



BAYNE

PROGRAM BOOK

37th Annual Meeting & Exhibition of the AADR
Hilton Anatole Hotel

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EXCELLENCE

EDUCATION

COLLABORATION

NETWORK

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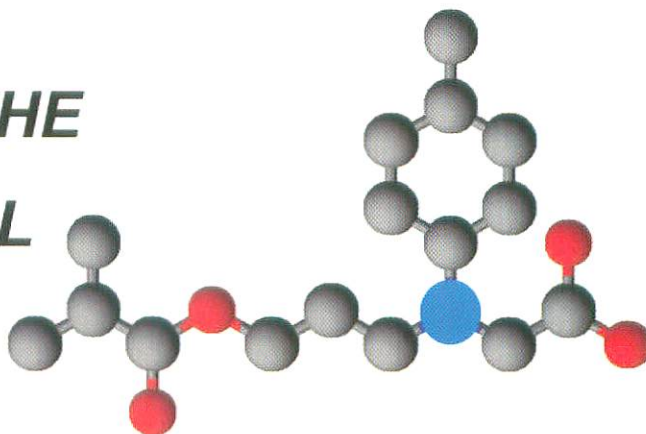
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Mg Salt of NTG-GMA
PMDM
PMGDM in Acetone
PMGDM in Tri-EDMA
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TABLE OF CONTENTS

Schedule of Events	.2	AADR Pavilion	.23
Floor Plans	.6	• AADR Identity • Future Meetings • Government Affairs • Membership	
• Hilton Anatole Hotel • Trinity I Exhibition Hall			
Chronological Listing of Sessions	.8	Poster Competitions	.24
Meeting Overview	.13	• AADR/Johnson & Johnson Hatton Awards • AADR NSRG DENTSPLY/Caulk Awards	
• Meeting Site • Registration Location & Hours • Accompanying Person(s) (Guests) • Badges • Cell Phones, PDAs, and Pagers • Photographs and Tape Recordings • Flash Drive of Abstracts • Listing of Presenters and Authors • Child Access to Sessions • Smoking Policy • Participants with Disabilities or Special Needs • Continuing Education Credits • Job Opportunity Bulletin Service (JOBS) • Presenter's Note • Hilton Anatole Hotel		Corporate Sponsorship	.25
		• Programs and Activities • Symposia and Workshops	
		Awards and Fellowships	.26
		Acknowledgments	.27
		AADR Institutional Section Member Listing	.28
		The Exhibition	.29
		• Company Descriptions	
		Scientific Program	.35
		• Wednesday • Thursday • Friday • Saturday	.35 .38 .55 .71
Featured Presentations	.16	Author/Co-author Index	.82
• Distinguished Lecture Speakers • Student & Mentor Plenary Session		Key Word Index	.98
NIDCR Activities	.17	CERP Form	.105
Symposia Listing	.18	Future Meetings	.107
Hands-on Workshop Listing	.19		
Keynote Speakers	.19		
Lunch & Learning	.22		
Special Events	.23		
• New Member Orientation • Opening Ceremonies & Awards Program • Welcome Reception • 3M ESPE Hospitality & WiFi Centers • Group Business Meetings & Receptions • National Student Research Group Business Meeting & Reception • Dental Materials Group Reception			

SCHEDULE OF EVENTS

All events listed will take place at the Hilton Anatole Hotel (see page 6 for the location of each room).

DATE/TIME	EVENT	ROOM
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TUESDAY, APRIL 1

8 a.m. – 10 a.m.	IADR ASC Meeting	Suite
8 a.m. – noon	ADA SCDP Annual Meeting	Stemmons Ballroom A
8 a.m. – 1 p.m.	AADR/Johnson & Johnson Oral Health Products Hatton Competition	
	- Junior Category	Morocco
	- Senior Category	Obelisk A
	- Post-doctoral Category	Obelisk B
	- Judges' Deliberation Room	Library
10:30 a.m. – noon	NIDCR T32 Training Directors' Meeting	Stemmons Ballroom C
Noon – 1:30 p.m.	ADA SCDP Officers' Meeting	Inverness
1 p.m. – 3 p.m.	NIDCR Trainees' Poster Session	L'Entrecote
1:30 p.m. – 4:30 p.m.	ADA SCDP 7.55 / Oral Rinses	Inverness
1 p.m. – 5 p.m.	AADR Council Meeting	Stemmons Ballroom B
1:30 p.m. – 5 p.m.	ADA SCDP Standards Development Training Workshop	Chambers Lecture Hall
	Ad hoc Group Meeting on CAD CAM in Dentistry	Jade
2 p.m. – 5 p.m.	Registration Open	Chantilly Foyer
	Speaker Ready Room Open	Coral
	ADA SCDP Amalgam Working Group	Library
3:30 p.m. – 4:30 p.m.	NIDCR Director's Meeting with Research Trainees and Junior Scientists	Stemmons Ballroom C
6 p.m. – 8 p.m.	AADR Board Meeting	Amethyst

WEDNESDAY, APRIL 2

8 a.m. – 9 a.m.	ADA SCDP 7.6/ Tooth-bleaching Materials	Obelisk
8 a.m. – 10 a.m.	ADA SCDP 7.61/ Fluoride Varnishes	Steuben
8 a.m. – 4:30 p.m.	Registration Open	Chantilly Foyer
	Speaker Ready Room Open	Coral
8 a.m. – 5 p.m.	Exhibitor Move-in	Trinity Exhibit Hall I
8:30 a.m. – 9:30 a.m.	New Member Orientation Reception	Wyeth
9 a.m. – 10 a.m.	ADA SCDP 1/ Biological Evaluation	Peridot
10 a.m. – 11 a.m.	AADR Opening Ceremony & Awards Program	Stemmons Ballroom
11 a.m. – noon	Distinguished Lecture Series – Jim Baker, Jr.	Stemmons Ballroom
11 a.m. – 12:30 p.m.	ADA SCDP 1.1	Peridot
Noon – 4 p.m.	FNIDCR Board Meeting	Amethyst
12:30 p.m. – 1 p.m.	Oral Session Chairperson Orientation	Sapphire
1:30 p.m. – 3 p.m.	Symposia	See Chron Listing.
2 p.m. – 3 p.m.	Enhancing Peer Review at NIH	Emerald

WEDNESDAY, APRIL 2 (CONTINUED)

3:15 p.m. – 4:45 p.m.	Oral Sessions and Symposium	See Chron Listing.
	Updating NIDCR's Strategic Plan	Emerald
5 p.m. – 6:30 p.m.	AADR Welcome Reception	Anatole Park
6:30 p.m. – 8:30 p.m.	NSRG Officers' Meeting	Amethyst
	University of Buffalo Reception (<i>invitation only</i>)	Grand Ballroom C
7 p.m. – 8:30 p.m.	IUSD Reception (<i>invitation only</i>)	Plum Blossom

THURSDAY, APRIL 3

7 a.m. – 8 a.m.	Dental Deans' Meeting	Amethyst
	Behavioral, Epidemiologic & HSR Executive Committee Breakfast	Lalique
	Craniofacial Biology Group Executive Committee Breakfast	Peridot
	Dental Materials Group Executive Committee Breakfast	Travertine
	Implantology Research Group Executive Committee Breakfast	Steuben
7 a.m. – 4 p.m.	Speaker Ready Room Open	Coral
7 a.m. – 5 p.m.	ACRPTA Meeting	Inverness
7:30 a.m. – 3:30 p.m.	Registration Open	Chantilly Foyer
8 a.m. – 9:30 a.m.	Oral Sessions and Symposia	See Chron Listing.
8 a.m. – 4 p.m.	Poster Viewing Open - All Student Posters	Trinity Exhibit Hall I
9 a.m. – 12:30 p.m.	AADR NSRG DENTSPLY/Caulk Competition	
	- Basic Science Category	Fleur de Lis A
	- Clinical Science Category	Fleur de Lis B
	- Judges' Deliberation Room	Edelweiss
8 a.m. – noon	HOW #1: NIDCR Essentials in Grant Writing	Morocco
9:45 a.m. – 11:15 a.m.	Oral Sessions and Symposia	See Chron Listing.
	HOW #2: Publishing Your Manuscript – A JDR Perspective	Rosetta
9:45 a.m. – 11:45 a.m.	Symposium	See Chron Listing.
11:30 a.m. – 12:15 p.m.	Distinguished Lecture Series – Milton Packer	Stemmons Ballroom
Noon – 2 p.m.	High School Student Outreach Program (sponsored by Crest Oral-B, P&G Professional Oral Health)	Travertine
12:15 p.m. – 1:30 p.m.	Lunch Break	
	• Lunch & Learning (<i>ticketed event</i>)	Trinity Hall 2
	• AADR Committees' Lunch	Trinity Hall 2
1 p.m. – 4 p.m.	Exhibits Open	Trinity Hall I–Exhibit Hall
1:30 p.m. – 2:30 p.m.	All Student Poster Presentations – Block #1	See Chron Listing.
2:45 p.m. – 3:45 p.m.	All Student Poster Presentations – Block #2	See Chron Listing.
4 p.m. – 4:45 p.m.	Plenary Session with Panel Discussion (Meet & Greet reception to follow until 5:15)	Stemmons Ballroom
4 p.m. – 5 p.m.	JDR Editorial Board Meeting	Senators Lecture Hall
4 p.m. – 6 p.m.	ADA SCDP 2.18	Peridot

THURSDAY, APRIL 3 (CONTINUED)

5 p.m. – 6 p.m.	Group Business Meetings	
	- Behavioral, Epidemiologic & HSR	Morocco
	- Cariology Research	Emerald
	- Craniofacial Biology	Grand Ballroom B
	- Dental Materials	Sapphire
	- Diagnostic Sciences	Topaz
	- Mineralized Tissue	Monet Ballroom
	- Oral Health Research	Miro
	- Oral & Maxillofacial Surgery	Metropolitan Ballroom
	- Oral Medicine & Pathology	Grand Ballroom D
	- Pharmacology, Toxicology & Therapeutics	Governors Lecture Hall
	- Pulp Biology & Regeneration	Rosetta
5 p.m. – 7 p.m.	Tufts University School of Dental Medicine Reception (<i>invitation only</i>)	Cardinal
5:15 p.m. – 6 p.m.	NSRG Business Meeting	Grand Ballroom E
6 p.m. –	Group Receptions	
	- Behavioral, Epidemiologic & HSR, Geriatric Oral Research, & Nutrition Joint Reception	Fleur de Lis
	- Craniofacial Biology	Grand Ballroom B
	- Mineralized Tissue & Pulp Biology & Regeneration Joint Reception	Steuben
	- Oral Health Research	Miro
	- Oral & Maxillofacial Surgery	Metropolitan Ballroom
	- Oral Medicine & Pathology	Grand Ballroom D
6 p.m. – 7:30 p.m.	University of Iowa Reception (<i>invitation only</i>)	Obelisk
	University of North Carolina Reception (<i>invitation only</i>)	Jade
6 p.m. – 8 p.m.	NSRG Student & Faculty Advisor Reception (<i>invitation only, sponsored by Dentsply International</i>)	Khmer
	University of Michigan School of Dentistry Reception (<i>invitation only</i>)	Peacock Room
	University of Connecticut Reception (<i>invitation only</i>)	Nana Restaurant
6:30 p.m. – 8 p.m.	Dentistry Alumni and Friends Reception – University of Rochester (<i>invitation only</i>)	Plum Blossom
6:30 p.m. – 8:30 p.m.	Dental Materials Group Reception (<i>ticketed event</i>)	Wedgewood Room
7 p.m. – 8:30 p.m.	University of Alabama Dean's Reception (<i>invitation only</i>)	Wyeth
7 p.m. – 9 p.m.	University of California – San Francisco Reception (<i>invitation only</i>)	Travertine
	Harvard/ Forsyth Reception (<i>invitation only</i>)	Batik

FRIDAY, APRIL 4

7 a.m. – 8 a.m.	San Antonio Chapter Student Breakfast	Wyeth
7 a.m. – 8 a.m.	Behavioral, Epidemiologic & HSR Executive Committee Breakfast	Lalique
7 a.m. – 5 p.m.	ACRPTA Meeting	Inverness
7:30 a.m. – 9 a.m.	Oral Care Report Breakfast Meeting	Peridot
7:30 a.m. – 2:30 p.m.	Speaker Ready Room Open	Coral
7:30 a.m. – 3:30 p.m.	Registration Open	Chantilly Foyer

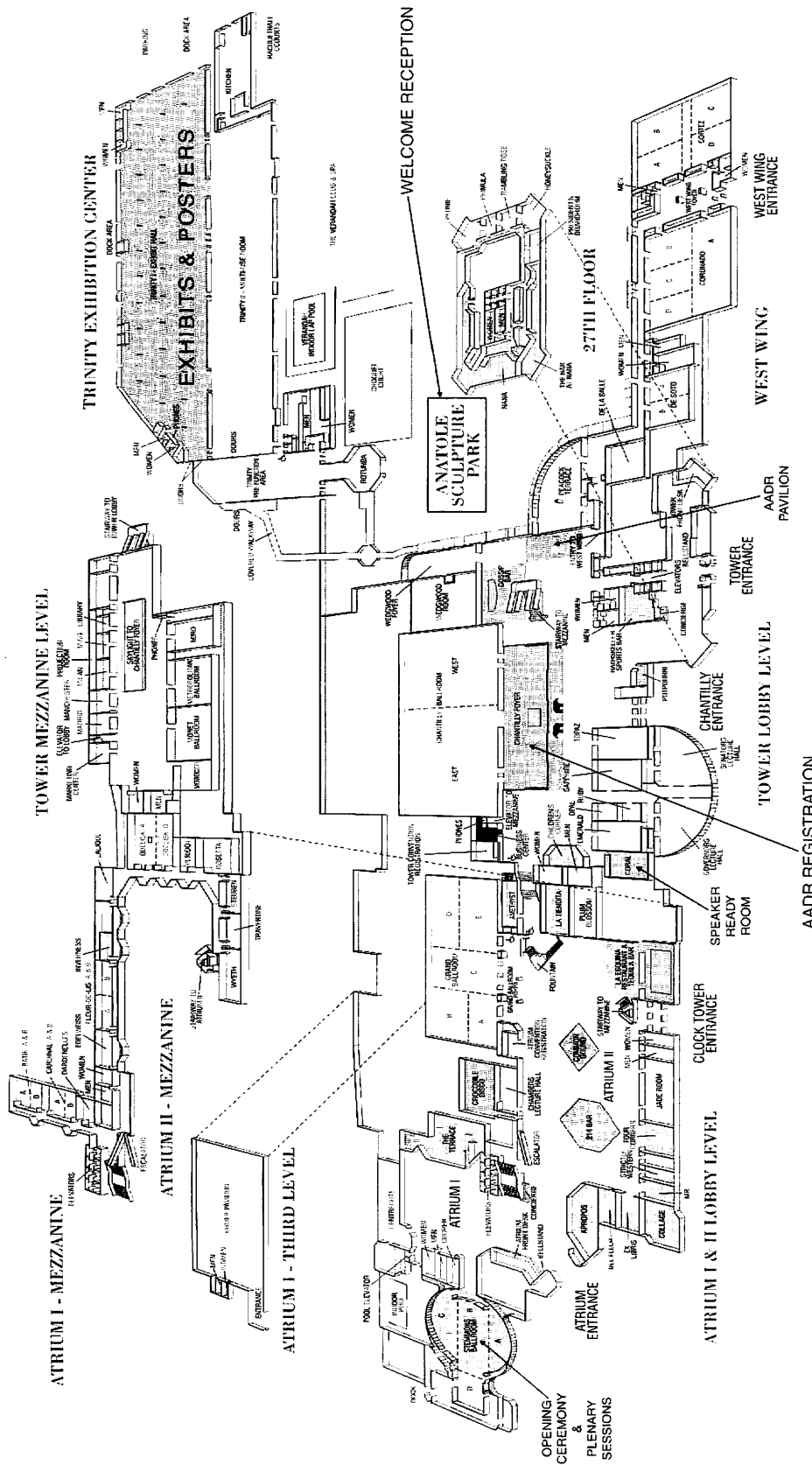
FRIDAY, APRIL 4

8 a.m. – 9:30 a.m.	Oral Sessions and Symposia	See Chron Listing.
8 a.m. – 10 a.m.	Symposium	See Chron Listing.
8 a.m. – 5 p.m.	Poster Viewing Open	Trinity Hall 1–Exhibit Hall
9 a.m. – 1 p.m.	International Academy of Periodontology	Amethyst
9:15 a.m. – 10:45 a.m.	NIDCR Research Training & Career Development Opportunities	Obelisk
9:45 a.m. – 11:15 a.m.	Oral Sessions and Symposia	See Chron Listing.
	HOW #3: Oral Pathogen Sequence Analysis and Comparative Study	Rosetta
11:30 a.m. – 12:15 p.m.	Distinguished Lecture Series - Eric Olson	Stemmons Ballroom
12:15 p.m. – 1:30 p.m.	Lunch Break	
	• Faculty Advisors' and SRG President's Lunch	Trinity Hall 2
	• VIP Luncheon for Spouses of the AADR Board and Past Presidents (invitation only)	Nana
	• Past Editors', Executive Directors', and AADR Past Presidents' Lunch (invitation only, sponsored by Johnson & Johnson Oral Health Products)	Presidential Board Rm.
1 p.m. – 5 p.m.	Exhibits Open	Trinity Hall 1–Exhibit Hall
1:30 p.m. – 2:30 p.m.	All Student Poster Presentations – Block #1	See Chron Listing.
2:45 p.m. – 3:45 p.m.	Poster Presentations – Block #2	See Chron Listing.
4 p.m. – 5 p.m.	AADR Institutional Section Meeting	Wyeth
5 p.m. – 6 p.m.	Nutrition Research Group Business Meeting	Topaz
6 p.m. – 7:30 p.m.	University of Minnesota Reception (invitation only)	Plum Blossom

