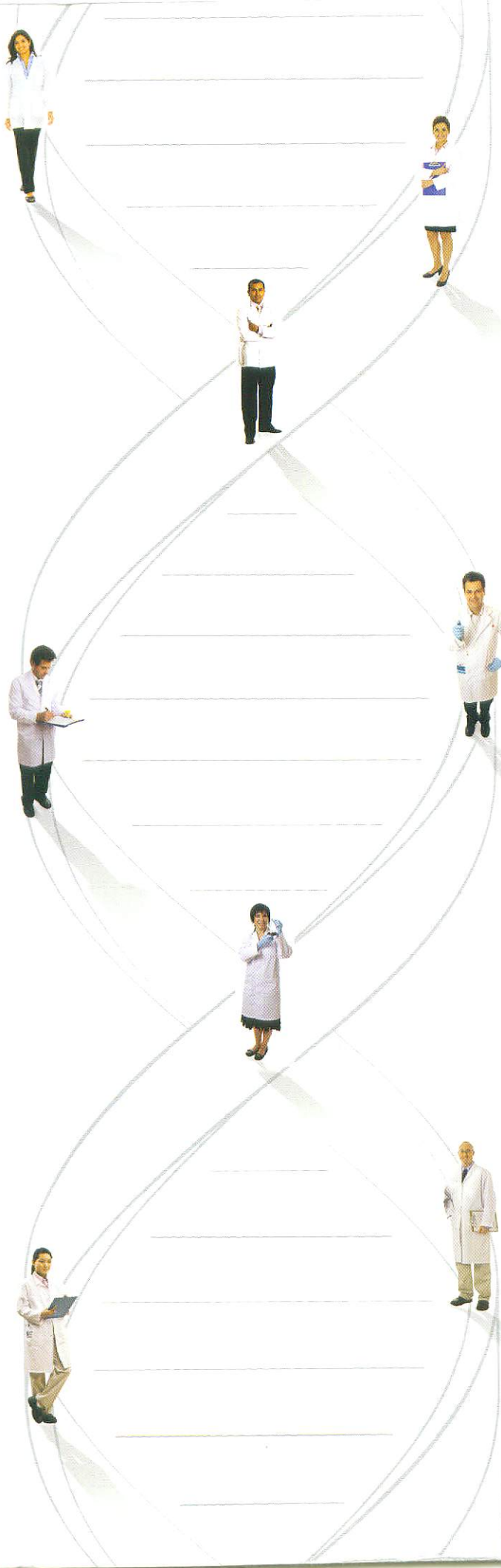


# PROGRAM BOOK



Walter E. Washington Convention Center  
Washington, DC

39<sup>th</sup> Annual Meeting of the AADR

34<sup>th</sup> Annual Meeting of the CADR

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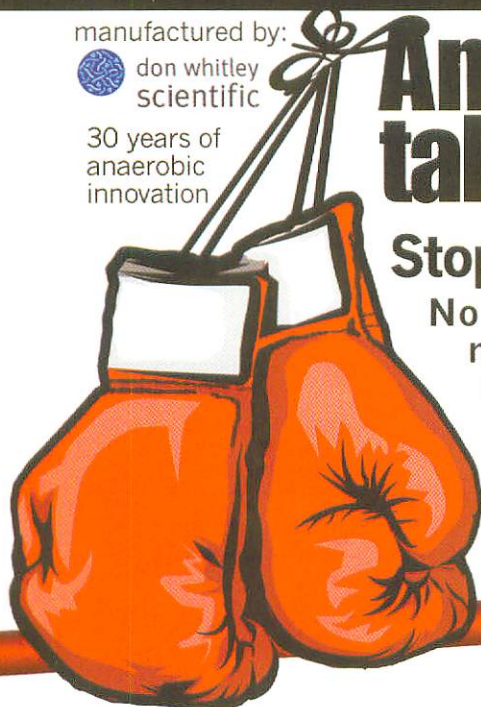
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| • CADR Activities                                               |    |                                                               |     |
| • AADR NSRG Business Meeting & Reception                        |    |                                                               |     |
| • Group Business Meetings & Receptions                          |    |                                                               |     |



# independent evaluation of oral health care products

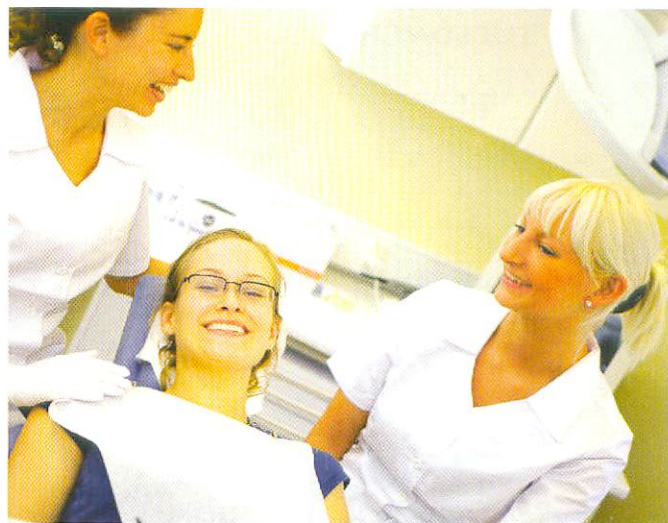


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- dental hypersensitivity
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# SCHEDULE OF EVENTS

## LEGEND:

CC = Washington Convention Center

RH = Renaissance Washington Hotel

| DATE / TIME                | EVENT                                                                                                                                               | LOCATION                                 |
|----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------|
| <b>SUNDAY, FEBRUARY 28</b> |                                                                                                                                                     |                                          |
| 1 p.m. – 5 p.m.            | IADR Officers' Meeting                                                                                                                              | RH: Room 15                              |
| <b>MONDAY, MARCH 1</b>     |                                                                                                                                                     |                                          |
| 7:30 a.m. – 10 a.m.        | ADA SCDP Oversight Committee Meeting                                                                                                                | RH: Room 17                              |
| 8 a.m. – 10 a.m.           | Joint IADR Officers' and AADR Board Meeting                                                                                                         | CC: Room 102A                            |
| 8 a.m. – 4:30 p.m.         | Clinical Research Workshop (separate registration required)                                                                                         | RH: Room 8-9                             |
| 10 a.m. – noon             | ADA SCDP/US Sub-TAG 2 Prosthodontic Materials                                                                                                       | RH: Room 12-13                           |
| 10 a.m. – 4 p.m.           | AAADR Board Meeting                                                                                                                                 | CC: Room 102A                            |
| 10:30 a.m. – noon          | ADA SCDP/US Sub-TAG 4 Dental Instruments                                                                                                            | RH: Room 16                              |
|                            | ADA SCDP/US Sub-TAG 8 Dental Implants                                                                                                               | RH: Room 14                              |
| Noon – 2 p.m.              | ADA SCDP/US Sub-TAG 3 Luncheon (ADA ticketed event)                                                                                                 | RH: Room 15                              |
| Noon – 2 p.m.              | ADA Standards Program New Member Orientation (ADA ticketed event)                                                                                   | RH: Room 17                              |
| 2 p.m. – 4 p.m.            | ADA SCDP/US Sub-TAG 1 Restorative Materials & Orthodontic Products                                                                                  | RH: Room 14                              |
|                            | ADA SCDP/US Sub-TAG 7 Oral Hygiene Products                                                                                                         | RH: Room 12-13                           |
|                            | ADA SCDP SC5 for CAD/CAM                                                                                                                            | RH: Room 16                              |
| 4 p.m. – 6 p.m.            | IADR/AAADR ASC 2011 Meeting                                                                                                                         | CC: Room 102A                            |
| 4 p.m. – 6 p.m.            | ADA SCDP 6 & 9/Sub-TAG 6 Dental Equipment & Infection Control Products                                                                              | RH: Room 12-13                           |
| 6 p.m. – 7:30 p.m.         | ADA SCDP/US TAG Reception                                                                                                                           | RH: Room 15                              |
| <b>TUESDAY, MARCH 2</b>    |                                                                                                                                                     |                                          |
| 7:30 a.m. – 12:30 p.m.     | ADA SCDP Plenary Session                                                                                                                            | RH: Room 12-14                           |
| 8 a.m. – 4:30 p.m.         | Clinical Research Workshop (separate registration required)                                                                                         | RH: Room 16                              |
| 8:30 a.m. – 1:30 p.m.      | Epi-Forum Pre-conference—"National Oral Health Surveillance: Gaps, Priorities, and Future Strategies" (invitation only, sponsored by CDC and NIDCR) | CC: Room 140A                            |
| 9 a.m. – 11:30 a.m.        | AAADR & Research!America Research Advocacy Training Workshops                                                                                       | CC: Room 101                             |
| 11:30 a.m. – 1:30 p.m.     | GAC Meeting                                                                                                                                         | CC: Room 101                             |
| Noon – 5 p.m.              | Capitol Hill Visits by AAADR Members (separate registration required)                                                                               | Capitol Hill                             |
| 12:30 p.m. – 2:30 p.m.     | ADA SCDP Oversight Committee Meeting                                                                                                                | RH: Room 11                              |
| 1 p.m. – 3 p.m.            | ADA SCDP/WG 7.61 Fluoride Varnishes                                                                                                                 | RH: Room 15                              |
| 1 p.m. – 2 p.m.            | ADA SCDP FT 5.6 CAD CAM Imaging Die Stone                                                                                                           | RH: Room 12-14                           |
| 2 p.m. – 3 p.m.            | ADA SCDP FT 5.3 CAD CAM Implant Abutments                                                                                                           | RH: Room 12-14                           |
| 2:30 p.m. – 4 p.m.         | ADA SCDP Strategic Planning Committee                                                                                                               | RH: Room 11                              |
| 2:30 p.m. – 4:30 p.m.      | Epi-Forum Main Conference—"Oral Epidemiology Research and Surveillance: Current and Future Activities" (open to all meeting delegates)              | CC: Room 140A                            |
| 2:30 p.m. – 6:30 p.m.      | Registration Open                                                                                                                                   | CC: East Lobby                           |
|                            | Speaker Ready Room Open                                                                                                                             | CC: Room 157                             |
| 3 p.m. – 4 p.m.            | ADA SCDP 5.8 Dental CBCT Prosthesis                                                                                                                 | RH: Room 12-14                           |
| 4 p.m. – 5 p.m.            | ADA SCDP WG 5.65 Dental CAD CAM Machinable Zirconia Blanks                                                                                          | RH: Room 12-14                           |
| 4 p.m. – 5:30 p.m.         | ADA SCDP Ad hoc Committee on Performance Based Standards                                                                                            | RH: Room 11                              |
| 5:30 p.m. – 7:30 p.m.      | AAADR & Research!America Research Advocacy Awards Reception (separate registration required)                                                        | Rayburn House Office Building, Gold Room |



### WEDNESDAY, MARCH 3

|                         |                                                                                                                                                                                               |                                                                |
|-------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------|
| 8 a.m. – 9 a.m.         | ADA SCDP FT 5.9 CAD CAM Terminology                                                                                                                                                           | RH: Room 12                                                    |
| 8 a.m. – noon           | Clinical Research Workshop (separate registration required)                                                                                                                                   | RH: Room 16                                                    |
| 8 a.m. – noon           | NIDCR Meetings in Bethesda, Maryland:<br>- NIDCR T32 Training Directors' Meeting<br>- NIDCR Trainees' Poster Session<br>- NIDCR Director's Meeting with Research Trainees & Junior Scientists | NIH Campus                                                     |
| 8 a.m. – noon           | AADR Council Meeting                                                                                                                                                                          | CC: Room 145                                                   |
| 8 a.m. – 1 p.m.         | AADR/Johnson & Johnson Oral Health Products Hatton Awards Competition<br>- Junior Category<br>- Senior Category<br>- Post-doctoral Category<br>- Judges Deliberation                          | CC: Room 140A<br>CC: Room 140B<br>CC: Room 156<br>CC: Room 142 |
| 8 a.m. – 4:30 p.m.      | Registration Open<br>Speaker Ready Room Open                                                                                                                                                  | CC: East Lobby<br>CC: Room 157                                 |
| 8 a.m. – 5 p.m.         | Exhibitor Move-in                                                                                                                                                                             | CC: Exhibit Hall D                                             |
| 8:30 a.m. – 10 a.m.     | ADA SCDP Working Group 1.3 Composite Resins                                                                                                                                                   | RH: Room 17                                                    |
| 9 a.m. – 10 a.m.        | ADA SCDP FT 5.7 CAD CAM Removable Prosthesis<br>ADA SCDP/JWG 1 Biological Evaluation                                                                                                          | RH: Room 12<br>RH: Room 15                                     |
| 10 a.m. – 11 a.m.       | ADA SCDP FT CAD CAM Bonding Cements                                                                                                                                                           | RH: Room 12                                                    |
| 10 a.m. – noon          | ADA SCDP/WG 7.6 Tooth Bleaching Materials                                                                                                                                                     | RH: Room 13-14                                                 |
| 11 a.m. – noon          | ADA SCDG/WG 5.66 Scanning Accuracy of Dental Chair-side and Laboratory CAD CAM Systems<br>ADA SCDP/WG 1.1 Adhesion Test Methods to Tooth Structure                                            | RH: Room 12<br>RH: Room 15                                     |
| Noon – 4 p.m.           | FNIDCR Annual Meeting (invitation only)                                                                                                                                                       | CC: Room 101                                                   |
| 1 p.m. – 2 p.m.         | ANSI/ADA WG2.2 Dental Ceramics and Metal-Ceramic Systems                                                                                                                                      | RH: Room 15                                                    |
| 1:30 p.m. – 2:30 p.m.   | New Member Orientation Reception                                                                                                                                                              | CC: Room 152B                                                  |
| ✓ 1:45 p.m. – 2 p.m.    | Oral Session Chairperson Orientation                                                                                                                                                          | CC: Room 151B                                                  |
| 1 p.m. – 4 p.m.         | Symposium                                                                                                                                                                                     | See Chron Listing                                              |
| ✓ 2:30 p.m. – 4 p.m.    | Oral Sessions                                                                                                                                                                                 | See Chron Listing                                              |
| 2:30 p.m. – 3:30 p.m.   | ARRA Grants: Report on the Dental and Craniofacial Research Community                                                                                                                         | CC: Room 143C                                                  |
| 4 p.m. – 5 p.m.         | Society for Color and Appearance in Dentistry Meeting                                                                                                                                         | CC: Room 142                                                   |
| ✓ 4:15 p.m. – 5:15 p.m. | Opening Ceremonies & Awards Program                                                                                                                                                           | CC: Room 146AB                                                 |
| ✓ 5:15 p.m. – 6:30 p.m. | Welcome Reception                                                                                                                                                                             | CC: Room 146<br>Concourse                                      |
| 6 p.m. – 7 p.m.         | NSRG Officers' Meeting                                                                                                                                                                        | CC: Room 101                                                   |
| 6 p.m. – 8 p.m.         | University of Buffalo Reception (invitation only)                                                                                                                                             | RH: Renaissance<br>Ballroom East                               |
| ✓ 6:30 p.m. – 8:30 p.m. | Dental Materials Group Reception (ticketed event)                                                                                                                                             | Cannon House<br>Office Building                                |
| 7 p.m. – 8:30 p.m.      | IUSD Reception (invitation only)                                                                                                                                                              | RH: Room 12-14                                                 |

### THURSDAY, MARCH 4

|                    |                                                                                              |                              |
|--------------------|----------------------------------------------------------------------------------------------|------------------------------|
| 7 a.m. – 8 a.m.    | Dental Deans' Meeting                                                                        | CC: Room 101                 |
| 7 a.m. – 8 a.m.    | Group Executive Committee Meeting<br>- Behavioral, Epidemiologic & HSR<br>- Dental Materials | CC: Room 148<br>CC: Room 142 |
| 7 a.m. – 3:30 p.m. | Speaker Ready Room Open                                                                      | CC: Room 157                 |
| 7 a.m. – 5 p.m.    | Registration Open                                                                            | CC: East Lobby               |



## THURSDAY, MARCH 4 (CONTINUED)

|                         |                                                                                                 |                               |
|-------------------------|-------------------------------------------------------------------------------------------------|-------------------------------|
| 7:30 a.m. – 5 p.m.      | Ivoclar Vivadent Inc. Meeting                                                                   | RH: Room 7                    |
| 8 a.m. – 9:30 a.m.      | Oral Sessions and Symposia                                                                      | See Chron Listing             |
| 8 a.m. – 5 p.m.         | Poster Viewing Open                                                                             | CC: Exhibit Hall D            |
| 9 a.m. – 12:30 p.m.     | AADR NSRG Dentsply/Caulk Competition                                                            |                               |
|                         | - Basic Science Category                                                                        | CC: Room 153                  |
|                         | - Clinical Science Category                                                                     | CC: Room 155                  |
| 9:45 a.m. – 10:30 a.m.  | Distinguished Lecture Series, David Sidransky                                                   | CC: Room 146AB                |
| 10:45 a.m. – 12:15 p.m. | Oral Sessions, Symposia and Hands-on Workshop #1                                                | See Chron Listing             |
| 11:30 a.m. – 3 p.m.     | CADR Executive Committee Meeting                                                                | RH: Room 17                   |
| Noon – 1 p.m.           | AAOB Meeting                                                                                    | CC: Room 101                  |
| 12:15 p.m. – 1:30 p.m.  | Lunch Break                                                                                     |                               |
|                         | Lunch & Learning (ticketed event)                                                               | CC: Room 146C                 |
|                         | AADR Committees' Lunch                                                                          | CC: Room 152B                 |
|                         | IADR/AADR Publications Committee Meeting                                                        | CC: Room 148                  |
| 12:30 p.m. – 4:30 p.m.  | Dentsply CE Directors' Meeting (invitation only)                                                | RH: Room 16                   |
| 1 p.m. – 5 p.m.         | Exhibits Open                                                                                   | CC: Exhibit Hall D            |
| 1 p.m. – 5:30 p.m.      | HOW #2: NIDCR Essentials in Grant Writing                                                       | CC: Room 147B                 |
| 2 p.m. – 3:15 p.m.      | Poster Presentations – Block #1                                                                 | CC: Exhibit Hall D            |
| 3:30 p.m. – 4:45 p.m.   | Poster Presentations – Block #2                                                                 | CC: Exhibit Hall D            |
| 4 p.m. – 5 p.m.         | Student Plenary Session                                                                         | CC: Room 147A                 |
|                         | JDR Editorial Board Meeting                                                                     | CC: Room 143C                 |
| 4 p.m. – 6 p.m.         | CTSA Dental Working Group                                                                       | CC: Room 144C                 |
| 5 p.m. – 6 p.m.         | Group Business Meetings                                                                         |                               |
|                         | - Behavioral, Epidemiologic & HSR                                                               | CC: Room 140A                 |
|                         | - Cariology Research                                                                            | CC: Room 140B                 |
|                         | - Craniofacial Biology                                                                          | CC: Room 150A                 |
|                         | - Dental Materials                                                                              | CC: Room 150B                 |
|                         | - Mineralized Tissue                                                                            | CC: Room 151A                 |
|                         | - Nutrition                                                                                     | CC: Room 149AB                |
|                         | - Oral Health Research                                                                          | CC: Room 145A                 |
|                         | - Oral Medicine & Pathology                                                                     | CC: Room 154                  |
|                         | - Pharmacology, Therapeutics & Toxicology                                                       | CC: Room 151B                 |
|                         | - Prosthodontics Research                                                                       | CC: Room 144AB                |
|                         | - Pulp Biology & Regeneration                                                                   | CC: Room 156                  |
| 5 p.m. – 6 p.m.         | NSRG Business Meeting                                                                           | CC: Room 143AB                |
| 5:30 p.m. – 6:30 p.m.   | CADR Annual General Meeting                                                                     | CC: Room 152A                 |
| 6 p.m. –                | Group Receptions                                                                                |                               |
|                         | - Behavioral, Epidemiologic & HSR, Geriatric Oral Research and Nutrition Joint Reception        | CC: Room 102A                 |
|                         | - Craniofacial Biology and Mineralized Tissue Joint Reception                                   | CC: Room 155                  |
|                         | - Oral Health Research                                                                          | CC: Room 145A                 |
|                         | - Oral Medicine & Pathology                                                                     | CC: Room 154                  |
| 6 p.m. – 8 p.m.         | Tufts University School of Dental Medicine Reception (invitation only)                          | RH: 15 Squares Restaurant     |
|                         | NSRG Student & Faculty Advisor Reception (invitation only, sponsored by DENTSPLY International) | RH: Renaissance Ballroom East |
|                         | University of Michigan Reception (invitation only)                                              | RH: Room 15                   |
| 6:30 p.m. – 8 p.m.      | CADR Reception (invitation only)                                                                | CC: Room 152B                 |



## THURSDAY, MARCH 4 (CONTINUED)

|                       |                                                                                    |                                 |
|-----------------------|------------------------------------------------------------------------------------|---------------------------------|
| 6:30 p.m. – 8:30 p.m. | Alumni and Friends Reception - Eastman Institute for Oral Health (invitation only) | RH: Renaissance Ballroom West B |
|                       | Harvard/Forsyth Reception (invitation only)                                        | RH: Renaissance Ballroom West A |
| 6:30 p.m. – 8:30 p.m. | Stony Brook School of Dental Medicine Alumni Reception (invitation only)           | RH: Room 17                     |
| 6:30 p.m. – 9 p.m.    | UCSF School of Dentistry Reception (invitation only)                               | RH: Room 16                     |
| 7 p.m. – 8:30 p.m.    | UAB School of Dentistry Dean's Reception (invitation only)                         | RH: Room 12-14                  |
|                       | University of North Carolina School of Dentistry Reception (invitation only)       | RH: Penn Quarter                |

## FRIDAY, MARCH 5

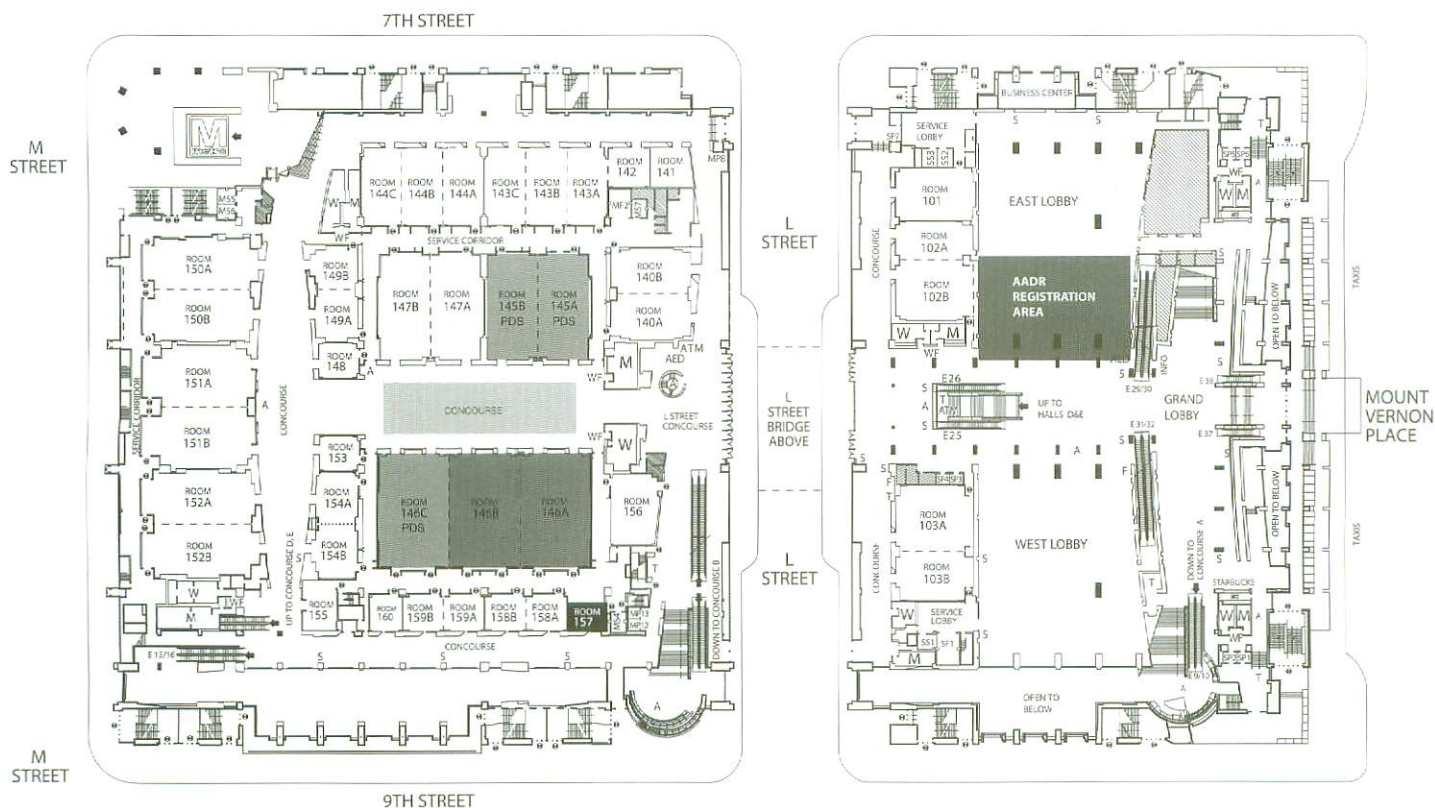
|                         |                                                                                |                           |
|-------------------------|--------------------------------------------------------------------------------|---------------------------|
| 7 a.m. – 8 a.m.         | Behavioral, Epidemiologic & HSR Group Executive Committee Meeting              | CC: Room 148              |
| 7 a.m. – 3:30 p.m.      | Speaker Ready Room Open                                                        | CC: Room 157              |
| 7 a.m. – 5 p.m.         | Registration Open                                                              | CC: East Lobby            |
| 7:30 a.m. – 8:30 a.m.   | AADR Institutional Section Meeting                                             | CC: Room 102A             |
| 7:30 a.m. – 5 p.m.      | Ivoclar Vivadent Inc. Meeting                                                  | RH: Room 7                |
| 8 a.m. – 9:30 a.m.      | Oral Sessions, Symposia and Hands-on Workshop #3                               | See Chron Listing         |
| 8 a.m. – 5 p.m.         | Poster Viewing Open                                                            | CC: Exhibit Hall D        |
| 9 a.m. – noon           | International Academy of Periodontology (invitation only)                      | CC: Room 101              |
| 9:30 a.m. – 5 p.m.      | Exhibits Open                                                                  | CC: Exhibit Hall D        |
| 9:45 a.m. – 10:30 a.m.  | Distinguished Lecture Series, Kenneth Yamada                                   | CC: Room 146AB            |
| 10:30 a.m. – noon       | NIDCR Research Training and Career Development Opportunities                   | CC: Room 142              |
| 10:45 a.m. – 12:15 p.m. | Oral Sessions, Symposia and Hands-on Workshop #4                               | See Chron Listing         |
| 12:15 p.m. – 1:30 p.m.  | Lunch Break                                                                    |                           |
|                         | AADR/CADR Past Executives' Business Meeting                                    | CC: Room 153              |
|                         | VIP Luncheon for Spouses of the AADR/CADR Past Executives                      | CC: Room 148              |
|                         | Faculty Advisors' and SRG Presidents' Lunch                                    | CC: Room 152B             |
| 1 p.m. – 3 p.m.         | University Park Research Center Meeting                                        | CC: Room 102A             |
| 1:30 p.m. – 2:30 p.m.   | NIH Peer Review: Overview and What's New                                       | CC: Room 142              |
| 2 p.m. – 3:15 p.m.      | Poster Presentations – Block #1                                                | CC: Exhibit Hall D        |
| 3:30 p.m. – 4:45 p.m.   | Poster Presentations – Block #2                                                | CC: Exhibit Hall D        |
| 4 p.m. – 5:30 p.m.      | Dental Informatics Working Group                                               | CC: Room 102A             |
| 5 p.m. – 6 p.m.         | Geriatric Oral Research Group Business Meeting                                 | CC: Room 140A             |
| 6 p.m. – 7:30 p.m.      | University of Iowa Dental Reception (invitation only)                          | RH: 15 Squares Restaurant |
|                         | University of Southern California Research Reception (invitation only)         | RH: Room 16               |
| 7:30 p.m. – 8:30 p.m.   | University of Minnesota School of Dentistry Dean's Reception (invitation only) | RH: Room 12-14            |

## SATURDAY, MARCH 6

|                         |                                                  |                    |
|-------------------------|--------------------------------------------------|--------------------|
| 8:30 a.m. – 10:30 a.m.  | Symposium                                        | See Chron Listing  |
| 8:30 a.m. – 11 a.m.     | Speaker Ready Room Open                          | CC: Room 157       |
| 8:30 a.m. – 1 p.m.      | Registration Open                                | CC: East Lobby     |
| 9 a.m. – 10:30 a.m.     | Oral Sessions, Symposia and Hands-on Workshop #5 | See Chron Listing  |
| 9 a.m. – 1 p.m.         | Poster Viewing                                   | CC: Exhibit Hall D |
| 10:45 a.m. – 11:30 a.m. | Distinguished Lecture Series, Elaine Fuchs       | CC: Room 146AB     |
| 11:45 a.m. – 1 p.m.     | Poster Presentations                             | CC: Exhibit Hall D |
| 12:30 p.m. – 2 p.m.     | GPC Meeting                                      | CC: Room 102A      |
| 1 p.m.                  | Meeting Adjourns                                 |                    |
| 2 p.m. – 3:30 p.m.      | AADR Board Meeting (if needed)                   | CC: Room 102A      |

# FLOOR PLANS

## WALTER E. WASHINGTON CONVENTION CENTER STREET LEVEL



### ROOM 146 A/B

Opening Ceremonies (Wed.)  
Distinguished Lecture Speakers (Thu. – Sat.)

### ROOM 157

Speaker Ready Room

### CONCOURSE

Welcome Reception (Wed.)

### ROOMS 145A, 145B & 146C

#### Poster Discussion Sessions (PDS)

| Presentations         | Room #     | Viewing Time            | Mount Posters      | Remove Posters |
|-----------------------|------------|-------------------------|--------------------|----------------|
| Thursday              |            |                         |                    |                |
| 2 p.m. – 3:15 p.m.    | 145A       | 8 a.m. – end of session | 7:30 a.m. – 8 a.m. | end of session |
| 3:30 p.m. – 4:45 p.m. | 145B       |                         |                    |                |
| Friday                |            |                         |                    |                |
| 2 p.m. – 3:15 p.m.    | 145A       | 8 a.m. – end of session | 7:30 a.m. – 8 a.m. | end of session |
| 3:30 p.m. – 4:45 p.m. | 145B, 146C |                         |                    |                |
| Saturday              |            |                         |                    |                |
| 11:45 a.m. – 1 p.m.   | 145A       | 9 a.m. – end of session | 8:30 a.m. – 9 a.m. | end of session |

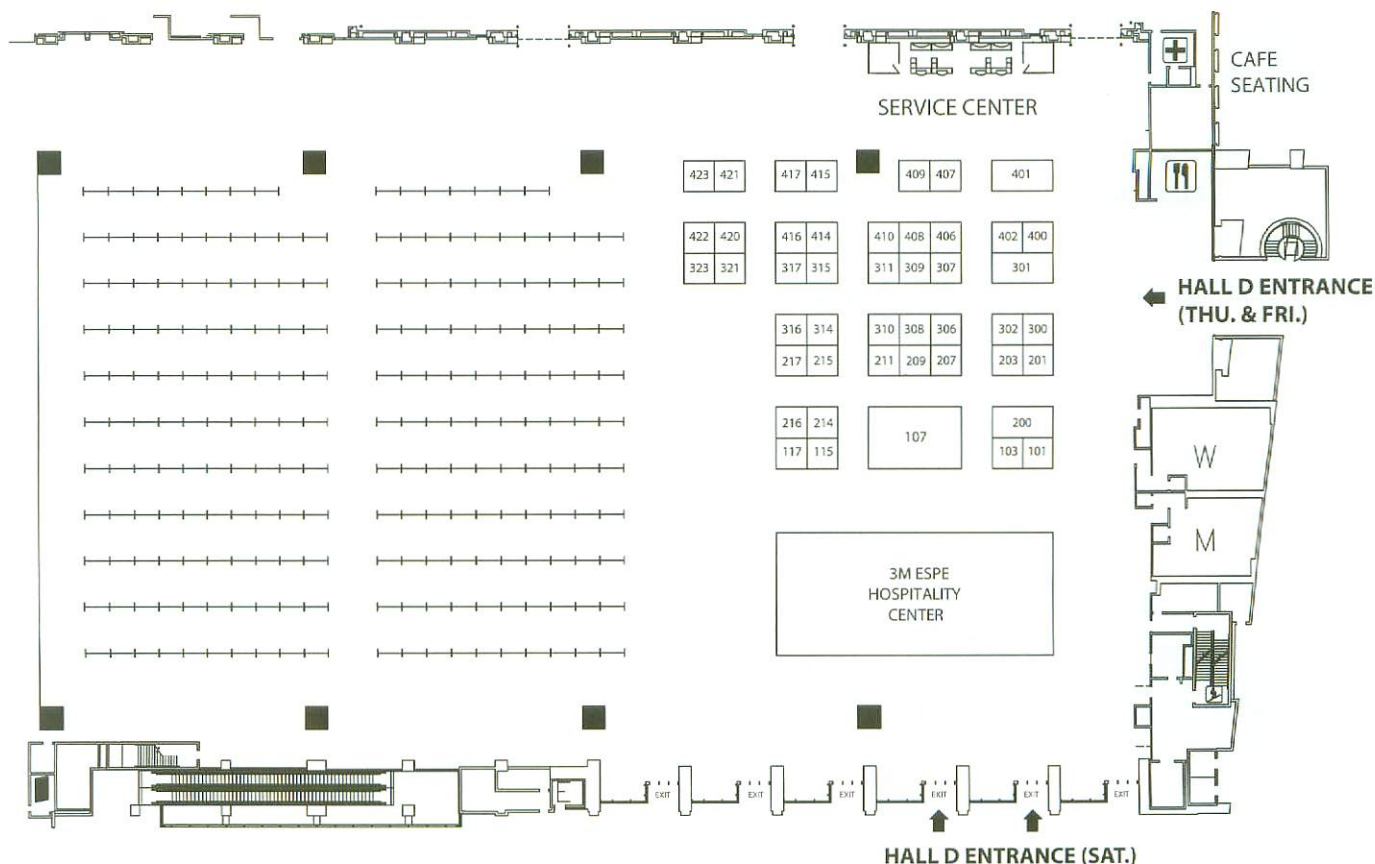
### AADR REGISTRATION AREA INCLUDES

- Registration Counters
- Bag Distribution
- USB of Abstracts
- NSRG Membership Booth
- Abstracts Viewing Stations
- Continuing Education Online Forms
- Restaurant Reservations & City Information
- WiFi Cyber Café
- JOBS Board
- Message Center



# WALTER E. WASHINGTON CONVENTION CENTER

## LEVEL TWO – EXHIBIT HALL D



### EXHIBIT HALL D

Exhibit Booths  
Poster Presentations  
3M ESPE Hospitality Center

### 3M ESPE HOSPITALITY CENTER HOURS

Thursday 8 a.m. – 5 p.m.  
Friday 8 a.m. – 5 p.m.  
Saturday 9 a.m. – 1 p.m.

### EXHIBITION OPEN

Thursday 1 p.m. – 5 p.m.  
Friday 9:30 a.m. – 5 p.m.  
Note: Exhibit booths will not be open on Saturday even though poster presentations will take place in the Exhibit Hall.

### POSTER SUPPLIES

Please bring your own supplies to mount posters (thumbtacks or push pins). A limited amount of push pins will be available on site from the AADR staff. NOTE: Velcro will NOT adhere to poster boards.

### POSTER PRESENTATIONS

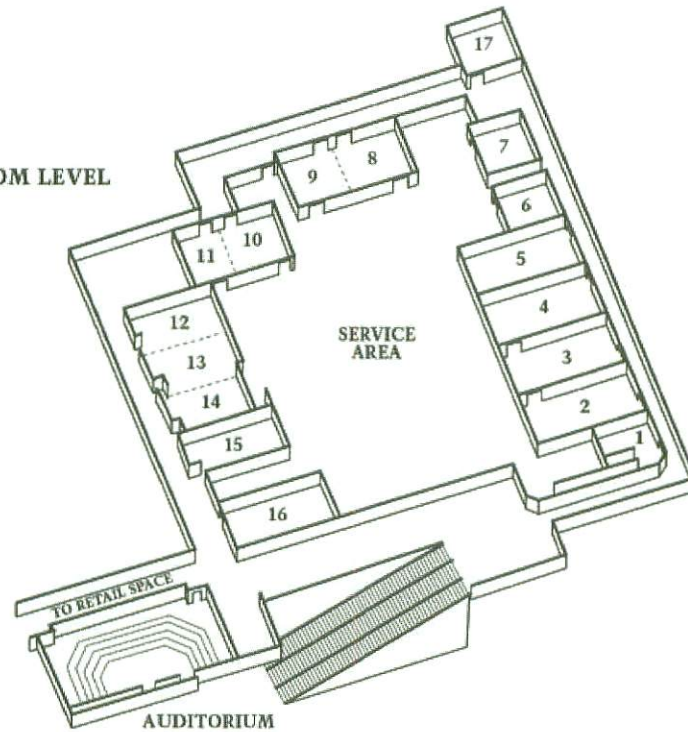
| Day      | Program #s  | Poster Viewing  | Poster Presentation Times       |
|----------|-------------|-----------------|---------------------------------|
| Thursday | 201 – 419   | 8 a.m. – 5 p.m. | Block #1: 2 p.m. – 3:15 p.m.    |
|          | 426 – 641   |                 | Block #2: 3:30 p.m. – 4:45 p.m. |
| Friday   | 769 – 976   | 8 a.m. – 5 p.m. | Block #1: 2 p.m. – 3:15 p.m.    |
|          | 993 – 1201  |                 | Block #2: 3:30 p.m. – 4:45 p.m. |
| Saturday | 1276 – 1509 | 9 a.m. – 1 p.m. | Block #1: 11:45 a.m. – 1 p.m.   |

### POSTER SET-UP AND TEAR-DOWN SCHEDULE

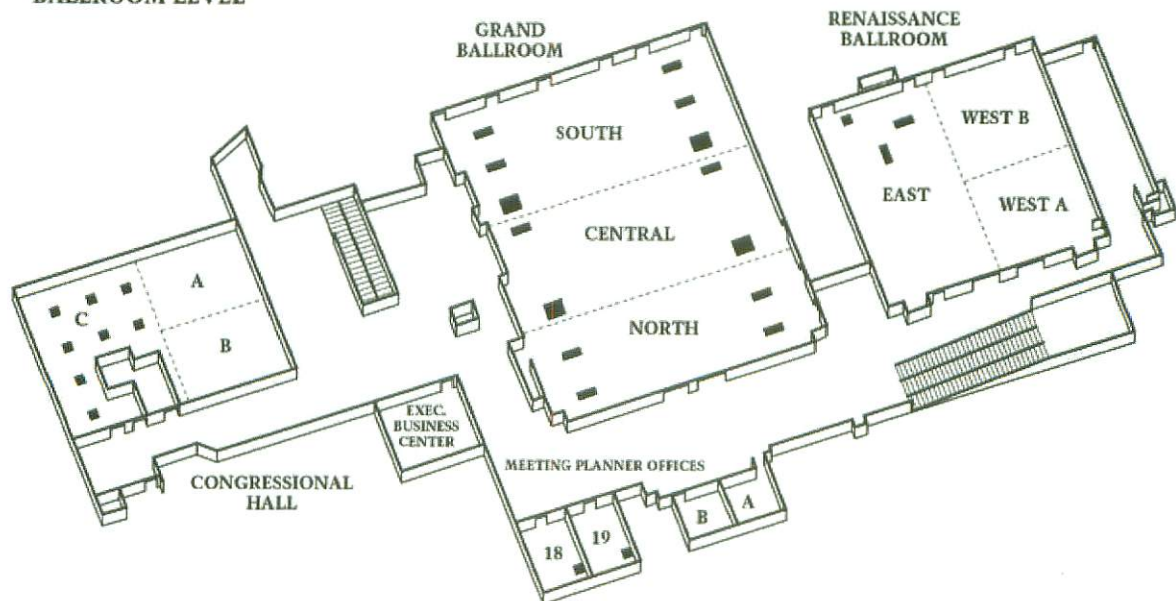
| Presentation Date | Poster Set-up      | Poster Tear-down   |
|-------------------|--------------------|--------------------|
| Thursday          | 7:30 a.m. – 8 a.m. | 5 p.m. – 5:15 p.m. |
| Friday            | 7:30 a.m. – 8 a.m. | 5 p.m. – 5:15 p.m. |
| Saturday          | 8:30 a.m. – 9 a.m. | 1 p.m. – 1:15 p.m. |

# RENAISSANCE WASHINGTON, DC HOTEL

MEETING ROOM LEVEL



BALLROOM LEVEL





# CHRONOLOGICAL LISTING OF SESSIONS

| SEQ #                             | GROUP | SESSION TITLE                                                                                                  | ROOM       | PRESENTATION # |
|-----------------------------------|-------|----------------------------------------------------------------------------------------------------------------|------------|----------------|
| <b>WEDNESDAY, MARCH 3, 2010</b>   |       |                                                                                                                |            |                |
| Symposium: 1 p.m. - 4 p.m.        |       |                                                                                                                |            |                |
| 1                                 | SYM   | Do Current Studies Support or Refute a Causal Relationship between Oral Disease and Adverse Pregnancy Outcome? | Room 147B  | 1              |
| Symposia: 2:30 p.m. - 4 p.m.      |       |                                                                                                                |            |                |
| 2                                 | SYM   | Current, Ongoing Research in Bisphosphonate-related Osteonecrosis of the Jaws (BRONJ)                          | Room 147A  | 2              |
| 3                                 | SYM   | To Seal, Remineralize, or Restore: What is the Evidence?                                                       | Room 152A  | 3              |
| Oral Sessions: 2:30 p.m. - 4 p.m. |       |                                                                                                                |            |                |
| 4                                 | BEHSR | Keynote Address and Dental Providers in Research Set-up                                                        | Room 140B  | 4 - 7          |
| 5                                 | CRAN  | Orthodontics: Diagnosis and Treatment Modalities                                                               | Room 140A  | 8 - 13         |
| 6                                 | DM    | Adhesive-Enamel/Dentin Bond Strength                                                                           | Room 151B  | 14 - 19        |
| 7                                 | DM    | Keynote Address and Dental Materials: Adhesive Interfaces and Hybrid Layer Morphology                          | Room 150B  | 20 - 24        |
| 8                                 | DM    | Keynote Address and Clinical Study Reports on Restorative Materials                                            | Room 151A  | 25 - 29        |
| 9                                 | DM    | New Ideas in Composites                                                                                        | Room 150A  | 30 - 35        |
| 10                                | DIA   | Diagnostic Imaging                                                                                             | Room 156   | 36 - 40        |
| 11                                | IMP   | Bone-Implant Interface                                                                                         | Room 154   | 41 - 46        |
| 12                                | M/I   | <i>Streptococci</i>                                                                                            | Room 144AB | 47 - 52        |
| 13                                | MT    | Gene Mutations and Tooth Formation                                                                             | Room 143AB | 53 - 58        |
| 14                                | SAL   | Salivary Gland Development I                                                                                   | Room 149   | 59 - 64        |
| <b>THURSDAY, MARCH 4, 2010</b>    |       |                                                                                                                |            |                |
| Symposia: 8 a.m. - 9:30 a.m.      |       |                                                                                                                |            |                |
| 15                                | SYM   | Osteonecrosis of the Jaws and the CONDOR ONJ Case-Control Study                                                | Room 147B  | 65             |
| 16                                | SYM   | Reconstructive Dentistry and Tissue Engineering                                                                | Room 147A  | 66             |
| 17                                | SYM   | Whole Saliva: Proteome/Peptidome, Microbiome, and Proteasome                                                   | Room 152A  | 67             |
| Oral Sessions: 8 a.m. - 9:30 a.m. |       |                                                                                                                |            |                |
| 18                                | CAR   | Fluoride Bioavailability and Efficacy - Dentifrices/Rinse                                                      | Room 140A  | 68 - 73        |
| 19                                | CRAN  | Odontogenesis: Gene Regulation and Bioengineering                                                              | Room 143AB | 74 - 79        |
| 20                                | DM    | Keynote Address and Back to the Future                                                                         | Room 151A  | 80 - 84        |
| 21                                | DM    | Keynote Address and Fracture Mechanics, Stress, and Fatigue                                                    | Room 150B  | 85 - 89        |
| 22                                | DM    | Adhesives, Coatings, and Glass Ionomers                                                                        | Room 151B  | 90 - 95        |
| 23                                | MT    | Applications of Animal Models in Mineralization Studies                                                        | Room 140B  | 96 - 101       |

| SEQ # | GROUP | SESSION TITLE | ROOM | PRESENTATION # |
|-------|-------|---------------|------|----------------|
|-------|-------|---------------|------|----------------|

# **THURSDAY, MARCH 4, 2010 (CONTINUED)**

Oral Sessions: 8 a.m. - 9:30 a.m. (continued)

|    |       |                                                              |            |           |
|----|-------|--------------------------------------------------------------|------------|-----------|
| 24 | NUT   | Keynote Address and Nutrition Research<br>Oral Presentations | Room 149   | 102 - 105 |
| 25 | OHR   | Prevention and Treatment of Oral Diseases I                  | Room 144AB | 106 - 110 |
| 26 | OMP   | Oral Cancer I and HIV; Cell Signaling and Differentiation    | Room 150A  | 111 - 116 |
| 27 | PERIO | Host-Bacterial Interactions                                  | Room 154   | 117 - 122 |
| 28 | PTT   | Pharmacology, Therapeutics, & Toxicology                     | Room 156   | 123 - 128 |

Plenary: 9:45 a.m. - 10:30 a.m.

|    |    |                                                                     |            |     |
|----|----|---------------------------------------------------------------------|------------|-----|
| 29 | PL | Molecular Markers in Personalized Cancer<br>Diagnosis and Treatment | Room 146AB | 129 |
|----|----|---------------------------------------------------------------------|------------|-----|

Hands-on Workshop: 10:45 a.m. - 12:15 p.m.

|    |     |                                                                                     |           |     |
|----|-----|-------------------------------------------------------------------------------------|-----------|-----|
| 30 | HOW | Introduction to the Dental, Oral, and Craniofacial<br>Data Resource Center Web Site | Room 143C | 130 |
|----|-----|-------------------------------------------------------------------------------------|-----------|-----|

Symposia: 10:45 a.m. - 12:15 p.m.

|    |     |                                                  |           |     |
|----|-----|--------------------------------------------------|-----------|-----|
| 31 | SYM | DNA Tumorviral Pathogenesis in the Head and Neck | Room 152A | 131 |
| 32 | SYM | Phosphate Homeostasis                            | Room 147A | 132 |

Oral Sessions: 10:45 a.m. - 12:15 p.m.

|    |       |                                                                                               |            |           |
|----|-------|-----------------------------------------------------------------------------------------------|------------|-----------|
| 33 | CRAN  | Biology of Bone and Cartilage                                                                 | Room 140A  | 133 - 138 |
| 34 | DM    | Adhesive Properties and Bonding                                                               | Room 151B  | 139 - 144 |
| 35 | DM    | Keynote Address and Material Biocompatibility                                                 | Room 150B  | 145 - 149 |
| 36 | DM    | Keynote Address and Current Findings in Preventive<br>and Operative Dentistry                 | Room 151A  | 150 - 153 |
| 37 | GOR   | Keynote Address and Care of Oral Health in Older Adults                                       | Room 149   | 154 - 157 |
| 38 | M/I   | Oral Biology                                                                                  | Room 144AB | 158 - 163 |
| 39 | OHR   | Prevention and Treatment of Oral Diseases II                                                  | Room 150A  | 164 - 169 |
| 40 | PERIO | New Drugs for Periodontal Therapy; Results from<br><i>in vitro</i> and <i>in vivo</i> Studies | Room 154   | 170 - 175 |
| 41 | PROS  | Clinical and Laboratory Research as Predictive of<br>Prosthetic Treatment Success             | Room 143AB | 176 - 181 |
| 42 | PB    | Keynote Address and Pulp Regeneration, Stem Cells,<br>and Scaffold Biology                    | Room 156   | 182 - 186 |
| 43 | SAL   | Salivary Proteomics and Diagnostics                                                           | Room 140B  | 187 - 192 |

Lunch & Learning: 12:15 p.m. - 1:30 p.m.

**Room 146C**

- Biomodification of Dentin for Enhanced Bond Stability
- Caries Management by Risk Assessment - What's the Evidence?
- Ceramic Lifetime Prediction: Physical vs. Virtual Approach?
- Dietary Assessment Strategies in Oral Health Research
- Digital Impressions and CAD/CAM Ceramics
- Lessons Learned from PBRN Studies
- Management of Early Caries Lesions: Remineralization or Infiltration?
- Maximizing the Balance among Fluoride Intake, Fluorosis, and Caries:  
Science of Fluoride Use in Oral Health Care
- Nanofillers-Design and Utility in Dental Materials



| SEQ #                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | GROUP | SESSION TITLE                                                                                                                      | ROOM           | PRESENTATION # |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|------------------------------------------------------------------------------------------------------------------------------------|----------------|----------------|
| THURSDAY, MARCH 4, 2010 (CONTINUED)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |       |                                                                                                                                    |                |                |
| Lunch & Learning: 12:15 p.m. - 1:30 p.m. (continued)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |       |                                                                                                                                    | Room 146C      |                |
| <ul style="list-style-type: none"><li>- New Clinical Research Designs</li><li>- New Implant Surfaces and Strategies for Control of Peri-implant Epithelium and Fibrous Tissue Attachment</li><li>- Physical Methods of Mineralized Tissue Characterization</li><li>- Prevention of Secondary Caries: Clinical and Biologic Factors</li><li>- Prosthodontic Treatment Planning Considerations for the Replacement of Missing Teeth in the Growing Patient</li><li>- Saliva and Dental Erosion</li><li>- Salivary Hypofunction-Causes, Diagnosis, Complications, and Management</li><li>- The Role of Proteomics to Understand the Acquired Enamel Pellicle</li></ul> |       |                                                                                                                                    |                |                |
| Hands-on Workshop: 1 p.m. - 5:30 p.m.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |       |                                                                                                                                    |                |                |
| 44                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | HOW   | NIDCR Essentials in Grant Writing                                                                                                  | Room 147B      | 193            |
| Poster Discussion Session: 2 p.m. - 3:15 p.m.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |       |                                                                                                                                    |                |                |
| 45                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | MT    | <i>In vitro</i> Mineralization (PDS)                                                                                               | Room 145A      | 194 - 200      |
| Poster Sessions: 2 p.m. - 3:15 p.m.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |       |                                                                                                                                    | Exhibit Hall D |                |
| 46                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | DM    | Adhesive Bonding Mechanisms                                                                                                        |                | 201 - 217      |
| 47                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | DM    | Ceramics - Strength, Fatigue, and Wear; Cements - Bonding to Ceramics, Hard Tissues, Media Interactions, and Provisional Materials |                | 218 - 237      |
| 48                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | DM    | Impression Materials                                                                                                               |                | 238 - 246      |
| 49                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | DM    | Color and Appearance I                                                                                                             |                | 247 - 262      |
| 50                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | DIA   | Diagnostic Challenges and Modalities                                                                                               |                | 263 - 277      |
| 51                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | GOR   | Care of Oral Health among Older Adults                                                                                             |                | 278 - 287      |
| 52                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | BEHSR | Poverty, Disparities, and Special-needs Groups                                                                                     |                | 288 - 298      |
| 53                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | EDU   | Research Methods in Clinical Education                                                                                             |                | 299 - 311      |
| 54                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | CAR   | Caries Inhibition - Varnishes, Coatings, CCP/ACP - Lasers                                                                          |                | 312 - 320      |
| 55                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | OHR   | Prevention and Treatment of Oral Diseases II                                                                                       |                | 321 - 336      |
| 56                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | MT    | Gene Expression and Function Studies                                                                                               |                | 337 - 351      |
| 57                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | SAL   | Salivary Research                                                                                                                  |                | 352 - 361      |
| 58                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | M/I   | Biofilms                                                                                                                           |                | 362 - 367      |
| 59                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | M/I   | Infection Control/Antimicrobials/Antibiotics                                                                                       |                | 368 - 378      |
| 60                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | PERIO | Host-Bacterial Interactions Posters                                                                                                |                | 379 - 392      |
| 61                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | NEU   | Human and Cellular Studies in Neuroscience                                                                                         |                | 393 - 399      |
| 62                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | CRAN  | Bone Biology I - Formation and Resorption                                                                                          |                | 400 - 407      |
| 63                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | CRAN  | Orthodontics I - Diagnosis and Treatment Modalities                                                                                |                | 408 - 419      |
| Poster Discussion Session: 3:30 p.m. - 4:45 p.m.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |       |                                                                                                                                    |                |                |
| 64                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | DM    | New Developments in Ceramics and Composites (PDS)                                                                                  | Room 145B      | 420 - 425      |
| Poster Sessions: 3:30 p.m. - 4:45 p.m.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |       |                                                                                                                                    | Exhibit Hall D |                |
| 65                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | NPBR  | Methods and Basic Current Research                                                                                                 |                | 426 - 429      |
| 66                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | DM    | Bond Strength Measurements I                                                                                                       |                | 430 - 443      |





| SEQ # | GROUP | SESSION TITLE | ROOM | PRESENTATION # |
|-------|-------|---------------|------|----------------|
|-------|-------|---------------|------|----------------|

## THURSDAY, MARCH 4, 2010 (CONTINUED)

Poster Sessions: 3:30 p.m. - 4:45 p.m. (continued)

Exhibit Hall D

|    |       |                                                                                  |  |           |
|----|-------|----------------------------------------------------------------------------------|--|-----------|
| 67 | DM    | Clinical Studies                                                                 |  | 444 - 454 |
| 68 | DM    | Performance of Resin Composites                                                  |  | 455 - 470 |
| 69 | DM    | Remineralization Agents                                                          |  | 471 - 486 |
| 70 | DM    | Lamps and Irradiation Equipment                                                  |  | 487 - 489 |
| 71 | DIA   | Cone Beam Computed Tomography: Application in Maxillofacial Diagnosis            |  | 490 - 498 |
| 72 | BEHSR | Dental Public Health Methods                                                     |  | 499 - 521 |
| 73 | CAR   | Caries and Erosion/Abrasion Prevention: Toothpastes - Varnishes - Rinses         |  | 522 - 532 |
| 74 | IMP   | Implant Prosthodontics/Design/Digital Technology                                 |  | 533 - 552 |
| 75 | MT    | <i>In vitro</i> Mineralization                                                   |  | 553 - 567 |
| 76 | M/I   | <i>Aggregatibacter actinomycetemcomitans</i> and <i>Porphyromonas gingivalis</i> |  | 568 - 580 |
| 77 | PERIO | Bone Grafts / Osseointegration / Mucogingival Considerations                     |  | 581 - 591 |
| 78 | PERIO | Oral Hygiene Aids / Dentin Hypersensitivity                                      |  | 592 - 602 |
| 79 | PTT   | Pharmacology, Therapeutics, & Toxicology                                         |  | 603 - 608 |
| 80 | OMP   | Peptides, Genes, and Cellular Aspects of Oral Disease                            |  | 609 - 623 |
| 81 | CRAN  | Craniofacial Growth & Development                                                |  | 624 - 629 |
| 82 | CRAN  | Genetics - Craniofacial Morphogenesis                                            |  | 630 - 633 |
| 83 | CRAN  | Odontogenesis - Differentiation and Maturation                                   |  | 634 - 641 |

Plenary: 4 p.m. - 4:45 p.m.

|    |    |                                                                 |           |     |
|----|----|-----------------------------------------------------------------|-----------|-----|
| 84 | PL | Student Plenary Session: An Insider's Guide to Dental Academics | Room 147A | 642 |
|----|----|-----------------------------------------------------------------|-----------|-----|

## FRIDAY, MARCH 5, 2010

Hands-on Workshop: 8 a.m. - 9:30 a.m.

|    |     |                                                |           |     |
|----|-----|------------------------------------------------|-----------|-----|
| 85 | HOW | Publishing Your Manuscript - a JDR Perspective | Room 147B | 643 |
|----|-----|------------------------------------------------|-----------|-----|

Symposia: 8 a.m. - 9:30 a.m.

|    |     |                                                                                           |           |     |
|----|-----|-------------------------------------------------------------------------------------------|-----------|-----|
| 86 | SYM | Craniofacial Midline Defects: Genetic, Developmental, Morphological, and Clinical Aspects | Room 152A | 644 |
| 87 | SYM | Special Needs - What Should Be the Research Agenda?                                       | Room 147A | 645 |

Oral Sessions: 8 a.m. - 9:30 a.m.

|    |     |                                                                                      |           |           |
|----|-----|--------------------------------------------------------------------------------------|-----------|-----------|
| 88 | CAR | Biofilm                                                                              | Room 140A | 646 - 651 |
| 89 | DM  | Dental Materials: Adhesion-Leakage/Margin Assessments- Microleakage and Permeability | Room 150B | 652 - 657 |
| 90 | DM  | Keynote Address and Resin-based Composite Synthesis and Destruction                  | Room 151A | 658 - 662 |
| 91 | DM  | Nickel-titanium and Titanium Alloys                                                  | Room 151B | 663 - 668 |
| 92 | EDU | Advances in Education Research                                                       | Room 154  | 669 - 674 |



| SEQ #                                                | GROUP | SESSION TITLE                                                                                                    | ROOM                  | PRESENTATION # |
|------------------------------------------------------|-------|------------------------------------------------------------------------------------------------------------------|-----------------------|----------------|
| <b>FRIDAY, MARCH 5, 2010 (CONTINUED)</b>             |       |                                                                                                                  |                       |                |
| <b>Oral Sessions: 8 a.m. - 9:30 a.m. (continued)</b> |       |                                                                                                                  |                       |                |
| 93                                                   | M/I   | Oral Microbiology I                                                                                              | Room 144AB            | 675 - 680      |
| 94                                                   | MT    | Keynote Address and Cementogenesis and Mineralization                                                            | Room 143AB            | 681 - 685      |
| 95                                                   | NPBR  | Issues in Primary Care Research                                                                                  | Room 156              | 686 - 688      |
| 96                                                   | PERIO | Periodontal Diseases / General Health Interrelations                                                             | Room 150A             | 689 - 694      |
| 97                                                   | SAL   | Keynote Address and Salivary Gland Development II                                                                | Room 149              | 695 - 699      |
| 190                                                  | LBN   | Late-breaking News I                                                                                             | Room 140B             | 1510 - 1513    |
| <b>Plenary: 9:45 a.m. - 10:30 a.m.</b>               |       |                                                                                                                  |                       |                |
| 98                                                   | PL    | Cell and Tissue Dynamics in Development and Regeneration                                                         | Room 146AB            | 700            |
| <b>Hands-on Workshop: 10:45 a.m. - 12:15 p.m.</b>    |       |                                                                                                                  |                       |                |
| 99                                                   | HOW   | From "Good Idea" to Grant Award: Transforming Behavioral and Social Research Ideas into Innovative Funded Grants | Room 143C             | 701            |
| <b>Symposia: 10:45 a.m. - 12:15 p.m.</b>             |       |                                                                                                                  |                       |                |
| 100                                                  | SYM   | Changes in Saliva Composition with Age                                                                           | Room 147A             | 702            |
| 101                                                  | SYM   | The Promise of Next-generation Sequencing Technologies for Oral Microbiome Research                              | Room 147B             | 703            |
| <b>Oral Sessions: 10:45 a.m. - 12:15 p.m.</b>        |       |                                                                                                                  |                       |                |
| 102                                                  | BEHSR | Oral Epidemiology Methods                                                                                        | Room 140B             | 704 - 708      |
| 103                                                  | CRAN  | Developmental Mechanisms of Craniofacial Structures                                                              | Room 143AB            | 709 - 714      |
| 104                                                  | DAR   | Dental Anesthesiology Research                                                                                   | Room 149              | 715 - 718      |
| 105                                                  | DM    | Keynote Address and Curing Lamps                                                                                 | Room 150B             | 719 - 723      |
| 106                                                  | DM    | Optical Properties: Friend or Foe                                                                                | Room 151A             | 724 - 729      |
| 107                                                  | DM    | Keynote Address and Dentin Bonding Mechanisms                                                                    | Room 151B             | 730 - 734      |
| 108                                                  | IMP   | Bone Regeneration                                                                                                | Room 156              | 735 - 740      |
| 109                                                  | M/I   | Immunology                                                                                                       | Room 144AB            | 741 - 746      |
| 110                                                  | OMS   | Oral and Maxillofacial Surgery                                                                                   | Room 140A             | 747 - 750      |
| 111                                                  | OMP   | Keynote Address and Oral Cancer II: Invasion and Progression                                                     | Room 150A             | 751 - 755      |
| 112                                                  | PERIO | Pathogenic Mechanisms                                                                                            | Room 154              | 756 - 761      |
| <b>Poster Discussion Session: 2 p.m. - 3:15 p.m.</b> |       |                                                                                                                  |                       |                |
| 113                                                  | OHR   | Prevention and Treatment of Oral Diseases I (PDS)                                                                | Room 145A             | 762 - 768      |
| <b>Poster Sessions: 2 p.m. - 3:15 p.m.</b>           |       |                                                                                                                  | <b>Exhibit Hall D</b> |                |
| 114                                                  | PB    | Pulp Biology & Regeneration Research I                                                                           |                       | 769 - 778      |
| 115                                                  | DM    | Bond Strength Measurements II                                                                                    |                       | 779 - 796      |
| 116                                                  | DM    | Material Biocompatibility: Cell, Tissue, and Bacterial Responses                                                 |                       | 797 - 816      |
| 117                                                  | DM    | Performance of Flowable and Provisional Resin Cements & Restoratives                                             |                       | 817 - 827      |

| SEQ # | GROUP | SESSION TITLE | ROOM | PRESENTATION # |
|-------|-------|---------------|------|----------------|
|-------|-------|---------------|------|----------------|

# **FRIDAY, MARCH 5, 2010 (CONTINUED)**

Poster Sessions: 2 p.m. - 3:15 p.m. (continued)

Exhibit Hall D

|     |       |                                                                                 |  |           |
|-----|-------|---------------------------------------------------------------------------------|--|-----------|
| 118 | DM    | Color and Appearance II                                                         |  | 828 - 842 |
| 119 | BEHSR | Applied Epidemiology of Oral and Craniofacial Conditions I                      |  | 843 - 865 |
| 120 | BEHSR | Dental Public Health in the Social Context                                      |  | 866 - 879 |
| 121 | EDU   | Research Findings in Dental Curricula                                           |  | 880 - 891 |
| 122 | CAR   | Caries Detection & Classification -<br>Caries Risk Factors - Fluoride Ingestion |  | 892 - 904 |
| 123 | MT    | BMPs and Other Proteins                                                         |  | 905 - 922 |
| 124 | M/I   | Immunology of the Oral Cavity                                                   |  | 923 - 934 |
| 125 | PERIO | Periodontal Diseases / Advances in Diagnosis<br>and Epidemiology                |  | 935 - 950 |
| 126 | OMP   | Oral and Systemic Disease and Saliva                                            |  | 951 - 965 |
| 127 | CRAN  | Bone Biology II - Structure and Gene Regulation                                 |  | 966 - 974 |
| 128 | CRAN  | PDL Biology                                                                     |  | 975 - 976 |

Poster Discussion Sessions: 3:30 p.m. - 4:45 p.m.

|     |     |                                        |           |           |
|-----|-----|----------------------------------------|-----------|-----------|
| 129 | DM  | Biological Response to Materials (PDS) | Room 145B | 977 - 983 |
| 130 | SAL | Salivary Research Discussion (PDS)     | Room 146C | 984 - 992 |

Poster Sessions: 3:30 p.m. - 4:45 p.m.

Exhibit Hall D

|     |       |                                                                               |  |             |
|-----|-------|-------------------------------------------------------------------------------|--|-------------|
| 131 | PB    | Pulp Biology & Regeneration Research II                                       |  | 993 - 1001  |
| 132 | PROS  | Prosthodontics Research                                                       |  | 1002 - 1022 |
| 133 | DM    | Synthesis and Polymerization of Resins and Ionomers                           |  | 1023 - 1040 |
| 134 | DM    | Roughness, Gloss & Appearance of Resins after<br>Polishing &/or Toothbrushing |  | 1041 - 1052 |
| 135 | DM    | CAD/CAM and Polishing Equipment                                               |  | 1053 - 1062 |
| 136 | BEHSR | Dental Professionals in Dental Public Health                                  |  | 1063 - 1084 |
| 137 | NUT   | Nutrition Oral Health Research                                                |  | 1085 - 1088 |
| 138 | CAR   | Caries Prevalence and Experience - Early Childhood<br>Caries (ECC) - Erosion  |  | 1089 - 1097 |
| 139 | IMP   | Tissue Regeneration                                                           |  | 1098 - 1116 |
| 140 | OHR   | Prevention and Treatment of Oral Diseases I                                   |  | 1117 - 1132 |
| 141 | M/I   | Cell Biology                                                                  |  | 1133 - 1145 |
| 142 | PERIO | Host Modulators/Antimicrobials/ Wound Healing/<br>Systemic Influences         |  | 1146 - 1151 |
| 143 | NEU   | Animal Models in Neuroscience                                                 |  | 1152 - 1166 |
| 144 | OMP   | Oral Cancer and Precancer                                                     |  | 1167 - 1176 |
| 145 | CRAN  | Developmental Mechanisms of Craniofacial Structures                           |  | 1177 - 1186 |
| 146 | CRAN  | Muscle Cell Biology                                                           |  | 1187 - 1188 |
| 147 | CRAN  | Orthodontics II - Diagnosis and Treatment Modalities                          |  | 1189 - 1196 |
| 148 | CRAN  | TMJ                                                                           |  | 1197 - 1201 |



| SEQ #                                          | GROUP | SESSION TITLE                                                                                        | ROOM           | PRESENTATION # |
|------------------------------------------------|-------|------------------------------------------------------------------------------------------------------|----------------|----------------|
| <b>SATURDAY, MARCH 6, 2010</b>                 |       |                                                                                                      |                |                |
| Symposium: 8:30 a.m. - 10:30 a.m.              |       |                                                                                                      |                |                |
| 149                                            | SYM   | New Perspectives in Stem Cell Therapeutic Research                                                   | Room 143C      | 1202           |
| Hands-on Workshop: 9 a.m. - 10:30 a.m.         |       |                                                                                                      |                |                |
| 150                                            | HOW   | Next-generation Sequencing (NGS) Data Analysis for the Oral Microbiome                               | Room 147B      | 1203           |
| Symposia: 9 a.m. - 10:30 a.m.                  |       |                                                                                                      |                |                |
| 151                                            | SYM   | National Student Research Group:<br>The Now and Future of Dental Research                            | Room 152A      | 1204           |
| 152                                            | SYM   | Orofacial Clefting in Mouse Models                                                                   | Room 147A      | 1205           |
| Oral Sessions: 9 a.m. - 10:30 a.m.             |       |                                                                                                      |                |                |
| 153                                            | BEHSR | Oral Health Outcomes - Health Literacy & Quality of Life                                             | Room 140B      | 1206 - 1210    |
| 154                                            | CAR   | Demin/Remin - F-varnishes, CPP/ACP                                                                   | Room 140A      | 1211 - 1215    |
| 155                                            | CRAN  | Genetics: Craniofacial Morphogenesis and Root Resorption                                             | Room 143AB     | 1216 - 1221    |
| 156                                            | DM    | Bond Strength - Other                                                                                | Room 151B      | 1222 - 1226    |
| 157                                            | DM    | Ceramic Surfaces, Interfaces, Graded Structures, and Cements                                         | Room 150B      | 1227 - 1232    |
| 158                                            | DM    | Failure Mechanisms and Impression Materials                                                          | Room 151A      | 1233 - 1238    |
| 159                                            | M/I   | <i>Porphyromonas gingivalis</i> and <i>Aggregatibacter actinomycetemcomitans</i>                     | Room 144AB     | 1239 - 1244    |
| 160                                            | MT    | Enamel and Other Mineralized Tissues                                                                 | Room 149       | 1245 - 1250    |
| 161                                            | NEU   | Temporomandibular Disorder Pain                                                                      | Room 156       | 1251 - 1256    |
| 162                                            | OMP   | Oral Cancer III: Stem Cells and Cell Survival                                                        | Room 150A      | 1257 - 1262    |
| 163                                            | PERIO | Periodontal Therapy; Effects on Clinical Parameters, the Subgingival Microbiota, and Host Biomarkers | Room 154       | 1263 - 1268    |
| 191                                            | LBN   | Late-breaking News II                                                                                | Room 146C      | 1514 - 1518    |
| Plenary: 10:45 a.m. - 11:30 a.m.               |       |                                                                                                      |                |                |
| 164                                            | PL    | Epithelial Stem Cells: Biology and Clinical Promise                                                  | Room 146AB     | 1269           |
| Poster Discussion Session: 11:45 a.m. - 1 p.m. |       |                                                                                                      |                |                |
| 165                                            | OHR   | Prevention and Treatment of Oral Diseases II (PDS)                                                   | Room 145A      | 1270 - 1275    |
| Poster Sessions: 11:45 a.m. - 1 p.m.           |       |                                                                                                      | Exhibit Hall D |                |
| 166                                            | AAHAT | AADR/Johnson & Johnson Oral Health Products Hatton Awards - Junior Category                          |                | 1276 - 1284    |
| 167                                            | AAHAT | AADR/Johnson & Johnson Oral Health Products Hatton Awards - Senior Category                          |                | 1285 - 1293    |
| 168                                            | AAHAT | AADR/Johnson & Johnson Oral Health Products Hatton Awards - Post-doctoral Category                   |                | 1294 - 1302    |
| 169                                            | CAULK | AADR DENTSPLY/Caulk Competition - Basic Science                                                      |                | 1303 - 1309    |
| 170                                            | CAULK | AADR DENTSPLY/Caulk Competition - Clinical Science                                                   |                | 1310 - 1316    |
| 171                                            | DM    | Adhesive Bonding - Ceramics and Other                                                                |                | 1317 - 1334    |
| 172                                            | DM    | Dental Materials: Adhesion and Microleakage                                                          |                | 1335 - 1342    |

| SEQ # | GROUP | SESSION TITLE | ROOM | PRESENTATION # |
|-------|-------|---------------|------|----------------|
|-------|-------|---------------|------|----------------|

# **SATURDAY, MARCH 6, 2010 (CONTINUED)**

Poster Sessions: 11:45 a.m. - 1 p.m. (continued)

Exhibit Hall D

|     |       |                                                                                                |  |             |
|-----|-------|------------------------------------------------------------------------------------------------|--|-------------|
| 173 | DM    | Performance of Materials for Release, Anticaries, Maxillofacial, Posts, and Other Applications |  | 1343 - 1352 |
| 174 | DM    | Casting Alloys, Nickel-titanium, and Metal Coatings                                            |  | 1353 - 1356 |
| 175 | DM    | Dental Disciplines (Orthodontic, Endodontic, and Operative) and Impression                     |  | 1357 - 1370 |
| 176 | BEHSR | Applied Epidemiology of Oral and Craniofacial Conditions II                                    |  | 1371 - 1390 |
| 177 | CAR   | Caries Models - Alkali Production - Biofilm                                                    |  | 1391 - 1397 |
| 178 | DAR   | Dental Anesthesia Research                                                                     |  | 1398        |
| 179 | MT    | <i>In vitro</i> Tooth Studies                                                                  |  | 1399 - 1415 |
| 180 | M/I   | <i>Candida</i>                                                                                 |  | 1416 - 1418 |
| 181 | M/I   | <i>Streptococci</i>                                                                            |  | 1419 - 1435 |
| 182 | OMS   | Oral and Maxillofacial Surgery                                                                 |  | 1436 - 1444 |
| 183 | PERIO | Pathogenic Mechanisms Posters                                                                  |  | 1445 - 1459 |
| 184 | OMP   | Osteonecrosis and Oral Infections                                                              |  | 1460 - 1473 |
| 185 | CRAN  | Odontogenesis II: Differentiation and Maturation                                               |  | 1474 - 1480 |
| 186 | CRAN  | Orofacial Disease: Cancer and Wound Healing                                                    |  | 1481 - 1482 |
| 187 | CRAN  | Orthodontics III - Diagnosis and Treatment Modalities                                          |  | 1483 - 1492 |
| 188 | LBN   | Late-breaking News III                                                                         |  | 1493 - 1502 |
| 189 | LBN   | Late-breaking News IV                                                                          |  | 1503 - 1509 |

## **LEGEND**

|       |                                                           |
|-------|-----------------------------------------------------------|
| AAHAT | AADR/Johnson & Johnson Oral Health Products Hatton Awards |
| BEHSR | Behavioral, Epidemiologic & Health Services Research      |
| CAR   | Cariology Research                                        |
| CAULK | AADR DENTSPLY/Caulk Competition                           |
| CRAN  | Craniofacial Biology                                      |
| DAR   | Dental Anesthesiology Research                            |
| DM    | Dental Materials                                          |
| DIA   | Diagnostic Sciences                                       |
| EDUC  | Education Research                                        |
| GOR   | Geriatric Oral Research                                   |
| HOW   | Hands-on Workshop                                         |
| IMP   | Implantology Research                                     |
| LBN   | Late-Breaking News                                        |

|       |                                         |
|-------|-----------------------------------------|
| M/I   | Microbiology/Immunology                 |
| MT    | Mineralized Tissue                      |
| NEU   | Neuroscience/TMJ                        |
| NPBR  | Network for Practice-based Research     |
| NUT   | Nutrition Research                      |
| OHR   | Oral Health Research                    |
| OMS   | Oral & Maxillofacial Surgery            |
| OMP   | Oral Medicine & Pathology               |
| PERIO | Periodontal Research                    |
| PL    | Plenary Session                         |
| PTT   | Pharmacology, Therapeutics & Toxicology |
| PROS  | Prosthodontics Research                 |
| PB    | Pulp Biology & Regeneration             |
| SAL   | Salivary Research                       |
| SYM   | Symposium                               |



# MEETING OVERVIEW

## MEETING SITE

The scientific sessions, registration and the commercial exhibition will be held at the Walter E. Washington Convention Center, located at  
801 Mount Vernon Place, N.W.  
Washington, DC 20001 USA

## REGISTRATION

The AADR Registration Area will be located in the East Lobby of the Convention Center. Registration will be open during the following hours:



|                    |                       |
|--------------------|-----------------------|
| Tuesday, March 2   | 2:30 p.m. – 6:30 p.m. |
| Wednesday, March 3 | 8 a.m. – 4:30 p.m.    |
| Thursday, March 4  | 7 a.m. – 5 p.m.       |
| Friday, March 5    | 7 a.m. – 5 p.m.       |
| Saturday, March 6  | 8:30 a.m. – 1 p.m.    |

## ACCOMPANYING PERSON(S) (GUESTS)

Accompanying persons are non-dentists, non-researchers and non-members who may be traveling to Washington, DC with a meeting delegate and who have no scientific or educational interest in the meeting. Meeting delegates' students, lab technicians, colleagues, past IADR/AADR members, co-authors, etc., do not qualify as accompanying persons and are required to pay the appropriate registration fee if they wish to attend.