SATURDAY, APRIL 5

7 a.m. – 5 p.m.	ACRPTA Meeting	Inverness
8:30 a.m. – 11 a.m.	Speaker Ready Room Open	Coral
8:30 a.m. – noon	Poster Viewing & Exhibits Open	Trinity Hall 1–Exhibit Hall
8:30 a.m. – noon	Registration Open	Chantilly Foyer
9 a.m. – 10:30 a.m.	Oral Sessions and Symposia	See Chron Listing.
9 a.m. – 11 a.m.	Symposium	See Chron Listing.
10:45 a.m. – 11:45 a.m.	Poster Presentations	See Chron Listing.
Noon	Meeting Adjourns	
Noon – 1:30 p.m.	GPC Meeting	Plum Blossom

HILTON ANATOLE DALLAS



AADR REGISTRATION HOURS

Tuesday, April 1	2 p.m. – 5 p.m.
Wednesday, April 2	8 a.m. – 4:30 p.m.
Thursday, April 3	7:30 a.m. – 3:30 p.m.
Friday, April 4	7:30 a.m. – 3:30 p.m.
Saturday, April 5	8:30 a.m. – noon

AADR REGISTRATION AREA INCLUDES:

Registration Counters

AADR Pavilion

- AADR Identity & Membership
- Student Research Group
- Future Meetings
- Conference Bag Distribution
- Government Affairs

|OBS Board

Message Center Board

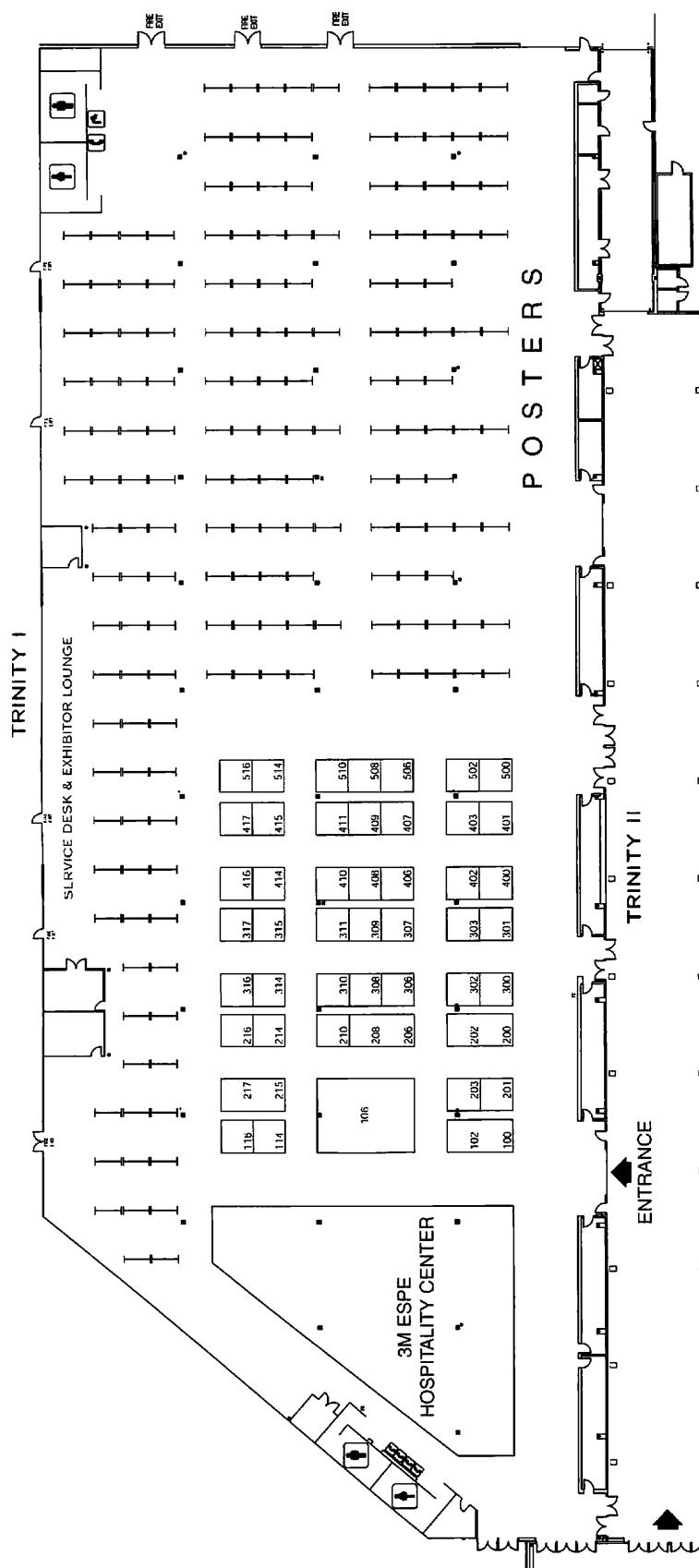
Abstracts Viewing Stations

City Information Booth

**SPEAKER READY ROOM
HOURS – CORAL ROOM**

Tuesday, April 1	2 p.m. - 5 p.m.
Wednesday, April 2	8 a.m. - 4:30 p.m.
Thursday, April 3	7 a.m. - 4 p.m.
Friday, April 4	7 a.m. - 2:30 p.m.
Saturday, April 5	8:30 a.m. - 11 a.m.

EXHIBIT HALL



POSTER PRESENTATIONS

Day	Program #s	Poster Viewing	Poster Presentations
Thursday	156-339 *	8 a.m. – 4 p.m.	Block #1: 1:30 p.m. – 2:30 p.m.
	340-520 *		Block #2: 2:45 p.m. – 3:45 p.m.
Friday	629-817 *	8 a.m. – 5 p.m.	Block #1: 1:30 p.m. – 2:30 p.m.
	818-966		Block #2: 2:45 p.m. – 3:45 p.m.
Saturday	1016-1265	8:30 a.m. – 11:45 a.m.	10:45 a.m. – 11:45 a.m.

* All student posters.

POSTER SET-UP AND TEAR-DOWN SCHEDULE

Presentation Date	Poster Set-up	Poster Tear-down
Thursday	7:30 a.m. – 8 a.m.	3:45 p.m. – 4 p.m.
Friday	7:30 a.m. – 8 a.m.	4:45 p.m. – 5 p.m.
Saturday	8 a.m. – 8:30 a.m.	11:45 a.m. – noon

POSTER SUPPLIES

Please bring your own thumbtacks, push pins, or staples to mount posters. Note: Velcro will NOT adhere to the poster boards.

EXHIBIT HALL OPEN

Thursday	1 p.m. – 4 p.m.
Friday	1 p.m. – 5 p.m.
Saturday	8:30 a.m. – noon

3M ESPE HOSPITALITY CENTER OPEN

Thursday	8 a.m. – 4 p.m.
Friday	8 a.m. – 5 p.m.
Saturday	8:30 a.m. – noon

CHRONOLOGICAL LISTING OF SESSIONS

GROUP	SESSION TITLE	ROOM	PRESENTATION
WEDNESDAY, APRIL 2, 2008			
Plenary: 11 a.m. - noon			
1	PL Nanotechnology for the Enhancement of Human Health	Stemmons Auditorium	1
Symposia: 1:30 p.m. - 3 p.m.			
2	SYM Challenges of Clinically Relevant Testing: Advanced Methods on the Horizon	Governors Lecture Hall	2
3	SYM Improving Oral Health and Promoting the Well-being of the Geriatric Population: Education Research Issues	Monet Ballroom	3
4	SYM New Insights into Tooth and Craniofacial Development	Grand Ballroom E	4
Symposium: 3:15 p.m. - 4:45 p.m.			
5	SYM Bone Augmentation Alternatives in the Craniofacial Skeleton	Monet Ballroom	5
Oral: 3:15 p.m. - 4:45 p.m.			
6	BEHSR Oral and Systemic Health	Senators Lecture Hall	6 - 11
7	DM Keynote Address and Ceramics — Fractography, Fracture Mechanisms, and Residual Stress	Grand Ballroom D	12 - 16
8	IMP Keynote Address and Bioactive Implant Materials	Morocco	17 - 21
9	M/I <i>Porphyromonas gingivalis</i>	Metropolitan Ballroom	22 - 27
10	OHR Oral Disease and Systemic Health	Miro	28 - 33
11	OMP Oral Cancer	Sapphire	34 - 39
12	PERIO Periodontal Therapy: Antimicrobials and Immune Modulators	Topaz	40 - 45
13	PROS Clinical Prosthodontics and Advances in Dental Ceramics	Grand Ballroom A	46 - 51
THURSDAY, APRIL 3, 2008			
Symposia: 8 a.m. - 9:30 a.m.			
14	SYM Bisphosphonates & Osteonecrosis: Evidence from Population Research in the United States	Monet Ballroom	52
15	SYM Dental School Involvement in the Planning and Implementation of NIH Clinical and Translational Science Awards: We are at the Table; What Do We Do Now?	Grand Ballroom E	53
16	SYM Host Immunotherapeutic Approaches for the Treatment of Periodontal Diseases	Governors Lecture Hall	54
Oral: 8 a.m. - 9:30 a.m.			
17	BEHSR Keynote Address and Social Disparities in Oral Health	Senators Lecture Hall	55 - 59
18	CAR Keynote Address and Clinical Studies, Erosion	Miro	60 - 64
19	DM Keynote Address and Adhesion-Leakage/Margin Assessments	Grand Ballroom D	65 - 69
20	DM Novel Ceramics: Processing, Resin-bonding, and Osseogenesis	Grand Ballroom A	70 - 75
21	DM Physical Properties of Resin Composite Materials	Grand Ballroom B	76 - 81
22	DIA Radiographic Quality Controls; Salivary Markers for Cancer and Cardiac Disease	Sapphire	82 - 87
23	MT Teeth and Associated Structures	Emerald	88 - 93
24	OMS Oral and Maxillofacial Surgery	Metropolitan Ballroom	94 - 99
Hands-on Workshop: 8 a.m. - 12:30 p.m.			
25	HOW Essentials in Grant Writing	Morocco	100
Hands-on Workshop: 9:45 a.m. - 11:15 a.m.			
26	HOW Publishing Your Manuscript — a JDR Perspective	Rosetta	101
Symposia: 9:45 a.m. - 11:15 a.m.			
27	SYM Advances in Imaging Hard Tissues <i>in vivo</i>	Governors Lecture Hall	102
28	SYM Bisphosphonates & Osteonecrosis of the Jaw (ONJ)	Monet Ballroom	103

THURSDAY, APRIL 3, 2008 (CONTINUED)

Oral: 9:45 a.m. - 11:15 a.m.

30	CAR	Caries Lesions, Fluoride, Remineralization	Miro	105 - 110
31	CRAN	TMJ Developmental Biology and Engineering	Emerald	111 - 116
32	DM	Keynote Address, Testing and Durability of the Adhesive Interface	Grand Ballroom D	117 - 121
33	DM	Polymerization Kinetics and Effects	Grand Ballroom B	122 - 127
34	DM	Materials and Remineralization; Elastomers; Mechanical Testing	Grand Ballroom A	128 - 133
35	M/I	<i>Streptococci</i>	Metropolitan Ballroom	134 - 139
36	NEU	Neuroscience/TMJ	Senators Lecture Hall	140 - 144
37	OHR	Keynote Session and Oral Halitosis, Assessment, Treatment, and Management	Sapphire	145 - 148
38	SAL	Saliva and Salivary Glands	Topaz	149 - 154

Symposium: 9:45 a.m. - 11:45 a.m.

29	SYM	NIDCR's 60th Anniversary Symposium: Looking Toward the Future	Grand Ballroom E	104
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Plenary: 11:30 a.m. - 12:15 p.m.

39	PL	Engineering the Clinical Research Enterprise in a Multi-institutional and Multidisciplinary Environment	Stemmons Auditorium	155
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Poster: 1:30 p.m. - 2:30 p.m.

40	AAHATTON	AADR/Johnson & Johnson Oral Health Products Hatton Awards - Junior Category	Trinity I - Exhibit Hall	156 - 164
41	AAHATTON	AADR/Johnson & Johnson Oral Health Products Hatton Awards - Senior Category		165 - 173
42	AAHATTON	AADR/Johnson & Johnson Oral Health Products Hatton Awards - Post-doctoral Category		174 - 182
43	PROS	Prosthodontic Research: Student Abstracts		183 - 193
44	DM	Environmental Influences on Adhesive Bond Strength		194 - 204
45	DM	Polymerization Kinetics Factors		205 - 208
46	DM	Mechanical Testing, Light Curing, Surface Properties		209 - 214
47	DM	Physical Properties of Elastomers		215 - 219
48	DM	Metals (Various)		220 - 224
49	DM	Student Posters: Titanium Alloys, Ni-Ti Alloys, & Other Metals		225 - 233
50	DIA	Diagnostic Sciences Student Posters		234 - 249
51	CAR	Undergraduate Student Abstracts		250 - 261
52	IMP	Implant Clinical and <i>in vivo</i> Studies		262 - 268
53	IMP	Implant Materials Cell Culture Studies		269 - 274
54	OHR	Oral Health Services/Quality-of-Life Measures/Epidemiology		275 - 283
55	MT	Gene Expression		284 - 290
56	M/I	Oral Microbiology		291 - 315
57	PERIO	Bacterial and Salivary Diagnostics/ Systemic Conditions		316 - 319
58	PERIO	Periodontal Pathology : Host-Bacterial Interactions		320 - 329
59	CRAN	Psychological and Sociological Aspects of Orthodontics		330 - 339

Poster: 2:45 p.m. - 3:45 p.m.

60	DM	Core Materials, Electrosurgery, Lasers, Burs, Ultrasonic Preparation	Trinity I - Exhibit Hall	340 - 344
61	DM	Bond Strength: Technique and Substrate		345 - 356
62	DM	Marginal Integrity of Various Restorations		357 - 370
63	DM	Provisional Materials, Posts, Wear Testing		371 - 378
64	DM	Endodontic, Orthodontic, and Miscellaneous Materials		379 - 391
65	GOR	Geriatric Oral Research Student Posters		392 - 395
66	BEHSR	BEHSR Student Abstracts I		396 - 417
67	CAR	Graduate Student Abstracts		418 - 426
68	DAR	Dental Anesthesiology Research Student Posters		427 - 429
69	MT	Structure/Function of Protein and Mineral		430 - 439
70	OMS	Student Posters		440 - 450
71	PERIO	Periodontal Research: Diagnosis/Epidemiology		451 - 460
72	PERIO	Periodontal Pathology Host Responses		461 - 471
73	PERIO	Student Posters		472 - 478
74	PTT	Student Posters		479 - 482
75	NEU	Student Abstracts		483 - 502
76	CRAN	Dental and Profile Changes Accompanying Orthodontic Treatments		503 - 513
77	CRAN	ECM of the Temporomandibular Joint and Periodontal Ligament		514 - 520

THURSDAY, APRIL 3, 2008 (CONTINUED)

Plenary: 4 p.m. - 5:15 p.m.