If your accompanying person wishes to hear your presentation, he or she must go to the Meeting Services counter in the registration area on site, purchase a badge for \$50, and receive a special color-coded badge-holder. The badge will admit an accompanying person to **one session only** (morning or afternoon) and will not be honored at any other session during the meeting. Anyone who wishes to attend more than one session will be required to pay the appropriate full-registrant fee. All accompanying persons may attend the Opening Ceremonies on Wednesday and the plenary sessions on Thursday, Friday and Saturday mornings.

## BADGES – REPRINT FEE!

Admission to all sessions and all other events during the Meeting will be by badge only. Please wear your badge at all times. Guest badges and special color codes for specific sessions will be available at the Meeting Services counter in the registration area, and guest badges are required for all social functions. If you lose your badge, you will be required to show your receipt and an identification card to obtain a replacement badge. A \$25 fee will be charged for all registration badge reprints requested on site. Do not leave your badge in your hotel room.

## CELL PHONES, PDAS AND PAGERS

All cell phones, PDAs and pagers must be turned OFF or set on "vibrate mode" during sessions.

## IADR/AADR PHOTOGRAPHY, AUDIO AND/OR VIDEO RECORDING POLICY

Taking photographs of scientific content in either an oral session (PowerPoint slides and other projected images) or poster presentation is strictly prohibited. Taking photographs of presentations is permissible with the permission of the presenter, and may occur only at the beginning or end of a session or in between presentations. Audio and/or video recordings is strictly prohibited without the written permission of the IADR/AADR Global Headquarters.

## PROGRAM AND ABSTRACTS

A USB of abstracts, generously sponsored by **Straumann**, will be produced for the AADR meeting delegates (and JDR institutional subscribers). Delegates can pick up their copy on site in the registration area (please have your USB voucher [found on your badge sheet] available to turn in). Members not attending the meeting can purchase a copy after the meeting. The Program will be printed and distributed on site to all meeting delegates. If you need a replacement or extra copy, the fee is \$25 each.

The Program and abstracts are available online at:  
<http://iadr.confex.com/iadr/2010dc/webprogram/index.html>

## LISTING OF PRESENTERS AND AUTHORS

The Program lists the primary presenter's name, co-author's name(s) and the presenter's institution. Abstracts numbers of presenters are listed in the Author/Co-author Index in bold-face type. In cases of multiple authorship, the speaker is identified in the abstract by an asterisk (\*) following his or her name in both the Program and Abstracts. An "S" appears before the presentation number for student presenters.

The number of each abstract printed in the Abstracts is the same as the corresponding paper in the Program. Abstracts are printed exactly as submitted by the authors, without subsequent editing. Authors are not allowed to reference their abstract if the presentation was withdrawn or cancelled.

## CHILD ACCESS TO SESSIONS

Children are allowed access to the exhibition hall **ONLY** during poster presentation/exhibition hours. Children are **NOT** allowed access to the oral session meeting rooms. If you need day care assistance, please contact your assigned hotel to assist with making the necessary arrangements.





## SMOKING POLICY

The AADR meeting is a non-smoking meeting. All public areas in Washington, DC are also smoke-free.

## PARTICIPANTS WITH DISABILITIES OR SPECIAL NEEDS

If you have a disability or special need that may have an impact on your participation in the Annual Meeting, please contact any AADR staff member on site in the registration area to discuss your requirements.

## CONTINUING EDUCATION CREDITS

IADR/AADR is an ADA CERP recognized provider. Delegates are eligible to receive continuing education credits for attending the scientific oral and poster sessions throughout the meeting. One hour of program time is equivalent to one credit hour. Delegates are responsible for completing the forms accurately and keeping their forms for auditing purposes. (Do NOT return the forms to the IADR/AADR.) For questions regarding CERP, please contact Emily Sidla, program manager, at [esidla@iadr.org](mailto:esidla@iadr.org).

## JOB OPPORTUNITY BULLETIN SERVICE (JOBS)

A Job Opportunity Bulletin Service, located in the registration area, is available to all registrants. Bulletin boards will be available to job recruiters to post job vacancies. If you would like to post an opening available at your university, private organization, and/or within the Government, please make sure that a contact name and address are listed on your sheet so that prospective candidates can contact you both on site and/or after the meeting.

## CONVENTION CENTER

### MEETING ROOMS

All scientific sessions will be held in the Walter E. Washington Convention Center. Please check the Schedule of Events for the location of specific meetings and functions. You are encouraged to find rooms in which you plan to present or hear presentations well in advance of the times of the functions.

### COAT CHECK/LUGGAGE STORAGE

Facilities for coat check and luggage storage will be available at the convention center in the registration area for the duration of the meeting. Please do not bring your luggage to the meeting rooms.

## PRESENTER'S NOTE

### SPEAKER READY ROOM

The Speaker Ready Room is located in **Room 157** at the Convention Center and will be open during the following hours:

|                    |                                                   |
|--------------------|---------------------------------------------------|
| Tuesday, March 2   | 2:30 p.m. – 6:30 p.m.                             |
| Wednesday, March 3 | 8 a.m. – 4:30 p.m.<br>(peak usage: noon – 2 p.m.) |
| Thursday, March 4  | 7 a.m. – 3:30 p.m.<br>(peak usage: 7 a.m. – noon) |
| Friday, March 5    | 7 a.m. – 3:30 p.m.<br>(peak usage: 7 a.m. – noon) |
| Saturday, March 6  | 8:30 a.m. – 11 a.m.                               |

To alleviate waiting for a computer station, you may wish to avoid peak times.

### IMPORTANT NOTE:

**All oral presenters must check in at the Speaker Ready Room prior to their presentations.** The room will be equipped with rehearsal computer stations for PowerPoint presenters. Any PowerPoint presenter who has not pre-submitted his/her presentation must bring it to the Speaker Ready Room (on CD-ROM or USB flash drive) at least 24 hours prior to the presentation to have it uploaded to the server.

### PRESENTER'S OBLIGATION

AADR regulations state that submission of an abstract carries with it the obligation of the author to present the paper in person. Requests to withdraw papers must have been made in writing BY THE PRESENTER (requests from anyone other than the presenter will not be honored) and submitted to the online form prior to the meeting. If a presenter finds it impossible to give the paper, the presenter must send written notification with an explanation and the name of a substitute presenter. The substitute should not already be presenting a paper on the program, and should be a co-author who is listed on the abstract. If an acceptable reason is not given, the presenter will not be allowed to submit a paper for the next General Session. NOTE: Lack of travel funds is not an acceptable reason to withdraw an abstract or delegate a substitute presenter.



## FEATURED PRESENTATIONS

### DISTINGUISHED LECTURE SERIES SPEAKERS

On Thursday, Friday and Saturday mornings (in between the two blocks of sessions), a plenary session is scheduled to interest delegates from all Scientific Groups.

#### THURSDAY, MARCH 4, 9:45 A.M. – 10:30 A.M.

Location: Room 146AB (Convention Center)



**David Sidransky**  
(Johns Hopkins University,  
Baltimore, Md., USA)

#### *Molecular Markers in Personalized Cancer Diagnosis and Treatment*

We aimed to personalize head and neck cancer treatment by generating

individual personalized Tumorgrafts generated from a patient's own tumor. Tumor fragments were implanted into nude mice and propagated as tumor fragments to generate cohorts of homogeneously growing tumors suitable for drug treatments. In total, we evaluated 159 different anticancer agents alone or in combination, spanning all currently known classes of anticancer agents and mechanisms of action. Recommended treatments were administered to 10 affected individuals, which resulted in a 100% correlation of both positive and negative predictive values. Additionally, molecular studies in these clinically validated Tumorgraft models offer the unique opportunity for the discovery of new biomarkers. For example, we first applied a pharmacologic unmasking approach to detect hypermethylated genes whose inactivation contributes to cisplatin resistance. Utilizing 3 pairs of cisplatin-sensitive and -resistant cell lines, we identified several hundred genes that were down-regulated in each resistant cell line and re-activated by the DNA methyltransferase inhibitor 5-Aza-dC. Among 30 genes, bisulfite sequencing confirmed that 14 genes were hypermethylated in resistant cell lines, but not in the sensitive cell lines. Six of 14 genes were cisplatin-inducible in sensitive, but not in resistant, cell lines. siRNA knockdown of 2 genes, SAT and S100P, increased cell viability with cisplatin treatment in sensitive parental cell lines. Testing of these methylated genes in primary Tumorgrafts correctly predicted cisplatin sensitivity. Methylation-induced gene silencing plays a role in the development of resistance to cytotoxic chemotherapeutic agents. The predictive nature of the personalized models and easy access to tissue support their use in drug development and the discovery of new predictive biomarkers.

#### FRIDAY, MARCH 5; 9:45 A.M. – 10:30 A.M.

Location: Room 146AB (Convention Center)



#### **Kenneth Yamada**

2008 AADR Distinguished Scientist  
Award Recipient  
(NIDCR/NIH, Bethesda, Md., USA)

#### *Cell and Tissue Dynamics in Development and Regeneration*

Recent advances in imaging, three-dimensional tissue culture, and gene expression analysis are revealing how tissues undergo dynamic remodeling in processes as diverse as organ formation and tumor invasion. The mechanisms responsible for these processes include cell adhesion, migration, contractility, signaling, and local gene expression, which can now be visualized or quantified directly. For example, as a result of these advances, we can now visualize mechanisms of salivary gland development involving dramatic tissue rearrangements orchestrated by a variety of matrix and regulatory proteins and genes. The new tools and approaches developed for these studies should be applicable to any field where tissues are remodeled by movements of molecules and cells.

#### SATURDAY, MARCH 6; 10:45 A.M. – 11:30 A.M.

Location: Room 146AB (Convention Center)



#### **Elaine Fuchs**

2009 National Medal of Science Recipient,  
2010 L'Oreal UNESCO Award  
(The Rockefeller University,  
New York, N.Y., USA)

#### *Epithelial Stem Cells: Biology and Clinical Promise*

Elaine Fuchs is the Rebecca C. Lancefield Professor in Mammalian Cell Biology and Development at The Rockefeller University. She is also an investigator at the Howard Hughes Medical Institute. Fuchs has published more than 250 papers and is internationally known for her research in skin biology and associated human genetic disorders, which include skin cancers and life-threatening genetic syndromes such as blistering skin disorders. Fuchs' current research focuses on the molecular mechanisms that underlie how multipotent stem cells respond to external cues, change their program of gene expression, exit their niche and adopt specific fates to make the epidermis, sebaceous glands and hair follicles of the skin. In tackling the biology of normal tissue homeostasis, Fuchs has begun to explore how this process changes during wound repair and in human disorders, e.g. cancers, where tissue development goes awry. Fuchs' lecture will focus on stem cells of the skin and their promise for regenerative medicine.



## STUDENT PLENARY SESSION

THURSDAY, MARCH 4, 4 P.M. – 4:45 P.M.

Location: Room 147A (Convention Center)

### *An Insider's Guide to Dental Academics*

Sponsor: AADR National Student Research Group

This can't-miss plenary session will feature enthusiastic dental academicians who are passionate about their careers in research. Each presenter will share a short biography of his or her path to a career in dental research, addressing several key topics provided by the AADR NSRG. The session will conclude with questions from students who are considering careers in dental academia. All students are encouraged to attend.

### Moderator:

Mary MacDougall (University of Alabama, Birmingham, USA)

### Panelists:

Luisa DiPietro (University of Chicago, Ill., USA)

Janet Guthmiller (University of North Carolina, Chapel Hill, USA)

Brent Larson (University of Minnesota, Minneapolis, USA)

Paul Krebsbach (University of Michigan, Ann Arbor, USA)

## SYMPOSIA

All symposia will take place at the Walter E. Washington Convention Center and are open for all to attend. Visit the AADR Web site at [www.aadronline.org/aaam](http://www.aadronline.org/aaam) or view the USB for a description of each symposium.

WEDNESDAY, MARCH 3, 1 P.M. - 4 P.M.

### *Do Current Studies Support or Refute a Causal Relationship between Oral Disease and Adverse Pregnancy Outcome?*

Sponsors: Microbiology/Immunology and Periodontal Research Groups

Supported by: Microbiology/Immunology Group and Case Western Reserve University School of Dental Medicine

Organizers: Yiping Han (Case Western Reserve University, Cleveland, USA) and Jeffrey Ebersole (University of Kentucky, Lexington, USA)

Seq #1, Room 147B

WEDNESDAY, MARCH 3, 2:30 P.M. - 4 P.M.

### *Current, Ongoing Research in Bisphosphonate-related Osteonecrosis of the Jaws (BRONJ)*

Sponsor: Oral & Maxillofacial Surgery Group

Organizer: Pamela Jean Hughes (University of Minnesota, Minneapolis, USA)

Seq #2, Room 147A

### *To Seal, Remineralize or Restore: What is the Evidence?*

Sponsors: Cariology Research, Dental Materials, Education Research, Network for Practice-based Research and Oral Health Research Groups

Supported by: 3M ESPE and DENTSPLY International

Organizers: Mathilde Peters and Margherita Fontana (University of Michigan – CRSE, Ann Arbor, USA)

Seq #3, Room 152A

THURSDAY, MARCH 4, 8 A.M. - 9:30 A.M.

### *Osteonecrosis of the Jaws and the CONDOR ONJ Case-Control Study*

Sponsor: Network for Practice-based Research

Organizer: Timothy DeRouen (University of Washington, Seattle, USA)

Seq #15, Room 147B

### *Reconstructive Dentistry and Tissue Engineering*

Sponsors: Implantology Research and Periodontal Research Groups

Organizer: Selim Pamuk (University of Istanbul, Turkey)

Seq #16, Room 147A

### *Whole Saliva: Proteome/Peptidome, Microbiome and Proteasome.*

Sponsor: Salivary Research Group

Organizer: Eva Helmerhorst (Boston University, Mass., USA)

Seq #17, Room 152A

THURSDAY, MARCH 4, 10:45 A.M. - 12:15 P.M.

### *DNA Tumorigenic Pathogenesis in the Head and Neck*

Sponsor: Oral Medicine & Pathology Group

Organizers: Jennifer Webster-Cyriaque (University of North Carolina, Chapel Hill, USA); Craig Miller (University of Kentucky, Lexington, USA); and John Greenspan (University of California, San Francisco, USA)

Seq #31, Room 152A

### *Phosphate Homeostasis*

Sponsor: Mineralized Tissue Group

Organizer: Jan C.-C. Hu (University of Michigan, Ann Arbor, USA)

Seq #32, Room 147A



## FRIDAY, MARCH 5, 8 A.M. - 9:30 A.M.

### *Craniofacial Midline Defects. Genetic, Developmental, Morphological and Clinical Aspects*

Sponsors: Craniofacial Biology and Oral & Maxillofacial Surgery Groups

Organizer: W.H. Arnold (University Witten-Herdecke, Germany)

Seq #86, Room 152A

### *Special Needs – What Should Be the Research Agenda?*

Sponsors: Geriatric Oral Research and Nutrition Research Groups

Organizer: Ronald Ettinger (University of Iowa, Iowa City, USA)

Seq #87, Room 147A

## FRIDAY, MARCH 5, 10:45 A.M. - 12:15 P.M.

### *Changes in Saliva Composition with Age*

Sponsor: Salivary Research Group

Organizer: Olga Baker (University of Missouri, Columbia, USA)

Seq #100, Room 147A

### *The Promise of Next Generation Sequencing Technologies for Oral Microbiome Research*

Sponsored by and Supported by: NIH/NIDCR

Organizer: Gary Xie (Los Alamos National Laboratory, N.M., USA)

Seq #101, Room 147B

## SATURDAY, MARCH 6, 8:30 A.M.-10:30 A.M.

### *New Perspectives in Stem Cell Therapeutic Research*

Sponsors: Craniofacial Biology, Mineralized Tissue and Pulp Biology & Regeneration Groups

Organizer: Petros Papagerakis (University of Michigan, Ann Arbor, USA)

Seq #149, Room 143C

## SATURDAY, MARCH 6, 9 A.M.-10:30 A.M.

### *National Student Research Group: The Now and Future of Dental Research*

Sponsors: Dental Materials, Salivary Research and National Student Research Groups

Organizer: Nathaniel Lawson (University of Alabama, Birmingham, USA)

Seq #151, Room 152A

### *Orofacial Clefting in Mouse Models*

Sponsor: Craniofacial Biology Group

Organizer: Ophir Klein (University of California, San Francisco, USA)

Seq #152, Room 147A

## HANDS-ON WORKSHOPS

The workshops will take place at the Walter E. Washington Convention Center. The workshops are complimentary; however, attendance is limited at all workshops except Sequence #s 44 and 85, and registrations were processed on a first-come, first-served basis. If you registered in advance, your ticket was included in your registration packet.

Visit the AADR Web site at [www.aadronline.org/aaam](http://www.aadronline.org/aaam) or view the USB for a description of each workshop.

## THURSDAY, MARCH 4, 10:45 A.M. – 12:15 P.M.

### *Introduction to the Dental, Oral and Craniofacial Data*

*Resource Center* (a joint project of CDC's Division of Oral Health and NIH's National Institute of Dental and Craniofacial Research)

Sponsor: Behavioral, Epidemiologic & HSR Group

Organizer: Laurie Barker (CDC, Atlanta, Ga., USA)

Seq #30, Room 143C

## THURSDAY, MARCH 4, 1 P.M. – 5:30 P.M.

### *NIDCR Essentials in Grant Writing*

Sponsored and Supported by: NIDCR

Organizer: Kevin Hardwick (NIDCR, Bethesda, Md., USA)

Seq #44, Room 147B

## FRIDAY, MARCH 5, 8 A.M. – 9:30 A.M.

### *Publishing your Manuscript – a JDR Perspective*

Sponsor: *Journal of Dental Research*

Organizer: Anthony Smith (University of Birmingham, UK)

Seq #85, Room 147B

## FRIDAY, MARCH 5, 10:45 A.M. – 12:15 P.M.

### *From “Good Idea” to Grant Award: Transforming Behavioral and Social Research Ideas into Innovative Funded Grants*

Sponsors: Behavioral, Epidemiologic & HSR, Education Research and Nutrition Research Groups

Organizer: Melissa Riddle (NIDCR, Bethesda, Md., USA)

Seq #99, Room 143C

## SATURDAY, MARCH 6, 9 A.M. – 10:30 A.M.

### *Next Generation Sequencing (NGS) Data Analysis for the Oral Microbiome*

Sponsored by and Supported by: NIH/NIDCR – Microbiology Program

Organizer: Gary Xie (Los Alamos National Laboratory, N.M., USA)

Seq #150, Room 147B

## KEYNOTE SPEAKERS

Each Scientific Group has been asked to select a keynote speaker to give an overview of research in that area of expertise. Delegates can benefit from these extended presentations by getting an overall understanding of what is currently being done in other disciplines. Visit the AADR Web site or view the USB for a description of each keynote.

## BEHAVIORAL, EPIDEMIOLOGIC AND HEALTH SERVICES RESEARCH

**Mary Tavares** (The Forsyth Institute, Boston, Mass., USA)  
and **Anne Koerber** (University of Illinois, Chicago, USA)  
*Are Dental Providers Ready to Offer Health Promotions to their Patients? – A Look at Provider Behavior*  
Wednesday, March 3, 2:30 p.m.  
Seq #4, Room 140B

## DENTAL MATERIALS

**Jorge Perdigão** (University of Minnesota, Minneapolis, USA)  
*Variables Related to the Clinical Situation for Adhesion and Treatment of the Substrate*  
Wednesday, March 3, 2:30 p.m.  
Seq #7, Room 150B

**Patricia Pereira** (University of North Carolina, Chapel Hill, USA)  
*Translating Dental Materials Research into Clinical Outcomes*  
Wednesday, March 3, 2:30 p.m.  
Seq #8, Room 151A

**Rade Paravina** (University of Texas Dental Branch at Houston, USA)  
*Color, Appearance and Esthetics: a New Context for an Old Riddle*  
Thursday, March 4, 8 a.m.  
Seq #20, Room 151A

**George Quinn** (NIST, Gaithersburg, Md., USA)  
*Practical Application of Fracture Mechanics to Restoration Failure Analysis*  
Thursday, March 4, 8 a.m.  
Seq #21, Room 150B

**Richard Price** (Dalhousie University, Halifax, NS, Canada)  
*Total Energy – Are You Delivering Enough to Cure Your Restorations?*  
Thursday, March 4, 10:45 a.m.  
Seq #36, Room 151A

**Gottfried Schmalz** (University of Regensburg, Germany)  
*Bisphenol A in Dentistry—an Unacceptable Biological Risk?*  
Thursday, March 4, 10:45 a.m.  
Seq #35, Room 150B

**Jeff Stansbury** (University of Colorado, Aurora, USA)  
*Approaches to Low-shrinkage and/or Low-stress Dental Polymers*  
Friday, March 5, 8 a.m.  
Seq #90, Room 151A

**Steven Armstrong** (University of Iowa, Iowa City, USA)  
*Revisiting Microtensile Bond Strength Testing Methodology*  
Friday, March 5, 10:45 a.m.  
Seq #107, Room 151B

**Daniel Fried** (University of California, San Francisco, USA)  
*Near-IR Imaging of Dental Decay*  
Friday, March 5, 10:45 a.m.  
Seq #105, Room 150B

## GERIATRIC ORAL RESEARCH

**Athena Papas** (Tufts School of Dental Medicine, Boston, Mass., USA)  
*Sjögren's Syndrome—Oral Manifestations and Treatment Options*  
Thursday, March 4, 10:45 a.m.  
Seq #37, Room 149

## MINERALIZED TISSUE

**Graeme Hunter** (University of Western Ontario, London, Canada)  
*Mechanistic Studies on Protein Inhibitors of Crystal Formation*  
Friday, March 5, 8 a.m.  
Seq #94, Room 143AB

## NUTRITION RESEARCH

**Connie Mobley** (University of Nevada, Las Vegas, USA)  
*Advancing the Translation of Evidence in Nutrition and Oral Health Research: Future Challenges*  
Thursday, March 4, 8 a.m.  
Seq #: 24: Room 149

## ORAL MEDICINE & PATHOLOGY

**Cun Yu Wang** (University of California, Los Angeles, USA)  
*Molecular Regulation of Oral Cancer Invasion and Chemoresistance*  
Friday, March 5, 10:45 a.m.  
Seq #111, Room 150A



## PULP BIOLOGY AND REGENERATION

**Kerstin Galler** (University of Regensburg, Germany)  
*Nanostructured Peptide Hydrogels for the Regeneration of the  
Dentin-Pulp Complex*  
Thursday, March 4, 10:45 a.m.  
Seq #42, Room 156

## SALIVARY RESEARCH

**Kirsten Limesand** (University of Arizona, Tucson, USA)  
*Sensitivity of the Salivary Glands to Radiation*  
Friday, March 5, 8 a.m.  
Seq #97, Room 149

## LUNCH & LEARNING

**THURSDAY, MARCH 4, 12:15 P.M. – 1:30 P.M.**

Location: Room 146C

During lunch, you may discuss topics of current interest with the researchers as identified below. There is a \$60 fee to cover the cost of the lunch, and attendance is limited to 10 persons per table, including the speaker(s). Assignments were processed on a first-come, first-served basis. If you purchased your ticket in advance, your Lunch & Learning ticket was included in your registration packet. Space permitting, tickets may be sold on site. Visit the AADR Web site at [www.aadronline.org/aaam](http://www.aadronline.org/aaam) or view the USB for a description of each table presentation.

**Table #1: Caries Management by Risk Assessment –  
What's the Evidence?**  
Speaker: Mark Wolff (New York University, N.Y., USA)

**Table #2: Management of Early Caries Lesions:  
Remineralization or Infiltration?**  
Speaker: Mathilde Peters (University of Michigan –  
CRSE, Ann Arbor, USA)

**Table #3: Maximizing the Balance among Fluoride  
Intake, Fluorosis, and Caries: Science of Fluoride Use in  
Oral Health Care**  
Speaker: Liang Hong (University of Missouri,  
Kansas City, USA)

**Table #4: Prevention of Secondary Caries: Clinical and  
Biologic Factors**  
Speaker: John Hicks (Baylor College of Medicine,  
Houston, Texas, USA)

**Table #5: The Role of Proteomics to Understand the  
Acquired Enamel Pellicle**

Speaker: Walter Siqueira (University of Western Ontario,  
London, Canada)

**Table #6: Biomodification of Dentin for Enhanced  
Bond Stability**  
Speaker: Ana Bedran-Russo (University of Illinois,  
Chicago, USA)

**Table #7: Ceramic Lifetime Prediction: Physical vs.  
Virtual Approach?**  
Speaker: Jason Griggs (University of Mississippi, Jackson, USA)

**Table #8: Digital Impressions and CAD/CAM Ceramics**  
Speaker: John Powers (Dental Consultants, Inc., Ann Arbor,  
Mich., USA)

**Table #9: Lessons Learned from PBRN Studies**  
Speaker: Van Thompson (New York University, N.Y., USA)

**Table #10: Nanofillers—Design and Utility in Dental Materials**  
Speaker: Sumita Mitra (3M ESPE Dental Products, St. Paul,  
Minn., USA)

**Table #11: New Clinical Research Designs**  
Speaker: Stephen Bayne (University of Michigan,  
Ann Arbor, USA)

**Table #12: Salivary Hypofunction—Causes, Diagnosis,  
Complications and Management**  
Speaker: Mabi Singh (Tufts University, Boston, Mass., USA)

**Table #13: New Implant Surfaces and Strategies for Control  
of Peri-implant Epithelium and Fibrous Tissue Attachment**  
Speaker: John Ricci (New York University, N.Y., USA)

**Table #14: Prosthodontic Treatment Planning Considerations  
for the Replacement of Missing Teeth in the Growing Patient**  
Speaker: L.A. Knobloch (The Ohio State University,  
Columbus, USA)

**Table #15: Physical Methods of Mineralized Tissue  
Characterization**  
Speaker: Elia Beniash (University of Pittsburgh, Pa., USA)

**Table #16: Dietary Assessment Strategies in Oral Health  
Research**  
Speakers: Anne Hague (The Ohio State University,  
Columbus, USA) and Teresa Marshall (University of Iowa,  
Iowa City, USA)

**Table #17: Saliva and Dental Erosion**  
Speaker: Marilia Buzalaf (University of São Paulo, Brazil)

## SPECIAL EVENTS

### **AADR/RESEARCH! AMERICA ADVOCACY DAY AND AWARDS RECEPTION**

**TUESDAY, MARCH 2**

To help ensure Congress' focus is on an innovation economy and the importance of research, AADR and Research!America will co-host a legislative workshop, Capitol Hill visits, and research advocates awards reception on Tuesday evening, March 2 for all delegates to attend at no charge. The event is generously sponsored by **P&G Oral Health**.

#### **Schedule**

- |                       |                                                                                                                        |
|-----------------------|------------------------------------------------------------------------------------------------------------------------|
| 9 a.m. – 11:30 a.m.   | Legislative Workshop<br>Location: Convention Center;<br>Room 101                                                       |
| Noon – 5 p.m.         | Capitol Hill Visits<br>(Please refer to your confirmation<br>e-mail for specific appointment time<br>and location.)    |
| 5:30 p.m. – 7:30 p.m. | AADR & Research!America Research<br>Advocacy Awards Reception<br>Location: Rayburn House Office<br>Building, Gold Room |

NOTE: Delegates are requested to take public transportation to Capitol Hill to visit with their legislators and/or attend the reception. You can access the Metro inside the Convention Center by Room 150 and the closest Metro stop to Capitol Hill is South Capitol on the blue or orange lines. The entrance to the Rayburn House is located at C Street and is just a short walking distance from the station.

### **NEW MEMBER & FIRST-TIMER ORIENTATION RECEPTION**

**WEDNESDAY, MARCH 3, 1:30 P.M. – 2:30 P.M.**

Location: Room 152B

All new members and first-timers at the Annual Meeting are invited to attend the reception. Graduate and post-doctoral students are also welcome to attend. If you are interested in becoming more involved in the Association or learning more about specific Groups, Sections or Divisions within IADR/AADR, please join us for refreshments.

### **3M ESPE HOSPITALITY & WIFI CENTERS**

**WEDNESDAY - SATURDAY, MARCH 3-6**

3M ESPE will provide a Hospitality Center (cyber café) located in the Exhibit Hall, along with a WiFi Center located in the registration area. Computer stations will be set with Internet access for delegates to check their e-mail or browse the Web in the Exhibit Hall. Admission is free, and all meeting participants are invited to visit at their convenience and enjoy light refreshments. The Hospitality Center will be open during the poster viewing, Thursday through Saturday. Bring your laptop to the WiFi Center, and you can have free Internet access (if you have a wireless card in your computer), all day Wednesday through Saturday.

### **OPENING CEREMONIES & AWARDS PROGRAM, FOLLOWED BY THE WELCOME RECEPTION**

**WEDNESDAY, MARCH 3, 4:15 P.M.**

Location: Room 146AB

The Opening Ceremonies & Awards Program will begin at 4:15 p.m. and will include presentations of the various AADR Awards and Fellowships and the President-elect address by David Wong (University of California, Los Angeles, USA). After the Opening Ceremonies, all meeting participants are invited to the Welcome Reception, which will take place in the Concourse Foyer outside Room 146.

### **DENTAL MATERIALS GROUP RECEPTION – NEW DAY**

**WEDNESDAY, MARCH 3, 6:30 P.M. – 8:30 P.M.**

Location: Cannon House Office Building, Caucus Room

The Dental Materials Group is hosting a reception at the Cannon House Office Building for members, friends, and students. Tickets for the event are \$35 per non-students and \$25 for students and will be sold on site on a space-available basis only. If you purchased a ticket and later need to cancel, a full refund is available if notification was received up to one month prior to the date of the event. Pre-purchased tickets are included in your registration packet. Delegates are advised to take public transportation to Capitol Hill. You can access the Metro inside the Convention Center by Room 150 and the closest stop to Capitol Hill is South Capitol on the blue or orange line. The Cannon House Building is located at Independence Avenue, 1<sup>st</sup> Street and C Street, S.E. and is just a short walking distance from the station.



## CADR ACTIVITIES

### THURSDAY, MARCH 4

- 11:30 a.m. – 3 p.m. CADR Executive Meeting  
Location: Renaissance Hotel, Room 17
- 5:30 p.m. – 6:30 p.m. CADR Business Meeting  
Location: Convention Center,  
Room 152A
- 6:30 p.m. – 8 p.m. CADR Reception (invitation only)  
Location: Convention Center,  
Room 152B

## AADR NATIONAL STUDENT RESEARCH GROUP BUSINESS MEETING & RECEPTION

### THURSDAY, MARCH 4

The AADR National Student Research Group (NSRG) will hold its business meeting on Thursday, March 4, at 5 p.m. in Room 143AB at the Convention Center. All student members and non-members are encouraged to attend, as are SRG faculty advisors. The business meeting will include presentation of numerous awards, including the 2010 DENTSPLY/Caulk Student Research Group Awards for the best student presentations at the 2010 Annual Meeting. If you are unable to attend the business meeting, be sure to stop by the NSRG Booth in the registration area to obtain information on becoming more involved in the Association.

Following the business meeting, a reception will take place at the Renaissance Hotel (Renaissance Ballroom East), generously sponsored by **DENTSPLY International**, from 6 p.m. – 8 p.m.

## GROUP BUSINESS MEETINGS & RECEPTIONS

All business meetings and receptions will take place at the Walter E. Washington Convention Center (except the Dental Materials Reception).

|                                      | Business Meetings<br>5 p.m. – 6 p.m. | Receptions<br>6 p.m. –                                              |
|--------------------------------------|--------------------------------------|---------------------------------------------------------------------|
| Behavioral Epidemiologic & HSR       | Thursday, Room 140A                  | Thursday, Room 102A *                                               |
| Cariology Research                   | Thursday, Room 140B                  | -                                                                   |
| Craniofacial Biology                 | Thursday, Room 150A                  | Thursday, Room 155 ^                                                |
| Dental Materials                     | Thursday, Room 150B                  | Wednesday, Cannon House<br>Office Building<br>(starts at 6:30 p.m.) |
| Geriatric Oral Research              | Friday, Room 140A                    | Thursday, Room 102A *                                               |
| Mineralized Tissue                   | Thursday, Room 151A                  | Thursday, Room 155 ^                                                |
| Nutrition                            | Thursday, Room 149AB                 | Thursday, Room 102A *                                               |
| Oral Health Research                 | Thursday, Room 145A                  | Thursday, Room 145A                                                 |
| Oral Medicine & Pathology            | Thursday, Room 154                   | Thursday, Room 154                                                  |
| Pharmacology/Therapeutics/Toxicology | Thursday, Room 151B                  | -                                                                   |
| Prosthodontics Research              | Thursday, Room 144AB                 | -                                                                   |
| Pulp Biology & Regeneration          | Thursday, Room 156                   | -                                                                   |

\* ^ Joint Receptions

NOTE: Groups/Networks not listed are hosting their meetings/receptions at the IADR General Session in Barcelona.

## NIH/NIDCR/NCRR ACTIVITIES

### WEDNESDAY, MARCH 3

- 8 a.m. – noon      NIDCR Meetings in Bethesda, Md.  
- NIDCR T32 Training Directors' Meeting  
- NIDCR Trainees' Poster Session  
- NIDCR Director's Meeting with Research Trainees and Junior Scientists
- 2:30 p.m. – 3:30 p.m.      ARRA Grants: Report on the Dental and Craniofacial Research Community  
Location: CC – Room 143C

### THURSDAY, MARCH 4

- 1 p.m. – 5:30 p.m.      *NIDCR Essentials in Grant Writing Workshop*  
Location: CC – Room 147B
- 4 p.m. – 6 p.m.      NCRR: CTSA Dental Working Group  
Location: CC – Room 144C

### FRIDAY, MARCH 5

- 10:30 a.m. – noon      NIDCR Research Training & Career Development Opportunities  
Location: CC – Room 142
- 10:45 a.m. – 12:15 p.m.      *The Promise of Next Generation Sequencing Technologies for Oral Microbiome Research Symposium*  
Location: CC – Room 147B
- 1:30 p.m. – 2:30 p.m.      NIH Peer Review: Overview and What's New  
Location: CC – Room 142

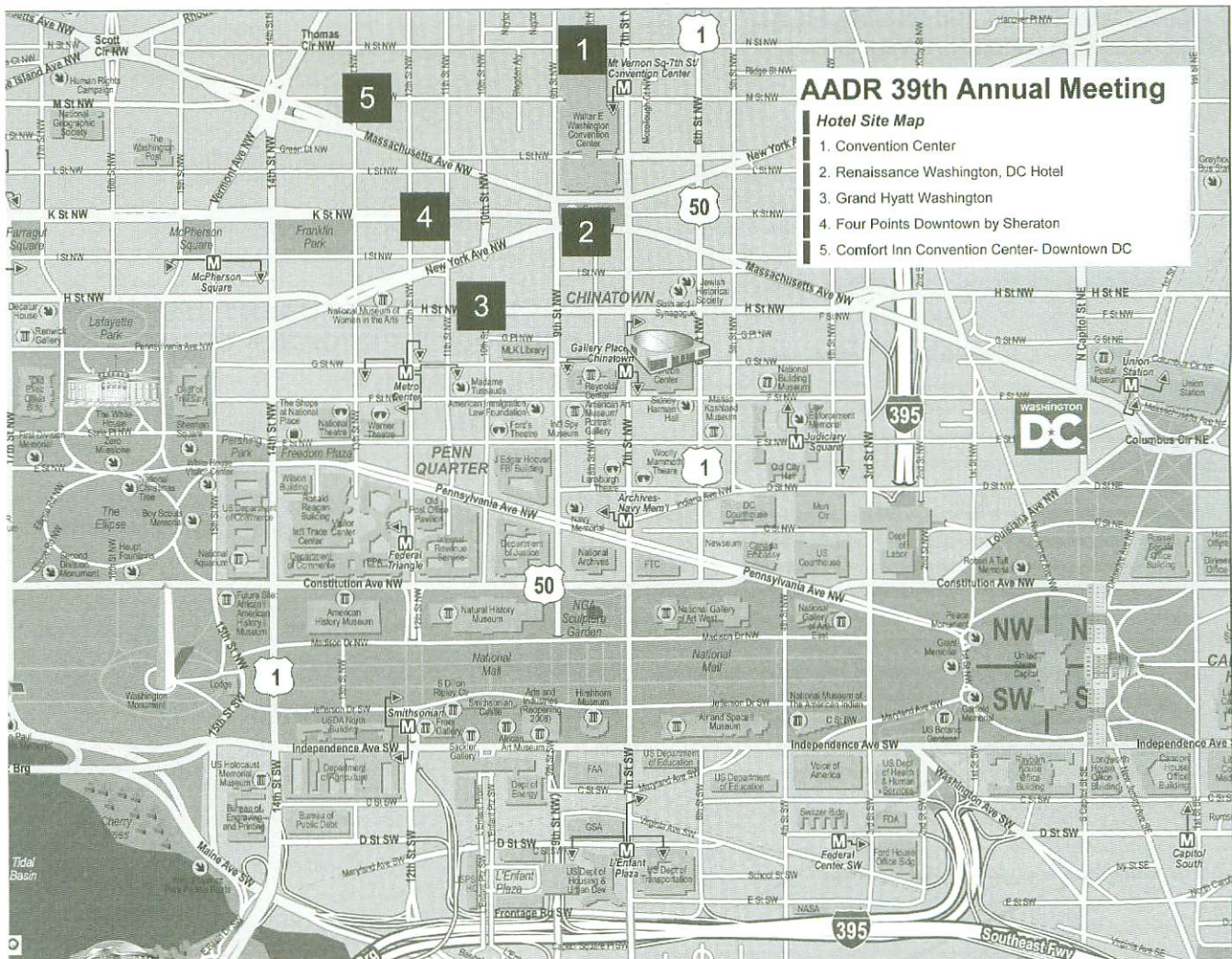
### SATURDAY, MARCH 6

- 9 a.m. – 10:30 a.m.      *Next Generation Sequencing (NGS) Data Analysis for the Oral Microbiome Workshop*  
Location: CC – Room 147B





# HOTEL MAP



## MEETING VENUE

1. Walter E. Washington Convention Center 801 Mount Vernon Place, N.W.

## HOTELS

2. Renaissance Washington DC (HQ Hotel)
3. Grand Hyatt Washington
4. Four Points by Sheraton Washington DC
5. Comfort Inn Convention Center

## STREET ADDRESS

- 999 9th Street, N.W.
- 1000 H Street, N.W.
- 1201 K Street, N.W.
- 1201 13th Street, N.W.

## TELEPHONE

- +1.202.898.9000
- +1.202.582.1234
- +1.202.289.7600
- +1.202.682.5300

## BABYSITTING SERVICE

Should you require a babysitter during your stay in Washington, DC, please contact the concierge at your respective hotel, since most can arrange the service for you.



# POSTER COMPETITIONS

## AADR/JOHNSON & JOHNSON HEALTHCARE PRODUCTS HATTON AWARDS COMPETITION

WEDNESDAY, MARCH 3

|                    |                                         |
|--------------------|-----------------------------------------|
| 7:45 a.m.          | Judges Arrive                           |
| 8:20 a.m. – noon   | Presentations (closed-door competition) |
| 7:30 a.m. – 2 p.m. | Judging Deliberations (Room 142)        |

### Junior Category – Location: CC – Room 140A

| Time       | Name                             |
|------------|----------------------------------|
| 8:20 a.m.  | Laney Mai                        |
| 8:40 a.m.  | Carrie Neill                     |
| 9 a.m.     | Angela Gullard                   |
| 9:20 a.m.  | Sheede Khalil                    |
| 9:40 a.m.  | Break                            |
| 10 a.m.    | Lan Pham                         |
| 10:20 a.m. | Kathryn Ritchie                  |
| 10:40 a.m. | Harrison Edward Mackler          |
| 11 a.m.    | Jonghee Cheryl Park              |
| 11:20 a.m. | Yoon Ji Seon                     |
| 11:40 a.m. | Anika Voisey                     |
| Noon       | Completion – Deliberations Begin |

### Senior Category – Location: CC – Room 140B

| Time       | Name                             |
|------------|----------------------------------|
| 8:20 a.m.  | Vesna-Lea Ferrer                 |
| 8:40 a.m.  | Iris González                    |
| 9 a.m.     | Chad Novince                     |
| 9:20 a.m.  | Yuhe Lu                          |
| 9:40 a.m.  | Break                            |
| 10 a.m.    | Daniela Mendonca                 |
| 10:20 a.m. | Anna Turabelidze                 |
| 10:40 a.m. | Bojana Bojovic                   |
| 11 a.m.    | Hani Mawardi                     |
| 11:20 a.m. | Completion – Deliberations Begin |

### Post-doctoral Category – Location: CC – Room 156

| Time      | Name                   |
|-----------|------------------------|
| 8:20 a.m. | Sundaralingam Premaraj |
| 8:40 a.m. | Marcelo Catalan        |
| 9 a.m.    | Paul Doodes            |
| 9:20 a.m. | Angela Brown           |

|            |                                  |
|------------|----------------------------------|
| 9:40 a.m.  | Break                            |
| 10 a.m.    | Francisco Paula e Silva          |
| 10:20 a.m. | Maria Serrano                    |
| 10:40 a.m. | Ramiro Murata                    |
| 11 a.m.    | Maria Athanassiou-Papaefthymiou  |
| 11:20 a.m. | Jae-Won Kim                      |
| 11:40 a.m. | Completion – Deliberations Begin |

## AADR NATIONAL STUDENT RESEARCH GROUP DENTSPLY/CAULK COMPETITION

THURSDAY, MARCH 4

|                     |                                         |
|---------------------|-----------------------------------------|
| 8 a.m. – 8:30 a.m.  | Poster Set-up                           |
| 8:30 a.m. – 9 a.m.  | Poster Viewing by Judges                |
| 9 a.m. – 11:40 a.m. | Presentations (closed-door competition) |
| 11:45 a.m. – noon   | Poster Tear-down                        |
| Noon                | Judges' Deliberation                    |

### Basic Science Category – Location: CC – Room 153

| Board #    | Time       | Name                |
|------------|------------|---------------------|
| #1         | 9 a.m.     | Julie Coyne         |
| #2         | 9:20 a.m.  | Byungdo Han         |
| #3         | 9:40 a.m.  | Blair Cohen         |
| #4         | 10 a.m.    | Karen Liang         |
| Break      | 10:20 a.m. |                     |
| #5         | 10:40 a.m. | David Nedrelov      |
| #6         | 11 a.m.    | Jennifer Adicks     |
| #7         | 11:20 a.m. | Paul Dyer           |
| Completion | Noon       | Deliberations Begin |

### Clinical Science Category – Location: CC – Room A107

| Board #    | Time       | Name                |
|------------|------------|---------------------|
| #1         | 9 a.m.     | Hanna Lindskog      |
| #2         | 9:20 a.m.  | Amanda Cheng        |
| #3         | 9:40 a.m.  | Stuart Seheult      |
| #4         | 10 a.m.    | Becky Paquin        |
| Break      | 10:20 a.m. |                     |
| #5         | 10:40 a.m. | Dennis Beliveau     |
| #6         | 11 a.m.    | Alana Bednarz       |
| #7         | 11:20 a.m. | Nishith Patel       |
| Completion | Noon       | Deliberations Begin |



## EVENTS & AWARDS SPONSORS

AADR THANKS THE FOLLOWING COMPANIES FOR THEIR GENEROUS SUPPORT OF THE AADR ANNUAL MEETING:



Hospitality & WiFi Centers,  
AADR Student Research Fellowship



AADR President's Induction Ceremony & Reception,  
AADR William B. Clark Fellowship,  
AADR Student Research Fellowships,  
AADR/Research!America Advocacy Day



AADR NSRG Reception,  
AADR Student Research Fellowships



AADR Distinguished Scientist Award,  
AADR Student Research Fellowships



USB of Abstracts



IADR/AADR William J. Gies Awards



AADR/CADR Past Executives'  
Business Meeting,  
AADR Student Research Fellowships,  
AADR Hatton Awards Competition



AADR Student Research Fellowships



Dental Education | Access to Care | Research | Charitable Assistance

AADR Student Research Fellowships



AADR Student Research Fellowships



AADR NSRG Poster  
Competition Awards



AADR Student Research Fellowships



AADR Neal W. Chilton Fellowship

# ACKNOWLEDGMENTS

## SYMPOSIA AND WORKSHOPS

AADR acknowledges the following companies and organizations for their support:

**3M ESPE** – in support of the *To Seal, Remineralize or Restore: What is the Evidence?* symposium.

**Case Western Reserve University School of Dental Medicine** – in support of the *Do Current Studies Support or Refute a Causal Relationship between Oral Disease and Adverse Pregnancy Outcome?* symposium.

**DENTSPLY International** – in support of the *To Seal, Remineralize or Restore: What is the Evidence?* symposium.

**Microbiology/Immunology Group** – in support of the *Do Current Studies Support or Refute a Causal Relationship between Oral Disease and Adverse Pregnancy Outcome?* symposium.

**NIDCR** – in support of the *Essentials in Grant Writing and Next Generation Sequencing (NGS) Data Analysis for the Oral Microbiome workshops and The Promise of Next Generation Sequencing Technologies for Oral Microbiome Research* symposium.

## AADR AWARDS AND FELLOWSHIPS

The Awards and Fellowships of the Association provide recognition of and support for individuals who have made significant contributions to dental research.

**IADR/AADR William J. Gies Award:** This annual award recognizes the best papers published in the *Journal of Dental Research* for the period of July 1 through June 30 preceding the AADR Annual Meeting. One paper is selected in each category: Clinical, Biological, and Biomaterials & Bioengineering. The award is supported by **J. Morita USA, Inc.**

**AADR Distinguished Scientist Award:** This award is made to recognize and honor outstanding research of particular significance in any of the fields related to oral science. The award is supported by **GlaxoSmithKline** and is presented every two years.

**AADR Distinguished Mentoring Award:** This new award was established to provide national recognition for outstanding efforts to foster and promote research training and career development of students, trainees and junior faculty. It is intended to identify individuals at all levels of their career with an exemplary record of mentoring.

**AADR Honorary Membership:** The three most recent living Past Presidents of the AADR may elect an honorary member. This person is not a member of the Association but has made significant contributions to and/or supports dental research.

**AADR Jack Hein Public Service Award:** This award honors individuals who have given exemplary service in the area of public affairs by consistently promoting the interests and activities of oral health research to a wide constituency.

**AADR Student Research Group DENTSPLY/Caulk Competition:** This competition is run entirely by the AADR National Student Research Group and is generously supported by the **L.D. Caulk Division of DENTSPLY International**. First-, second-, and third-place winners are selected in two categories: Basic Science and Clinical Science.

**AADR/Johnson & Johnson Healthcare Products Hatton Awards Competition:** The six winners of the AADR competition this year will compete in the IADR/Unilever Hatton Competition & Awards at the 88th General Session & Exhibition of the IADR in Barcelona, Spain, July, 2010. The awards are supported annually by **Johnson & Johnson Healthcare Products**.

**AADR William B. Clark Fellowship:** This annual award was established in memory of William B. Clark and is supported by **P&G Professional Oral Health, Crest Oral-B**. The award recognizes investigators carrying out clinical research in periodontology.

**AADR Neal W. Chilton Fellowship in Clinical Research:** This AADR Fellowship, sponsored by the Task Force on Design and Analysis in Dental and Oral Research, has been established in memory of Neal W. Chilton. The Fellowship was designed to enable dental clinical faculty to obtain training in clinical Research.

**AADR/IADR Journal of Dental Research "Cover of the Year, 2009":** This recognition is presented annually for the previous year's *JDR* cover image that enhances the impact of the article, and is both scientifically novel and aesthetically pleasing.



## AADR STUDENT RESEARCH FELLOWSHIPS

AADR thanks the following companies and organizations that provided funding for the 2010 Fellowships (number of fellowships supported appears in parentheses):

3M ESPE Dental Products (1)  
American Academy of Periodontology (1)  
The ADA Foundation (2)  
Colgate-Palmolive Company (1)  
P&G Professional Oral Health, Crest Oral-B (2)  
DENTSPLY International (2)  
GlaxoSmithKline (2)  
Johnson & Johnson Healthcare Products (3)  
Sunstar Americas, Inc. (3)

The following AADR Sections and Groups have donated or pledged to support a 2010 Fellowship (at the time of publication):

### Sections:

North Carolina  
Houston  
Iowa  
Pittsburgh

### Scientific Groups:

Microbiology/Immunology  
Behavioral, Epidemiologic and Health Services Research  
Oral Medicine & Pathology  
Dental Materials

## AADR STUDENT RESEARCH FELLOWSHIP WINNERS PRESENTING AT THE 2010 MEETING

| <u>2009 Winners</u> | <u>Institution</u>                        | <u>P#</u> |
|---------------------|-------------------------------------------|-----------|
| Jennifer Fountain   | University of Pacific                     | 613       |
| Stephen George      | Oregon Health and Science University      | 538       |
| Angela Gullard      | University of Alabama at Birmingham       | 1284      |
| Nathaniel Lawson    | University of Alabama at Birmingham       | 240       |
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88<sup>th</sup> General Session & Exhibition of the IADR  
5<sup>th</sup> General Session of the Pan European Region of the IADR  
Location: Centre Convencions Internacional Barcelona (CCIB)

### IMPORTANT DATES

|                                                  |                |
|--------------------------------------------------|----------------|
| Abstracts Notification Letters Sent (via e-mail) | April 16, 2010 |
| Presenters' Pre-registration Deadline            | May 14, 2010   |
| Non-presenters' Pre-registration Deadline        | May 28, 2010   |
| Barcelona Tours Deadline                         | June 18, 2010  |
| Hotel Reservation Deadline                       | July 7, 2010   |

[www.iadr.org/iags](http://www.iadr.org/iags)

### DISTINGUISHED LECTURE SERIES SPEAKERS

Thursday, July 15, 2010

**Francisco Fernández-Avilés**  
"Stem Cells in Cardiovascular Therapy"  
Hospital General Universitario Gregorio  
Marañón, Servicio de Cardiología, Madrid, Spain



Friday, July 16, 2010

**Thomas Lehner**  
"The Contribution of Oral Immunology to our  
Understanding of Dental and Oral Diseases"  
King's College London, Dental Institute, UK



Saturday, July 17, 2010

**Harald zur Hausen**  
"Infectious Causes of Human Cancers"  
Nobel Laureate  
German Cancer Research Centre, Heidelberg



## ACKNOWLEDGMENTS

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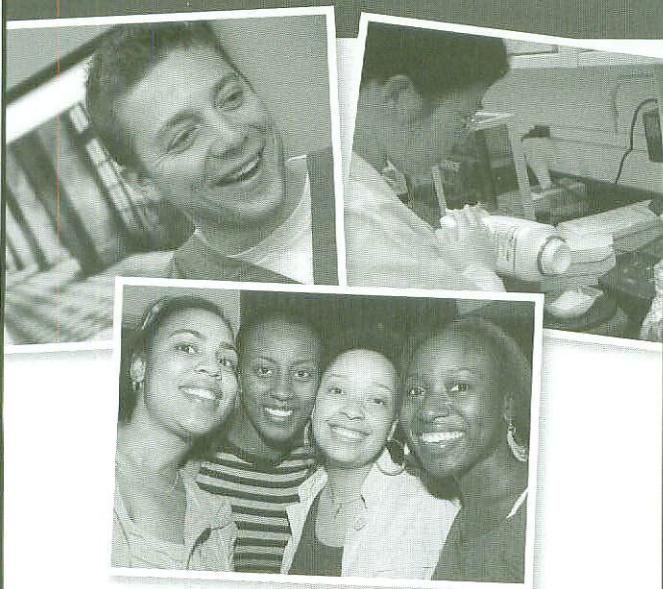
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**2012**

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Exhibitor listing as of 1/14/2010

The Exhibition will be held in Exhibit Hall D at the Walter E. Washington Convention Center. The exhibit hours are as follows:

|                 |                           |
|-----------------|---------------------------|
| <b>Thursday</b> | <b>1 p.m. – 5 p.m.</b>    |
| <b>Friday</b>   | <b>9:30 a.m. – 5 p.m.</b> |

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DMD/PhD, PhD in Craniofacial Biology track of Molecular and Cellular Biology and Pathobiology Program, Postdoctoral Training.

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**Booth #: 115**

**Booth #: 309**

**Booth #: 308**

**Booth #: 421**

**Minnesota Craniofacial Research Training (MinnCResT) Program**  
**Minneapolis, Minn., USA**  
**Tel: +1.612.625.3974**  
**Fax: +1.612.626.2651**  
**[www.mncrest.umn.edu](http://www.mncrest.umn.edu)**

The Minnesota Craniofacial Research Training (MinnCResT) Program aims to train the next generation of independent investigators exploring questions in craniofacial oral health and dental research. Supported by a major grant from NIDCR, MinnCResT provides full fellowship support for graduate students, DDS/PhD students, and postdoctoral fellows.

**National Institute of Dental and Craniofacial Research (NIDCR)**  
**Bethesda, Md., USA**  
**Tel: +1.301.496.4261**  
**Fax: +1.301.496.9988**  
**[www.nidcr.nih.gov](http://www.nidcr.nih.gov)**

The mission of the National Institute of Dental and Craniofacial Research (NIDCR) is to improve oral, dental and craniofacial health through research, research training, and the dissemination of health information.

**SAGE**  
**Thousand Oaks, Calif., USA**  
**Tel: +1.805.410.7239**  
**Fax: +1.805.499.0871**  
**[www.sagepub.com](http://www.sagepub.com)**

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**\*The Ohio State University, College of Dentistry**  
**Columbus, OH, USA**  
**Tel: +1.614.292.2401**  
**Fax: +1.614.292.7619**  
**[www.dent.osu.edu](http://www.dent.osu.edu)**

The Ohio State University's College of Dentistry offers the following degree programs: B.S. in Dental Hygiene; Doctor of Dental Surgery (D.D.S.) degree; Ph.D. in Oral Biology; combined D.D.S. and Ph.D. degrees. Comprising nine divisions—Oral Hygiene, Primary Care, Oral Biology, Pediatrics, Restorative, Endodontics, Periodontics, Orthodontics, and Oral and Maxillofacial Surgery—the College offers clinic services and academic programs that provide professional specialty training.

**\*UCLA School of Dentistry**  
**Los Angeles, Calif., USA**  
**Tel: +1.310.206.8045**  
**Fax: +1.310.825.7609**  
**<http://dent.ucla.edu>**

UCLA School of Dentistry will provide information about opportunities for research for dental students, graduate – masters/PhD, and postdoctoral students. Descriptions of programs, including the Oral Biology Masters Program, dual degree programs, various residency programs and the T32 mechanism will be available.

**\*UNC School of Dentistry**  
**Chapel Hill, N.C., USA**  
**Tel: +1.919.966.1161**  
**Fax: +1.919.966.3683**  
**[www.dent.unc.edu](http://www.dent.unc.edu)**

The UNC-Chapel Hill School of Dentistry is among the leading public dental schools nationwide. Residents, DDS and allied programs are supported by nine academic departments. State-of-the-art centers and programs promote scholarship in research, education, patient care, and service.

**\*University of California, San Francisco School of Dentistry**  
**San Francisco, Calif., USA**  
**Tel: +1.415.502.7772**  
**Fax: +1.415.502.7763**  
**<http://dentistry.ucsf.edu>**

UCSF School of Dentistry unites investigators to better understand the underlying causes of oral and craniofacial diseases and disorders, and to develop new treatments and strategies for prevention and early intervention. UCSF faculty engages in cutting-edge research leading to scientific breakthroughs that drive the future development of dental education.

**\*University of Connecticut School of Dental Medicine**  
**Farmington, Conn., USA**  
**<http://sdm.uchc.edu/research/index.html>**

University of Connecticut, School of Dental Medicine has the following research training programs: PhD in Skeletal, Craniofacial and Oral Biology; DMD combined with PhD, Master of Clinical and Translational Research or Master of Public Health; Master of Dental Science; and postdoctoral research. Training is available in: skeletal and craniofacial biology, oral biology, biomaterials, stem cell biology, cancer, genetics, oral infection-induced inflammation, oral health promotion and regenerative medicine. Training Our Future Dental Academicians.



**\*University of Florida College of  
Dentistry**

**Gainesville, Fla., USA**

**Tel: +1.352.392.9778**

**Fax: +1.352.392.9721**

**<http://www.dental.ufl.edu/>**

Faculty and student representatives of the UF College of Dentistry will discuss aspects of our research and advanced education programs. The purpose of our exhibit is to highlight: 1) facilities at the University of Florida; 2) research at the College of Dentistry; and 3) student opportunities for research and advanced education.

**NEW!**

**University of Illinois at Chicago**

**College of Dentistry**

**Chicago, Ill., USA**

**Tel: +1.312.413.1160**

**Fax: +1.312.413.0907**

**<http://dentistry.uic.edu>**

UIC College of Dentistry is part of a world-class center for research located near downtown Chicago. The college offers a range of opportunities for research training, from bench to clinical research training. Programs include a concurrent DDS/PhD, a DDS/MS in Clinical Research and an PhD in Oral Sciences.

**\*University of Iowa College of  
Dentistry**

**Iowa City, Iowa, USA**

**Tel: +1.319.335.7406**

**Fax: +1.319.335.8895**

**[www.dentistry.uiowa.edu](http://www.dentistry.uiowa.edu)**

The University of Iowa College of Dentistry is one of the leading dental schools in the U.S. Our primary mission is to educate prospective dentists. The College of Dentistry also has advanced education programs in all dental specialties and other advanced programs. Visit our booth for information about our educational and research programs.

**\*University of Michigan**

**Ann Arbor, Mich, USA**

**Tel: +1.734.615.1970**

**Fax: +1.734.647.6805**

**[www.dent.umich.edu/academic-programs](http://www.dent.umich.edu/academic-programs)**

The University of Michigan School of Dentistry is committed to training excellent clinicians & leaders in oral health research. Training is offered for DDS, Specialties, PhD degrees (DDS/PhD, MS/PhD, & PhD), and Postdoc. Support from NIH, UMSD, & other sources.

**Booth #: 410**

**\*University of Missouri-Kansas City**

**Kansas City, Mo., USA**

**Tel: +1.816.235.6323**

**Fax: +1.516.235.5524**

**<http://dentistry.umkc.edu/oralbiology/default.htm>**

The UMKC School of Dentistry Department of Oral Biology offers an Interdisciplinary Ph.D. training program funded by NIDCR. The general philosophy of this training program is interdisciplinary and offers research opportunities in biomaterials, mineralized tissue biology and clinical research.

**\*University of Tennessee College  
of Dentistry**

**Memphis, Tenn., USA**

**Tel: +1.901.448.6167**

**Fax: +1.901.448.7860**

**[www.utmem.edu/dentistry](http://www.utmem.edu/dentistry)**

The College of Dentistry of the University of Tennessee Health Science Center provides opportunities for research and advanced training in clinical dentistry and oral biology. The UTHSC College of Dentistry will co-sponsor the Hinman Student Research Symposium the last weekend in October, 2010, at the Peabody Hotel in Memphis, Tennessee.

**\*University of Washington School of  
Dentistry**

**Seattle, Wash., USA**

**Tel: +1.206.543.5982**

**Fax: +1.206.616.2612**

**<http://www.dental.washington.edu>**

The University of Washington School of Dentistry offers outstanding training opportunities in research and all clinical dental specialties. It also has a unique short-term clinical research training program, a PhD program, and postdoctoral opportunities emphasizing biological, and epidemiologic areas.

**Booth #: 214**

**Booth #: 317**

**Booth #: 211**

**Booth #: 314**

**Booth #: 409**

**Booth #: 117**

# SCIENTIFIC PROGRAM

**NOTE:** \* = Presenting Author  
S prior to the presentation number indicates Student Presenter

**Seq#: 1 Wednesday, 3 March 2010, 1 p.m. - 4 p.m.**  
**Symposium, Room 147B**

**Symposium - Do Current Studies Support or Refute a Causal Relationship between Oral Disease and Adverse Pregnancy Outcome?**

**Chairperson: Y. Han**

- 0001** 1:00 Introduction. M. JEFFCOAT\* (*University of Pennsylvania, Philadelphia, USA*)  
1:15 Telegraphing Preterm Birth - Why Haven't We Got the Message Yet?. C. WEINER\* (*University of Kansas, Kansas City, USA*)  
1:35 Intra-amniotic Inflammation, Fetal Damage, and Preterm Birth. C. BUHIMSCHI\* (*Yale University, New Haven, CT, USA*)  
1:55 Oral Health: Impact on Maternal, Fetal, and Infant Outcomes. K. BOGGESE\* (*University of North Carolina, Chapel Hill, USA*)  
2:15 Mechanisms Linking Maternal Oral Infection to Pregnancy Complications. S. OFFENBACHER\* (*University of North Carolina, Chapel Hill, USA*)  
2:35 Implication of Oral Bacteria in Adverse Pregnancy Outcome: from Bench to Bedside. Y.W. HAN\* (*Case Western Reserve University, Cleveland, OH, USA*)  
2:55 Nonhuman Primate Model of Pregnancy and Periodontal Infections. J.L. EBERSOLE\* (*University of Kentucky, Lexington, USA*)  
3:15 A Clinician-scientist Perspective of the Science of Oral Disease and PTB/LBW. M.J. NOVAK\* (*University of Kentucky, Lexington, USA*)  
3:30 Panel Discussion.

**Seq#: 2 Wednesday, 3 March 2010, 2:30 p.m. - 4 p.m.**  
**Symposium, Room 147A**

**Symposium - Current, Ongoing Research in Bisphosphonate-related Osteonecrosis of the Jaws (BRONJ)**

**Chairperson: P. Hughes**

- 0002** 2:30 Epidemiology, Systemic, and Oral Risk Factors Associated with BRONJ. R. GOPALAKRISHNAN\* (*University of Minnesota, Minneapolis, USA*)  
2:50 Effects of Bisphosphonates on Wound Healing. D. BASI\* (*University of Minnesota, Minneapolis, USA*)  
3:10 Hyperbaric Oxygen as a Treatment Modality of BRONJ. J.J. FREIBERGER\* (*Duke University, Durham, NC, USA*)  
3:30 Management Strategies for Patients with BRONJ. S. RUGGIERO\* (*The New York Center for Orthognathic and Maxillofacial Surgery, West Islip, USA*)

**Seq#: 3 Wednesday, 3 March 2010, 2:30 p.m. - 4 p.m.**  
**Symposium, Room 152A**

**Symposium - To Seal, Remineralize, or Restore: What is the Evidence?**

**Chairperson: M. Fontana**

- 0003** 2:30 When Do We Need Restorations? How Much Carious Tissue Should We Remove for a Filling? E. KIDD\* (*Surbiton, Surrey, United Kingdom*)  
3:00 Black's Principles Viewed in Today's Light. J.B. SUMMITT\* (*University of Texas - San Antonio / Health Science Ctr., USA*)  
3:30 Discussion.