78	PL	Careers in Dental and Craniofacial Research: The Good, The Bad and The Ugly—Mainly the Good!	Stemmons Auditorium	521
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FRIDAY, APRIL 4, 2008

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

79	SYM	Genomics & Oral Pathogen Research: Making the Connection	Monet Ballroom	522
81	SYM	TMJ Pain Mechanisms	Grand Ballroom E	524

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

82	BEHSR	Oral Health in Children	Senators Lecture Hall	525 - 530
83	CRAN	Craniofacial Developmental Biology and Genetics	Grand Ballroom A	531 - 536
84	DM	Keynote Address and Clinical Trials	Grand Ballroom D	537 - 541
85	DM	Mechanical Testing of Resin Composites	Grand Ballroom B	542 - 547
86	GOR	Geriatric Oral Research	Sapphire	548 - 553
87	MT	Keynote Address and Genetic Mutations	Emerald	554 - 558
88	PTT	Pharmacology, Therapeutics, & Toxicology	Metropolitan Ballroom	559 - 564
89	PB	Cell and Molecular Assessments of Pulp Infection, Pain Induction, and Pulp Regeneration	Miro	565 - 570
90	SAL	Keynote Address and Biomarkers in Saliva	Topaz	571 - 575

Symposium: 8 a.m. - 10 a.m.

80	SYM	NIDCR 60th Anniversary Symposium: Dental Practice-based Research — Practitioner-driven Evidence-based Dentistry	Governors Lecture Hall	523
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Hands-on Workshop: 9:45 a.m. - 11:15 a.m.

91	HOW	Oral Pathogens Sequence Analysis and Comparative Study	Rosetta	576
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Symposia: 9:45 a.m. - 11:15 a.m.

92	SYM	Bioactive and Caries-inhibiting Resin-based Materials	Monet Ballroom	577
93	SYM	Stem Cells at Work	Grand Ballroom E	578

Oral: 9:45 a.m. - 11:15 a.m.

94	CAR	Genetics, De-/Remineralization Studies	Miro	579 - 584
95	CRAN	Dental Development and Genetics	Emerald	585 - 590
96	DM	Keynote Address and Cast Titanium Alloys and Ni-Ti Endodontic Alloys	Grand Ballroom D	591 - 595
97	EDU	Education Research	Senators Lecture Hall	596 - 598
98	IMP	Bone Regeneration and Testing Methods	Morocco	599 - 604
99	M/I	The Effects of Oral Microbes on Cells	Metropolitan Ballroom	605 - 610
100	OMP	Oral Pathology	Sapphire	611 - 616
101	PERIO	Periodontal Research: Diagnosis/Epidemiology	Topaz	617 - 622
102	PROS	Keynote Address and Advances in Prosthodontics	Grand Ballroom A	623 - 627

Plenary: 11:30 a.m. - 12:15 p.m.

103	PL	Genetic Control of Heart Development and Disease	Stemmons Auditorium	628
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Poster: 1:30 p.m. - 2:30 p.m.

104	CAULK	DENTSPLY/Caulk - Basic Science Category	Trinity I - Exhibit Hall	629 - 635
105	CAULK	DENTSPLY/Caulk - Clinical Science Category		636 - 642
106	PB	Pulp Clinical Diagnostics and Treatment		643 - 647
107	DM	Ceramics, Cements, and Bonding		648 - 663
108	DM	Biocompatibility and Clinical Trials—Student Posters		664 - 673
109	DM	Physical Properties of Glass Ionomers and Resin Composites		674 - 684
110	BEHSR	BEHSR Student Abstracts II		685 - 704
111	EDU	Student Posters		705 - 709
112	IMP	Implant Materials Testing and Mechanical Performance		710 - 717
113	OHR	Student Posters		718 - 729
114	MT	Tissue Regeneration and Stem Cells		730 - 738
115	SAL	Student Posters		739 - 745
116	M/I	Immune Mechanisms and the Oral Cavity		746 - 756
117	PTT	Pharmacology, Therapeutics & Toxicology Posters		757 - 761

FRIDAY, APRIL 4, 2008 (CONTINUED)

Poster: 1:30 p.m. - 2:30 p.m. (continued)

118	OMP	Oral Cancer Student Posters	Trinity I - Exhibit Hall	762 - 772
119	OMP	Oral Pathology Student Posters		773 - 784
120	CRAN	Biometrics in Orthodontics		785 - 794
121	CRAN	Bone, Cartilage, and Suture Biomechanics		795 - 804
122	CRAN	Normal and Abnormal Craniofacial Development		805 - 817

Poster: 2:45 p.m. - 3:45 p.m.

123	PROS	Biomechanics and Materials Considerations in Prosthodontics	Trinity I - Exhibit Hall	818 - 821
124	PROS	Ceramics, Color Science, and Esthetics		822 - 824
125	DM	Environment, Material, and Technique Impacts on Bond Strength		825 - 836
126	DM	Bond Strength of Resin Cements		837 - 843
127	DM	Physical Properties of Resin Composites and Glass Ionomers		844 - 863
128	DIA	Diagnostic Sciences Posters		864 - 875
129	BEHSR	Health Services and Behavioral Research		876 - 884
130	NUT	Nutrition		885 - 891
131	CAR	Caries Management, Sealants		892 - 899
132	CAR	Erosion, Molecular Biology, Clinical Studies		900 - 907
133	DAR	Dental Anesthesiology Research		908 - 910
134	OHR	Whitening/Stain/Bleaching/Dentifrices		911 - 921
135	MT	Enamel and Mineralization		922 - 928
136	MI	Infection Control		929 - 947
137	PERIO	Lasers		948 - 950
138	CRAN	Dental Developmental Biology		951 - 958
139	CRAN	Orthodontic Treatment Outcomes and Esthetics		959 - 966

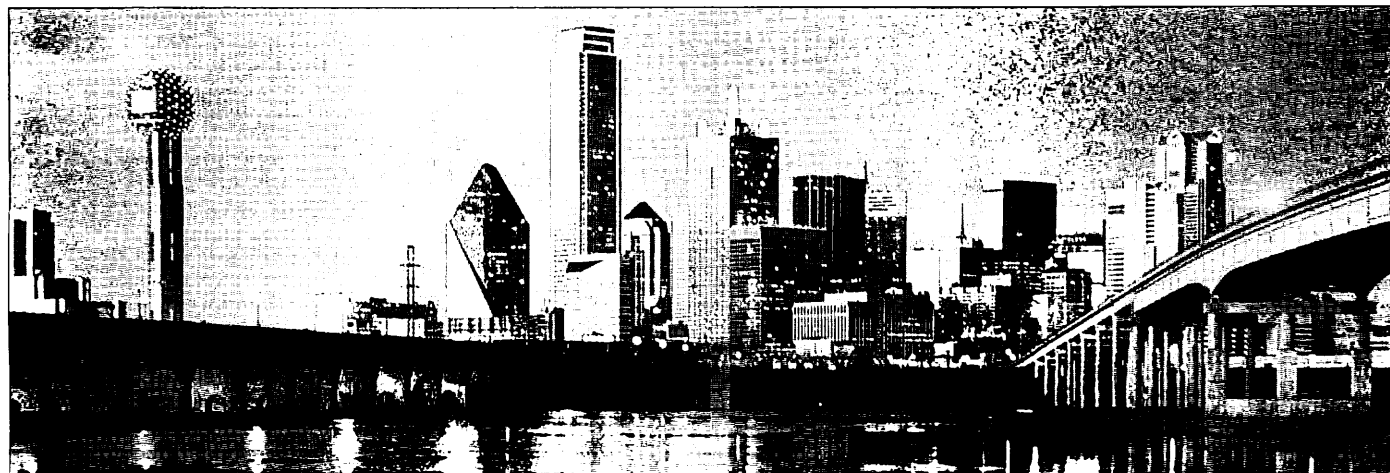
SATURDAY, APRIL 5, 2008

Symposia: 9 a.m. - 10:30 a.m.

140	SYM	Local Anesthesia: New and Improved?	Governors Lecture Hall	967
141	SYM	Mechanotransduction in Mineralized Tissues	Grand Ballroom E	968

Oral: 9 a.m. - 10:30 a.m.

143	BEHSR	Dental Behavior of Private Practice Dentists	Senators Lecture Hall	970 - 975
144	CRAN	Contemporary Adjuncts to Orthodontic Diagnosis and Treatments	Emerald	976 - 981
145	DM	Enamel Properties; Agents Released from Novel Materials	Grand Ballroom A	982 - 987
146	DM	Keynote Address and Dental Light-curing Units	Grand Ballroom D	988 - 991
147	MI	Microbiology and Immunology	Metropolitan Ballroom	992 - 997
148	MT	Dentin and Bone	Sapphire	998 - 1003
149	OHR	Toothbrushes, Toothpaste, Dental Floss, and Rinses	Miro	1004 - 1009
150	PERIO	Periodontal Pathology : Host Responses	Topaz	1010 - 1015



SATURDAY, APRIL 5, 2008 (CONTINUED)

Symposium: 9 a.m. - 11 a.m.

142 SYM NIDCR's 60th Anniversary Symposium: Building on Our Strengths

Grand Ballroom B

969

Poster: 10:45 a.m. - 11:45 a.m.

Trinity I - Exhibit Hall

151	DM	Cutting, Finishing, Polishing, Endodontic Posts, New Treatment Devices, Impression Mixers	1016 - 1023
152	PB	Pulp Diagnostics and Pulp Regeneration	1024 - 1034
153	PROS	Removable Prosthodontics and Endodontic Restorations	1035 - 1039
154	DM	Adhesive Materials	1040 - 1053
155	DM	Ceramic, Composite Adhesion	1054 - 1065
156	DM	Adhesive/Cement Bonding to Ceramics	1066 - 1074
157	DM	Bleaching and Dentifrices	1075 - 1084
158	DM	Clinical Trials Posters	1085 - 1093
159	DM	Toxicology and Biocompatibility	1094 - 1098
160	DM	Properties of Polymers	1099 - 1103
161	DM	Physical Properties of Elastomeric and Provisional Materials	1104 - 1113
162	DM	Miscellaneous Topics	1114 - 1121
163	BEHSR	Epidemiology and Behavioral Research	1122 - 1130
164	BEHSR	Epidemiology of Oral Diseases	1131 - 1139
165	EDU	Education Research Posters	1140 - 1143
166	IMP	Bone Growth and Response to Implants	1144 - 1151
167	OHR	Toothbrushes, Floss and Plaque Control	1152 - 1163
168	MT	Bone, Dentin, and Cementum	1164 - 1173
169	SAL	Salivary Research	1174 - 1182
170	M/I	Microbiology	1183 - 1201
171	OMS	Poster Presentations	1202 - 1205
172	PERIO	Periodontal Pathology Posters	1206 - 1216
173	PERIO	Periodontal Therapy: Regeneration, Antimicrobials, and Prognosis	1217 - 1225
174	NEU	Poster Presentations	1226 - 1232
175	OMP	Oral Cancer, Wound Healing	1233 - 1242
176	OMP	Oral Pathology Posters	1243 - 1252
177	CRAN	Normal and Abnormal Craniofacial Growth	1253 - 1259
178	CRAN	Orthodontic Diagnostic Aids	1260 - 1265
179	LBN	Late-breaking News	1266 - 1282

LEGEND

BEHSR	Behavioral, Epidemiologic, & Health Services Research	NEU	Neuroscience/TMJ
CAR	Cariology Research	NUT	Nutrition Research
CRAN	Craniofacial Biology	OHR	Oral Health Research
DAR	Dental Anesthesiology Research	OMS	Oral & Maxillofacial Surgery
DM	Dental Materials	OMP	Oral Medicine & Pathology
DIA	Diagnostic Sciences	PERIO	Periodontal Research
EDUC	Education Research	PL	Plenary Session
GOR	Geriatric Oral Research	PTT	Pharmacology, Therapeutics & Toxicology
HOW	Hands-on Workshop	PROS	Prosthodontics Research
IMP	Implantology Research	PB	Pulp Biology & Regeneration
LBN	Late-breaking News	SAL	Salivary Research
M/I	Microbiology/Immunology	SYM	Symposium
MT	Mineralized Tissue		

MEETING OVERVIEW

MEETING SITE

The scientific sessions, registration, and the commercial exhibition will be held at the Hilton Anatole Hotel. The address is as follows:

Hilton Anatole Hotel
2201 Stemmons Freeway
Dallas, Texas 75207
Tel: +1-214-748-1200
FAX: +1-214-761-7520

REGISTRATION

The AADR Registration Area will be located in the Chantilly Ballroom Lobby located in the Tower section of the hotel. Registration will be open during the following hours:

Tuesday, April 1	2 p.m. – 5 p.m.
Wednesday, April 2	8 a.m. – 4:30 p.m.
Thursday, April 3	7:30 a.m. – 3:30 p.m.
Friday, April 4	7:30 a.m. – 3:30 p.m.
Saturday, April 5	8:30 a.m. – noon

ACCOMPANYING PERSON(S) (GUESTS)

Accompanying persons are adult non-dentists, non-researchers, non-IADR/AADR members who may be traveling to Dallas with a meeting delegate and have no scientific interest in the meeting. Meeting participants' students, lab technicians, colleagues, etc., do not qualify as accompanying persons and should pay the appropriate registration fee if they wish to attend the meeting.

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 \$45.00, 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 and Friday mornings.

BADGES

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 to obtain a replacement badge.

CELL PHONES AND PAGERS

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

PHOTOGRAPHS & TAPE RECORDINGS

Individuals desiring to take photographs or make tape recordings during the session must obtain prior permission from the speakers, as well as from the session chair.

PROGRAM AND ABSTRACTS

A Flash drive of abstracts, generously sponsored by Straumann, will be produced for the AADR meeting delegates (and *JDR* institutional subscribers). All meeting delegates will receive the Flash drive on site. 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 \$25.00 each.

The Program and abstracts are available online at <http://iadr.confex.com/iadr/2008dallas/techprogram/index.html>

LISTING OF PRESENTERS AND AUTHORS

The Program lists the primary presenter's name, co-author's name(s), and their institutions. 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.

The number of each abstract printed in the Abstracts is the same as the corresponding paper in this book. Abstracts are printed exactly as submitted by the authors, without subsequent editing.

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.

SMOKING POLICY

The AADR meeting is a non-smoking meeting. The Hilton Anatole is a 100% non-smoking hotel.

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 the AADR Meetings Department either prior to the meeting or on site to discuss your requirements.

CONTINUING EDUCATION CREDITS

The IADR 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 Janis Flemming, Senior Program Manager, at jflemming@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.

PRESENTER'S NOTE

SPEAKER READY ROOM

The Speaker Ready Room is located in **Coral Room** (Tower section) at the Hilton Anatole Hotel and will be open during the following hours:

Tuesday, April 1	2 p.m. – 5 p.m.
Wednesday, April 2	8 a.m. – 4:30 p.m. (peak usage: Noon – 2 p.m.)
Thursday, April 3	7 a.m. – 4 p.m. (peak usage: 7 a.m. – noon)
Friday, April 4	7 a.m. – 2:30 p.m. (peak usage: 7 a.m. – noon)
Saturday, April 5	8:30 a.m. – 11 a.m.

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

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 Central Office 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.

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 Flash drive) at least 24 hours prior to the presentation to have it uploaded onto the server.

HILTON ANATOLE HOTEL

MEETING ROOMS

All scientific sessions will be held in the Hilton Anatole Hotel. Please check the Schedule of Events for the location of specific meetings and functions (see page 6 for the floor plans). You are encouraged to find rooms in which you plan to present or hear presentations well in advance of the times of the functions.

MEETING ROOM LOCATOR

<u>Room Name</u>	<u>Section</u>	<u>Level</u>
Amethyst	Atrium	Lobby
Anatole Sculpture Park	Tower	Lobby (outside)
Batik	Atrium	Mezzanine
Cardinal	Atrium	Mezzanine
Chambers Lecture Hall	Atrium	Lobby
Chantilly Ballroom	Tower	Lobby
Cooper	Atrium	Lobby
Coral	Tower	Lobby
Dardenelles	Atrium	Mezzanine
Edelweiss	Atrium	Mezzanine
Emerald	Tower	Lobby
Fleur-de-Lis	Atrium	Mezzanine
Grand Ballroom (A-E)	Atrium	Lobby
Governors Lecture Hall	Tower	Lobby
Inverness	Atrium	Mezzanine
Jade	Atrium	Lobby
Khmer Pavilion	Atrium	3rd Level
Lalique	Atrium	Mezzanine
L'Entrecote	Atrium	Lobby
Library	Tower	Mezzanine
Madrid	Tower	Mezzanine
Manchester	Tower	Mezzanine
Metropolitan	Tower	Mezzanine
Milan	Tower	Mezzanine
Miro	Tower	Mezzanine
Monet	Tower	Mezzanine
Morocco	Tower	Mezzanine
Obelisk	Atrium	Mezzanine
Opal	Tower	Lobby
Peacock Terrace	Tower	Lobby
Peridot	Atrium	Mezzanine
Plum Blossom	Atrium	Lobby
President's Boardroom	Tower	27th Floor
Rosetta	Atrium	Mezzanine
Ruby	Tower	Lobby
Sapphire	Tower	Lobby
Senators Lecture Hall	Tower	Lobby
Stemmons Ballroom	Atrium	Lobby
Steuben	Atrium	Mezzanine
Topaz	Tower	Lobby
Travertine	Atrium	Mezzanine
Trinity I & II Exhibition Hall	Tower	Lobby (behind the park)
Wedgewood	Tower	Lobby
Wyeth	Atrium	Mezzanine

LUGGAGE STORAGE

Facilities for luggage storage will be available at the front desk of the hotel for the duration of the meeting. Please do not bring your luggage to the meeting rooms.

RESTAURANTS/BARS

There are nine (9) on-site restaurants and bars (in addition to room service) open during the AADR meeting (please check with the individual location or the concierge for the exact hours of operation).

<u>Atrium Section</u>	<u>Open For</u>
The Terrace	breakfast, lunch, and dinner
Common Ground	breakfast and lunch
La Esquina	lunch and dinner
Crocodile Disco Bar	drinks only in the evening
214 Bar	drinks only in the evening
<u>Tower Section</u>	
Gossip Bar	continental breakfast and evening sushi
Rathskeller Sports Bar	lunch and dinner
Nana Restaurant and Bar	dinner (5-star rating) plus nightly entertainment and dancing
<u>Verandah Club</u>	
Pool Bar	lunch (weather permitting)

VERANDAH CLUB & SPA

The Verandah Club & Spa is an upscale, 80,000-square-foot, private club located in the beautiful seven-acre Anatole Sculpture Park at the Hotel. The facility is open Monday through Friday from 5:30 a.m. to 9:30 p.m. and Saturday and Sunday from 7 a.m. to 8 p.m. There is a daily guest fee of \$15.00 (guests must be 17 years of age or older).

Verandah facilities include:

- cardio and strength training room
- 25-meter indoor lap pool
- outdoor play pool
- ¼-mile secure outdoor track
- full-court basketball court
- tennis
- racquetball and squash courts
- aerobics classroom
- boxing gym
- spinning room
- sauna, steam, eucalyptus steam, and whirlpool
- complete locker rooms

Verandah services include:

- personal training
- exercise prescription
- group exercise classes
- massage therapy
- tennis lessons and clinics
- laundry and private lockers
- social events
- skin care treatments

FEATURED PRESENTATIONS

DISTINGUISHED LECTURE SERIES SPEAKERS

WEDNESDAY, APRIL 2; 11:00 A.M. – NOON

Location: Stemmons Ballroom (Atrium, Lobby Level)

Note: This program will immediately follow the Opening Ceremonies & Awards Program.



Jim Baker, Jr.

Michigan Nanotechnology Institute
for Medicine & Biological Science
Ann Arbor, Mich., USA

*Nanotechnology for the Enhancement
of Human Health*

The application of nanotechnology to the prevention and treatment of human diseases holds great promise, but faces huge hurdles. Nanomaterials must be biocompatible, non-toxic and functional in biologic (wet) conditions, and sufficiently well-defined to pass the scrutiny of regulatory agencies. Early applications of nanomaterials will likely involve the development of medications that take advantage of unique aspects of nanostructures to achieve or enhance therapeutic activity. Examples will be provided for the design, synthesis, and analysis of therapeutic nanomaterials where distinct kinds of attached molecules allow for unique therapeutic functions. These applications include antimicrobial compounds, drug and gene delivery, and functional imaging. Concepts of future nanotechnology applications—such as cellular engineering, human performance augmentation, and genetic manipulation for the treatment of human disease—will be addressed.

THURSDAY, APRIL 3; 11:30 A.M. – 12:15 P.M.

Location: Stemmons Ballroom (Atrium, Lobby Level)



Milton Packer

University of Texas, Southwestern Medical Center
Dallas, Texas, USA

*Engineering the Clinical Research Enterprise in a
Multi-institutional and Multidisciplinary Environment*

Modern clinical research is reaching well beyond the confines of traditional health care disciplines to incorporate multidisciplinary perspectives and, in the process, is reshaping approaches to disease and treatment. Yet creating a workable academic and community-based multi-institutional infrastructure to facilitate such perspectives is a great challenge. This session will present the view of the Medical Center in developing a modern clinical research enterprise that ensures a synergy created by cooperation and involvement across health care disciplines. A key question of such integration is: How do we effectively merge the interests and activities of those medical disciplines with long histories of high-level clinical research investigation with other health science fields, such as oral health, in which clinical research expertise and infrastructure are less-well-developed?

FRIDAY, APRIL 4; 11:30 A.M. – 12:15 P.M.

Location: Stemmons Ballroom (Atrium, Lobby Level)

Eric Olson

University of Texas,
Southwestern Medical Center
Dallas, Texas, USA



*Genetic Control of Heart Development
and Disease*

Heart formation involves a precisely orchestrated series of morphologic and molecular events that, if perturbed even subtly, can have catastrophic consequences. Many of the transcription factors that control heart development also regulate remodeling of the adult heart in response to injury and stress-signaling. Mechanistic dissection of the transcriptional circuits that regulate cardiac gene expression has opened opportunities for genetic and pharmacological modification of cardiac function. We have discovered several signal-responsive and cell-type-restricted transcriptional co-activators and co-repressors that control cardiac development and remodeling. For example, the myocardin family of co-activators stimulates the activity of SRF, and CAMTA co-activates Nkx2-5, whereas Class II histone deacetylases (HDACs) function as signal-dependent repressors of MEF2. The functions of co-activators and co-repressors, as well as the involvement of specific microRNAs, in the control of cardiac gene expression during development and disease will be discussed.

STUDENT & MENTOR PLENARY SESSION

THURSDAY, APRIL 3

Location: Stemmons Ballroom (Atrium, Lobby Level)

4 p.m. – 4:45 p.m. Program: Careers in Dental and Craniofacial
Research: The Good, The Bad,
and The Ugly—Mainly the Good!

4:45 p.m. – 5:15 p.m. Mentor "Meet & Greet" Reception

Panelists:

Mary MacDougall	University of Birmingham, Ala., USA
Marc Heft	University of Florida, Gainesville, USA
George Taylor	University of Michigan, Ann Arbor, USA

Three prominent researchers working in dental academe will outline their career paths and will discuss why they have made this their career choice. They will also outline why their careers have been so successful and what challenges, if any, they have met while climbing the academic ladder. Finally, they will discuss why they would advise a dental student to choose a research/teaching career in dental academe.

NIDCR National Institute of Dental and Craniofacial Research

ACTIVITIES

Celebrating NIDCR's 60th Anniversary



TUESDAY, APRIL 1

10:30 a.m. – noon NIDCR T32 Training Directors' Meeting
Location: Stemmons Ballroom, Section C

1 p.m. – 3 p.m. NIDCR Trainees' Poster Session
Location: L'Entrecote

3:30 p.m. – 4:30 p.m. NIDCR Director's Meeting with
Research Trainees and Junior Scientists
Location: Stemmons Ballroom, Section C

WEDNESDAY, APRIL 2

2 p.m. – 3 p.m. Enhancing Peer Review at NIH
Location: Emerald Room

NIDCR Director Lawrence Tabak has co-chaired a trans-NIH effort to examine the two-level NIH peer review system with the goal of optimizing its efficiency and effectiveness, and to ensure that the NIH will be able to continue to meet the needs of the research community and the public-at-large. The peer review study involves both external and internal working groups. Dr. Tabak will review the working groups' recommendations to the NIH Director and discuss potential actions.

3:15 p.m. – 4:45 p.m. Updating NIDCR's Strategic Plan
Location: Emerald Room

This session will give an opportunity for AADR attendees to provide input for the leadership of the NIDCR on the development of the Institute's next Strategic Plan (FY2009-2013). As the only Institute of the NIH devoted to dental, oral, and craniofacial research, the NIDCR has a distinguished record of supporting oral health research. Having a strategic plan that identifies the most promising opportunities for investment and that delineates the Institute's priorities is essential to achieving the NIDCR's mission of advancing oral health and well-being for all. The session will enable participants to suggest research priorities, offer input regarding directions for future research, and otherwise comment on how the NIDCR can most effectively achieve its mission. The input of AADR participants is vital to the development of a comprehensive strategic plan that reflects the wisdom and advice of the oral, dental, and craniofacial research communities.

THURSDAY, APRIL 3

8 a.m. – noon Hands-on Workshop:
Essentials in Grant Writing
Location: Morocco

This seminar teaches new investigators how to write a grant application, a subject that is missing from the educational backgrounds of most junior faculty members. The program content is appropriate for senior graduate students, post-doctoral research fellows, and non-tenure-track faculty members who aspire to the tenure track and have never written a successful grant application. The seminar is a modification of the advanced seminar, "Write Winning Grants". The difference is that the pace here is slower. For example, more time is allowed for questions and discussions, and more basic material is included (e.g., organizational structures of the major Federal funding agencies, how priority scores are calculated, what facilities and administrative costs are, how to analyze a critique in anticipation of resubmission, etc.). As would be expected, greater emphasis is given on how one starts to build an academic career, including how to write a career development award.

Another difference is that the last hour is devoted to questions and answers. For example: What should a trainee be thinking about with respect to proposal writing while still in training? When and how should a mentor be approached by a senior graduate student/post-doctoral research fellow who wants to take a project with him/her? How does a student gradually become independent of a mentor? Why do so many assistant professors fail to merit promotion and tenure?

9:45 a.m. – 11:45 a.m. NIDCR 60th Anniversary
Symposium: Looking Toward the Future
Location: Grand Ballroom E

As the NIDCR celebrates its 60th anniversary in 2008, it is a pleasure to recognize that a growing cadre of new scientists and professionals is emerging and making an impact in the oral health research community. This Symposium highlights this development by selecting five emerging scientists from this group. The Symposium has no unifying theme, but highlights oral health research and scientific inquiry over a broad field, from the basic sciences through translational research to the social and behavioral sciences. Each of these talented individuals has been, or is currently being, supported by one or more of the NIDCR's training and career development mechanisms.

FRIDAY, APRIL 4

8 a.m. – 10 a.m. NIDCR 60th Anniversary Symposium:
Dental Practice-based Research –
Practitioner-driven Evidence-based Dentistry
Location: Governors Lecture Hall

Practice-based research holds great potential for answering the questions that practitioners face daily in the routine care of their patients. This symposium will focus on the important aspects of the conduct of oral health research in a general dental practice. The Practitioners Engaged in Applied Research and Learning (PEARL), the Practice-based Research Collaborative in Evidence-based Dentistry (PRECEDENT), and the Dental Practice-Based Research Network (DPBRN) are NIDCR-funded dental Practice-Based Research Networks (PBRN) that conduct clinically relevant clinical research studies in practitioners' offices. The network directors and one dental practitioner-investigator from each Network will provide an overview of an active dental PBRN, using a network study to illustrate the tremendous potential and significant challenges involved in conducting networked research in general dental practices.

9:15 a.m. – 10:45 a.m. NIDCR Research Training & Career
Development Opportunities
Location: Obelisk Room

SATURDAY, APRIL 5

9 a.m. – 11 a.m. NIDCR 60th Anniversary Symposium:
Building on Our Strengths
Location: Grand Ballroom B

As the NIDCR celebrates its 60th anniversary in 2008, it is gratifying to acknowledge that many NIDCR-supported scientists have made highly significant and career-long contributions to the field of oral health research which have helped improve oral health conditions for Americans. The NIDCR proposes to celebrate the anniversary by highlighting four individuals who continue to make high-impact contributions to oral health research. The Symposium does not have a single unifying theme, but highlights four different and important fields of oral health research.

SYMPOSIA

All symposia will take place at the Hilton Anatole Hotel and are open for all to attend. Visit the AADR Web site or view the Flash drive for a description of each symposium.

WEDNESDAY, APRIL 2 1:30 P.M. – 3 P.M.

Challenges of Clinically Relevant Testing:

Advanced Methods on the Horizon

Organizer: Hockin Xu (ADA, Gaithersburg, Md., USA)
Sponsors: Dental Materials Group, ADA Standards Committee on Dental Products, NIST, and NIDCR
Seq #: 2, Governors Lecture Hall

Improving Oral Health and Promoting the Well-being of the Geriatric Population: Education Research Issues

Organizer: Helen Best (HEQ Consulting Ltd, London, UK)
Sponsors: Education Research and Geriatric Oral Research Groups
Seq #: 3, Monet Ballroom

New Insights into Tooth and Craniofacial Development

Organizer: Hitesh Kapadia (Baylor College of Dentistry, Dallas, Texas, USA)
Sponsors: Craniofacial Biology, Implantology Research, and Mineralized Tissue Groups
Seq #: 4, Grand Ballroom E

WEDNESDAY, APRIL 2 3:15 P.M. – 4:45 P.M.

Bone Augmentation Alternatives in the Craniofacial Skeleton

Organizer: Mohammed Elsalanty (Medical College of Georgia, Augusta, USA)
Sponsors: Craniofacial Biology and Implantology Research Groups
Supported by: Craniotech ACR Devices, LLC, and Medtronic, Inc.
Seq #: 5, Monet Ballroom

THURSDAY, APRIL 3 8 A.M. – 9:30 A.M.

Bisphosphonates & Osteonecrosis: Evidence from Population Research in the United States

Organizer: Athanasios Zavras (Harvard School of Dental Medicine, Boston, Mass., USA)
Sponsor: Behavioral, Epidemiologic & HSR Group
Seq #: 14, Monet Ballroom

Dental School Involvement in the Planning and Implementation of NIH Clinical and Translational Science Awards: We Are at the Table... What Do We Do Now?

Organizer: Paul Dechow (Baylor College of Dentistry, Dallas, Texas, USA)
Sponsor: Craniofacial Biology Group
Seq #: 15, Grand Ballroom E

Host Immunotherapeutic Approaches for the Treatment of Periodontal Diseases

Organizer: William Giannobile (University of Michigan, Ann Arbor, USA)
Sponsors: Periodontal Research and Microbiology/Immunology Groups
Seq #: 16, Governors Lecture Hall

THURSDAY, APRIL 3 9:45 A.M. – 11:15 A.M.

Advances in Imaging Hard Tissues in vivo

Organizer: Lynne Opperman (Baylor College of Dentistry, Dallas, Texas, USA)
Sponsors: Craniofacial Biology, Mineralized Tissue, and Implantology Research Groups
Seq #: 27, Governors Lecture Hall

Bisphosphonates & Osteonecrosis of the Jaw (ONJ)

Organizer: Sarandeep Huja (Ohio State University, Columbus, USA)
Sponsors: Craniofacial Biology and Implantology Research Groups
Seq #: 28, Monet Ballroom

THURSDAY, APRIL 3 9:45 A.M. – 11:45 A.M.