**Seq#: 4 Wednesday, 3 March 2010, 2:30 p.m. - 4 p.m.**  
**Oral Session, Room 140B**

**Behavioral, Epidemiologic and Health Services Research - Keynote Address and Dental Providers in Research Set-up**

**Chairpersons: A. Ismail and H. Logan**

- 0004** 2:30 Keynote Address: Are Dental Providers Ready to Offer Health Promotions to their Patients? A Look at Provider Behavior. A. KOERBER\* and M. TAVARES (*University of Illinois - Chicago, USA*)  
**0005** 3:15 Change in Stated Practice Associated with Participation in "The Dental-PBRN". G.H. GILBERT\*, J.S. RICHMAN, V. QVIST, D.J. PIHLSTROM, P.J. FOY, V.V. GORDAN, and The DPBRN COLLABORATIVE GROUP (*The University of Alabama at Birmingham, USA*)  
**0006** 3:30 Lessons Learned from Feasibility/Pilot Testing Studies in The Dental PBRN. G.H. GILBERT, S.M. SUTPHIN\*, J.A. LOVE, A.H. MATHEWS, S.K. MAKHIJA, A. VOINEA-GRIFFIN, R.G. PALMORE, J.L. SANDERSON, Jr., and The DPBRN COLLABORATIVE GROUP (*The University of Alabama at Birmingham, USA*)  
**0007** 3:45 Treatment Thresholds for Occlusal and Proximal Lesions among DPBRN Dentists. J. FELLOWS\*, V.V. GORDAN, G. GILBERT, D.B. RINDAL, M. LITAKER, V. QVIST, A. VOINEA-GRIFFIN, P. BENJAMIN, H. FLINK, A. FALCK, D. PIHLSTROM, and The DPBRN COLLABORATIVE GROUP (*Kaiser Permanente Center for Health Research, Portland, OR, USA*)



Seq#: 5 Wednesday, 3 March 2010, 2:30 p.m. - 4 p.m.  
Oral Session, Room 140A

**Craniofacial Biology - Orthodontics: Diagnosis and Treatment Modalities**

**Chairpersons: A. Firestone and P. Rossouw**

- S0008** 2:30 Treatment Effects of Mini-implants and Functional Appliances in Class II Malocclusions. M. UPADHYAY\* and R. NANDA (*University of Connecticut, Farmington, USA*)
- 0009** 2:45 Three-dimensional Analysis of Mini-screw Implants. H. IKEDA, P.E. ROSSOUW\*, P. BUSCHANG, and P. CAMPBELL (*Baylor College of Dentistry, Dallas, TX, USA*)
- 0010** 3:00 Measuring Buccolingual Inclination of Mandibular Canines and Molars Using CBCT. W. SHEWINVANAKITKUL, M. HANS, S. NARENDRA, and J. PALOMO\* (*Case Western Reserve University, Cleveland, OH, USA*)
- S0011** 3:15 Effectiveness of Invisalign® on Correcting Anterior Crowding and Spacing. N. WAX\*, F.M. BECK, and A.R. FIRESTONE (*College of Dentistry, The Ohio State University, Columbus, USA*)
- 0012** 3:30 Glenoid Fossa Displaces Backward and Downward during Growth. S. BAUMRIND\*, R. BOYD, and H. OH (*University of the Pacific, San Francisco, CA, USA*)
- 0013** 3:45 Biology of Osseous Black Male Facial Profile Compared with that of Whites. E. RICHARDSON\* (*Center for the Study of Human Growth and Development, Nashville, TN, USA*)

Seq#: 6 Wednesday, 3 March 2010, 2:30 p.m. - 4 p.m.  
Oral Session, Room 151B

**Dental Materials: Adhesion - Bond Strength Testing and Mechanisms - Adhesive-Enamel/Dentin Bond Strength**

**Chairpersons: A. Misra and L. Pinzon**

- S0014** 2:30 Bond Strength and Fluoride Release Capabilities of Three Cements. L.M. PINZON\*, L. KHOSROOSI, J.M. POWERS, V. USKOKOVIC, S. HABELITZ, L.G. WATANABE, G. NONOMURA, G.W. MARSHALL, and S.J. MARSHALL (*University of California - San Francisco, USA*)
- 0015** 2:45 Bonding to Beveled vs. Non-beveled Enamel at the Gingival Margin. J. PURK\*, V. DUSEVICH, D. KRUSE, J. ATWOOD, A. GLAROS, and J.D. EICK (*University of Missouri - Kansas City, USA*)
- 0016** 3:00 Bond Strengths to Enamel Using Hydrophilic and Hydrophobic Adhesives. M. LATTA, W. BARKMEIER, and S. McNALLY\* (*Creighton University School of Dentistry, Omaha, NE, USA*)
- 0017** 3:15 Fatigue Limits of Enamel Bonds Using Single and Multi-step Adhesives. M. LATTA\* and W. BARKMEIER (*Creighton University, Omaha, NE, USA*)
- S0018** 3:30 Long-term Evaluation of Anti-oxidant Agents on Bleached Enamel. A.C. BOTTA\*, A.L. OLIVEIRA, S. DUARTE, J.-H. PHARK, C. PAGANI, and A. SADAN (*São Paulo State University, São José dos Campos, Brazil; and Case Western Reserve University, Cleveland, OH, USA*)
- 0019** 3:45 Bond Strength Testing of All-in-One Adhesives on Enamel and Dentin. G. KUGEL\*, R.D. PERRY, M. FINKELMAN, and R. PERRY (*Tufts University, Boston, MA, USA*)

Seq#: 7 Wednesday, 3 March 2010, 2:30 p.m. - 4 p.m.  
Oral Session, Room 150B

**Dental Materials: Adhesion - Leakage/Margin Assessments - Keynote Address and Dental Materials: Adhesive Interfaces and Hybrid Layer Morphology**

**Chairperson: Y. Wang**

- 0020** 2:30 Keynote Address: Variables Related to the Clinical Situation for Adhesion and Treatment of the Substrate. J. PERDIGÃO\* (*University of Minnesota, Minneapolis, USA*)
- S0021** 3:00 Grape Seed Proanthocyanidins Increase Collagen Biodegradation Resistance in Dentin Bonding. B. GREEN\*, X. YAO, A. GANGULY, C. XU, M.P. WALKER, and Y. WANG (*University of Missouri - Kansas City, USA*)
- 0022** 3:15 Inhibition of MMP-9 by Use of Quaternary Ammonium Methacrylates. A. TEZVERGIL-MUTLUAY\*, T. UCHIYAMA, T. HOSHIKA, K. AGEE, and D. PASHLEY (*University of Turku, Finland*)
- S0023** 3:30 Nanoleakage in Over-etched Dentin under Water and Ethanol Wet-bonding Techniques. B. ANDERSON\*, J. GOODSON, M. GIBBS, S. ARMSTRONG, F. TAY, D. PASHLEY, K. WALTERS, and S. GERALDELI (*University of Iowa, Iowa City, USA*)
- 0024** 3:45 Interfacial Chemomechanics of Bonding to Clinically Relevant Dentin Substrates. Y. WANG\* and X. YAO (*University of Missouri - Kansas City, USA*)

Seq#: 8 Wednesday, 3 March 2010, 2:30 p.m. - 4 p.m.  
Oral Session, Room 151A

**Dental Materials: Clinical Trials - Keynote Address and Clinical Study Reports on Restorative Materials**

**Chairpersons: S. Bayne and F. Burke**

- 0025** 2:30 Keynote Address: Translating Dental Materials Research into Clinical Outcomes. P. PEREIRA\* (*University of North Carolina, Chapel Hill, USA*)
- 0026** 3:00 Clinical Evaluation of Lithium Disilicate Chair-side CAD/CAM Crowns. D. FASBINDER\*, J. DENNISON, and D. HEYS (*University of Michigan, Ann Arbor, USA*)
- 0027** 3:15 Cluster Analysis of Short-term USPHS Category Changes for Class V Composites. S. BAYNE\*, A. WILDER, H. HEYMANN, J. STURDEVANT, and E. SWIFT (*University of Michigan School of Dentistry, Ann Arbor, USA*)
- S0028** 3:30 Clinical Evaluation of Three Adhesive Systems in Class V Restorations. R. SADID ZADEH\*, J.O. BURGESS, M. ANABTAWI, D. GIVAN, B. WALDO, and L. RAMP (*University of Alabama, Birmingham, USA*)
- 0029** 3:45 Practice-based One-year Clinical Performance of Low-shrinkage Resin Composite Restorations. F.J.T. BURKE\* and R. CRISP (*University of Birmingham, England*)



Seq#: 9    Wednesday, 3 March 2010, 2:30 p.m. - 4 p.m.  
Oral Session, Room 150A

**Dental Materials: Polymer-based Materials—Physical Properties and Performance - *New Ideas in Composites***

**Chairpersons: D. Shin and S. Dickens**

- 0030**    2:30    Nanoparticle-filled Polymer-Particle Composites. T. SCHUMAN\*, S. SUBRAMANI, K. KILWAY, M. VELEZ, D. DAY, and J.D. EICK (*Missouri University of Science and Technology, Rolla, USA*)
- 0031**    2:45    Effects of Fluorinated Additives on Physical Properties of Composite Resins. S.H. DICKENS\*, A. PARIKH, J.G. JOHNSON, K. HOFFMAN, and J.M. ANTONUCCI (*American Dental Association Foundation, Gaithersburg, MD, USA*)
- 0032**    3:00    Light-curable Core Build-up Dental Composite Containing New Synthetic Resin. S. JIN\*, W. JIA, and S. RICHARDS (*Pentron Clinical Technologies, Wallingford, CT, USA*)
- 0033**    3:15    Generalized Wear Simulation of Resin Composites. W. BARKMEIER\*, M. LATTA, and R. ERICKSON (*Creighton University, Omaha, NE, USA*)
- 0034**    3:30    Analysis of Tackiness of Dental Resin Composites. D. SHIN\* and B. SUH (*Bisco, Inc., Schaumburg, IL, USA*)
- 0035**    3:45    Mechanical Properties of Universal Composites and a New Nanofilled Composite. B. CRAIG\*, G.A. KOBUSSEN, S.B. MITRA, M.C. DORUFF, R.H. HALVORSON, and W.S. BIGHAM (*3M ESPE, Saint Paul, MN, USA*)

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Seq#: 10    Wednesday, 3 March 2010, 2:30 p.m. - 4 p.m.  
Oral Session, Room 156

**Diagnostic Sciences - *Diagnostic Imaging***

**Chairpersons: T. Heaven and C. Kau**

- S0036**    2:30    Mandibular BV/TV Ratios in Women with Breast Cancer and ONJ. W. SANTEE\*, M.L. JOHNSON, and C. BARRAGAN-ADJEMIAN (*UMKC School of Dentistry, Kansas City, MO, USA*)
- 0037**    2:45    The Effect of Beam Energy Separation on Dual Energy Radiography. T. HEAVEN\*, S. WHITE, D. GAUNTT, and R. WEEMS (*University of Alabama, Birmingham, USA*)
- S0038**    3:00    Diagnosis of Mandibular Asymmetry using 3D Mirroring. A. ALHADIDI\*, L. CEVIDANES, J. LUDLOW, and A. MOL (*University of North Carolina, Chapel Hill, USA*)
- S0039**    3:15    Clinical (QLF) and Histological Features of ICDAS Non-cavitated Smooth-surface Lesions. S. DORN\*, J. KOLKER, F. QIAN, J. WEFEL, J. HARLESS, and M. HOGAN (*University of Iowa, Iowa City, USA*)
- S0040**    3:30    Imaging of Secondary Caries with Polarization-sensitive Optical Coherence Tomography. J. STAHL\*, H. KANG, C.L. DARLING, and D. FRIED (*University of California - San Francisco, USA*)
- 3:45    Discussion.

Seq#: 11    Wednesday, 3 March 2010, 2:30 p.m. - 4 p.m.  
Oral Session, Room 154

**Implantology Research - *Bone-Implant Interface***

**Chairpersons: C. Stanford and J. Mitchell**

- S0041**    2:30    Osterix Enhances BMSC-association Osseointegration of Implants. X. BEIYUM, J. ZHANG, E. BREWER, Q. TU, M. KIM\*, M. WIELAND, and J.J. CHEN (*Tufts University, Boston, MA, USA*)
- 0042**    2:45    RCT Trial of Insertion Torque Relative to ISQ Implant Stability. C. STANFORD\*, C. BARWACZ, C. ASMUSSEN, R. BAREWAL, D. DAWSON, and S. JOHNSON (*University of Iowa, Iowa City, USA*)
- 0043**    3:00    Impact of Maxillary Sinus Pathosis on Implant Success following Augmentation. K. CHOE\*, G. KOUGENTAKIS, H. SHIAU, M.E. AICHELMANN-REIDY, and M.A. REYNOLDS (*University of Maryland Dental School, Baltimore, USA*)
- S0044**    3:15    Influence of Implant Thread Design on Bone Surface-Strain around Orthodontic Mini-implants. T. GROESBECK\*, S. GEORGE, D. DUNCAN, S. KIRKPATRICK, B. HOULBERG, and J.C. MITCHELL (*Oregon Health & Science University, Portland, USA*)
- 0045**           Paper Withdrawn.
- 0046**    3:45    Load to Failure of Mini-implants with Collared and Non-collared Designs. J.C. MITCHELL\*, S. GEORGE, and H. GRIMSLID (*Oregon Health & Science University, Portland, USA*)

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Seq#: 12    Wednesday, 3 March 2010, 2:30 p.m. - 4 p.m.  
Oral Session, Room 144AB

**Microbiology / Immunology and Infection Control - *Streptococci***

**Chairpersons: F. Chen and N. Childers**

- S0047**    2:30    Comparison of *Streptococcus mutans* Genotypes using Rep-PCR and MLST. S. MOMENI\*, C. ATKINS, R.C. OSGOOD, J. WHIDDON, S. MOSER, J.D. RUBY, and N.K. CHILDERS (*University of Alabama at Birmingham, USA*)
- 0048**    2:45    *Streptococcus mutans* Counts from Clinical Samples Using Quantitative Real-time PCR. K.-L. HSU\*, R.C. OSGOOD, T. WILEY, N. DOPPALAPUDI, and N.K. CHILDERS (*University of Alabama at Birmingham, USA*)
- S0049**    3:00    Genotypic Characteristics of Mutans Streptococci in High-caries-risk Children. K. CHEON\*, T. WILEY, J. WHIDDON, S. MOMENI, S. MOSER, G. CUTTER, J.D. RUBY, and N.K. CHILDERS (*University of Alabama at Birmingham, USA*)
- S0050**    3:15    Oxidative Stress and Pathogenesis of *Streptococcus mutans*. A. DERR\*, J. ABRANCHES, R. FAUSTOFERRI, and R. QUIVEY, Jr. (*University of Rochester School of Medicine and Dentistry, NY, USA*)
- 0051**           Paper Withdrawn.
- S0052**    3:30    Tooth-binding Triclosan-containing Micelles Inhibit *Streptococcus mutans* Biofilm Growth on HA Discs. F. CHEN\*, K. RICE, X. LIU, R. REINHARDT, K. BAYLES, and D. WANG (*University of Nebraska Medical Center, Omaha, USA*)
- 3:45    Discussion.



Seq#: 13 Wednesday, 3 March 2010, 2:30 p.m. - 4 p.m.  
Oral Session, Room 143AB

**Mineralized Tissue - Gene Mutations and Tooth Formation**

**Chairpersons: X. Luan and M. MacDougall**

- 0053** 2:30 ENAM Missense Mutation in Autosomal-recessive Hypoplastic Amelogenesis Imperfecta. M. MacDOUGALL\*, Y. WU, K. CHEON, R. APONTE-WESSON, S. MITCHELL, and J. DONG (*University of Alabama, Birmingham, USA*)
- 0054** 2:45 Enamel Mineral Acquisition Rates in Kallikrein 4 Null Mice. C.E. SMITH\*, A. RICHARDSON, J.D. BARTLETT, and J.P. SIMMER (*Université de Montréal and McGill University, Montreal, Canada*)
- S0055** 3:00 PAX9 p.F15I Mutation and Familial Tooth Agenesis. S.-K. WANG\*, H.-C. CHAN, I. MAKOVEY, J.P. SIMMER, and J. HU (*University of Michigan, Ann Arbor, USA*)
- 0056** 3:15 DGI-associated c.2525delG Founder Mutation Identified in American and British Caucasians. D.A. McKNIGHT\*, S.T. HAN, P.S. HART, T.C. HART, M.J. DIXON, and L.W. FISHER (*NIDCR/NIH, Bethesda, MD, USA*)
- S0057** 3:30 AMELX Deletion and p.P70T Mutation Display Different Enamel Phenotypes. H.-C. CHAN\*, C.-F. CHEN, N.M. ESTRELLA, S.-K. WANG, J.P. SIMMER, and J. HU (*University of Michigan, Ann Arbor, USA*)
- 0058** 3:45 Amelogenesis Imperfecta Due to Mutation of the Enamelin Gene. R. LINDEMAYER\*, C.W. GIBSON, and J. WRIGHT (*University of Pennsylvania, Philadelphia, USA*)

Seq#: 14 Wednesday, 3 March 2010, 2:30 p.m. - 4 p.m.  
Oral Session, Room 149

**Salivary Research - Salivary Gland Development I**

**Chairperson: O. Baker**

- 0059** 2:30 Par-C10 Acinar Spheres, a Novel *in vitro* Model of Differentiated Acini. D. SCHULZ and O. BAKER\* (*State University of New York - Buffalo, USA*)
- S0060** 2:45 Quantification of Changes in Salivary Gland Morphology Using Cell Graphs. C.C. BILGIN, S. RAY\*, W.P. DALEY, B. BAYDIL, S.J. SEQUEIRA, B. YENER, and M. LARSEN (*Rensselaer Polytechnic Institute, Troy, NY, USA*)
- S0061** 3:00 Profiling Active Protein Expression in Salivary Gland Using Multiplex Methods. C.T. MANHARDT\*, M.S. LAZARE, M. ROTHNEY, M. BELLO, S. DINN, C.S. SEVINSKY, A. CORWIN, B. SARACHAN, M.J. GERDES, and M. LARSEN (*University at Albany, State University of New York, USA*)
- 0062** 3:15 Wnt/beta-catenin Signaling Regulates Progenitor Cells and Regeneration of Salivary Glands. B. HAI and F. LIU\* (*Institute for Regenerative Medicine at Scott & White, Texas A&M Health Science Center, Temple, USA*)
- 0063** 3:30 Targeted Overexpression of TGF- $\beta$ 1 Disrupts Function of Mouse Salivary Glands. B. HALL\*, C. ZHENG, W.D. SWAIM, A. CHO, C.N. NAGINENI, M.A. ECKHAUS, K.C. FLANDERS, I.S. AMBUDKAR, B.J. BAUM, and A.B. KULKARNI (*National Institutes of Health, Bethesda, MD, USA*)
- 0064** 3:45 Ascl3 Transcription Factor Functions in Salivary Gland Maintenance. S. ARANY, M. CATALÁN, E. ROZTOCIL, and C. OVITT\* (*University of Rochester, NY, USA*)

**NOTE:** \* = Presenting Author  
S prior to the presentation number  
indicates Student Presenter

**Seq#: 15 Thursday, 4 March 2010, 8 a.m. - 9:30 a.m.**  
**Symposium, Room 147B**

**Symposium - Osteonecrosis of the Jaws and the CONDOR ONJ Case-Control Study**

**Chairperson: T. DeRouen**

- 0065** 8:00 Clinical, Pharmacological, and Biological Issues in ONJ. A. BARASCH\* (*University of Alabama at Birmingham, The DPBRN, and CONDOR, Seattle, WA, USA*)  
8:25 Design of the CONDOR Case-Control Study of ONJ. P. HUJOEL\* (*University of Washington, NW PRECEDENT, and CONDOR, Seattle, USA*)  
8:50 Findings of the CONDOR Case-Control Study of ONJ. F.A. CURRO\* (*New York University, PEARL, and CONDOR, Seattle, WA, USA*)  
9:15 Discussion.

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**Seq#: 16 Thursday, 4 March 2010, 8 a.m. - 9:30 a.m.**  
**Symposium, Room 147A**

**Symposium - Reconstructive Dentistry and Tissue Engineering**

**Chairperson: J. Mitchell**

- 0066** 8:00 Advances in Oral and Periodontal Bioengineering. W. GIANNIBILE\* (*University of Michigan, Ann Arbor, USA*)  
8:20 Current Approaches for Dental Tissue Engineering. P.C. YELICK\* (*Tufts University, Boston, MA, USA*)  
8:40 Calcium Phosphate Ceramic Composites for Bone Tissue Engineering. J.A. JANSEN\* (*Radboud University, Nijmegen Medical Center, Department of Periodontology and Biomaterials, Netherlands*)  
9:00 Photofunctionalized Titanium for Improved Bone Integration and Regeneration. T. OGAWA\* (*University of California-Los Angeles, USA*)  
9:20 Discussion.

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**Seq#: 17 Thursday, 4 March 2010, 8 a.m. - 9:30 a.m.**  
**Symposium, Room 152A**

**Symposium - Whole Saliva: Proteome/Peptidome, Microbiome, and Proteasome**

**Chairperson: E. Helmerhorst**

- 0067** 8:00 The Saliva Proteome/Peptidome Studied by Mass Spectrometry. I. MESSANA\* (*Universita di Cagliari, Sardinia, Italy*)  
8:20 SELDI-TOF MS Analysis of Saliva: a Promising Diagnostic and Monitoring Tool. R. SCHIPPER\* (*Wageningen University, Netherlands*)  
8:40 Whole Saliva Proteolytic Activity and the Identification of Enzymes. F.G. OPPENHEIM\* (*Boston University, MA, USA*)  
9:00 Worldwide Diversity in the Human Salivary Microbiome. M. STONEKING\* (*Max Planck Institute for Evolutionary Anthropology, Leipzig, Germany*)  
9:20 Discussion.

**Seq#: 18 Thursday, 4 March 2010, 8 a.m. - 9:30 a.m.**  
**Oral Session, Room 140A**

**Cariology Research - Fluoride Bioavailability and Efficacy - Dentifrices/Rinses**

**Chairpersons: C. Carey and J. Creeth**

- 0068** 8:00 Analysis of Bioavailable Fluoride from a One-minute Dentifrice Slurry. C. CAREY\* and B. SCHMUCK (*American Dental Association Foundation, Gaithersburg, MD, USA*)  
**0069** 8:15 Increasing Exposure Time and Dentifrice Concentration Increase Enamel Remineralization *in vitro*. J. CREETH\*, C. GONZALEZ-CABEZAS, J. EDER, M. BOSMA, and D. ZERO (*GlaxoSmithKline Consumer Healthcare, Weybridge, Surrey, United Kingdom*)  
**0070** 8:30 Effect of Dentifrice Usage Regimen on Fluoride Efficacy *in situ*. D. ZERO\*, J. CREETH, M. BOSMA, R.G. GUIBERT, R. KARWAL, R. LYNCH, C. GONZALEZ-CABEZAS, and S. KELLY (*Indiana University School of Dentistry, Indianapolis, USA*)  
**0071** 8:45 Low-fluoride Dentifrice and Fluoride Concentration in Dental Biofilm. A.A. DEL BEL CURY\*, R.C. AMARAL, L.M.A. TENUTA, C.P.M. TABCHOURY, and J.A. CURY (*Piracicaba Dental School - UNICAMP, Brazil*)  
**S0072** 9:00 Fluoride and Calcium in Plaque Sections after Fluoride Dentifrice Use. J. PESSAN\*, K.M.R.P. ALVES, F. ITALIANI, I. RAMIRES, J.R.P. LAURIS, G.M. WHITFORD, K.J. TOUMBA, C. ROBINSON, and M.A.R. BUZALAF (*Bauru Dental School, University of São Paulo, Brazil*)  
**0073** 9:15 Confirmation: CaF<sub>2</sub> Not Found in Plaque after NaF Rinse. G.L. VOGEL\*, L.C. CHOW, L. TENUTA, and G.E. SCHUMACHER (*Paffenbarger Research Center, Gaithersburg, MD, USA*)

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**Seq#: 19 Thursday, 4 March 2010, 8 a.m. - 9:30 a.m.**  
**Oral Session, Room 143AB**

**Craniofacial Biology - Odontogenesis: Gene Regulation and Bioengineering**

**Chairpersons: Y. Lu and R. D'Souza**

- S0074** 8:00 Characterization of Bioengineered Human Dental Tissues. S. SOROUSHAN\*, M. DUAILIBI, S. DUAILIBI, W. ZHANG, R. LITERMAN, I. PRUIT, and P.C. YELICK (*Tufts University, Boston, MA, USA*)  
**S0075** 8:15 Establishment of Apert DP/EOE Cells with a FGFR2 S252W Mutation. W. GRAY\*, J. DONG, O. MAMAEVA, Y. WU, J. DEATHRIDGE, and M. MacDOUGALL (*University of Alabama at Birmingham, USA*)  
**0076** 8:30 Role of the Trps1 Transcription Factor in Odontoblasts. D. NAPIERALA\*, Y. SUN, I. MACIEJEWSKA, E. MUNIVEZ, B. DAWSON, R. D'SOUZA, C. QIN, and B. LEE (*Baylor College of Medicine, Houston, TX, USA*)  
**0077** 8:45 Runx2 Indirectly Regulates FGFR2 Expression. Y. LI, Y. LU, A. CAVENDER, A. MANSUKHANI, and R. D'SOUZA\* (*Baylor College of Dentistry, Dallas, TX, USA*)



**S0078** 9:00 CP27 Affects Odontogenic Gene Expression and Shuttles during Cell-cycle Progression. Y. ITO\*, T. JIN, S. DANGARIA, C.R. AYARZAGOITIA, X. LUAN, and T.G.H. DIEKWISCH (*University of Illinois - Chicago, USA*)

**0079** 9:15 Runx2 Regulates FGF3/10 through Controlling E12/47 Expression in Dental Mesenchyme. Y. LU\*, A. CAVENDER, Y. LI, and R. D'SOUZA (*Baylor College of Dentistry, Houston, TX, USA*)

**Seq#: 20** Thursday, 4 March 2010, 8 a.m. - 9:30 a.m.  
Oral Session, Room 151A

**Dental Materials: Color and Appearance (Esthetics) - Keynote Address and Back to the Future**

**Chairpersons: R. Paravina and S. Farrell**

**0080** 8:00 Keynote Address: Color Appearance and Esthetics: a New Context for an Old Riddle. R. PARAVINA\* (*University of Texas Dental Branch at Houston, USA*)

**S0081** 8:30 Composite Fluorescence When Excited by Visible Light at 400 nm. S.F. THORSTEINSON\*, L.T. SMITH, D. METTENBERG, and F. RUEGGERBERG (*Medical College of Georgia, Augusta, USA*)

**0082** 8:45 Pilot *in vitro* Evaluation of a Novel Tooth-whitening Agent. S. JEFFERIES\*, K. MOORE, V. HANSEN, D. SMITH, D. BOSTON, E. WHITAKER, and B. SPERONELLO (*Temple University, Philadelphia, PA, USA*)

**0083** 9:00 Image Analysis of Tooth Whitening: Standard Development and Method Application. M.L. BARKER\*, M.E. RUBUSH, P.A. SAGEL, A.R. BIESBROCK, and R.W. GERLACH (*The Procter & Gamble Company, Mason, OH, USA*)

**0084** 9:15 Meta-analysis of Tooth Whitening: High-adhesion Strips vs. Professional Products. S. FARRELL\*, M.K. ANASTASIA, M.L. BARKER, and R.W. GERLACH (*The Procter & Gamble Company, Mason, OH, USA*)

**Seq#: 21** Thursday, 4 March 2010, 8 a.m. - 9:30 a.m.  
Oral Session, Room 150B

**Dental Materials: Ceramic-based Materials and Cements - Keynote Address and Fracture Mechanics, Stress, and Fatigue**

**Chairpersons: Y. Zhang and D. Arola**

**0085** 8:00 Keynote Address: Practical Application of Fracture Mechanics to Restoration Failure Analysis. G. QUINN\* (*University of Maryland Baltimore County, USA*)

**0086** 8:30 All-ceramic Crown Residual Stress Simulations, Material Inhomogeneity/Fine Structure Effects. H. BALE, P. COELHO, N. SILVA, V. THOMPSON, and J. HANAN\* (*Oklahoma State University, Tulsa, USA*)

**S0087** 8:45 An Evaluation of Stress Concentrations in All-ceramic Bridge Designs. C. HEBERT\*, J.R. VERHOEF, G. QUINN, and D. AROLA (*University of Maryland Baltimore County, USA*)

**S0088** 9:00 Step-Stress Analysis for Predicting Dental Ceramic Reliability. M. BORBA\*, M.D. DE ARAUJO, J. BROWN, H.N. YOSHIMURA, P. CESAR, J. GRIGGS, and A. DELLA BONA (*University of São Paulo, Brazil*)

**0089** 9:15 Modified Y-TZP Core Design Improves All-ceramic Crown Reliability. N. SILVA\*, B. RAFFERTY, R. ZAVANELLI, E. BONFANTE, E.D. REKOW, V. THOMPSON, and P. COELHO (*New York University, USA*)

**Seq#: 22** Thursday, 4 March 2010, 8 a.m. - 9:30 a.m.  
Oral Session, Room 151B

**Dental Materials: Polymer-based Materials—Physical Properties and Performance - Adhesives, Coatings, and Glass Ionomers**

**Chairpersons: A. Falsafi and J. Powers**

**0090** 8:00 Structure-Property Relationships in Dentin Adhesives. J. PARK\*, J. ESLICK, C. DAVIS, M. SECKA, Q. YE, K. CAMARDA, S. KIEWEG, A. MISRA, and P. SPENCER (*University of Kansas/Bioengineering Research Center, Lawrence, USA*)

**0091** 8:15 Biodegradable Protective Resin Coatings for Early Lesions and Hypersensitive Teeth. K.M. HOFFMAN\*, J.G. JOHNSON, J.M. ANTONUCCI, and S.H. DICKENS (*American Dental Assoc., Gaithersburg, MD, USA*)

**0092** 8:30 Fluoride-releasing Materials: pH Effects on Mechanical Properties and Ion Release. J.L. MOREAU\*, H.H.K. XU, H.E. STRASSLER, and L. SUN (*University of Maryland Dental School, Baltimore, USA*)

**0093** 8:45 Comparative Properties of RMGI Nano-ionomer Restorative Delivered via Novel Automix Capsule. A. BOEHM, B. BROYLES, A. FALSAFI\*, V.J. MADSEN, S.B. MITRA, J.D. OXMAN, M. PEUKER, and T. TON (*3M ESPE Dental Products, Saint Paul, MN, USA*)

**0094** 9:00 Mixing-system-induced Air Voids in Glass-ionomer Filling Materials. B. BROYLES\*, A. FALSAFI, A. BOEHM, M. PEUKER, V.J. MADSEN, J.D. OXMAN, T. TON, M. HUGHES, and M. BROSTROM (*3M ESPE Dental Products, Saint Paul, MN, USA*)

**0095** 9:15 *In vitro* Wear of Glass-ionomer Restorative Materials. M. LATTA, W. BARKMEIER, and T. WILWERDING\* (*Creighton University, Omaha, NE, USA*)

**Seq#: 23** Thursday, 4 March 2010, 8 a.m. - 9:30 a.m.  
Oral Session, Room 140B

**Mineralized Tissue - Applications of Animal Models in Mineralization Studies**

**Chairpersons: C. Qin and J. Bartlett**

**S0096** 8:00 Cleavage-site Residue Substitution Blocks Processing of DMP1 *in vivo*. Y. SUN\*, M. PRASAD, X. WANG, Q. ZHU, J.Q. FENG, and C. QIN (*Baylor College of Dentistry, Dallas, TX, USA*)

**0097** 8:15 p120 Catenin is Necessary for Cadherin Switching in Ameloblasts. Z. SKOBE\*, J. DOBECK, C. TYE, R. SHARMA, M. PEREZ-MORENO, N. STOKES, A. REYNOLDS, E. FUCHS, and J. BARTLETT (*The Forsyth Institute, Boston, MA, USA*)



- 0098** 8:30 Rescue of the Periodontal Defects in Dmp1 Null Mice. L. YE\*, R. KAJITA, J. FENG, and L. BONEWALD (*University of Missouri - Kansas City, USA*)
- S0099** 8:45 Newly Generated DMP1 Mutant Model Mimics Human ARHR Disease. Z. CAO\*, B. JIANG, Y. LU, Y. XIE, C. QIN, and J. FENG (*Baylor College of Dentistry, Texas A&M University Health Science Center; Dallas, USA*)
- S0100** 9:00 Loss of AMEL Caused Ectopic Mineral, Cytoskeletal, and Vesicular Alterations. C.R. AYARZAGOITIA\*, T. JIN, Y. ITO, A. KULKARNI, C.W. GIBSON, X. LUAN, and T.G.H. DIEKWISCH (*University of Illinois - Chicago, USA*)
- 0101** 9:15 Runx2 Conditional Ablation in Chondrocyte Causes Lethality and Failed Endochondral Ossification. H. CHEN\*, F.Y. GHORI, R.A. SERRA, S. GUTIERREZ, and A. JAVED (*University of Alabama, Birmingham, USA*)

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**Seq#: 24** **Thursday, 4 March 2010, 8 a.m. - 9:30 a.m.**  
**Oral Session, Room 149**

**Nutrition - Keynote Address and Nutrition Research Oral Presentations**

**Chairpersons: T. Marshall and A. Hague**

- 0102** 8:00 Keynote Address: Advancing the Translation of Evidence in Nutrition and Oral Health Research: Future Challenges. C. MOBLEY\* (*University of Nevada Las Vegas, USA*)
- 0103** 8:30 Effect of Infusion Time on the Fluoride Content of Tea. M. KARAMI NOGOURANI\*, S. JAVADINEJAD, N. DIDEBAN, and S. JALALI (*Islamic Azad University Dental Center, Isfahan, Iran*)
- 0104** 8:45 Beverage Intakes, Visible Plaque, and Dental Caries in Young Children. T. MARSHALL\*, A. BUTTON, D. DAWSON, K. WEBER-GASPARONI, D. DRAKE, and J. WARREN (*University of Iowa, Iowa City, USA*)
- 0105** 9:00 Dietary Carbohydrates and Root Caries Incidence over 15 Years. E. KRALL KAYE\*, M. NUNN, T. DIETRICH, and R. GARCIA (*Boston University, MA, USA*)
- 9:15 Discussion.

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**Seq#: 25** **Thursday, 4 March 2010, 8 a.m. - 9:30 a.m.**  
**Oral Session, Room 144AB**

**Oral Health Research - Prevention and Treatment of Oral Diseases I**

**Chairpersons: C. Kincaid and H.C. Van der Mei**

- 0106** 8:00 Development of an *in vitro* Dynamic Flow Erosion Susceptibility Assay. H.C. VAN DER MEI\*, D.J. WHITE, B.W. PETERSON, B. VAN DE BELT-GRITTER, and H.J. BUSSCHER (*University Medical Center Groningen, Netherlands*)
- 0107** 8:15 Eroded Enamel and Clinical Outcome with Toothbrush and Dentifrice Use. C. KINCAID\*, C. KINCAID, E. ERSEN, N. LI, II, and J. HEFFERREN (*Associates in Dentistry, Lawrence, KS, USA*)
- 0108** 8:30 The Staining Potential of Various Currently Marketed Mouthrinses. T. LISANTE\*, J.A. ASKINAZI, J.A. MCGUIRE, A. HEE, and K.P. WILLIAMS (*Johnson & Johnson Consumer & Personal Products Worldwide, Division of Johnson & Johnson Consumer Companies Inc., Morris Plains, NJ, USA*)

- S0109** 8:45 Human ES Cell-derived Mesenchymal Cells Express Dental Pulp Cell Markers. W. GOLDMAN\*, Y. SHAMIS, K. HEWITT, W. ZHANG, I. PRUITT, P.C. YELICK, and J. GARLICK (*Tufts University, Boston, MA, USA*)
- 0110** 9:00 Colorimetric Breath Assay Strip Ratings Compared with Established Assessment Methods. P. LENTON\*, M. LEESMAN, A. BURGESS-CASSLER, and S. LUNOS (*University of Minnesota, Minneapolis, USA*)
- 9:15 Discussion.

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**Seq#: 26** **Thursday, 4 March 2010, 8 a.m. - 9:30 a.m.**  
**Oral Session, Room 150A**

**Oral Medicine & Pathology - Oral Cancer I and HIV; Cell Signaling and Differentiation**

**Chairpersons: N. D'Silva and B. Reboucas**

- S0111** 8:00 Tempol Prevention of Fractionated Radiation-induced Oral Mucositis (murine model). A.P. COTRIM\*, A.N. SUNSHINE, A. SOWERS, J.B. MITCHELL, and B.J. BAUM (*National Institute of Dental & Craniofacial Research, Bethesda, MD, USA*)
- 0112** 8:15 Human Embryonic Stem Cells Differentiate to Specified Mesenchymal Lineage Fates. K. HEWITT, Y. SHAMIS, M. CARLSON, S. DONG, and J. GARLICK\* (*Tufts University, Boston, MA, USA*)
- 0113** 8:30 Rap1 Mediates GALR2-induced Proliferation and Survival in HNSCC. R. BANERJEE, B. HENSON, and N.J. D'SILVA\* (*University of Michigan, Ann Arbor, USA*)
- S0114** Paper Withdrawn.
- S0115** 8:45 MUC1 Signaling Pathways in Oral Cancer. B. REBOUCAS\*, X. LI, D. KEEFE, F. OPPENHEIM, and G. OFFNER (*Boston University, MA, USA*)
- 0116** 9:00 HIV Protease Inhibitors Alter TLR3 Signaling in Oral Epithelial Cells. R. DANAHER\*, C. WANG, R. GREENBERG, C. KAETZEL, and C. MILLER (*University of Kentucky, Lexington, USA*)
- 9:15 Discussion.

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**Seq#: 27** **Thursday, 4 March 2010, 8 a.m. - 9:30 a.m.**  
**Oral Session, Room 154**

**Periodontal Research - Pathogenesis - Host-Bacterial Interactions**

**Chairpersons: M. Cugini and F. Teles**

- 0117** 8:00 Clinical, Immunological, and Microbiological Changes Associated with Experimental Gingivitis. M. CUGINI\*, R. TELES, S. HOWELL, L. DU-THUMM, and S. MILLER (*The Forsyth Institute, Boston, MA, USA*)
- S0118** 8:15 Cigarette Smoke Alters *Porphyromonas gingivalis* LPS Structure and Immune Function. A. BOYLE\*, J. BAGAITKAR, D.E. RENAUD, D.R. DEMUTH, and D.A. SCOTT (*University of Louisville, KY, USA*)



- 0119** 8:30 *Porphyromonas gingivalis* Accelerates Atherosclerosis in ApoE<sup>null</sup> Mice with Balloon Angioplasty. A. LUCAS, R. VERMA, E. DAI, L. LIU, G. MUNUSWAMY-RAMANUJAM, J. KIM, S. POLA, and L. KESAVALU\* (*University of Florida, Gainesville, USA*)
- S0120** 8:45 Lipopolysaccharide Causes Hypoxia-inducible Factor 1 Alpha Accumulation in Gingival Fibroblasts. J.-P. LI\*, M.L. FUNG, A. XU, G.S.W. TSAO, and W.K. LEUNG (*The University of Hong Kong, China*)
- 0121** 9:00 *Porphyromonas gingivalis* Suppresses Bone Formation by Inhibition of Osteoblast Differentiation. W. ZHANG\*, J. JU, T. RIGNEY, and G. TRIBBLE (*University of Texas - Houston/Health Science Center, USA*)
- 0122** 9:15 Quantification of Uncultivated Bacterial Species in Periodontally Healthy Individuals. F. TELES\*, Y. SIEGELIN, R. TELES, B. PASTER, A.D. HAFFAJEE, and S.S. SOCRANSKY (*The Forsyth Institute, Boston, MA, USA*)

**Seq#: 28** Thursday, 4 March 2010, 8 a.m. - 9:30 a.m.  
Oral Session, Room 156

**Pharmacology, Therapeutics, & Toxicology - Pharmacology, Therapeutics, & Toxicology**

**Chairpersons: J. Gibbs and H. Zhang**

- S0123** 8:00 Cannabinoids as Potential Peripheral Analgesics. N.B. RUPAREL\*, A.M. PATWARDHAN, A.N. AKOPIAN, and K.M. HARGREAVES (*University of Texas - San Antonio / Health Science Ctr., USA*)
- S0124** 8:15 Modeling Peroxide Release Dynamics and Pulp Penetration during Tooth-bleaching Procedures. S. SATISH\*, H. CHING, R. DEDHIA, N.K. VOULGARAKIS, T.D. JOHNSON, and C.J. RADKE (*Department of Chemical Engineering, University of California, Berkeley, USA*)
- S0125** 8:30 Nanoparticle-based Formulations for Localized Oral-mucosal Delivery (LOMD) of Lipophilic Compounds. A. HOLPUCH\*, G. HUMMEL, M. TONG, P. PEI, and S. MALLERY (*The Ohio State University, Columbus, USA*)
- S0126** 8:45 Organogold(III) Complexes Differentially Induce Apoptosis in Oral Epithelial Cells. H.H. HSU\*, P. PEIXOTO, S.-Y. RYU, P.G. SACKS, K. FLEISHER, M. CONTEL, and K.W. KINNALLY (*New York University College of Dentistry, USA*)
- 0127** 9:00 Identification of Genes Affected by Bisphosphonate Treatment in Mice. H. AKO, O. HORST, M.J. SOMERMAN, and H. ZHANG\* (*University of Washington, Seattle, USA*)
- S0128** 9:15 Bisphosphonates Inhibit Leptin-induced SOCS3 Expression. E. PALOS\*, D. VANDERBROOK, L. XIANG, and J. REUBEN (*Baylor College of Dentistry, Dallas, TX, USA*)

**Seq#: 29** Thursday, 4 March 2010, 9:45 a.m. - 10:30 a.m.  
Plenary, Room 146AB

**Plenary Session - Molecular Markers in Personalized Cancer Diagnosis and Treatment**

- 0129** 9:45 Molecular Markers in Personalized Cancer Diagnosis and Treatment. D. SIDRANSKY\* (*Johns Hopkins University, Baltimore, MD, USA*)

**Seq#: 30** Thursday, 4 March 2010, 10:45 a.m. - 12:15 p.m.  
Hands-on Workshop, Room 143C

**Hands-on Workshop - Introduction to the Dental, Oral, and Craniofacial Data Resource Center Web Site**

**Chairperson: L. Barker**

- 0130** 10:45 Overview of the Data Resource Center. L. BARKER\* (*U.S. Centers for Disease Control and Prevention, Atlanta, GA, USA*)
- 11:00 Survey Question Compendium. S. DRILEA\* (*Northrop Grumman Information Technology, Herndon, VA, USA*)
- 11:25 Catalog of Surveys and Archive of Methods Related to Oral Health. P. MARTINEZ\* (*Northrop Grumman Information Technology, Rockville, MD, USA*)
- 11:50 Data Query System. C.-H. LI\* (*Northrop Grumman Information Technology, Rockville, MD, USA*)

**Seq#: 31** Thursday, 4 March 2010, 10:45 a.m. - 12:15 p.m.  
Symposium, Room 152A

**Symposium - DNA Tumorigenic Pathogenesis in the Head and Neck**

**Chairpersons: J. Greenspan, C. Miller, and J. Webster-Cyriaque**

- 0131** 10:45 Immunopathology of KSHV. E. CESARSMAN\* (*Weill Cornell Medical College, New York, NY, USA*)
- 11:05 Molecular Mechanisms of EBV Pathology and Its Evolution. N. RAAB-TRAUB\* (*University of North Carolina, Chapel Hill, USA*)
- 11:25 Epidemiology of Oropharyngeal Cancer in the Midst of HPV and HIV Co-infections. M. GILLISON\* (*The Ohio State University, Columbus, USA*)
- 11:45 Pathogenesis of Polyomaviruses. J. BUTEL\* (*Baylor College of Medicine, Houston, TX, USA*)

**Seq#: 32** Thursday, 4 March 2010, 10:45 a.m. - 12:15 p.m.  
Symposium, Room 147A

**Symposium - Phosphate Homeostasis**

**Chairperson: J. Hu**

- 0132** 10:45 Regulation of Pi Homeostasis by DMP1 and PHEX. J.Q. FENG\* (*Department of Biomedical Sciences, Baylor College of Dentistry, Texas A&M University System Health Science Center, Dallas, USA*)
- 11:10 FGF23 and Its Role in Mineralization. B. LANSKE\* (*Harvard University, Boston, MA, USA*)
- 11:35 Regulation of Phosphate Metabolism by Klotho. M. KURO-O\* (*The University of Texas Southwestern Medical Center at Dallas, USA*)
- Noon Discussion.



**Seq#: 33 Thursday, 4 March 2010, 10:45 a.m. - 12:15 p.m.**  
**Oral Session, Room 140A**

**Craniofacial Biology - Biology of Bone and Cartilage**

**Chairpersons: S. Huja and H. Yao**

**0133** 10:45 MAPK Phosphatase-1 Attenuates LPS-induced Immune Response and Alveolar Bone Loss. H. YU\*, Q. LI, B. HERBERT, R. ZINNA, K. MARTIN, C. ROSSA, and K. KIRKWOOD (*Medical University of South Carolina, Department of Craniofacial Biology and the Center for Oral Health Research, Charleston, USA*)

**0134** 11:00 Glucose Consumption Rates of Temporomandibular Joint Disc Cells. L. ZHANG, J. KUO, M. KERN, and H. YAO\* (*Clemson University, Charleston, SC, USA*)

**0135** 11:15 Tgf- $\beta$  Regulates Basal Transcriptional Factors during Intramembranous Bone Formation. J. IWATA\*, R. HOSOKAWA, P. SANCHEZ-LARA, M. URATA, and Y. CHAI (*University of Southern California, Los Angeles, USA*)

**0136** 11:30 Direct Comparison of Progenitor Cells Derived from Different Post-natal Tissues. G. COOPER\*, E. LENSIE, J. CRAY, M. BYKOWSKI, G. DECESARE, M. SMALLEY, M. MOONEY, P. CAMPBELL, and J. LOSEE (*University of Pittsburgh, PA, USA*)

**0137** 11:45 Zoledronic Acid Treatment Reduces Bone Remodeling at Extraction and Implant Sites. S. HUJA\*, S. HUENI, M. XIAOKUI, C. FENNELL, A. D'ATRI, and S. FERNANDEZ (*The Ohio State University, Columbus, USA*)

**0138** Noon Abnormal Development of Intramembranous and Endochondral Bones with Nell-1 Deficiency. X. ZHANG\*, R. SIU, T. KO, B. WU, K. TING, C.T. CULIAT, and C. SOO (*University of California, Los Angeles, School of Dentistry, USA*)

**Seq#: 34 Thursday, 4 March 2010, 10:45 a.m. - 12:15 p.m.**  
**Oral Session, Room 151B**

**Dental Materials: Adhesion - Bond Strength Testing and Mechanisms - Adhesive Properties and Bonding**

**Chairpersons: C. Gernhardt and A. Bedran-Russo**

**0139** 10:45 Impact of Desensitizers on Tensile Bond Strength after Artificial Aging. C. GERNHARDT\*, H. ZALIKOWSKI, and H.-G. SCHALLER (*Martin-Luther-University Halle-Wittenberg, Germany*)

**0140** 11:00 Self-etching Adhesive Compositions Using Recently Developed Multifunctional Molecules. M. TRUJILLO-LEMON\*, K. ESQUIBEL, A. DOCKTOR, W. VICTOR, Z. SHELTON, J. LEADFORD, K. IDA, and C. BRACHO-TROCONIS (*Septodont, Confi Dental Division, Louisville, CO, USA*)

**0141** 11:15 Long-term Bonding Efficacy of Immediate Dentin Sealing Techniques. S. DUARTE\*, J.-H. PHARK, A.C. BOTTA, A. AVISHAI, A. HERNANDEZ, and A. SADAN (*Case Western Reserve University, Cleveland, OH, USA*)

**0142** 11:30 Long-term Effect of Carbodiimide on Dentin-Resin Bond Strength. A.K. BEDRAN-RUSSO\*, C. VIDAL, P. DOS SANTOS, and C. CASTELLAN (*University of Illinois, Chicago, USA*)

**0143** 11:45 Fatigue Behavior of Dentin Adhesives under Dry and Wet Conditions. V. SINGH, A. MISRA\*, O. MARANGOS, Q. YE, J. PARK, J. ESLICK, and P. SPENCER (*University of Kansas/Bioengineering Research Center, Lawrence, USA*)

**0144** Noon Microtensile Dentin Adhesion of Adper Easy Bond in Total-etch Mode. N. KARIM\*, B. SHUKLA, C. THALACKER, and S. VELAMAKANNI (*3M ESPE Dental, St. Paul, MN, USA*)

**Seq#: 35 Thursday, 4 March 2010, 10:45 a.m. - 12:15 p.m.**  
**Oral Session, Room 150B**

**Dental Materials: Biocompatibility and Biologic Effects - Keynote Address and Material Biocompatibility**

**Chairpersons: J. Ferracane and B. Yang**

**0145** 10:45 Keynote Address: Bisphenol A in Dentistry—an Unacceptable Biological Risk? G. SCHMALZ\* (*University Medical Center Regensburg, Germany*)

**S0146** 11:15 Identification of Osteogenic Gene Families Enhanced by Bioactive Glass Ions. T. BISHOP\*, V. VARANASI, K. LEONG, A. TOMSIA, E. SAIZ, G.W. MARSHALL, S.J. MARSHALL, and P. LOOMER (*University of California - San Francisco, USA*)

**S0147** 11:30 Cell and Tissue Reaction to Gutta-percha- vs. Epoxy-resin-based Sealers. I. WILLERSHAUSEN\*, S. GHANAATI, M. BARBECK, M. JOERGENSEN, J. KRAFT, B. WILLERSHAUSEN, R.A. SADER, and C.J. KIRKPATRICK (*Institute for Dental Material Sciences and Technology, Johannes Gutenberg-University Mainz, Germany*)

**0148** 11:45 Dentin Matrix Proteins Solubilized by Solutions Relevant to Dentin Adhesives. J. FERRACANE\*, P. COOPER, and A. SMITH (*Oregon Health & Science University, Portland, USA*)

**0149** Noon Remineralization of Natural and Artificial Carious Dentin Lesions *in vitro*. B. YANG\*, G.M. FLAIM, J.G. JOHNSON, and S.H. DICKENS (*American Dental Association Foundation, Gaithersburg, MD, USA*)

**Seq#: 36 Thursday, 4 March 2010, 10:45 a.m. - 12:15 p.m.**  
**Oral Session, Room 151A**

**Dental Materials: Other Materials - Chemistry, Properties, and Performance - Keynote Address and Current Findings in Preventive and Operative Dentistry**

**Chairperson: J. da Costa**

**0150** 10:45 Keynote Address: Total Energy—Are You Delivering Enough to Cure Your Restorations? R.B.T. PRICE\* (*Dalhousie University, Halifax, Nova Scotia, Canada*)

**0151** 11:15 SnF<sub>2</sub> Effects on Acid Resistance of HAP Mineral *in vitro*. M. ZSISKA\*, B.W. PETERSON, and D.J. WHITE (*The Procter & Gamble Company, Mason, OH, USA*)

**S0152** 11:30 Unique Treatment of Early Caries and White-spot Lesions. D. NOBREGA\*, R. PERRY, E. KAMINSKY, M. FINKELMAN, and G. KUGEL (*Tufts University, Boston, MA, USA*)



- 0153** 11:45 Synthesis and Characterization of Amorphous Calcium Chlorhexidine Phosphate Fluoride. M. TUNG\*, A.T. CHUANG, and K. LIN (*NIST, Gaithersburg, MD, USA*)  
Noon Discussion.

**Seq#: 37** Thursday, 4 March 2010, 10:45 a.m. - 12:15 p.m.  
Oral Session, Room 149

**Geriatric Oral Research - Keynote Address and Care of Oral Health in Older Adults**

**Chairpersons: M. Singh and M. Singh**

- 0154** 10:45 Keynote Address: Sjögren's Syndrome—Oral Manifestations and Treatment Options. A. PAPAS\* (*Tufts University School of Dental Medicine, Boston, MA, USA*)  
**0155** 11:15 Effect of Calcium on Periodontal Disease in a Salivary Hypofunction Population. M. SINGH\* and A. PAPAS (*Tufts University School of Dental Medicine, Boston, MA, USA*)  
**0156** 11:30 Trajectories of Oral Health among Old Adults. J. LIANG, B. WU\*, B. PLASSMAN, Y.-Y. LEE, C. REMLE, L. BAI, and J. BECK (*University of North Carolina, Greensboro, USA*)  
**0157** 11:45 Management of Peri-implant Mucositis using Ozone Quantified by Metrology. D. McKENNA, E. LYNCH\*, L. CUNNINGHAM, and M. GROOTVELD (*Queens University Belfast, Northern Ireland, UK*)  
Noon Discussion.

**Seq#: 38** Thursday, 4 March 2010, 10:45 a.m. - 12:15 p.m.  
Oral Session, Room 144AB

**Microbiology / Immunology and Infection Control - Oral Biology**

**Chairpersons: S. Ruhl and P. Sreenivasan**

- 0158** 10:45 Effect of Smoking on Supragingival Bacterial Acquisition and Colonization. V. JOSHI\*, C. MATTHEWS, M. DEJAGER, M. ASPIRAS, and P. KUMAR (*The Ohio State University, Columbus, USA*)  
**S0159** 11:00 Co-adhesion Partners for *Helicobacter pylori* among Oral Biofilm Microbiota. A. EIDT, D.H. LEE\*, S.M. HEO, E.M. HAASE, U. REISCHL, J.O. CISAR, F.A. SCANNAPIECO, and S. RUHL (*Department of Oral Biology, School of Dental Medicine, State University of New York, Buffalo, USA*)  
**0160** 11:15 Epithelial Cell Responses to Oral Bacterial Biofilms. R. PEYYALA\*, S.S. KIRAKODU, J.L. EBERSOLE, and K.F. NOVAK (*University of Kentucky, Lexington, USA*)  
**0161** 11:30 Molecular Mechanisms of *Tannerella forsythia* Invasion into Epithelial Cells. E. MISHIMA\* and A. SHARMA (*State University of New York - Buffalo, USA*)  
**S0162** 11:45 Contributions of Ethnicity to Composition of the Supragingival Biofilm. M. MASON\*, V. JOSHI, H. FISCHBACH, M. ZIANNI, and P. KUMAR (*The Ohio State University, Columbus, USA*)  
**S0163** Paper Withdrawn.  
Noon Discussion.

**Seq#: 39** Thursday, 4 March 2010, 10:45 a.m. - 12:15 p.m.  
Oral Session, Room 150A

**Oral Health Research - Prevention and Treatment of Oral Diseases II**

**Chairpersons: M. Walker and K. Perry**

- 0164** 10:45 Post-radiation Dental Lesion Severity: Association with Tooth-level Radiation Dose. M.P. WALKER\*, K.B. WILLIAMS, A.-L. CHENG, B.D. WICHMAN, and S.K. McDONALD (*University of Missouri - Kansas City, USA*)  
**0165** 11:00 Clinical Trial of Gingivitis Image Analysis and Gingivitis Natural History. R.W. GERLACH\*, R.D. GIBB, M.E. RUBUSH, J.M. DUNAVENT, and A.R. BIESBROCK (*The Procter & Gamble Company, Mason, OH, USA*)  
**0166** 11:15 Randomized Controlled Experimental Gingivitis Study of CPC Rinse in Twins. W.A. BRETZ\*, P.M. CORBY, A.L. CORBY, A.L. MOREIRA, M.F. GABBARD, M.L. BARKER, R.W. GERLACH, and A.R. BIESBROCK (*New York University, USA*)  
**0167** 11:30 Comparing Effectiveness of Plaque Removal of Three Different Interproximal Devices. A. MOBILIA\*, G. ERICKSON, V. DROUIN, J. MERCER, and S. SEVILLA PEREZ (*Loma Linda University, CA, USA*)  
**0168** 11:45 Efficacy of BRUSH, FLOSS, & RINSE™ Regimen vs. Mechanical Oral Hygiene. K. SIMMONS\*, C. CHARLES, J. MCGUIRE, A. HEE, J. QAQISH, and P. AMINI (*Johnson & Johnson Consumer & Personal Products Worldwide Division of Johnson & Johnson Consumer Companies Inc., Morris Plains, NJ, USA*)  
**S0169** Noon Community Relationships Improve Oral Health Outcomes for Low-income Children. K.B. PERRY\* (*Baylor College of Dentistry, Dallas, TX, USA*)

**Seq#: 40** Thursday, 4 March 2010, 10:45 a.m. - 12:15 p.m.  
Oral Session, Room 154

**Periodontal Research - Therapy - New Drugs for Periodontal Therapy; Results from in vitro and in vivo Studies**

**Chairpersons: H. Hasturk and A. Kantarci**

- 0170** 10:45 rhAMG Enhances Mineralized-tissue-associated Proteins of Cementoblasts. S. HAKKI\*, B.S. BOZKURT, M. DARD, and W. GOETZ (*Selcuk Universitesi, Konya, Turkey*)  
**S0171** 11:00 Synergistic Effect of Amelogenin N-terminus and Hydroxyapatite Increases Osteoblast Maturation. K. VESPER\*, R. OLIVARES-NAVARRETE, M. DARD, C. MAUTH, R. RANEVSKI, B.D. BOYAN, and Z. SCHWARTZ (*Georgia Institute of Technology, Atlanta, USA*)  
**S0172** 11:15 Chemically Modified Tetracycline Reduces MMP-9 Levels in Mononuclear Cells. C. MISSIHOUN\* (*State University of New York - Stony Brook, USA*)  
**0173** 11:30 Diabetes Enhances FOXO1 Nuclear Translocation in Fibroblasts. J. LI, T. DESTA\*, and D. GRAVES (*University of Medicine and Dentistry of New Jersey, Newark, USA*)  
**0174** 11:45 Aldose Reductase Inhibitors Reduce Experimental Periodontitis. P. KADOR, J.D. O'MEARA, K. BLESSING, and R.A. REINHARDT\* (*University of Nebraska, Lincoln, USA*)



**S0175** Noon Periodontitis and Atherosclerosis in High-cholesterol-fed Rabbits. H. HASTURK, R. ABDALLAH\*, A. KANTARCI, D. NGUYEN, C. ANDRY, and T. VAN DYKE (Boston University, MA, USA)

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**Seq#: 41** Thursday, 4 March 2010, 10:45 a.m. - 12:15 p.m.  
Oral Session, Room 143AB

**Prosthodontics Research - Clinical and Laboratory Research as Predictive of Prosthodontic Treatment Success**

**Chairpersons: P. Guess and M. Etman**

**0176** 10:45 Prospective Clinical Evaluation of All-ceramic Crowns at 36 Months. D. FELTON\* and L. COOPER (University of North Carolina, Chapel Hill, USA)

**0177** 11:00 Clinical Performance of All-ceramic Veneers in AI Patients. M. GROTEN\*, C. WALTER, and L. PROEBSTER (University of Tuebingen, Germany)

**S0178** 11:15 Preliminary Results with Newly Designed Zirconia Ceramic-inlay-retained FDPs. M. ABOU TARA\*, S. WOLFART, and M. KERN (Christian-Albrechts University at Kiel, Department of Prosthodontics, Dental School, Germany)

**0179** 11:30 Fatigue Testing of Monolithic Lithium-disilicate and Veneer-zirconia All-ceramic Crown Systems. P. GUESS\*, R. ZAVANELLI, N. SILVA, E. BONFANTE, P. COELHO, and V. THOMPSON (University of Freiburg School of Dentistry, Germany)

**0180** 11:45 Clinical Evaluation of Metal-Ceramic Crowns over Three Time Periods. M. ETMAN\* and A. WOLFE (College of Dentistry, University of Saskatchewan, Saskatoon, Canada)

**0181** Noon Influence of Posts on Fracture Resistance of Endodontically Treated Teeth. J.T. MANGOLD and M. KERN\* (Christian-Albrechts University, Kiel, Germany)

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**Seq#: 42** Thursday, 4 March 2010, 10:45 a.m. - 12:15 p.m.  
Oral Session, Room 156

**Pulp Biology & Regeneration Research - Keynote Address and Pulp Regeneration, Stem Cells, and Scaffold Biology**

**Chairpersons: S.W. Whitson and J.E. Nor**

**0182** 10:45 Keynote Address: Nanostructured Peptide Hydrogels for the Regeneration of the Dentin-Pulp Complex. K. GALLER\* (University of Regensburg, Germany)

**0183** 11:15 SHED in Dental Pulp Tissue Engineering. L. CASAGRANDE, V.T. SAKAI, M.M. CORDEIRO, S. SHI, A. SMITH, and J.E. NÖR\* (University of Michigan, Ann Arbor, USA)

**0184** 11:30 The Co-culture of Cells from the Growing Apical Root. S.W. WHITSON\*, J. HOWENSTEIN, and S. SIMPSON (Southern Illinois University, Alton, USA)

**S0185** 11:45 Odontogenic Differentiation of Human DPSCs on Nanofibrous Scaffold. J. WANG\*, X. LIU, X. JIN, H. MA, J. HU, L. NI, and P. MA (University of Michigan, Ann Arbor, USA)

**0186** Noon Unique Dental Progenitor Cell Populations Differentiate into Distinct Neural Lineages. L. LI, Y. ITO, S. DANGARIA, and X. LUAN\* (University of Illinois - Chicago, USA)

**Seq#: 43** Thursday, 4 March 2010, 10:45 a.m. - 12:15 p.m.  
Oral Session, Room 140B

**Salivary Research - Salivary Proteomics and Diagnostics**

**Chairperson: D. Wong**

**S0187** 10:45 Composition of Human Salivary Lipids in Human Saliva. A. BRASSER\*, C. BARWACZ, D. DAWSON, K. BROGDEN, D. DRAKE, and P. WERTZ (University of Iowa, Iowa City, USA)

**S0188** 11:00 Salivary Transcriptomic Biomarkers for Early Detection of Lung Cancer. L. ZHANG\*, J. LEE, H. ZHOU, D. AKIN, D. CHIA, and D. WONG (UCLA School of Dentistry and Dental Research Institute, Los Angeles, CA, USA)

**S0189** 11:15 Dimerization of Parotid Secretory Protein. D.M. BLAU\*, S.G. VENKATESH, A.L. CARENBAUER, and D.S. DARLING (Oral Health and Systemic Disease, University of Louisville, KY, USA)

**0190** 11:30 Salivary Biomarkers of Acute Myocardial Infarction Identified by CART. C. MILLER\*, J. FOLEY, J. EBERSOLE, C. CAMPBELL, A. BAILEY, J. STEVENS, D. DAWSON, M.J. NOVAK, R. KRYSIO, S.W. REDDING, D. KINANE, B. ROSE, P. FLORIANO, N. CHRISTODOULIDES, and J. McDEVITT (University of Kentucky College of Dentistry, Lexington, USA)

**0191** 11:45 Characterization of Epithelial Cells in Saliva. M. SRINIVASAN\* and V. SWAMINATHAN (Indiana University School of Dentistry, Indianapolis, USA)

**0192** Noon Clinical Validation of Salivary Biomarkers for Primary Sjögren's Syndrome. D. WONG\*, S. HU, H. ZHOU, C. KALLENBERG, and A. VISSINK (University of California - Los Angeles, USA)

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**Seq#: 44** Thursday, 4 March 2010, 1 p.m. - 5:30 p.m.  
Hands-on Workshop, Room 147B

**Hands-on Workshop - NIDCR Essentials in Grant Writing**

**Chairperson: K. Hardwick**

**0193** 1:00 NIDCR Essentials in Grant Writing. K. HARDWICK\* (NIDCR, Bethesda, MD, USA)

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**Seq#: 45** Thursday, 4 March 2010, 2 p.m. - 3:15 p.m.  
Poster Discussion Session, Room 145A

**Mineralized Tissue - In vitro Mineralization (PDS)**

**Chairpersons: C. Sfeir and J. Gorski**

2:00 Poster Viewing Period.

**0194** 2:25 Effects of Fluoride, Amelogenin, and Supersaturation Degree on Remineralized-enamel Morphology. Y. FAN\*, J.R. ALVAREZ, X. XU, Z. SUN, and J. MORADIAN-OLDAK (Louisiana State University Health Science Center, New Orleans, USA)

**S0195** 2:32 Analysis of BMP2 and VEGF Expression in 3-dimensional Osteoblast Cultures. J. HOOPES\*, D. SEABOLD, J. BOEHRS, R. ZAHARIAS, J. LAFFOON, and G. SCHNEIDER (University of Iowa, Iowa City, USA)



- 0196** 2:39 Cryo-TEM Study of the Self-assembly of Amelogenin. P.-A. FANG\*, A.S. DESHPANDE, H.C. MARGOLIS, and E. BENIASH (*University of Pittsburgh, PA, USA*)
- S0197** 2:46 Ameloblast and Stratum Intermedium Co-cultures Mediate Matrix Mineralization. L. THOMAS\*, O. MAMAEVA, M.A. MacDOUGALL, Y. WU, and M. MacDOUGALL (*University of Connecticut, Farmington, USA*)
- 0198** 2:53 Novel Biodegradable Porous Cements for Orthopaedic and Craniofacial Regeneration. C. SFEIR\*, A. ROY, H. WU, F. SYED-PICARD, B. COSTELLO, M. MOONEY, and P. KUMTA (*University of Pittsburgh, PA, USA*)
- S0199** 3:00 Binding of Type XI Collagen to Phosphoproteins at Biomineralization Sites. D. PernoUD\*, N. HUFFMAN, J. OXFORD, D. EYRE, and J. GORSKI (*UMKC School of Dentistry, Kansas City, MO, USA*)
- 0200** 3:07 Post-translational Modifications of Porcine Dentin Sialoprotein (DSP). Y. YAMAKOSHI\*, T. NAGANO, J. HU, F. YAMAKOSHI, and J.P. SIMMER (*University of Michigan, Ann Arbor, USA*)

**Seq#: 46 Thursday, 4 March 2010, 2 p.m. - 3:15 p.m.**  
**Poster Session, Exhibit Hall D**

**Dental Materials: Adhesion - Bond Strength Testing and Mechanisms - Adhesive Bonding Mechanisms**

- 0201** Shear Bond Strength of Self-adhesive Resin Cements to Dentin. W. NAUGHTON\* and M. LATTA (*Creighton University, Omaha, NE, USA*)
- S0202** Gingival Adhesive Bond Strength under 15.0 cm of Pulpal Pressure. J. PURK, D. RAINWATER\*, K. WILLIAMS, and V. DUSEVICH (*University of Missouri - Kansas City, USA*)
- S0203** Delayed Microtensile Bond Strength of a Silorane-based Composite Resin Bonding Agent. M. GIACOBBI\* and K. VANDEWALLE (*USAF, Lackland AFB, TX, USA*)
- S0204** Change in Elastic Modulus of Adhesive-infiltrated Dentin. G. YASUDA\*, A. RIKUTA, C. TAKUBO, S. ANDO, M. MIYAZAKI, and J.A. PLATT (*Nihon University, Tokyo, Japan*)
- S0205** Evaluation of the Bonding Mechanisms of a Resin-modified Glass Ionomer. A. NAMBOODIRI\*, T.A. IMBERY, L. PACE, and P. MOON (*Virginia Commonwealth University - VCU/MCV, Richmond, USA*)
- 0206** Microtensile-Microshear, Comparable Results? L.G. WATANABE\*, L. PINZON, S.J. MARSHALL, and G.W. MARSHALL (*University of California - San Francisco, USA*)
- 0207** Sandblasting Alumina Affects Adhesion and Bending Properties of Resin Cement. G. NISHIGAWA\*, Y. MARUO, M. OKA, Y. TAMADA, K. YOSHIHARA, S. MINAGI, M. IRIE, and K. SUZUKI (*Okayama University, Japan*)
- S0208** Ethanol Gel Application Time and  $\mu$ TBS at Resin-Dentin Interfaces. M. GIBBS\*, S. GERALDELI, S. ARMSTRONG, D. PASHLEY, F. TAY, and F. QIAN (*University of Iowa, Iowa City, USA*)
- 0209** Different Treatments before Bonding Composite Resin to Laser-prepared Enamel. A. OBEIDI\*, J. ONTIVEROS, L. SENG, J. BARROS, and S. PATEL (*University of Texas - Houston/Health Science Center, USA*)
- 0210** Bond Durability of Vertise Flow to Tooth Structure. M. NGUYEN\*, T. NGUYEN, X. QIAN, and D. TOBIA (*Kerr Corporation, Orange, CA, USA*)

- 0211** Bond Strength of Vertise Flow to Porcelain Substrate. H. BUI\*, T. NGUYEN, X. QIAN, and D. TOBIA (*Kerr Corporation, Orange, CA, USA*)
- S0212** Influence of Resin-modified Fluoride and Chlorhexidine Varnishes on Hypersensitive Dentin Adhesion. A.L. OLIVEIRA\*, A.C. BOTTA, S. DUARTE, J.-H. PHARK, E.M.A. GIRO, and A. SADAN (*São Paulo State University, São Carlos, Brazil*)
- 0213** Bonding Durability of All-in-One Adhesive Systems under Thermo-mechanical Repeated Stress. Y. NARA\*, M. HARA, T. YAMADA, S. OGAWA, T. MASEKI, T. KIMISHIMA, and I.L. DOGON (*Nippon Dental University, Tokyo, Japan*)
- S0214** Strength Analysis of Rebonded Composite Restorations. S. SHARMA, M. GONZALEZ, C. DECOTEAU\*, C. DEFURIA, M. FINKELMAN, and G. KUGEL (*Tufts University, Boston, MA, USA*)
- S0215** Comparison of Shear Bond Strengths on Bleached and Unbleached Enamel. A. DIETRICH, J. ENGLISH, K.R. MCGRORY, J. ONTIVEROS, A. SALAS-LOPEZ, H.I. BUSSA, J.M. POWERS., and R.D. HUNTER\* (*University of Texas - Houston/Health Science Center, USA*)
- 0216** *In vitro* Composite Bond Strength to Laser-treated Enamel. J. ONTIVEROS\*, A. OBEIDI, L. SENG, and G. FREY (*University of Texas - Houston/Health Science Center, USA*)
- 0217** Effects of Contaminations on Dentin Bonding Strength of Glass Ionomers. L. BUTLER, J.-W. CHEN, F.R. TRAFICANTE, II, C. ROGGENKAMP\*, and H. RITER (*Loma Linda University, CA, USA*)

**Seq#: 47 Thursday, 4 March 2010, 2 p.m. - 3:15 p.m.**  
**Poster Session, Exhibit Hall D**

**Dental Materials: Ceramic-based Materials and Cements - Ceramics — Strength, Fatigue, and Wear; Cements — Bonding to Ceramics, Hard Tissues, Media Interactions, and Provisional Materials**

- 0218** Effect of Surface Treatment on Load to Failure of Lithium-disilicate. C. PUSATERI\*, G. TYSOWSKY, and T. HILL (*Ivoclar Vivadent, Amherst, NY, USA*)
- 0219** Fracture Strength of Zirconia-frameworks Veneered with Pressed and Layered Ceramics. B. STAWARCZYK\*, I. SAILER, M. ÖZCAN, and C. HÄMMERLE (*Clinic for Fixed & Removable Prosthodontics and Dental Material Science, University of Zürich, Switzerland*)
- 0220** Initial Strength of CAD/CAM-veneered All-ceramic Posterior Restorations. A. HERRMANN\*, G. SCHECHNER, and G. KINDLER (*3M ESPE AG, Seefeld, Germany*)
- 0221** Effect of Cyclic Loading on Cement-retained Crowns on Implant Abutments. Y. NAGASAWA\*, H. NAKAJIMA, K. TOMITA, and Y. HIBINO (*Meikai University, Saitama, Japan*)
- 0222** Effect of Cement Thickness on Fracture Load of CAD/CAM Crowns. T. HILL\*, K. CHLOSTA, and G. TYSOWSKY (*Ivoclar Vivadent Inc., Amherst, NY, USA*)
- 0223** Margin Assessment and Fracture Resistance of Adhesively Luted Ceramic Crowns. J. EL GUINDY\*, D. MOSTAFA, and M. EL-AGROUDI (*Cairo University, Faculty of Dentistry, Egypt*)



**S0224** Marginal Fit and Shear Bond Strength of IPS-Emax to Zirconia. S. MANTILLA\*, I. SALAZAR, J. GUERRERO, and A. FERNANDEZ PEDRERO (*Universidad Nacional Autonoma de Mexico, Mexico City*)

**S0225** Characterization of the Interface between Zirconia and Veneering Porcelain. M. ZAHARAN\*, O. EL-MOWAFY, A. JOKSTAD, A. RIZKALLA, and L. TAM (*University of Toronto, ON, Canada*)

**0226** Influence of Toothbrushing on Surface Roughness of Pressable Ceramics. J.-H. PHARK\*, S. DUARTE, and A. SADAN (*Case Western Reserve University, Cleveland, OH, USA*)

**S0227** Wear of Enamel on Polished and Glazed Zirconia. S. SHAH\*, C. MICHELSON, P. BECK, L.C. RAMP, D. CAKIR, and J. BURGESS (*University of Alabama at Birmingham, USA*)

**0228** Shear Bond Strength of Self-adhesive Cements to Pressed Ceramics. T. MAGNUSZEWSKI\* and C. MUÑOZ (*University at Buffalo, NY, USA*)

**0229** Bonding between Primed Zirconia and Composite Using Self-adhesive Resin Cement. K. YOSHIDA\*, K. KAMADA, and T. SAWASE (*Nagasaki University Hospital, Japan*)

**S0230** Indirect Composite Bonded with Self-adhesive Cement. A. ANTUNES\*, M.F. DE GOES, G.M.D. DE SOUZA, and M.A.C. SINHORETI (*Faculdade de Odontologia de Piracicaba - UNICAMP, Brazil*)

**0231** Effects of Pre-etching and Thermocycling on Self-etching Adhesive Enamel Bonding. J. SHEETS\*, C. WILCOX, and W. BARKMEIER (*Creighton University, Omaha, NE, USA*)

**0232** Self-adhesive Resin Cement Dentin Bond Strength under Various Mixing Protocols. Y. CHAIYABUTR, D.E. KOIS\*, and J.C. KOIS (*Kois Center Research, Seattle, WA, USA*)

**0233** Stem-cell-encapsulated Self-setting Calcium Phosphate Scaffolds for Bone Regeneration. M. WEIR\* and H. XU (*University of Maryland Dental School, Baltimore, USA*)

**0234** Compatibility of Self-adhesive Cement with Bonding Agents. H. LIU\*, L. HAYES, and M. WALLER (*DENTSPLY International, Milford, DE, USA*)

**S0235** Interaction of a Resin Luting Cement with Two Aqueous Media. N.K. SARKAR, J. BENNETT\*, J. CHEUK, and A. FALSTER (*Louisiana State University School of Dentistry, New Orleans, USA*)

**S0236** One-year Color Stability of Composite Resin Cements. D. SMITH, B. WHISLER\*, and K. VANDEWALLE (*USAF, Lackland AFB, TX, USA*)

**S0237** Physical Properties of Four Provisional Restorative Materials. M. SALARI\*, C. GARCIA-GODOY, J. ROTHROCK, R. SMITH, and J. THOMPSON (*Nova Southeastern University, Fort Lauderdale, FL, USA*)

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**Seq#: 48** Thursday, 4 March 2010, 2 p.m. - 3:15 p.m.  
Poster Session, Exhibit Hall D

**Dental Materials: Polymer-based Materials—Physical Properties and Performance - Impression Materials**

**0238** Flowability at Different Working Times of Polyether and VPS. C.E. SABROSA\*, L. MIRAGAYA, R. NASCIMENTO, R. ANDREIUOLO, L. VASCONCELOS, L. ALVES, and M.F. DE GOES (*Universidade do Estado do Rio de Janeiro, Brazil*)

**0239** Tear Strengths of Dental Impression Elastomers. P. MONAGHAN\*, M. MILLER, and A. BOGHOSIAN (*Sherman Dental Associates of Evanston, LTD, IL, USA*)

**S0240** Impression Material Tear Strength before and after Recommended Setting Time. N. LAWSON\*, L.C. RAMP, D. CAKIR, P. BECK, and J. BURGESS (*University of Alabama at Birmingham, USA*) [2009 AADR Student Research Fellowship Winner]

**0241** Contact Angle Measurement of a ROMP Impression Material. C. LUU\*, D. XIE, and D. TOBIA (*Kerr Corporation, Orange, CA, USA*)

**0242** Wetting Ability and Chemical Compatibility of Precision Impression Materials. T. KLETTKE\*, B. KUPPERMANN, R. DIETER, and Z. JOACHIM (*3M ESPE, Seefeld, Germany*)

**S0243** Moisture Effect on Elastomeric Impression Dimensional Accuracy and Detail Reproduction. Y. CHOY\*, N. ALDERMAN, J. PARKINSON, and M.P. WALKER (*University of Missouri - Kansas City, USA*)

**0244** Time-dependent Hydrophilicity of Quick-setting Monophase Impression Materials. J. ZECH\*, E. DECHENT, D. RANFTL, and T. KLETTKE (*3M ESPE AG, Seefeld, Germany*)