NIDCR's 60th Anniversary Symposium: Looking Toward the Future

Organizer: Henning Birkedal-Hansen (NIDCR, Bethesda, Md., USA)
Sponsored and Supported by: NIDCR
Seq #: 29, Grand Ballroom E

FRIDAY, APRIL 4 8 A.M. – 9:30 A.M.

Genomics & Oral Pathogen Research: Making the Connection

Organizers: Gary Xie and Thomas Bretin (Los Alamos National Laboratory, N.M., USA)
Sponsor: NIDCR
Seq #: 79, Monet Ballroom

TMJ Pain Mechanisms

Organizer: Phillip Kramer (Baylor College of Dentistry, Dallas, Texas, USA)
Sponsors: Craniofacial Biology and Neuroscience/TMJ Groups
Supported by: Baylor College of Dentistry and Texas A&M HSC
Seq #: 81, Grand Ballroom E

FRIDAY, APRIL 4 8 A.M. – 10 A.M.

NIDCR's 60th Anniversary Symposium: Dental Practice-based Research – Practitioner-driven Evidence-based Dentistry

Organizer: Henning Birkedal-Hansen (NIDCR, Bethesda, Md., USA)
Sponsored and Supported by: NIDCR
Seq #: 80, Governors Lecture Hall

FRIDAY, APRIL 4 9:45 A.M. – 11:15 A.M.

Bioactive and Caries-inhibiting Resin-based Materials

Organizer: Hockin Xu (ADA, Gaithersburg, Md., USA)
Sponsors: Dental Materials and Cariology Groups and Academy of Dental Materials
Seq #: 92, Monet Ballroom

Stem Cells at Work

Organizer: Brian Clarkson (University of Michigan, Ann Arbor, USA)
Sponsors: Mineralized Tissue and Pulp Biology & Regeneration Groups
Seq #: 93, Grand Ballroom E

SATURDAY, APRIL 5

9 A.M. – 10:30 A.M.

Local Anesthesia: New and Improved?

Organizer: Sharon Gordon (University of Maryland, Baltimore, USA)

Sponsors: Pharmacology, Toxicology & Therapeutics, and Dental Anesthesiology Research Groups

Supported by: Dentsply Pharmaceuticals and Novalar Pharmaceuticals, Inc.

Seq #: 140, Governors Lecture Hall

Mechanotransduction in Mineralized Tissues

Organizer: Lynda Bonewald (University of Missouri, Kansas City, USA)

Sponsors: Mineralized Tissue and Implantology Research Groups

Seq #: 141, Grand Ballroom E

SATURDAY, APRIL 5

9 A.M. – 11 A.M.

NIDCR's 60th Anniversary Symposium: Building on Our Strengths

Organizer: Henning Birkedal-Hansen (NIDCR, Bethesda, Md., USA)

Sponsored and Supported by: NIDCR

Seq #: 142, Grand Ballroom B

HANDS-ON WORKSHOPS

The workshops will take place at the Hilton Anatole Hotel. The workshops are complimentary; however, attendance is limited at workshops #1 and #3, 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 or view the Flash drive for a description of each workshop.

HOW #1: *Essentials in Grant Writing*

Date/Time: Thursday, April 3, 8 a.m. – noon

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

Sponsor: NIDCR

Seq #: 25, Morocco Room

HOW #2: *Publishing Your Manuscript – A JDR Perspective*

Date/Time: Thursday, April 3, 9:45 a.m. – 11:15 a.m.

Organizer: Anthony Smith (University of Birmingham, UK)

Sponsor: *Journal of Dental Research*

Seq #: 26, Rosetta Room

HOW #3: *Oral Pathogen Sequence Analysis and Comparative Study*

Date/Time: Friday, April 4, 9:45 a.m. – 11:15 a.m.

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

Sponsor: NIDCR

Seq #: 91, Rosetta Room

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 30-minute presentations by getting an overall understanding of what is currently being done in other disciplines. Listed below are the speakers:

BEHAVIORAL, EPIDEMIOLOGIC & HEALTH SERVICES RESEARCH

Luisa Borrell (Columbia University, New York, N.Y., USA)

Race and Ethnicity as Social Determinants of Oral Health

Thursday, 8 a.m.

Seq # 17: Senators Lecture Hall

Disparities in oral health between racial and ethnic groups have been pervasive, persistent, and increasing over time in the US. The persistence of these findings over time begs us to question the repetition of findings documenting racial/ethnic disparities as an expected fact and to ask the question: What is it about race and ethnicity as social constructs that affect an individual's oral health in the US? First, race and ethnicity are proxies for an array of unmeasured exposures (i.e., racial discrimination, segregation, environmental exposure, unequal opportunities for social mobility, access to quality of care) in US society that may act directly or indirectly on oral health. Moreover, because racial/ethnic membership channels people to advantages or disadvantages according to their race/ethnicity, this membership determines the education that individuals receive in the US and, further, may influence their occupation and income. Race/ethnicity also influences social and physical characteristics of an individual's neighborhood of residence that may either promote oral health or cause it to deteriorate. This presentation aims to provide evidence of racial/ethnic disparities in oral health and discuss the potential causal pathways by which race/ethnicity affects oral health.

CARIOLOGY RESEARCH

Dominick Zero (Indiana University, Indianapolis)

Improvements in Clinical Diagnosis and Management of Caries

Thursday, 8 a.m.

Seq # 18: Miro Room

There is increasing interest in when and how we detect caries and the development of new technologies to assist in this process. Several clinical caries detection systems have been recently developed (International Caries Detection and Assessment System and the Nyvad Method) that include the early staging of caries and assessment of lesion activity. QLF and DIAGNOdent are examples of currently marketed technology-based quantitative methods of scoring early caries. Caries risk assessment tools have been developed, but past caries experience remains the best predictor of future caries. The recognition that dental caries can be arrested and possibly reversed if detected at an early stage is leading to renewed interest in innovative intervention strategies. There is considerable enthusiasm for the "medical model" approach of managing caries as an infectious disease; however, current intervention strategies are effective by containment of the disease

process and not by eliminating target micro-organisms, such as mutans streptococci. Toothbrushing as a means of delivering fluoride dentifrice, professionally applied fluoride (varnish), preventive and therapeutic use of dental sealants, and the chewing of sugar-free gum are the mainstays of caries prevention, with other remineralization strategies in need of further testing. While the traditional surgical approach still has its role, the possibility of conservatively managing coronal caries that has progressed into dentin is also being considered. The development of innovative approaches to meet the oral health needs of underserved populations remains a high priority.

DENTAL MATERIALS

Susanne Scherrer (University of Geneva, Switzerland)
Optimizing the Survival of Ceramic Prostheses: Lessons Learned from the Analysis of Clinical Failures

Wednesday, 3:15 p.m.

Seq #7: Grand Ballroom D

The fracture surface analysis of failed ceramic restorations by stereomicroscopy as well as SEM assists in the pattern recognition of markings that are indicators of the direction of crack propagation. Mapping these crack features of the failed component provides evidence of where the failure started and what can be done to improve the lifetime of these restorations. The dimensions of the critical flaw can also be used to calculate the stress at failure if the fracture toughness is known. Several examples of fractographic analysis of fractured clinical prostheses will be presented, which will focus on the use of fracture markings in the ceramic veneer (such as wake hackle and twist hackle) to track the fracture path back to its origin.

Anil Misra (University of Missouri, Kansas City, USA)
Adhesive Dentin Interfacial Characterization and Micromechanical Behavior

Thursday, 8 a.m.

Seq #19: Grand Ballroom D

The adhesive/dentin (a/d) interface is a complex multi-phase material system consisting of the adhesive layer, the hybrid layer, the uninfiltreated demineralized dentin or exposed collagen, the partially demineralized dentin, and the native dentin. Needless to say, microstructure and phase micromechanical properties have a profound effect on the mechanical behavior of a/d interfaces. This presentation focuses on understanding the micromechanical stress development at the interface through the use of finite element analysis (FEA). Such analysis is now feasible, given that it is possible to measure micromechanical properties non-destructively and characterize the microstructure/composition of the same specimen. Based upon the microstructure measurements, computational unit cells have been identified to model the representative geometry of the a/d interface. These unit cells reduce the computation requirements considerably and provide us with the ability to perform investigations of parameters that influence stress development and, consequently, to understand how the interfacial stress distribution potentially contributes to its premature breakdown.

Larry Watanabe (University of California, San Francisco, USA)
Status of Standardization: 'Adhesion Test Methods to Tooth Structure'
Thursday, 9:45 a.m.

Seq #32: Grand Ballroom D

Standardization of a method to test adhesion to tooth structure continues to be difficult, as evident at these meetings and the many publications using this type of modality. The need for a common method is universally understood, but consensus remains elusive. This presentation describes the state of standardization efforts from both the US (American Dental Association; Subcommittee on Dental Products; Working Group 1.1 "Adhesion Test Methods to Tooth Structure" [ADA; SCDP; WG 1.1]) and international perspectives (International Standards Organization; Technical Committee 106 Dentistry; Working Group 11 "Adhesion Test Methods to Tooth Structure" [ISO; TC 106; WG 11]). The many steps involved in the evolution of a standard will be presented. This presentation will also include various components within the ADA's method that are relevant to other methods and the importance of these components to the outcome of this type of testing. For 22 years, the ADA; SCDP; WG 1.1 has met in conjunction with the AADR Annual Meeting. The goal was to devise a simple, reliable, and reproducible test. Various test methods were discussed, and the 'Single Plane Shear Test Assembly' (SPSTA) was chosen for in-depth evaluation; ultimately it was accepted and submitted to the international body (ISO; TC; WG 11). It has been included in the TS-11405 document, which is a precursor to a standard. ISO; WG 11 is currently involved in "round robin" testing of 2 methods, one of which will become the method in ISO's standard. In conclusion, standardization of 'Bond Strength Testing to Tooth Structure' remains elusive. The path toward standardization has been long, with many obstacles overcome and some that remain. An ISO standard is actively being pursued, and the journey along this path has certainly been interesting. Knowledge learned in this process should lend insight into the current state of "Adhesion Test Methods to Tooth Structure".

John Wataha (Medical College of Georgia, Augusta, USA)
Biocompatibility of Dental Materials: a Confusing and Uncomfortable Science

Friday, 8 a.m.

Seq #84: Grand Ballroom D

Biocompatibility is a challenging endeavor from concept to implementation. A primary goal of this field is to measure the biological responses of tissues to materials to ensure material safety and efficacy. Concerns about ethics, money, and time have driven the development of *in vitro* models that attempt to substitute for animal or human clinical trials as predictors of clinical safety. In the last decade, more sophisticated cell-culture techniques have been melded with molecular biological techniques to improve *in vitro* models considerably. For example, we are now measuring molecular signaling changes induced by sublethal and trace levels of material degradation products. With this knowledge, current *in vitro* models mimic even specialized clinical environments far better than did their predecessors. Furthermore, we are now measuring subtle changes in cellular behavior that may have gone undetected a decade ago. These advances will help forge a better understand-

ing of the biological effects of materials, and may provide opportunities to harness these effects for therapeutic advantage. Yet, with the intellectual rewards of this molecular level of knowledge come skepticism and even hostility, as data from new *in vitro* models often catalyze controversy and debate. Knowledge of the effects of material behavior at the molecular level brings the need to verify the role of these effects clinically. It is this need to link our molecular understanding with clinical outcomes and safety that will drive biocompatibility research for the next decade.

William Brantley (Ohio State University, Columbus, USA)

Metallic Materials Used in Dentistry

Friday, 9:45 a.m.

Seq #96: Grand Ballroom D

Metallic materials have widespread uses for restorative dentistry, prosthodontics, orthodontics, and endodontics. This presentation will review the compositions, structures and properties, and performance of dental amalgams, gold casting alloys for all-metal restorations, noble and base metal casting alloys for metal-ceramic restorations, base metal casting alloys for removable prosthodontics, and base metal wrought alloys for implant dentistry, orthodontics, and endodontics. In addition to gold casting alloys, other major casting alloys in widespread clinical use are palladium-based, Ni-Cr and Co-Cr, and there is considerable interest in cast titanium and titanium alloys. The major wrought alloys are stainless steel, Co-Cr-Ni, beta-titanium, and nickel-titanium. The advantages and concerns for clinical usage of this wide range of metallic materials will be discussed, and exciting future directions will be described.

Frederick Rueggeberg (Medical College of Georgia, Augusta, USA)

The History of Photopolymerization Units in Dentistry

Saturday, 9 a.m.

Seq #146: Grand Ballroom D

This seminar will focus on the history of the development of light-curing units used to photo-activate resin-based restorative materials in dentistry. Coverage of the chemical reactions occurring, the mechanical components required, light sources utilized, physics underlying transferring light from the source to the target, and steps needed to protect the oral environment from biological damage will be covered. The seminar will provide a background of past and current technology, plus take a glimpse at what possibilities the future holds in the area.

IMPLANTOLOGY

Ichiro Nishimura (University of California, Los Angeles, USA)

Implantology – The State of the Art in 2008

Wednesday, 3:15 p.m.

Seq #8, Morocco Room

The current extremely high survival rates of implant fixtures have been achieved in a relatively selected patient population; thus, the treatment success for implant-associated prostheses may be different in a wider range of populations. The Institute of Medicine (the National Academy of Science) recently reported alarmingly high levels of vitamin D insufficiency in European and North American human populations over 60 years of age. The deficit in serum vitamin D not only results in secondary hyperparathy-

roidism, but also limits the effectiveness of the human innate immune response to repel bacterial challenge, effectively corral the adaptive immune response to that bacterial challenge, and dysregulate T helper cell (Th) cytokine synthesis. In a recent study in a rat model, vitamin D insufficiency showed significant inhibitory effects of osseointegration. It is possible, therefore, that unexpected failures of implant osseointegration may be accounted for, in part, by subclinical manifestation of vitamin D insufficiency. This presentation initiates a new discussion of systemic and genetic influences in implant dentistry.

MINERALIZED TISSUE

Andrew Lidral (University of Iowa, Iowa City, USA)

Using Human Genetic Approaches to Identify Genes for Common Diseases: Cleft Lip/Palate as a Model

Friday, 8 a.m.

Seq #87: Emerald Room

Finding genes that cause nonsyndromic cleft lip with or without cleft palate (CL/P) has been particularly difficult, because this condition is not inherited in a typical recessive, dominant, or X-linked manner, not everyone having a mutation in a CL/P gene has a cleft, and there are multiple genes involved such that not everyone with cleft lip has a mutation in the same gene. This latter fact complicates genetic approaches that look for regions of the genome that are shared between affected individuals. If there are multiple genes involved, some families would show increased sharing in one region, while other families would not. CL/P fits the description of a genetically complex trait similar to hypertension, asthma, or Alzheimer's disease. This presentation will describe the successful application of contemporary genetic strategies to identify a novel gene for CL/P. This was accomplished by a genome-wide scan for CL/P genes on over 600 families including over 4500 individuals. This identified a genetically large region on chromosome 9 that was significantly shared between affected members within families compared with what was statistically expected. A strategy that looks for sharing between individuals across families was used to evaluate a large number of genes in the chromosome 9 region, narrowing the critical region to only 3 genes. The expression patterns of these genes during lip formation was determined in mouse embryos, revealing that two genes, HEMGN and C9orf156, were not expressed in the facial regions, while FOXE1 was expressed in the fusion between the medial nasal and maxillary processes. Genetic variants within FOXE1 were found to be highly shared between affected individuals. Analysis of these data strongly suggests that FOXE1 is a novel gene for CL/P. This discovery provides invaluable insight about the etiology of a very common facial birth defect.

ORAL HEALTH RESEARCH

Sushma Nachnani (University Health Resources Group, Inc., Culver City, Calif., USA)

Assessment and Treatment of Oral Malodor

Thursday, 9:45 a.m.

Seq #37: Sapphire Room

The objective of this keynote presentation is to provide up-to-date information and insight into the oral and non-oral causes of

oral malodor (oral halitosis). The most recent findings on the etiology, diagnosis, and treatment of oral malodor will be discussed. The presentation will focus on innovative diagnostic techniques such as the nasal powers of dogs to assess odors, the use of the artificial mouth system for screening and treating halitosis, the identification of a novel bacterium (the Gram-positive anaerobe *Solobacterium moorei*) found in most people with oral malodor, and the application of novel fluorescence imaging to assess tongue bacteria.

PROSTHODONTICS

Takahiro Ogawa (University of California, Los Angeles, USA)
Technological Breakthroughs for More Biocompatible and Bioactive

Pre-prosthetic and Prosthetic Devices and Materials

Friday, 9:45 a.m.

Seq # 102: Grand Ballroom A

We have acquired a full line-up of convenient dental products responding to the increasing and expanding demands of dental treatments. It may be time to revisit the biocompatible nature and possible improvement of dental biomaterials. Prosthetic treatment involves various types of biomaterials, ranging from dental implants, bone substitute materials, and collagen membranes/sponges for bone generation/healing as pre-prosthetic materials, to polymethacrylate and ethyl methacrylate resins as prosthetic ones. Recent studies have demonstrated that some of these materials are cytotoxic to a biologically significant degree, i.e., the exposure of the cells to materials results in cell death or significantly impaired cell function. Titanium loses osteoconductivity over time and the dental implant materials in circulation may not exert their maximum potential. This presentation will discuss: 1) the toxicity of these materials; 2) whether the potential toxicity can be diminished or removed; 3) whether the reduced cellular function caused by the toxicity of the materials can be restored and even enhanced; and 4) whether the recently found aging property of titanium can be prevented.

SALIVARY RESEARCH

Charles Streckfus (University of Texas HSC, Houston, USA)
Proteomic Procedures to Discover Biomarkers for Systemic Cancers
Friday, 8 a.m.

Seq #90: Topaz Room

A surge of new technological developments, coupled with the limitations of existing disease detection methodologies, is propelling the field of medical diagnostics forward at unprecedented rates. Advancements in proteomics and nanotechnology are paving the way for diagnostic tests that will be capable of rapid multi-analyte detection in both laboratory and non-laboratory settings. Technological advancements have also benefited biomarker research to the point where saliva is now recognized as an excellent diagnostic medium that can be collected simply and non-invasively. Salivary biomarkers have been identified that may provide diagnostic information about a variety of cancers and other diseases. The emphasis of this presentation will be to inform the audience regarding the recent advances in proteomic procedures to discover biomarkers for systemic cancers.

LUNCH & LEARNING

THURSDAY, APRIL 3, 12:15 PM – 1:30 PM

Location: Trinity Hall 2

During lunch, you may discuss topics of current interest with the researchers as identified below. There is a \$55.00 fee to attend to cover the cost of the lunch, and attendance is limited to 10 persons per table, including the speaker. 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 or view the Flash drive for a description of each table presentation.

Table #1) *Imaging for the Facial Region*

Speaker: Chung Kau (University of Texas HSC, Houston, USA)

Table #2) *ADA Professional Product Review Program*

Speaker: David Sarrett (Virginia Commonwealth University, Richmond, USA)

Table #3) *Development of Stress-bearing, Caries-inhibiting Dental Nanocomposites*

Speaker: Hockin Xu (ADA, Gaithersburg, Md., USA)

Table #4) *Practice-based Research: A New Model for Obtaining Clinical Evidence*

Speaker: Tom Hilton (Oregon Health & Science University, Portland, USA)

Table #5) *Rampant Caries Control Program: Management of High-caries-risk / High-caries-activity Patients*

Speaker: Sandra Guzmán-Armstrong (University of Iowa, Iowa City, USA)

Table #6) *Update on the Effect of Polishing on Resin Composites*

Speaker: Juliana da Costa (Oregon Health & Science University, Portland, USA)

Table #7) *The Evidence Base for the Use of Amorphous Calcium Phosphate in Geriatric and Special Needs Dentistry*

Speaker: Jane Chalmers (University of Iowa, Iowa City, USA)

Table #8) *Gene Polymorphisms and Implant Failure*

Speaker: Sergio Line (University of Campinas, São Paulo, Brazil)

Table #9) *Enamel Regeneration Utilizing Novel Bio-nanocomposite Approaches*

Speaker: Yuwei Fan (University of Southern California, Los Angeles, USA)

Table #10) *From Human Pulp Stem Cells to Tubular Dentin Formation in vitro: Prospects and Problems*

Speaker: William Whitson (Southern Illinois University, Alton, USA)

SPECIAL EVENTS

NEW MEMBER ORIENTATION BREAKFAST

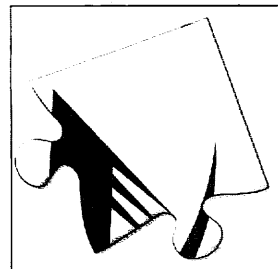
WEDNESDAY, APRIL 2, 8:30 A.M. – 9:30 A.M.

Location: Wyeth Room

All new members and first-timers at the Annual Meeting are invited to attend the breakfast. 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 or Divisions within the IADR/AADR, please join us.

OPENING CEREMONIES & AWARDS PROGRAM

WEDNESDAY, APRIL 2, 10 A.M. – 11 A.M.



The Opening Ceremonies will take place in the Stemmons Ballroom and will include presentations of the various AADR Awards and Fellowships and the President-elect Address by Brian Clarkson (University of Michigan, Ann Arbor, USA). **Discover the final piece of the puzzle at the Opening Ceremonies!** Join President Marc Heft as he speaks about the future of the AADR and how the AADR will help you move your research into action.

For more information visit the Membership Pavilion in the Registration area. AADR staff and volunteers will be available to answer your questions.

AADR PAVILION

Be sure to visit the AADR Pavilion located in the registration area to visit the following booths:

AADR Identity: Pick up your conference bag and Flash drive of abstracts with the new AADR logo and learn all about the new positioning of the Association.

2009 Meeting – Miami Beach: Stop by for a preview of the General Session in Miami and learn all about the city and what you can expect to see.

Government Affairs: Interested in knowing how you can get involved? Stop by and view the "Legislative Action Center" Web site and speak to the staff on hand.

Membership: Interested in joining the Association? Pick up a membership form and join today.

WELCOME RECEPTION

WEDNESDAY, APRIL 2

All meeting participants are invited to the Welcome Reception in the Anatole Sculpture Park (located outside the doors by the Peacock Terrace on the lobby level) from 5 p.m. to 6:30 p.m. The reception is to honor the 60th Anniversary of the NIDCR. In case of inclement weather, the reception will be moved indoors to the Chantilly Ballroom.

3M ESPE HOSPITALITY & WiFi CENTERS

WEDNESDAY - SATURDAY, APRIL 2-5

3M ESPE will provide a Hospitality Center (cyber café) located in the Exhibit Hall, along with a WiFi Center located in the Gossip Bar, adjacent to the registration area. Computer stations will be set with Internet access for delegates to check their e-mail or "surf 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 and exhibition hours, 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. Both cyber cafés are graciously sponsored by **3M ESPE**.

GROUP BUSINESS MEETINGS & RECEPTIONS

Group	Business Meetings 5:15 p.m. – 6 p.m.	Receptions 6 p.m.
Behavioral, Epidemiologic & HSR	Thursday - Morocco Room	Thursday* - Fleur-de-Lis
Cariology Research	Thursday - Emerald Room	(no reception)
Craniofacial Biology	Thursday - Grand Ballroom B	Thursday - Grand Ballroom B Foyer
Dental Materials	Thursday - Sapphire	Thursday (starts at 6:30 p.m.) - Wedgewood
Diagnostic Sciences	Thursday - Topaz	(no reception)
Geriatric Oral Research	(no meeting)	Thursday* - Fleur-de-Lis
Mineralized Tissue	Thursday - Monet Ballroom	Thursday* - Steuben
Nutrition	Friday - Topaz	Thursday* - Fleur-de-Lis
Oral Health Research	Thursday - Miro Room	Thursday - Miro Foyer
Oral & Maxillofacial Surgery	Thursday - Metropolitan Ballroom	Thursday - Metropolitan Foyer
Oral Medicine & Pathology	Thursday - Grand Ballroom D	Thursday - Grand Ballroom D Foyer
Pharmacology, Toxicology & Therapeutics	Thursday - Governors Lecture Hall	(no reception)
Pulp Biology & Regeneration	Thursday - Rosetta	Thursday* - Steuben

* * Joint Receptions

NOTE: Groups not listed are hosting the meetings/receptions at the IADR meeting in Toronto.

AADR NATIONAL STUDENT RESEARCH GROUP BUSINESS MEETING & RECEPTION

THURSDAY, APRIL 3

The AADR National Student Research Group (NSRG) will hold its business meeting on Thursday, April 3, at 5:15 pm in Grand Ballroom E. AADR and IADR student members and all student non-members are encouraged to attend, as are SRG faculty advisors. The business meeting will include presentation of numerous awards, including the 2008 DENTSPLY/Caulk Student Research Group Awards for the best student presentations at the 2008 Annual Meeting.

Later that evening, a reception will take place in the Khmer Pavilion (third level, Atrium), generously sponsored by **DENTSPLY International**, from 6 p.m. – 8 p.m. Both AADR

and IADR students are encouraged to attend. If you are unable to attend the business meeting and reception, be sure to stop by the NSRG Booth in the AADR Pavilion in the registration area to obtain information on becoming more involved in the Association.

DENTAL MATERIALS GROUP RECEPTION

THURSDAY, APRIL 3, 6:30 P.M. – 8:30 P.M.

Location: Wedgewood Room

The Dental Materials Group is hosting a reception for members, friends, and students. Tickets for the event are \$30 per person 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.

POSTER COMPETITIONS

AADR/Johnson & Johnson Oral Health Products Hatton Awards Competition

TUESDAY, APRIL 1

7 a.m. – 7:45 a.m. Poster Set-up
7:45 a.m. – 8:20 a.m. Poster Viewing by Judges
8:20 a.m. – 11:40 a.m. Presentations (closed-door competition)
11:45 a.m. – noon Poster Tear-down

Junior Category – Location: Morocco Room

Board #	Time	Name
#1	8:20 a.m.	Frank Huff
#2	8:40 a.m.	Jessica Boehrs
#3	9 a.m.	Benjamin Barbetta
#4	9:20 a.m.	Erica Scheller
Break	9:40 a.m.	
#5	10 a.m.	Bo Wang
#6	10:20 a.m.	Joe Vela
#7	10:40 a.m.	Annie Chou
#8	11 a.m.	Sarah Azhar
#9	11:20 a.m.	Nicholas Bennetts
Completion	11:40 a.m.	Deliberations begin.

Senior Category – Location: Obelisk A Room

Board #	Time	Name
#1	8:20 a.m.	Julio Rodriguez
#2	8:40 a.m.	Xiuli Sun
#3	9 a.m.	Baichun Jiang
#4	9:20 a.m.	Yu Lei
Break	9:40 a.m.	
#5	10 a.m.	Chetan Patil
#6	10:20 a.m.	Anjalee Vacharaksa
#7	10:40 a.m.	Tao Peng
#8	11 a.m.	Lauren Turner
#9	11:20 a.m.	Sarah Pollan-White
Completion	11:40 a.m.	Deliberations begin.

Post-doctoral Category – Location: Obelisk B Room

Board #	Time	Name
#1	8:20 a.m.	Xiaojing Wang
#2	8:40 a.m.	Rene Olivares-Navarrete

#3	9 a.m.	Xiu-Ping Wang
#4	9:20 a.m.	Marlise Klein
Break	9:40 a.m.	
#5	10 a.m.	Ying Wang
#6	10:20 a.m.	Lei Chen
#7	10:40 a.m.	Nam Joo
#8	11 a.m.	Rodrigo Giacaman
#9	11:20 a.m.	Pui-yan Lee
Completion	11:40 a.m.	Deliberations begin.

AADR National Student Research Group DENTSPLY/Caulk Competition

THURSDAY, APRIL 3

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

Basic Science Category – Location: Fleur-de-Lis A

Board #	Time	Name
#1	9 a.m.	Alpesh Patel
#2	9:20 a.m.	Beth Rainwater
#3	9:40 a.m.	Brandon Lloyd
#4	10 a.m.	Monet Ducksworth
Break	10:20 a.m.	
#5	10:40 a.m.	Jason Berk
#6	11 a.m.	Ren De Luna
#7	11:20 a.m.	Chi Viet
Completion	11:40 a.m.	Deliberations begin.

Clinical Science Category – Location: Fleur-de-Lis B

Board #	Time	Name
#1	9 a.m.	Suzanne Delima
#2	9:20 a.m.	Jody Chapman
#3	9:40 a.m.	Hareeti Gill
#4	10 a.m.	Ashley Gibbs
Break	10:20 a.m.	
#5	10:40 a.m.	Gail Garrett
#6	11 a.m.	Niyati Menta
#7	11:20 a.m.	Jonathan Miller
Completion	11:40 a.m.	Deliberations begin.

CORPORATE SPONSORSHIP

The AADR is grateful to the following companies for their support of the AADR Annual Meeting:



P&G Professional Oral Health

AADR President's Induction Ceremony & Reception
High School Student Outreach Program
AADR William B. Clark Fellowship in Clinical Research

3M ESPE

Hospitality & WiFi Centers



AADR Distinguished Scientist Award

DENTSPLY

CAULK

AADR NSRG Competition

DENTSPLY
INTERNATIONAL

NSRG Reception

Johnson & Johnson
ORAL HEALTH PRODUCTS

Past Editors', Executive Directors' and AADR Past Presidents' Luncheon

AADR Hatton Awards Competition

straumann

Flash drive of abstracts

Task Force on Design and Analysis, Inc.

Neal W. Chilton Fellowship

SYMPOSIA AND WORKSHOP

The AADR acknowledges the following companies and organizations for their support of symposia and workshops for this meeting:

Baylor College of Dentistry – in support of the *TMJ Pain Mechanisms* symposium.

Craniotech ACR Devices, LLC – in support of the *Bone Augmentation Alternatives in the Oral Cavity* symposium.

Dentsply Pharmaceuticals – in support of the *Local Anesthesia: New and Improved?* symposium.

Medtronic Inc. – in support of the *Bone Augmentation Alternatives in the Oral Cavity* symposium.

NIDCR – in support of the *Dental Practice-based Research – Practitioner-driven Evidence-based Dentistry* and the *Oral Pathogens Sequence Analysis and Comparative Study* symposia.

Novalar Pharmaceuticals, Inc. – in support of the *Local Anesthesia: New and Improved?* symposium.

Texas A&M Health Science Center – in support of the *TMJ Pain Mechanisms* symposium.

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.

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 Student Research Group DENTSPLY/Caulk Competition: This competition is run entirely by the AADR 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 Oral Health Products Hatton Awards Competition: The winners of the AADR competition will compete in the IADR/Unilever Hatton Awards Competition in Toronto, ON, Canada, on Tuesday, July 1, 2008. The awards are supported annually by Johnson & Johnson Oral Health Products.

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

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 IADR General Session. One paper is selected in each category: Clinical, Biological, and Biomaterials & Bioengineering. The award is sponsored by J. Morita Corporation.

AADR Neal W. Chilton Fellowship: This annual Fellowship has been established in memory of Neal W. Chilton, the late Executive Director of the Task Force on Design and Analysis in Dental and Oral Research, a clinician and statistician who made major contributions to the advancement of clinical research in dentistry, and is funded by a generous donation from the Task Force on Design and Analysis in Dental and Oral Research. The purpose of this Fellowship is to enable dental clinical faculty to obtain training in clinical research.