**0245** Clinical Comparison of Two Impression Materials' Effectiveness for Inexperienced Operators. D. CAKIR\*, M. ANABTAWI, S. O'NEAL, L. MITCHELL, L.C. RAMP, and J. BURGESS (*University of Alabama at Birmingham, USA*)

**0246** Physical and Mechanical Properties of Elastomeric Impression Materials. J.M. POWERS\* and R. YAPP (*Dental Consultants, Inc., Ann Arbor, MI, USA*)

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**Seq#: 49** Thursday, 4 March 2010, 2 p.m. - 3:15 p.m.  
Poster Session, Exhibit Hall D

**Dental Materials: Color and Appearance (Esthetics) - Color and Appearance I**

**0247** Influence of Mouthrinse Immersion on Color Changes of Resin Composites. S. ANDO\*, T. TAKAMIZAWA, H. KUROKAWA, M. MIYAZAKI, and Y. HOSOYA (*Nihon University, Tokyo, Japan*)

**0248** Effects of Surface-glazing Sealants on Color Stability of Composite Resins. L.G. SENSI\* and H. STRASSLER (*University of Maryland Dental School, Baltimore, USA*)

**S0249** Specular Component as Predictor of Gloss of Resin Composites. M. ELDIWANY\*, M.S. ELDIWANY, J. ONTIVEROS, J.M. POWERS, and R. PARAVINA (*University of Texas - Houston/Health Science Center, USA*)

**0250** Staining-dependent Changes in Translucency of Resin Composites. F. FALCAO\*, S. PATEL, J.M. POWERS, and R. PARAVINA (*University of Texas - Houston/Health Science Center, USA*)

**0251** Staining-dependent Changes in Color of Resin Composites. S. PATEL\*, F. FALCAO, J. BARROS, J.M. POWERS, and R. PARAVINA (*University of Texas - Houston/Health Science Center, USA*)

**S0252** Color Stability of Four Provisional Restoration Resins. N. PISKORSKI\*, J. SANSLAND, H. WATANABE, and E. KIM (*University of Nebraska, Lincoln, USA*)

**S0253** Comparative Study on Radiopacity of Fiber Posts and Resin Cements. K. McCLENDON\*, A. RIPPES, and Y. FAN (*Louisiana State University, New Orleans, USA*)



**S0254** Translucency of Shaded Zirconia Core with and without Veneering Porcelain. P.E. SPYROPOULOU\* (*University of Michigan, Ann Arbor, USA*)

**S0255** Effects of Various Hydration States on Natural Tooth Shade. N. UMADAT\* and T. BONSTEIN (*University of Manitoba, Winnipeg, Canada*)

**S0256** Staining Characteristics of Sports Drinks on Dentin and Enamel. S. BAE\*, C. DIMAGGIO, T. BROMAGE, A. WOJCIK, and M. WOLFF (*New York University College of Dentistry, USA*)

**S0257** Effect of Hydrogen Peroxide Concentration on Enamel Surface Roughness. R. SIMAS, Sr.\*, R.C. PAES, C.M. SILVA, L.F. PONTES, and A.L. GAMA (*Universidade Federal do Para, Belém, Brazil*)

**S0258** Analysis of the Morphologies of Maxillary Central Incisors in Caucasians. L. GOBBATO\*, T. TSUKIYAMA, P. LEVI, T. GRIFFIN, and A. WEISGOLD (*Tufts University, Boston, MA, USA*)

**S0259** Comparison of Maxillary Anterior Teeth between Asian and Caucasian Subjects. T. TSUKIYAMA\*, E. MARCUSHAMER, E. ARGUELLO, P. MAGNE, G. GALLUCCI, and T.J. GRIFFIN (*Tufts University, Boston, MA, USA*)

**S0260** Orthodontic Appliance Preferences of Children and Adolescents. D. WALTON\*, H. FIELDS, and W. JOHNSTON (*The Ohio State University, Columbus, USA*)

**S0261** Extrinsic Coating Effects on Color Stability of Silicone Maxillofacial Elastomers. C.N. THANG\*, N. WONG, J.M. POWERS, and S. KIAT-AMNUAY (*University of Texas Houston - Houston / Health Sci Ctr., USA*)

**S0262** Color Changes in Different Alloys during Fabrication of Metal-Ceramic Restorations. B. YILMAZ, B. OZCELIK, A. COMPANY\*, and A. WEE (*Medical College of Georgia, Augusta, USA*)

**S0270** Near-IR Imaging of Thermal Changes in Enamel during Laser Ablation. L. MAUNG\* and D. FRIED (*University of California - San Francisco, USA*)

**S0271** Dental Digital Radiography Literature: Study Design and Diagnostic Efficacy. I.H. KIM, P.W. WONG\*, M.J. PATEL, and M.L. KANTOR (*New Jersey Dental School, UMDNJ, Newark, USA*)

**0272** Radiological Reliability for Locating Root Canals Prior to Endodontic Treatment. B. BRISEÑO MARROQUÍN\*, R. GALL, and B. WILLERSHAUSEN (*Universitätsklinik für Zahn-, Mund- und Kieferheilkunde, Mainz, Germany*)

**0273** Using Digital Imaging for Inter-operator Tooth Color Measurement in Twins. P.M. CORBY\*, W.A. BRETZ, A.L. CORBY, A.L. MOREIRA, M. D'AQUINO SILVA, A.R. BIESBROCK, A.A. WALANSKI, M.E. RUBUSH, M.L. BARKER, and R.W. GERLACH (*New York University, USA*)

**S0274** NIR Imaging of Occlusal Caries with a Ge-enhanced CMOS Camera. C. LEE\*, C.L. DARLING, and D. FRIED (*University of California - San Francisco, USA*)

**0275** Establishing Cephalometric Norms for an Indian Population. R. RAJAGOPAL, II\*, K. UMASHANKAR, and A. SAIPRAKASH (*Saveetha Dental College, Chennai, India*)

**S0276** Correlation Coefficient between Gingival Crevicular Fluid and Oral Malodor. W.-J. HOH\*, S.-C. SHIN, and J.-W. CHO (*Dankook University, Cheonan City, South Korea*)

**0277** Tongue-coating Score Variations in Different Tongue-coating Zones. S. LEE\*, W. JEONG, J. MOON, and D. LEE (*Loma Linda University, CA, USA*)

**Seq#: 51** Thursday, 4 March 2010, 2 p.m. - 3:15 p.m.  
Poster Session, Exhibit Hall D

**Seq#: 50** Thursday, 4 March 2010, 2 p.m. - 3:15 p.m.  
Poster Session, Exhibit Hall D

#### Diagnostic Sciences - Diagnostic Challenges and Modalities

**0263** Design for Caries Diagnostics by a New Brilliant X-ray Source. T. SAKAE\*, Y. HAYAKAWA, Y. TAKAHASHI, Y. NUMATA, T. HAYAKAWA, H. OKADA, H. NAKADA, T. TANAKA, K. HAYAKAWA, and I. SATO (*Nihon University School of Dentistry at Matsudo, Japan*)

**S0264** Proteomic Analysis and Biomarker Discovery of Human Saliva—A Systematic Review. S. AL-TARAWNEH\* and S. BENCHARIT (*University of North Carolina, Chapel Hill, USA*)

**0265** Quantification of Multiple Oral Pathogens in Dental Plaque using MLPA. D. CHEN\*, Z. TEREFEWORK, and L. DUTHUMM (*Colgate-Palmolive, Piscataway, NJ, USA*)

**0266** OTU Analysis of Clonal and Cultural Microbiota of Childhood Caries. N. CHALMERS\*, E. KANASI, J.J. MATHNEY, F.E. DEWHIRST, C.V. HUGHES, C.Y. LOO, and A.C.R. TANNER (*University of Maryland Dental School, Baltimore, USA*)

**0267** Maxillary Morphology in Obstructive Sleep Apnea Patients. M.Y. TABBAA and S. TABBAA\* (*State University of New York - Buffalo, USA*)

**0268** Paper Withdrawn.

**S0269** Comparison of Methods for Assessment of Temporomandibular Joint Bony Changes. G. PALCONET\*, L. CEVIDANES, P.F. LIM, and J. LUDLOW (*University of North Carolina, Chapel Hill, USA*)

#### Geriatric Oral Research - Care of Oral Health among Older Adults

**0278** Paper Withdrawn.

**S0279** Systemic Diseases, Xerogenic Medications, and Oral Health of Older Adults. K. TRUONG and H.A. KIYAK\* (*University of Washington, Seattle, USA*)

**0280** Association among Denture Stomatitis, Salivary Flow, and Dry Mouth in Edentulous Individuals. S. BARROS, S. OFFENBACHER, L. GENDREAU, G. SHANGA, and P. FERNANDEZ\* (*GlaxoSmithKline, Parsippany, NJ, USA*)

**0281** Oral Hygiene and Self-assessment of Oral Health for Older Adults. M. WIENER\*, B. WU, R. CROUT, R.C. WIENER, B. PLASSMAN, E. KAO, D. McNEIL, L. BAI, and D. CAPLAN (*West Virginia University, Morgantown, USA*)

**0282** Gender Differences in Oral Health and Function in the Elderly. K. IKEBE\*, K. ENOKI, K. MATSUDA, and Y. MAEDA (*Osaka University, Suita, Osaka, Japan*)

**0283** Gender Differences in Oral Hygiene Practices in Older Adults. R.C. WIENER\*, B. WU, R. CROUT, M. WIENER, B. PLASSMAN, E. KAO, D. McNEIL, and L. BAI (*West Virginia University, Morgantown, USA*)

**S0284** Oral Health Assessments for Elderly Residents of Long-term-care Facilities. A. WONG\*, N. TONG, and C. WYATT (*University of British Columbia, Vancouver, Canada*)

**0285** Systematic Review: Supplemental Fluoride Use for Moderate/High-carries-risk Adults. M. JURASIC\*, G. GIBSON, C. WEHLER, and J. JONES (*Boston University, MA, USA*)



- 0286** Oral Health Disparities among Elders with and without Cognitive Impairment. B. WU, B. PLASSMAN, R. CROUT\*, D. CAPLAN, M. BOONE, M. WIENER, D. McNEIL, R.C. WIENER, E. KAO, and L. BAI (*West Virginia University, Morgantown, USA*)
- S0287** Explaining Elders' Non-utilization of Subsidized Dental Services. K. ROWLEY\* and H.A. KIYAK (*University of Washington, Seattle, USA*)

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**Seq#: 52 Thursday, 4 March 2010, 2 p.m. - 3:15 p.m.**  
**Poster Session, Exhibit Hall D**

**Behavioral, Epidemiologic and Health Services Research - Poverty, Disparities, and Special-needs Groups**

- 0288** Oral Health of Adults in Long-term-care Facilities. D. MATTHEWS\*, J.B. CLOVIS, M. FILIAGGI, and M. McNALLY (*Dalhousie University, Halifax, NS, Canada*)
- S0289** Perspectives of Dental Issues among the Working Poor in Canada. C. HUYNH\*, D.M. ARDENGGHI, and C. BEDOS (*McGill University, Montreal, Canada*)
- S0290** Clinical Decision-making among Pediatric Dentists and Oral Health Disparities. J. HOWARD\*, A. KOERBER, A. MATTHEWS, A. BOLDEN, and I. PUNWANI (*University of Illinois - Chicago, USA*)
- S0291** Low-income Children Have Poor Oral-health-related Quality of Life. M.K. SINNOTT\*, S. RICH, M.M. HENSHAW, R.I. GARCIA, M. MONOPOLI, and J.A. JONES (*Boston University School of Dental Medicine, MA, USA*)
- 0292** Peoria Parents' Dental Perceptions for Special- and Non-special-needs Kindergartners. J.L. MCCARTHY, L.M. KASTE\*, S. FADAVI, A. KOERBER, and A.M. GALLO (*University of Illinois - Chicago, USA*)
- 0293** Medicaid/KCHIP Dental Utilization by Pre-school Children in Kentucky in 2006-2007. J. SKELTON\*, J. TALBERT, M.R. MULLINS, R. KOVARIK, and J. EBERSOLE (*University of Kentucky, Lexington, USA*)
- S0294** Early Childhood Caries under General Anesthesia Places Burden on Families. H. PORTWOOD\*, S. THIKKURISY, and M. SMILEY (*The Ohio State University, Columbus, USA*)
- 0295** Characteristics of Medicaid Dental Procedures Provided to Children in Kentucky. R. KOVARIK\*, J. TALBERT, M.R. MULLINS, J. SKELTON, J. CECIL, and J. EBERSOLE (*University of Kentucky, Lexington, USA*)
- 0296** Oral Health Disparities: 2007 National Survey of Children's Health. M. MATHEW\*, M.M. HENSHAW, and R. GARCIA (*University of Missouri - Kansas City, USA*)
- S0297** Current Dental Status and Needs of Louisiana's Nursing Home Residents. E. HEBERT\*, M. BRONSON, S. SISON, J. HAGAN, W.H. GARBEE, Jr., and T.E. RODRIGUEZ (*Louisiana State University, New Orleans, USA*)
- S0298** Oral Health Status of Head Start Children in Columbus, Ohio. D. WALKER\* and H. AMINI (*The Ohio State University, Columbus, USA*)

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**Seq#: 53 Thursday, 4 March 2010, 2 p.m. - 3:15 p.m.**  
**Poster Session, Exhibit Hall D**

**Education Research - Research Methods in Clinical Education**

- S0299** Providing Care for Underserved Patients: Periodontists' Education, Attitudes, and Behavior. A.J. GARFINKLE\*, P.S. RICHARDS, and M.R. INGLEHART (*University of Michigan, Ann Arbor, USA*)
- S0300** Trends in Sources of New Knowledge for Dental Practitioners. C. MUELLER\*, J.D. RUGH, and J.P. HATCH (*University of Texas - San Antonio / Health Science Ctr., USA*)
- S0301** Dental Students' Ability to Diagnose Malocclusion. D.K. DHILLON\*, D. HARDY, P. CUBAS, and M. ORELLANA (*University of California - San Francisco, USA*)
- S0302** Practitioners' Perceptions of Knowledge Half-life and Adoption of New Concepts. J.D. RUGH, T. GOGGINS\*, and J. HATCH (*University of Texas - San Antonio / Health Science Ctr., USA*)
- S0303** Students' Perception of Clinical Preparedness to Detect Possible Caries Lesions. J. GUM\*, J. O'DONNELL, M. OAKLEY, and A. VIEIRA (*University of Pittsburgh, PA, USA*)
- S0304** Facilitating Student Encounters in an Academic Detailing Program. J.D. RUGH, N. SEVER\*, W.D. HENDRICKSON, R. PARMA, K.M. GURECKIS, J.P. HATCH, and M.R. HERNANDEZ (*University of Texas - San Antonio / Health Science Ctr., USA*)
- S0305** Impact of Dental Education on Intent to Provide Low-income Care. A. EHLERT\* and G. KING (*University of Washington, Seattle, USA*)
- 0306** Perception of Education and Practice Patterns in Special Care Dentistry. E. CHAVEZ\*, P. SUBAR, J. MILES, A. WONG, E. LABARRE, and P. GLASSMAN (*University of the Pacific, Arthur A. Dugoni School of Dentistry, San Francisco, CA, USA*)
- 0307** Alumni Practice Patterns for the Dental Care of Special Populations. P. SUBAR\*, E.M. CHAVEZ, J. MILES, A. WONG, E. LABARRE, and P. GLASSMAN (*University of the Pacific, Arthur A. Dugoni School of Dentistry, San Francisco, CA, USA*)
- 0308** Comparing State CHIP Dental Literature Reading Levels with Literacy Rates. N.K. ANDERSON\* and D.B. GIDDON (*Harvard University, Boston, MA, USA*)
- S0309** Survey of Extramural Dental Clinical Rotation Programs in North America. T. SLAUGHTER\*, M.D. McCUNIFF, L. HONG, and M. MATHEW (*UMKC School of Dentistry, Kansas City, MO, USA*)
- S0310** Perception of the Effectiveness of Clinical Orthodontic Rotations. C. MILLER\*, B. SHROFF, A. BEST, and S. LINDAUER (*Virginia Commonwealth University - VCU/MCV, Richmond, USA*)
- 0311** Freshman Dental Student Clinic Selection. M.H. RAMP\*, P.-R. LIU, and L.C. RAMP (*University of Alabama at Birmingham, USA*)



**Seq#: 54 Thursday, 4 March 2010, 2 p.m. - 3:15 p.m.**  
**Poster Session, Exhibit Hall D**

**Cariology Research - Caries Inhibition - Varnishes, Coatings, CCP/ACP - Lasers**

- 0312** *In vivo* Study: Migration and Salivary Fluoride after Varnish Application. V. KOLB\*, P. KLAIBER, A. PFARRER, and R. FARLEE (*3M ESPE Dental Products, St. Paul, MN, USA*)
- 0313** Reducing Enamel Softening with Glass-ionomer Coating and Ca/P/F Toothpaste. D. TANTBIROJN\*, D.G. AUGUSTSON, R.P. RUSIN, and A. VERSLUIS (*University of Minnesota, Minneapolis, USA*)
- S0314** Comparative Study of Strategies to Reduce Demineralization around Orthodontic Brackets. E. MOHEBZAD, K. NAJIBFARD\*, P.T. GAKUNGA, J.P. HATCH, and B.T. AMAECHI (*University of Texas - San Antonio / Health Science Ctr., USA*)
- 0315** Prevention of Enamel Demineralization around Orthodontic Brackets with BisCover LV. D. CAO, G.T. GAKUNGA, J.P. HATCH, and B.T. AMAECHI\* (*University of Texas - San Antonio / Health Science Ctr., USA*)
- 0316** Effect of Caries Inhibition on New Root-coating Material. K. OKUYAMA\*, H. KOMATSU, T. KIJIMURA, K. KOJIMA, and H. SANO (*Hokkaido University, Sapporo, Japan*)
- 0317** Comparative Study on CPP-ACP- and TCP-based Products. E. YASUDA\*, T. SATO, S. KATO, L. CHEN, and E. YOSHII (*GC Corporation, Tokyo, Japan*)
- 0318** Remineralizing Fluoridated Paste and Argon Laser: Enamel Surface Topography Effects. G. WESTERMAN\*, C. FLAITZ, G. POWELL, and J. HICKS (*Creighton University, School of Dentistry, Omaha, NE, USA*)
- S0319** Effect of Er,Cr:YSGG Laser Irradiation on Enamel Caries Prevention. V.R. GERALDO-MARTINS\*, C.P. LEPRI, and R.G. PALMA-DIBB (*University of São Paulo, Ribeirão Preto, Brazil*)
- S0320** Influence of Laser Irradiation on Root Caries Prevention. C.P. LEPRI\*, V.R. GERALDO-MARTINS, and R. PALMA-DIBB (*Faculdade de Odontologia de Ribeirão Preto - Universidade de São Paulo, Brazil*)

**Seq#: 55 Thursday, 4 March 2010, 2 p.m. - 3:15 p.m.**  
**Poster Session, Exhibit Hall D**

**Oral Health Research - Prevention and Treatment of Oral Diseases II**

- S0321** Diabetes Educators' Knowledge, Behaviors, & Opinions Regarding Periodontal Disease/Diabetes. M. VINSON\*, J.B. BUSE, R.M. MALONE, J. SOUTHERLAND, and R.S. WILDER (*University of North Carolina, Chapel Hill, USA*)
- 0322** Recovering Methamphetamine Users' Oral Hygiene Habits and Caries Experience. M. CUNNINGHAM\*, T. MARSHALL, S. GUZMAN-ARMSTRONG, J. FLANIGAN, and F. QIAN (*University of Iowa, Iowa City, USA*)
- 0323** Awareness and Oral-health-related Quality of Life among Diabetic Patients. A. ELDARRAT\* (*University of Sharjah, United Arab Emirates*)
- 0324** Analysis of Emergency Room Dental Consults by Pediatric Dentistry Residents. T. PERKINS\*, J. SESSUMS, E. HEITZMANN, and N. EKLUND (*University of Mississippi Medical Center, Jackson, USA*)

**0325** Comparison of Overnight and Daytime Plaque by Digital Image Analysis. M. WYSS, J. LYON\*, A.A. WALANSKI, M.F. GABBARD, M.L. BARKER, and R.W. GERLACH (*Community Research, Cincinnati, OH, USA*)

- S0326** Fluconazole Resistance Analysis in *Candida glabrata* Isolates from OPC Patients. S.A. MAYEN\*, N.P. WIEDERHOLD, T.A. SAMUEL, W.R. KIRKPATRICK, J.E. ERLANDSEN, T.F. PATTERSON, and S.W. REDDING (*University of Texas - San Antonio / Health Science Ctr., USA*)
- S0327** The Effects of Epigallocatechin-3-gallate on Gene Expression in NOD Mice. J. HUGHES\*, Y. TENG, A. FREE, F. BISCH, and S. HSU (*Tingay Dental Clinic, Fort Gordon, GA, USA*)
- 0328** Partnering for Pediatric Oral Health in Rural Kentucky Head Starts. N. STONE\*, D. GROSS, J. CORNETT, P. CORNETT, and G. BENTLEY (*University of Kentucky, Hazard, USA*)
- 0329** Brushing Duration of Manual vs. Sonic Toothbrushes. A. MASTER\*, J.L. MILLEMAN, M.S. PUTT, W. JENKINS, J. WEI, and J. STRATE (*Philips Oral Healthcare, Snoqualmie, WA, USA*)
- 0330** Comparative Plaque Removal Efficacy of SpinBrush-Swirl® Battery-powered and Manual Toothbrushes. L. VORWERK\*, A. GHASSEMI, W. HOOPER, P. AMINI, J. GALLOB, J. QAQISH, and H. PROSKIN (*Church & Dwight Co., Inc., Princeton, NJ, USA*)
- 0331** Hydroxyapatite Solubility Reduction under Acidic Conditions by 5000-ppm Fluoride Dentifrice. V. PORTER\*, A. MORGAN, M. JOZIAK, and M. PRENCIPE (*Colgate-Palmolive Company, Piscataway, NJ, USA*)
- 0332** Oral Malodor Clinical Study in Long-term Use of Arginine Dentifrice. D.-Y. HU, X. LI, W. YIN, Y.P. ZHANG\*, E. DELGADO, and W. DEVIZIO (*Colgate-Palmolive Company, Piscataway, NJ, USA*)
- 0333** Comparative Plaque Removal Efficacy of Two Toothbrush-Dentifrice Combinations. A. GHASSEMI, W. HOOPER\*, L. VORWERK, S. THONG, P. AMINI, and J. QAQISH (*Church & Dwight Co., Inc., Princeton, NJ, USA*)
- 0334** Tooth-whitening Effectiveness of Arm & Hammer Whitening Booster. A. GHASSEMI\*, L. VORWERK, S. THONG, S. NATHOO, and H. PROSKIN (*Church & Dwight Co., Inc., Princeton, NJ, USA*)
- 0335** Comparison of Sugar Consumption in Sjögren's and Healthy Controls. E. TZAVARAS\*, A. PAPAS, M. SINGH, and P. CORRADO (*Tufts University School of Dental Medicine, Boston, MA, USA*)
- 0336** Change in Sugar Consumption in Sjögren's over Five Years. P. CORRADO\*, A. PAPAS, M. SINGH, and E. TZAVARAS (*Tufts University School of Dental Medicine, Boston, MA, USA*)

**Seq#: 56 Thursday, 4 March 2010, 2 p.m. - 3:15 p.m.**  
**Poster Session, Exhibit Hall D**

**Mineralized Tissue - Gene Expression and Function Studies**

- S0337** Non-collagenous Protein Distribution in Alveolar Processes of Growing Alendronate-treated Rats. V. BRADASCHIA-CORREA\* and V.E. ARANA-CHAVEZ (*University of São Paulo, School of Dentistry, Division of Oral Biology, Brazil*)
- 0338** Effect of Acid Exposure on Surface and Subsurface Enamel Erosion. D. MIKSA\*, Z. LU, A. BASSANI, M. HORE, A. DOLGONOS, J. MASTERS, and R. COMPOSTO (*Colgate-Palmolive Co., Piscataway, NJ, USA*)



- S0339** SIBLING Proteins in the Articular Cartilage of the Rat Femur Head. R. MOSLEY\*, Y. SUN, M. PRASAD, and C. QIN (*Baylor College of Dentistry, Dallas, TX, USA*)
- S0340** The Effects of Nanoparticles on Osteoblast Biomineralization. A. ROSENBLOOM\* and L. COLLAZO (*State University of New York - Stony Brook, USA*)
- 0341** Deregulated Ion Control in *Mmp20* Null Mouse Enamel. C. TYE, R. SHARMA, C. SMITH, and J. BARTLETT\* (*The Forsyth Institute, Boston, MA, USA*)
- 0342** Enamel is Disrupted by Expression of RhoA<sup>DN</sup> in Ameloblasts. Y. LI\*, M. PUGACH, M. ARAGON, and C.W. GIBSON (*University of Pennsylvania, Philadelphia, USA*)
- 0343** Recovering Amelogenesis in Ameloblastin Mutant Mice and Cleavage of Ambn. Y.-H.P. CHUN\*, Y. YAMAKOSHI, F. YAMAKOSHI, and J.P. SIMMER (*University of Michigan, Ann Arbor, USA*)
- S0344** Regulation of Bone Mass by Leptin in the Marrow Cavity. E. SCHELLER\*, J. SONG, F. SOKI, Z. WANG, K. HANKENSON, and P. KREBSBACH (*University of Michigan, Ann Arbor, USA*)
- S0345** Role of Dentin Proteins' Primary Structure and Phosphorylation in Mineralization. A.S. DESHPANDE\*, C. SFEIR, and E. BENIASH (*University of Pittsburgh, PA, USA*)
- 0346** Interactions of Amelogenin Assemblies with Collagen Fibrils Regulate Calcium-Phosphate Mineralization. A. DESHPANDE, P.-A. FANG, J.P. SIMMER, H.C. MARGOLIS, and E. BENIASH\* (*University of Pittsburgh, PA, USA*)
- S0347** Effects of Autogenous vs. Exogenous Mineral on an Engineered Dentin Microenvironment. F.N. SYED-PICARD\*, R. LAM, N.A. ROBERTSON, E. BENIASH, and C. SFEIR (*University of Pittsburgh, PA, USA*)
- 0348** Paper Withdrawn.
- S0349** Pleiotrophin Expression in Teeth: Role in Continued Dentin Production. J. AMES\*, O. MAMAEVA, K. STIDHAM, P. PEREZ PINERAS, T.F. DEUEL, M. MacDOUGALL, and H. ERLANDSEN (*University of Alabama, Birmingham, USA*)
- S0350** Enamel Protein Gene Expression in Osteoblasts and Bone. P. ATSAWASUWAN\*, Y. ITO, X. LU, C. EVANS, T.G.H. DIEKWISCH, and X. LUAN (*University of Illinois - Chicago, USA*)
- 0351** Ameloblast Apoptosis in Enamelin-null Mice. J.C.-C. HU\*, R. LERTLAM, Y.Y. HU, M.D. MCKEE, C.E. SMITH, J.T. WRIGHT, and J.P. SIMMER (*University of Michigan, Ann Arbor, USA*)

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**Seq#: 57 Thursday, 4 March 2010, 2 p.m. - 3:15 p.m.**  
**Poster Session, Exhibit Hall D**

#### **Salivary Research - Salivary Research**

- S0352** Lateral Hypothalamus-SSN Neural Axis Regulates Salivatory Function. B. AHUJA\*, E. KIM, G. LAU, and E.-K. PAE (*UCLA School of Dentistry, Los Angeles, CA, USA*)
- 0353** Botulinum Toxin Induces Functional Changes in Rat Submandibular Gland Cells. K. UCHIHASHI\*, Y. NISHIKAWA, and Y. SONODA (*Osaka Dental University, Japan*)
- 0354** MicroRNAs Regulate FGF-induced Gene Expression during Salivary Gland Development. I. REBUSTINI\*, A. REYNOLDS, M. DILLARD, and M. HOFFMAN (*NIDCR-NIH, Bethesda, MD, USA*)

- S0355** Oral Assessment of Autistic and Healthy Children. L. CHRISTIAN\*, F. SALAMA, W. FISHER, and B. LANCASTER (*University of Nebraska, Omaha, USA*)
- 0356** 3-O-sulfation Modulates Fgf10/Fgfr2b Function during Submandibular Gland Epithelial Branching Morphogenesis. V. PATEL\*, S. COWHERD, Y. XU, J. LIU, and M. HOFFMAN (*National Institutes of Health, Bethesda, MD, USA*)
- S0357** Histatin 1 Resists the Oral Proteolytic Environment when Adsorbed to Hydroxyapatite. E. McDONALD\*, H.A. GOLDBERG, and W.L. SIQUEIRA (*The University of Western Ontario - Schulich School of Medicine & Dentistry, London, Canada*)
- S0358** Effect of Dialyzed Saliva on Human Enamel Demineralization. C. MARTINS\*, P.M. YAMAGUTI, G.F. CASTRO, and W.L. SIQUEIRA (*The University of Western Ontario - Schulich School of Medicine & Dentistry, London, Canada*)
- S0359** Salivary Biomarker of Acute Myocardial Infarction. J. YASHARI\*, C. MILLER, D. DAWSON, J. STEVENS, C. CAMPBELL, J. FOLEY, M.J. NOVAK, S. STEINHUBL, J. EBERSOLE, P. FLORIANO, N. CHRISTODOULIDES, S.W. REDDING, and J. McDEVITT (*University of Kentucky, Lexington, USA*)
- 0360** Neurturin Modulates Neuronal-Epithelial Interactions during Submandibular Gland Branching Morphogenesis. C. HADDOX\*, M. HOFFMAN, and S. KNOX (*NIDCR, Bethesda, MD, USA*)
- S0361** Submandibular Vascular and Secretory Responses in Type 2 Diabetic Rats. C. GALEA\*, K. HERCHOLD, B. DELONG, R. RAHIMIAN, and L. ANDERSON (*University of the Pacific, San Francisco, CA, USA*)

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**Seq#: 58 Thursday, 4 March 2010, 2 p.m. - 3:15 p.m.**  
**Poster Session, Exhibit Hall D**

#### **Microbiology / Immunology and Infection Control - Biofilms**

- S0362** Oral Lactobacilli Colonization and Transmission in Mothers and Their Children. N. HOANG\*, L. ZHAN, C. HOOVER, and J.D. FEATHERSTONE (*University of California - San Francisco, USA*)
- S0363** Comparative Biofilm Inhibition by Rat vs. Human Antibody to Gtf. C. KOLSTAD\*, W. KING, M. TAUBMAN, W. MARASCO, J. SUI, and D. SMITH (*Harvard School of Dental Medicine, Boston, MA, USA*)
- 0364** Characterization of Mucosal Biofilms Formed by *Candida albicans*. A. DONGARI-BAGTZOGLOU, H. KASHLEVA, P. DWIVEDI, P.I. DIAZ\*, and J.P. VASILAKOS (*University of Connecticut Health Center, Farmington, USA*)
- S0365** Age as a Determinant of Composition of the Supragingival Biofilm. M. TAMPI\*, S. THIKKURISY, V. JOSHI, and P. KUMAR (*The Ohio State University, Columbus, USA*)
- 0366** Identification of Micro-organisms in Dental Plaques by Checkerboard DNA-DNA Hybridization. Y. LI, R. APRECIO\*, W. ZHANG, and S. LEE (*Loma Linda University, CA, USA*)
- 0367** Synergism between Berberine and Miconazole in Inhibiting *Candida albicans* Biofilm. G. WEI and C.D. WU\* (*College of Dentistry, UIC, Chicago, IL, USA*)



Seq#: 59 Thursday, 4 March 2010, 2 p.m. - 3:15 p.m.  
Poster Session, Exhibit Hall D

**Microbiology / Immunology and Infection Control - Infection Control/Antimicrobials/Antibiotics**

- S0368** Comparison of In-office Dental Unit Waterline Test Kits. B. MORRIS\*, D.M. HENSLEY, K. VANDEWALLE, J. BARTOLONI, and J.A. HARTE (USAF, Lackland AFB, TX, USA)
- 0369** Effect of Antimicrobial Nano-emulsion on Dental Unit Waterline Biofilm. R. KARTHIKEYAN\*, N. FROHLICH, and V.A. LEE (University of Texas - San Antonio / Health Science Ctr., USA)
- S0370** Presence of Methicillin-resistant *Staphylococcus aureus* on Dental Student Laptops. R. DUNLOP\*, C. PALENIK, and M.J. KOWOLIK (University of Indiana - Indianapolis, USA)
- 0371** Cleaning Ability of Different Ultrasonic Cleaning Solutions. B. WILLIAMS\*, P. JUNG, and M. MURPHY (Biotrol, Boulder, CO, USA)
- S0372** Efficacy and Compliance of Sterilization Methods in Dental Practice. S. PURI\*, S. GOVINDAGOUDAR, W. ZHANG, R. KHOIE, O. MOHAMED, Q. WANG, K. POULSON, J. KIM, and Y. LI (Loma Linda University, CA, USA)
- 0373** Microbial Flora in Musical Wind Instruments and Potential Disease Transmission. R. GLASS\*, R. CONRAD, J. BULLARD, G. KÖHLER, R. AGUILAR, T. HARRISON, D. HAYES, J. LE, K. LUTHEY, M. McCLAIN, G. KUGEL, and E. DOHERTY (Oklahoma State University - CHS, Tulsa, USA)
- 0374** Differentiation of the Anti-plaque Efficacy of Oral Hygiene Agents. R. LEDDER\*, P. SREENIVASAN, W. DE VIZIO, and A. McBAIN (University of Manchester, United Kingdom)
- 0375** Infection Control/Safety Compliance by Faculty, Staff, and Students. A.C. WILSON\*, P.L. RICHARDSON, S.G. MORROW, and W.P. NAYLOR (Loma Linda University, CA, USA)
- 0376** *In vitro* Effectiveness of Photodynamic Antimicrobial Therapy against *C. albicans*. M.A.A.M. MACHADO\*, V. TESSAROLLI, V.S. BAGNATO, T.C. SILVA, T.M. OLIVEIRA, A.P. KLOSTER, V.T. SAKAI, S.M.B. SILVA, A.L. SILVA, and A.P. CAMPANELLI (Bauru Dental School University of São Paulo, Brazil)
- S0377** Analysis of Microbial Biofilms on Different Dental Material Surfaces. L. LI\*, M.B. FINNEGAN, S. OZKAN, Y. KIM, P. LILLEHOJ, C.-M. HO, R. LUX, W. SHI, and Z. LOEWY (University of California - Los Angeles, USA)
- 0378** Novel ClosysII Oral Rinse: Comparison of Bactericidal Activity. A. VILLHAUER\* and D. DRAKE (University of Iowa College of Dentistry, Iowa City, USA)

Seq#: 60 Thursday, 4 March 2010, 2 p.m. - 3:15 p.m.  
Poster Session, Exhibit Hall D

**Periodontal Research - Pathogenesis - Host-Bacterial Interactions Posters**

- 0379** *Porphyromonas gingivalis* Stimulates IL-18 Secretion in Monocytic THP-1 Cells. M. YEE\*, A. KIM, N. DÜZGÜNE, T. ALPAGOT, and K. KONOPKA (University of the Pacific, Arthur A. Dugoni School of Dentistry, San Francisco, CA, USA)
- S0380** *Porphyromonas gingivalis* SerB Phosphoserine Phosphatase Enzyme Role in Periodontal Disease. C. EASTMAN\*, R. VERMA, B. BAINBRIDGE, B. YEHIA, R.J. LAMONT, and L. KESAVALU (University of Florida, Gainesville, USA)

- S0381** Cytokine Responses of Oral Epithelial Cells Exposed to *Porphyromonas gingivalis*. S. KIM\*, M. YEE, T. ALPAGOT, N. DÜZGÜNE, and K. KONOPKA (University of the Pacific, Arthur A. Dugoni School of Dentistry, San Francisco, CA, USA)
- 0382** *P. gingivalis* Engages Immune Pathways Linked to TH1/TH17 Lineage Differentiation. N. MOUTSOPOULOS\*, B. GUPTA, N. ANGELOV, S. NARES, and S. WAHL (NIDCR/NIH, Bethesda, MD, USA)
- 0383** Effect of Periodontal Therapy on Subgingival Taxa Identified by HOMIM. A.S. KOKARAS\*, S.L. COTTON, C.M. MURPHY, T. YASKELL, S.S. SOCRANSKY, F.E. DEWHIRST, B.J. PASTER, and A.D. HAFFAJEE (The Forsyth Institute, Boston, MA, USA)
- 0384** Post-treatment Changes in Subgingival Species by Checkerboard and HOMIM. T. YASKELL\*, A.S. KOKARAS, C.M. MURPHY, S.L. COTTON, S.S. SOCRANSKY, F.E. DEWHIRST, B.J. PASTER, and A.D. HAFFAJEE (The Forsyth Institute, Boston, MA, USA)
- S0385** Biofilm-challenged Human Oral Keratinocytes: Host-Parasite Interactions. S. NOFALLAH\*, S.M. WALLET, J.J. MANS, and C. WALKER (University of Florida, Gainesville, USA)
- S0386** LPS-mediated Inhibition of MIP-1 Secretion by Cultured Monocytes. J. BOLING\*, P. ADATROW, and J.P. BABU (University of Tennessee, Memphis, USA)
- S0387** Amine Oxide Alteration of Candida Biofilm Resistance to Antifungal Agents. B. TAYLOR\* and J.P. BABU (University of Tennessee, Memphis, USA)
- 0388** Oral Bacteria in the Synovial Fluid in Patients Undergoing Arthroplasty. A. EL-HALABY, S. FITZGERALD, S. TEMOIN, Y. HAN, L. PALOMO, R. MARCUS, and N. BISSADA\* (Case Western Reserve University, Cleveland, OH, USA)
- S0389** Influence of Cigarette Smoke Extract on Neutrophil-Epithelial-Bacterial Biofilm Interactions. J. BONDY\*, J. GALICIA, D.E. RENAUD, D. KINANE, and D.A. SCOTT (University of Louisville, KY, USA)
- S0390** Humoral Immune Response to *Tannerella forsythia*'s Virulence Factor BspA. L. HALL\*, R. DUNFORD, R.J. GENCO, and A. SHARMA (State University of New York - Buffalo, USA)
- 0391** *In vitro* Aggregation of Human Platelets by Oral Bacteria. C. TIMBY and E. WHITAKER\* (Temple University, Philadelphia, PA, USA)
- 0392** Dog Gingivitis and IgG Responses to Recombinant Lysine Decarboxylase. J. PETERS, P. DEMARS, L. COLLINS, J. STONER\*, J. HADDOCK, and M. LEVINE (University of Oklahoma Health Sciences Center, Oklahoma City, USA)

Seq#: 61 Thursday, 4 March 2010, 2 p.m. - 3:15 p.m.  
Poster Session, Exhibit Hall D

**Neuroscience / TMJ - Human and Cellular Studies in Neuroscience**

- S0393** TNF- $\alpha$  Enhances Neural Differentiation of Mandible Bone Marrow Stromal Cells. A. BHALLA\*, M. DAMEK-POPRAWA, and S.O. AKINTOYE (University of Pennsylvania School of Dental Medicine, Philadelphia, USA)



**0394** Peptidergic Neuron Activation by Oral Squamous Cell Carcinoma Secreted Factors. C. GONZALES\*, J. ADICKS, J. HUA, and K. HARGREAVES (*University of Texas - San Antonio / Health Science Ctr., USA*)

**0395** NIDCR's TMJ Implant Registry-Repository: Predicting Outcomes of TMJ Surgery. S. MYERS\*, A.M. VELLY, J. SWIFT, S. KAIMAL, W. KANG, P. LENTON, A. (CARLSON) EMERY, and J. FRICTON (*University of Minnesota, Minneapolis, USA*)

**S0396** Role of Endogenous Opioid System Underlying Experimental Pain Modulation. S. EL-SHERBINI\*, C. KING, N. GRAVENSTEIN, and J. RILEY (*University of Florida, Gainesville, USA*)

**S0397** Hormone Influences in Inflammatory Response in Patients with Temporomandibular Disorders. C. MONFORD\*, S. WALLET, R.B. FILLINGIM, and M.C. RIBEIRO-DASILVA (*University of Florida, Gainesville, USA*)

**S0398** Hyperbaric Oxygen (HBO<sub>2</sub>)-induced Analgesia in Humans: a Pilot Study. W. BATOR\*, M. DRANGSHOLT, M.D. MARTIN, R. QUOCK, and D.S. RAMSAY (*University of Washington, Seattle, USA*)

**0399** Diurnal Electromyographic Activity of Masticatory Muscles in Children with Bruxism. P.M. CASTELO\*, T.S. BARBOSA, and M.B.D. GAVIÃO (*State University of Campinas, São Paulo, Brazil*)

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**Seq#: 62 Thursday, 4 March 2010, 2 p.m. - 3:15 p.m.**  
**Poster Session, Exhibit Hall D**

**Craniofacial Biology - Bone Biology I - Formation and Resorption**

**0400** MK2 Silencing Selectively Modulates LPS-induced Immune Response. Q. LI\*, H. YU, B. HERBERT, C. ROSSA, and K. KIRKWOOD (*Medical University of South Carolina, Department of Craniofacial Biology and the Center for Oral Health Research, Charleston, USA*)

**S0401** Short-term Zoledronic Acid Reduces Trabecular Bone Remodeling in Aged Dogs. N. HELM\*, F. BECK, and S. HUJA (*The Ohio State University, Columbus, USA*)

**0402** Testosterone Affects the BMP-TGF Beta Pathways in Osteoprogenitor Cells. J. CRAY, Jr.\*, E. LENSIE, M. SMALLEY, M. BYKOWSKI, C. KINSELLA, Jr., M. MOONEY, J. LOSEE, and G. COOPER (*University of Pittsburgh, PA, USA*)

**0403** Osteogenic Response in Wild-type and Craniosynostotic Rabbit Bone Cells. E. LENSIE\*, J. CRAY, G. DECESARE, M. SMALLEY, J. LOSEE, M. MOONEY, and G. COOPER (*University of Pittsburgh, PA, USA*)

**S0404** Abnormal Response to FGF2 in Calvarial-derived Cells from Craniosynostotic Rabbits. M. BYKOWSKI\*, J. CRAY, E. LENSIE, M. SMALLEY, B. CHU, C. KINSELLA, Jr., M. MOONEY, P. CAMPBELL, L. WEISS, J. LOSEE, and G. COOPER (*University of Pittsburgh, PA, USA*)

**S0405** A Novel Class of V-ATPase-directed Anti-bone-resorptive Agents. E. TORO\*, D.A. OSTROV, T.J. WRONSKI, and L.S. HOLLIDAY (*University of Florida, Gainesville, USA*)

**S0406** MKP-1 is Required for Maximal 1,25(OH)<sub>2</sub>D<sub>3</sub>-induced RANKL Expression and Osteoclastogenesis. A. GRIFFIN, III\*, C. ROSSA, and K. KIRKWOOD (*Medical University of South Carolina, Charleston, USA*)

**0407** Evaluation of Bond Strengths of Novel Bone Adhesives. U. KANDALAM\*, A. BOUVIER, S.B. CASAS, A.M. GALLEG0, J.K. ROTHROCK, J.Y. THOMPSON, C.-Y. HUANG, and E.J. STELNICKI (*Nova Southeastern University, Ft. Lauderdale, FL, USA*)

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**Seq#: 63 Thursday, 4 March 2010, 2 p.m. - 3:15 p.m.**  
**Poster Session, Exhibit Hall D**

**Craniofacial Biology - Orthodontics I - Diagnosis and Treatment Modalities**

**0408** Midline Diastema and Frenum Attachment in Children. E.A. BOUTSI\* and D.N. TATAKIS (*Dental Clinic, Public Health Center, Lavrion, Athens, Greece*)

**S0409** Patient Compliance with Orthodontic Retainers in the Post-retention Phase. M. PRATT\* and G.T. KLUEMPER (*University of Kentucky, Lexington, USA*)

**0410** Effects of Alternate Maxillary Expansion and Contraction on Maxillary Protraction. P. NGAN\*, T. DO-DELA TOUR, C.A. MARTIN, T. RAZMUS, and E. GUNEL (*West Virginia University, Morgantown, USA*)

**S0411** Superimposition of CBCT Synthesized Cephalograms Using Automated Image Fitting. B. LARSON and Y. ESLAMI\* (*University of Minnesota, Minneapolis, USA*)

**S0412** Are Trends in Clinical Orthodontics Practice Correlated with Research Findings? J.C. FRANCIS\*, J.D. RUGH, and J.P. HATCH (*University of Texas - San Antonio / Health Science Ctr., USA*)

**S0413** Chewing Pattern Differences between Individuals Chewing at Different Rates. S. HOGAN\*, J.D. RUGH, J. RADKE, J.P. HATCH, and P. HURST (*University of Texas - San Antonio / Health Science Ctr., USA*)

**S0414** Practice-based Questionnaire on the Failure of Temporary Anchorage Devices. T. SIMON\*, J.D. RUGH, and J.P. HATCH (*University of Texas - San Antonio / Health Science Ctr., USA*)

**S0415** Smile Esthetics from the Patients' Perspective. N. SPRINGER\*, C. CHANG, J. CHRISTENSEN, H. FIELDS, M. BECK, A. FIRESTONE, and S.F. ROSENSTIEL (*The Ohio State University, Columbus, USA*)

**0416** The Effect of Risedronate on Tooth Movement and Relapse in Ovariectomized Rats. J.L. BORKE\*, A. WHITE, J.N. WINGER, M. ORELLANA, J.W. STOCKSTILL, and E. DELEON (*Medical College of Georgia, Augusta, USA*)

**S0417** Changes in Airway Dimensions in Class III Patients after Protraction. R. ULIBARRI\*, P. NGAN, and E. GUNEL (*West Virginia University, Morgantown, USA*)

**S0418** Absence of Continued Dental Eruption in a Modern Adult Cohort. C. FOSTER\* and E. HARRIS (*University of Tennessee, Memphis, USA*)

**S0419** Buccal Bone Changes with Self-ligating Brackets vs. Conventional Brackets. S. KORTAM\*, P. GEUY, W. JOHNSTON, H. FIELDS, J. PALOMO, and D.-G. KIM (*The Ohio State University, Columbus, USA*)



Seq#: 64 Thursday, 4 March 2010, 3:30 p.m. - 4:45 p.m.  
Poster Discussion Session, Room 145B

**Dental Materials: Ceramic-based Materials and Cements - New Developments in Ceramics and Composites (PDS)**

**Chairpersons: M. Kern and Y. Zhang**

- 3:30 Poster Viewing Period.  
**0420** 3:55 Strong and Translucent Colored Lithium-disilicate Glass-ceramic for CAD/CAM Use. M. SCHWEIGER\*, D. TAUCH, H. BÜRKE, H.F. KAPPERT, and V.M. RHEINBERGER (*Ivoclar Vivadent AG, Schaan, Liechtenstein*)  
**0421** 4:02 Volumetric Shrinkage of a Newly Developed Low-shrinkage Composite. T. TAKAMIZAWA\*, T. WATANABE, A. TSUJIMOTO, S. ANDO, and M. MIYAZAKI (*Nihon University, Tokyo, Japan*)  
**0422** 4:09 Poly(propylene fumarate)-Brushite Cement Composites with Strength Comparable with that of Trabecular Bone. D. ALGE and T. CHU\* (*Indiana University, Indianapolis, USA*)  
**0423** 4:16 Ag-doped Bioactive Glasses as Fillers in Bio-composites. Y. HE\*, M. VELEZ, T. SCHUMAN, D. DAY, K. KILWAY, E. NALVARTE, and J.D. EICK (*Mo-Sci Corp. Rolla, MO, USA*)  
**S0424** 4:23 Retention of Zirconia Crowns with Different Cements and Artificial Aging. R. SHAHIN\* and M. KERN (*Department of Prosthodontics, Propadentics and Dental Materials, University of Kiel, Germany*)  
**S0425** 4:30 Long-term Resin Bond Strength of Graded Glass-Zirconia Structures. N. COVEL\*, J.W. KIM, and Y. ZHANG (*New York University, USA*)  
 4:37 Discussion.

Seq#: 65 Thursday, 4 March 2010, 3:30 p.m. - 4:45 p.m.  
Poster Session, Exhibit Hall D

**Network for Practice-based Research - Methods and Basic Current Research**

- 0426** Recommendations for Third Molar Extraction in Northwest PRECEDENT. G. HUANG\*, J. CUNHA-CRUZ, M. DRANGSHOLT, C. SPIEKERMAN, B. LATZKE, M. ROTHEN, and NORTHWEST PRECEDENT (*University of Washington, Seattle, USA*)  
**0427** Dentin Hypersensitivity: Diagnosis/Treatment Preferences of Dentists of Northwest PRECEDENT Network. J. CUNHA-CRUZ, J.C. WATAHA, L. ZHOU, W. MANNING\*, M. TRANTOW, M. BETTENDORF, L.J. HEATON, J. BERG, and NORTHWEST PRECEDENT (*Private Practice Dentist and Northwest PRECEDENT Dentist-Investigator, Albany, OR, USA*)  
**0428** Feasibility of an Electronic Dental Practice-based Research Network. T. SCHLEYER\* (*University of Pittsburgh, PA, USA*)  
**0429** Staff Changes in Practice-based Research: a Regional Coordinator's Viewpoint. P.A. HARRIS, V.V. GORDAN, D.L. McEDWARD\*, D.G. AYAN, J. GUIDONI, O.D. WILLIAMS, and The DPBRN COLLABORATIVE GROUP (*University of Florida, Gainesville, USA*)

Seq#: 66 Thursday, 4 March 2010, 3:30 p.m. - 4:45 p.m.  
Poster Session, Exhibit Hall D

**Dental Materials: Adhesion - Bond Strength Testing and Mechanisms - Bond Strength Measurements I**

- 0430** Dentin and Enamel Bond Strengths of Self-adhesive Composite Resins. E.J. SWIFT, Jr.\*, R. WALTER, E. QIAN, T. NGUYEN, and H. BUI (*University of North Carolina, Chapel Hill, USA*)  
**0431** Influence of Storage Conditions of Adhesive Vials on Bond Strength. K. TSUBOTA\*, Y. CHIBA-SHIBUYA, Y. CHIBA, S. ANDO, M. MIYAZAKI, and M.A. LATTA (*Nihon University, Tokyo, Japan*)  
**S0432** Microtensile Bond Strength Comparison of Self- and Total-etch Adhesives. T. HILTON, S. TRIEU\*, and J. FERRACANE (*Oregon Health & Science University, Portland, USA*)  
**0433** Dentin Microtensile Bond Strength of Commercial and Experimental Adhesives. J. YAMAGAWA, S. ARMSTRONG\*, S. GERALDELI, K. HIRATA, and F. QIAN (*University of Iowa, Iowa City, USA*)  
**S0434** Bond Strength of Self-adhesive and Conventional Resin Cements to Dentin. T. AGUIAR\*, C. ANDRÉ, G. AMBROSANO, L. CORRER-SOBRINHO, and M. GIANNINI (*State University of Campinas, Piracicaba, Brazil*)  
**S0435** Dentin Bond Strength, Flexural Strength, and Modulus of Bonding Agents. A. CARVALHO\*, M. CARRILHO, D. METTENBURG, G. AMBROSANO, R. CANTANHEDE DE SÁ, F. RUEGGERBERG, and M. GIANNINI (*State University of Campinas, Piracicaba, Brazil*)  
**0436** Bond Strength of Luting Cements to Silorane-based Composite Surfaces. M.F. DE GOES\*, C.H.M. ARITA, and M.A.C. SINHORETI (*Piracicaba Dental School, Campinas State University, Brazil*)  
**S0437** Effects of Dentin-cleaning Techniques on Bond Strength to Dentin. H. BAPOO\*, A.S. RIZKALLA, G.C. SANTOS, Jr., and M.J.M.C. SANTOS (*University of Western Ontario, London, Canada*)  
**S0438** Effects of Sterilization Methods on Composite-to-Dentin Shear Bond Strengths. M. LE\* (*New York University, USA*)  
**0439** Shear Bond Strength of OptiBond All-in-One on Metals. X. CHEN\*, O. BAGATCHENKO, X. QIAN, and D. TOBIA (*Kerr Corporation, Orange, CA, USA*)  
**0440** Influence of Ethanol Dehydration on Dentin Bond Strengths. J. PERDIGÃO\* and G. GOMES (*University of Minnesota, Minneapolis, USA*)  
**S0441** Bond Strength of Color-changing Adhesives Used with Aesthetic Brackets. B. PENTON\*, J.D. ENGLISH, J. ONTIVEROS, J.M. POWERS, H.I. BUSSA, G. FREY, B. POWELL, and N. RANEY (*University of Texas - Houston/Health Science Center, USA*)  
**0442** Long-term Bond Strength Evaluation of an Adhesive System. J. KANCA\* and G. GREITZER (*Middlebury, CT, USA*)  
**0443** Bond Strength of a Self-adhesive Flowable to Enamel and Dentin. C. MUÑOZ\* and M. CAMPILLO (*State University of New York - Buffalo, USA*)



**Seq#: 67 Thursday, 4 March 2010, 3:30 p.m. - 4:45 p.m.**  
**Poster Session, Exhibit Hall D**

**Dental Materials: Clinical Trials - Clinical Studies**

**0444** A 24-month Clinical Evaluation of a Self-adhesive Resin Cement. H. MALMSTROM\*, R. CACCIATO, M. YUNKER, T. DEROSA, and Y. REN (*Eastman Dental Center, Rochester, NY, USA*)

**0445** One-year Practice-based Clinical Evaluation of a Low-shrinkage Posterior Composite. T. HILTON\*, J. FERRACANE, C. BARNES, D. TOBIA, and PROH NETWORK (*Oregon Health & Science University, Portland, USA*)

**0446** Clinical Performance of Rebilda DC vs. Cast Posts and Cores. G. WINKLER\*, B. WÖSTMANN, and M. BALKENHOL (*Justus-Liebig-University, Giessen, Germany*)

**0447** Clinical Efficacy and Safety of Two Marketed Whitening Treatments. M.K. ANASTASIA\*, E. CONDE, V. WIDMEYER, S. FIEDLER, and S. FARRELL (*The Procter & Gamble Company, Mason, OH, USA*)

**0448** Clinical Comparison of High-adhesion Whitening Strips and Professional Laser-assisted Whitening. J. SIMON\*, K.A. KING, L. POWELL, N. WILSON, E. CONDE, M.K. ANASTASIA, J. CARSON, and S. FARRELL (*University of Tennessee, Memphis, USA*)

**0449** 48-month Clinical Evaluation of Cercon Zirconia All-ceramic Restorations. D. BARNES\*, J.C. GINGELL, J. RAJASKI, G. KAPLOWITZ, P. WARREN, and V. SUNDAR (*University of Maryland, Baltimore, USA*)

**0450** Class II Comparison of Highly Filled and Flowable Resin-based Composites. B. WALDO\*, J.O. BURGESS, D. GIVAN, M. ANABTAWI, and L. RAMP (*University of Alabama School of Dentistry, Birmingham, USA*)

**0451** Denture Adhesive Food Occlusion: Validation of a Peanut Extraction Process. M. CAMPILLO-FUNOLLET\*, T. MAGNUSZEWSKI, P. FERNANDEZ, L. GENDREAU, N. SCHOBBER, and C. MUNOZ-VIVEROS (*State University of New York - Buffalo, USA*)

**S0452** Five-year Clinical Evaluation of Tetric EvoCeram Restorations in Anterior Teeth. S. LEE, M. ARAMBULA\*, K. POULSEN, K. BRAY, and Y. LI (*Loma Linda University, CA, USA*)

**S0453** A Technique to Measure Soft-tissue Changes following NCCL Restorations. P. JAMPANI\*, P. BECK, D. CAKIR, M. LITAKER, M. REDDY, and J. BURGESS (*University of Alabama at Birmingham, USA*)

**0454** 12 Months' Clinical Evaluation of Tetric N-Ceram in Posterior Restorations. B. GUTIERREZ, C. VILLANUEVA, V. G. CERVANTES, and A. FERNANDEZ PEDRERO\* (*Universidad Nacional Autonoma de Mexico, Mexico City*)

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**Seq#: 68 Thursday, 4 March 2010, 3:30 p.m. - 4:45 p.m.**  
**Poster Session, Exhibit Hall D**

**Dental Materials: Polymer-based Materials—Physical Properties and Performance - Performance of Resin Composites**

**0455** Does Hygroscopic Expansion Compensate for Polymerization Shrinkage? A. VERSLUIS\*, D. TANTBIROJN, and R. DELONG (*University of Minnesota, Minneapolis, USA*)

**0456** Polymerization Shrinkage Force of Various Resin Composites with Adhesive. F. FUSEJIMA\*, S. KAGA, T. SAKUMA, and T. KUMAGAI (*GC Corporation, Tokyo, Japan*)

**0457** Characteristics in Polymerization Shrinkage of Latest Low-shrinkage Resin Composite Restoratives. T. MASEKI\*, T. NITTA, M. YAMASE, T. YAMADA, S. OGAWA, T. KIMISHIMA, Y. NARA, and I.L. DOGON (*Nippon Dental University, Tokyo, Japan*)

**0458** Setting Shrinkage Performance of Resin Composites. M. IRIE\*, Y. TAMADA, Y. MARUO, G. NISHIGAWA, M. OKA, S. MINAGI, K. SUZUKI, and D.C. WATTS (*Okayama University, Japan*)

**0459** Localized Wear of Resin Composites with Three Antagonists. N. KIMMES\*, W. BARKMEIER, and M. LATTA (*Creighton University, Omaha, NE, USA*)

**S0460** Effects of Irradiance on the Microhardness of a Silorane-based Composite. D. STEFAN-DOGAR\* and K. VANDEWALLE (*USAF, Lackland AFB, TX, USA*)

**0461** Fracture Toughness and Work of Composites Utilizing a Precise Pre-crack Method. S. MEGREMIS, H. SHEPELAK, K. VOGT, A. TIBA\*, R. GEARY, and J. KUEHNE (*American Dental Association, Chicago, IL, USA*)

**0462** Properties of a Composite Resin with New Monomer Technology. W. LIEN\* and K. VANDEWALLE (*USAF, Lackland AFB, TX, USA*)

**S0463** Silica Nanofiber Filler Additions to Dental Composites—Mechanical Properties. A. SWARN\*, D.R. DEAN, D. CAKIR, L. RAMP, J.A. WAGNER, and J. BURGESS (*University of Alabama, Birmingham, USA*)

**0464** Mechanical Properties of Various Latest Resin Composite Restoratives. M. YAMASE\*, T. MASEKI, T. NITTA, T. KIMISHIMA, and Y. NARA (*Nippon Dental University, Tokyo, Japan*)

**0465** Effects of One-year Water-aging on Mechanical Properties of Dental Nanocomposites. E. LEVINE\*, H.H.K. XU, and J. MOREAU (*University of Maryland, Baltimore, USA*)

**0466** Effect of Light Tip Movement during Exposure on Composite Microhardness. F. RUEGGEBERG\*, R.B.T. PRICE, C.M. FELIX, and M.M. MUTLUAY (*Medical College of Georgia, Augusta, USA*)

**0467** Controlling Ordering in Composites Reinforced with Monodisperse Fillers. Q. WAN\*, E. KRAMER, R. FARLEY, J. DELANEY, and G. BARAN (*Temple University, Philadelphia, PA, USA*)

**S0468** Physical Properties Assessment of a Silorane Composite. P. WAIKASETKORN\*, P. YAMAN, J. DENNISON, G. NEIVA, and A. HERRERO (*University of Michigan, Ann Arbor, USA*)

**0469** Long-term Mechanical Properties of Zirconia-Silica Nanofiber-reinforced Dental Composites. G. GUO\*, Y. FAN, J. HAGAN, and X. XU (*Louisiana State University, New Orleans, USA*)

**0470** Degree of Polymerization Conversion of Current Dual-cured Resin Cements. S. ARNOLD\* and B. SUH (*Bisco Inc., Schaumburg, IL, USA*)



**Seq#: 69 Thursday, 4 March 2010, 3:30 p.m. - 4:45 p.m.**  
**Poster Session, Exhibit Hall D**

**Dental Materials: Other Materials - Chemistry, Properties and Performance - Remineralization Agents**

- S0471** Fluoride Release of New Fluoride Varnishes from Enamel. B. JABLONOWSKI\*, D.M. HENSLEY, K. VANDEWALLE, and J. BARTOLONI (*USAF, Lackland AFB, TX, USA*)
- 0472** Surface Roughness Determination of a Caries Infiltration Resin. P. BECK\*, I.S. MUGISA, D. CAKIR, L. RAMP, and J. BURGESS (*University of Alabama at Birmingham, USA*)
- 0473** A Practice-based Research Group Handling Evaluation of a Fluoridated Clear Varnish. R.J. CRISP\*, F.J.T. BURKE, and I. HAEBERLEIN (*University of Birmingham, UK*)
- S0474** Demineralization after Fluoride Recharging of RMGI-bonded Orthodontic Brackets. J. SULLIVAN\*, S. GOGGIN, C. BEEMAN, H. BUSH, M. McHUGH, W. SADLER, and R. MITCHELL (*University of Kentucky, Lexington, USA*)
- S0475** Nd:YAG Laser Protection of Acid-softened Dentin against Further Erosion. J.J. FARAONI-ROMANO\*, R. PALMA-DIBB, C. TURSSI, and J. PECORA (*Faculdade de Odontologia de Ribeirão Preto - Universidade de São Paulo, Brazil*)
- 0476** Assessment of Dentin Tubular Occlusion of In-office and Prescription Products. S. MELLO\*, L. ARVANITIDOU, F. SYED, and F. PANAGAKOS (*Colgate-Palmolive, Piscataway, NJ, USA*)
- S0477** Oxalates for the Treatment of Dentin Hypersensitivity: a Systematic Review. J.R. STOUT\*, J.C. WATAHA, L.J. HEATON, D.J. OLSON, J. CUNHA-CRUZ, and NORTHWEST PRECEDENT (*University of Washington, Seattle, USA*)
- 0478** Enamel-strengthening Effectiveness Study of Two Commercial Toothpastes. Y. XU\*, P. MAJOR, A. BUELO, and S. THONG (*Church & Dwight, Princeton, NJ, USA*)
- 0479** *In vitro* Anti-erosion Efficacy of Triclosan/Copolymer/Silicon Dioxide/NaF Dentifrice. L. ZAIDEL\*, D. MIKSA, J. MASTERS, and M. PRENCIPE (*Colgate-Palmolive, Piscataway, NJ, USA*)
- 0480** The Effect of a Triclosan/Copolymer/Silicon Dioxide/NaF Dentifrice on Dentin Permeability. R. PATEL\*, L. ZAIDEL, S. CHOPRA, and M. PRENCIPE (*Colgate-Palmolive Co., Piscataway, NJ, USA*)
- 0481** Effect of Fluoride on Fluorapatite Crystal Growth on Metal Surfaces. S.-R. CHANG\*, J. LIU, A. CZAJKA-JAKUBOWSKA, and B.H. CLARKSON (*University of Michigan, Ann Arbor, USA*)
- S0482** Functional Remineralization of Dentin Demineralized using Lactic Acid. R. STANISLAWSKI\*, A.K. BURWELL, M. KURYLO, S. HO, S. HABELITZ, S.J. MARSHALL, and G.W. MARSHALL (*University of California - San Francisco, USA*)
- S0483** Effects of Compositional Changes on Properties of Calcium Phosphate Glass. G. CATIG and E. LIAO\* (*New York University, USA*)
- S0484** Sintering and Chemical Characterization of HA/-TCP Scaffolds. L. WITEK\*, N. SILVA, J. RICCI, E. CLARK, J. SMAY, M. PINES, and P. COELHO (*New York University, USA*)
- S0485** Transformation of Calcium Oxalate on Dentin Surfaces. N.K. SARKAR, J. CHEUK\*, and A. FALSTER (*Louisiana State University School of Dentistry, New Orleans, USA*)

**S0486** Icon Caries-infiltrant Resin for Treatment of White-spot Lesions. A. BERGDOLL\*, P. BECK, D. CAKIR, and J. BURGESS (*University of Alabama at Birmingham, USA*)

**Seq#: 70 Thursday, 4 March 2010, 3:30 p.m. - 4:45 p.m.**  
**Poster Session, Exhibit Hall D**

**Dental Materials: Instruments and Equipment - Lamps and Irradiation Equipment**

- S0487** Effect of Thermopile Height on ADA Specification-48 Exitance Power Value. A. PATEL\* and F. RUEGGERBERG (*Medical College of Georgia, Augusta, USA*)
- S0488** A Novel *in vitro* Model for Light-induced Wound Healing. C. MILLAN\*, J. LEWIS, R. MESSER, and R. GERLACH (*U.S. Army Dental Corps, Martinez, GA, USA*)
- 0489** Irradiance of Nine Curing Lights at 2-mm and 9-mm Distances. S. MEGREMIS, R. GEARY\*, H. SHEPELAK, K. VOGT, and J. KUEHNE (*American Dental Association, Chicago, IL, USA*)

**Seq#: 71 Thursday, 4 March 2010, 3:30 p.m. - 4:45 p.m.**  
**Poster Session, Exhibit Hall D**

**Diagnostic Sciences - Cone Beam Computed Tomography: Applications in Maxillofacial Diagnosis**

- S0490** Cone Beam Computer Tomography: Mandibular Measurements Using Advanced Imaging Software. D. SNITZER\*, C.A. BATES, L. HONG, V. DAVID, and V.M. CASTRO (*University of Missouri-Kansas City, USA*)
- 0491** 3D Cone Beam to Evaluate Masseter Muscle Morphology. C. MARTIN\*, M. BECHT, P. NGAN, T. RAZMUS, and J. MAH (*West Virginia University, Morgantown, USA*)
- 0492** Alveolar Bone Thickness Affects Bone-height Measurements from CBCT Images. Z. SUN, T. SMITH, S. KORTAM, D.-G. KIM, and H. FIELDS\* (*The Ohio State University, Columbus, USA*)
- 0493** Understanding the Maxillary Sinus in Human Fetuses by CBCT. R. ASAUMI\*, I. SATO, Y. MIWA, T. KAWAI, and T. YOSUE (*Nippon Dental University, Tokyo, Japan*)
- S0494** Retrospective Study of Maxillary Sinuses Utilizing Cone-Beam Computed Tomography. B. CLARK\*, and J. CHAUDHRY (*University of Tennessee, Memphis, USA*)
- S0495** Incidence of Occult Pathology in Orthodontic Diagnostic CBCT Scans. M. DEROCHER\*, B. PLISKA, and B. LARSON (*University of Minnesota, Minneapolis, USA*)
- S0496** CBCT Analysis after a Novel Device Usage. C.H. KAU, J. NGUYEN\*, J.D. ENGLISH, and R. LEE (*University of Texas - Houston/Health Science Center, USA*)
- S0497** CBCT Analysis of the Maxilla after Dento-alveolar Expansion. C. DOMANN\*, J.D. ENGLISH, C.H. KAU, K.R. McGRORY, R.K. ELLIS, and R. GALLERANO (*University of Texas - Houston/Health Science Center, USA*)
- 0498** 3D Analysis of Patients with DDH. C.H. KAU\*, T. SHANE, C.R. STEPHENS, R.K. ELLIS, J.D. ENGLISH, P. PIRTINIEMI, and V. HARILA (*University of Texas - Houston/Health Science Center, USA*)



Seq#: 72 Thursday, 4 March 2010, 3:30 p.m. - 4:45 p.m.  
Poster Session, Exhibit Hall D

**Behavioral, Epidemiologic and Health Services Research -  
Dental Public Health Methods**

- 0499** PRECEDE-PROCEED Model Modification in Community-based Oral Health Promotion in Japan. M. KAWAMURA\*, T. KOMABAYASHI, H. SASAHARA, N. TAGUCHI, and T. OGAWA (*Hiroshima University, Japan*)
- 0500** Correlations of Head & Neck Specific QOL Domains with Global Health/QOL. M.L. AGUILAR\* and W.J. PSOTER (*University of Florida, Gainesville, USA*)
- S0501** Modeling a State Dentist Workforce Using County-level Data. S.C. McKERNAN\*, R.A. KUTHY, E.T. MOMANY, M.R. McQUISTAN, and F. QIAN (*University of Iowa, Iowa City, USA*)
- 0502** Pilot Appraisal of Variables among Mexican-Americans for Social Network Analysis. G. MAUPOME\*, A. MARTINEZ-MIER, E. WRIGHT, and C.E. MEDINA-SOLIS (*Indiana University/Purdue University School of Dentistry, Indianapolis, USA*)
- 0503** Recruitment in a Practice-based Research Network Study of Dental Fear. L.J. HEATON\*, S.E. COLDWELL, and NORTHWEST PRECEDENT (*University of Washington, Seattle, USA*)
- 0504** Monitoring Fluoride Concentrations in the Public Water Supply in Bauru, Brazil. M. BUZALAF\*, J. PESSAN, J.G. ANDRADE E SILVA, C.M. MORÃES, L.T. GRIZZO, A.C. MAGALHÃES, R. OLIVEIRA, and I. RAMIRES (*Bauru Dental School - University of São Paulo, Brazil*)
- S0505** Examiner Reliability of Fluorosis Scoring: Photographs vs. Clinical Examination. N. CRUZ-ORCUTT\*, J. WARREN, B. BROFFITT, and S. LEVY (*University of Iowa, Coralville, USA*)
- 0506** Methods used by DPBRN Dentists to Diagnose Primary Caries Lesions. B. RINDAL\*, V.V. GORDAN, M. NASCIMENTO, M. LITAKER, J. BADER, J. FELLOWS, M. ANDERSON, V. QVIST, M. WALLACE-DAWSON, and THE DPBRN COLLABORATIVE GROUP (*Health Partners, Minneapolis, MN, USA*)
- S0507** Numbers and Types of Research Publications in Clinical Disciplines. V. VORA\*, M. MacEACHERN, T. BOTERO, S. BAYNE, and G.R. HOLLAND (*University of Michigan, Ann Arbor, USA*)
- 0508** Paper Withdrawn.
- S0509** Actual vs. Reported Caries-restorative Thresholds by Dental PBRN Dentists. A. VOINEA-GRIFFIN\*, V.V. GORDAN, M. LITAKER, J. FELLOWS, B. RINDAL, V. QVIST, J. McCLELLAND, and The DPBRN COLLABORATIVE GROUP (*University of Alabama, Birmingham, USA*)
- 0510** Paper Withdrawn.
- 0511** Evaluating a New Model for Expanding Access to Dental Care. D. WORLEY\*, M.J. THOELE, S. ASCHE, O. GODLEVSKY, A. SCHMIDT, R. YARDIC, and W. RUSH (*HealthPartners Dental Group, Bloomington, MN, USA*)
- S0512** Parental Knowledge of Beverage Selection and Children's Caries Risk. L. COSPER\*, J. WARREN, T. MARSHALL, and K. WEBER-GASPARONI (*University of Iowa, Iowa City, USA*)