AADR STUDENT RESEARCH FELLOWSHIPS

The AADR is grateful to the following companies and organizations that provided funding for the 2008 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)
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DENTSPLY International (2)
GlaxoSmithKline (2)
Johnson & Johnson Oral Health Products (3)
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The following AADR Sections and Group Chapters have donated or pledged to support a 2008 Fellowship (at the time of publication):

Sections:

Dallas
Georgia
Houston
Iowa
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Scientific Group Chapters:

Dental Materials
Geriatric Oral Research
Implantology
Microbiology/Immunology
Mineralized Tissue
Nutrition
Pharmacology/Therapeutics/Toxicology

AADR STUDENT FELLOWSHIP WINNERS PRESENTING AT THE 2008 MEETING

<u>2006 Winners</u>	<u>Institution</u>	<u>P#</u>
Alexander Campagna	State University of New York	151
Andrea Keith	Baylor College of Dentistry	601
Steven Obreiter	University of Michigan	434
Justin Wright	University of Texas HSC – Houston	429

<u>2007 Winners</u>	<u>Institution</u>	<u>P#</u>
Jessica Boehrs	University of Iowa	157
Brandon Burke	University of North Carolina – Chapel Hill	445
Adam Chorak	University of North Carolina – Chapel Hill	494
Jeffrey Kim	University of California – Los Angeles	770
Jamie Luria	University of Michigan	284
Melissa Talbert	University of Alabama – Birmingham	273
Joseph Tesene	University of Iowa	559
Chi Viet	University of California – San Francisco	635

ACKNOWLEDGMENTS

We thank the following individuals for their time and energy in finalizing the program for the 2008 Annual Meeting:

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American Dental Association
Children's Dental Research Society
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THE EXHIBITION

Exhibitor listing as of 2/22/08

The Exhibition will be held in Trinity Hall I at the Hilton Anatole Hotel. The exhibit hours are as follows:

Thursday	1 p.m. – 4 p.m.
Friday	1 p.m. – 5 p.m.
Saturday	8:30 a.m. – noon

NEW! Denotes first-time exhibitors.

* Denotes AADR Institutional Section Member.

COMMERCIAL EXHIBITORS

*** 3M ESPE Dental Products** **Booth #: Hospitality Center**
St. Paul, Minn., USA
Tel: 1-800-634-2249 Ext. 1
FAX: 1-800-728-0956
www.3MESPE.com

3M's oral health care family includes 3M Unitek orthodontic solutions and 3M ESPE. 3M ESPE dental solutions now includes OMNI Preventive Care, and Brontes Technologies Inc. 3M ESPE manufactures and markets more than 2,000 products and services designed to help dental professionals improve their patients' oral health. With a rich history of product and service innovation, 3M ESPE is trusted by dental professionals worldwide for excellence in product quality and reliability.

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BioHorizons **Booth #: 216**
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FAX: +1-205-870-0304
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Schaumburg, Ill., USA
Tel: +1-800-247-3368 or +1-847-534-6000
FAX: +1-800-959-9550 or +1-847-891-5049
www.bisco.com

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FAX: +1-909.598.6742
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Case Dental & Medical Supply, Inc. (CDMS) sells the patented SquirtBrush® and HyssopBrush® product line. The SquirtBrush® is an interdental brush that delivers medicament through the brush. The Company's products are sold online, and through dental professionals and other conventional channels. In 2006, the Squirt-Brush® was rated one of the outstanding products in the CRA Annual Buying Guide.

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FAX: +1-212-310-2317
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Colgate is the global leader in oral care technology, products, and education. Colgate products include technologically advanced toothpastes, toothbrushes, fluoride, tooth whitening, floss, oral first aid, and gingival health products. Please visit our booth for information and an overview of our complete line of products.

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FAX: +1-513-639-7343
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Booth #: 407

Community Research is a dedicated multi-specialty clinical research site with locations in Greater Cincinnati, Ohio. CR conducts phase I-IV trials in a variety of therapeutic areas, including: Sleep Disorders, CNS/Psychiatric, General Medicine, and PK-PD. Oral Care. Facilities include three outpatient clinics, a 36-bed Phase I unit, and two sleep research labs (18 beds).

*** Crest Oral-B,**
P&G Professional Oral Health
Cincinnati, Ohio, USA
Tel: +1-800-492-7378
FAX: +1-513-983-9988

Booth #: 100-102

www.dentalcare.com and www.oralbprofessional.com

Crest Oral-B features a complete line of preventive products including Crest toothpaste, Oral-B power and manual brushes, Crest Whitestrips - Professional Strength, Glide floss and interdental products, as well as office/home use Fluorides, and prophylactic paste/angles. Visit the Crest Oral-B booth or online at www.dentalcare.com.

*** Den-Mat Holdings, LLC**
Santa Maria, Calif., USA
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www.denmat.com

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Booth #: 303

www.dentsply.com

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Designs for Vision, Inc.
Ronkonkoma, N.Y., USA
Tel: +1-800-345-4009
FAX: +1-631-737-1842
www.designsforvision.com

Booth #: 210

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www.esstechinc.com & www.sglass.com

Booth #: 410

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www.gcamerica.com

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THE NATURAL DENTIST is an oral care innovator, offering clinically proven products with natural antimicrobial and anti-inflammatory ingredients. The Natural Dentist Healthy Gums Mouth Rinse[®] showed clinical and microbiological outcomes comparable with or better than those of the leading OTC mouthwash, according to a recent human clinical trial conducted at The Forsyth Institute.

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OMNI Preventive Care helps dental professionals implement protocols that help enhance the quality of care and productivity in the dental hygiene department. OMNI provides a broad range of oral preventive care products and services for in-office and at-home use. For more information or to set up a staff meeting, visit the OMNI Web site.

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Scanco Medical is the leading manufacturer of a full range of state-of-the-art μ CT scanners for research and clinical use (high-resolution specimens, in vivo rodent and human extremity scanners). The scanners, together with built-in analysis and visualization software, provide for 3-dimensional, rapid, non-destructive, and comprehensive quantitative measurements. The in vivo scanners are uniquely engineered for high-resolution, rapid scanning with very low radiation exposure. Scanco Medical also offers contract-based scanning services for academic and industrial groups at facilities in the USA or in Switzerland.

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Booth #: 214

Booth #: Hospitality Center

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www.sunstaramerica.com

Booth #: 309

Sunstar Americas, manufacturer of the GUM® and Butler® brands, is dedicated to offering the highest quality oral care products and supporting the oral-systemic health link. Today, Sunstar's products include a comprehensive line of preventive care products (adult, child, and specialty toothbrushes, floss, and interdental cleaners), pain management, hygiene supplies (prophy paste and angles, fluorides, disclosants), and clinical products. The Sunstar-GUM® Gold Plan for toothbrushes and other patient home care products offers the industry's best combination of cost savings, free goods, and plan flexibility.

The Journal of Clinical Dentistry
Yardley, Pa., USA
Tel: +1-215-493-7400
FAX: +1-215-493-9804
www.jclindent.com

Booth #: 506

The Journal of Clinical Dentistry is a peer-reviewed journal, dedicated to the rapid publication of dental product research, case reports, and reviews. Papers accepted for publication will be in print in no more than 16 weeks.

Tokuyama America Inc.
San Mateo, Calif., USA
Tel: +1-760-942-7211
FAX: +1-760-942-7212
www.tokuyama-us.com

Booth #: 114

Tokuyama America Inc., is a dental manufacturer whose products include composites, chairside denture reline materials and adhesives, including the newly released Tokuyama Bond Force (a 7th-generation bonding system). The patented SR monomer creates a 3-D link to the tooth, generating reliable 6th-generation bond strengths to enamel and dentin.

Ultradent Products, Inc.
South Jordan, Utah, USA
Tel: +1-800-552-5512
FAX: +1-801-572-0600
www.ultradent.com

Booth #: 206-208

Ultradent manufactures over 500 cutting-edge dental products used by dentists worldwide. The company holds dozens of patents and trademarks on unique products, application devices, materials, and techniques. Ultradent's mission is to improve the quality of dental health care globally.

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www.blackwellpublishing.com

Booth #: 415

Wiley-Blackwell (formerly Blackwell Munksgaard) is a world-leading publisher in dentistry. The program represents the very best in academic research, student learning, and clinical expertise, offering a vast selection of books and journals covering all areas of the field.

Zimmer Dental
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www.zimmerdental.com

Booth #: 300

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EDUCATIONAL EXHIBITORS

*** Baylor College of Dentistry: Texas A&M University Health Science Center**
Dallas, Texas, USA
Tel: +1-214-828-8214
www.bcd.tamhsc.edu

For more than 100 years, Texas A&M University Health Science Center Baylor College of Dentistry in Dallas has combined higher education and research with community service. HSC-BCD has graduated more than 8,000 dentists and dental hygienists. In addition to the dental surgery and dental hygiene degrees, the college offers a variety of post-doctoral certificates and degree programs.

Howard Hughes Medical Institute
Bethesda, Md., USA
FAX: +1-301-951-6776
www.hhmi.org/medstudent

Booth #: 308

HHMI offers two programs in which medical, dental, and veterinary students from U.S. schools spend a year doing biomedical research: the HHMI-NIH Research Scholars Program at the NIH in Bethesda, MD, and the HHMI Research Training Fellowships Program at any academic or non-profit institution in the U.S., except the NIH. Students may apply to both programs in the same year. Visit: www.hhmi.org/medstudent

NEW!

Lutheran Medical Center
Brooklyn, N.Y., USA
Tel: +1-718-630-7152
FAX: +1-718-630-6279
www.lmcdental.com

Lutheran Medical Center Department of Dental Medicine is the educational sponsor of four ADA-accredited postdoctoral dental residency programs. Throughout the past decade, the department has strengthened its commitment to care for underserved communities by forging alliances with community health centers and others that serve as catalysts for developing exciting models for dental residency training.

*** Minnesota Craniofacial Research**
Training(MinnCResT) Program
Minneapolis, Minn., USA
Tel: +1-612-625-3974
FAX: +1-612-626-2651
www.mncrest.umn.edu

An innovative interdisciplinary program designed to develop a cadre of scientists who explore the frontiers of craniofacial, dental, and oral health research. It is supported by a major grant from the NIDCR and housed at the University of Minnesota.

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

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.

*** NYU Global Public Health**
New York, N.Y., USA
Tel: +1-212-992-MPH1
FAX: +1-212-995-4614
www.nyu.edu/mph

Representatives of the program will be available to talk to prospective students and colleagues interested in our innovative Global Public Health program awarding the Master's in Public Health degree (M.P.H.). The program is collaboratively offered by five of NYU's premier professional schools, including the College of Dentistry.

Stanford University (Stanford/NASA
National Biocomputation Center)
Portola Valley, Calif., USA
Tel: +1-650-888-6601
FAX: +1-650-854-2568
www.eHuman.com

Digital Dental Curriculum - We will introduce and demonstrate an NIDCR-funded dental simulator with an attached dental curriculum. 3D interactive atlases of skull osteology, TMJ/occlusion, and tooth morphology will be available for educators to evaluate.

Booth #: 409

Booth #: 516

Booth #: Island 106

Booth #: 311

Booth #: 514

*** The Forsyth Institute**
Boston, Mass., USA
Tel: +1-617-892-8452

http://bioinformatics.forsyth.org/homim/

Forsyth is an independent research organization committed to leading the discovery, communication, and application of breakthroughs in oral health and disease prevention that will significantly improve the oral health and well-being of our nation and the world. Visit Forsyth's booth to learn more about cutting-edge research and innovative community-based prevention programs.

Learn more about the Forsyth Human Oral Microbe Identification Microarray Service, which allows for the simultaneous detection of over 300 oral bacterial species, including those that are uncultivable. HOMIM enables researchers to compare bacterial associations in health vs. disease, monitor effects of therapy on oral ecology, and perform microbial perturbation studies.

*** UCLA School of Dentistry**
Los Angeles, Calif., USA
Tel: +1-310-206-8045
FAX: +1-310-825-7609

http://uclasod.dent.ucla.edu/index.asp

UCLA School of Dentistry will provide information about opportunities for research for dental students, graduate-master's/PhD, and post-doctoral students. Descriptions of programs, including the Oral Biology Master's 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

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 Alberta,
Department of Dentistry
Edmonton, Alberta, Canada
Tel: +1-780-492-4468
FAX: +1-780-492-1624
www.dent.ualberta.ca

The Dental Program at the University of Alberta is celebrating its 90th year. In addition to the Dental program, the Department offers both a diploma and a Bachelor's degree in Dental Hygiene. A Master's degree in Oral Biology, Orthodontics, or TMD/Orofacial Pain is offered. Two PhD programs are also available in, Oral Biology or Orthodontics.

Booth #: 215-217

Booth #: 510

Booth #: 417

Booth #: 414

*** University of Connecticut School
of Dental Medicine**

Farmington, Conn., USA

<http://sdm.uchc.edu/research/index.shtml>

We provide research training for future dental academicians. Training for PhD, combined DMD/PhD, and post-doctoral research is available in a wide variety of research areas, including skeletal and craniofacial biology, oral biology, biomaterials, stem cell biology, cancer, genetics, oral health promotion, women's health, and regenerative medicine.

Booth #: 502

*** University of Michigan
Ann Arbor, Mich., USA**

Tel: +1-734-615-1970

FAX: +1-734-647-6805

www.dent.umich.edu

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

Booth #: 406

*** University of Missouri-Kansas City
Kansas City, Mo., USA**

Tel: +1-816-235-6323

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

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

Booth #: 416

*** University of Tennessee
College of Dentistry**

Memphis, Tenn., USA

Tel: +1-901-448-6167

FAX: +1-901-448-7860

www.utm.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 first weekend in November, 2008, at the Peabody Hotel in Memphis, Tennessee.

Booth #: 315

*** 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 UW School of Dentistry offers training opportunities in research and all clinical dental specialties. It has a short-term clinical research training program, a PhD program, and post-doc opportunities emphasizing biological and epidemiologic areas.

Booth #: 317

SCIENTIFIC PROGRAM

Wednesday

Seq#: 1 Wednesday, 2 April 2008, 11:00 a.m. - noon
Plenary Session: Stemmons Ballroom

Plenary Session - Nanotechnology for the Enhancement of Human Health

0001 11:00 Nanotechnology for the Enhancement of Human Health. J. BAKER, Jr.* (*Michigan Nanotechnology Institute for Medicine & Biological Science [MNIMBS], Ann Arbor, USA*)

Seq#: 2 Wednesday, 2 April 2008, 1:30 p.m. - 3:00 p.m.
Symposium, Room: Governors Lecture Hall

Symposium - Challenges of Clinically Relevant Testing: Advanced Methods on the Horizon

Chairpersons: S. Lin-Gibson and G. Schumacher

- 0002 1:30 Need for Performance-based Standards for Dentistry. S.J. MEGREMIS* (*American Dental Association, Chicago, IL, USA*)
1:50 Real-time Monitoring of Conversion Dependence of Polymerization Shrinkage and Stress. J.W. STANSBURY* (*University of Colorado School of Dentistry, Aurora, USA*)
2:10 Metrologies for Dental Materials: NIST's Role. S. LIN-GIBSON* (*National Institute of Standards and Technology, Gaithersburg, MD, USA*)
2:30 Correlating and Interpreting *in vitro* Testing Results with *in vivo* Data. J. LEMONS* (*University of Alabama, Birmingham, USA*)
2:50 Discussion.

Seq#: 3 Wednesday, 2 April 2008, 1:30 p.m. - 3:00 p.m.
Symposium, Room: Monet Ballroom

Symposium - Improving Oral Health and Promoting the Well-being of the Geriatric Population: Education Research Issues

Chairpersons: E. Romberg and L. Johnson

- 0003 1:30 Challenges and Opportunities for Researching Educational Issues to Improve Oral Health and Promote the Well-being of the Geriatric Population. J. YELLOWITZ* (*University of Maryland at Baltimore, USA*)
1:50 Educational Systems and the Continuum of Care for Older Adults. H. BEST* (*heqconsulting limited, London, United Kingdom*)
2:10 Mainstream and Specialist Educational Program Components: Clinical and Non-clinical. D. BERKEY* (*University of Colorado, Aurora, USA*)
2:30 Teaching, Learning, and Assessment Researching Contemporary Issues. B. SMITH* (*American Dental Association, Chicago, IL, USA*)

Seq#: 4 Wednesday, 2 April 2008, 1:30 p.m. - 3:00 p.m.
Symposium, Room: Grand Ballroom E

Symposium - New Insights into Tooth and Craniofacial Development

Chairperson: H. Kapadia

- 0004 1:30 Genetic Regulation of Stem Cell Progeny in Mouse Incisor. O. KLEIN* (*University of California, San Francisco, USA*)

2:00 Functional Characterization of Forkhead Domain Factors during Tooth Morphogenesis and its Regulation by PITX2. B.A. AMENDT* (*Texas A&M Health Science Center, Houston, USA*)

2:30 Genetic Dissection of Hand Genes during Craniofacial Development *in vivo*. H. YANAGISAWA* (*University of Texas Southwestern Medical Center, Dallas, USA*)

Seq#: 5 Wednesday, 2 April 2008, 3:15 p.m. - 4:45 p.m.
Symposium, Room: Monet Ballroom

Symposium - Bone Augmentation Alternatives in the Craniofacial Skeleton

Supported by: Craniotech ACR Devices, LLC. and Medtronic, Inc.