- 0513** A Speech-to-Chart Prototype for Automatically Charting Hard-tissue Examinations. J. IRWIN, L. CHRISTENSEN, H. HARKEMA\*, T. SCHLEYER, H. SPALLEK, P. HAUG, B. CHAPMAN, and W. CHAPMAN (*University of Pittsburgh, PA, USA*)
- S0514** OHIP-5 Score Reliability and Validity in General Dental Practice. J. GILTNER\*, B. RINDAL, W. RUSH, D. GESKO, N. PRONK, and M. JOHN (*University of Minnesota, Minneapolis, USA*)
- 0515** Association between Self-rated General and Oral Health among US Children. S.O. GRIFFIN\*, P.M. GRIFFIN, and B.F. GOOCH (*Centers for Disease Control, Atlanta, GA, USA*)
- 0516** Correlation Due to Clustering in Ratings of Caries Lesions. M. LITAKER\*, D.B. RINDAL, J. FELLOWS, V.V. GORDAN, V. QVIST, G. GILBERT, and The DPBRN COLLABORATIVE GROUP (*University of Alabama, Birmingham, USA*)
- S0517** Feasibility of Delphi Methodology to Validate Dental Information Items List. A. ACHARYA\*, T. THYVALIKAKATH, and T. SCHLEYER (*Biomedical Informatics Research Center, Marshfield Clinic Research Foundation, WI, USA*)
- 0518** Field Test of an Oral and Pharyngeal Cancer Knowledge Survey. J. RILEY\*, C. PORTER, H. LOGAN, V. DODD, and K. MULLER (*University of Florida, Gainesville, USA*)
- S0519** Distinguishing Existing Findings from Planned Treatments in Dictated Dental Examinations. D. MOWERY\*, T. SCHLEYER, and W. CHAPMAN (*University of Pittsburgh, PA, USA*)
- 0520** Brief Motivational Interviewing for Prevention of Early Childhood Caries. A. ISMAIL\*, J. WILLEM, E. LIGHT, A. CLARKE, W. SOHN, R. LITTLE, and J. LEPKOWSKI (*Temple University, Philadelphia, PA, USA*)
- 0521** Utilizing the Internet for Consumer Education in Dental Caries Transmission. D. ALBERT\*, A. WARD, S. WILLIAMS, M.L. CONICELLA, and L. MCGREW (*Columbia University College of Dental Medicine, New York, NY, USA*)

Seq#: 73 Thursday, 4 March 2010, 3:30 p.m. - 4:45 p.m.  
Poster Session, Exhibit Hall D

**Cariology Research - Caries and Erosion/Abrasion Prevention:  
Toothpastes - Varnishes - Rinses**

- S0522** Determination of Free Fluoride in 20 International Toothpastes. R. KAUR\* and M.S. WOLFF (*New York University College of Dentistry, USA*)
- S0523** Effects of Additive Ingredients on Available Fluoride in Sodium Fluoride Dentifrices. P. PATEL\*, C. GONZALEZ-CABEZAS, and J. EDER (*Indiana University School of Dentistry, Oral Health Research Institute, Indianapolis, USA*)
- 0524** *In vitro* Fluoride Bioavailability and Cleaning Efficacy of a Triclosan/Copolymer/Silicon Dioxide/NaF Dentifrice. S. FISHER\*, L. ZAIDEL, S. CHOPRA, and M. PRENCIPE (*Colgate-Palmolive, Piscataway, NJ, USA*)
- 0525** Enamel Protection: Comparison of Marketed Dentifrice Performance - Erosion Cycling. R.V. FALLER\*, S.L. EVERSOLE, K. BURKHARDT, and G.E. TZEGHAI (*Procter & Gamble Co., Mason, OH, USA*)



**0526** Enamel Protection: Deposition and Retention of SnF<sub>2</sub> on Enamel Surfaces. D. KHAMBE\*, S.L. EVERSOLE, T. MILLS, and R.V. FALLER (*Procter & Gamble Co., Mason, OH, USA*)

**0527** Enamel Protection: OTC vs. Rx: Crest Pro-Health vs. ClinPro™ 5000. S. EVERSOLE\*, G.E. TZEGHAI, K. BURKHARDT, and R.V. FALLER (*Procter & Gamble Co., Mason, OH, USA*)

**0528** Evaluation of Hexametaphosphate-containing Dentifrice on Root Dentin Erosion-Abrasion. A. HARA\*, K. ENGLE, C. GONZALEZ-CABEZAS, and D. ZERO (*Indiana University School of Dentistry, Indianapolis, USA*)

**0529** Toothpaste Diluent and Dilution Rate Effects on Dentin Abrasion. C. TURSSI\*, D. MESSIAS, A. HARA, N. HUGHES, G.A. BORGES, and F. GARCIA-GODOY (*University of Uberaba, MG, Brazil*)

**0530** Effect of TiF<sub>4</sub> and NaF on Dentin Erosion *in vitro*. A.C. MAGALHÃES\*, F. LEVY, D. RIOS, and M. BUZALAF (*Bauru School of Dentistry - University of São Paulo, Brazil*)

**0531** Calcium-Phosphate Electrolyte Solution and Enamel Caries Formation *in vitro*. C. FLAITZ\* and J. HICKS (*University of Texas - Houston / Health Science Ctr., USA*)

**0532** Fluoride Uptake 12 Hours after Mouthrinse Treatments *in vitro*. E.E. ENGELMAN\*, D. RICCI-NITTEL, and B. SCHEMEHORN (*Johnson & Johnson Consumer & Personal Products Worldwide, Skillman, NJ, USA*)

**Seq#: 74 Thursday, 4 March 2010, 3:30 p.m. - 4:45 p.m.**  
**Poster Session, Exhibit Hall D**

#### **Implantology Research - Implant Prosthodontics/Design/Digital Technology**

**0533** Antibiotic Resistance in Human Peri-implantitis Microbiota. T.E. RAMS\*, J.E. DEGENER, and A.J. VAN WINKELHOFF (*Temple University, Philadelphia, PA, USA*)

**0534** Strain Comparisons for Splinted and Non-splinted Crowns on Short Implants. B. YILMAZ\*, J.D. SEIDT, E.A. McGLUMPHY, and N.L. CLELLAND (*The Ohio State University, Columbus, USA*)

**0535** Impact of Implant System on Transfer Accuracy in Implant Impressions. K. WEGNER\*, K. WESKOTT, M. BALKENHOL, P. REHMANN, and B. WÖSTMANN (*Justus-Liebig-University, Giessen, Germany*)

**S0536** Dynamic Loading Effect on Screw Detorque among Implant Systems. D. PANNU\*, E. BRITTON-VIDAL, S. LOONEY, and F. RUEGGEBERG (*Medical College of Georgia, Augusta, USA*)

**S0537** Strain Comparisons for Splinted and Non-splinted Cement-retained Implant Crowns. J. MESS\*, B. YILMAZ, J.D. SEIDT, and N.L. CLELLAND (*The Ohio State University, Columbus, USA*)

**S0538** Electron Speckle Measurement of Simulated Bone Strain around Collared/Non-collared Implants. S. GEORGE\*, D. DUNCAN, T. GROESBECK, S. KIRKPATRICK, H. GRIMSLID, and J.C. MITCHELL (*Oregon Health & Science University, Portland, USA*) [2009 AADR Student Research Fellowship Winner]

**0539** Effects of Selected Design Parameters on Stability of Mini-anchorage Implants. R. SALAMA\*, N. BADR, and A. ELRAGI (*Cairo University, Egypt*)

**S0540** Comparison: Digital Radiographs and Computed Tomography in Determining Inter-root Distances. K. HUSTON\*, A. FAHKRY, T. SOUTHARD, and F. QIAN (*University of Iowa, Iowa City, USA*)

**0541** Impression Technique, Material, and Inter-implant Span Effect on Accuracy. Z. BAGHERI\*, Z. JACOBSON, and D. NATHANSON (*Boston University, MA, USA*)

**S0542** A Comparison of Histology and Micro-CT Evaluations for Regenerated Bone. Y. KANG\*, M. SALAS, A. JOHNSON, D.-G. KIM, M. CARLTON, D.N. TATAKIS, S. AGARWAL, and B. I EBLEBICIOGLU (*The Ohio State University, Columbus, USA*)

**0543** Cortical Bone Remodeling Due to Implants by Finite Element Analysis. S. MUFTU\* and H.-Y. CHOU (*Northeastern University, Boston, MA, USA*)

**S0544** Accuracy of Lateral Cephalograms in Measuring Bone for Palatal Implants. S. BOWER\*, A. FAKHRY, and F. QIAN (*University of Iowa, Iowa City, USA*)

**0545** Distribution of Posterior Superior Alveolar Branches in Japanese Human Maxilla. Y. MIWA\*, T. YATSU, R. ASAUMI, M. SUNOHARA, T. KAWAI, T. YOSUE, and I. SATO (*Nippon Dental University, Tokyo, Japan*)

**0546** Comparing Immediate Implants with or without Immediate Loading. O. SHIBLY, N. PATEL, and S. CIANCIO\* (*University at Buffalo, NY, USA*)

**0547** The Microbial Diversity of Biofilms on Implant-anchored Telescopic Attachments. W. HEUER\*, A. KETTENRING, S.N. STUMPP, E. GELLERMANN, A. WINKEL, P. KOHORST, and M. STIESCH (*Hannover Medical School, Department of Prosthetic Dentistry and Biomedical Materials Science, Hannover Medical School, Germany*)

**S0548** Bone Quality Evaluation: Comparison of CBCT and Subjective Surgical Assessment. I. YAMANY\*, M. FREILICH, D. SHAFER, D. ORTIZ, D. PENDRYIS, A. LURIE, S. REISINE, P. TAXEL, and S. MALLYA (*University of Connecticut School of Dental Medicine, Farmington, USA*)

**0549** Load-bearing Capacity of Different Implant-abutment Connection Types. M.P. DITTMER\*, S. BEIKE, L. BORCHERS, and M. STIESCH (*Hannover Medical School, Department of Orthodontics, Germany*)

**0550** Biocompatible and Antimicrobial Behavior of TiO<sub>x</sub> and NbO<sub>x</sub> Thin Films. A. ALMAGUER-FLORES\*, R. OLIVARES-NAVARRETE, L.A. XIMENEZ-FYVIE, and S.E. RODIL (*Universidad Nacional Autonoma de Mexico, Mexico City*)

**0551** Success Rate of Single-tooth Implant Restorations in an Academic Environment. S. ROSHAN\*, D.J. FLINT, R. AJLOUNI, E. SOLOMON, and F. RIVERA-HIDALGO (*Baylor College of Dentistry, Dallas, TX, USA*)

**S0552** Impact of Additional Diagnostic Information on Mandibular Implant Length Selection. C. FELIX\*, H. SELIPSKY, R. LONDON, C. CHEN, and P. HUJOEL (*University of Washington, Seattle, USA*)



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Poster Session, Exhibit Hall D

**Mineralized Tissue - In vitro Mineralization**

**0553** X-ray Microanalysis of Cylindrical Structures Emanating from Dental Tubules. G. HACK\*, B. LEITE, D. GUARRERA, and R.-C. HSIA (*University of Maryland Dental School, Baltimore, USA*)

**S0554** A Chemical Phosphorylation-inspired Design for Type I Collagen Biomimetic Mineralization. L. GU\*, Y.K. KIM, J.R. KIM, J. LING, D.H. PASHLEY, and F.R. TAY (*Guanghua School of Stomatology, Sun Yat-sen University, Guangzhou, China*)

**0555** Fibrillar Amelogenin Assembly. S. HABELITZ\*, X. HE, S. WU, and Y. CHENG (*University of California - San Francisco, USA*)

**0556** Microarray Analysis of Gene Expression in Dental Pulp Cultures. Y.-H. WANG\*, A. BALIC, D. ROWE, D.-G. SHIN, and M. MINA (*University of Connecticut Health Center, Farmington, USA*)

**S0557** Development of a Dentin Smear Layer Grading Scale. R. VON KOPPENFELS\*, H. GOETZ, H.J. DÜSCHNER, D.J. WHITE, M. ZSISKA, Y. SHI, J. GRUNER, and J. ZOLADZ (*Applied Structure and Microanalysis, Mainz, Germany*)

**S0558** Synthetic Enamel Paste in the Treatment of Dentin Hypersensitivity. S. TAHA\*, H. HAN, S.-R. CHANG, K. KURODA, and B.H. CLARKSON (*University of Michigan, Ann Arbor, USA*)

**0559** Differentiation of Adipose-derived Stem Cells Grown on Fluorapatite Surfaces. J. LIU\*, S. CHANG, Z. ZHANG, J.E. NÖR, A. CZAJKA-JAKUBOWSKA, and B.H. CLARKSON (*University of Michigan, Ann Arbor, USA*)

**0560** Molecular Dynamics Simulations of Hydroxyapatite-nucleating and Growth-inhibiting Macromolecules. J. O'YOUNG\*, G. BAHT, B. GROHE, M. KARTTUNEN, H. GOLDBERG, and G. HUNTER (*University of Western Ontario, London, Canada*)

**0561** Dentin Sialophosphoprotein is Cleaved by Isoforms of Bone Morphogenetic Protein-1. Z. VON MARSCHALL\* and L. FISHER (*NIDCR/NIH, Bethesda, MD, USA*)

**S0562** Analysis of Early Events of Amelogenin Self-assembly by Fluorescence Spectroscopy. A. KISS\*, K. BROMLEY, R. LAKSHMINARAYANAN, and J. MORADIAN-OLDAK (*University of Southern California, Los Angeles, USA*)

**S0563** Silencing NF1c in Hertwig's Epithelial Root Sheath (HERS) Cells. D. HAVAS\*, L. CHEN, J. REYNA, and M. ZEICHNER-DAVID (*University of Southern California, Los Angeles, USA*)

**0564** Effect of Native Full-length Amelogenin on Spontaneous Mineralization *in vitro*. S.-Y. KWAK\*, F. BIDLACK, E. BENIASH, Y. YAMAKOSHI, J.P. SIMMER, and H.C. MARGOLIS (*The Forsyth Institute, Boston, MA, USA*)

**0565** A Biomimetic Strategy to Induce Mineralization of Dentin Collagen. Z. XU, K. GEE NEOH, and A. KISHEN\* (*University of Toronto, Canada*)

**S0566** DSPP Affects the Development of Murine Dentin and Enamel. K. VERDELIS\*, S. SUZUKI, A. KULKARNI, E. ATTIHANDLER, S. TETRADIS, and A. BOSKEY (*Hospital for Special Surgery, New York, NY, USA*)

**S0567** Three-dimensional Scaffold-less Engineered Constructs: a Model for the Study of Mineralized Tissues. N.A. ROBERTSON\*, F.N. SYED-PICARD, and C. SFEIR (*University of Pittsburgh, PA, USA*)

Seq#: 76    Thursday, 4 March 2010, 3:30 p.m. - 4:45 p.m.  
Poster Session, Exhibit Hall D

**Microbiology / Immunology and Infection Control -**

**Aggregatibacter actinomycetemcomitans and Porphyromonas gingivalis**

**S0568** HBD3 Inhibits Binding of *Porphyromonas gingivalis* rHagB to Keratinocytes. D. DIETRICH\*, K. YOHNKE, K.G. KOHLGRAF, C. BRATT, M. BELANGER, A. PROGULSKE-FOX, and K. BROGDEN (*University of Iowa, Iowa City, USA*)

**S0569** *Porphyromonas gingivalis* rHagB Binds to Human Dendritic Cell Proteins. A. ACKERMANN\*, M. BELANGER, A. PROGULSKE-FOX, and K. BROGDEN (*University of Iowa, Iowa City, USA*)

**S0570** Degradation of Intracellular Host Proteins by *Porphyromonas gingivalis*. J. AULTMAN\*, G. HARBER, S.M. MICHALEK, and J. KATZ (*University of Alabama at Birmingham, USA*)

**0571** Effects of HIV Infection and HAART on Oral Bacterial Colonization. Z. CHEN\*, G. LIU, N. CHHUN, D. SAXENA, D. MALAMUD, and Y. LI (*New York University, USA*)

**S0572** Database and Tools for Studying the *Porphyromonas gingivalis* Transcriptome. W.-H. YU\*, H. HØVIK, K. NGUYEN, and T. CHEN (*The Forsyth Institute, Boston, MA, USA*)

**S0573** Site-dependent Transcriptional Regulation of Leukotoxin in *Aggregatibacter actinomycetemcomitans*. C.J. CHILDRESS\*, L.H. PHILLIPS, and D.J. KOLODRUBETZ (*University of Texas - San Antonio / Health Science Ctr., USA*)

**S0574** DNA Uptake and Stress Tolerance in *Porphyromonas gingivalis*. C. WONG\*, T. RIGNEY, and G.D. TRIBBLE (*University of Texas - Houston/Health Science Center, USA*)

**S0575** Using a Novel Peptide to Prevent *Porphyromonas gingivalis* Biofilm Formation. C. AMORIN DAEP\*, R. LAMONT, and D.R. DEMUTH (*University of Louisville, KY, USA*)

**S0576** Autoinducer-2, QseBC Control Biofilm Formation and Virulence in *Aggregatibacter actinomycetemcomitans*. E. NOVAK\*, H. SHAO, and D.R. DEMUTH (*University of Louisville, KY, USA*)

**S0577** Multiple Receptors Mediate Responses to *P. gingivalis* DNA Challenge. C. WARREN\*, T. WYANT, C. ANAYA BERGMAN, H. MIYAZAKI, and J. LEWIS (*Virginia Commonwealth University - VCU/MCV, Richmond, USA*)

**S0578** Evaluating Bone Microbiota in Bisphosphonate-related Osteonecrosis of the Jaw. C.Y. WONG\*, X. WEI, S. PUSHALKAR, Y. LI, M. FORNIER, A. FAROOKI, C. ESTILO, and D. SAXENA (*New York University College of Dentistry, USA*)

**0579** Lactoferrin Exhibits Proteolytic Activity against Aae in *Aggregatibacter actinomycetemcomitans*. K. VELLIYAGOUNDER\*, K. GANESHNARAYAN, D. FURGANG, and D. FINE (*New Jersey Dental School - UMDNJ, Newark, USA*)

**S0580** Critical Amino Acids of the PG 1587 Lipid A Phosphatase. K. BANANI\*, S.R. COATS, S. JAIN, and R.P. DARVEAU (*University of Washington, Seattle, USA*)



Seq#: 77 Thursday, 4 March 2010, 3:30 p.m. - 4:45 p.m.  
Poster Session, Exhibit Hall D

**Periodontal Research - Therapy - Bone Grafts / Osseointegration / Mucogingival Considerations**

- 0581** Newly Formulated Synthetic Graft Material in Immediate Implant Stability and Function. H. HASTURK\*, A. KANTARCI, M. GHATTAS, R. ABDALLAH, R. GIORDANO, T.G.H. DIEKWISCH, and T. VAN DYKE (*Boston University, MA, USA*)
- 0582** Histological Evaluation of a Newly Formulated Synthetic Graft around Immediate Implants. A. KANTARCI\*, H. HASTURK, M. GHATTAS, R. ABDALLAH, and T. VAN DYKE (*Boston University, MA, USA*)
- S0583** Socket Preservation in Response to a Newly Formulated Synthetic Graft Material. H. HASTURK, A. KANTARCI, D. NGUYEN\*, M. GHATTAS, R. ABDALLAH, and T. VAN DYKE (*Boston University, MA, USA*)
- 0584** Salicylic-acid-based Polyanhydride Composite Bone Grafts. M.A. REYNOLDS\*, M.E. AICHELMANN-REIDY, and K.E. UHRICH (*University of Maryland Dental School, Baltimore, USA*)
- 0585** Existing Periodontitis Inhibits Frequency and Duration of Osseointegration Outcomes. A. POLSON\* and P. ROUFF (*University of Pennsylvania School of Dental Medicine, Philadelphia, USA*)
- S0586** Skin Wound Healing following Application of Enamel Matrix Protein. K. AL-HEZAIMI, N. AL-SOURANI\*, A. AL-RASHEED, R. O'NEILL, and T. GRIFFIN (*Tufts University, Boston, MA, USA*)
- S0587** The Effect of Enamel Matrix Derivative on Gingival Tissue Thickness. K. ALHEZAIMI and H. AL-FAHAD\* (*Tufts University, Boston, MA, USA*)
- S0588** Incomplete Passive Eruption. Proposed Classification and Treatment. I. SANZ MARTIN\*, L. GOBBATO, T. HEMPTON, and T. GRIFFIN (*Tufts University, Boston, MA, USA*)
- S0589** Blood Flow and Dimensional Changes of Connective Tissue Grafts. S.A. ROTENBERG\* and D.N. TATAKIS (*The Ohio State University, Columbus, USA*)
- 0590** Measurement and Analysis of Anterior Labial Gingiva in Chinese Youth. W. HU\*, Y. ZHANG, H. ZHANG, and H. MENG (*Department of Periodontology, Peking University School and Hospital of Stomatology, Beijing, China*)
- S0591** Vacuum-induced Suction Increases Lymphatic Vessels in Dog Gingiva. R. BUDINSKIY\*, E. KONTOGIORGOS, L.A. OPPERMAN, K.K. SVOBODA, P.C. DECHOW, and O. BUDINSKAYA (*Texas Tech University, Lubbock, USA*)

Seq#: 78 Thursday, 4 March 2010, 3:30 p.m. - 4:45 p.m.  
Poster Session, Exhibit Hall D

**Periodontal Research - Therapy - Oral Hygiene Aids / Dentin Hypersensitivity**

- 0592** Effect of Colgate-Total on Metabolites in Gingival Crevicular Fluid. V.M. BARNES\*, R. TELES, T. XU, W. DEVIZIO, H. TRIVEDI, and L. GUO (*Colgate-Palmolive Co., Piscataway, NJ, USA*)
- 0593** Comparative Anti-plaque Efficacy of Two Dentifrices. T. HE, L. SUN\*, X. LI, and Y. ZHANG (*Procter & Gamble Co., Beijing, China*)

- 0594** Superior Anti-plaque Efficacy of a Stannous-containing Sodium Fluoride Dentifrice. T. HE\*, L. SUN, Y. ZHANG, and X. LI (*Procter & Gamble Co., Mason, OH, USA*)
- 0595** Anti-plaque Efficacy of a Sodium Fluoride/Stannous Dentifrice. M. WYSS\*, T. HE, B. OHMER, and M. BARKER (*Community Research, Cincinnati, OH, USA*)
- 0596** Extrinsic Stain Removal Efficacy of a Stannous-containing Sodium Fluoride Dentifrice. L. NI, T. HE, M. BRITT\*, A. CHANG, and L. SUN (*Procter & Gamble Co., Mason, OH, USA*)
- 0597** Meta-analysis on the Breath Benefits of Stannous-containing Sodium Fluoride Dentifrice. X. FENG, C.-H. CHENG\*, X. CHEN, Y. ZHANG, L. SUN, and T. HE (*Procter & Gamble Co., Mason, OH, USA*)
- 0598** Multiple-use Study Evaluating Plaque Removal of Two Manual Brushes. G.T. TEREZHALMY, J. GRENDER\*, P. WALTERS, P. HOKE, R.W. GERLACH, A.R. BIESBROCK, and S. FARRELL (*The Procter & Gamble Company, Mason, OH, USA*)
- 0599** Plaque Removal by Oscillating-Rotating Power Toothbrush and Manual Toothbrush. N. SHARMA, J. QAQISH, M. KLUKOWSKA\*, J. ROONEY, J. GRENDER, P. HOKE, and P. CUNNINGHAM (*The Procter & Gamble Company, Mason, OH, USA*)
- 0600** Paper Withdrawn.
- 0601** Occluding Ability of Dentin Tubules with Tokuyama Shield Force. Q. CUI\* and M. KIMURA (*Research & Development Division, Tokuyama Dental Corporation, Tsukuba, Ibaraki, Japan*)
- 0602** Paper Withdrwn.

Seq#: 79 Thursday, 4 March 2010, 3:30 p.m. - 4:45 p.m.  
Poster Session, Exhibit Hall D

**Pharmacology, Therapeutics, & Toxicology - Pharmacology, Therapeutics, & Toxicology**

- S0603** Treatment of *Mycobacterium tuberculosis* with Propolis in Guinea Pigs. M. HARDEN\*, C. McARTHUR, J.C. WHITT, and L. CANTARERO (*UMKC School of Dentistry, Kansas City, MO, USA*)
- S0604** Clarithromycin Accumulation and Release by Cells of Myeloid Lineage. I. ISKANDAR\* and J.D. WALTERS (*The Ohio State University, Columbus, USA*)
- S0605** Latex Protein in the Commercially Available Products Used in American Dentistry. K. MANN\*, R. MATHIAS, R. WAVRIN, M. BOYD, and K. CORNISH (*Arizona School of Dentistry & Oral Health, Mesa, USA*)
- S0606** Mitigating Risks of Type I Latex Allergy in American Dentistry. R. MATHIAS\*, K. MANN, R. WAVRIN, M. BOYD, and K. CORNISH (*Arizona School of Dentistry & Oral Health, Mesa, USA*)
- S0607** Topical Application of Lyophilized Black Raspberries Inhibits Experimental Oral Cancer. B. WARNER\*, B. CASTO, T. KNOBLOCH, B. ACCURSO, and C. WEGHORST (*The Ohio State University, Columbus, USA*)
- 0608** Fluoride Concentrations in Tea: Influence of Preparatory Methods. G.M. WHITFORD\* and A. ARUN (*Medical College of Georgia, Augusta, USA*)



Seq#: 80 Thursday, 4 March 2010, 3:30 p.m. - 4:45 p.m.  
Poster Session, Exhibit Hall D

**Oral Medicine & Pathology - Peptides, Genes, and Cellular Aspects of Oral Disease**

0609 Paper Withdrawn.

0610 Recurrent Aphthous Stomatitis and Scoliosis. L. BACCAGLINI\*, D. THERIAQUE, R. LALLA, G. SERRANO, D. PETERSON, and J. SHUSTER (*College of Dentistry, University of Florida, Gainesville, USA*)

S0611 Galectin-1 Levels in Cultured Adenocarcinoma Cells and Conditioned Media. S.R. CLARK\*, M.M. JEFFERSON, E.L. THOMAS, and M.K. DABBOUS (*University of Tennessee, Memphis, USA*)

S0612 Plakophilin-3 Dephosphorylation and Desmosome Disassembly in Response to HGF Signaling. K. HARMS\* and J. WAHL (*University of Nebraska, Lincoln, USA*)

S0613 Cell-penetrating Peptides Enhance Gene Delivery by Lipid-DNA Complexes. J. FOUNTAIN\*, S. GEBREMEDHIN, K. KONOPKA, and N. DÜZGÜNES (*Department of Microbiology, University of the Pacific Arthur A. Dugoni School of Dentistry, San Francisco, CA, USA*) [2009 AADR Student Research Fellowship Winner]

S0614 Differentiation of Mesenchymal Progenitors from iPS and Embryonic Stem Cells. M. CARLSON, G. CHAO\*, K. HEWITT, K. HOCHEDLINGER, and J. GARLICK (*Tufts University, Boston, MA, USA*)

S0615 miR-21 Regulates Cytokine Production in Embryonic Stem-cell-derived Mesenchymal Cells. M. CARLSON, B. COOK\*, K. HEWITT, and J. GARLICK (*Tufts University, Boston, MA, USA*)

0616 Gene Expression Profile in Human Ameloblastoma and Keratocystic Odontogenic Tumors. J. WRIGHT\*, D. SIMMONS, C. SUGGS, M. TORAIN, J. PREISSER, R. PADILLA, and V. MURRAH (*University of North Carolina, Chapel Hill, USA*)

S0617 The Role of BAX Translocation in Mitochondrial Dynamics. R. RANGE\*, P. PEIXOTO, S.-Y. RYU, and K.W. KINNALLY (*New York University College of Dentistry, USA*)

0618 Paper Withdrawn.

S0619 Sprouty2 Down-regulates Angiogenesis during Mouse Skin Wound Healing. M. WIETECH\*, L. CHEN, M. RANZER, T. PATEL, and L. DIPIETRO (*University of Illinois - Chicago, USA*)

S0620 The Effects of Bisphosphonates on TGF- $\beta$ 3 Expression in Osteoblasts. L.M. GAINES\*, R. SPEARS, L.A. OPPERMAN, and A. NAIDU (*Baylor College of Dentistry, Dallas, TX, USA*)

S0621 Growth Factor Production by Human Embryonic Stem-cell-derived Mesenchymal Cells. Y. SHAMIS, C. ZHAO\*, M. CARLSON, K. HEWITT, L. DAHERON, and J. GARLICK (*Tufts University, Boston, MA, USA*)

S0622 Characterization of Fibroblast Heterogeneity in 3D Epithelial Tissue Models. H. QARI\*, Y. SHAMIS, A. ALTHOLLAND, and J. GARLICK (*Tufts University, Boston, MA, USA*)

0623 Evaluation of Modified Adenoviral Vectors for Treatment of Odontogenic Tumors. A. BOROVIJAGIN\*, C. REN, P. DEVILLIERS, L. McNALLY, and M. MacDOUGALL (*University of Alabama at Birmingham School of Dentistry, USA*)

Seq#: 81 Thursday, 4 March 2010, 3:30 p.m. - 4:45 p.m.  
Poster Session, Exhibit Hall D

**Craniofacial Biology - Craniofacial Growth & Development**

0624 Mandible Growth in Late-teen Caucasian Males. N. HEAD, P. NIETERT, L. LEITE, and J. ZHOU\* (*Department of Pediatric Dentistry and Orthodontics, Medical University of South Carolina, Charleston, USA*)

0625 Location Variations of Mandibular Periosteum. Z. SUN\*, B. TEE, S. HUENI, and S. AGARWAL (*The Ohio State University, Columbus, USA*)

S0626 Bone Remodeling in Maxilla and Mandible of Skeletally Immature Dogs. L. RANDALL\*, F. BECK, and S. HUJA (*The Ohio State University, Columbus, USA*)

S0627 Folate Receptor  $\alpha$  Autoantibodies and Risk of Orofacial Clefts. E. GORMAN\*, C. BILLE, D.A. PEDERSEN, A.-M.N. ANDERSEN, M.A. MANSILLA, J.C. MURRAY, K. CHRISTENSEN, J. BALLARD, R. CABRERA, and R. FINNELL (*Texas A&M Health Science Center - Institute of Biosciences and Technology, Houston, USA*)

S0628 Effects of Growth Hormone and Ultrasound Treatment on Mandibular Growth. I. KHAN\*, A. EL-KADI, and T. EL-BIALY (*University of Alberta, Edmonton, Canada*)

S0629 Quantifying Midfacial Morphology in Chick Embryos. A. SALAMATI\* and T. COX (*University of Washington, Seattle, USA*)

Seq#: 82 Thursday, 4 March 2010, 3:30 p.m. - 4:45 p.m.  
Poster Session, Exhibit Hall D

**Craniofacial Biology - Genetics - Craniofacial Morphogenesis**

S0630 TP63 Associated with Non-syndromic Cleft Lip with or without Palate. B. SMITH\*, M.A. MANSILLA, M. MARAZITA, M. COOPER, and J.C. MURRAY (*University of Iowa, Iowa City, USA*)

0631 Genetic Variation in the CYP19A1/Aromatase Gene and Facial Growth. J.K. HARTSFIELD, Jr.\*, J. ZHOU, and S. CHEN (*University of Kentucky, Lexington, USA*)

S0632 Prevalence of Multi-system Anomalies in Patients with Velo-Cardio-Facial Syndrome. V. LEON-SALAZAR\*, S. BEIRAGHI, R.J. KOLTS, and G.C. ANDERSON (*University of Minnesota, Minneapolis, USA*)

0633 Association Analysis of Class II Division 2 (CII/D2) with PAX9 and MSX1. L.A. MORFORD\*, M.D. WALL, M.W. MORRISON, K.S. KULA, and J.K. HARTSFIELD, Jr. (*University of Kentucky, Lexington, USA*)



Seq#: 83 Thursday, 4 March 2010, 3:30 p.m. - 4:45 p.m.  
Poster Session, Exhibit Hall D

**Craniofacial Biology - Odontogenesis - Differentiation and Maturation**

**S0634** Systemic Calcium Status Affects Cementum Apposition in Mice. X. ZHANG\*, F. RAHEMTULLA, P. ZHANG, and H.F. THOMAS (*University of Alabama, Birmingham, USA*)

**S0635** Tooth Mineralization Standards for American Blacks in the Mid-South. E. HARRIS\* (*University of Tennessee, Memphis, USA*)

**S0636** Regulation of Human Bmp4 Promoter by Pax9, Msx1, and Msx2. M. PATEL\*, Y. WANG, G. MUES, and R. D'SOUZA (*Baylor College of Dentistry, Dallas, TX, USA*)

**S0637** Bioengineered Dental Microtissues in a Collagen-Matrigel Construct. F. ASSADIPOUR\*, W. ZHANG, R. LITERMAN, and P.C. YELICK (*Tufts University, Boston, MA, USA*)

**S0638** Amelogenin Changes Surface Potential when Interacting with Hydroxyapatite. F. YANG\* and S. HABELITZ (*University of California - San Francisco, USA*)

**S0639** Expression of Osteogenic Genes in the Rat Dental Follicle. S. YAO, S. RING, D.L. GUTIERREZ-REYNOSO\*, D. LIU, and G.E. WISE (*Louisiana State University, Baton Rouge, USA*)

**S0640** Development of an Odontogenic Epithelial Stem Cell Culture System. J.Y.F. CHANG\*, Y. HUANG, R. D'SOUZA, and F. WANG (*Baylor College of Dentistry, Houston, TX, USA*)

**S0641** Gingival Transcriptome Analysis of the GINGF3 Locus on Chromosome 2. P.P. SULIMA\*, T.C. HART, and P.S. HART (*NIDCR/NIH, Bethesda, MD, USA*)

Seq#: 84 Thursday, 4 March 2010, 4 p.m. - 4:45 p.m.  
Plenary, Room 147A

**Plenary Session - Student Plenary Session: An Insider's Guide to Dental Academics**

**Chairperson: M. MacDougall**

**0642** 4:00 Panelist. J. GUTHMILLER\* (*University of North Carolina, Chapel Hill, USA*)

4:10 Panelist. B. LARSON\* (*University of Minnesota, Minneapolis, USA*)

4:20 Panelist. P. KREBSBACH\* (*University of Michigan, Ann Arbor, USA*)

4:30 Panelist. L. DIPIETRO\* (*University of Illinois at Chicago, USA*)

**NOTE:** \* = Presenting Author  
S prior to the presentation number indicates Student Presenter

**THURSDAY, MARCH 4, 2010**

**POSTER CHAIR LISTING**

**Poster Sessions: 2 p.m. - 3:15 p.m.**

| Session #'s | Group | Poster #'s | Poster Chairs              |
|-------------|-------|------------|----------------------------|
| 46 - 49     | DM    | 201 - 262  | Sillas Duarte & Masao Irie |
| 50          | DIA   | 263 - 277  | Jennifer Nguyen            |
| 51          | GOR   | 278 - 287  | Bei Wu                     |
| 52          | BEHSR | 288 - 298  | Amit Acharya               |
| 53          | EDU   | 299 - 311  | Sharon Grayden             |
| 54          | CAR   | 312 - 320  | Catherine Flaitz           |
| 55          | OHR   | 321 - 336  | ToniAnne Lisante           |
| 56          | MT    | 337 - 351  | Haiyan Chen                |
| 57          | SAL   | 352 - 361  | Lei Zhang                  |
| 58 - 59     | M/I   | 362 - 378  | Jacques Izard              |
| 60          | PERIO | 379 - 392  | Malgorzata Klukowska       |
| 61          | NEU   | 393 - 399  | -                          |
| 62 - 63     | CRAN  | 400 - 419  | Edward Harris              |

**Poster Sessions: 3:30 p.m. - 4:45 p.m.**

| Session #'s | Group | Poster #'s | Poster Chairs                 |
|-------------|-------|------------|-------------------------------|
| 65          | NPBR  | 426 - 429  | -                             |
| 66 - 70     | DM    | 430 - 489  | Jylan el Guindy & Thomas Hill |
| 71          | DIA   | 490 - 498  | Sawsan Tabbaa                 |
| 72          | BEHSR | 499 - 521  | Jaha Howard                   |
| 73          | CAR   | 522 - 532  | Juliano Pessan                |
| 74          | IMP   | 533 - 552  | Rene Olivares-Navarrete       |
| 75          | MT    | 553 - 567  | Charles Sfeir                 |
| 76          | M/I   | 568 - 580  | Cristina C. Villar            |
| 77 - 78     | PERIO | 581 - 602  | Flavia Teles                  |
| 79          | PTT   | 603 - 608  | -                             |
| 80          | OMP   | 609 - 623  | Lorena Baccaglini             |
| 81 - 83     | CRAN  | 624 - 641  | Juan Palomo                   |



**Seq#: 85**     **Friday, 5 March 2010, 8 a.m. - 9:30 a.m.**  
**Hands-on Workshop, Room 147B**

**Hands-on Workshop - Publishing Your Manuscript – a JDR Perspective**

**0643**     8:00     Publishing your Manuscript – a JDR Perspective. A. SMITH\* (*University of Birmingham, England, UK*)

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**Seq#: 86**     **Friday, 5 March 2010, 8 a.m. - 9:30 a.m.**  
**Symposium, Room 152A**

**Symposium - Craniofacial Midline Defects. Genetic, Developmental, Morphological, and Clinical Aspects**

**Chairpersons: W. Arnold and M. Steed**

- 0644**     8:00     Genetic and Environmental Influences in Holoprosencephaly. R. KRAUSS\* (*Mount Sinai School of Medicine, New York, NY, USA*)
- 8:20     Development, Growth, and Patterning of Fields of the Five Facial Prominences. I. KJAER\* (*University of Copenhagen, Denmark*)
- 8:40     Morphology of Cranial Malformations in Holoprosencephalic Embryos. W.H. ARNOLD\* (*University Witten-Herdecke, Germany*)
- 8:55     Clinical Aspects of Craniofacial Midline Defects. R. RUIZ\* (*Arnold Palmer Hospital for Children, Orlando, FL, USA*)
- 9:15     Discussion.
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**Seq#: 87**     **Friday, 5 March 2010, 8 a.m. - 9:30 a.m.**  
**Symposium, Room 147A**

**Symposium - Special Needs – What Should Be the Research Agenda?**

**Chairperson: R. Ettinger**

- 0645**     8:00     Definition of Who Constitutes the Adult Special-needs Population. R.L. ETTINGER\* (*University of Iowa, Iowa City, USA*)
- 8:15     Oral Health Needs/Solutions for Adults with Developmental Disabilities. P. GLASSMAN\* (*University of the Pacific, San Francisco, CA, USA*)
- 8:40     Oral Health Needs/Solutions for the Aging and Aged Population. J. YELLOWITZ\* (*University of Maryland at Baltimore, USA*)
- 9:05     Epidemiologic Evidence and Policy Considerations for Adult Special-needs Populations. J. CRALL\* (*University of California at Los Angeles, USA*)
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**Seq#: 88**     **Friday, 5 March 2010, 8 a.m. - 9:30 a.m.**  
**Oral Session, Room 140A**

**Cariology Research - Biofilm**

**Chairpersons: L. Tenuta and L. Hong**

- 0646**     8:00     Cultural Detection of a Diverse Microbiota in Early Childhood Caries. A.C.R. TANNER\*, J.J. MATHNEY, F.E. DEWHIRST, C.V. HUGHES, C.Y. LOO, N.S. PRADHAN, E. KANASI, and R. KENT (*The Forsyth Institute, Boston, MA, USA*)

- 0647**     8:15     Aciduric Microbiota of Severe and Recurrent Early Childhood Caries. C.V. HUGHES\*, J.J. MATHNEY, F.E. DEWHIRST, C.Y. LOO, M. DAHLAN, N. PRADHAN, S.C. LU, R. KENT, and A.C.R. TANNER (*Boston University, MA, USA*)
- S0648**     8:30     *Streptococcus mutans* Genotypes: Planktonic Acid Tolerance. D. CHOI\*, J. BANAS, D. DRAKE, D. LYNCH, D. DAWSON, K. KRAMER, D. McNEIL, R. CROUT, R. WEYANT, and M. MARAZITA (*University of Iowa, Iowa City, USA*)
- 0649**     8:45     Effect of Iron(II) on *S. mutans* Biofilm and Enamel Demineralization. J.A. CURY\*, R.A. CCAHUANA-VÁSQUEZ, C.M.C. ALVES, T. MUNERATO, C.D.S. CARMO, C.C.C. RIBEIRO, and T.J.L. OLIVEIRA (*Piracicaba Dental School, University of Campinas, SP, Brazil*)
- 0650**     9:00     Calcium Mobilization in Biofilms Formed on Enamel, Dentin, and Acrylic. L.M.A. TENUTA\*, M.F. CORREIRA, A.A. DEL BEL CURY, and J.A. CURY (*Piracicaba Dental School, University of Campinas, SP, Brazil*)
- S0651**     9:15     Aquaporin Genetic Markers are Associated with High Caries Experience. I. ANJOMSHOAA\*, R. SILVA, M. COOPER, and A. VIEIRA (*University of Pittsburgh, PA, USA*)
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**Seq#: 89**     **Friday, 5 March 2010, 8 a.m. - 9:30 a.m.**  
**Oral Session, Room 150B**

**Dental Materials: Adhesion - Leakage/Margin Assessments - Dental Materials: Adhesion-Leakage/Margin Assessments—Microleakage and Permeability**

**Chairpersons: A. Reis and R. Rusin**

- 0652**     Paper Withdrawn.
- 0653**     8:00     Microleakage of an Experimental Resin-based ACP Endodontic Sealer. J. O'DONNELL\*, G. SCHUMACHER, M. PASCAL, and D. SKRTIC (*Paffenbarger Research Center - American Dental Association Foundation, Gaithersburg, MD, USA*)
- 0654**     8:15     Marginal Assessment of Cavities Restored with a Low-stress Bulk-filling Composite. A.F. REIS\*, R.S. DE ALEXANDRE, S. BERTRAND, Q. DAI, and X. JIN (*Guarulhos University, SP, Brazil*)
- 0655**     8:30     Dentin Permeability of New Dental Adhesives. B. SHUKLA\*, R. RUSIN, S. VELAMAKANNI, and C. SUMMERS (*3M ESPE Dental, St. Paul, MN, USA*)
- 0656**     8:45     Dentin Permeability of a 7<sup>th</sup>-generation Adhesive with Total Etch. R. RUSIN\*, B. SHUKLA, S. VELAMAKANNI, C. SUMMERS, and C. THALACKER (*3M ESPE Dental, St. Paul, MN, USA*)
- S0657**     9:00     Ferrule Effect on Preliminary Cyclic Fatigue of Endodontically Treated Teeth. J. KUMAR\*, C. NG, J. GRIGGS, Y. DUAN, and W. NAGY (*University of Mississippi Medical Center, Jackson, USA*)
- 9:15     Discussion.
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Seq#: 90 Friday, 5 March 2010, 8 a.m. - 9:30 a.m.  
Oral Session, Room 151A

**Dental Materials: Polymer-based Materials—Chemistry and Composition - Keynote Address and Resin-based Composite Synthesis and Destruction**

**Chairpersons: C. Pfeifer and L. Gettleman**

**0658** 8:00 Keynote Address: Approaches to Low-shrinkage and/or Low-stress Dental Polymers. J. STANSBURY\* (University of Colorado Denver School of Dental Medicine, Aurora, USA)

**0659** 8:30 Newly Synthesized Urethane Monomers: Copolymerizations with BisGMA and BisEMA. M. BARROS\*, C. PFEIFER, and J. STANSBURY (University of Colorado Denver, Aurora, USA)

**S0660** 8:45 Modified Filler Surfaces in Polymeric Composites Used as Dental Restoratives. P. SHAH\*, Z. LAKEMAN, and J. STANSBURY (University of Colorado Boulder, USA)

**S0661** 9:00 Preliminary Elemental Analysis of Dental Materials before and after Incineration. T.S.Y. CHEUNG\* and T. BONSTEIN (University of Manitoba, Winnipeg, Canada)

**0662** 9:15 Heterogeneous Networks Formed by TEGDMA/Low-profile Additives: Kinetics of Conversion. C. PFEIFER\*, Z. SHELTON, and J. STANSBURY (University of Colorado Denver, School of Dental Medicine, Aurora, USA)

Seq#: 91 Friday, 5 March 2010, 8 a.m. - 9:30 a.m.  
Oral Session, Room 151B

**Dental Materials: Metal-based Materials - Nickel-Titanium and Titanium Alloys**

**Chairpersons: D. Berzins and S. Alapati**

**S0663** 8:00 SEM Comparison of As-received and Used GTX Rotary NiTi Instruments. J. LIU, W. BRANTLEY, J. NUSSTEIN, and S. ALAPATI\* (University of Illinois - Chicago, USA)

**0664** Paper Withdrawn.

**0665** 8:15 Effect of Thermocycling on Mechanical Properties of Copper-Nickel-Titanium Orthodontic Wires. D. BERZINS\* and H. ROBERTS (Marquette University, Milwaukee, WI, USA)

**0666** 8:30 Fabrication of Titanium Denture Frameworks with an Investment Coating Method. M. KOIKE\*, S. HUMMEL, J. BALL, K. MARTINEZ, L. GUO, and T. OKABE (Baylor College of Dentistry, Dallas, TX, USA)

**S0667** 8:45 Effects of Investment Materials on Mechanical Properties of Cast Titanium. K. MARTINEZ\*, M. KOIKE, and T. OKABE (Baylor College of Dentistry, Dallas, TX, USA)

**S0668** 9:00 Surface Energy of Titanium Biofunctionalized with Elastin-like Recombinant BioPolymers. M.A. BROOKS\*, C. APARICIO, E.C. COMBE, D.S. NEDRELOW, C. RODRIGUEZ-CABELLO, E. SALVAGNI, and J.A. PLANELL (University of Minnesota, USA)

9:15 Discussion.

Seq#: 92 Friday, 5 March 2010, 8 a.m. - 9:30 a.m.  
Oral Session, Room 154

**Education Research - Advances in Education Research**

**Chairpersons: J. Rugh and N. Estrella**

**0669** 8:00 Motivational Interviewing - Educating Parents of Special-needs Children. M.N. ESTRELLA\*, B.R. WILLIAMS, and M.R. INGLEHART (University of Michigan, Ann Arbor, USA)

**0670** 8:15 Initial LCS Learning Gains vs. Subsequent Pre-clinical Course Performance. M.E. McLEAN, S. GRAYDEN\*, M. FITZGERALD, E. MASLOWSKI, P. BAUER, and S. BAYNE (University of Michigan, Ann Arbor, USA)

**0671** 8:30 Correlation between Students' Technical Ability and Ability to Self-evaluate. S. AQUILINO\*, D. GRATTON, F. QIAN, and D. JOHNSEN (University of Iowa, Iowa City, USA)

**S0672** 8:45 Evaluation of the ICDAS e-Learning Program for Dental Student Education. C.A. GLEICH\*, J.L. KOLKER, C.M. KUMMET, D.V. DAWSON, G.V. DOUGLAS, and C. BERGERON (University of Iowa, Iowa City, USA)

**0673** 9:00 Assessing Outcomes of Research Methods Courses. J.D. RUGH\*, J.P. HATCH, and W.D. HENDRICKSON (University of Texas - San Antonio / Health Science Ctr., USA)

**0674** 9:15 Dentists' Participation in Charitable Care Post Community-based Clinical Experiences. M.R. McQUISTAN\* and R.A. KUTHY (University of Iowa, Iowa City, USA)

Seq#: 93 Friday, 5 March 2010, 8 a.m. - 9:30 a.m.  
Oral Session, Room 144AB

**Microbiology / Immunology and Infection Control - Oral Microbiology I**

**Chairpersons: J. Izard and G. Xie**

**0675** 8:00 The Human Oral Microbiome Database Curated Genomic Library. J. IZARD\*, O.V. BARANOVA, T. CHEN, W. WADE, and F.E. DEWHIRST (The Forsyth Institute, Boston, MA, USA)

**S0676** Paper Withdrawn.

**0677** 8:15 Oralgen: a Comprehensive Workbench for "omics" Analyses of Oral Pathogens. G. XIE\* and P. CHAIN (Los Alamos National Laboratory, NM, USA)

**0678** 8:30 Co-adhesion Partners for *Actinomyces naeslundii* from Dental Biofilm Microbiota. S. RUHL\*, A. EIDT, U. REISCHL, and J.O. CISAR (Department of Oral Biology, School of Dental Medicine, State University of New York, Buffalo, USA)

**S0679** 8:45 Oral Mucosal Lipids: Antibacterial Activity and Induction of Ultrastructural Damage. C. BRATT\*, D. DAWSON, D. DRAKE, K. BROGDEN, and P. WERTZ (University of Iowa, Iowa City, USA)

**0680** 9:00 Rechargeable N-Halamine Antimicrobial Dental Unit Waterline Tubing. N. PORTEOUS\*, J. LUO, E.K. ESKEW, K.L. VOGT, and Y. SUN (University of Texas - San Antonio / Health Science Ctr., USA)

9:15 Discussion.



**Seq#: 94 Friday, 5 March 2010, 8 a.m. - 9:30 a.m.**  
**Oral Session, Room 143AB**

**Mineralized Tissue - Keynote Address and Cementogenesis and Mineralization**

**Chairpersons: Y. Yamakoshi and D. Liu**

**S0681 8:00** Keynote Address: Mechanistic Studies on Protein Inhibitors of Crystal Formation. G. HUNTER\*, J. O'YOUNG, M. KARTTUNEN, and H. GOLDBERG (*University of Western Ontario, London, Canada*)

**S0682 8:30** Pyrophosphate Controls Acellular Cementum Formation. B.L. FOSTER\*, K.J. NAGATOMO, K.A. TOMPKINS, H. FONG, D. MATSA-DUNN, E.Y. CHU, J. WADE, R.B. RUTHERFORD, C. GUENTHER, D. KINGSLEY, S. NARISAWA, J.L. MILLÁN, and M.J. SOMERMAN (*University of Washington School of Dentistry, Seattle, USA*)

**S0683 8:45** Osterix (Ox) is Vital for Cementogenesis. A. WENSEL\*, Z. CAO, Y. XIE, X. ZHOU, B.D. CROMBRUGGHE, M.J. SOMERMAN, and J.Q. FENG (*Baylor College of Dentistry, Dallas, TX, USA*)

**S0684 9:00** Identification of Subchondral Bone Defects in a TMJ-OA Mouse Model. M. EMBREE\*, M. ONO, D. WALKER, T. KILTS, J. MIKHAIL, Y. BI, and M. YOUNG (*Medical University of South Carolina, Charleston, USA*)

**S0685 9:15** Acceleration of Orthodontic Tooth Movement by Mechanical Vibration. D. LIU\* (*Marquette University School of Dentistry, Milwaukee, WI, USA*)

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**Seq#: 95 Friday, 5 March 2010, 8 a.m. - 9:30 a.m.**  
**Oral Session, Room 156**

**Network for Practice-based Research - Issues in Primary Care Research**

**Chairperson: C. Demko**

**S0686 8:00** Reliability of Photographic Documentation for the Purpose of Practice-based Research. J. DE LA FUENTE\*, J. HATCH, and M. TSUTSUI (*University of Texas - San Antonio / Health Science Ctr., USA*)

**S0687 8:15** Unique Design Challenges in Practice-based Clinical Trial on Pulp Capping. B. LEROUX\*, T. HILTON, L. MANCL, J. FERRACANE, K. ORTLAD, and NORTHWEST PRECEDENT (*University of Washington, Seattle, USA*)

**S0688 8:30** Oral Cancer Examinations in the Dental Office: a CROWN Study. C. DEMKO\* and S. WOTMAN (*Case School of Dental Medicine, Cleveland, OH, USA*)

8:45 Discussion.

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**Seq#: 96 Friday, 5 March 2010, 8 a.m. - 9:30 a.m.**  
**Oral Session, Room 150A**

**Periodontal Research - Diagnosis / Epidemiology - Periodontal Diseases / General Health Interrelations**

**Chairpersons: N. Bissada and L. Bahl-Palomo**

**S0689 8:00** Association among Periodontal Disease, Bacterial Vaginosis, and Sexual Behaviors. E. ZABOR\*, M. KLEBANOFF, K. YU, J. ZHANG, T. NANSEL, M. JEFFCOAT, W. ANDREWS, and J. SCHWEBKE (*University of Minnesota, Minneapolis, USA*)

**S0690 8:15** Risk of Preterm Birth is Reduced with Successful Periodontal Treatment. M. JEFFCOAT\*, S. PARRY, M. SAMMEL, and G. MACONES (*University of Pennsylvania, Philadelphia, USA*)

**S0691 8:30** Periodontitis and Prostate Specific Antigen Levels in Chronic Prostatitis Patients. N. JOSHI\*, N.F. BISSADA, D. BODNER, G. MacLENNAN, S. NARENDHAN, R. JUREVIC, and R. SKILLICORN (*Case Western Reserve University, Cleveland, OH, USA*)

**S0692 8:45** Periodontal Effects of Long-term Bisphosphonate Therapy. M. BUENCAMINO, H. THACKER, and L. BAHL-PALOMO\* (*Case Western Reserve University, Cleveland, OH, USA*)

**S0693 9:00** Physical Activity and Periodontal Disease in Children with Diabetes. A. McTIER\*, A.T. MERCHANT, M. JETHWANI, Y.-H. CHOI, and E. MAYER-DAVIS (*Department of Nutrition, Gillings School of Global Public Health, University of North Carolina, Chapel Hill, USA*)

**S0694 9:15** Periodontal Disease and Incident Rheumatoid Arthritis. R. DEMMER\*, J. MOLITOR, D. JACOBS, Jr., and B. MICHALOWICZ (*University of Minnesota, Minneapolis, USA*)

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**Seq#: 97 Friday, 5 March 2010, 8 a.m. - 9:30 a.m.**  
**Oral Session, Room 149**

**Salivary Research - Keynote Address and Salivary Gland Development II**

**Chairpersons: M. Larsen and B. Baum**

**S0695 8:00** Keynote Address: Sensitivity of the Salivary Glands to Radiation. K. LIMESAND\* (*University of Arizona, Tucson, USA*)

**S0696 8:30** Prevention of Radiation-induced Salivary Hypofunction following hKGF Gene Delivery. C. ZHENG\*, A.P. COTRIM, A. ROWZEE, A. SOWERS, J.B. MITCHELL, and B.J. BAUM (*National Institute of Dental and Craniofacial Research, Bethesda, MD, USA*)

**S0697 8:45** Aquaporin-5 Expression during Mouse Submandibular Gland (SMG) Development. A. KHATRI, E. ABATE, A.G. MENON, and A. HAND\* (*University of Connecticut Health Center, Farmington, USA*)

**S0698 9:00** Parasympathetic Innervation Influences Epithelial Progenitor Cell Fate during Salivary Development. S. KNOX\*, X. REED, I. LOMBAERT, and M. HOFFMAN (*NIDCR, Bethesda, MD, USA*)

**S0699 9:15** Matrigel Improves the Functional Properties of Human Salivary Gland Cells. O.M. MARIA\*, O. MARIA, Y. LIU, S. KOMAROVA, and S. TRAN (*McGill University, Montreal, Canada*)



**Seq#: 190** Friday, 5 March 2010, 8 a.m. - 9:30 a.m.  
Oral Session, Room 140B

**Late-breaking News I**

**Chairpersons: S. Tetradis and R. Silva**

**1510** 8:00 Periodontitis and Bisphosphonates Induce Osteonecrosis of the Jaws in Rats. T. AGHALOO, B. KANG, E. SUNG, M. SHOFF, M. RONCONI, J. GOTCHER, O. BEZOUGLAIA, S. DRY, and S. TETRADIS\* (*University of California - Los Angeles, USA*)

**1511** 8:15 Trabecular Metal Dental Implants in an Animal Model. D.-G. KIM\*, S.S. HUJA, P.E. LARSEN, K.S. KREUTER, H.-H. CHIEN, W. JOO, and H.B. WEN (*Ohio State University, Columbus, USA*)

**1512** 8:30 PAMM: a Novel Antioxidant Enzyme Induced by Oxidative Stress. R. SILVA\*, Y. XU, L. MORSE, P. STASHENKO, and R. BATTAGLINO (*University of Sao Paulo - School of Dentistry of Ribeirão Preto, Ribeirão Preto, Brazil*)

**1513** 8:45 Treponema Denticola PrcB Lipoprotein Interactions with PrcA-PrpP "dentilisin" Complex. V. GODOVIKOVA\*, M.P. GOETTING-MINESKY, and J.C. FENNO (*University of Michigan, Ann Arbor, USA*)  
9:00 Discussion.

**Seq#: 98** Friday, 5 March 2010, 9:45 a.m. - 10:30 a.m.  
Plenary, Room 146AB

**Plenary Session - Cell and Tissue Dynamics in Development and Regeneration**

**0700** 9:45 Cell and Tissue Dynamics in Development and Regeneration. K. YAMADA\* (*National Institute of Dental and Craniofacial Research, Bethesda, MD, USA*)

**Seq#: 99** Friday, 5 March 2010, 10:45 a.m. - 12:15 p.m.  
Hands-on Workshop, Room 143C

**Hands-on Workshop - From "Good Idea" to Grant Award: Transforming Behavioral and Social Research Ideas into Innovative Funded Grants**

**Chairperson: M. W. Riddle**

**0701** 10:45 From "Good Idea" to Grant Award: Transforming Behavioral and Social Research Ideas into Innovative Funded Grants. M.W. RIDDLE\* (*National Institute of Dental and Craniofacial Research, NIH, Bethesda, MD, USA*)

**Seq#: 100** Friday, 5 March 2010, 10:45 a.m. - 12:15 p.m.  
Symposium, Room 147A

**Symposium - Changes in Saliva Composition with Age**

**Chairperson: O. Baker**

**0702** 10:45 Aging and Dry Mouth. A.P. COTRIM\* (*NIDCR, NIH, Bethesda, MD, USA*)

11:10 Aging and Salivary Cytokine Concentrations as Predictors of Whole Saliva Flow Rates. C.F. STRECKFUS\* (*University of Texas - Houston/Health Science Center, USA*)

11:35 Minor Salivary Gland Secretion in the Elderly. W.A. BRETZ\* (*New York University, USA*)

Noon Discussion.

**Seq#: 101** Friday, 5 March 2010, 10:45 a.m. - 12:15 p.m.  
Symposium, Room 147B

**Symposium - The Promise of Next-generation Sequencing Technologies for Oral Microbiome Research**

**Chairperson: P. Chain**

**0703** 10:45 Next Generation 16S rDNA Sequencing and the Oral Microbiome. A. GRIFFEN\* (*The Ohio State University, Columbus, USA*)

11:10 Metagenomic Analysis of the Human Oral Viral Microbiome. D.E. FOUTS\* (*J. Craig Venter Institute, Rockville, MD, USA*)

11:35 Oralgen2.0 and Next-generation Sequencing Applications. P. CHAIN\* (*Los Alamos National Laboratory, NM, USA*)

Noon Discussion.

**Seq#: 102** Friday, 5 March 2010, 10:45 a.m. - 12:15 p.m.  
Oral Session, Room 140B

**Behavioral, Epidemiologic and Health Services Research - Oral Epidemiology Methods**

**Chairpersons: M. Macek and S. Reed**

**0704** 10:45 Analysis of OHRQOL of Hemodialysis Patients Using a Structural Equation Model (SEM). E. GUZELDEMIR\* and B. TASDELEN (*Baskent University, Faculty of Dentistry, Department of Periodontology, Istanbul, Turkey*)

**0705** 11:00 Qualitative Comparison of Three Innovations in Dental Hygiene Education. J. DAVIS and A. KOERBER\* (*University of Illinois - Chicago, USA*)

**0706** 11:15 Genomic Prognostic Modeling of Nicotine Dependence. R. RAMONI\*, J. DREYFUSS, L.J. BIERUT, and M. RAMONI (*Harvard University, Boston, MA, USA*)

**0707** 11:30 Teledentistry Caries Prevalence Estimates from a Truncated Imaging Protocol in Preschoolers. S.A. GANSKY\* and CARIES OUTCOME WORKGROUP OF NIDCR ECC COLLABORATIVE CENTERS (*University of California - San Francisco, USA*)

**0708** 11:45 Caries, Fluorosis, and Amounts of Dentifrice used in Childhood. J. WARREN\*, B. BROFFITT, and S. LEVY (*University of Iowa, Iowa City, USA*)

Noon Discussion.

**Seq#: 103** Friday, 5 March 2010, 10:45 a.m. - 12:15 p.m.  
Oral Session, Room 143AB

**Craniofacial Biology - Developmental Mechanisms of Craniofacial Structures**

**Chairpersons: M. Kern and H. Nah**

**S0709** 10:45 Craniofacial Bone Density and Dentin Defects in Dlx3 Mutant Mice. P. GAUTAM\*, S. CHOI, G. EMGUSHOVA, and T.C. HART (*NIDCR/National Institutes of Health, Bethesda, MD, USA*)

**S0710** 11:00 Characterization of FOXE1 Expression during Craniofacial Development of Mouse Embryos. J.T. ROGERS\*, A.C. LIDRAL, S.A. BULLARD, and S.E. BLOOMBERG (*University of Iowa, Iowa City, USA*)



**0711** 11:15 TGF- $\beta$  Signaling Regulates Tongue Muscle Development through Tissue-Tissue Interaction. J. WU\*, R. HOSOKAWA, M. HTUT, and Y. CHAI (*University of Southern California, Los Angeles, USA*)

**S0712** 11:30 Eph/ephrin Signaling in Palate Fusion. I. KHOBAHY\*, S. SAN MIGUEL, M. SERRANO, M. MILLER, K. SVOBODA, and M.D. BENSON (*Baylor College of Dentistry, Dallas, TX, USA*)

**0713** 11:45 The Role of Prrx Transcription Factors in Salivary Gland Development. M. KERN\*, D. WEST, M.A. BAYBO, and C. KERN (*Medical University of South Carolina, Charleston, USA*)

**S0714** Noon Fate of Hertwig's Epithelial Root Sheath in NFIC(-/-) Mouse Molars. D. KHORSHAD\*, L. CHEN, R. GRONOSTAJSKI, and M. ZEICHNER-DAVID (*University of Southern California, Los Angeles, USA*)

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**Seq#: 104** Friday, 5 March 2010, 10:45 a.m. - 12:15 p.m.  
Oral Session, Room 149

**Dental Anesthesiology Research - Dental Anesthesiology Research**

**Chairpersons: I. Corbett and N. Johnson**

**S0715** 10:45 Efficacy of Local Infiltration Anesthesia in Dentistry: a Systematic Review. R. BRANDT\*, N.J. McDONALD, P.F. ANDERSON, M. MacEACHERN, M. SHLAFFER, W. SOHN, and M.C. PETERS (*University of Michigan, Ann Arbor, USA*)

**0716** 11:05 4% Articaine vs. 2% Lidocaine for Pulpitic Maxillary Teeth Anesthesia. J.G. MEECHAN\*, M.D. KANAA, and J.M. WHITWORTH (*Newcastle University, Newcastle upon Tyne, United Kingdom*)

**S0717** 11:25 Intranasal Lidocaine Blocks Orofacial Pain with Few Behavioral Side-effects. N. JOHNSON\*, N. JARNOT, B. HERMES, R. THOMPSON, D. BEREITER, and W. FREY, II (*University of Minnesota, Minneapolis, USA*)

**0718** 11:45 Survey of OraVerse In-practice Use for Soft-tissue Anesthesia Reversal. T.R. SAUNDERS, G. PSALTIS, J.F. WESTON, R.R. YANASE, S. ROGY, and R. GHALIE\* (*Novalar Pharmaceuticals, San Diego, CA, USA*)

12:05 Discussion.

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**Seq#: 105** Friday, 5 March 2010, 10:45 a.m. - 12:15 p.m.  
Oral Session, Room 150B

**Dental Materials: Instruments and Equipment - Keynote Address and Curing Lamps**

**Chairpersons: R. Price and C. Felix**

**0719** 10:45 Keynote Address: Near-IR Imaging of Dental Decay. D. FRIED\* (*University of California - San Francisco, USA*)

**0720** 11:15 Total Energy Delivered to a Restoration Under Simulated Clinical Conditions. M. McLEOD\*, R.B. PRICE, and C.M. FELIX (*Dalhousie University, Halifax, NS, Canada*)

**0721** 11:30 Light Beam Profiles from Four Curing Lights. R.B. PRICE and C.M. FELIX\* (*Dalhousie University, Halifax, NS, Canada*)

**0722** 11:45 Reproducibility of an Intra-oral Light Energy Measurement Device. C. LEE\*, R.B. PRICE, and C.M. FELIX (*Dalhousie University, Halifax, NS, Canada*)

**0723** Noon Accuracy of an Energy Measurement System to Measure Curing Lights. R.B. PRICE\* and C.M. FELIX (*Dalhousie University, Halifax, NS, Canada*)

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**Seq#: 106** Friday, 5 March 2010, 10:45 a.m. - 12:15 p.m.  
Oral Session, Room 151A

**Dental Materials: Color and Appearance (Esthetics) - Optical Properties: Friend or Foe**

**Chairpersons: W. Johnston and M. Beatty**

**0724** 10:45 Environmental Conditions Affecting Color Stability in Facial Elastomers. M.W. BEATTY\*, G.K. MAHANNA, K.M. LEWIS, T. ANDERSON, and B. SIMETICH (*Nebraska-Western Iowa Health Care System, VA Medical Center, University of Nebraska Medical Center College of Dentistry, Lincoln, USA*)

**0725** 11:00 Translucency Estimations for Thick-pigmented Maxillofacial Elastomer. X. HU and W.M. JOHNSTON\* (*The Ohio State University, Columbus, USA*)

**S0726** 11:15 Influence of Photoinitiator Type and Concentration on Translucency of Composites. J. LEADFORD\*, J. BOULDEN, K. ESQUIBEL, B. LEIGHTON, K. IDA, A. DOCKTOR, Z. SHELTON, M. TRUJILLO-LEMON, and C. BRACHO-TROCONIS (*Septodont, Confi Dental Division, Louisville, CO, USA*)

**S0727** 11:30 Staining Resistance and Surface Topography of Novel Esthetic Materials. S. NAORUNGROJ\*, C.-C. KO, and T. DONOVAN (*Department of Operative Dentistry, School of Dentistry, UNC, Chapel Hill, USA*)

**S0728** 11:45 Effectiveness of a 2-step Polishing System for Composite Restorations. H. POCATERRA\*, P. YAMAN, J. DENNISON, and G. NEIVA (*University of Michigan, Ann Arbor, USA*)

**0729** Paper Withdrawn.  
Noon Discussion.

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**Seq#: 107** Friday, 5 March 2010, 10:45 a.m. - 12:15 p.m.  
Oral Session, Room 151B

**Dental Materials: Adhesion - Bond Strength Testing and Mechanisms - Keynote Address and Dentin Bonding Mechanisms**

**Chairpersons: F. Tay and S. Duarte**

**0730** 10:45 Keynote Address: Revisiting Microtensile Bond Strength Testing Methodology. S. ARMSTRONG\* (*University of Iowa, Iowa City, USA*)

**S0731** 11:15 Effect of Chlorhexidine Application in Dentin Bond Strength. E. LEE\*, E. DOHERTY, E. KAMINSKY, M. FINKELMAN, and G. KUGEL (*Tufts University, Boston, MA, USA*)

**0732** 11:30 Implication of Ethanol Wet Bonding in *in vitro* Hybrid Layer Remineralization. J. KIM, L. GU, Y.K. KIM, L. BRESCHI, S.C. CHOI, K.K. CHOI, D.H. PASHLEY, and F.R. TAY\* (*Medical College of Georgia, Augusta, USA*)



- 0733** 11:45 Chlorhexidine Binding to Mineralized vs. Demineralized Dentin. J. KIM, T. UCHIYAMA, M. CARRILHO, K. AGEE, A. MAZZONI, L. BRESCHI, R. CARVALHO, L. TJÄDERHANE, A. TEZVERGIL-MUTLUAY, F. TAY, and D. PASHLEY\* (*Medical College of Georgia, Augusta, USA*)
- S0734** Noon Ethanol-Wet Bonding: Bond Strength to Over-etched Dentin. J. GOODSON\*, B. ANDERSON, S. ARMSTRONG, F. QIAN, D. PASHLEY, and S. GERALDELI (*University of Iowa, Iowa City, USA*)

**Seq#: 108 Friday, 5 March 2010, 10:45 a.m. - 12:15 p.m.**  
**Oral Session, Room 156**

**Implantology Research - Bone Regeneration**

**Chairpersons: D. Diamond and B. Case**

- 0735** 10:45 Comparison of CT Scans' and Digital Periapical Radiographs' Ridge-Height Measurements. R. JULURI\*, M. MORAN, and A. KHOCHT (*Meharry Medical College, Nashville, TN, USA*)
- S0736** 11:00 Mandibular Canal Computed Tomographic Analysis for Donor Ramus Block Graft. D. DIAMOND\*, N. BISSADA, J. BECKER, M. LANDERS, and A. PANNEERSELVAM (*Case Western Reserve University, Cleveland, OH, USA*)
- S0737** 11:15 Growth Factors and Biomimetic Scaffolds on Cell Responses *in vitro*. B. CASE\*, J.-H. KIM, D. YOUNG, and Y. YANG (*University of Texas - Houston/Health Science Center, USA*)
- 0738** 11:30 Exposure to Bioactive Glass Ionic Dissolution Products Enhances hPDLF Osteogenesis. V. VARANASI\*, J. OWYOUNG, S.J. MARSHALL, P. LOOMER, E. SAIZ, and G.W. MARSHALL (*University of California - San Francisco, USA*)
- S0739** 11:45 Biomechanical and Histomorphometric Evaluation of Titanium Implants Augmented with rhBMP-2. A. ARORA\*, J.M. TOTH, M. WANG, and C. PATEL (*Marquette University, Milwaukee, WI, USA*)
- S0740** Noon Acceleration of Human Oral Osseous Regeneration Using Bone Repair Cells. D. KAIGLER, G. PAGNI\*, A. GALLORO, C.-H. PARK, R.L. BARTEL, and W.V. GIANNOBILE (*University of Michigan, Ann Arbor, USA*)

**Seq#: 109 Friday, 5 March 2010, 10:45 a.m. - 12:15 p.m.**  
**Oral Session, Room 144AB**

**Microbiology / Immunology and Infection Control - Immunology**

**Chairpersons: G. Diamond and J. Ebersole**

- 0741** 10:45 An Antimicrobial Peptide Mimetic Exhibits Anti-inflammatory Activity. G. DIAMOND\*, J. HUA, and R. SCOTT (*UMDNJ-New Jersey Dental School, Newark, USA*)
- 0742** 11:00 Model of Mucosal Inflammation in Inflammatory Bowel Disease and Periodontitis. H.S. OZ\* and J. EBERSOLE (*University of Kentucky, Lexington, USA*)
- S0743** 11:15 Tobacco Alters *P. gingivalis* Surface Ultrastructure and Induces TLR2 Hyposensitivity. J. BAGAITKAR\*, D.R. DEMUTH, C.A. DAEP, D.E. RENAUD, D.L. PIERCE, and D.A. SCOTT (*University of Louisville, KY, USA*)

- S0744** 11:30 Rapamycin and T<sub>REG</sub> Effects on Immunity to *Aggregatibacter actinomycetemcomitans* OMP34. A. BENAVIDES\* and E. KRAIG (*University of Texas - San Antonio / Health Science Ctr., USA*)
- S0745** 11:45 MicroRNA Regulation of ASC in Immunologically Active Human Monocytes. A. CORSARO\*, K. PAULEY, and S. CHA (*University of Florida, Gainesville, USA*)
- 0746** Noon Polybacterial Challenge: Cytokine/Chemokine Production by Macrophages and Dendritic Cells. J. EBERSOLE\*, C. HUANG, Y. ALIMOVA, and S. STRANGE (*University of Kentucky, Lexington, USA*)

**Seq#: 110 Friday, 5 March 2010, 10:45 a.m. - 12:15 p.m.**  
**Oral Session, Room 140A**

**Oral & Maxillofacial Surgery - Oral and Maxillofacial Surgery**

**Chairpersons: C. Phillips and P. Dechow**

- 0747** 10:45 Patient Satisfaction following Orthognathic Surgery: a Multi-dimensional Evaluation. C. PHILLIPS\*, A. SAFAVI, and L. LONG (*University of North Carolina -, Chapel Hill, USA*)
- S0748** 11:00 Characterization of Satellite Cells from Rats and Expanded in Culture. Y.J. SHIN\*, N. TYHOVYCH, K. PARK, S. HALEY, and L. TERRACIO (*New York University, USA*)
- 0749** 11:15 Histological Evaluation of New Carrier System for rhBMP-2. M. LU\*, J. HONG, A. HERFORD, and P. BOYNE (*Loma Linda University School of Dentistry, CA, USA*)
- S0750** 11:30 Cannabinoids May Reduce Oral Squamous Cell Carcinoma Proliferation and Pain. N. SAGHAFI\*, D. LAM, and B. SCHMIDT (*University of California - San Francisco, USA*)
- 11:45 Discussion.

**Seq#: 111 Friday, 5 March 2010, 10:45 a.m. - 12:15 p.m.**  
**Oral Session, Room 150A**

**Oral Medicine & Pathology - Keynote Address and Oral Cancer II: Invasion and Progression**

**Chairpersons: N. Rhodus and F. Alawi**

- 0751** 10:45 Keynote Address: Molecular Regulation of Oral Cancer Invasion and Chemoresistance. C.-Y. WANG\* (*UCLA School of Dentistry, Los Angeles, CA, USA*)
- 0752** 11:15 Up-regulation of Dyskerin in Oral Keratinocytes Occurs Independently of Telomerase. P. LIN and F. ALAWI\* (*University of Pennsylvania School of Dental Medicine, Philadelphia, USA*)
- S0753** 11:30 Epithelial-to-Endothelial Transition: an Epithelial Phenotypic Modulation Facilitating Oral-Squamous-Cell-Carcinoma Progression. M. TONG\*, L. HE, B. HAN, A. HOLPUCH, B. LLOYD, P. PEI, and S.R. MALLERY (*The Ohio State University, Columbus, USA*)
- 0754** 11:45 Hypoxia Enhances HNSCC Cell Motility through a HIF-2/EGFR-driven Signaling Axis. X. WANG\* and A. SCHNEIDER (*University of Maryland Dental School, Baltimore, USA*)



**S0755** Noon Normalization of Epithelial Precancerous Tissues through Modulation of Tumor-Microenvironment Interactions. A. ALT-HOLLAND, H. PARK\*, Y. SZWEC-LEVIN, S.D. NGUYEN, A. SOWALSKY, L.A. FEIG, and J.A. GARLICK (Tufts University, Boston, MA, USA)

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**Seq#: 112** Friday, 5 March 2010, 10:45 a.m. - 12:15 p.m.  
Oral Session, Room 154

**Periodontal Research - Pathogenesis - Pathogenic Mechanisms**

**Chairpersons: M. Levine and P. Temprow**

**0756** 10:45 Nasal Immunization with Recombinant Lysine Decarboxylase Inhibits Gingivitis in Beagles. J. PETERS, P.L. DEMARS, L.M. COLLINS, J.A. STONER, J. HADDOCK, and M. LEVINE\* (University of Oklahoma HSC, Oklahoma City, USA)

**0757** 11:00 Systemic Responses and Pregnancy Outcomes in Baboons with Periodontitis. M. STEFFEN\*, D. CAPPELLI, S. HOLT, and J. EBERSOLE (University of Kentucky, Lexington, USA)

**S0758** 11:15 Macrophage iPLA2 Levels in Diabetes with or without Periodontal Disease. J. EKSTEIN\*, A. KANTARCI, H. HASTURK, S. AYILAVARAPU, O. TURKOGLU, T. IWATA, and T.E. VAN DYKE (Boston University, MA, USA)

**S0759** 11:30 Sperm-associated Antigen 4 (Spag4)—A Novel Anti-apoptotic Mediator in Periodontitis. M. KEBSCHULL\*, J. KEBSCHULL, R.T. DEMMER, A. POLLREISZ, T.A. SEIMON, J. HEIDEMANN, N. WERNER, S. JEPSSEN, J. DESCHNER, and P.N. PAPAPANOU (Columbia University College of Dental Medicine, New York, NY, USA)

**0760** 11:45 Apoptotic Biomarkers in Chronic Periodontitis. S. HALUBAI\*, H. ABUHUSSEIN, A. MMENEGH, H. BOURI, C. KLAUSNER, M. LAYHER, P. KAMARAJAN, L. ZHAN, W.V. GIANNOBILE, and Y. KAPILA (University of Michigan, Ann Arbor, USA)

**0761** Noon Race and Gender Associations in Smoking-related Periodontitis Severity. P. TEMPRO\*, M. AL SABBAGH, M. STEFFEN, and E. BADGER (University of Kentucky, Lexington, USA)

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**Seq#: 113** Friday, 5 March 2010, 2 p.m. - 3:15 p.m.  
Poster Discussion Session, Room 145A

**Oral Health Research - Prevention and Treatment of Oral Diseases I (PDS)**

**Chairpersons: P. Kanjirath and M. Rothen**

2:00 Poster Viewing Period.

**0762** 2:25 Diabetes and Oral Health—the Role of Health Behavior. P.P. KANJIRATH\*, S.E. KIM, and M. INGLEHART (University of Michigan, Ann Arbor, USA)

**S0763** 2:32 A Comparison of Oral Health Behaviors of Professional Students. M. FERRARO\* and A. VIEIRA (University of Pittsburgh, PA, USA)

**0764** 2:39 Validation of the German Version of the Child Perceptions Questionnaire. K. BEKES\*, H.-G. SCHALLER, and C. HIRSCH (Martin-Luther-University Halle-Wittenberg, Germany)

**0765** 2:46 Toothbrushing Behaviors and Caries Prevalence in Northwest PRECEDENT Patients. M. ROTHEN\*, L. MANCL, B. LEROUX, D. MARSHALL, J. BERG, and NORTHWEST PRECEDENT (University of Washington, Seattle, USA)

**0766** 2:53 Abrasivity of Products Containing 8% Arginine and Calcium Carbonate. J. HEFFERREN\*, N. LI, II, and E. ERSEN (Department of Pharmaceutical Chemistry, Lawrence, KS, USA)

**S0767** 3:00 Home Environment in Oral Health Outcomes of Special-needs Patients. G. TENTINDO\*, J. MORGAN, and P. STARK (Tufts University, Boston, MA, USA)

**0768** 3:07 Self-reported Medical Status in a Dental Patient Population. M. GUNGOR HATİPOĞLU\*, H. HATİPOĞLU, and G. PEKKAN (Dumlupınar University, Kutahya, Turkey)

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**Seq#: 114** Friday, 5 March 2010, 2 p.m. - 3:15 p.m.  
Poster Session, Exhibit Hall D

**Pulp Biology & Regeneration Research - Pulp Biology & Regeneration Research I**

**S0769** Cigarette Smoke Condensate Affects Repairing Ability of Human Pulp Fibroblasts. B. LABLONDE\*, N. SANTOSH, M. PATEL, D. ARIF, B. SARANJAMI, N. WEBSTER, L.J. WINDSOR, and F. SONG (Indiana University School of Dentistry, Indianapolis, USA)

**S0770** A New Isoform of Numb in the Dental Papilla. H. LI\*, J. HAO, Y. SONG, C. EVANS, and A. GEORGE (University of Illinois - Chicago, USA)

**S0771** BMP-2/-3 Differentially Regulate Pulp Mineralization in Radicular Dentin Dysplasia. M. WILSON\*, Y. WU, A. ACEVEDO, J. DONG, and M. MacDOUGALL (University of Alabama, Birmingham, USA) [2009 AADR Student Research Fellowship Winner]

**0772** Pulpotomy of Human Primary Molars with Formocresol and Portland Cement. T.M. OLIVEIRA\*, V.T. SAKAI, A.B.S. MORETTI, N. LOURENÇO-NETO, M.A.A.M. MACHADO, S.M.B. SILVA, C.F. SANTOS, and R.C.C. ABDO (Bauru Dental School University of São Paulo, Brazil)

**S0773** Strategies to Protect DPSCs and Augment Regeneration of Pulpal Tissue. A. ARASTEH\*, H. ARASTEH, and H.C.H. TSENG (University of California - Los Angeles, USA)

**S0774** Electrospun Nanofibrous Scaffolds for Dental Pulp Bioengineering. K. KANG\*, V. THOMAS, M. WILSON, O. MAMAEVA, V. VOHRA, and M. MacDOUGALL (University of Alabama at Birmingham, USA)

**0775** Prefabricated Three-dimensional Dental Epithelial-Mesenchymal Model for Tooth Regeneration. W. ZHANG\* and P.C. YELICK (Tufts University, Boston, MA, USA)

**0776** Umbilical Cord Stem Cell Seeding on Fast-dissolution Calcium Phosphate Bone Cements. H.H.K. XU\*, L. ZHAO, M. DETAMORE, S. TAKAGI, and L. CHOW (University of Maryland Dental School, Baltimore, USA)

**S0777** Osteogenic Differentiation and Mineralization via Umbilical Cord Stem Cell/Calcium Phosphate Constructs. L. ZHAO\*, M. WEIR, and H.H.K. XU (University of Maryland Dental School, Baltimore, USA)

**0778** Change in Mass of Endodontic Sealers Cured in Endodontic Irrigants. B. RASIMICK\*, J. WAN, B. MUSIKANT, and A. DEUTSCH (Essential Dental Systems, South Hackensack, NJ, USA)



**Seq#: 115 Friday, 5 March 2010, 2 p.m. - 3:15 p.m.**  
**Poster Session, Exhibit Hall D**

**Dental Materials: Adhesion - Bond Strength Testing and Mechanisms - Bond Strength Measurements II**

- 0779** Immediate Bond Strengths of Total and Self-etch Adhesives. R. RITTER, C. RAMSEY\*, and J.M. POWERS (*Private Practice, Jupiter, FL, USA*)
- 0780** Effectiveness of Self-adhesive Cements. G. GREITZER\*, J. KANCA, and E. KRAUSE (*Tarrytown, NY, USA*)
- 0781** Shear Bond Strength Evaluation of Resin-modified Glass-ionomer Cements. M. PAPPAS, M.T. PULIDO, and S.S. AZER\* (*The Ohio State University, Columbus, USA*)
- 0782** Fluoride Release and Bond Strength to Enamel and Dentin. C. PINTO, M. OLIVEIRA, A. PAES LEME, E. SOUZA, and M. GIANNINI\* (*State University of Campinas, Piracicaba, Brazil*)
- S0783** Bond Strength of Restorative Materials following Surface Conditioning for Repair. T. REDLINGER\*, B. FALAMARZI, and F. SALAMA (*Creighton University, Omaha, NE, USA*)
- S0784** Microtensile Strength and Hydrolytic Stability of Three Self-etching Bonding Agents. C. JOHNSON\*, J.-F. ZHANG, G. GUO, R. SERGENT, and X. XU (*Louisiana State University, New Orleans, USA*)
- S0785** Evaluation of Bond Strength of Composites and Adhesives on Enamel. T. WALKER, J. HEATON\*, P. STARK, and G. KUGEL (*Tufts University, Boston, MA, USA*)
- S0786** Effects of Different Resin-Adhesive Combinations on Shear Bond Strength. S. HOELZ\*, M. CAMPILLO, E.L. DAVIS, and C. SABATINI (*State University of New York - Buffalo, USA*)
- S0787** Effect of Desensitizing Toothpaste on Dentin Bond Strength. G. CANARES\*, M. PINES, T. SALGADO, and M. WOLFF (*New York University College of Dentistry, USA*)
- S0788** Fracture Resistance of Laser-welded Orthodontic Wires. G. STIGALL\*, E. WATANABE, W. ELSHAHAWY, and I. WATANABE (*Baylor College of Dentistry, Dallas, TX, USA*)
- S0789** Comparison of Shear Bond Strength of All-in-One Adhesive and Self-adhesive Flowable Resin. M. HARSONO, R. PERRY, T. WALKER\*, J. TOWERS, and G. KUGEL (*Tufts University, Boston, MA, USA*)
- 0790** Bond Strength Testing of Total-etch Adhesives on Enamel and Dentin. R. PERRY, K. KUGEL, M. FINKELMAN\*, and G. KUGEL (*Tufts University, Boston, MA, USA*)
- 0791** Deflection Load Characteristics of Laser-welded Orthodontic Wires. E. WATANABE\*, G. STIGALL, W. ELSHAHAWY, and I. WATANABE (*Baylor College of Dentistry, Dallas, TX, USA*)
- S0792** Effect of Calcium/Phosphate Paste on Dentin and Enamel Bond Strengths. W. DUONG\* and M.S. WOLFF (*New York University College of Dentistry, USA*)
- 0793** Two-year Bond Strengths of "All-in-One" Adhesives to Dentin. R. WALTER\* and E. SWIFT (*University of North Carolina, Chapel Hill, USA*)
- 0794** Bond Strength Comparison among Three Testing Machines. E. KAMINSKY, M. HARSONO, E. DOHERTY\*, M. FINKELMAN, R. PERRY, and G. KUGEL (*Tufts University, Boston, MA, USA*)
- S0795** SBS Value with Different Load-cell Capacity on Enamel and Dentin. M. HARSONO\*, R.D. PERRY, J. TOWERS, P. STARK, and G. KUGEL (*Tufts University, Boston, MA, USA*)

**0796** Effect of Resin Coating on the Ultimate Strength of Glass Ionomers. M. SHINOHARA\*, A. ANTUNES, J. PADOVANO, and A.K. BEDRAN-RUSSO (*Amazonas State University and Uninorte - Laureate International Universities, Manaus Amazonas, Brazil*)

**Seq#: 116 Friday, 5 March 2010, 2 p.m. - 3:15 p.m.**  
**Poster Session, Exhibit Hall D**

**Dental Materials: Biocompatibility and Biologic Effects -**

**Material Biocompatibility: Cell, Tissue, and Bacterial Responses**

- 0797** Chloroform Biocompatibility on Human Periodontal Ligament Fibroblasts. A.H. CHUANG\*, J. HWANG, S.J. SIDOW, B.C. MORRISON, C.L. HENEMYRE-HARRIS, and J.C. McPHERSON, III (*Eisenhower Army Medical Center, Fort Gordon, GA, USA*)
- 0798** Color Match of Five Resin Veneer Cements and Try-in Pastes. S. KIM-PUSATERI\*, C. PUSATERI, M. CAMPILLO-FUNOLLET, and C. MUÑOZ (*State University of New York - Buffalo, USA*)
- 0799** The Effect of Photodynamic Therapy on Human Fibroblasts and Osteoblasts. A. AZARIPOUR\*, A. PABST, T. ZIEBART, B. AL-NAWAS, and B. WILLERSHAUSEN (*University Mainz, Germany*)
- 0800** Cytotoxicity of Newly Developed Calcium-phosphate-based Root Canal Sealers. R.M. KHASHABA\*, N.B. CHUTKAN, and J.L. BORKE (*Medical College of Georgia, Augusta, USA*)
- S0801** Altered Protein Expression in 3D Tissues Exposed to Whitening Agents. R. LUCIER\*, O. ETIENNE, S. FERREIRA, J. GARLICK, G. KUGEL, and C. EGLES (*Tufts University, Boston, MA, USA*)
- S0802** Biocompatibility of New-generation Endodontic Material. C. FOY\*, J. WASHINGTON, C.R. FERNANDEZ, R. SPEARS, and L.A. OPPERMAN (*Baylor College of Dentistry, Dallas, TX, USA*)
- 0803** Histopathological and X-ray Micro-CT Studies of Premixed CPC for Bone Graft. A. SUGAWARA\*, K. FUJIKAWA, M. HAYASHI, H. OGATA, M. OKI, B. OGISO, S. TAKAGI, and L. CHOW (*Nihon University School of Dentistry, Tokyo, Japan*)
- S0804** Comparative Studies of P-CPC and Conventional Endodontic Cements on Mineralization. H. OGATA\*, M. HAYASHI, H. TSUDA, N. SUZUKI, A. SUGAWARA, S. TAKAGI, L.C. CHOW, M. MAENO, and B. OGISO (*Nihon University School of Dentistry, Tokyo, Japan*)
- 0805** Histopathological Study of Dual-paste Premixed CPC Used for Bone Defect. K. FUJIKAWA\*, A. SUGAWARA, H. OGATA, M. HAYASHI, S. HIRAYAMA, K. SAKAI, K. INOUE, S. TAKAGI, and L.C. CHOW (*Nihon University School of Dentistry, Tokyo, Japan*)
- 0806** Biological Evaluation of an Antimicrobial Cationic Dimethacrylate Monomer. N.J. LIN\*, D.N. ZEIGER, K. TANG, J.M. ANTONUCCI, and S. LIN-GIBSON (*National Institute of Standards and Technology, Gaithersburg, MD, USA*)
- 0807** MIC Test for Antimicrobial Evaluation of Root Canal Irrigants. P. KANG, S. GRUNINGER\*, H.-N. CHOU, and J. KUEHNE (*American Dental Association, Chicago, IL, USA*)
- 0808** Effects of Composite Formulation and Roughness on *Streptococcus mutans* Biofilms. A. KRAIGSLY\*, N.J. LIN, and S. LIN-GIBSON (*National Institute of Standards and Technology, Gaithersburg, MD, USA*)



**S0809** Inhibitory Effects of RMGIC Containing Chlorhexidine/ Doxycycline on Cariogenic Bacteria. A.R.F. CASTILHO, C. DUQUE, J. PUPPIN-ROTONI\*, T.C. NEGRINI, D.M.P. SPOLIDORIO, and R.M. PUPPIN-ROTONI (*FOAr/UNESP, Araraquara, Brazil*)

**0810** Antibacterial Potential of an Amorphous Calcium Phosphate Orthodontic Adhesive. T. CULBREATH\* and J. STUBBS III (*Howard University College of Dentistry, Washington, DC, USA*)

**0811** Effect of a New Desensitization Material on Dentin Permeability. R. RUSIN, P.R. KLAIBER, and M. GUSTAFSON\* (*3M ESPE Dental Products Laboratory, St. Paul, MN, USA*)

**0812** Nano-mechanical Property Changes in Carious Dentin after *in vitro* ART. K. SAEKI\*, G. NONOMURA, S.J. MARSHALL, and G.W. MARSHALL (*University of California - San Francisco, USA*)

**0813** Effect of Bleaching on Enamel Structure Assessed by Infrared Spectroscopy. K. KHOSRAVI\* (*Isfahan University of Medical Sciences, Iran*)

**S0814** Thermal Changes during Photodynamic Therapy Performed with Red Light Sources. M.A. MELO\*, D.M. DE-PAULA, J.P.M. LIMA, I.C.J. ZANIN, and L.K.A. RODRIGUES (*Universidade Federal do Ceara, Fortaleza Ceara, Brazil*)

**0815** Primary/Permanent Dentin Changed by Chemical Substances during Root Canal Preparation. F.M. PASCON, K.R. KANTOVITZ, J.F. GASPAR, and R.M. PUPPIN-ROTONI\* (*University of Campinas State - Piracicaba, SP, Brazil*)

**S0816** Influence of Bioactive Materials Combined with a Whitening Gel. B. LOPES, H. PINHEIRO, J. CARDOSO\*, and P.E.C. CARDOSO (*Universidade de São Paulo, Brazil*)

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**Seq#: 117** **Friday, 5 March 2010, 2 p.m. - 3:15 p.m.**  
**Poster Session, Exhibit Hall D**

**Dental Materials: Polymer-based Materials—Physical Properties and Performance - Performance of Flowable and Provisional Resin Cements & Restoratives**

**0817** Stability of Self-adhesive Resin Cement in Water. H. TOKUI\*, H. YARIMIZU, and T. SAKUMA (*GC Corporation, Tokyo, Japan*)

**0818** Wear Resistance of SureFil SDR Flow Posterior Flowable Base. Q. DAI\* and S. BERTRAND (*DENTSPLY Caulk, Milford, DE, USA*)

**S0819** *In vitro* Three-body Wear of Five Flowable Composite Resins. T. GHUMAN\*, D. CAKIR, P. BECK, L. RAMP, and J. BURGESS (*UAB School of Dentistry, Birmingham, AL, USA*)

**0820** Influence of POSS on Polymer Flow Characteristics. A. KARMAKER, M. KARLAK\*, and W. JIA (*Pentron Clinical Tech, Wallingford, CT, USA*)

**0821** A Low-shrinkage Flowable Composite with High Radiopacity. C. TRAN\*, D. DANG, L. LING, and D. TOBIA (*Kerr Corporation, Orange, CA, USA*)

**0822** Characterization of Flow Behavior for Flowable Materials using Rheometry. G.A. KOBUSSEN, C. CAO\*, and T. DUNBAR (*3M ESPE, St. Paul, MN, USA*)

**S0823** Radiopacity of Five Flowable Composites. J. THOMPSON\*, J. DENNISON, P. YAMAN, and J. VIVAS (*University of Michigan, Ann Arbor, USA*)

**0824** Comparison of Viscosities of Flowable Composites to Warmed Posterior Composites. S. MEGREMIS, H. BATCHU, and J. KUEHNE\* (*American Dental Association, Chicago, IL, USA*)

**S0825** Fracture Toughness and Shear Punch Strength of Provisional Resins. J. SARSLAND\*, N. PISKORSKI, H. WATANABE, and E. KIM (*University of Nebraska, Lincoln, USA*)

**0826** Conversion, Water Sorption, and Solubility of Temporary Cement. C. CVETAN\*, J. LEE, and B. SUH (*Bisco, Inc., Schaumburg, IL, USA*)

**S0827** Stress Relaxation in Recent Provisional Crown Materials. M. MANASSE\*, J. VAIDYANATHAN, T. VAIDYANATHAN, and R. FLINTON (*New Jersey Dental School - UMD, Newark, USA*)

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**Seq#: 118** **Friday, 5 March 2010, 2 p.m. - 3:15 p.m.**  
**Poster Session, Exhibit Hall D**

**Dental Materials: Color and Appearance (Esthetics) - Color and Appearance II**

**0828** Safety and Efficacy Meta-analysis of Self-directed Tooth Whitening by Delivery. R.W. GERLACH, M.K. ANASTASIA, S. FARRELL, M.L. BARKER, and P.A. SAGEL\* (*The Procter & Gamble Company, Mason, OH, USA*)

**0829** Whitening Efficacy of Two Manual Toothbrushes Using New Stain Index. S. FARRELL, J. GRENDER, J.E. ROONEY, A.R. BIESBROCK, L. ARCHILA, and G.T. TEREZHALMY\* (*University of Texas at San Antonio, USA*)

**0830** Short-term Stain Removal with Brush, Paste, Rinse, and Strip Combinations. R.W. GERLACH, E. CONDE, M.K. ANASTASIA, M.J. DOYLE\*, J. HAUN, and K. WILLIAMS (*The Procter & Gamble Company, Mason, OH, USA*)

**0831** Shade Change of Whitening Strips and Light-assisted Whitening in Practice. G. KUGEL, S. SHARMA, S. FERREIRA, C. ANDERSON\*, M.K. ANASTASIA, B. OHMER, R.W. GERLACH, and S. FARRELL (*Anderson Cosmetic & Comprehensive Dental Excellence, Fresno, CA, USA*)

**0832** Nightguard Vital Bleaching: Longevity and Side-effects: 10-17 Years Post-treatment. R. LEONARD\*, A.V. RITTER, G.E. GARLAND, K.K. TIWANA, L. SMITH, L.W. BOUSHELL, and A. BROOME (*University of North Carolina, Chapel Hill, USA*)

**0833** Short-term Whitening Efficacy of Marketed High-adhesion Whitening Strips. L. ARCHILA\*, E. IBÁÑEZ, E. CONDE, V. WIDMEYER, M.K. ANASTASIA, and S. FARRELL (*University of Texas - San Antonio Health Science Ctr., USA*)

**S0834** Effect of Hydrogen Peroxide Concentration on Bleaching. G. NASCIMENTO\*, A.R. FRAZÃO, C.M. SILVA, D.M. GUIMARÃES, L.M. RODRIGUES, and E.B. ALVES (*Universidade Federal do Para, Belém, Brazil*)

**0835** Novel Method for Efficacy Assessment of Whitening Agents. P.E.C. CARDOSO\*, R.M.C. BARROS, U.M.L. MARQUEZ, and J. CARDOSO (*Universidade de São Paulo, Brazil*)

**S0836** Effects of Different Shades of Toothpaste on Composite Color Stability. K. RILEY\* and J. DA COSTA (*Oregon Health & Science University, Portland, USA*)

**S0837** Effect of Bleaching on the Micro-flexural Modulus of Demineralized Dentin. S. BERGER\*, S. PAVAN, P. DOS SANTOS, C. VIDAL, M. GIANNINI, and A.K. BEDRAN-RUSSO (*State University of Campinas, Piracicaba, SP, Brazil*)



**0838** The Fluoride Therapy Effect, before or after Bleaching, on Enamel Microhardness. P. MIRZAKOUCHEKI BOROUJENI\* and O. SOOLMAZ HOMAYONI (*Islamic Azad University of Khurasgan, Isfahan, Iran*)

**S0839** Microhardness and Ultramorphological Changes after Whitening: Calcium and Phosphate Benefits. H. B. PINHEIRO\* and P.E. CARDOSO (*Universidade de São Paulo, Brazil*)

**0840** Dentist VAS Perception of  $\Delta E$  Measurement of Color Change. M. FINKELMAN, P. STARK\*, C. ANDERSON, R.W. GERLACH, and G. KUGEL (*Tufts University, Boston, MA, USA*)

**0841** Correlation between Digital and Visual Color Measuring Techniques. M.M. GHONEIM\*, M.N. ABOUSHELIB, and N. FAHMY (*University of Alexandria, Egypt*)

**0842** Reliability of Clinical Spectrophotometer in Color Assessment. R. ELSALAWY\*, H. HAMZA, and M. EL-AGROUDI (*Faculty of Oral and Dental Medicine, Cairo University, Egypt*)

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**Seq#: 119 Friday, 5 March 2010, 2 p.m. - 3:15 p.m.**  
**Poster Session, Exhibit Hall D**

**Behavioral, Epidemiologic and Health Services Research - Applied Epidemiology of Oral and Craniofacial Conditions I**

**S0843** Pre-hypertension in the Child Population; Pilot Study of Three Races. J. CARSON\*, J. KOWOLIK, and M.L. MEADOWS (*Indiana University School of Dentistry, Indianapolis, USA*)

**S0844** ECC-related Outcomes Associated with Maternal Knowledge and Behavioral Intentions. K.W. KRAMER\*, D.V. DAWSON, K. WEBER-GASPARONI, J. REEVE, D.R. DRAKE, and J.J. WARREN (*University of Iowa, Iowa City, USA*)

**0845** Factors Associated with Childhood Dental Caries in Kentucky. E. KANDEL, J. RICHARDS, C. BINKLEY\*, and SMILEKENTUCKY! (*University of Louisville, KY, USA*)

**S0846** Prevalence of Angle Class III Malocclusion: a Systematic Review. D. HARDY\* and M. ORELLANA (*University of California - San Francisco, USA*)

**0847** "MAYA" - Randomized Clinical Trial to Prevent Early Childhood Caries. F. RAMOS-GOMEZ\*, S. GANSKY, W. SANTO, J.D. FEATHERSTONE, and J.A. WEINTRAUB (*University of California, Los Angeles, USA*)

**0848** Chlorhexidine Mouthrinse Efficacy and Duration in Reducing Salivary Mutans Streptococci. J.A. WEINTRAUB\*, S.A. GANSKY, W. SANTO, C.I. HOOVER, J.D.B. FEATHERSTONE, and F. RAMOS-GOMEZ (*University of California - San Francisco, USA*)

**0849** Association of Serum 25(OH)D Levels and Periodontal Status during Pregnancy. S.G. REED\*, C.L. WAGNER, T.C. HULSEY, M.D. EBELING, and B.W. HOLLIS (*Medical University of South Carolina, Charleston, USA*)

**S0850** Early Childhood Caries, Treatment and Oral-health-related Quality of Life. J. ABRAHAM, R.G. ROZIER, and B.T. PAHEL\* (*University of North Carolina, Chapel Hill, USA*)

**0851** Factors Affecting Aesthetic Treatment Choices in Posterior Teeth. C. JANUS\* and M.A. BAECHLE (*Virginia Commonwealth University - VCU/MCV, Richmond, USA*)

**0852** HIV Status of Women and Dental Caries over 10 Years. S.L. RUSSELL\*, R.G. NORMAN, E. NELSON, and J. PHELAN (*New York University, USA*)

**S0853** Caries and Oral Hygiene Profiles in Early Head Start Children. R. LAM\* and A.L. SEMINARIO (*University of Washington, Seattle, USA*)

**S0854** Oral Disease Prevalence among US-Mexico Border "Colonia" Residents. J. LOZANO-PINEDA, B. BUCK\*, and S. ADRIANA (*University of Texas - San Antonio / Health Science Ctr., USA*)

**S0855** Prevalence of S-ECC in Rural and Urban Communities. T. LINDHOLM\*, C. HAYES, P. CASAMASSIMO, and R. GARCIA (*Tufts University, Boston, MA, USA*)

**0856** Oral Disease Prevalence among Diabetic and Non-diabetic "Colonia" Residents. J. LOZANO-PINEDA\*, B. BUCK, and A. SEGURA (*University of Texas - San Antonio / Health Science Ctr., USA*)

**0857** NHIS Oral Health Supplement Results for Children Under 18. T. IAFOLLA\* (*National Institute of Dental and Craniofacial Research, Bethesda, MD, USA*)

**0858** Paper Withdrawn.

**0859** Characteristics of Patients Hospitalized for Jaw Fractures. V. ALLAREDDY, S. ELANGO VAN, M.K. LEE, A. SHAH, and R. NALLIAH\* (*Harvard University, Boston, MA, USA*)

**0860** Impact of Partial Denture Wearing on Quality of Life. B. LIU\*, M. NUNN, G.D. OFFNER, and J. JONES (*Boston University, MA, USA*)

**0861** Age of First Preventive Visits and Subsequent Dental Treatments. A. McLEAN, E. LIGHT, and W. SOHN\* (*University of Michigan, Ann Arbor, USA*)

**0862** Oral Health Survey of HIV/AIDS Community Health Center Patients. S. GAJENDRA\*, R. BILLINGS, S. FIELDS, R. CORALES, N. WOODS, and C. CARTER (*University of Rochester School of Medicine and Dentistry, NY, USA*)

**S0863** Examination of Percutaneous Injuries at Tufts Dental School: 2000-2008. A. DEVITRE\*, N. SHAKOURIAN, M. FLOWERS, and K. GANDA (*Tufts University, Boston, MA, USA*)

**0864** Race Differences in Knowledge of Oral and Pharyngeal Cancer. H. LOGAN\*, V. DODD, C. PORTER, K. MULLER, and J. RILEY (*University of Florida, Gainesville, USA*)

**S0865** Expectant Mothers' Readiness for and Knowledge of Infant Oral Health. T. BRICKHOUSE, R. TURNER\*, A. ZIMA, and A. BEST (*Virginia Commonwealth University, Richmond, USA*)

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**Seq#: 120 Friday, 5 March 2010, 2 p.m. - 3:15 p.m.**  
**Poster Session, Exhibit Hall D**

**Behavioral, Epidemiologic and Health Services Research - Dental Public Health in the Social Context**

**S0866** Depression, Self-efficacy, and Oral Health - An Exploration. M.L. McFARLAND\* and M.R. INGLEHART (*University of Michigan, Ann Arbor, USA*)

**0867** Oral Health Literacy and Type 2 Diabetes: Identifying the Needs. M.C. PETERS\*, P.P. KANJIRATH, C. KLAUSNER, and M. VALERIO (*University of Michigan, Ann Arbor, USA*)

**S0868** Oral-health-related Quality of Life, Job-search Experiences, and Person Perceptions. K.L. BROWN\*, M. PETERS, P. KANJIRATH, and M.R. INGLEHART (*University of Michigan, Ann Arbor, USA*)



- 0869** Dental Tourism – A Preliminary International Ecologic Perspective. A. SINGHAL\*, A. ADAMS, I. GARCIA, and A. CHATTOPADHYAY (*National Institute of Dental & Craniofacial Research, Bethesda, MD, USA*)
- S0870** Parental Management of Pediatric Dental Pain Relates to Health Literacy. A. GOODWIN\*, S. THIKKURISY, H. AMINI, A. KUMAR, and R. RASHID (*The Ohio State University, Columbus, USA*)
- S0871** Marketing of an Oral Health Pregnancy Message. S.B. BATES\* and C.A. RIEDY (*University of Washington, Seattle, USA*)
- S0872** Knowledge and Awareness of Diabetes Mellitus in the NYU Clinic. H. GADE\*, S.L. RUSSELL, D. ZAHEDI, S.W. YANG, G.L. LAM, M. AGARWAL, and A. SHARMA (*New York University, New York City, USA*)
- S0873** Oral Health Literacy and Subjective Oral Health. K. DIVARIS\*, J.Y. LEE, A.D. BAKER, and W.F. VANN, Jr. (*UNC School of Dentistry, Chapel Hill, NC, USA*)
- 0874** Oral Health Beliefs and Behaviors during Pregnancy. H. AMINI\* (*The Ohio State University, Columbus, USA*)
- S0875** Sociodemographic Predictors of ECC and its Effect on POQL. H. FASSIL\*, C. HAYES, and W. WRIGHT (*Tufts University, Boston, MA, USA*)
- 0876** Patients' Participation in a Dental-PBRN Study of Satisfaction with Care. J. RILEY, V.V. GORDAN, J. RICHMAN, C. AJMO\*, V. QVIST, B. RINDAL, J. FELLOWS, G. GILBERT, and The DPBRN COLLABORATIVE GROUP (*Private Practice in Dunedin, FL, USA*)
- 0877** The Dental Informatics Online Community. H. SPALLEK\*, J. IRWIN, and T. SCHLEYER (*University of Pittsburgh, PA, USA*)
- S0878** Effect of Acculturation in OHRQoL and Perceived Need for Orthodontics. Y. CUBAS\* and M. ORELLANA (*University of California - San Francisco, USA*)
- S0879** Socio-economic Predictors of Caries Re-occurrence in Children Treated for S-ECC. M. KAUR\*, C. HAYES, and W. WRIGHT (*Tufts University, Malden, MA, USA*)

**Seq#: 121 Friday, 5 March 2010, 2 p.m. - 3:15 p.m.**  
**Poster Session, Exhibit Hall D**

#### **Education Research - Research Findings in Dental Curricula**

- S0880** Overview of Dental Education Systems in Colombia and USA. J. JARAMILLO\*, W. BIRD, and T. KOMABAYASHI (*Baylor College of Dentistry, Dallas, TX, USA*)
- S0881** Commonly Reported Statistics in Three Dental Journals. E. WALLMANN\*, J.D. RUGH, J.P. HATCH, S.R. MATTESON, and S.T. DEAHL, II (*University of Texas - San Antonio / Health Science Ctr., USA*)
- 0882** Comparison of Sources of New Knowledge of Adopters vs. Non-adopters. R.R. PARMA\*, J.D. RUGH, J.P. HATCH, C. MUELLER, and K.M. GURECKIS (*University of Texas - San Antonio / Health Science Ctr., USA*)
- 0883** Influences on Immediate Career Choice: Longitudinal Study of Dental Students. F. QIAN\*, R.A. KUTHY, and S. McKERNAN (*University of Iowa, Iowa City, USA*)
- 0884** Use of a Grading Rubric to Evaluate Research Abstracts. K. WILKINS, C. WHITT, D. CHEEK, R. WILKINS, and J. STEPHENS\* (*Loma Linda University, CA, USA*)

- 0885** Student Assessment of Digitized Online Clinical-Pathologic Cases in Oral Pathology. P.C. EDWARDS\*, N. D'SILVA, and K. CORDELL (*University of Michigan, Ann Arbor, USA*)
- S0886** Dental Schools' Curricula and Policies Regarding Detection of Elder Mistreatment. J. DYER\*, S.L. RUSSELL, N. FINK, G. SINGH, and T. FULMER (*Howard University, Washington, DC, USA*)
- 0887** Change in Attitudes toward Interdisciplinary Treatment of Bulimia Nervosa. A. HAGUE\* and J. KOVACICH (*The Ohio State University College of Dentistry, Columbus, USA*)
- S0888** Study of Head and Neck Cancer Curriculum in Pittsburgh. S. BARKET\* and A. VIEIRA (*University of Pittsburgh, PA, USA*)
- S0889** Association between DAT and Final Comprehensive Examination Performance at Harvard. V. ALLAREDDY\*, M.K. LEE, H. HOWELL, and N. KARIMBUX (*Harvard University, Boston, MA, USA*)
- S0890** A Digital Instruction of Techniques and Principles of Mucoperiosteal Flaps. S. ARCENEUX\*, M. LU, W. TANAKA, F. ORBAN, and M. KNUTSON (*Loma Linda University, CA, USA*)
- 0891** Evaluation of EBP Knowledge, Attitudes, Access, and Confidence. W.D. HENDRICSON\*, J.D. RUGH, J.P. HATCH, and D.L. STARK (*University of Texas - San Antonio / Health Science Ctr., USA*)

**Seq#: 122 Friday, 5 March 2010, 2 p.m. - 3:15 p.m.**  
**Poster Session, Exhibit Hall D**

#### **Cariology Research - Caries Detection & Classification - Caries Risk Factors - Fluoride Ingestion**

- 0892** Polarized Light Microscopy Lesion Area in Early Caries Detection. J. WEFEL\*, M. MEHARRY, D. DAWSON, J. HARLESS, and C. KUMMET (*University of Iowa, Iowa City, USA*)
- 0893** Lesion Progression Evaluated by Fluorescence Image Analyses. M. ANDO\*, M. GARCIA-CORRETTIER, G. ECKERT, E. SANTIAGO, B. KATZ, D. ZERO, and A. ZANDONA (*Indiana University School of Dentistry, Indianapolis, USA*)
- S0894** *In vitro* Detection of Caries Lesions through a Clear Sealant. G. ABERNATHEY\*, M. FONTANA, M. ANDO, and G. ECKERT (*Indiana University School of Dentistry, Indianapolis, USA*)
- S0895** Time-dependent Changes in Transparent Sealants and Their Effects on QLF. A. KURSHUK\*, J.A. PLATT, M. FONTANA, A. HARA, M. ANDO, A. SOTO, and G.J. ECKERT (*Indiana University-Purdue University, Indianapolis, USA*)
- 0896** One-year Assessment of Caries Measurement *in vivo* under Sealants. M. FONTANA\*, J. PLATT, M. ANDO, A.E. SOTO-ROJAS, G. ECKERT, K. YODER, C. GONZALEZ-CABEZAS, and D. ZERO (*University of Michigan School of Dentistry, Ann Arbor, USA*)
- 0897** Ability to Classify Caries after a Brief ICDAS Training Session. J. KOLKER\*, C.M. KUMMET, and D.V. DAWSON (*University of Iowa, Iowa City, USA*)
- S0898** Root Caries Activity: Examiner Calibration for a Clinical Study. C. SENGER\*, J. KOLKER, F. QIAN, K. EKSTRAND, H. COWEN, and M. ROUMAN (*University of Iowa, Iowa City, USA*)



**S0899** Perceptions of Xerostomia and Caries Risk in Methamphetamine Users. J. FLANIGAN\*, T. MARSHALL, M. CUNNINGHAM, S. GUZMAN-ARMSTRONG, F. QIAN, and M. SMITH (*University of Iowa, Iowa City, USA*)

**0900** Risk Factors Related to Early Childhood Caries in High-risk Children. K. WEBER-GASPARONI\*, D.V. DAWSON, J.J. WARREN, K.W. KRAMER, J. REEVE, and D.R. DRAKE (*University of Iowa, Iowa City, USA*)

**S0901** Assessment of Caries Risk Clinical Program at a U.S. Dental School. V. ISIUTSINA\*, M. FONTANA, and G. ECKERT (*Indiana University School of Dentistry, Indianapolis, USA*)

**S0902** Variation in Dental Caries Management Decisions of U.S. Dental Students. D. WU\*, M. FONTANA, G. ECKERT, S. DOMEJEAN, I. ESPELID, and A. TVEIT (*Indiana University School of Dentistry, Indianapolis, USA*)

**0903** Dispenser Device to Reduce Fluoride Dentifrice Ingestion by Children. S. JOSE CHEDID\*, L.M.A. TENUTA, and J.A. CURY (*Piracicaba Dental School, University of Campinas, SP, Brazil*)

**0904** Mean Daily Fluid Ingestion by Children during Summer in Kuwait. E.S. AKPATA\*, M.J. BEHBEHANI, and J. AKBAR (*Kuwait University, Safat*)

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**Seq#: 123 Friday, 5 March 2010, 2 p.m. - 3:15 p.m.**  
**Poster Session, Exhibit Hall D**

**Mineralized Tissue - BMPs and Other Proteins**

**S0905** The Expression of FAM20C (DMP4) during Odontogenesis and Osteogenesis. X. WANG\*, Y. XIE, B. HERNANDEZ, Y. SUN, M. PRASAD, Q. ZHU, J. FENG, and C. QIN (*Baylor College of Dentistry, Dallas, TX, USA*)

**S0906** The Expression of FAM20C (DMP4) in Parietal Bone and Brain. B. HERNANDEZ\*, X. WANG, Y. XIE, Y. SUN, M. PRASAD, Q. ZHU, J. FENG, and C. QIN (*Baylor College of Dentistry, Dallas, TX, USA*)

**0907** Fibrillar Collagen Thin Films Promote Early Osteogenesis. Y. LIU, A.J. GOLDBERG\*, P. MAYE, M.C. ADVINCULA, and L.T. KUHN (*University of Connecticut Health Center, Farmington, USA*)

**S0908** Amelogenin Splice Isoforms Stimulate Chondrogenic Differentiation of ATDC5 Cells. K. MITANI\*, N. HARUYAMA, and K. IGARASHI (*Tohoku University, Sendai, Japan*)

**S0909** Biomimetic Mineralization of Thin Collagen Films. D.N. ZEIGER\*, Y. CHENG, R.P. KOSESKI, C.M. STAFFORD, and S. LIN-GIBSON (*National Institute of Standards and Technology, Gaithersburg, MD, USA*)

**0910** Comparison of MMP-2 in Human and Bovine Dentin. L. BOUSHELL\*, M. KAKU, Y. MOCHIDA, and M. YAMAUCHI (*University of North Carolina/School of Dentistry, Chapel Hill, USA*)

**0911** Paper Withdrawn.

**0912** Effects of White Tea on Structure of Enamel and Jawbone. E. IBRAHIM-AUERKARI\*, A. SOUFYAN, W. SUHARTONO, E.D. NURFITRI, D. SARITA, P.R. SUMARINGSIH, and N. SUMAWINATA (*University of Indonesia, Jakarta*)

**S0913** Enigma, a Downstream Gene of TGF- $\beta$ 1, Regulates PDL Stem Cells. Z. LIN\*, V.P. NAVARRO, K. KEMPEINEN, L. FRANCO, Q. JIN, J. SUGAL, and W. GIANNOBILE (*University of Michigan School of Dentistry, Ann Arbor, USA*)

**S0914** Estrogen Deficiency Increases Variability of Mineralization of Bone Surrounding Teeth. M. AMES\*, S. HONG, H. LEE, H.W. FIELDS, W. JOHNSTON, and D.-G. KIM (*The Ohio State University, Columbus, USA*)

**S0915** Bmp2/Bmp4 Signaling in Osteoblast Differentiation and Extracellular Matrix Remodeling. L. WU\*, S. FARNSWORTH, J. GLUHAK-HEINRICH, K. DONLY, S. HARRIS, M. MacDOUGALL, and S. CHEN (*University of Texas - San Antonio / Health Science Ctr., USA; The Fourth Military Medical University, Xi-an, China*)

**S0916** Biglycan-enhanced BMP Signaling: Role of Glycosaminoglycans. P. MIGUEZ\*, Y. MOCHIDA, and M. YAMAUCHI (*University of North Carolina at Chapel Hill, USA*)

**S0917** Estrogen-induced Chondrocyte Apoptosis is via a Mitochondrial Pathway. M. ZHONG\*, B.D. BOYAN, and Z. SCHWARTZ (*Georgia Institute of Technology, Atlanta, USA*)

**S0918** Role of PLAA in 1,25(OH)<sub>2</sub>D<sub>3</sub>-mediated Membrane Signaling in Osteoblasts. M. DOROUDI\*, Y. WANG, Z. SCHWARTZ, and B. BOYAN (*Georgia Institute of Technology, Atlanta, USA*)

**S0919** Location of VEGF in a Bioreactor-engineered Cartilage Nodule. H. LUONG\*, L.K. DOAN, Q. DIEP, W. LEBOEUF, and J. DUKE (*University of Texas - Houston/Health Science Center, USA*)

**S0920** Eph/ephrin Signaling in Calvarial Bone Growth. O. ATOBAJEUN\*, C.R. FERNANDEZ, S. SAN MIGUEL, J. LA, L.A. OPPERMAN, and M.D. BENSON (*Baylor College of Dentistry, Dallas, TX, USA*)

**S0921** MMP-1's Regulation of Osteoblastic Differentiation Occurs via Protease-activated Receptor-1. T. HAYAMI\*, Y. KAPILA, and S. KAPILA (*University of Michigan, School of Dentistry, Ann Arbor, USA*)

**0922** Lysyl Oxidase Propeptide Inhibits FGF-2-induced Signaling and Proliferation of Osteoblasts. S. VORA\* and P. TRACKMAN (*Boston University, MA, USA*)

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**Seq#: 124 Friday, 5 March 2010, 2 p.m. - 3:15 p.m.**  
**Poster Session, Exhibit Hall D**

**Microbiology / Immunology and Infection Control - Immunology of the Oral Cavity**

**S0923** Salivary IgA Levels in Children in Alabama's Black Belt. N. DOPPALAPUDI\*, S.M. MICHALEK, and N.K. CHILDERS (*University of Alabama at Birmingham, USA*)

**0924** Phosphoglucosamine Mutase Contributes to Survival of Streptococci in Polymorphonuclear Leukocytes. Y. TAKAHASHI\*, A. YAJIMA, K. SHIMAZU, Y. URANO-TASHIRO, Y. UCHIKAWA, H. KARIBE, and K. KONISHI (*Nippon Dental University, Tokyo, Japan*)

**0925** Non-memory B-cells Produce Surface-bound TNF $\alpha$  and Lymphotoxin. J. ROGER\* and I. SANZ (*University of Rochester School of Medicine and Dentistry, NY, USA*)

**0926** Ectopic Germinal Centers in the Salivary Glands after Cytomegalovirus Infection. J.S. GREWAL\*, M.J. PILGRIM, S. GREWAL, L. LONDON, and S.D. LONDON (*State University of New York - Stony Brook, USA*)



**S0927** TLR2 and TLR9 Activation by Periodontal Pathogens Induces HIV-1 Reactivation. O.A. GONZALEZ\*, M. LI, J.L. EBERSOLE, and C.B. HUANG (*University of Kentucky, Lexington, USA*)

**0928** Binding of Epithelial Cell Defensin HBD-3 to Periodontal Pathogen LPS. S.T. FINDER, M.M. JEFFERSON, and E.L. THOMAS\* (*University of Tennessee, Memphis, USA*)

**S0929** Functional Epitopes of *Tannerella forsythia* BspA Protein in TLR2 Activation. S.R. MYNENI VENKATASATYA\*, P. SETTEM, H.T. SOJAR, and A. SHARMA (*University at Buffalo, NY, USA*)

**0930** Activation of TLR4 and TLR9 Modulates Immune Cell RANKL Expression. X. HAN\*, X. LIN, S. LEE, J. EASTCOTT, and M.A. TAUBMAN (*The Forsyth Institute, Harvard School of Dental Medicine, Boston, MA, USA*)

**S0931** *Fusobacterium nucleatum* Modulates Death Ligands in Immune Cell Apoptosis. D. FRASER\*, M. RAPOZO-HILO, C.I. HOOVER, and T. HUYNH (*University of California - San Francisco, USA*)

**0932** Role of Innate Immunity in an Experimental Periodontal Disease Model. R. SARTORI, R. ZINNA, K. MARTIN, C. ROSSA, and K. KIRKWOOD\* (*Medical University of South Carolina, Department of Craniofacial Biology, Charleston, USA*)

**S0933** Activation of Innate Immune Antiviral Response by NOD2. A. SABBAAH\* (*University of Texas Health Science Center, San Antonio, USA*)

**0934** Tolerance through TLR2 Ligands Enhances Osteogenic Potential in Osteoblasts. A. BERGDAHL and M. MUTHUKURU\* (*University of Washington, Seattle, USA*)

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**Seq#: 125** **Friday, 5 March 2010, 2 p.m. - 3:15 p.m.**  
**Poster Session, Exhibit Hall D**

**Periodontal Research - Diagnosis / Epidemiology - Periodontal Diseases / Advances in Diagnosis and Epidemiology**

**S0935** Initial Clinical Decision-making by Students Regarding Periodontal Referrals. G. BURGARDT\*, K.B. WILLIAMS, C. COBB, and J. RAPLEY (*UMKC School of Dentistry, Kansas City, MO, USA*)

**S0936** A Comparison of Periodontal Referral Patterns: Trends toward Urgent Care. T. SAW\*, S. SEARS, and L. BAHL-PALOMO (*Case Western Reserve University, Cleveland, OH, USA*)

**0937** Periodontal Status of HIV+ and Non-HIV Hispanic Pregnant Women. L. LÓPEZ\*, M.E. GUERRA, C. ZORRILLA, and L. SANTIAGO (*University of Puerto Rico, San Juan*)

**0938** Periodontitis Case Definition Affects the Association with Renal Function. E. IOANNIDOU\*, M. SHAQMAN, J. BURLESON, and A. DONGARI-BAGTZOGLOU (*University of Connecticut Health Center, Farmington, USA*)

**0939** Comparison of Periodontal Disease Severity using Two Assessment Methods. S. MAURIELLO\*, K. MOSS, and J. BECK (*University of North Carolina, Chapel Hill, USA*)

**0940** Alkaline Phosphatase as Potential Indicator for Grouping Aggressive Periodontitis. D.N. MUSTAQIMAH\* and E. IBRAHIM-AUERKARI (*University of Indonesia, Jakarta*)

**S0941** Familial Aggregation of Periodontal Disease in a North Carolina Population. C. HUBER\*, D. DAWSON, K. KRAMER, J. BECK, and J.A. WEINTRAUB (*University of Iowa, Iowa City, USA*)

**S0942** Soluble TLR-2: Putative Adjunctive Marker for Chronic Periodontitis. S. PRAKASAM\*, S. BLANCHARD, V. JOHN, and M. SRINIVASAN (*Indiana University School of Dentistry, Indianapolis, USA*)

**0943** Periodontal Risk Assessment. Y. HUR\*, P. LEVI, W. CHEUNG, E. ARGUELLO, P. STARK, and T. GRIFFIN (*Tufts University, Boston, MA, USA*)

**S0944** T<sub>H</sub>4 Levels in Gingival Crevicular Fluid Correlate to Pocket Depth. E. KWON\*, M. WHEATER, and L. CABANILLA (*University of Detroit Mercy, Ypsilanti, MI, USA*)

**S0945** Gingival Inflammation and Cortisol Levels in Saliva and Crevicular Fluid. B. EL-DAHDAH\*, P. EMECEN, J. GALLEY, M. BAILEY, J. SHERIDAN, and B. LEBLEBICIOGLU (*The Ohio State University, Columbus, USA*)

**0946** Paper Withdrawn.

**0947** Paper Withdrawn.

**S0948** Measuring Clinical Attachment Loss Using Cone Beam Computed Tomography (CBCT). B. BEZAK\*, A. DHILLON, and L. BAHL-PALOMO (*Case Western Reserve University, Cleveland, OH, USA*)

**S0949** Alteration of Gingival Endothelial Vascular Function in a Diabetes Rat Model. S. SUGIYAMA\*, S.-S. TAKAHASHI, C. MIYAMOTO, A. YOSHIDA, K. KOBAYASHI, Y. MAEHATA, F. YOSHINO, S. TAKAHASHI, and M. LEE (*Kanagawa Dental College, Yokosuka, Japan*)

**S0950** Quantifying the Soft-tissue Wound-healing Response to Tooth Extraction. R. RAJANNA\*, M. GEISINGER, S. McNEAL, P. VASSILOPOULOS, N. GEURS, and M. REDDY (*University of Alabama at Birmingham, USA*)

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**Seq#: 126** **Friday, 5 March 2010, 2 p.m. - 3:15 p.m.**  
**Poster Session, Exhibit Hall D**

**Oral Medicine & Pathology - Oral and Systemic Disease and Saliva**

**S0951** Idiopathic Osteosclerosis: a Systemic Review of a Population in Northern Taiwan. C. KUO CHOU\*, S. HUANCHING, and S. YI-SHIEN (*National Defense Medical Center, Graduate Institute of Medical Sciences, Dental Branch, Taipei, Taiwan*)

**S0952** Detection of Carotid Artery Blockage in the Dental Setting. L. BABB\* and A. VIEIRA (*University of Pittsburgh, PA, USA*)

**S0953** Oral Health Status of Adolescents with Sickle Cell Disease. E. RALSTROM\*, M. DA FONSECA, and H. AMINI (*The Ohio State University, Columbus, USA*)

**0954** Effect of Training Dentists to Conduct Chairside Medical Screening. B.L. GREENBERG\*, M. GLICK, D. FRANCES, J. FRANTSVE, M.L. KANTOR, and S. JIANG (*New Jersey Dental School - UMDNJ, Newark, USA*)

**0955** Paper Withdrawn.



**0956** Electronic Health Records Improve Care of Patients with Medical Conditions. J. FRICTON\*, B. RINDAL, W. RUSH, T. FLOTTEMESCH, E. DURAND, M.J. THOELE, C. HUNTLEY, and O. GODLEVSKY (*HealthPartners Research Foundation and University of Minnesota, Minneapolis, USA*)

**S0957** Special Effects of Endodontic Inflammation on the Rat Aorta. C. SHOOK\*, J. BAIN, C. CASKEY, H. ZHANG, and R. JOHNSON (*University of Mississippi Medical Center, Jackson, USA*)

**S0958** Mediators in Gingival Crevicular Fluid of Individuals on Bisphosphonate Therapy. M. SORENSEN\*, K.G. KOHLGRAF, C. KUMMET, D. DAWSON, K. BROGDEN, C. BARWACZ, G. JOHNSON, and C. STANFORD (*University of Iowa, Iowa City, USA*)

**0959** Proteomics Analysis of Oral Epithelial Cells Collected by Brush Biopsy. X.B. CHEN, N.L. RHODUS\*, M. STONE, F. ONDREY, B. CHENG, and T. GRIFFIN (*University of Minnesota, Minneapolis, USA*)

**S0960** Rat Model of Bisphosphonate-induced Osteonecrosis of the Jaw (BIONJ). K. MARINO\*, I. ZAKHARY, M. ELSALANTY, R. ABDELSAYED, M. STEVENS, and J. BORKE (*Medical College of Georgia, Augusta, USA*)

**S0961** Evaluation of Rinse Formulations for Sustained Salivary Levels of Anthocyanins. D. BUDENDORF\*, M.P. LARSEN, Z. LIU, P.E. LARSEN, G.D. STONER, H.W. FIELDS, and S.R. MALLERY (*The Ohio State University, Columbus, USA*)

**S0962** Diagnostic Utility of Labial Salivary Gland Biopsy in Sjögren's Syndrome. S. SCHMIDT\*, A. WALKER, A. NAZMUL-HOSSAIN, S. MYERS, K. MOSER, and N. RHODUS (*University of Minnesota, Minneapolis, USA*)

**0963** The Sjögren's Syndrome Knowledge Base (SSKB) Compared with Gene Expression Data. S.-U. GORR\*, T. WENNBLOM, M. ZHOU, S. HORVATH, D.T. WONG, S. MICHIE, C. KALLENBERG, and A. VISSINK (*University of Minnesota, Minneapolis, USA*)

**S0964** Efficacy of Cevimeline vs. Pilocarpine in the Secretion of Saliva. J. BRIMHALL\*, M. JHAVERI, and J. YEPES (*University of Kentucky, Lexington, USA*)

**0965** Prevalence of Self-reported Bad Breath among Sjögren's and Healthy Groups. L. FAGONE\*, A.S. PAPAS, M.L. SINGH, E. TZAVARAS, and R.W. GERLACH (*Tufts University, Boston, MA, USA*)

**Seq#: 127** Friday, 5 March 2010, 2 p.m. - 3:15 p.m.  
Poster Session, Exhibit Hall D

#### **Craniofacial Biology - Bone Biology II - Structure and Gene Regulation**

**S0966** Trabecular Microarchitecture of the Browridge in Select Primates. M.F. BOLOURI\* and P.C. DECHOW (*Baylor College of Dentistry, Dallas, TX, USA*)

**S0967** Rescue of Coronal Suture Fusion with Relaxin in Craniosynostotic Rabbits. D. WILCOX\*, J. CRAY, S. SCHROEDER, T. CRAFT, C. KINSELLA, Jr., M. BYKOWSKI, A. BURROWS, L. VECCHIONE, J. LOSEE, M. SIEGEL, A. MOURSI, G. COOPER, and M. MOONEY (*University of Pittsburgh, PA, USA*)

**S0968** rhBMP-2 Treatment Decreases Sagittal Sutural Width after Expansion. K. MISNER\*, P. WHITTINGTON, H. XU, S. LIU, P.H. BUSCHANG, and L.A. OPPERMAN (*Baylor College of Dentistry, Dallas, TX, USA*)

**S0969** Nell-1 Induced Osteoblast Differentiation in a Microenvironment-dependent Manner. B. ZHANG\*, C. BESSETTE, T. AGHALOO, B. WU, and C. SOO (*University of California, Berkeley, USA*)

**S0970** Trabecular Microarchitecture of Maxillary Alveolar Bone in Four Primate Species. A. MORTIMER\* and P.C. DECHOW (*Baylor College of Dentistry, Dallas, TX, USA*)

**S0971** Cortical Bone Elastic Properties Evaluated with Bar-wave and Nano-indentation Techniques. H.V. NGUYEN\* and P.C. DECHOW (*Baylor College of Dentistry, Dallas, TX, USA*)

**S0972** Zoledronic Acid Suppresses Trabecular Bone Formation in Aged Rice Rats. H. KHURANA\*, S. HUENI, A. D'ATRI, K. EDMONDS, and S. HUJA (*The Ohio State University, Columbus, USA*)

**S0973** rhBMP-2 Affects Sagittal Sutural Expansion and Percent Fusion. P. WHITTINGTON\*, K. MISNER, H. XU, P.H. BUSCHANG, L.A. OPPERMAN, and S. LIU (*Baylor College of Dentistry, Dallas, TX, USA*)

**S0974** Role of FOXO1 in Bone Formation. J. PANG\*, L. MON THANT, M. ALIKHANI, and C. TEIXEIRA (*New York University College of Dentistry, Brooklyn, USA*)

**Seq#: 128** Friday, 5 March 2010, 2 p.m. - 3:15 p.m.  
Poster Session, Exhibit Hall D

#### **Craniofacial Biology - PDL Biology**

**S0975** Gene Expression in PDL Cells from Sturge-Weber Syndrome Patients. B. MOALEJ\*, N. COUGHLIN, L. CHEN, J. REYNA, and M. ZEICHNER-DAVID (*University of Southern California, Los Angeles, USA*)

**S0976** Identification of Mechanisms Regulating Endothelin-A Receptor Expression. Y. ZHANG\* and L.B. RUEST (*Texas A&M Health Science Center, Baylor College of Dentistry, Dallas, USA*)

**Seq#: 129** Friday, 5 March 2010, 3:30 p.m. - 4:45 p.m.  
Poster Discussion Session, Room 145B

#### **Dental Materials: Biocompatibility and Biologic Effects - Biological Response to Materials (PDS)**

**Chairpersons: J. Sun and S. Dogan**

3:30 Poster Viewing Period.

**0977** 3:55 Aging of Composite Materials: Surface Properties and Streptococcal Adhesion. S. HAHNEL\*, M. ROSENTRITT, A. HENRICH, G. HANDEL, and R. BÜRGERS (*University Medical Center Regensburg, Department of Prosthodontics, Germany*)

**S0978** 4:02 Gold(III) as an Inhibitor of Oral Streptococci. S. DOGAN\*, W. CHUNG, D.T. HOBBS, and J. WATAHA (*University of Washington, Seattle, USA*)

**0979** 4:09 Polyacrylic-acid-based Rechargeable Long-term Antifungal Denture Materials. Z. CAO, X. SUN, C.-K. YEH, and Y. SUN\* (*University of South Dakota, Sioux Falls, USA*)



**S0980** 4:16 Composite Dust Particle Cytotoxicity and Release of HMGB1 from Macrophages. A. HOLT\*, M.P. WALKER, J.H. PURK, V. DUSEVICH, N. LARA, C. MO, J.D. EICK, and E.L. NALVARTE-KOSTORYZ (*UMKC School of Dentistry, Kansas City, MO, USA*)

**S0981** 4:23 Resin Monomer-induced Activation of Mitogen-activated Protein Kinases *in vitro*. S. KRIFKA\*, E.-M. FRANK, C. PETZEL, G. SPAGNUOLO, K.-A. HILLER, G. SCHMALZ, and H. SCHWEIKL (*University Medical Center Regensburg, Germany*)

**0982** 4:30 Controlling Cell Orientation *via* Experimental Gratings. J. SUN\*, Y. DING, H. RO, N.J. LIN, J. ZHOU, C.L. SOLES, M.T. CICERONE, and S. LIN-GIBSON (*American Dental Association Foundation, Gaithersburg, MD, USA*)

**0983** 4:37 *In vitro* Intrapulpal Temperature Rise Using Multi-mode LED Lights. J.K. MITCHELL\* and F. RUEGGEBERG (*Medical College of Georgia, Augusta, USA*)

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**Seq#: 130** Friday, 5 March 2010, 3:30 p.m. - 4:45 p.m.  
Poster Discussion Session, Room 146C

#### Salivary Research - Salivary Research Discussion (PDS)

**Chairpersons: E. Salih and M. Srinivasan**

3:30 Poster Viewing Period.

**0984** 3:55 Variability of Fluoride Content in Salivary Fluid and Sediment. E. NAUMOVA\*, P. GAENGLER, S. ZIMMER, and W.H. ARNOLD (*University of Witten/Herdecke, Germany*)

**S0985** 4:02 Viscoelastic Properties of the Salivary Conditioning Film Using QCM-D. D. HALENAHALLY VEEREGOWDA\*, H.C. VAN DER MEI, H.J. BUSSCHER, and P. K. SHARMA (*University Medical Centre Groningen, Netherlands*)

**0986** 4:09 Nanofiber Scaffolds for Establishment of Salivary Gland Epithelial Cell Polarity. S.J. SEQUEIRA\*, D. SOSCIA, R. JEAN-GILLES, S.B. PETERS, M. MELFI, M. KARASS, W.P. DALEY, A. GADRE, J. CASTRACANE, and M. LARSEN (*University at Albany, State University of New York, USA*)

**S0987** 4:16 Membrane-protein Expression Regulation by the Unfolded Protein Response in Epithelia. L. STEVENSON\* and Z. BEBOK (*University of Alabama at Birmingham, USA*)

**S0988** 4:23 The Oral Microflora Contains Gluten-degrading Micro-organisms. E. HELMERHORST, M. ZAMAKHCHARI\*, J. LEE, and F. OPPENHEIM (*Boston University, MA, USA*)

**0989** 4:30 Histain-5 Effect on *Candida albicans* Evaluated by Quantitative Proteomics Analysis. T. KOMATSU\*, E. SALIH, E.J. HELMERHORST, G.D. OFFNER, and F.G. OPPENHEIM (*Boston University, MA, USA*)

**S0990** 4:37 Salivary Proteomic Biomarkers for Lung Cancer Detection. H. XIAO\*, L. ZHANG, M. ZHOU, J. LEE, D. AKIN, and D. WONG (*University of California - Los Angeles, USA*)

**0991** 4:44 Role of *in vivo* Statherin Protein Fragments on Mineral Homeostasis. P.M. YAMAGUTI\*, C. MARTINS, and W.L. SIQUEIRA (*The University of Western Ontario - Schulich School of Medicine & Dentistry, London, ON, Canada*)

**S0992** 4:51 Quantitative Proteomics of Gingival Crevicular Fluid in Periodontal Disease. L. CARNEIRO\*, C. VENULEO, G. GOKTUG, H. HASTURK, E.J. HELMERHORST, F.G. OPPENHEIM, and E. SALIH (*Boston University School of Dental Medicine, MA, USA*)

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**Seq#: 131** Friday, 5 March 2010, 3:30 p.m. - 4:45 p.m.  
Poster Session, Exhibit Hall D

#### Pulp Biology & Regeneration Research - Pulp Biology & Regeneration Research II

**0993** Human Dental Pulp Biocompatibility Responses to Tissue Engineering Scaffolds. P.E. MURRAY\* and F. GARCIA-GODOY (*Nova Southeastern University, Ft. Lauderdale, FL, USA*)

**S0994** Neurovascular Relationships in Normal and Painful Human Dental Pulp. M. SUBHANI\*, G. PERRY, S. LUO, S.R. LEVINSON, K. HARGREAVES, and M. HENRY (*University of Texas - San Antonio / Health Science Ctr., USA*)

**0995** bFGF Up-regulates CSF-I Gene Transcription in Ameloblast-like Cells. Z. FAN\*, K. WOODRUFF, M. MacDOUGALL, and S. ABBOD WERNER (*University of Texas - San Antonio / Health Science Ctr., San Antonio, USA*)

**S0996** NPY Knockout Results in Altered Cytokine Levels in Tooth Pulp. P. PRIOUR\* and R. SPEARS (*Baylor College of Dentistry, Dallas, TX, USA*)

**0997** Hyperglycemia Leads to Enamel Defects and Pulpitis in Type I Diabetic Mice. Z. FAN, D. HORN, K. WOODRUFF, M. MacDOUGALL, and S. ABBOD WERNER\* (*University of Texas - San Antonio / Health Science Ctr., USA*)

**0998** *In vitro* Multilayer Osteochondral Tissue Engineering Using HMSC 3-dimensional Cultures. L. HONG\*, D. SEABOLD, C. STANFORD, and G. SCHNEIDER (*University of Iowa, Iowa city, USA*)

**S0999** Characterization of Mineralized Tissue in Primary Dental Pulp Cultures. A. BALIC\*, M.C. CAIMANO, V.P. FRANCONI, and M. MINA (*University of Connecticut Health Center, Farmington, USA*)

**1000** Availability and Diffusivity of Potassium in Desensitizing Dentifrices *in vitro*. M. ZSISKA, D.J. WHITE\*, B.W. PETERSON, and J. GRUNER (*The Procter & Gamble Company, Mason, OH, USA*)

**S1001** Bioactive Multidomain Peptides and Their Application for Dental Tissue Regeneration. K. REGAN\*, K. GALLER, A. CAVENDER, R. D'SOUZA, and J. HARTGERINK (*Rice University Department of Chemistry, Houston, TX, USA*)

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**Seq#: 132** Friday, 5 March 2010, 3:30 p.m. - 4:45 p.m.  
Poster Session, Exhibit Hall D

#### Prosthodontics Research - Prosthodontics Research

**1002** Systematic Review of Survival Analysis of Fiber-reinforced Posts. R. CAINE, Jr.\* (*UMDNJ, Newark, NJ, USA*)

**1003** Wireless vs. Classic Periotest, Reproducibility Measures: *in vitro* Study. H. MORRIS\*, S. ALMUSA, P. CRUM, R. JANDALI, and D. DESROSIERS (*Department of Veterans' Affairs [160], Ann Arbor, MI, USA*)

**1004** Cast Post/Core - Ferrule and Post Size Affects Fracture Resistance. A. MAALHAGH-FARD\*, W. WAGNER, and J. BRINGAS (*University of Detroit Mercy, MI, USA*)



**1005** Benefits of Pre-restorative Orthodontic Treatments on Veneer Preparations. E. SUNG\*, T.-L. CHANG, K. SHAH, N. GHAEM-MAGHAMI, and B. WU (*University of California - Los Angeles, USA*)

**S1006** Conventional Removable Denture Wearers' Complaints in University-based Care Clinic. C. SAFI\*, L. DE KONINCK, G. GAUTHIER, P. DE GRANDMONT, and E. EMAMI (*Université de Montréal, Canada*)

**S1007** Gene Expression in Osteoblasts Cultured with Collagen Membranes. T. LIN\* and S. YAMANO (*New York University, USA*)

**S1008** Surface Properties and Bond Strength Measurements of N-vinylcaprolactam (NVC)-containing Glass Ionomers. A. MOSHAVERINIA\*, W. BRANTLEY, S. ANSARI, W. CHEE, and S. SCHRICKER (*University of Southern California, Los Angeles, USA*)

**1009** Effect of Stress Distribution on Restorative Design Recuperation in Maxillary Central Incisors. Y. CHAIYABUTR\*, V. ISVILANONDA, D.E. KOIS, and J.C. KOIS (*Kois Center, Seattle, WA, USA*)

**S1010** Effects of Implant Angulations on Retentive Characteristics of Stud Attachment. D. WHITING\* and K.-H. CHUNG (*University of Washington, Seattle, USA*)

**1011** Paper Withdrawn.

**1012** Paper Withdrawn.

**S1013** Photoelastic Stress Analysis of Load Transfer by Implant-supported Restorations. R. TIOSSI\*, Y.C. HEO, R.C. RODRIGUES, H. CONRAD, M.D.G. DE MATTOS, A. FOK, and R.F. RIBEIRO (*University of Minnesota, Minneapolis, USA*)

**1014** Surface Strain on Ce-TZP/Al<sub>2</sub>O<sub>3</sub> Nanocomposite and Y-TZP Framework. A. KAWAZU\*, H. MIURA, Y. KIZUKI, R. NEMOTO, and T. OOMORI (*Tokyo Medical & Dental University, Japan*)

**1015** Comparison of Breakage Force for Dental Burs. H. STRASSLER\*, L.G. SENSI, and M. QUIGLEY (*University of Maryland Dental School, Baltimore, USA*)

**S1016** Accuracy and Linearity of the JT-3D Jaw Tracker. K. YUN\*, J. RUGH, and J. RADKE (*Tufts University, Boston, MA, USA*)

**S1017** Effect of Core Design on Metal-Ceramic Implant-supported Crown Failure. L.D.M. MARTINS\*, J.L.G.D. OLIVEIRA, L.A. SANTOS, A.L.D. VALLE, G. BONFANTE, and P.C.G.D. OLIVEIRA (*Bauru School of Dentistry, São Paulo University, Brazil*)

**S1018** Primer Effect on Bond Strength of Resin Cements to Zirconia. G. MILLAN\*, M. RAAD, M. ATTAR, and D. NATHANSON (*Boston University, MA, USA*)

**1019** Accuracy of Working Casts and Dies Using Polyvinyl Siloxane Impressions. M. EL-AGROUDI\* (*University of Cairo, Egypt*)

**1020** Retentive Characteristics of Overdenture Attachments during Repeated Dislodging and Loading. K.-H. CHUNG\*, D. WHITING, D. CHAN, and J.C. WATAHA (*University of Washington, Seattle, USA*)

**1021** Shear Bond Strength of Composite to Zirconia Veneering Porcelains. Y.-M. YANG, M. SIERRAALTA\*, and M. RAZZOOG (*University of Michigan, Ann Arbor, USA*)

**1022** Paper Withdrawn.

**Seq#: 133** Friday, 5 March 2010, 3:30 p.m. - 4:45 p.m.  
Poster Session, Exhibit Hall D

#### Dental Materials: Polymer-based Materials—Chemistry and Composition - Synthesis and Polymerization of Resins and Ionomers

**1023** Ultra-low Volumetric Shrinkage of Dental Composites Based on *in situ* Nanocavitation. Y. CHENG\*, J.M. ANTONUCCI, N. LIN, S. HUDSON, and S. LIN-GIBSON (*National Institute of Standards and Technology, Gaithersburg, MD, USA*)

**1024** Polymerization Shrinkage and Contraction Stress of an Experimental Composite. J. PLATT\*, M. MacPHERSON, and B. RHODES (*Indiana University School of Dentistry, Indianapolis, USA*)

**1025** Photopolymerized Dimethacrylates Containing Antimicrobial Silver Nanoparticles Formed *in situ*. S. LIN-GIBSON\*, Y. CHENG, J.M. ANTONUCCI, D.N. ZEIGER, and N.J. LIN (*National Institute of Standards and Technology, Gaithersburg, MD, USA*)

**1026** Ionic Liquid Dental Monomers Based on Quaternary Ammonium Salts. J.M. ANTONUCCI\*, B. FOWLER, N.J. LIN, D.N. ZEIGER, and S. LIN-GIBSON (*National Institute of Standards and Technology, Gaithersburg, MD, USA*)

**1027** Synthesis of Novel Vinylbenzyl Ethers. C. DAVIS\* and R. BOWEN (*American Dental Association Foundation, Gaithersburg, MD, USA*)

**1028** Low-shrinkage Bisphenol A Free Microhybrid Composite. K. ESQUIBEL\*, A. DOCKTOR, Z. SHELTON, J. LEADFORD, K. IDA, B. LEIGHTON, J. BOULDEN, C. BRACHO-TROCONIS, and M. TRUJILLO LEMON (*Septodont, Confi Dental Division, Louisville, CO, USA*)

**S1029** Dimer Acid Bisphenol A Free Dental Pit and Fissure Sealants. Z. SHELTON, K. IDA\*, J. BOULDEN, B. LEIGHTON, K. ESQUIBEL, A. DOCKTOR, J. LEADFORD, C. BRACHO-TROCONIS, and M. TRUJILLO-LEMON (*Septodont, Confi Dental Division, Louisville, CO, USA*)

**1030** Sugar-alcohol Eutectics for Use in Synthesis of Novel Vinylbenzyl Ethers. R. BOWEN\*, C. DAVIS, and G. SCHUMACHER (*American Dental Association Foundation, Gaithersburg, MD, USA*)

**1031** Silsesquioxane-containing Thiol-Ene Resins for Composite Restoratives. K. SCHRECK\* and C. BOWMAN (*University of Colorado, Boulder, USA*)

**S1032** Formulate and Characterization of New Antibacterial Fluoride-releasing Composite. X. XU, Y. WANG, R. WU, N.E. THIELER\*, and Y. FAN (*Louisiana State University, New Orleans, USA*)

**1033** Synthesis and Evaluation of Novel Low-shrink Monomers. A.S. ABUELYAMAN\*, S.B. MITRA, R.J. CARUFEL, A.P. YANG, F.M. ZAIN, M.B. ALI, S.E. LANGER, and W.Y.-S. CHENG (*3M ESPE Dental Product, Saint Paul, MN, USA*)

**1034** Mechanism and Kinetics of Novel, Step-growth Thiol-yne Photopolymerization. B. FAIRBANKS, H. PARK, C. KLOXIN, T. SCOTT, K. ANSETH, and C. BOWMAN\* (*University of Colorado, Boulder, USA*)



- 1035** Why Do Acidic Monomers Have Greater Negative Effects on Chemical Cure? G. GIRARD\*, L. FENG, and B. SUH (*Bisco, Inc., Schaumburg, IL, USA*)
- S1036** Effect of Calcium Aluminate Cement on Hardness of Glass Ionomer. A. WHITE\* and W. WAGNER (*University of Detroit Mercy, MI, USA*)
- S1037** Polymerization Stress Reduction through Delayed Gelation. N. WILSON\*, C. PFEIFER, M. BARROS, and J. STANSBURY (*University of Colorado Denver, USA*)
- 1038** Investigation of Mixed-initiated Cationic Polymerization of a Silorane Resin. K.V. KILWAY\*, R.A. WEILER, J. MELANDER, B.D. MILLER, T. SCHUMAN, M. VELEZ, D. DAY, L. BONEWALD, and J.D. EICK (*UMKC College of Arts and Sciences, Department of Chemistry, Kansas City, MO, USA*)
- S1039** Kinetics of Conversion of Cyclic Enes/Thiol Copolymerized with BisEMA. Z. SHELTON\*, C. PFEIFER, and J. STANSBURY (*University of Colorado Denver, School of Dentistry, Aurora, USA*)
- 1040** Visible-light-activated Methacrylate Polymerization with Unique Dark Cure Behavior. J. STANSBURY\*, D. KIM, M. BARROS, and C. PFEIFER (*University of Colorado Denver School of Dental Medicine, Aurora, USA*)

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**Seq#: 134 Friday, 5 March 2010, 3:30 p.m. - 4:45 p.m.**  
**Poster Session, Exhibit Hall D**

**Dental Materials: Polymer-based Materials—Physical Properties and Performance - Roughness, Gloss, & Appearance of Resins after Polishing &/or Toothbrushing**

- 1041** Effect of Finishing Time on Polishability of Resin-based Composites. J. YAMAGAWA\*, S. ARMSTRONG, F. QIAN, S. GERALDELI, and K. HIRATA (*Tokuyama Dental Corporation, Tsukuba, Japan*)
- S1042** Color Stability of a New Silorane-based Restorative Material. J. BREWSTER\* and K. VANDEWALLE (*USAF, Lackland AFB, TX, USA*)
- 1043** Smoothness and Gloss of Polished and Glazed Composites after Brushing. J. DA COSTA\* and J. FERRACANE (*OHSU School of Dentistry, Portland, OR, USA*)
- 1044** Surface Roughness of Resin Composites after Staining and Polishing. F. SALAMA\*, O. BAWAZIR, N. AL HAMAD, and F. ABDELMEGID (*University of Nebraska, Omaha, USA*)
- 1045** Toothbrush Surface Luster of Composite Resins. V. BUI\*, A. KOBASHIGAWA, and D. TOBIA (*Kerr Corporation, Orange, CA, USA*)
- 1046** Toothbrush Surface Gloss vs. Filler Particle Size of Composites. A. KOBASHIGAWA\*, V. BUI, and D. TOBIA (*Kerr Corporation, Orange, CA, USA*)
- S1047** The Effects of Various Dentifrices on Surface Gloss of Composites. A. ADAMS-BELUSKO\* and J. DA COSTA (*Oregon Health & Science University, Portland, USA*)
- 1048** Evaluation of Six Different Polishing Systems Using Novel Polishing Apparatus. S. MEGREMIS\*, S.E. GRUNINGER, N. NJEGOVAN, J. KUEHNE, O. SIROVSKAYA, and H. SHEPELAK (*American Dental Association, Chicago, IL, USA*)

- S1049** *In vitro* Toothbrush Abrasion and Three-body Wear of Composite Resins. C. MICHELSON\*, P. JAMPANI, I.S. MUGISA, G. NATARAJARATHINAM, L.C. RAMP, P. BECK, D. CAKIR, and J. BURGESS (*University of Alabama at Birmingham, USA*)
- S1050** The Effect of Toothbrushing on the Surfaces of Resin Composites. D. FUFIDIO\*, M. CAMPILLO-FUNOLLET, P. BUSH, and C. MUÑOZ (*State University of New York - Buffalo, USA*)
- S1051** Gloss, Surface-roughness, Color Stability, and Wear of Composite Resins. G. NATARAJARATHINAM\*, I.S. MUGISA, C. MICHELSON, P. BECK, L.C. RAMP, D. CAKIR, and J. BURGESS (*University of Alabama at Birmingham, USA*)
- S1052** Influence of Toothbrushing on Surface Roughness of Restorative Materials. J.-H. PHARK, I. HUH\*, A.C. BOTTA, S. DUARTE, and A. SADAN (*Case Western Reserve University, Cleveland, OH, USA*)

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**Seq#: 135 Friday, 5 March 2010, 3:30 p.m. - 4:45 p.m.**  
**Poster Session, Exhibit Hall D**

**Dental Materials: Instruments and Equipment - CAD/CAM and Polishing Equipment**

- 1053** A Novel Testing System and Method to Evaluate Polishing Instruments. N. NJEGOVAN\*, S. MEGREMIS, J. KUEHNE, O. SIROVSKAYA, and H. SHEPELAK (*American Dental Association, Chicago, IL, USA*)
- S1054** Factors Affecting Dental Air-turbine Handpiece Bearing Failure. M. WEI\*, J.E. DYSON, and B.W. DARVELL (*The University of Hong Kong*)
- 1055** Evaluation of Different Finishing and Polishing Disc Systems on Composites. X. HUO\* and V. TORRES (*DENTSPLY Caulk, Milford, DE, USA*)
- S1056** Comparison of Ceramic Physical Properties Milled from Cerec3 and MCXL. L. JACKSON\* and R. GIORDANO (*Boston University, MA, USA*)
- S1057** Comparison of Commercially Available Powered Toothbrushes in a Dental Student Population. M. SILVERSTEIN\*, P. FAMILI, and A. SATTAR (*University of Pittsburgh, PA, USA*)
- S1058** Margin Characteristics of PFM Crown Copings Fabricated on Stereolithography Models. W. MOORE\*, P. DUNNE, E. DOHERTY, M. NELSON, M. FINKELMAN, and G. KUGEL (*Tufts University, Boston, MA, USA*)
- 1059** Effect of Irrigant Agitation with Reciprocating Instruments on Cleaning Efficiency. J. WAN\*, B. RASIMICK, B. MUSIKANT, and A. DEUTSCH (*Essential Dental Systems, South Hackensack, NJ, USA*)
- S1060** Accuracy of 3M-Brontes Stereolithography Models Compared with Plaster Models. M. OGLEDZKI\*, K. WENZEL, E. DOHERTY, and G. KUGEL (*Tufts University, Boston, MA, USA*)
- 1061** Comparison of Different Digitizing Methods in CAD/CAM Restorations. C.C. HUNG\*, C.H. CHANG, W.C. CHEN, T.K. HUANG, and C.F. TSAI (*Kaohsiung Medical University, Taiwan*)
- 1062** Comparative Anatomy of Stainless Steel Crowns. R. DELONG\*, M. PINTADO, A. FOK, and W. DOUGLAS (*University of Minnesota, Minneapolis, USA*)



**Seq#: 136 Friday, 5 March 2010, 3:30 p.m. - 4:45 p.m.**  
**Poster Session, Exhibit Hall D**

**Behavioral, Epidemiologic and Health Services Research -  
 Dental Professionals in Dental Public Health**

**S1063** Professional Attitudes and Behavior Concerning Special-needs Patients - Specialists' Perspectives. T. WEIL\*, R. BAGRAMIAN, and M.R. INGLEHART (*University of Michigan, Ann Arbor, USA*)

**S1064** Orthodontic Treatment and Pain - Providers' Perspective. N.D. SHAH\*, A.O. ARRUDA, and M.R. INGLEHART (*University of Michigan, Ann Arbor, MI, USA*)

**1065** General Practitioner Fee Variation by County Affluence, Density, GP Age. B. MUNSON\*, A.R. MENEZES, and J.D. RUESCH (*American Dental Association, Chicago, IL, USA*)

**S1066** Dentists in Community Health Centers - Exploring Professional Challenges. C. ROSSER\*, M.W. WOOLFOLK, and M.R. INGLEHART (*University of Michigan, Ann Arbor, USA*) [2009 AADR Student Research Fellowship Winner]

**S1067** Prescription Drug Abuse Awareness among Dental Professionals. J. MARTIN\*, M. OAKLEY, J. O'DONNELL, and A. VIEIRA (*University of Pittsburgh, PA, USA*)

**1068** Rubber Dam Use during Operative Dentistry: Findings from The Dental-PBRN. G.H. GILBERT, M.S. LITAKER, D.J. PIHLSTROM\*, C.W. AMUNDSON, S.L. NEW, V.V. GORDAN, and The DPBRN COLLABORATIVE GROUP (*Center for Health Research, Portland, OR, USA*)

**S1069** Complementary-and-Alternative-Medicine for Work-related Pain Correlates with Career Satisfaction among Hygienists. A. CHISMARK\*, G. ASHER, T. TAVOC, M. STEIN, and A.E. CURRAN (*University of North Carolina, Chapel Hill, USA*)

**1070** Medical Doctors' Knowledge of Dental Specialty: an Implication for Referral. C.C. AZODO, O. EHIGIATOR, A.O. EHIZELE, and O. OLOLO\* (*Patriot Dental Clinic, Owerri, Imo State, Nigeria*)

**1071** Predictors of Illinois Providers' Willingness to Provide Infant Oral Care. T. HACEK, I. PUNWANI\*, A. KOERBER, and L.G. NIEDERMAN (*University of Illinois - Chicago, USA*)

**1072** Determinants of Infant Oral Health Practices among General Dentists. K. DONOVAN\* and J.Y. LEE (*University of North Carolina, Chapel Hill, USA*)

**S1073** Job Satisfaction among Nigerian Oral Health Workers. E.B. EZEJA, C.C. AZODO, A.O. EHIZELE, O. EHIGIATOR\*, and H.O. OBORO (*Department of Oral Pathology and Oral Medicine, University of Benin Teaching Hospital, Benin City, Edo State, Nigeria*)

**1074** Dental Patients Agree with Dentists' Expanding Roles as Oral Physicians. J.S. COOPER, N.K. ANDERSON, and D.B. GIDDON\* (*Harvard University, Boston, MA, USA*)

**S1075** Primary Care Medical Provider Referral and Dental Utilization in Children. H. BEIL\* and R.G. ROZIER (*University of North Carolina, Chapel Hill, USA*)

**S1076** Perceptions and Knowledge of Orofacial Piercings among Dental Students. R. UCHIDA\*, B. SKAR, E. JOHNSON, A. KEBRIAEI, and F. SALAMA (*University of Nebraska, Omaha, USA*)

**S1077** Do Pediatricians Motivate Caregivers to Seek Dental Care for Children? K. LUDWIG\* and J. KOWOLIK (*Indiana University School of Dentistry, Indianapolis, USA*)

**1078** Dentists' Gender Differences in Caries Risk Assessment: The Dental PBRN. J. RILEY, V.V. GORDAN, J. MCCLELLAND\*, G. GILBERT, and The DPBRN COLLABORATIVE GROUP (*Jocelyn A. McClelland, DDS, LLC, Alabaster, AL, USA*)

**1079** Gender Differences in Treatment of Dental Caries: The Dental PBRN. J. RILEY, V.V. GORDAN, J. MERAL\*, G. GILBERT, and The DPBRN COLLABORATIVE GROUP (*Private Practice in Coral Springs, FL, USA*)

**1080** Infant Oral Health: the Role of Caregivers' Oral Health Literacy. W.F. VANN, Jr.\*, J.Y. LEE, K. DIVARIS, and A.D. BAKER (*University of North Carolina, Chapel Hill, USA*)

**1081** Survey of Healthcare Professionals in Ohio on Oral Cancer Examination. A.G. WEE\*, A.K. FERKETICH, C.M. ALLEN, F.A. ULLRICH, R.R. HIGH, D. POST, J.C. LYNCH, and E.D. PASKETT (*University of Nebraska Medical Center, Omaha, USA*)

**S1082** Effects of Dentists' Perceived Barriers and Knowledge on Pregnant Women. R.S.Y. LEE\*, P. MILGROM, C. HUEBNER, and D. CONRAD (*University of Washington, Seattle, USA*)

**1083** Perceptions of Faculty, Students, and Laypersons to Altered Dental Esthetics. E.C. KAO\*, T.W. NGAN, and E. GUNEL (*West Virginia University, Morgantown, USA*)

**1084** Achieving Student Body Diversity Utilizing Dental Admission Workshops. S. PRICE\*, R. CROUT, and S. WEARDEN (*West Virginia University, Morgantown, USA*)

**Seq#: 137 Friday, 5 March 2010, 3:30 p.m. - 4:45 p.m.**  
**Poster Session, Exhibit Hall D**

**Nutrition - Nutrition Oral Health Research**

**S1085** EGCG Normalizes Anti-oxidant Capacity in Tissues Affected by Autoimmune Diseases. C. KRAGOR\*, B. PAQUIN, J. HANSFORD, D. DICKINSON, K. OGBUREKE, K. GILLESPIE, and S. HSU (*Medical College of Georgia, Augusta, USA*)

**S1086** *In vitro* Erosion Potential of Vitamin C Supplements. K. MOTZ\*, T. MARSHALL, J. HARLESS, M. HOGAN, F. QIAN, and J. WEFEL (*University of Iowa, Iowa City, USA*)

**S1087** Video Gaming Teenagers: an Examination of Diet and Caries. J. POSS\*, T. MARSHALL, F. QIAN, K. WEBER-GASPARNI, and C. SKOTOWSKI (*University of Iowa, Iowa City, USA*)

**S1088** Characterization of Milk as a Protective Agent against Dental Erosion. J. GROBE\*, T. MARSHALL, F. QIAN, J. HARLESS, M. HOGAN, and J. WEFEL (*University of Iowa, Iowa City, USA*)

**Seq#: 138 Friday, 5 March 2010, 3:30 p.m. - 4:45 p.m.**  
**Poster Session, Exhibit Hall D**

**Cariology Research - Caries Prevalence and Experience - Early Childhood Caries (ECC) - Erosion**

**1089** Is There a Relationship between Malocclusion and Caries Prevalence? R. REINHARDT\*, B. SCHERER, A. AZARIPOUR, B. WILLERSHAUSEN, and H. WEHRBEIN (*Johannes Gutenberg University Mainz, Germany*)

**1090** Relationship between Parents' Knowledge of Caries Transmissibility and Caries Prevalence. S. SEGURA, J.-W. CHEN\*, B. NELSON, and F.R. TRAFICANTE (*Loma Linda University, CA, USA*)



- S1091** Caries Relation to Height, BMI, and Salivary Factors in Children. K. BURDETTE\*, N. WOODWARD, F. SALAMA, and D. MARX (*University of Nebraska, Omaha, USA*)
- S1092** Maternal Influence on *S.mutans* Colonization and ECC in Thai Children. P. GOODARZI\*, P. SARAITHONG, Z. CHEN, N. CHHUN, K. PATTANAPORN, S. KHONGKHUNTHIAN, P. LAOHAPENSANG, and Y. LI (*New York University, USA*)
- 1093** Primary Tooth Eruption and ECC (early childhood caries): Longitudinal Study. S. SILVA\*, A.A. NAKAMURA, O.P.S. ROSA, and W.A. BRETZ (*University of São Paulo-Bauru, Brazil*)
- 1094** Diet and Infection in Severe and Recurrent Early Childhood Caries. C.Y. LOO\*, C.A. PALMER, C.V. HUGHES, N.S. PRADHAN, E. KANASI, R. KENT, E. STUTIUS, S. AREVALO VASQUEZ, N. CHALMERS, P. LIF HOLGERSON, and A.C.R. TANNER (*Tufts University, Boston, MA, USA*)
- 1095** Dental Erosion, Caries Experience, and Risk Factors among Young Children. L. HONG\*, M. SIMMER-BECK, M. McCUNIFF, M. MATHEW, and B. DANEMAN (*University of Missouri-Kansas City, USA*)
- 1096** Screening for Dental Erosive Capacity - Correlation of Two Methods. B. SCHMUCK\* and C. CAREY (*American Dental Association Foundation, Paffenbarger Research Center, Gaithersburg, MD, USA*)
- 1097** Increased Erosion a Predictor of Coronal Caries. S. SUNDARALINGAM\*, M.L. SINGH, R.W. GERLACH, and A.S. PAPAS (*Tufts University School of Dental Medicine, Boston, MA, USA*)

**Seq#: 139 Friday, 5 March 2010, 3:30 p.m. - 4:45 p.m.**  
**Poster Session, Exhibit Hall D**

#### **Implantology Research - Tissue Regeneration**

- 1098** Nano- and Microstructuring of Implant Surfaces to Reduce Bacterial Adhesion. P. KOHORST\*, K. OSTERMANN, E. FADEEVA, A. WINKEL, W. HEUER, B.N. CHICHKOV, and M. STIESCH (*Hannover Medical School, Department of Prosthetic Dentistry and Biomedical Materials Science, Germany*)
- S1099** Primary Stability in Cancellous Bone of Two Implant Site Preparations. S. VORA\*, J. BAKER, L. BAIRAM, H.-I. KIM, E.L. DAVIS, and S. ANDREANA (*State University of New York - Buffalo, USA*)
- S1100** Effect of Smoking on Implants Placed Immediately in Grafted Sinus. T.H.S. LIN\*, L. CHEN, J. CHA, J. FIORELLINI, and M. JEFFCOAT (*University of Pennsylvania, Philadelphia, USA*)
- S1101** Effect of Titanium Surface Topography on Adherent Cellular Collagen Biosynthesis. G. MENDONCA\*, D. MENDONCA, P. MIGUEZ, M. YAMAUCHI, F. ARAGÃO, and L. COOPER (*University of North Carolina, Raleigh, USA*)
- 1102** Comparison of the Biocompatibility of Resilon and Gutta Percha Cones. M. FOROOZIA, M. ADEL\*, M. NASSIRI-ASL, P. MASUMI, and N. MAHBOOBI (*School of Dentistry, Qazvin University of Medical Science, Iran*)
- S1103** *In vivo* Evaluation of Novel Experimental Implants. N. KHOUJA\*, T. CHU, G. CHAHINE, R. KOVACEVIC, M. KOIKE, and T. OKABE (*Indiana University, Indianapolis, USA*)

- S1104** Comparison of Bio-Oss with Bone Grafts: Systematic Review and Meta-analysis. F. GHANAVATI, F. GHANAVATI, A. AKBARZADE BAGHBAN, A. DEGHANI, and Y. SAMANI\* (*Qazvin University of Medical Sciences, Iran*)
- S1105** Evaluation of Time-counter Torque and Transposition Implants on Osseointegration. F. GHANAVATI, M.R. KARIMI, S. FATHI, and Z. HASSANTASH\* (*Shahid Beheshti University of Medical Sciences, Tehran, Iran*)
- 1106** Periosteal and Peri-implant Bone Responses of Two Different Non-coated Implants. D. SHIN\*, S. BLANCHARD, M. ITO, and T. CHU (*Indiana University, Indianapolis, USA*)
- 1107** Flexural Properties of Mixed-initiator Silorane Bone Stabilizer. J. MELANDER, R.A. WEILER, B. MILLER, K. KILWAY, and J.D. EICK\* (*University of Missouri - Kansas City, USA*)
- 1108** Cell Maturation Determines Role of Dickkopf-1/ Dickkopf-2 in Osteogenesis on Titanium. R. OLIVARES-NAVARRETE\*, S. HYZY, M. WIELAND, B.D. BOYAN, and Z. SCHWARTZ (*Georgia Institute of Technology, Atlanta, USA*)
- S1109** Effect of Drilling Speed on Early Integration of Endosseous Implants. G. GIRO, C. MARIN, R. GRANATO, E. BONFANTE, M. SUZUKI, and P. COELHO\* (*New York University, USA*)
- S1110** *In vivo* Evaluation of Nanometer Scale Roughness Surfaces. S. LIN\*, R. GRANATO, C. MARIN, E. BONFANTE, M. SUZUKI, and P. COELHO (*New York University, USA*)
- 1111** Bone Health in Post-menopausal Women Undergoing Bone Augmentation and Implantation. D. ORTIZ\*, P. TAXEL, D. PENDRYS, S. MALLYA, D. SHAFER, S. REISINE, A. LURIE, and M. FREILICH (*University of Connecticut, Farmington, USA*)
- 1112** Prevalence of Sinus Grafting Associated with Maxillary Posterior Implants. W.-J. SEONG\*, M. BARCZAK, J. JUNG, S. BASU, and H. CONRAD (*University of Minnesota - Minneapolis, USA*)
- S1113** Influence of Bisphosphonates on Alveolar Bone Loss around Osseointegrated Implants. T. ZAHID\*, B. WANG, and R. COHEN (*State University of New York - Buffalo, USA*)
- 1114** PDGF Delivery Increases Chemokine Gene Expression during Dental Implant Osseointegration. Q. JIN\*, P.-C. CHANG, J. SUGAI, and W. GIANNOBILE (*University of Michigan, Ann Arbor, USA*)
- S1115** Piezoelectric vs. Conventional Site Preparation: *ex vivo* Implant Primary Stability. J. BAKER\*, S. VORA, L. BAIRAM, H.-I. KIM, and S. ANDREANA (*State University of New York - Buffalo, USA*)
- 1116** Paper Withdrawn.

**Seq#: 140 Friday, 5 March 2010, 3:30 p.m. - 4:45 p.m.**  
**Poster Session, Exhibit Hall D**

#### **Oral Health Research - Prevention and Treatment of Oral Diseases I**

- 1117** Dentin Permeability Reduction by a Fluoride-calcium-phosphate Treatment. T. KOMABAYASHI\*, Y. IMAI, C. AHN, L.C. CHOW, and S. TAKAGI (*Baylor College of Dentistry, Dallas, TX, USA*)
- S1118** Accuracy of MEDLINE Indexing for Dental-related Randomized Controlled Trials. C.M. RIGGS\*, J.D. RUGH, A. MYATT, and J.P. HATCH (*University of Texas - San Antonio / Health Science Ctr., USA*)



- 1119** Oral-Systemic Health Knowledge, Attitudes, and Practices of New Hampshire Physicians. A. GRILL, S. MILLS\*, and M. COURET (*Northeast Delta Dental, Concord, NH, USA*)
- 1120** *In vitro* Evaluation of Two Commercial Rinses against Indole Formation. B. WON\*, S. PILCH, P. SREENIVASAN, and J. MASTERS (*Colgate-Palmolive Company, Piscataway, NJ, USA*)
- S1121** CHROMagar Dilution Screening vs. CLSI for the Detection of Fluconazole-resistant *Candida*. T.A. SAMUEL\*, A.W. FOTHERGILL, J.E. ERLANDSEN, S.A. MAYEN, W.R. KIRKPATRICK, N.P. WIEDERHOLD, T.F. PATTERSON, and S.W. REDDING (*University of Texas - San Antonio / Health Science Ctr., USA*)
- 1122** Brushing Duration of Two Power Toothbrushes. K.R. MILLEMAN\*, M.S. PUTT, W. JENKINS, J. WEI, and J. STRATE (*University Park Research Center, Fort Wayne, IN, USA*)
- 1123** Prenatal Counseling for Pregnant Women: a Survey of General Dentists. F. SALAMA, K. McFARLAND\*, A. KEBRIAIEI, and T. DURHAM (*University of Nebraska, Omaha, USA*)
- S1124** Neutralization of Nicotine-induced Cytotoxic Effects by Green Tea Epigallocatechin Gallate. J. DESJARDINS\* and D. GRENIER (*Laval University, Quebec, Canada*)
- S1125** Factors Associated with Child Self-perception of Oral Health. T.S. BARBOSA\*, P.M. CASTELO, M.S. LEME, and M.B.D. GAVIÃO (*University of Campinas - Piracicaba Dental School, Brazil*)
- S1126** Dental Status among Children with and without Special Needs. R. KAROLL\*, M. HEIMA, S. NELSON, and G. FERRETTI (*Case Western Reserve University, Cleveland, OH, USA*)
- 1127** Four-week Evaluation of Toothbrush and Floss Regimen in Reducing Gingivitis. S. SANTOS\*, A. MORRIS, N. SHARMA, J. EDELSTEIN, J. McGUIRE, A. HEE, and J. QAQISH (*Johnson & Johnson Consumer & Personal Products Worldwide, Morris Plains, NJ, USA*)
- 1128** Vitamin D Induction of Innate Immunity in Gingival Epithelial Cells. L.W. McMAHON\*, S. YIM, S. CHRISTAKOS, and G. DIAMOND (*University of Medicine and Dentistry of New Jersey, Newark, USA*)
- S1129** Frequency of Radiographic Evaluation for Patients with Special Needs. L. CHRISTENSEN\*, R.L. SLAYTON, M.-E. ASSELIN, C.M. KUMMET, and S.R. JOHNSON (*University of Iowa, Iowa City, USA*)
- 1130** Comparative Evaluation of Three Manual Toothbrushes for Removing Dental Plaque. A. MORRIS\*, S. SANTOS, B. LEMLI, J. EDELSTEIN, N. SHARMA, C. GOYAL, J.A. McGUIRE, J. QAQISH, A. HEE, and J. KNUTZEN (*Johnson & Johnson Consumer & Personal Products Worldwide, Morris Plains, NJ, USA*)
- 1131** Efficacy of Two New REACH® Manual Toothbrushes for Dental Plaque Removal. A. MORRIS, S. SANTOS, C. GOYAL, N. SHARMA, J. QAQISH, S. DEMISSIE, J.A. McGUIRE, B. LEMLI, J. EDELSTEIN, and C. CHARLES\* (*Johnson & Johnson Consumer & Personal Products Worldwide, Morris Plains, NJ, USA*)
- S1132** mDia Regulates Force-induced Myofibroblast Differentiation. M.W.C. CHAN\*, F. CHAUDARY, W. LEE, J. COPELAND, and C.A. McCULLOCH (*University of Toronto, ON, Canada*)

**Seq#: 141** Friday, 5 March 2010, 3:30 p.m. - 4:45 p.m.  
Poster Session, Exhibit Hall D

#### Microbiology / Immunology and Infection Control - Cell Biology

- 1133** Mouse Model of Experimental Diabetic Periodontitis Induced by Gram-negative Infection. Q. WANG, W. ZHANG\*, R. APRECIO, O. MOHAMED, S. GOVINDAGOUDAR, S. PURI, and Y. LI (*Loma Linda University School of Dentistry, CA, USA*)
- S1134** Cationic Liposomes Enhance Adenoviral Gene Delivery to OSCC Cells. G. LIM\*, S. GEBREMEDHIN, J. OUELLETTE, I. ULASOV, M. LESNIAK, K. KONOPKA, and N. DÜZGÜNES (*Department of Microbiology, University of the Pacific Arthur A. Dugoni School of Dentistry, San Francisco, CA, USA*)
- S1135** Paracrine Modulation of Paracellular Permeability by Cytomegalovirus. E. DANG\* (*University of California - San Francisco, USA*)
- S1136** Expression of 25-HydroxyvitaminD<sub>3</sub>-1- $\alpha$ -Hydroxylase in Gingival Epithelial Cells. Q. WANG\*, W. ZHANG, R. APRECIO, and Y. LI (*Loma Linda University School of Dentistry, CA, USA; State Key Laboratory of Oral Diseases, Sichuan University, Chengdu, China*)
- 1137** Polybacterial Challenge of HIV-Latently Infected Macrophages and Dendritic Cells. C. HUANG\*, Y. ALIMOVA, and J.L. EBERSOLE (*University of Kentucky, Lexington, USA*)
- 1138** Differences within the Dentition for Plaque and Anaerobic Plaque Bacteria. P. SREENIVASAN, K.V.V. PRASAD\*, R.D. KULKARNI, S. PATIL, K.G. CHHABRA, and G. RAJESH (*Colgate-Palmolive Company, Piscataway, NJ, USA*)
- 1139** Regulatory Mechanism of Tooth Development by an Intracellular Signal Transduction Pathway. M. SUNOHARA\*, H. MURATA, T. YATSU, and I. SATO (*Nippon Dental University, Tokyo, Japan*)
- S1140** Membrane-associated HSP90 Regulates NF- $\kappa$ B Activation in Herpesvirus Oncogenesis. M. DEFEE\*, Z. QIN, L. DAI, B. TOOLE, J. ISAACS, and C. PARSONS (*Medical University of South Carolina, Charleston, USA*)
- S1141** Method for Isolation of a Biologically Active Component from OSCC. T. BALABEGIANS\*, Z. KURAGO, and L. RAMANATHAPURAM (*New York University, USA*)
- S1142** Rapid Quantification by ELISA of the Activated Tumor Suppressor BAX. A. VILLAMAYOR\*, O. TEIJIDO, and L. DEJEAN (*New York University, USA*)
- S1143** Paper Withdrawn.
- S1144** APOBEC3C May Mediate G-to-A Hypermutation of HIV-1 in Target Cells. C. HOLTZ\*, E.W. REFSLAND, R.S. HARRIS, and L.M. MANSKY (*University of Minnesota, Minneapolis, USA*)
- S1145** SNS and HPA Axis Modulate Stress-impaired Wound Healing. J. RUTTENCUTTER\*, P. GAJENDRAREDDY, and P. MARUCHA (*University of Illinois at Chicago, Glenview, USA*)



Seq#: 142    Friday, 5 March 2010, 3:30 p.m. - 4:45 p.m.  
Poster Session, Exhibit Hall D

**Periodontal Research - Therapy - Host Modulators /  
Antimicrobials / Wound Healing / Systemic Influences**

- 1146** One-year Effects of Vitamin D-Calcium Supplementation on Chronic Periodontitis. M.N. GARCIA\*, C. HILDEBOLT, D.D. MILEY, R.A. COUTURE, D. DIXON, C. ANDERSON SPEARIE, E. LANGENWALTER, W. SHANNON, E. DEYCH, C. MUELLER, and R. CIVITELLI (*Saint Louis University, MO, USA*)
- 1147** Characterization of Single- vs. Multiple-species Biofilms of *Streptococcus* spp. S. KIRAKODU\*, R. PEYYALA, J. EBERSOLE, and K. NOVAK (*University of Kentucky, Lexington, USA*)
- S1148** Anti-oxidant Compounds Counteract the Effects of Nicotine on Cell Migration. J. PARSONS\*, S.M. SAN MIGUEL, M. SERRANO, L.A. OPPERMAN, and K.K. SVOBODA (*Baylor College of Dentistry, Dallas, TX, USA*)
- S1149** Anti-oxidants Promote Proliferation of Human Gingival and Periodontal Ligament Fibroblasts. S. SAN MIGUEL\*, L. OPPERMAN, and K. SVOBODA (*Baylor College of Dentistry, Dallas, USA*)
- S1150** Evaluation of Propolis vs. Standard Antibiotics against Periodontal Disease Biofilm. L. YANG\*, R. PILEGGI, C. WALKER, and L. SHADDOX (*University of Florida, Gainesville, USA*)
- 1151** Preliminary Data on Periodontal Disease Treatment Using Topical Oxidizing Agents. D. KELLER\*, L. NGUYEN, L. JOBE, and B. SINDELAR (*Perio Protect LLC, Saint Louis, MO, USA*)

Seq#: 143    Friday, 5 March 2010, 3:30 p.m. - 4:45 p.m.  
Poster Session, Exhibit Hall D

**Neuroscience / TMJ - Animal Models in Neuroscience**

- 1152** Material Properties of Pig Lateral TMJ Capsule under Tensile Loading. E. JOHNSON, A. KIMBERLY, and B. SINDELAR\* (*Ohio University, Athens, USA*)
- S1153** Strain-dependent Regional Electrical Conductivity of Porcine TMJ Disc Tissue. J. KUO\*, G. WRIGHT, and H. YAO (*Medical University of South Carolina, Charleston, USA*)
- S1154** Distinguishing Active-zone-based from Ectopic Transmitter Release at a Cholinergic Synapse. J. EMRICK\* and P. SARGENT (*University of California - San Francisco, USA*)
- S1155** Orexin siRNA Effects on Food Intake and Activity in Rats. J. NIXON\* and C. KOTZ (*University of Minnesota, Minneapolis, USA*)
- S1156** Social Stress Activates Innate Immune Responses in Brain Microglia. M. HANKE\*, A. WYNNE, C. HENRY, E. WOHLEB, M. BAILEY, J. GODBOUT, and J. SHERIDAN (*The Ohio State University, Columbus, USA*)
- 1157** Behavioral Manifestations of Dental Pulp Injury in the Mouse. J. GIBBS\*, R. URBAN, J. MELNYK, and A. BASBAUM (*UCSF, San Francisco, CA, USA*)
- S1158** 17- $\beta$  Estradiol Modulates GABA(A) Receptor  $\alpha$ 6 Expression in Inflamed Temporomandibular Joint. J. PURI\*, L. BELLINGER, and P. KRAMER (*Baylor College of Dentistry, Dallas, TX, USA*)

- 1159** Meal Duration; a Measure of Tooth and Temporomandibular Joint Nociception. L. BELLINGER\*, J. HE, and P. KRAMER (*Baylor College of Dentistry, Dallas, TX, USA*)
- S1160** Examination of Neuropeptide Levels during Adjuvant-induced Inflammation of the TMJ. M. BROWNLEE\*, P. PRIOUR, and R. SPEARS (*Baylor College of Dentistry, Dallas, TX, USA*)
- S1161** Changes in Neuropeptide Y Receptor Expression in Inflamed TMJ Tissues. S. VAUGHN\* and R. SPEARS (*Baylor College of Dentistry, Dallas, TX, USA*)
- S1162** Interleukin-10 and its Effects on Inflammation in TMJ Tissues. J. LEE\* and R. SPEARS (*Baylor College of Dentistry, Dallas, TX, USA*)
- S1163** Neurokinin-1-positive Neurons in Rostroventromedial Medulla Contribute to Inflammatory Hyperalgesia. T. BRINK\*, S. KHASABOV, and D. SIMONE (*University of Minnesota, Minneapolis, USA*)
- S1164** Role of Rostral Ventromedial Medulla in Facilitation of Pain Transmission. K. DESAI\* (*University of Minnesota, Minneapolis, USA*)
- S1165** A Novel Mechanical Operant Assay for the Assessment of Orofacial Pain. J. HESTER\*, T. NOLAN, and J. NEUBERT (*University of Florida, Gainesville, USA*)
- 1166** Characterization of a New Mouse Model of Orofacial Pain. M. ROMERO-REYES\*, E. NGUYEN, B. HOM, A. VIJESWARAPU, J. BIAG, H. DONG, and A. CHARLES (*University of California - Los Angeles, USA*)

Seq#: 144    Friday, 5 March 2010, 3:30 p.m. - 4:45 p.m.  
Poster Session, Exhibit Hall D

**Oral Medicine & Pathology - Oral Cancer and Precancer**

- S1167** Control of Oral-cancer-derived Cytokines by Tristetraprolin. E. VAN TUBERGEN\*, R. VANDERBROEK, K. KIRKWOOD, and N. D'SILVA (*University of Michigan, Ann Arbor, USA*)
- S1168** Hypoxia-inducible Factor: a Key Pro-angiogenic and Metabolic Target of mTOR? J. STIEBER\*, D. MARTIN, P. AMORNPHIMOLTHAM, A. MOLINOLO, V. PATEL, and J.S. GUTKIND (*University of Michigan, Ann Arbor, USA*)
- S1169** Activation of a p38MAPK Network in Head and Neck Cancer. K. LEELAHAVANICHKUL\*, A.A. MOLINOLO, J. BASILE, and J.S. GUTKIND (*National Institute of Dental and Craniofacial Research, Bethesda, MD, USA*)
- S1170** The Effect of Scaffold Topography on HNSCC Cell Motility. E. SHIPP\*, L. LEE, and R.H. KRAMER (*University of California - San Francisco, USA*)
- 1171** T2/Onc Transposition Generates Genetic Diversity in Cultured Oral Keratinocyte Populations. J. HILL\*, J. MATHEW, C. BUSCHMANN, and D. LARGAESPADA (*University of Texas - Houston/Health Science Center, USA*)
- S1172** Intracellular Calprotectin Reduces Pro-inflammatory Signals in Oral Keratinocytes. B. SORENSON\*, A. KHAMMANIVONG, B. GUENTHER, K. ROSS, and M. HERZBERG (*University of Minnesota, Minneapolis, USA*)
- S1173** Calprotectin Negatively Regulates Stem Cell Gene Networks in Carcinoma. A. KHAMMANIVONG\*, B. SORENSON, K. ROSS, M. LINGEN, and M. HERZBERG (*University of Minnesota, Minneapolis, USA*)



**1174** Efficient Gene Delivery to Oral Cancer Cells by Polyethylenimine-DNA Complexes. S. GEBREMEDHIN\*, F. MARTINEZ, J. FOUNTAIN, K. KONOPKA, and N. DÜZGÜNES (*Department of Microbiology, University of the Pacific Arthur A. Dugoni School of Dentistry, San Francisco, CA, USA*)

**1175** Butyrate Induces Up-regulated Expression of  $\alpha$ -defensins in Keratinocytes. M. NISHIMURA\*, M. YAMAZAKI, T. KAKU, M. SAITOH, and Y. ABIKO (*Health Sciences University of Hokkaido, Japan*)

**S1176** Pilot Study: Desmoglein-1 Expression in Lichenoid Lesions. P. MARTENS\*, N. NARAYANA, and J.K. WAHL III (*University of Nebraska, Lincoln, USA*)

**Seq#: 145** Friday, 5 March 2010, 3:30 p.m. - 4:45 p.m.  
Poster Session, Exhibit Hall D

**Craniofacial Biology - Developmental Mechanisms of Craniofacial Structures**

**S1177** Facial Defects Associated with FGF Pathway Activation. S. TROPP\*, X. LI, and R. MARCUCIO (*University of California - San Francisco, USA*)

**1178** Paper Withdrawn.

**1179** Smad4-Shh-Nfic Signaling-mediated Epithelial-Mesenchymal Interaction is Crucial in Regulating Root Development. J. LI\*, X. HUANG, Y. HUNG, and Y. CHAI (*University of Southern California, Los Angeles, USA*)

**S1180** Regulation of Endothelin-A Receptor Expression by Progesterone. G. KNUTSEN\*, Y. ZHANG, and L.B. RUEST (*Texas A&M Health Science Center, Baylor College of Dentistry, Dallas, USA*)

**S1181** Altered Dentition in Retinoblastoma (Rb) Mutant Mice. L. HU\*, W. ZHANG, P.C. YELICK, E. KONG, and P. HINDS (*Tufts University, Boston, MA, USA*)

**S1182** Periderm Cells Require Jag2-mediated Notch Signaling for Palate Formation. D. HALL\*, J.-Z. JIN, and J. DING (*University of Louisville, KY, USA*)

**1183** Robinow Syndrome: Genotype/Phenotype Correlations with WNT5A and ROR2 Mutations. S. BEIRAGHI\*, V. LEON-SALAZAR, A.P. PERSON, C.M. SIEBEN, S. HERMANSON, A.N. NEUMANN, M.E. ROBU, J.R. SCHLEIFFARTH, H. VAN BOKHOVEN, J.F. MAZZEU, A. PETRYK, H.G. BRUNNER, S.C. EKKER, and J.L. LOHR (*University of Minnesota, Minneapolis, USA*)

**1184** The Role of c-Kit Signaling in Submandibular Gland Development. I. LOMBAERT\* and M. HOFFMAN (*NIDCR, Bethesda, MD, USA*)

**S1185** Phenotypic Comparisons between WT and wnt9b Knockout Mice. B. JORGENSEN\*, A. LIDRAL, S. BULLARD, and S. BLOOMBERG (*University of Iowa, Iowa City, USA*)

**S1186** Visualizing the Role of PI-3 Kinase in Palate Fusion. M. MILLER\*, M. SERRANO, S.M. SAN MIGUEL, and K.K. SVOBODA (*Baylor College of Dentistry -, Dallas, TX, USA*) [2009 AADR Student Research Fellowship Winner]

**Seq#: 146** Friday, 5 March 2010, 3:30 p.m. - 4:45 p.m.  
Poster Session, Exhibit Hall D

**Craniofacial Biology - Muscle Cell Biology**

**1187** Mitochondria in the Masseter Muscle of *klotho* Mutant Mice. I. SATO\*, M. MURATA, M. YAMAZAKI, Y. MIWA, and M. SUNOHARA (*Nippon Dental University, Tokyo, Japan*)

**S1188** Myostatin and Myosin Heavy-chain Isoforms in Mouse Masseter Muscle. H. TAKADA\* and I. SATO (*Nippon Dental University, Tokyo, Japan*)

**Seq#: 147** Friday, 5 March 2010, 3:30 p.m. - 4:45 p.m.  
Poster Session, Exhibit Hall D

**Craniofacial Biology - Orthodontics II - Diagnosis and Treatment Modalities**

**S1189** Comparison of Orthodontic Treatment with Crowding Using ABO Parameters. A. HOYBJERG\* and G. CURRIER (*University of Oklahoma, Edmond, USA*)

**S1190** Effects of Bracket Angulations on Force System of Impacted Canines. S. YADAV\*, J. CHEN, and E. ROBERTS (*Indiana University-Purdue University, Indianapolis, USA*)

**S1191** CBCT Analysis of the Oropharynx: Effects of Age and Sex. K. FAGALA\*, R. STREIGHT, and E. HARRIS (*University of Tennessee, Memphis, USA*)

**1192** Differentiating Working from Non-working Masseter and Temporalis Activity. J. RADKE\*, S. HOGAN, P. HURST, J.P. HATCH, and J.D. RUGH (*Bio-Research Associates Inc., Milwaukee, WI, USA*)

**1193** Compensatory Mandibular Movement during Speech in Response to Intra-oral Perturbation. K.A. MAYES\*, D. WEATHERSPOON, J. LEE, and M. STONE (*University of Maryland Dental School, Baltimore, USA*)

**S1194** Three-dimensional Assessment of Dental Changes following Treatment with the Damon System. S. EHSANI\*, T. EL-BIALY, T.D. CARLYLE, and B. KUSNOTO (*University of Alberta, Edmonton, Canada*)

**1195** Systematic Review of Self-ligating Brackets. G.M. GREENLEE\*, S.S.-H. CHEN, C.L. SMITH, J.-E. KIM, and G. HUANG (*University of Washington, Seattle, USA*)

**1196** Periodontal Ligament Influence on Forces Produced by Orthodontic Asymmetric Headgear. L. CHI, M. CHENG, T. NGUYEN, H.G. HERSHEY, and C.-C. KO\* (*California Institute of Technology, Pasadena, USA*)



Seq#: 148    **Friday, 5 March 2010, 3:30 p.m. - 4:45 p.m.**  
**Poster Session, Exhibit Hall D**

**Craniofacial Biology - TMJ**

**S1197** Reduction of Ddr2 Attenuates TMJ Degeneration Induced by Partial Discectomy. I. POLUR\* and L. XU (*Harvard University, Boston, MA, USA*)

**S1198** Cell Density Distribution in the Porcine Temporomandibular Joint Disc. C. SHI\*, L. ZHANG, and H. YAO (*Clemson University, Charleston, SC, USA*)

**I199** Expression of Indian Hedgehog during Post-natal Development of Mandibular Condyle. Y. SHIBUKAWA\*, Y. ISHIZUKA, T. KINUMATSU, and S. YAMADA (*Tokyo Dental College, Chiba, Japan*)

**S1200** Validation of Shape Correspondence for Quantification of Condylar Resorption. D. WALKER\*, L. CEVIDANES, B. PANIAGUA, H. ZHU, M. STYNER, and P.F. LIM (*University of North Carolina, Chapel Hill, USA*) [2009 AADR Student Research Fellowship Winner]

**S1201** P1 Mediates Induction of MMPs by Relaxin in Mouse TMJ Fibrochondrocytes. R. NAIR\*, W. WANG, N. AHMAD, and S. KAPILA (*University of Michigan, Ann Arbor, USA*) [2008 AADR Student Research Fellowship Winner]

**NOTE:**    \* = Presenting Author  
               S prior to the presentation number  
               indicates Student Presenter

**FRIDAY, MARCH 5, 2010**

**POSTER CHAIR LISTING**

**Poster Sessions: 2 p.m. - 3:15 p.m.**

| Session #'s | Group | Poster #'s | Poster Chairs                   |
|-------------|-------|------------|---------------------------------|
| 114         | PB    | 769 - 778  | Peter E. Murray                 |
| 115 - 118   | DM    | 779 - 842  | Marie Koike &<br>Spiro Megremis |
| 119 - 120   | BEHSR | 843 - 879  | Alvin G. Wee                    |
| 121         | EDU   | 880 - 891  | Maria Ninna Estrella            |
| 122         | CAR   | 892 - 904  | Livia Maria Andaló<br>Tenuta    |
| 123         | MT    | 905 - 922  | Dawei Liu                       |
| 124         | M/I   | 923 - 934  | Helieh S. Oz                    |
| 125         | PERIO | 935 - 950  | Moritz Kebschull                |
| 126         | OMP   | 951 - 965  | Ana Paola Cotrim                |
| 127 - 128   | CRAN  | 966 - 976  | Iwao Sato                       |

**Poster Sessions: 3:30 p.m. - 4:45 p.m.**

| Session #'s | Group | Poster #'s  | Poster Chairs                         |
|-------------|-------|-------------|---------------------------------------|
| 131         | PB    | 993 - 1001  | Weibo Zhang                           |
| 132         | PROS  | 1002 - 1022 | Harold Morris                         |
| 133 - 135   | DM    | 1023 - 1062 | Randa Elsalawy &<br>Tadasha Culbreath |
| 136         | BEHSR | 1063 - 1084 | John Warren                           |
| 137         | NUT   | 1085 - 1088 | Helieh S. Oz                          |
| 138         | CAR   | 1089 - 1097 | James Wefel                           |
| 139         | IMP   | 1098 - 1116 | Brian Case                            |
| 140         | OHR   | 1117 - 1132 | Preetha Panose<br>Kanjirath           |
| 141         | M/I   | 1133 - 1145 | Keith Kirkwood                        |
| 142         | PERIO | 1146 - 1151 | Efthimia Ioannidou                    |
| 143         | NEU   | 1152 - 1166 | Cara Gonzales                         |
| 144         | OMP   | 1167 - 1176 | Nelson L. Rhodus                      |
| 145 - 148   | CRAN  | 1177 - 1201 | Junjie Wu                             |



**Seq#: 149** Saturday, 6 March 2010, 8:30 a.m. - 10:30 a.m.  
Symposium, Room 143C

**Symposium - New Perspectives in Stem Cell Therapeutic Research**

**Chairperson: P. Papagerakis**

**1202** 8:30 Orofacial Stem Cells and Tissue Regeneration. S. SHI\* (*USC CCMB, Los Angeles, CA, USA*)

9:00 Biomimetic Scaffolds and Growth Factor Delivery to Control Stem Cell Fate. P.X. MA\* (*University of Michigan, Ann Arbor, USA*)

9:30 Properties and Therapeutic Potential of Skin Stem Cells. E. FUCHS\* (*Howard Hughes Medical Institute, New York, NY, USA*)

10:00 Morphogenetic Signaling Pathways of Epithelial Stem Cells. S. MILLAR\* (*University of Pennsylvania, Philadelphia, USA*)

**Seq#: 150** Saturday, 6 March 2010, 9 a.m. - 10:30 a.m.  
Hands-on Workshop, Room 147B

**Hands-on Workshop - Next-generation Sequencing (NGS) Data Analysis for the Oral Microbiome**

**Chairperson: G. Xie**

**1203** 9:00 Next-generation Sequencing (NGS) Data Analysis for the Oral Microbiome. G. XIE\* (*Los Alamos National Laboratory, NM, USA*)

**Seq#: 151** Saturday, 6 March 2010, 9 a.m. - 10:30 a.m.  
Symposium, Room 152A

**Symposium - National Student Research Group: The Now and Future of Dental Research**

**Chairpersons: B. Warner and N. Lawson**

**1204** 9:00 Clinical and Materials Research. J. BURGESS\* (*University of Alabama, Birmingham, USA*)

9:20 Salivary Diagnostics. D. WONG\* (*University of California - Los Angeles, USA*)

9:40 Medical Approach to Dentistry. M. GLICK\* (*Arizona School of Dentistry & Oral Health, A.T. Still University, Mesa, USA*)

10:00 Discussion.

**Seq#: 152** Saturday, 6 March 2010, 9 a.m. - 10:30 a.m.  
Symposium, Room 147A

**Symposium - Orofacial Clefting in Mouse Models**

**Chairpersons: O. Klein and S. Beiraghi**

**1205** 9:00 Not Just Mousing Around: Lessons from Models of Orofacial Clefting. O. KLEIN\* (*University of California - San Francisco, USA*)

9:15 Tissue-specific Dissection of the Molecular Pathways Regulating Palate Development. R. JIANG\* (*University of Rochester, NY, USA*)

9:40 Mechanisms of Palatal Epithelial Seam Disintegration. A. NAWSHAD\* (*University of Nebraska, Lincoln, USA*)

10:05 Epithelial-mesenchymal Transformation during Craniofacial Development. K. SVOBODA\* (*Baylor College of Dentistry, Dallas, TX, USA*)

**Seq#: 153** Saturday, 6 March 2010, 9 a.m. - 10:30 a.m.  
Oral Session, Room 140B

**Behavioral, Epidemiologic and Health Services Research - Oral Health Outcomes - Health Literacy & Quality of Life**

**Chairpersons: G. Gilbert and L. Kaste**

**1206** 9:00 Oral Health Literacy Levels among a Low-income Population. J.Y. LEE\*, K. DIVARIS, R.G. ROZIER, A.D. BAKER, and W.F. VANN, Jr. (*University of North Carolina, Chapel Hill, USA*)

**1207** 9:15 Functional Health Literacy and Dental Utilization of Young Children. T. BRICKHOUSE, E. BERRY\*, M. FRIES, and H. CARRETTA (*Virginia Commonwealth University - VCU/MCV, Richmond, USA*)

**1208** 9:30 Children's Oral Health, Oral-health-related and Health-related Quality of Life. M.R. INGLEHART\*, L. LALONDE, A. ROBINSON, and M.N. ESTRELLA (*University of Michigan, Ann Arbor, USA*)

**1209** 9:45 Oral Cancer Examinations among U.S. Dentate Smokers and Drinkers. M.D. MACEK\* and J.A. YELLOWITZ (*University of Maryland Dental School, Baltimore, USA*)

**S1210** 10:00 Adolescents with Cleft Lip/Palate: Quality of Life and Treatment Satisfaction. S. MUNZ\*, S.P. EDWARDS, and M.R. INGLEHART (*University of Michigan, Ann Arbor, USA*)

10:15 Discussion.

**Seq#: 154** Saturday, 6 March 2010, 9 a.m. - 10:30 a.m.  
Oral Session, Room 140A

**Cariology Research - Demineralization/Remineralization - F-varnishes, CPP/ACP**

**Chairpersons: J. Hicks and M. Ando**

9:00 Discussion.

**S1211** 9:15 Micro-CT Assessment of Longitudinal Demineralization. R. GUPTE, W. DOUGLAS, and A. FOK\* (*University of Minnesota, Minneapolis, USA*)

**S1212** 9:30 Micro-CT Assessment of Inhibition of Enamel Demineralization by CPP-ACP Paste. H. HAMBATA\*, T. NIKAIDO, G. INOUE, and J. TAGAMI (*Tokyo Medical & Dental University, Japan*)

**1213** 9:45 Effect of Calcium Phosphate with Fluoride on Enamel Caries *in vitro*. J. HICKS\* and C. FLAITSZ (*Texas Children's Hospital, Baylor College of Medicine, Houston, USA*)

**1214** 10:00 Fluoride Deposition by Calcium- and L-aspartic-acid-containing Fluoride Varnishes. S. TAKAGI\*, B.J. WISOWATY, G. INOUE, and L.C. CHOW (*American Dental Association Foundation, Gaithersburg, MD, USA*)

**1215** 10:15 New Varnish Releases Fluoride, Calcium, and Phosphorus *in vitro*. P.-J. FLANIGAN\*, J. FITCH, and D. AESCHLIMAN (*3M ESPE, St. Paul, MN, USA*)



Seq#: 155 Saturday, 6 March 2010, 9 a.m. - 10:30 a.m.  
Oral Session, Room 143AB

**Craniofacial Biology - Genetics: Craniofacial Morphogenesis and Root Resorption**

**Chairperson: S. Frazier-Bowers and J. Sciote**

- S1216** 9:00 The Role between Variations in Alcohol Metabolism and Orofacial Clefts. S.R. IMOHL\*, M.A. MANSILLA, and J.C. MURRAY (*University of Iowa, Iowa City, USA*)
- 1217** 9:15 3D Analysis of Face Shape Heritability in Twins. S. WEINBERG\*, M. MARAZITA, and B. MAHER (*University of Pittsburgh, PA, USA*)
- 1218** 9:30 Novel Mutations in *PTH1R* Cause Primary Failure of Eruption. S. FRAZIER-BOWERS\*, D. SIMMONS, J. LEE, K. TSUI, K. THOMPSON, J. WRIGHT, and S. BENCHARIT (*University of North Carolina, Chapel Hill, USA*)
- 1219** 9:45 Molecular Determinants of Human Masseter Muscle Phenotype in Malocclusion. J. SCIOTE\*, M. HORTON, G. RAOUL, A. ROWLERSON, J. FERRI, and J. CLOSE (*Temple University, Philadelphia, PA, USA*)
- 1220** 10:00 6p12.1 Microdeletion in a Cleidocranial Dysplasia Family. J. DONG\*, Y. WU, Y.-S. FAN, J. WHATLEY, A. ACEVEDO, P. WAITE, and M. MacDOUGALL (*University of Alabama, Birmingham, USA*)
- S1221** 10:15 Possible Association of P2RX7 Polymorphisms and EARR during Orthodontia. T. MOREMI\*, G. FALCÃO-ALENCAR, L.A. MORFORD, J.V. MACRI, G.T. KLUEMPER, and J.K. HARTSFIELD, Jr. (*University of Kentucky, Lexington, USA*)

Seq#: 156 Saturday, 6 March 2010, 9 a.m. - 10:30 a.m.  
Oral Session, Room 151B

**Dental Materials: Adhesion - Bond Strength Testing and Mechanisms - Bond Strength - Other**

**Chairpersons: A. Obeidi and R. Ajlouni**

- S1222** 9:00 Durability of Resin Bonding to Nano-structured Alumina-coated Zirconia Ceramic. S. ZHANG\*, A. KOCJAN, F. LEHMANN, T. KOSMAC, and M. KERN (*Department of Prosthodontics, Propädeutics and Dental Materials, Christian-Albrechts University at Kiel, Germany*)
- S1223** 9:15 Dentin Bond Strength of Fiber Posts Using Different Cements. M. LATTA and T. BOSS\* (*Creighton University, Omaha, NE, USA*)
- 1224** 9:30 Curing Protocol Effect on Orthodontic Brackets' Bond Strength. R. AJLOUNI\*, S. BISHARA, K. AJLOUNI, and J. LAFFOON (*Baylor College of Dentistry, Dallas, TX, USA*)
- 1225** 9:45 Bond Strength of Adhesive Luting Cements to Dentin. Y. KORKMAZ\*, F.Y. CAKIR, S. AK, Z.B. KUTUKCU, S. GURGAN, and D. NATHANSON (*Baskent University, Ankara, Turkey*)
- 1226** 10:00 Immediate Shear Bond Strength of Two Dissimilar Resin Cements. R. RITTER\*, C. RAMSEY, and J.M. POWERS (*Private Practice, Jupiter, FL, USA*)
- 10:15 Discussion.

Seq#: 157 Saturday, 6 March 2010, 9 a.m. - 10:30 a.m.  
Oral Session, Room 150B

**Dental Materials: Ceramic-based Materials and Cements - Ceramic Surfaces, Interfaces, Graded Structures, and Cements**

**Chairpersons: Y. Zhang and A. ArRejaie**

- 1227** 9:00 Customized Integrated Ceramic Implants: Initial Trials. M.N. ABOUSHELIB\* and M. M. GHONEIM (*University of Alexandria, Egypt*)
- S1228** 9:15 Strength and Fracture Behavior of Alumina-Glass Graded Restorative Material. E. DORTHE\*, J.W. KIM, and Y. ZHANG (*New York University, USA*)
- S1229** 9:30 YSZ Thin-Film Modified Surfaces for Enhanced Fracture Behavior. R. CHAN\*, R. SCATTERGOOD, J. THOMPSON, B. STONER, and J. PIASCIK (*North Carolina State University, Raleigh, USA*)
- S1230** 9:45 Mechanical Properties of Y-TZP/ Porcelain Interface with Multiple Surface Treatments. A. ARREJAIE\*, R. GIORDANO, and R. POBER (*Boston University, MA, USA*)
- 1231** 10:00 Rapid-setting Tetracalcium Phosphate (TTCP)-based Cements. A. MOSTAFA, S. TAKAGI, and L.C. CHOW\* (*Paffenbarger Research Center, ADAF, Gaithersburg, MD, USA*)
- 1232** 10:15 Accelerated Aging of Dual-cure Cements: Conversion, Working and Setting Times. M.M. MUTLUAY\* and F. RUEGGERBERG (*University of Turku, Finland*)

Seq#: 158 Saturday, 6 March 2010, 9 a.m. - 10:30 a.m.  
Oral Session, Room 151A

**Dental Materials: Polymer-based Materials—Physical Properties and Performance - Failure Mechanisms and Impression Materials**

**Chairpersons: C. Cao and J. Kuehne**

- 1233** 9:00 Fracture Origins in a Commercial Indirect Dental Resin Composite. G. QUINN\* and J. QUINN (*American Dental Association Foundation, Gaithersburg, MD, USA*)
- S1234** 9:15 Assessment of Modifications to Notched Triangular Prism Method. J. MELANDER\*, A. GHOTBI, G. THIAGARAJAN, S. McDONALD, and M.P. WALKER (*University of Missouri - Kansas City, USA*)
- 1235** 9:30 Comparison of Shark-Fin and Custom Devices. E. KAMINSKY\*, R.D. PERRY, M. FINKELMAN, and G. KUGEL (*Tufts University, Boston, MA, USA*)
- S1236** 9:45 Contact Angle Measurement of Seven Unset Impression Materials. S. SINGHAL\*, G. NATARAJARATHINAM, P. BECK, L.C. RAMP, D. CAKIR, and J. BURGESS (*University of Alabama at Birmingham, USA*)
- S1237** 10:00 Comparing Initial Hydrophilicity of Four Impression Materials Prior to Setting. A. SAMAD-ZADEH\*, C. DEFURIA, R. PERRY, M. FINKELMAN, and G. KUGEL (*Tufts University, Boston, MA, USA*)
- 1238** 10:15 Comparison of Flow Behavior of Four Impression Materials. A. SAMAD-ZADEH, C. DEFURIA, R.D. PERRY\*, and G. KUGEL (*Tufts University, Boston, MA, USA*)



Seq#: 159 Saturday, 6 March 2010, 9 a.m. - 10:30 a.m.  
Oral Session, Room 144AB

**Microbiology / Immunology and Infection Control**  
**- Porphyromonas gingivalis and Aggregatibacter actinomycetemcomitans**

**Chairpersons: D. Furgang and J. Lewis**

- 1239** 9:00 Prevalence and Phenotypes of *Aggregatibacter actinomycetemcomitans* Native to Rhesus Monkeys. D. FURGANG\*, M. McKIERNAN, S. VUNDAVALLI, J. RAO, K. MANSFIELD, J. KRAMER, L. MAKARON, and D. FINE (*New Jersey Dental School - UMD, Newark, USA*)
- 1240** 9:15 Glycosylation of the Collagen Adhesin EmaA of *Aggregatibacter actinomycetemcomitans*. G. TANG\* and K. MINTZ (*University of Vermont, Burlington, USA*)
- 1241** 9:30 Gene Expression Profiling of *Aggregatibacter actinomycetemcomitans* with a Pangenome Microarray. C. CHEN\*, W. KITTICHOTIRAT, Y. HUANG, and R. BUMGARNER (*University of Southern California -, Los Angeles, USA*)
- 1242** 9:45 Novel *Porphyromonas gingivalis* RNAs Detected by High-density Genomic Tiling Microarrays. T. CHEN\*, W.-H. YU, and H. HØVIK (*The Forsyth Institute, Boston, MA, USA*)
- S1243** 10:00 Translocation of the Collagen Adhesin EmaA of *Aggregatibacter actinomycetemcomitans*. X. JIANG\* and K. MINTZ (*University of Vermont, Burlington, USA*)
- 1244** 10:15 Small RNAs in *Porphyromonas gingivalis* W83. J. LEWIS\*, S. KIM, K. JONES, and C. ANAYA-BERGMAN (*Virginia Commonwealth University - VCU/MCV, Richmond, USA*)

Seq#: 160 Saturday, 6 March 2010, 9 a.m. - 10:30 a.m.  
Oral Session, Room 149

**Mineralized Tissue - Enamel and Other Mineralized Tissues**

**Chairpersons: C. Gibson and T. Diekwisch**

- 1245** 9:00 Characterization of Enamel Defects in Mmp20/Klk4 Double-null Mice. Y.Y. HU\*, A. RICHARDSON, J. BARTLETT, and J.P. SIMMER (*University of Michigan, Ann Arbor, USA*)
- 1246** 9:15 Hierarchical Calcium Phosphate Microstructures Organized by Amelogenin. X. YANG, L. WANG, Z. HENNEMAN, J. MORADIAN-OLDAK, and G. NANCOLLAS\* (*State University of New York - Buffalo, USA*)
- S1247** 9:30 The Developmental Clock of Enamel Formation. L. ZHENG\*, L. HARBRON, W. HOOGWERF, and P. PAPAGERAKIS (*University of Michigan, Ann Arbor, USA*)
- S1248** 9:45 Role of PTH in Fgf23 Null Mice. Q. YUAN\*, D. SITARA, K. ROWALD, M. DENSMORE, H. SAITO, R. ERBEN, and B. LANSKE (*Harvard School of Dental Medicine, Boston, MA, USA*)
- S1249** 10:00 Cleavage-site Residue Substitution Blocks Processing of Dentin Sialophosphoprotein *in vivo*. Q. ZHU\*, Y. SUN, Y. LU, X. WANG, M. PRASAD, J. FENG, and C. QIN (*Baylor College of Dentistry, Dallas, TX, USA*)
- S1250** 10:15 BMP2 Gene is Essential in Post-natal Dentinogenesis. W. YANG\*, Y. CUI, J. GLUHAK-HEINRICH, M.A. HARRIS, Y. MISHINA, and S. HARRIS (*University of Texas - San Antonio / Health Science Ctr., USA*)

Seq#: 161 Saturday, 6 March 2010, 9 a.m. - 10:30 a.m.  
Oral Session, Room 156

**Neuroscience / TMJ - Temporomandibular Disorder Pain**

**Chairpersons: P. Svensson and M. Drangsholt**

- 1251** 9:00 Posterior Insular Glutamate and Glutamine in Myofascial Temporomandibular Disorders. G. GERSTNER\*, E. ICHESCO, A. DEEBAJAH, R. GRACEY, A. QUINTERO, D. CLAUW, and P. SUNDGREN (*University of Michigan, Ann Arbor, USA*)
- S1252** Paper Withdrawn.
- S1253** 9:15 Role of Jaw Muscle Spindle Afferents in Chronic Oro-facial Pain. S. JEAN\*, F. AUCLAIR, and A. KOLTA (*Université de Montréal, Canada*)
- 1254** 9:30 Associations of Dietary Glutamate and Chronic Temporomandibular Disorder (TMD) Pain. M. DRANGSHOLT\* and T. SILVESTRIN (*University of Washington, Seattle, USA*)
- 1255** 9:45 Development of a Palpometer for the Assessment of Deep Pain. P. SVENSSON\*, M. SERESHT, E. AYESH, and L. BAAD-HANSEN (*Dental College, Aarhus, Denmark*)
- S1256** 10:00 Gelatin Micro-capsule Degradation in the TMJ. J. MARTINEZ\*, B. WINDSOR, B. TRACY, K. CARSON, L. BELLINGER, and P. KRAMER (*Baylor College of Dentistry, Dallas, TX, USA*)
- 10:15 Discussion.

Seq#: 162 Saturday, 6 March 2010, 9 a.m. - 10:30 a.m.  
Oral Session, Room 150A

**Oral Medicine & Pathology - Oral Cancer III: Stem Cells and Cell Survival**

**Chairpersons: O. Oluwadara and J. Reuben**

- S1257** 9:00 Endothelial Cells and Head and Neck Cancer Stem Cell Survival. S. KRISHNAMURTHY\*, Z. DONG, M. PRINCE, and J. NÖR (*Department of Cariology, Restorative Sciences, and Endodontics, School of Dentistry, University of Michigan, Ann Arbor, USA*)
- 1258** 9:15 Natural Products Library Screening Reveals Unfolded Protein Response-inducing HNSCC-toxic Compounds. A. FRIBLEY\*, J. MILLER, P. LOPEZ, M. CALLAGHAN, D. SHERMAN, and R. KAUFMAN (*University of Michigan, Ann Arbor, USA*)
- S1259** 9:30 Monocytes and DCs Elevate Survival and Resistance of Oral Tumors. H.C.H. TSENG\*, D. FARZAM, A. ARASTEH, T. SARDARIAN, N. CACALANO, and A. JEWETT (*University of California - Los Angeles, USA*)
- 1260** 9:45 FAK/Src-depleted Fibroblasts Increase Carcinoma Cell Invasion through Elevated Cytokine Secretion. Y. SZWEC-LEVIN\*, A. SOWALSKY, L.A. FEIG, J.A. GARLICK, and A. ALT-HOLLAND (*Tufts University, Boston, MA, USA*)



- S1261** 10:00 T-cell Signaling Biomarker Profiling: Evaluation of Lck, PI-3K, and Survivin. O. OLUWADARA\*, R. CHRISTENSEN, R. AVEZOVA, G. KOSSAN, L. GIACOMELLI, and F. CHIAPPELLI (*University of California - Los Angeles, USA*)
- S1262** 10:15 Pamidronate Enhances NPY-Y1 Receptor Expression and NPY-induced Caspase-3 Cleavage. D. VANDERBROOK\*, E. PALOS, L. XIANG, and J. REUBEN (*Baylor College of Dentistry, Dallas, TX, USA*)

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**Seq#: 163** Saturday, 6 March 2010, 9 a.m. - 10:30 a.m.  
Oral Session, Room 154

**Periodontal Research - Therapy - Periodontal Therapy; Effects on Clinical Parameters, the Subgingival Microbiota, and Host Biomarkers**

**Chairpersons: J.M. Goodson and J. Payne**

- 1263** 9:00 Main Effects of 8 Periodontal Therapies on the Subgingival Microbiota. A.D. HAFFAJEE\*, S.S. SOCRANSKY, L. MARTIN, T. YASKELL, R. TELES, A. BOGREN, and J.M. GOODSON (*The Forsyth Institute, Boston, MA, USA*)
- 1264** 9:15 The Impact of Smoking on Periodontal Therapy. J.M. GOODSON\*, S. SOCRANSKY, A. HAFFAJEE, H. HASTURK, and A. BOGREN (*The Forsyth Institute, Boston, MA, USA*)
- 1265** 9:30 Periodontal Therapy Effects on GCF MMPs and the Subgingival Microbiota. W. ROSALEM, B. MEDEIROS, C.M. FIGUEREDO, S.S. SOCRANSKY, A.D. HAFFAJEE, and R. TELES\* (*The Forsyth Institute, Boston, MA, USA*)
- 1266** 9:45 Comparison between Scaling-root-planing (SRP) and SRP/Photodynamic Therapy: 6-month Study. B. WILLERSHAUSEN\*, A. CALLAWAY, M. FAKHR EDDIN, and M. BERAHDAR (*Johannes Gutenberg University Mainz, Germany*)
- 1267** 10:00 Association between Serum-bone-formation/ Bone-turnover Biomarkers and Alveolar and Systemic Bone Loss. J.B. PAYNE\*, J.A. STONER, H.M. LEE, P.V. NUMMIKOSKI, R.A. REINHARDT, and L.M. GOLUB (*University of Nebraska, Lincoln, USA*)
- 1268** 10:15 Effects of Dietary Fish Oil as Adjunct to Oral Hygiene. D. DAWSON, III\*, M. STEFFEN, J. EBERSOLE, and M. NOVAK (*University of Kentucky - Lexington, USA*)

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**Seq#: 191** Saturday, 6 March 2010, 9 a.m. - 10:30 a.m.  
Oral Session, Room 146C

**Late-breaking News II**

**Chairperson: A. Kulkarni**

- 1514** 9:00 Genome-wide Association Study of Caries in the Primary Dentition. M.L. MARAZITA\*, J.R. SHAFFER, X.J. WANG, M.K. LEE, F. BEGUM, E. FEINGOLD, D.E. WEEKS, M.M. BARMADA, K.T. CUENCO, S. WENDELL, D. CROSSLIN, C. LAURIE, B. WEIR, K. DOHENY, E. PUGH, R.J. WEYANT, R. CROUT, D. MCNEIL, S.M. LEVY, R.L. SLAYTON, M. WILLING, B. BROFFITT, and A.R. VIEIRA (*University of Pittsburgh, PA, USA*)
- S1515** 9:15 NBCE1 in Developing Tooth. L. ZHENG\*, Y. ZHANG, J. MENDOZA, K. BUTCHER, R.A. SCHNEIDER, and P. DENBESTEN (*University of California - San Francisco, USA*)

- 1516** 9:30 Teratoma Formation by iPS Cells Reprogrammed from Dental Stem Cells. X. YAN, H. QIN, S. SHI, and G. HUANG\* (*Boston University, MA, USA*)
- 1517** Paper Withdrawn.
- 1518** 9:45 Conditional Deletion of TGF- $\beta$  Receptor II Expression in Mouse Odontoblasts. A. CHO, S. SUZUKI, H. SASAKI, A. TERSE, M. PASSI, Z. SKOBE, P. STASHENKO, and A. KULKARNI\* (*National Institute for Dental and Craniofacial Research, NIH, Bethesda, MD, USA*)
- 10:00 Discussion.

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**Seq#: 164** Saturday, 6 March 2010, 10:45 a.m. - 11:30 a.m.  
Plenary, Room 146AB

**Plenary Session - Epithelial Stem Cells: Biology and Clinical Promise**

- 1269** 10:45 Epithelial Stem Cells: Biology and Clinical Promise. E. FUCHS\* (*Rockefeller University, New York, NY, USA*)

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**Seq#: 165** Saturday, 6 March 2010, 11:45 a.m. - 1 p.m.  
Poster Discussion Session, Room 145A

**Oral Health Research - Prevention and Treatment of Oral Diseases II (PDS)**

**Chairpersons: M. Casey and T. Komabayashi**

- 11:45 Poster Viewing Period.
- 1270** 12:10 Oral Health of Children in a Rural Area of the Philippines. A. LAM and C.H. CHU\* (*University of Hong Kong*)
- S1271** 12:17 Early Childhood Caries and Quality of Life in Preschool Children. D. COLEMAN\*, S. RICH, and W. WRIGHT (*Tufts University, Boston, MA, USA*)
- 1272** 12:24 Daytime Plaque Effects of Power Brush, Therapeutic Paste, and Rinse. R.W. GERLACH, A.A. WALANSKI, D.L. BOOKER\*, M.L. BARKER, and A.R. BIESBROCK (*The Procter & Gamble Company, Mason, OH, USA*)
- S1273** 12:31 Cross-sectional Analysis of Body Mass Index and Coronal Caries. M. CASEY\*, M. SINGH, P. STARK, M. FINKELMAN, and A. PAPAS (*Tufts University, Boston, MA, USA*)
- S1274** 12:38 The Role of Corticosteroids in Today's Dentistry. N. DEYHIM\* and M. McANDREW (*New York University, USA*)
- S1275** 12:45 Tooth Loss in Two US Populations Living a Century Apart. K. QUINLIN\* and A. VIEIRA (*University of Pittsburgh, PA, USA*)

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**Seq#: 166** Saturday, 6 March 2010, 11:45 a.m. - 1 p.m.  
Poster Session, Exhibit Hall D

**AADR/Johnson & Johnson Healthcare Products Hatton Awards Competition - Junior Category**

- S1276** Periapical Tooth Inflammation and the Uterine Morphology of Pregnant Rats. C. NEILL\*, L. BIERDEMAN, J. BAIN, S. LESTER, J. NAFTEL, and R. JOHNSON (*University of Mississippi Medical Center, Jackson, USA*)
- S1277** Nisin, a Bacteriocin and Food Additive, Suppresses OSCC *in vitro/in vivo*. K. RITCHIE\*, N.E. JOO, P. KAMARAJAN, and Y. KAPILA (*University of Michigan, Ann Arbor, USA*)



**S1278** Adenosine-mediated Amelioration of Periodontal Disease. H.E. MACKLER\*, M. KAJIYA, L.S.B. ALMEIDA, X. HAN, M.A. TAUBMAN, and T. KAWAI (*The Forsyth Institute, Harvard School of Dental Medicine, Howard Hughes Medical Institute Research Training Fellow, Boston, MA, USA*)

**S1279** Expression and Roles of Runx Genes in Oral Cancer. Y. SEON\*, P. PAPAGERAKIS, D. CHEPEHA, L. ZHENG, and S. PAPAGERAKIS (*University of Michigan, Ann Arbor, USA*)

**S1280** N-glycosylation Drives Duct Formation in the Developing Submandibular Gland. S. KHALIL\*, I. REBUSTINI, J. WALKER, and M. KUKURUZINSKA (*Boston University, MA, USA*)

**S1281** Mesenchymal Stem Cells from Human Gingiva Ameliorate Murine Alimentary Mucositis. J. PARK\*, A. BHATT, Q. ZHANG, S. SHI, P. WILDER-SMITH, and L. ANH (*University of Southern California, Los Angeles, USA*)

**S1282** Altered Enamel Phosphorylation Site Causes *Amelogenesis imperfecta*. L. MAI\*, H.-C. CHAN, A. OIKONOMOPOULOU, H. CHAN, S.-K. WANG, J.P. SIMMER, and J. HU (*University of Michigan, Ann Arbor, USA*)

**S1283** Anti-resorptive Activity of Twisted-gastrulation, a Regulator of BMP Signaling in Osteoclasts. L.D. PHAM\*, E.D. JENSEN, K. BEYER, C. BILLINGTON, J.S. RODRIGUEZ, J.G. DAVYDOVA, M. YAMAMOTO, A. PETRYK, K.C. MANSKY, and R. GOPALAKRISHNAN (*University of Minnesota, Minneapolis, USA*)

**S1284** TGF- $\beta$ 1 CED Mouse Model Demonstrates Altered SIBLING/MEPE Expression. A. GULLARD\*, O. MAMAEVA, X. WU, X. CAO, S. CHEN, and M. MacDOUGALL (*University of Alabama at Birmingham, USA*) [2009 AADR Student Research Fellowship Winner]

**Seq#: 167** Saturday, 6 March 2010, 11:45 a.m. - 1 p.m.  
Poster Session, Exhibit Hall D

**AAADR/Johnson & Johnson Healthcare Products Hatton Awards Competition - Senior Category**

**S1285** Antagonistic Inflammatory and Hypoxic Signaling in Stem-like and Osteoprogenitor Cells. D. MENDONCA\*, G. MENDONCA, F. ARAGÃO, and L. COOPER (*University of North Carolina, Raleigh, USA*)

**S1286** Differences in Epithelial Cells of Oral and Skin Tissues. A. TURABELIDZE\*, S. GUO, L. DIPIETRO, and P. MARUCHA (*University of Illinois - Chicago, USA*)

**S1287** Col3.6-Dlx5 Accelerates Odontoblast Differentiation and Affects Dspp and Dlx3 Expression. V.L.S. FERRER\*, Y. KAWANO, H.-J. CHIN, C.-K.L. WANG, T. MAEDA, and A. LICHTLER (*University of Connecticut, Farmington, USA*)

**S1288** MMP-9 is Essential for Alveolar Bone Formation and Tooth Development. I. ORTIZ GONZÁLEZ\*, G. YANG, G. YUAN, D. DEAS, L. WU, J. GLUHAK-HEINRICH, K. DONLY, X. XU, B. STEFFENSEN, M. MacDOUGALL, and S. CHEN (*United States Air Force, San Antonio, TX, USA*)

**S1289** Proteoglycan-4, a Novel Immunomodulator of Parathyroid Hormone (PTH) Anabolic Actions. C. NOVINC\*, A. KOH, M. MICHALSKI, J. MARCHESEAN, B. SINDER, K. KOZLOFF, and L. McCAULEY (*University of Michigan, Ann Arbor, USA*)

**S1290** BMPRIA Controls Tooth/Bone Cell Fate through Wnt/ $\beta$ -catenin Signaling via SOST. A. VOISEY\*, K. LV, L. YE, Y. XIE, R. D'SOUZA, and J. FENG (*Baylor College of Dentistry, Texas A&M Health Science Center, Dallas, USA*)

**S1291** Stem Cell Depletion and Oral Cancer Resistance in TRF2-/- Mice. B. BOJOVIC\* and D.L. CROWE (*University of Illinois - Chicago, USA*)

**S1292** Epithelial Regeneration in Bisphosphonate-associated Osteonecrosis of the Jaw. H. MAWARDI\*, G. GIRO, M. KAJIYA, X. HAN, M.A. TAUBMAN, and T. KAWAI (*Harvard University, Boston, MA, USA*)

**S1293** Phenotypic Rescue of *Enam* Knockout Mice by an Enamelin Transgene. Y. LU\* and J. HU (*University of Michigan, Ann Arbor, USA*)

**Seq#: 168** Saturday, 6 March 2010, 11:45 a.m. - 1 p.m.  
Poster Session, Exhibit Hall D

**AAADR/Johnson & Johnson Healthcare Products Hatton Awards Competition - Post-doctoral Category**

**1294** Mechanical Strain Activates Beta-catenin Signaling in Periodontal Ligament (PDL) Cells. S. PREMARA\*, I. SOUZA, L. TALLURI, M. GUERRERO, J. BARTA, and T. PREMARA\* (*University of Nebraska Medical Center College of Dentistry, Lincoln, USA*)

**S1295** *Aggregatibacter actinomycetemcomitans* (Aa) Leukotoxin Disrupts Cell Membranes by Inducing Curvature. A.C. BROWN\*, I.R. KIEBA, K. BOESZE-BATTAGLIA, and E.T. LALLY (*University of Pennsylvania, Philadelphia, USA*)

**S1296** Effects of Cold Air Plasma on Biofilm Formation. R.M. MURATA\*, C.Y. CHEN, S. KUO, D. SAXENA, and S. DUARTE (*New York University, College of Dentistry, USA*)

**S1297** Clonal Expansion of Epithelial Stem Cells from Human ERM. M. ATHANASSIOU-PAPAEFTHYMIU\*, S. PAPAGERAKIS, and P. PAPAGERAKIS (*University of Michigan, Ann Arbor, USA*)

**1298** Fatigue Behavior of Glass-infiltrated Functionally Graded Zirconia under Simulated Mastication. J.W. KIM\* and Y. ZHANG (*New York University, College of Dentistry, Department of Biomaterials and Biomimetics, USA*)

**S1299** CEMP-1 and ERK Mediate Periodontal Ligament Cell Differentiation and Cementogenesis. F.W.G. PAULA-SILVA\*, A. GHOSH, H. ARZATE, S. KAPILA, L.A.B. SILVA, and Y. KAPILA (*University of Michigan, Ann Arbor, USA*)

**S1300** IFN- $\gamma$  Regulates IL-17 in a Model of Autoimmune Inflammation. P. DOODES\*, K. HAMEL, R. RODEGHERO, Y. CAO, Y. WANG, T. KOBEZDA, and A. FINNEGAN (*University of Illinois College of Dentistry, Chicago, USA*)

**1301** Nicotine Down-regulated Rac GTP and Decreased Cell Migration. M. SERRANO\*, S. SAN MIGUEL, and K. SVOBODA (*Baylor College of Dentistry, Allen, TX, USA*)



**1302** Enhanced Dental Caries in a Mouse Model of Cystic Fibrosis. M.A. CATALAN\*, K.S. AMBATIPUDI, K. SCOTT-ANNE, W.H. BOWEN, and J.E. MELVIN (*University of Rochester Medical Center, NY, USA*)

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**Seq#: 169** **Saturday, 6 March 2010, 11:45 a.m. - 1 p.m.**  
**Poster Session, Exhibit Hall D**

**DENTSPLY/Caulk Competition - Basic Science Category**

**S1303** The Role of Extracellular DNA in *Streptococcus mutans* Biofilms. J. COYNE\* and J. BANAS (*University of Iowa, Iowa City, USA*)

**S1304** Endostatin Inhibits Tyrosine Phosphorylation in Oral Squamous Cell Carcinoma Cells. B. HAN\*, M. TONG, and S.R. MALLERY (*The Ohio State University, Columbus, USA*)

**S1305** Effect of Cranberry Juice Constituent on Biofilm on Dental Materials. B. COHEN\*, J. SHILOAH, I. OFEK, and J. BABU (*University of Tennessee, Memphis, USA*)

**S1306** Neuropeptide Y Knockout Results in Altered Levels of Cytokines. K. LIANG\*, P. PRIOUR, and R. SPEARS (*Baylor College of Dentistry, Dallas, TX, USA*)

**S1307** Osteoblast Response on Titanium Biofunctionalized with Elastin-like Recombinant Biopolymers. D.S.

NEDRELOW\*, C. APARICIO, E.D. JENSEN, M.A. BROOKS, R. GOPALAKRISHNAN, C. RODRIGUEZ-CABELLO, E. SALVAGNI, and J.A. PLANELL (*University of Minnesota, USA*)

**S1308** Over-expression of Transient Receptor Potential Channels in Oral Cancer. J. ADICKS\*, M. HENRY, and C. GONZALES (*University of Texas - San Antonio / Health Science Ctr., USA*)

**S1309** Comparing High-throughput with Live Cell Assay: Antioxidants Counteract Nicotine. P. DYER\*, S.M. SAN MIGUEL, J. PARSONS, M. SERRANO, M.D. BENSON, L.A. OPPERMAN, and K.K. SVOBODA (*Baylor College of Dentistry, Dallas, TX, USA*)

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**Seq#: 170** **Saturday, 6 March 2010, 11:45 a.m. - 1 p.m.**  
**Poster Session, Exhibit Hall D**

**DENTSPLY/Caulk Competition - Clinical Science Category**

**S1310** Mechanical Properties of Silver-Zinc-zeolite-modified Acrylic Resins. H. LINDSKOG\*, H.L. CARDENAS, N. CRUZ, and B. NORLING (*University of Texas - San Antonio / Health Science Ctr., USA*)

**S1311** Fourier-Transform-Infra-red Spectroscopy Provides Accurate Diagnosis of Salivary Gland Carcinoma. A.Y. CHENG\*, Y.Z. XU, Q.H. PAN, L. ZHANG, Y.F. ZHANG, G.Y. YU, J.G. WU, and A. ZAVRAS (*Harvard University, Boston, MA, USA*)

**S1312** Anatomical Proximity of the Maxillary Artery to the Gow-Gates Injection. S. SEHEULT\*, M. LU, B. KRALL, N. MARONGIU, and J. ASK (*Loma Linda University, USA*)

**S1313** Altered Glandular Anti-oxidant Capacity and Proliferation in Sjögren's Syndrome Patients. B. PAQUIN\*, C. KRAGOR, S. DEROSI, K. OGBUREKE, D. DICKINSON, Y.-H. MA, J. HANSFORD, S. LOONEY, and S. HSU (*Medical College of Georgia, Augusta, USA*)

**S1314** Timing Effects of Systemic Antibiotics in Aggressive Periodontitis Treatment. D. BELIVEAU\*, L. SHADDOX, S.M. WALLET, I. AUKHIL, and I. MAGNUSSON (*University of Florida, Gainesville, USA*)

**S1315** One-year Survival of Indirect and Direct Pulp Cap Treatments. A. BEDNARZ\*, A. BROWN, M. FINKELMAN, J. BADER, M. SINGH, and A. PAPAS (*Tufts University, Boston, MA, USA*)

**S1316** Conventional Methods and Laser Fluorescence Devices in Occlusal Caries Diagnosis. N. PATEL\* and D. ANTONSON (*State University of New York - Buffalo, USA*)

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**Seq#: 171** **Saturday, 6 March 2010, 11:45 a.m. - 1 p.m.**  
**Poster Session, Exhibit Hall D**

**Dental Materials: Adhesion - Bond Strength Testing and Mechanisms - Adhesive Bonding - Ceramics and Other**

**S1317** Rotating Fatigue Resistance of the Zirconia-composite Bond Strength. S.H. MIRMOHAMMADI\*, M.N. ABOUSHELIB, C.J. KLEVERLAAN, N. DE JAGER, and A.J. FEILZER (*ACTA - Vrije Universiteit, Amsterdam, Netherlands*)

**S1318** Bonding to Zirconia with Different Thicknesses of Glass Ceramic. T. McALISTER\*, A. TANAKA, and N. BARGHI (*University of Texas - San Antonio / Health Science Ctr., USA*)

**S1319** Reliability of Methods for Bonding De-bonded Ceramic Veneers. N. BERNUY\*, J. OVERTON, H.R. RAWLS, and N. BARGHI (*University of Texas - San Antonio / Health Science Ctr., USA*)

**S1320** Influences on Bond Strength of Orthodontic Brackets. J.-H. PHARK, K.M. CHOO\*, S. DUARTE, and A. SADAN (*Case Western Reserve University, Cleveland, OH, USA*)

**S1321** Bond Strength of Two Orthodontic Adhesives at Two Testing Times. N. RANEY\*, J. ENGLISH, B. PENTON, and J.M. POWERS (*Rice University, Houston, TX, USA*)

**S1322** Retention of Amalgam and Composite Cores with and without Pins. B. RICHMAN\*, R. SWIGERT, T. IMBERY, V. SAWICKI, L. PACE, and P. MOON (*Virginia Commonwealth University - VCU/MCV, Richmond, USA*)

**1323** Adhesion of Liners with a New 6<sup>th</sup>-generation Adhesive. S.B. MITRA\*, R.P. RUSIN, and H.T. BUI (*3M ESPE Dental Products, St. Paul, MN, USA*)

**S1324** Composite Resin Shear Bond Strength to Liners. M. GREENE\* and T. BONSTEIN (*University of Manitoba, Winnipeg, Canada*)

**1325** Bonding Orthodontic Brackets to Stainless Steel Crowns. D. STEWART, E. TUFEKCI\*, P. MOON, and S.J. LINDAUER (*Virginia Commonwealth University - VCU/MCV, Richmond, USA*)

**1326** Effects of Ceramic Etching Times on Dentin Shear Bond Strengths. A. MIECYJAK, P. McCABE\*, O. NIHLAWI, S. ANTONSON, G. TYSOWSKY, and T. HILL (*Ivoclar Vivadent Inc., Amherst, NY, USA*)

**1327** Non-abrasive Decontamination Method for Saliva-contaminated Ceramics. T. BOCK\*, F. MEIER, and U. SALZ (*Ivoclar AG, Schaan, Liechtenstein*)

**S1328** Shear Bond Strengths of Different Resin Cements to Zirconia. C. DEFURIA\*, A. SAMAD-ZADEH, R. PERRY, and G. KUGEL (*Tufts University, Boston, MA, USA*)

**1329** Zirconia-Primer-1: Bond Strength and Durability of Commercial Zirconia Primers. L. CHEN\* and B. SUH (*Bisco Inc., Schaumburg, IL, USA*)

**1330** Zirconia-Primer-2: Evaluation of Silane Priming Function of Zirconia/Silane Primers. B. SUH\* and L. CHEN (*Bisco, Inc., Schaumburg, IL, USA*)



**S1331** Bond Strength of an Amorphous Calcium-phosphate-containing Orthodontic Resin. B. LAMM\*, P. MOON, and E. TUFEKCI (*Virginia Commonwealth University - VCU/MCV, Richmond, USA*)

**S1332** Bond Strength between ProCAD and Two Commercial Composite Resin Cements. E. ALAKHRAS\* and R. SEGHI (*The Ohio State University, Columbus, USA*)

**S1333** Push-out Bond Strength of Fiber Posts by Five Cementation Techniques. I.S. MUGISA\*, C. MICHELSON, G. NATARAJARATHINAM, D. CAKIR, P. BECK, L. RAMP, and J.O. BURGESS (*University of Alabama at Birmingham, USA*)

**S1334** Self- vs. Light-cure Composite Cement Bonding to Core Composite. A. AKHTAR\*, A. WOJCIK, M. PRAGER, and M.S. WOLFF (*New York University College of Dentistry, USA*)

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**Seq#: 172** Saturday, 6 March 2010, 11:45 a.m. - 1 p.m.  
Poster Session, Exhibit Hall D

**Dental Materials: Adhesion - Leakage/Margin Assessments - Dental Materials: Adhesion and Microleakage**

**1335** Enamel Microleakage of a New Protective Coating. P. KLAIBER\*, R. RUSIN, and N. KUMAR (*3M ESPE Dental Products, Saint Paul, MN, USA*)

**1336** Microleakage of Composite Restorations after Er:YAG Laser and Bur Preparation. F. SHIRANI\*, R. BIRANG, M.R. MALEKIPOUR, Z. HEIDARY, and E. AHMAD POUR (*University of Isfahan, Iran*)

**1337** Evaluation of the Microleakage of Adhesives Containing Modified Nanoclay Fillers. S.M. MOUSAVINASAB\* (*Isfahan University of Medical Sciences, Iran*)

**S1338** Evaluation of Fissure Enameloplasty on Sealant Microleakage and Penetrability. F. SALAMA, B. CARRANZA\*, and F. ABDELMEGID (*OU Medical Center/Children's Physicians Dental Clinic, Omaha, NE, USA*)

**S1339** One-year *in vivo* Marginal Quality of Self-adhesive Resin Cement. C. AZEVEDO\* and M. DE GOES (*State University of Campinas - Piracicaba, Brazil*)

**S1340** Shear Bond Strength and Microleakage of Pit and Fissure Sealants. B. BALADHANDAYUTHAM\*, I.S. MUGISA, P. BECK, L.C. RAMP, D. CAKIR, and J. BURGESS (*University of Alabama at Birmingham, USA*)

**S1341** Microleakage: New Technique to Reduce Effects of Composite Polymerization Shrinkage. I. DHALIWAL\*, W.C. WAGNER, and D. GURUN (*University of Detroit Mercy, MI, USA*)

**S1342** Microleakage of Class V Restorations Placed with Different Restorative Techniques. S. P. PASSOS\*, G.C. IORGOVAN, M.J.M.C. SANTOS, G.C. SANTOS, Jr., and A.S. RIZKALLA (*University of Western Ontario, London, Canada*)

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**Seq#: 173** Saturday, 6 March 2010, 11:45 a.m. - 1 p.m.  
Poster Session, Exhibit Hall D

**Dental Materials: Polymer-based Materials—Physical Properties and Performance - Performance of Materials for Release, Anticaries, Maxillofacial, Posts, and Other Applications**

**1343** *In vitro* Wear of a Novel Composite Crown System. S. MURAHARA\*, S. SUZUKI, D. CAKIR, L.C. RAMP, H. MINAMI, Y. MINESAKI, T. TANAKA, and J.O. BURGESS (*Kagoshima University, Graduate School of Medical and Dental Sciences, Japan*)

**S1344** Comparison of Wear Characteristics of Various Orthotic Device Materials. N. ISSAR-GRILL\*, H. ROBERTS, K. VANDEWALLE, and E. WRIGHT (*USAF, Lackland AFB, TX, USA*)

**1345** Pilot Study to Measure Fluoride Ion Penetration of Hydrophilic Sealant. M. CANNON\*, A. POWELL, J. KUTTAB, and R. JURADO (*Grove Medical Center, Long Grove, IL, USA*)

**S1346** Fluoride-releasing Materials: Mechanical Properties in Long-term Water Aging. J. MOREAU, K. TARABISHY\*, and H.H.K. XU (*University of Maryland Dental School, Baltimore, USA*)

**S1347** Evaluation of the Microhardness of Triclosan-incorporated Acrylic and Composite Resin. K. SO\* and K. GREGSON (*Indiana University School of Dentistry, Indianapolis, USA*)

**1348** Glass-reinforced Calcium Phosphate-Resin Composite with High Strength for Caries Inhibition. P. LIMKANGWALMONGKOL\*, G. HACK, J. MOREAU, and H.H.K. XU (*University of Maryland Dental School, Baltimore, USA*)

**1349** Flexural Strength of Fiber Posts. A. BUFFINGTON\*, A. GARCIA-GODOY, F. GARCIA-GODOY, and M. FERRARI (*University of Tennessee, Memphis, USA*)

**1350** Setting Behaviors of Rigid Bite Registration Materials. T. CHAU\*, D. XIE, and D. TOBIA (*Kerr Corporation, Orange, CA, USA*)

**S1351** Differential Scanning Calorimetric Analyses of Pigmented Maxillofacial Prosthetic Elastomers. X. HU\*, W. BRANTLEY, F. ZHENG, and W.M. JOHNSTON (*The Ohio State University, Columbus, USA*)

**S1352** Early Mechanical Changes Detected in Weathered Facial Elastomers. C. PRUITT\*, B. SALLACH, J. SCHULTE, B. SIMETICH, and M.W. BEATTY (*University of Nebraska Medical Center, College of Dentistry, Lincoln, USA*)

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**Seq#: 174** Saturday, 6 March 2010, 11:45 a.m. - 1 p.m.  
Poster Session, Exhibit Hall D

**Dental Materials: Metal-based Materials - Casting Alloys, Nickel-titanium, and Metal Coatings**

**S1353** Elemental Release of CoCr and NiCr Castings Alloyed with Palladium. K.A. BECK\*, D. SARANTOPOULOS, and D.W. BERZINS (*Marquette University, Milwaukee, WI, USA*)

**1354** Wedge-castability of Titanium Castings Made with an Investment Coating Method. L. GUO\*, M. KOIKE, M. CECCONI, B. CECCONI, K. MARTINEZ, and T. OKABE (*Baylor College of Dentistry, Dallas, TX, USA*)



**S1355** Nanomechanical Testing of ALD Coatings for Dental and Orthopedic Applications. S. AZIMI\*, S. SMITH, J. CONLEY, and J.C. MITCHELL (*Oregon Health & Science University, Portland, USA*) [2008 AADR Student Research Fellowship Winner]

**S1356** Effect of Use on Cutting Efficiency of NiTi Rotary Files. A. TOMSIC, Jr., M. BAGBY\*, C.R. JACKSON, and M. GHALICHEBAF (*West Virginia University, Morgantown, USA*)

**Seq#: 175** Saturday, 6 March 2010, 11:45 a.m. - 1 p.m.  
Poster Session, Exhibit Hall D

**Dental Materials: Other Materials - Chemistry, Properties, and Performance - Dental Disciplines (Orthodontic, Endodontic, and Operative) and Impressions**

**S1357** Solvent Effects of Sodium Hypochlorite Solutions on Bovine Pulp Tissue. R. BOESTER\*, T. KIRKPATRICK, and K. VANDEWALLE (*USAF, Lackland AFB, TX, USA*)

**S1358** Oral Temperature Wettability of Restorative Resin-modified Glass Ionomers. S.S. KHAJOTIA, C.C. LOFTIN\*, and M.G. DUNCANSON, Jr. (*University of Oklahoma Health Sciences Center, Oklahoma City, USA*)

**S1359** Correlation of Force and Torque Behavior of Rotating Endodontic Files. J.B. ROANE, S.S. KHAJOTIA, D.T. PEEK\*, and M.G. DUNCANSON, Jr. (*University of Oklahoma Health Sciences Center, Oklahoma City, USA*)

**S1360** Practicing Orthodontists' Experiences with Miniscrew TSADs: a PRECEDENT Network Study. J. HYDE\*, G. KING, G. GREENLEE, G. VAUGHN, C. SPIEKERMAN, and G. HUANG (*University of Washington, Seattle, USA*)

**S1361** Influence of Setting Time on Permanent Deformation of Impression Materials. M. BALKENHOL\*, S. HAUNSCHILD, C. ERBE, and B. WÖSTMANN (*Justus-Liebig-University, Giessen, Germany*)

**S1362** Effect of Chlorine-based Disinfectant on Wettability of VPS Impression Materials. J.R. COOPER, III\*, J. BLALOCK, and F. RUEGGERBERG (*Medical College of Georgia, Augusta, USA*)

**S1363** Accuracy of Single- and Double-poured Casts from Extended-pour Alginate. J. NEHRING\*, T. IMBERY, C. JANUS, and P. MOON (*Virginia Commonwealth University - VCU/MCV, Richmond, USA*)

**S1364** Passive Ultrasonic Irrigation of the Primary Teeth Root Canals. C. UCHIDA\*, R. UCHIDA, V. MERLYN, and F. SALAMA (*University of Nebraska, Omaha, USA*)

**S1365** Physical Properties of Coated Fuji-IX vs. Uncoated Fuji-IX and Fuji-II. A. NACCHIO\*, A. RIPPS, and J.-F. ZHANG (*Louisiana State University, New Orleans, USA*)

**S1366** *In vitro* Diode Laser Effect on Dentin Resistance to Erosion. V.F. PASSOS\*, M.A.S. MELO, S.L. SANTIAGO, and L.K.A. RODRIGUES (*Universidade Federal do Ceara, Fortaleza Ceara, Brazil*)

**S1367** Surface Analysis of MTA following Household Bleach Application. K. VONG\* and T. BONSTEIN (*University of Manitoba, Winnipeg, Canada*)

**S1368** Filler Effects on White Portland Cement to Model MTA. S. DIXON\* and P. MOON (*Virginia Commonwealth University - VCU/MCV, Richmond, USA*)

**S1369** A Dynamic Mechanical Analysis of Human Dentin Using Nanoindentation. H. RYOU\*, F. TAY, D. PASHLEY, and D. AROLA (*University of Maryland Baltimore County, USA*)

**S1370** Digital vs. Plaster Models Using Alginate and Alginate Substitute Materials. C.H. KAU, J.D. ENGLISH, A.M. SALAS LOPEZ, H.I. BUSSA, R.K. ELLIS, J.A. CORBETT, and G. TOROSSIAN\* (*University of Texas - Houston/Health Science Center, USA*)

**Seq#: 176** Saturday, 6 March 2010, 11:45 a.m. - 1 p.m.  
Poster Session, Exhibit Hall D

**Behavioral, Epidemiologic and Health Services Research - Applied Epidemiology of Oral and Craniofacial Conditions II**

**S1371** Recent Trends in Dental Visits - 2003 to 2008. T.P. WALL\* and W.R. WENDLING (*American Dental Association, Chicago, IL, USA*)

**S1372** Psychosocial Impact of Class II Relationships in the Mixed Dentition. L. McCASKEY\*, T.J. McCASKEY, and S.J. LINDAUER (*Virginia Commonwealth University - VCU/MCV, Richmond, USA*)

**S1373** Quality of Life Impacts of Dental Implants among Postmenopausal Women. S. REISINE\*, M. FREILICH, D. PENDRYS, D. SHAFER, S. MALLYA, A. LURIE, P. TAXEL, and D. ORTIZ (*University of Connecticut, Farmington, USA*)

**S1374** OHQOL in Children with Ectodermal Dysplasias Ages 6-19 Years. C. KUMMET\*, C. STANFORD, D. DAWSON, C. ASMUSSEN, and R. KOHLI (*University of Iowa, Iowa City, USA*)

**S1375** Dental Composite Surfaces and Urinary Bisphenol A Levels among Children. Y.-H. CHOI\*, H. KWON, S.-Y. JEONG, H.-J. JIN, K.-B. SONG, and A.T. MERCHANT (*School of Dentistry, Kyungpook National University, Korea; Arnold School of Public Health, University of South Carolina, Columbia, USA*)

**S1376** Association between Self-efficacy and Loss to Follow-up in Periodontal Treatment. N. KAKUDATE\*, M. MORITA, S. YAMAZAKI, S. FUKUHARA, M. SUGAI, M. NAGAYAMA, M. KAWANAMI, and I. CHIBA (*Health Sciences University of Hokkaido, Ishikari-Tobetsu, Japan*)

**S1377** Occupational Violence in Nigerian Oral Healthcare Centres. C.C. AZODO, E.B. EZEJA\*, and E.E. EHIKHAMENOR (*University of Benin Teaching Hospital, Benin City, Edo State, Nigeria*)

**S1378** Use of Complementary and Alternative Medicine (CAM) among Dental Clinic Patients. M. FISCHER\*, M. SPECTOR, D. DAWSON, C. KUMMET, D. HOLMES, K. BAKER, and N. NISLY (*University of Iowa, Iowa City, USA*)

**S1379** Compliance and Retention in the Orthodontic Patient. N. MOLLOV\*, S.J. LINDAUER, and A. BEST (*Virginia Commonwealth University - VCU/MCV, Richmond, USA*)

**S1380** Predictors of Teachers' Oral Health Activities in EHS Programs. A. KRANZ\* and R.G. ROZIER (*University of North Carolina, Chapel Hill, USA*)

**S1381** Xerostomia and Oral Habits in Recurrent Aphthous Stomatitis. D. DAU\*, D. THERIAQUE, J. SHUSTER, C. WANG, and L. BACCAGLINI (*College of Dentistry, University of Florida, Gainesville, USA*)

**S1382** Identifying Risk Factors Associated with Early Childhood Caries. C. WOHLFORD\*, H. AMINI, R. RASHID, A. KUMAR, and P. CASAMASSIMO (*The Ohio State University, Columbus, USA*)



**S1383** Outcomes in Patients Hospitalized for Head and Neck Cancer Treatment. M.K. LEE\*, A. SHAH, S. ELANGOAN, N. KARIMBUX, and V. ALLAREDDY (*Harvard University, Boston, MA, USA*)

**S1384** Hospitalizations for Periapical Abscesses in the USA. M.K. LEE, A. SHAH\*, S. ELANGOAN, N. KARIMBUX, and V. ALLAREDDY (*Harvard University, Boston, MA, USA*)

**1385** Chronic Health Conditions and Pediatric Dental Utilization under General Anesthesia. D. CHI\*, E.T. MOMANY, J. NEFF, M. JONES, J. WARREN, R. SLAYTON, K. WEBER-GASPARONI, and P. DAMIANO (*University of Iowa, Iowa City, USA*)

**S1386** Barriers to Tobacco Cessation in Patients with High-risk Oral Lesions. D.M. TAM\*, B.L. CURRIE, M.P. ROSIN, and C.F. POH (*The University of British Columbia, Vancouver, Canada*)

**S1387** Factors Affecting Treatment Outcome in a Graduate Orthodontic Clinic. S. HAYASHIBARA\*, Y. CUBAS, L. LEW, and M. ORELLANA (*University of California - San Francisco, USA*)

**S1388** Childhood Obesity and Dental Caries. S.L. WERNER\*, L.D. KOROLUK, and C. PHILLIPS (*University of North Carolina, Chapel Hill, USA*)

**1389** Do Oral Health Literacy and Self-efficacy Beliefs Affect Dental Behaviors? A.D. BAKER\*, J.Y. LEE, K. DIVARIS, and W.F. VANN, Jr. (*UNC School of Dentistry, Chapel Hill, NC, USA*)

**1390** Oral Cancer Incidence and Mortality Trends in Maryland. S. BOROUMAND\*, I. GARCIA, and A. CHATTOPADHYAY (*NIDCR, Bethesda, MD, USA*)

**Seq#: 177** Saturday, 6 March 2010, 11:45 a.m. - 1 p.m.  
Poster Session, Exhibit Hall D

#### **Cariology Research - Caries Models - Alkali Production - Biofilm**

**1391** Development of Novel Artificial White-spot Solutions with 0.3 Ca:P Ratio. A. MACKAY\*, E. WALKER, and R. KARLINSEY (*Indiana Nanotech, Indianapolis, USA*)

**1392** Comparison of Models for Dentin Caries Lesions. M. PUGACH, G. NONOMURA, K. SAEKI, M. RAPOZO-HILO, S.J. MARSHALL\*, J.D. FEATHERSTONE, and G.W. MARSHALL (*University of California - San Francisco, USA*)

**S1393** Effects of Multispecies Biofilm Dentin Caries-like Lesion in Artificial Mouth. L. MEI\*, C.J. SENEVIRATNE, C.H. CHU, and E.C.M. LO (*University of Hong Kong, China*)

**1394** Is Alkali Production a Potential Approach for Caries Control? V.V. GORDAN, C. GARVAN, M. OTTENG\*, R. SCHULTE, D. McEDWARD, P. HARRIS, W. LI, and I. MAGNUSSON (*University of Florida, Gainesville, USA*)

**1395** Relationship between Patients' Oral Hygiene and Alkali Production. V.V. GORDAN\*, C. GARVAN, M. OTTENG\*, R. SCHULTE, P. HARRIS, D. McEDWARD, W. LI, and I. MAGNUSSON (*University of Florida, Gainesville, USA*)

**S1396** Effects of Starch and Sucrose on Biofilm Composition and Acidogenicity. K. YANG\*, R. MURATA, and S. DUARTE (*New York University, USA*)

**1397** Xylitol Chewing Gum in Biofilm Accumulation and Gingivitis. J. PORTILLA ROBERTSON\*, L. GAITAN CEPEDA, S. DE LEON AZUARA, and M.E. PINZON T. (*Universidad Nacional Autonoma de Mexico, Mexico City*)

**Seq#: 178** Saturday, 6 March 2010, 11:45 a.m. - 1 p.m.  
Poster Session, Exhibit Hall D

#### **Dental Anesthesiology Research - Dental Anesthesia Research**

**1398** Propofol Reduced the High Oxidative Stress in the SHRSP Brain. K. KOBAYASHI\*, F. YOSHINO, Y. MAEHATA, S.-S. TAKAHASHI, S. TAKAHASHI, S. SUGIYAMA, A. YOSHIDA, C. MIYAMOTO, and M. LEE (*Kanagawa Dental College, Yokosuka, Japan*)

**Seq#: 179** Saturday, 6 March 2010, 11:45 a.m. - 1 p.m.  
Poster Session, Exhibit Hall D

#### **Mineralized Tissue - In vitro Tooth Studies**

**S1399** Solutions and Conditions for Electrodeposition of Portland Cement. S. ESCHENBACH\* and P.C. MOON (*Virginia Commonwealth University - VCU/MCV, Richmond, USA*)

**1400** Energy Absorption during Nanoscale Deformation of Human Dentin. B. TASKONAK\*, J. YAN, and J.J. MECHOLSKY, Jr. (*Indiana University School of Dentistry, Indianapolis, USA*)

**S1401** Genetics of Tooth Enamel Thickness. I. TIKHONOV\*, D. DAUBERT, S. BAMASHMOUS, C. HABER DESOUZA, C. KLEIST, I. KHOSH, J. KELLEY, W. SWANSON, and F. ROBERTS (*University of Washington, Seattle, USA*)

**S1402** Phenotype Changes of Dental Papillae Mesenchyme Cells after Nfic-shRNA Treatment. M.Y. KIM\*, J. REYNA, L.S. CHEN, and M. ZEICHNER-DAVID (*University of Southern California, Los Angeles, USA*)

**1403** Expansion and Characterization of Osteogenically Differentiated Human Embryonic Stem Cells. P. ARPORNMAEKLONG\*, S.E. BROWN, Z. WANG, M.J. PRESSLER, and P.H. KREBSBACH (*University of Michigan, Ann Arbor, USA*)

**1404** Toward Synthetic Superimposition of Dental 3D Data. R. SMITH, K. CHEN, G. TOWNSEND, and A. BROOK\* (*University of Liverpool, United Kingdom*)

**S1405** Quantifying Phenotyping Variation in Mice with Amelx and Enam Mutations. T. COXON\*, A. BROOK, and R. SMITH (*University of Liverpool, United Kingdom*)

**S1406** Fractal Analysis of CBCT Images to Detect Age-related Bone Changes. L. GAALAAS\* and M. ISLAM (*University of Minnesota Dental School, Minneapolis, USA*)

**1407** What is the Real Fracture Toughness of Human Enamel? D. BAJAJ, S. PARK, G. QUINN, and D. AROLA\* (*University of Maryland Baltimore County, USA*)

**S1408** Fatigue Crack Growth in Human Dentin: Microstructure and Anisotropy. J. IVANCIK\*, H. MAJD, D. BAJAJ, E. ROMBERG, and D. AROLA (*University of Maryland Baltimore County, USA*)

**1409** Univariate/Multivariate Raman Spectral Analyses of Osteogenesis Imperfecta Mouse Bone. X. YAO\*, S.-H. JUNG, and Y. WANG (*University of Missouri-Kansas City, USA*)

**1410** Paper Withdrawn.

**S1411** Complementary Microscopic Studies of the Peritubular-Intertubular Human Dentin Region. C. XU\*, Z. WANG, and Y. WANG (*University of Missouri-Kansas City School of Dentistry, USA*)



- 1412** Extrinsic Stain Removal Efficacy of a Triclosan/Copolymer/Silicon-dioxide/NaF Dentifrice. S. NATHOO, E. DELGADO\*, Y.P. ZHANG, and W. DEVIZIO (*Colgate-Palmolive, Piscataway, NJ, USA*)
- S1413** MicroCT Scans of Mouse Skull Defects: One Year Post-surgery. Q. DIEP\*, L. DOAN, H. LUONG, C. KELLEY, H. GOMEZ, W. LEBOEUF, E. JOHNSON, D. CODY, and J. DUKE (*University of Houston, TX, USA*)
- 1414** Biological Responses of Cementoblasts to Mechanical Vibration *in vitro*. H. LU, E. LAU, A. XIAO\*, L. YOU, and D. LIU (*Marquette University, Milwaukee, WI, USA*)
- S1415** Serial Micro-CT Scans of Changes in Healing Mouse Skull Defects. W. LEBOEUF\*, C. KELLEY, H. LUONG, Q. DIEP, E. JOHNSON, D. CODY, and J. DUKE (*Our Lady of the Lake College, Baton Rouge, LA, USA*)

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**Seq#: 180** Saturday, 6 March 2010, 11:45 a.m. - 1 p.m.  
Poster Session, Exhibit Hall D

**Microbiology / Immunology and Infection Control - *Candida***

- 1416** *Candida albicans* Induces Epithelial Apoptosis followed by Secondary Necrosis. C.C. VILLAR\* and X.R. ZHAO (*University of Texas - San Antonio / Health Science Ctr., USA*)
- S1417** Mechanism of *Candida albicans* Activation of the Nlrp3 Inflammasome. M. DRESCHER\*, J. SADLER, T. ULLAND, S. IYER, S. JOLY, and F. SUTTERWALA (*University of Iowa College of Dentistry, Iowa City, USA*)
- 1418** Characterization of Bacterial Nuances in Oral Squamous Cell Carcinoma Tissues. S. PUSHALKAR\*, X. JI, Y. LI, C. ESTILO, and D. SAXENA (*New York University College of Dentistry, USA*)

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**Seq#: 181** Saturday, 6 March 2010, 11:45 a.m. - 1 p.m.  
Poster Session, Exhibit Hall D

**Microbiology / Immunology and Infection Control - *Streptococci***

- 1419** *In vitro* Multi-bacterial Species Adhesion Assay to Saliva-coated Hydroxyapatite Discs. E. YEK\*, L. MARTIN, S.S. SOCRANSKY, and A.D. HAFFAJEE (*The Forsyth Institute, Boston, MA, USA*)
- S1420** Selection of Mutans Streptococci Strains following Caries-preventive Therapy. E. PALMER\*, T. FINLAYSON, T. NIELSEN, P. PEIRANO, A. NGUYEN, A. VO, S. JACKSON, I. EDWARDS, K. MARSH, J. PETERSON, T. MAIER, and C. MACHIDA (*Oregon Health & Science University, Portland, USA*)
- S1421** The Ecto-5'-nucleotidase Modulates *Streptococcus sanguinis*-induced Platelet Aggregation. J. FAN\*, Y. ZHANG, and M. HERZBERG (*University of Minnesota, Minneapolis, USA*)
- S1422** Raman Identification of *Streptococcus mutans* Pathogenic Properties. M. WATERS\*, I. CALIZO, S. PAREKH, A. HIGHT WALKER, M. LIN, and S. LIN-GIBSON (*National Institute of Standards and Technology, Gaithersburg, MD, USA*)
- S1423** Effects of Dental Materials with Nicotine on *Streptococcus mutans* Growth. H. SHIH\*, K.S. GREGSON, and R.L. GREGORY (*Indiana University-Purdue University, Indianapolis, USA*)
- S1424** Effects of Protease Inhibitors on Assessment of Oral Microbes. G. LIU\*, D. SAXENA, Z. CHEN, H. DENG, R.G. NORMAN, D. MALAMUD, and Y. LI (*New York University, USA*)

- S1425** Investigation of Mutations in FadA Structure and Function. S. TEMOIN\*, K. WU, V. WU, and Y. HAN (*Case Western Reserve University, Cleveland, OH, USA*)
- S1426** Characterization of *Streptococcus gordonii* Fibrils. K. SONAN\*, Y. ZHANG, K. ROSS, and M. HERZBERG (*University of Minnesota, Minneapolis, USA*)
- S1427** The Roles of MazEF and RelBE in *Streptococcus mutans* Stress-tolerance. D. RAMOS VEGA\*, B. KORITHOSKI, and R. BURNE (*University of Florida, Gainesville, USA*)
- S1428** Oral Epithelial Cell Responses to *Streptococcus* spp. A. ROSE\*, R. PEYYALA, S. KIRAKODU, J.L. EBERSOLE, and K.F. NOVAK (*University of Kentucky, Lexington, USA*) [2008 AADR Student Research Fellowship Winner]
- S1429** Phenotypic Characterization of spx Mutant Strains in *Streptococcus mutans*. I. RIVERA-RAMOS\*, J.K. KAJFASZ, A.R. MARTINEZ, and J.A. LEMOS (*University of Rochester School of Medicine and Dentistry, NY, USA*)
- 1430** Investigating Acid-tolerance Mechanisms of *Streptococcus sobrinus* via Interspecies Microarrays. A.R. MARTINEZ\*, J. ABRANCHES, J.K. KAJFASZ, and J.A. LEMOS (*University of Rochester School of Medicine and Dentistry, NY, USA*)
- 1431** A Genetic Locus Mediates FapI Glycosylation and Biofilm Formation. M. ZHOU\*, F. ZHU, and H. WU (*UAB School of Dentistry, Birmingham, AL, USA*)
- S1432** Nicotine Effect on Hydrophobicity and Biofilm Formation of *S. mutans*. J. MORGAN\* and R.L. GREGORY (*Indiana University-Purdue University, Indianapolis, USA*)
- 1433** Molecular and Genetic Characterization of CPS by *Streptococcus parasanguinis*. R. WU\*, M. NAHM, and H. WU (*UAB School of Dentistry, Birmingham, AL, USA*)
- S1434** Increased Virulence Properties of a Nicotine-resistant *Streptococcus mutans* Mutant. C. ZHENG\*, A. JOURAVLEV, G. YASSEN, and R.L. GREGORY (*Indiana University, Indianapolis, USA*)
- 1435** *Streptococcus mutans* and Lactobacillus Prevalence and Acidogenicity in Caries. B. OLSON\*, M. McEWAN, and D. DRAKE (*University of Iowa, Iowa City, USA*)

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**Seq#: 182** Saturday, 6 March 2010, 11:45 a.m. - 1 p.m.  
Poster Session, Exhibit Hall D

**Oral & Maxillofacial Surgery - *Oral and Maxillofacial Surgery***

- 1436** Analysis of Third Molar Prevalence and Classification among Military Trainees. J. HOLLIER, J. BARTOLONI, K. VANDEWALLE\*, and K. MEYER (*USAF, Lackland AFB, TX, USA*)
- S1437** Collagen-mediated Hyperalgesia. M.T. POPP\*, R. GOMEZ, M.A. HENRY, and N. JESKE (*University of Texas - San Antonio / Health Science Ctr., USA*)
- S1438** Histomorphometric Analysis of the Porcine Mandibular Distraction Wound. M. LAWLER\*, F. TAYEBATY, W.B. WILLIAMS, M. TROULIS, and L. KABAN (*Massachusetts General Hospital Department of Oral and Maxillofacial Surgery, Boston, USA*)
- S1439** Agreement between Clinical and Histologic Diagnoses of Oral Biopsies. I. KONDORI\*, R. MOTTIN, M. SANT, A.O. ABUBAKER, and D. LASKIN (*Virginia Commonwealth University School of Dentistry, Richmond, USA*)



- S1440** Long-term Dental Health after Bilateral Sagittal Split Osteotomy. C. KARTALTEPE\*, J.D. RUGH, J.P. HATCH, P. GAKUNGA, C. DOLCE, and J. VAN SICKELS (*University of Texas - San Antonio / Health Science Ctr., USA*)
- 1441** Research in Oral and Maxillofacial Surgery Residencies: Attitudes and Opinions. D. LASKIN\*, A. E. MOHAMMAD, and A. BEST (*Virginia Commonwealth University - VCU/MCV, Richmond, USA*)
- 1442** Can HBO Prevent Post-extraction Osteoradionecrosis in Irradiated Patients? J. GUNSOLLEY\*, G. FRITZ, A.O. ABUBAKER, and D. LASKIN (*Virginia Commonwealth University - VCU/MCV, Richmond, USA*)
- 1443** Histomorphometric Differences in Cortical Bone after Mandibular Distraction Osteogenesis. U. ZAPATA, E.K. BEAL, M. ELSALANTY, P.C. DECHOW\*, and L.A. OPPERMAN (*Baylor College of Dentistry, Dallas, TX, USA*)
- S1444** SCC-25 Cellular Responses to Blue Light: a Comparative Study. A. DOWNER\*, D. PATEL, R. MESSER, J.C. WATAHA, V. McCLOUD, P. LOCKWOOD, S. HSU, and J. LEWIS (*Medical College of Georgia, Augusta, USA*)

**Seq#: 183 Saturday, 6 March 2010, 11:45 a.m. - 1 p.m.**  
**Poster Session, Exhibit Hall D**

**Periodontal Research - Pathogenesis - Pathogenic Mechanisms**

- 1445** Expression Change of Adenosine Receptors in Human Chronic Periodontitis. C.-X. SUN\*, N.R. WALL, N. ANGELOV, C. RIRIE, J.-W. CHEN, D.S. BOSKOVIC, and J.M. HENKIN (*Loma Linda University, CA, USA*)
- S1446** Gingival RAGE Expression of Calorie-restricted vs. ad libitum-fed Rats. S. WALLET, E. BIMSTEIN, S. CHA, L. KESAVALU, M. ELIOS\*, and J. KATZ (*University of Florida, Gainesville, USA*)
- 1447** Apoptosis Biomarkers within Gingiva at Sites of Clinical Attachment Loss. C. ROSE, R. JOHNSON\*, and F. SERIO (*University of Mississippi, Jackson, USA*)
- S1448** Effect of Cannabidiol on Gingival Fibroblast MMP Production and Activity. N. FERRELL\*, D. TIPTON, S. RAWAL, and M. DABBOUS (*University of Tennessee, Memphis, USA*)
- S1449** Oral Cancer and Stromal Cells as Contributors of Inflammatory Factors. T. BERTRAND\*, L. RAMANATHAPURAM, and Z. KURAGO (*New York University, NY USA*)
- 1450** Root Surface Colonization by Fibroblasts following Different Regenerative Treatment Modalities. A. KASAJ\*, M. KLEIN, J. DUPONT, U. KRAHN, B. WILLERSHAUSEN, H. GOETZ, J. ZEILER, D. BRUELLMANN, and H. DUSCHNER (*Department of Operative Dentistry and Periodontology, Johannes Gutenberg-University, Mainz, Germany*)
- S1451** Lactoferrin Gene Polymorphisms and Aggressive Periodontitis in a Turkish Population. C.W. BASSIM\*, R. MURALIDHARAN, S. BECERIK, D. COGULU, G. EMINGIL, P.P. SULIMA, and T.C. HART (*NIDCR/NIH, Bethesda, MD, USA*)
- S1452** TGF- $\beta$ 1 Induces Slug, MMPs, and EMT in Gingival Epithelial Cells. S. SUME\*, A. KANTARCI, H. HASTURK, and P. TRACKMAN (*Boston University, MA, USA*)

- S1453** SPARC is Critical in Collagen Fiber Morphology of the PDL. J. TROMBETTA\*, H. YU, C. ROSSA, K. KIRKWOOD, and A. BRADSHAW (*Medical University of South Carolina, Department of Craniofacial Biology, Charleston, USA*)
- S1454** Treg Effect on T-cell Responses in Localized Aggressive Periodontitis Patients. C. RAPER\* (*U.S. Air Force Dental Service, San Antonio, TX, USA*)
- S1455** Active GSK3 $\beta$  Uniquely Mediates TGF $\beta$ -stimulated CTGF/CCN2 Expression in Gingival Fibroblasts. M. BAHAMMAM\* and P. TRACKMAN (*Boston University, MA, USA*)
- 1456** OPG/RANKL and IL-10/IL-1 $\beta$  Levels in GCF after Periodontal Therapy. Y.D. YILDIRIM, E. BERKER\*, N. YAMALIK, G.N. GUNCU, and A.C. AKMAN (*Hacettepe University, Ankara, Turkey*)
- 1457** RANKL/OPG in Poorly- and Better-controlled Diabetic Subjects with Chronic Periodontitis. P.M. DUARTE\*, V.R. SANTOS, J.A. LIMA, T.E.D. GONÇALVES, and M.F. BASTOS (*Guarulhos University, Brazil*)
- S1458** Fibronectin and Collagen Glycation Alter MMP Expression in Periodontal Fibroblasts. X. ZHU\*, X. XU, Z. CHEN, M. MIKHAILOVA, S. PAL, and B. STEFFENSEN (*University of Texas - San Antonio / Health Science Ctr., USA*)
- S1459** Effects of Camel Snus® on Keratinocytes. C. BAKER\*, B. OURANOS, and L.J. WINDSOR (*Indiana University School of Dentistry, Indianapolis, USA*)

**Seq#: 184 Saturday, 6 March 2010, 11:45 a.m. - 1 p.m.**  
**Poster Session, Exhibit Hall D**

**Oral Medicine & Pathology - Osteonecrosis and Oral Infections**

- 1460** Comparative Study of RHL between Flight Crew and Office Staff. H. KHADEMI\* (*Dental College, Isfahan, Iran*)
- 1461** Susceptibility of *Candida* Biofilms to Histatin-5 and Fluconazole. K. KONOPKA\*, B. DOROCKA-BOBKOWSKA, S. GEBREMEDHIN, J. WILSON, and N. DÜZGÜNEÇ (*University of the Pacific, Arthur A. Dugoni School of Dentistry, San Francisco, CA, USA*)
- 1462** Calcofluor Fluorescence Microscopy: Diagnosis and Intra-operative Detection of Periodontal Mucormycosis. N.E. McDERMOTT\*, Y.R. SHEA, and T.J. WALSH (*National Institutes of Health, Bethesda, MD, USA*)
- 1463** Denture Stomatitis and Removable Partial Prosthesis: a Systematic Review. E. EMAMI\*, T. HANAN, C. LAMARCHE, J. BARBEAU, and P. DE GRANDMONT (*Université de Montréal, Canada*)
- S1464** Paper Withdrawn.
- 1465** Electron Microscopic Study of White Sponge Nevus in Oral Mucosa. Y. JINBU\* and M. KUSAMA (*Jichi Medical University, Tochigi, Japan*)
- S1466** Anticarcinogenic Properties of Capsaicin on Cancer. L. MONTERO\* (*Boston University, MA, USA*)
- 1467** D-Methionine as a Protector for Irradiation-induced Oral Mucositis. M. YOSHIKAWA\*, A.P. COTRIM, A. SOWERS, J.B. MITCHELL, and B.J. BAUM (*National Institute of Dental and Craniofacial Research, Bethesda, MD, USA*)
- S1468** The Effect of a Probiotic Mint on Oral *Candida albicans*. B. BRANCHEAU\* (*University of Washington, Seattle, USA*)



**S1469** Association of Enamel Hypoplasia with Cleft Lip and/or Palate. S. SIMPSON\* and T. WHITE (*University of Oklahoma, Oklahoma City, USA*)

**S1470** Oral Bacterial Influence on the Water-soluble Tetrazolium (WST-1) Assay. D. DARUWALA\*, K. GREGSON, L.J.

WINDSOR, R.L. GREGORY, and F. SONG (*Indiana University School of Dentistry, Indianapolis, USA*)

**1471** Mutant Nitric Oxide Gene in NICO (Neuralgia-inducing Cavitation Osteonecrosis). C. GLUECK, R. McMAHON, and J. BOUQUOT\* (*University of Texas Houston Dental Branch, USA*)

**S1472** Primary CEOT Cell Populations with Ameloblastin Gene Alteration. D.L. ROLLINS\*, C. REN, J. DONG, Y. WU, P. DEVILLIERS, H. RIVERA, and M. MacDOUGALL (*University of Alabama, Birmingham, USA*)

**S1473** Vitamin D Receptor Binds to Cyclin D1 in Oral Keratinocytes. J. VALIYAPARAMBIL\*, R. PANT, and S. MALLYA (*University of Connecticut School of Dental Medicine, Farmington, USA*)

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**Seq#: 185** Saturday, 6 March 2010, 11:45 a.m. - 1 p.m.  
Poster Session, Exhibit Hall D

**Craniofacial Biology - Odontogenesis II: Differentiation and Maturation**

**1474** Neural Differentiation of Human Gingival Fibroblasts with and without Ultrasound. T. EL-BIALY\*, H. SADEGHI, B. WONG, and D. GOLDBERG (*University of Alberta, Edmonton, Canada*)

**1475** Functional Evaluation of Msx1 Missense Mutations. Y. WANG\*, G. MUES, and R. D'SOUZA (*Baylor College of Dentistry, Dallas, TX, USA*)

**S1476** Pax9 Binding Sites in the Bmp4 Promoter. J. BONDS\*, Y. WANG, G. MUES, and R. D'SOUZA (*Baylor College of Dentistry, Dallas, TX, USA*)

**S1477** Comparative Genomics and Evolution of Dental Morphology in Mammals. V. MUSHEGYAN\*, C. CHARLES, and O. KLEIN (*University of California - San Francisco, USA*)

**1478** Interaction of Pax9 with Homeodomain Proteins during Odontogenesis. Y. WANG, G. MUES\*, and R. D'SOUZA (*Baylor College of Dentistry, Dallas, TX, USA*)

**1479** Activation of Bmp4 Expression in Tooth Bud Mesenchyme. H. KONG\*, Y. WANG, G. MUES, and R. D'SOUZA (*Baylor College of Dentistry, Dallas, TX, USA*)

**1480** Localization of EVC2 Protein in Cultured Ameloblasts. K. YOSHIDA\*, T. SASSA, K. UOSHIMA, and Y. MOCHIDA (*Boston University, MA, USA*)

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**Seq#: 186** Saturday, 6 March 2010, 11:45 a.m. - 1 p.m.  
Poster Session, Exhibit Hall D

**Craniofacial Biology - Orofacial Disease: Cancer and Wound Healing**

**S1481** Role of C18-Pyridinium Ceramide in Autophagy-induced Cell Death HNSCC. R.D. SENTELLE\*, Y.A. HANNUN, and B. OGRETMEN (*Medical University of South Carolina, Charleston, USA*)

**S1482** Evaluation of TGF- $\alpha$ 1 and VEGF during Wound Healing. F. MASHHADI ABBAS and N. DASMAH\* (*Shahid Beheshti University of Medical Sciences, Dental School, Tehran, Iran*)

**Seq#: 187** Saturday, 6 March 2010, 11:45 a.m. - 1 p.m.  
Poster Session, Exhibit Hall D

**Craniofacial Biology - Orthodontics III - Diagnosis and Treatment Modalities**

**S1483** Growth Associations between Bizygomatic Width and Mandibular First Premolar Roots. C. JONES\*, M. CROCO, R. STALEY, and C. KUMMET (*University of Iowa, Iowa City, USA*)

**S1484** Growth Relationships between the Mandible and Mandibular First Molar Roots. D. MEIER\*, G. JONES, R.N. STALEY, and C. KUMMET (*University of Iowa, Iowa City, USA*)

**1485** Role of Forehead and Nose in Perception of Incisor Position. B. GREEN\* and L. LEITE (*Department of Pediatric Dentistry and Orthodontics, Medical University of South Carolina, Charleston, USA*)

**S1486** Validating Tooth Measurements Using CBCT, Digital, and Analog Periapical Radiography. A. WILLIAMS\*, R.N. STALEY, F. QIAN, K. VELA, V. ALLAREDY, and L. MORENO URIBE (*University of Iowa, Coralville, USA*)

**S1487** Mandibular Ramus Flexure Blind Test a Morphological Indicator of Gender. A. PEREGRINA, S.S. AZER, E. TAO\*, and W.M. JOHNSTON (*The Ohio State University, Columbus, USA*)

**S1488** Comparison of Linear Measurements from CBCT Images and Digital Models. B. CREED, C.H. KAU, J.D. ENGLISH, J.B. LITTLEFIELD, M.G. MULLER-DELGADO\*, M.L. RUSHING, H.I. BUSSA, and K.R. McGORRY (*University of Texas - Houston/Health Science Center, USA*)

**S1489** Case Complexity and Outcomes Evaluated by ICON, DI, and ABOGS. M. XU\*, M. HANS, D. BEESON, and M. VALIATHAN (*Case Western Reserve University, Cleveland, OH, USA*)

**S1490** Mandibular Arch Changes in Customized vs. Vendor-prefabricated Arch Forms. T. DANDAJENA and T. GRIFFIN, II\* (*University of Oklahoma, Oklahoma City, USA*)

**1491** A Study of Retention Preferences of General Dentists. L. AUSTIN, M. HANS, S. NARENDHAN, and M. VALIATHAN\* (*Case Western Reserve University, Cleveland, OH, USA*)

**S1492** Longitudinal Assessment of Patients Treated with the Sabbagh Universal Spring (SUS). T. DANDAJENA and H. POTTER\* (*University of Oklahoma, Oklahoma City, USA*)

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**Seq#: 188** Saturday, 6 March 2010, 11:45 a.m. - 1 p.m.  
Poster Session, Exhibit Hall D

**Late-breaking News III**

**S1493** Bioactivity and Biocompatibility of Light-curing Resin-modified MTA. M.G. GANDOLFI\*, P. TADDEI, F. SIBONI, G. CIAPETTI, and C. PRATI (*University of Bologna, Italy*)

**1494** Dysregulations Of EGFR Pathway Are Early Events In Oral Carcinogenesis. C.F. POH\*, E. CHEN, L. ZHANG, and M.P. ROSIN (*University of British Columbia, Vancouver, Canada*)

**1495** Novel Method to Sequentially Measure Polymerization Shrinkage. M. CANNON, D. BROWN\*, R. NAGEL, and R. JURADO (*Bisco Inc, Schaumburg, IL, USA*)

**1496** Matrix Metalloproteinase-1 and -3 Gene Polymorphisms in Periodontitis Patients. E. BALTACIOGLU\*, H.H. AGUS, G. GUNCU, E. SUKUROGLU, E. DURSUN, S. SUMER, E. KARABULUT, and F.A. AKALIN (*Karadeniz Technical University, Trabzon, Turkey*)



**S1497** *H. pylori*, Periodontal Pathogens, and Risk Factors of Gastric Cancer. J. SUN\*, Y. LI, F. FRANCOIS, P. CORBY, A.P. DASANAYAKE, and Y. CHEN (New York University College of Dentistry, USA)

**S1498** Bioactivity and Sealing Ability of Polypropyleneglicole-modified MTA as Innovative Sealer. M.G. GANDOLFI, F. SIBONI, P. TADDEI, A. TINTI, S. CHERSONI, and C. PRATI\* (University of Bologna, Italy)

**1499** Evaluation of H1N1 Antiviral Properties of an Essential Oil-Containing Mouthrinse. K. TOMISHIMA\*, V. DSYAKANAVA, K. BURNINGHAM, and P.C. PAN (Johnson & Johnson Consumer & Personal Products Worldwide, Division of Johnson & Johnson Consumer Companies, Inc, Morris Plains, NJ, USA)

**1500** Human  $\alpha$ -defensin-3 Regulates Tumor-associated Macrophage Trafficking via CCR2. H.I. KAWSAR, S.A. HIRSCH, Z. FENG, A. ZHOU, A. WEINBERG, and G. JIN\* (Case Western Reserve University, Cleveland, OH, USA)

**1501** Real-time Tomographic Monitoring of Composite Restoration Placement Using SS-OCT. A. SADR\*, J. MAYORAL MOLINA, Y. SHIMADA, T.A. BAKHSH, E. CHO, and J. TAGAMI (Global COE, International Research Center for Molecular Science in Tooth and Bone Diseases, Tokyo Medical & Dental University, Japan)

**S1502** Matrix Metalloproteinases 2 and 9 Activity during Rat Tongue Carcinogenesis. D. RIBEIRO\*, A.C. FRACALOSI, S. MIRANDA, M. FRANCO, and C. OSHIMA (Federal University of Sao Paulo, Santos, Brazil)

**NOTE:** \* = Presenting Author  
S prior to the presentation number indicates Student Presenter

## SATURDAY, MARCH 6, 2010 POSTER CHAIR LISTING

### Poster Sessions: 11:45 a.m. - 1 p.m.

| Session #'s | Group | Poster #'s  | Poster Chairs                |
|-------------|-------|-------------|------------------------------|
| 171 - 175   | DM    | 1317 - 1370 | Yonca Korkmaz & Aws ArRejaie |
| 176         | BEHSR | 1371 - 1390 | Marita R. Inglehart          |
| 177         | CAR   | 1391 - 1397 | Rohit Gupta                  |
| 178         | DAR   | 1398        | -                            |
| 179         | MT    | 1399 - 1415 | A. Jon Goldberg              |
| 180 - 181   | M/I   | 1416 - 1435 | Prem Sreenivasan             |
| 182         | OMS   | 1436 - 1444 | Mei Lu                       |
| 183         | PERIO | 1445 - 1459 | Dolphus Dawson               |
| 184         | OMP   | 1460 - 1473 | N.J. D'Silva                 |
| 185 - 187   | CRAN  | 1474 - 1492 | James Sciote                 |

**Seq#: 189 Saturday, 6 March 2010, 11:45 a.m. - 1 p.m.**  
**Poster Session, Exhibit Hall D**

### Late-breaking News IV

**S1503** The Antifungal Activity of Human Parotid Secretion is Species-Specific. D. JAMMAL\*, H. HANASAB, C. VENULEO, F.G. OPPENHEIM, and E.J. HELMERHORST (Boston University, MA, USA)

**1504** Controlled Release of Active MUC7-12-mer Antifungal Peptide from PHEMA Hydrogel. J. YU, J.A. GARDELLA, G. WEI, and L.A. BOBEK\* (State University of New York - Buffalo, USA)

**S1505** Zymography of Dental Plaque Supernatant Reveals Multiple Gliadin-degrading Enzymes. J. LEE\*, M. ZAMAKHCHARI, X. SUN, F.G. OPPENHEIM, and E.J. HELMERHORST (Boston University, MA, USA)

**S1506** Adenovirus Expressing Flt3L Elicits Notch Ligand Expression by Dendritic Cells. R. GILBERT\*, Y. FUKUYAMA, A. IRWIN, G. MOON, and K. FUJIIHASHI (University of Alabama at Birmingham, USA)

**1507** Dentin Caries Activity in Occlusal RBC Restorations: PEARL Network Findings. M. LEHMANN\*, A. VEITZ-KEENAN, R. CRAIG, F. CURRO, V. THOMPSON, J. WU, and D. VENA (PEARL Network, New York University College of Dentistry, USA)

**1508** Cytotoxic Effects of Three Self-adhesive Cements on Fibroblast-like Cells. F. OZER\*, M.B. BLATZ, A. SENGUN, E. ULKER, M. YALCIN, A. USTA, and G. SCHMALZ (University of Pennsylvania, Philadelphia, USA)

**1509** Identification of Potent Small Molecule Inhibitors of Cariogenic Biofilms. C. LIU\*, R. WORTHINGTON, C. MELANDER, and H. WU (Department of Pediatric Dentistry, UAB School of Dentistry, Birmingham, AL, USA)

**Seq #: 190 Friday, 5 March 2010, 8 a.m. - 9:30 a.m.**  
**Oral Session, Room 140B**

### Late-breaking News I

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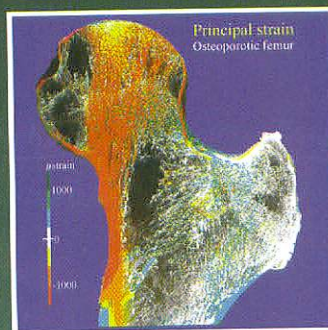
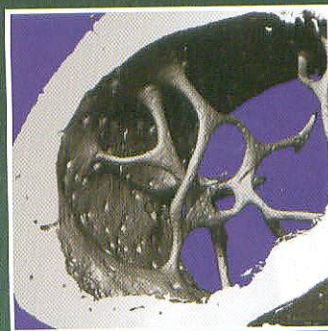
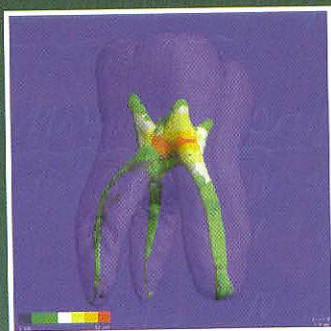
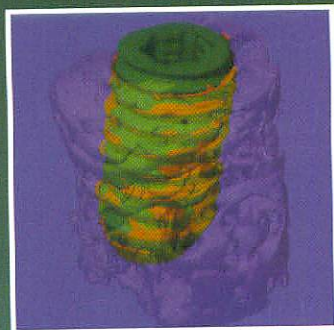
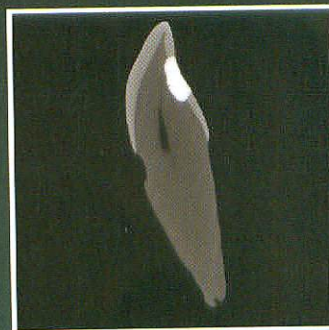
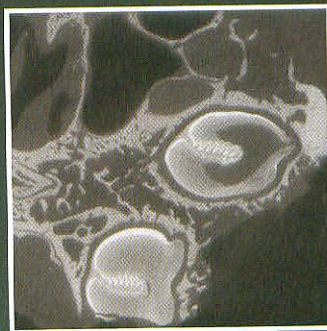
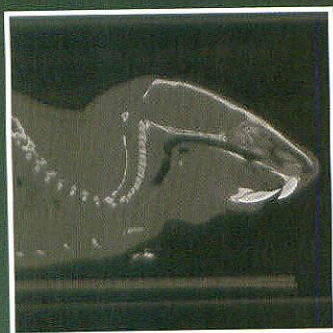
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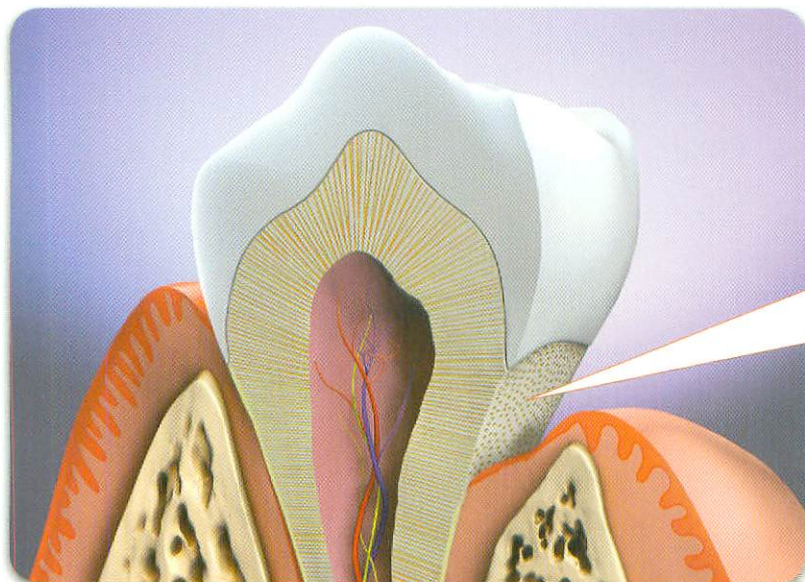
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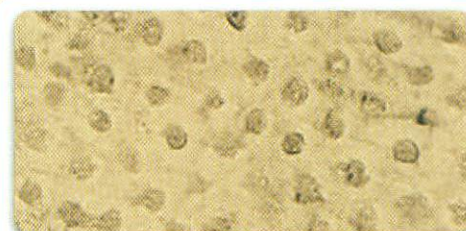
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