Chairperson: M. Elsalanty

- 0005 3:15 Reconstruction of Mandibular Defects with Non-vascularized Bone Grafts. M. STEVENS* (*Medical College of Georgia, Augusta, USA*)
3:30 Clinical Prospects of rhBMP-2 in the Reconstruction of Craniofacial Bone Defects. U.M. WIKESJÖ* (*Medical College of Georgia, Augusta, USA*)
3:45 Endosseous Implant Placement in Augmented Bone Sites. L.A. OPPERMAN* (*Texas A&M Health Science Center, Baylor College of Dentistry, Dallas, USA*)
4:00 Bone Transport Distraction Osteogenesis in the Mandible. M. ELSALANTY* (*Baylor College of Dentistry, Dallas, TX, USA*)

Seq#: 6 Wednesday, 2 April 2008, 3:15 p.m. - 4:45 p.m.
Oral Session, Room: Senators Lecture Hall

Behavioral, Epidemiologic, and Health Services Research - Oral and Systemic Health

Chairpersons: M. Tavares and A. Zavras

- 0006 3:15 Association between Recurrent Aphthous Stomatitis and Stress. R.A. PARIS*, J.J. SHUSTER, D.W. THERIAQUE, N.C. MARTINO, D. FRAGA, and L. BACCAGLINI (*University of Florida, Gainesville, USA*)
0007 3:30 Establishing Oral-Systemic Linkage Profiles Using Matrix Analyses of Relative-risk Correlations. R. LEE* and R. LEVINS (*New York University College of Dentistry, USA*)
0008 3:45 Dental Health, Cardiovascular Disease Risk, and Systemic Inflammation in Children. S.J. FRISBEE*, C.B. CHAMBERS, J.C. FRISBEE, A.G. GOODWILL, and R.J. CROUT (*West Virginia University School of Medicine, Morgantown, USA*)
0009 4:00 Pre-natal Care, Oral Health, and Birth Outcomes: Two-year Results. R. KOVARIK*, J. SKELTON, L. TODD, S. WOMACK, M.R. MULLINS, and J.L. EBERSOLE (*University of Kentucky, Lexington, USA*)
0010 4:15 Gene Environment Interaction between ERCC5 and Tobacco in Oral Pre-malignancies. A. ZAVRAS* (*Harvard University, Boston, MA, USA*)
0011 4:30 Acceptability and Feasibility of Obesity Prevention in a Dental Setting. M. TAVARES*, V. CHOMITZ, H. CABRAL, J. STULTZ, and A.K. MASCARENHAS (*Forsyth Institute, Boston, MA, USA*)

Seq#: 7 Wednesday, 2 April 2008, 3:15 p.m. - 4:45 p.m.
Oral Session, Room: Grand Ballroom D

**Dental Materials 3: Ceramic-based Materials and Cements -
Keynote Address and Ceramics - Fractography, Fracture Mechanisms, and Residual Stress**

Chairpersons: K. Anusavice and J. Quinn

0012 3:15 Keynote Address: Optimizing the Survival of Ceramic Prostheses: Lessons Learned from the Analysis of Clinical Failures. S.S. SCHERRER* (*Université de Genève, Geneva, Switzerland*)

0013 3:45 Mechanical Modeling and Laboratory Testing of Anatomically Correct All-ceramic Crowns. P.G. COELHO*, N.R.F.A. SILVA, M. CABRERA, E.A. BONFANTE, E.D. REKOW, and V.P. THOMPSON (*New York University, USA*)

0014 4:00 Edge-chipping Resistance of Zirconia and PFM Veneering Ceramics. J.B. QUINN*, V. SUNDAR, and E.E. PARRY (*American Dental Association Foundation, Gaithersburg, MD, USA*)

0015 4:15 Residual Stress Determination in Anatomically Correct All-ceramic and Metallo-ceramic Crowns. P.G. COELHO, N.R.F.A. SILVA*, E.D. REKOW, and V.P. THOMPSON (*New York University, USA*)

0016 4:30 Effects of Viscoelastic Parameters on Residual Stresses in Zirconia/Glass Ceramics. B. TASKONAK*, G.A. BORGES, J.J. MECHOLSKY, and K.J. ANUSAVICE (*Indiana University School of Dentistry, Indianapolis, USA*)

Seq#: 8 Wednesday, 2 April 2008, 3:15 p.m. - 4:45 p.m.
Oral Session, Room: Morocco

Implantology Research - Keynote Address and Bioactive Implant Materials

Chairpersons: J. Mitchell and N. Satsangi

0017 3:15 Keynote Address: Implantology - the State of the Art in 2008. I. NISHIMURA* (*UCLA School of Dentistry, Los Angeles, CA, USA*)

0018 3:45 Structure-Osteoblastic-Activity Relationship on Phospholipid-modified Surfaces. A. SATSANGI, R.K. SATSANGI, J. ONG, and N. SATSANGI* (*University of Texas Health Science Center at San Antonio, USA*)

0019 4:00 Sputtered Nanoscale Calcium Phosphate Coating on Osseointegrated Implant Devices. Y. YANG*, S.-W. PARK, Y. LIU, H.-S. KIM, J.-T. KOH, K.-M. LEE, X. MENG, K. KIM, H. JI, X. WANG, and J.L. ONG (*University of Tennessee Health Science Center, Memphis, USA*)

0020 4:15 Ion Release from Novel Boron- and Fluorine-containing Bioactive Glasses. J.C. MITCHELL* and H.B. DAVIS (*Oregon Health & Science University, Portland, USA*)

0021 4:30 Apatite Formation on Novel Boron- and Fluoride-containing Bioactive Glasses. H.B. DAVIS* and J.C. MITCHELL (*Oregon Health & Science University, Portland, USA*)

Seq#: 9 Wednesday, 2 April 2008, 3:15 p.m. - 4:45 p.m.
Oral Session, Room: Metropolitan Ballroom

**Microbiology / Immunology and Infection Control -
Porphyromonas gingivalis**

Chairpersons: D. Ojcius and T. Kawai

0022 3:15 Inflammasome in Gingival Epithelial Cells Infected by *Porphyromonas gingivalis*. O. YILMAZ, M. DUMAN, L. YAO, M. PETTENGILL, A.A. SATER, and D.M. OJCIUS* (*University of California, Merced, USA*)

0023 3:30 Human Defensins Interact with *Porphyromonas gingivalis* Fimbriae (rFimA). D.E. DIETRICH*, B.D. MORRISON, H. XIE, X. XIAO, D. DAWSON, and K.A. BROGDEN (*University of Iowa, Iowa City, USA*)

0024 3:45 Immunomodulation of Bone Destruction with a Novel *Porphyromonas gingivalis* Protein. O. LESHAM, A. CAMPOS-NETO, S. KASHINO, N. SUZUKI, H. SASAKI, M. ONODERA, A. FUJIMARA, and P. STASHENKO* (*The Forsyth Institute, Boston, MA, USA*)

0025 4:00 *Porphyromonas gingivalis* Activates Human Coronary Artery Endothelial Cells during Invasion. A.J. FETNER*, P.H. RODRIGUES, M. BELANGER, and A. PROGULSKE-FOX (*University of Florida, Gainesville, USA*)

0026 4:15 Social Stress Increases Cytokine Production by *Porphyromonas gingivalis* LPS-stimulated Macrophages. M.T. BAILEY*, D.A. PADGETT, J.F. SHERIDAN, and B. LEBLEBICIOGLU (*Ohio State University College of Dentistry, Columbus, USA*)

0027 4:30 *Porphyromonas gingivalis* Phosphatidylethanolamine Lipids Inhibit LL-37 Production in Epithelial Cells. T. KAWAI*, F. NICHOLS, K. OHARA, M. DUNCAN, F. DEWHIRST, and M. TAUBMAN (*Forsyth Institute, Boston, MA, USA*)

Seq#: 10 Wednesday, 2 April 2008, 3:15 p.m. - 4:45 p.m.
Oral Session, Room: Miro

Oral Health Research - Oral Disease and Systemic Health

Chairpersons: D. Kinane and S. Fadavi

0028 3:15 Dental Visits and Knowledge of Pregnant Minority Adolescents. M. SEVANDAL, S. FADAVI*, A. KOERBER, I. PUNWANI, and C. WANG (*University of Illinois - Chicago, USA*)

0029 3:30 Correlation of Low Birthweight with Enamel Defects and Dental Caries. S. TANDON* and A. RUNGTA (*Manipal College of Dental Sciences, Manipal University, India*)

0030 3:45 The Interplay among Chronic Gingivitis, Serum Cytokines, and Bacteremia. D.F. KINANE* (*University of Louisville, KY, USA*)

0031 4:00 Evaluation of Plaque Biofilm-killing Activity of Representative Global Mouthrinses. P. PAN, R. LUX, W. SHI, L. LI, S.D. CASTANEDA, C.M. FULLEM, and M.W.B. ARAUJO* (*Johnson & Johnson Consumer & Personal Products Worldwide, Division of Johnson & Johnson Consumer Companies Inc., Morris Plains, NJ, USA*)

0032 4:15 The Influence of Periodontal Treatment on Blood Lipid Level. P. BEHFARNIA* and A. TAVAKOLI (*Medical University of Isfahan, Iran*)

0033 4:30 Effect of Chlorhexidine on Plaque and Gingival Scores: Six-month Study. M. MACHADO*, T.M. OLIVEIRA, V.T. SAKAI, T.C. SILVA, P. MARCATO, and S. SILVA (*University of São Paulo, Bauru-São Paulo, Brazil*)

Seq#: 11 Wednesday, 2 April 2008, 3:15 p.m. - 4:45 p.m.
Oral Session, Room: Sapphire

Oral Medicine & Pathology - Oral Cancer

Chairpersons: N. Rhodus and N. D'Silva

0034 3:15 Proteomic Analysis of Cells in Saliva from Oral Cancer Patients. H. XIE, G. ONSONGO, J. CARLIS, N. RHODUS*, R. GRIFFIN, and T. GRIFFIN (*University of Minnesota, Minneapolis, USA*)

0035 3:30 Cell-based Biosensor for Analysis of Oral Cancer Biomarkers. S.E. WEIGUM*, N. CHRISTODOULIDES, P.N. FLORIANO, S.W. REDDING, C.-K. YEH, and J.T. McDEVITT (*University of Texas - Austin, USA*)

0036 3:45 WITHDRAWN

0037 4:00 Rap1GAP-mediated MMP9 Secretion is Associated with Poor Survival in SCC. R.S. MITRA, M. GOTO, J.S. LEE, D. MALDONADO, J.M. TAYLOR, Q. PAN, T.E. CAREY, C.R. BRADFORD, M.E. PRINCE, K.G. CORDELL, K.L. KIRKWOOD, and N.J. D'SILVA* (*University of Michigan, Ann Arbor, USA*)

0038 4:15 Systems Analysis of Primary Sjögren's Syndrome and Malt Lymphoma. S. HU*, J. WANG, J. JIANG, H. ZHOU, A. VISSINK, and D.T. WONG (*University of California - Los Angeles, USA*)

0039 4:30 WITHDRAWN

Seq#: 12 **Wednesday, 2 April 2008, 3:15 p.m. - 4:45 p.m.**
Oral Session, Room: Topaz

Periodontal Research - Therapy - Periodontal Therapy: Antimicrobials and Immune Modulators

Chairpersons: M. Ryan and D. Dawson

0040 3:15 Effects of Short-term COL-3 on Local Biomarkers of Periodontitis. M.E. RYAN*, H.M. LEE, R. TENZLER, O.I. CARNU, S. EFTEKHARI, A. DHAMI, T. SORSA, and L.M. GOLUB (*Stony Brook University, NY, USA*)

0041 3:30 n-3 PUFA Effects on Periodontitis in Humans. D.R. DAWSON, III*, S.S. KIRAKODU, K. NOVAK, J.L. EBERSOLE, and M.J. NOVAK (*University of Kentucky College of Dentistry, Lexington, USA*)

0042 3:45 Effect of Periodontal Therapy on Rheumatoid Arthritis Patients Receiving Anti-TNF- α . P. ORTIZ*, N. BISSADA, Y. HAN, L. PALOMO, M. AL-ZAHRANI, and A. ASKARI (*Case Western Reserve University, Cleveland, OH, USA*)

0043 4:00 Periodontal Changes for Individual Sites and Subjects in Therapy Trials. A.D. HAFFAJEE*, T. YASKELL, L. MARTIN, and S. SOCRANSKY (*Forsyth Institute, Boston, MA, USA*)

0044 4:15 Esterified Mono-unsaturated Fatty Acid Complex in the Treatment of Periodontitis. H. HASTURK*, A. KANTARCI, E. SURMENIAN, A. BLACKWOOD, C. ANDRY, and T.E. VAN DYKE (*Boston University, MA, USA*)

0045 4:30 Initial Gingivitis Effects of Therapeutic Paste-Rinse Regimen vs. Controls. R.W. GERLACH, R.D. BARTIZEK, A.R. BIESBROCK, K. KARPINIA*, and I. MAGNUSSON (*University of Florida, Gainesville, USA*)

Seq#: 13 **Wednesday, 2 April 2008, 3:15 p.m. - 4:45 p.m.**
Oral Session, Room: Grand Ballroom A

Prosthodontics Research - Clinical Prosthodontics and Advances in Dental Ceramics

Chairpersons: J. Sorensen and W. Nagy

0046 3:15 Effect of Porcelain Laminate Contour on Gingival Inflammation. J.A. OCAMPO, J.B. DENNISON*, P. YAMAN, and G.W. TAYLOR (*University of Michigan, Ann Arbor, USA*)

0047 3:30 Effect of Sintering Temperature on Reliability and Aging of 3Y-TZP. J.J. PEACOCK*, J. HOLLOWAY, and I. DENRY (*Ohio State University, Columbus, USA*)

0048 3:45 Effect of Inclination Angle on Fatigue of Veneered Zirconia Structures. J.W. KIM*, J.-H. KIM, V.P. THOMPSON, E.D. REKOW, and Y. ZHANG (*New York University, USA*)

0049 4:00 Clinical Investigation of Mandibular Distal Extension Removable Partial Dental Prosthesis. B. SHAMBLIN*, J. JONES, and Y. ROBERT (*University of Texas - San Antonio / Health Science Ctr., USA*)

0050 4:15 Thermal Compatibility of Veneering Porcelains on Zirconia Ceramic Implant Abutments. J.A. SORESENSEN*, J.Y. KANG, and K. YOKOYAMA (*Pacific Dental Institute, Portland, OR, USA*)

0051 4:30 Evaluation of Four Centric Relation Location Techniques Using Ultrasonic Axiography. C.M. ALLEN, W.W. NAGY*, C.G. WIRTH, P.H. BUSCHANG, and R.D. WOODY (*Baylor College of Dentistry, Dallas, TX, USA*)

Wednesday

Seq#: 14 **Thursday, 3 April 2008, 8:00 a.m. - 9:30 a.m.**
Symposium, Room: Monet Ballroom

Symposium - Bisphosphonates & Osteonecrosis: Evidence from Population Research in the United States

Chairperson: A. Zavras

8:00 Introductory Remarks. A. ZAVRAS* (*Harvard University, Boston, MA, USA*)

0052 8:05 ONJ: Evidence from Animal and Human Experiments. V. CARTSOS* (*Tufts University, Boston, MA, USA*)

8:25 Osteonecrosis among Cancer Patients in SEER Data. G. WILKINSON* (*University of Texas, Galveston, USA*)

8:45 Population-based Studies in the US: ONJ among Patients with Osteoporosis or Cancer. A. ZAVRAS* (*Harvard University, Boston, MA, USA*)

9:25 Discussion.

Seq#: 15 **Thursday, 3 April 2008, 8:00 a.m. - 9:30 a.m.**
Symposium, Room: Grand Ballroom E

Symposium - Dental School Involvement in the Planning and Implementation of NIH Clinical and Translational Science Awards: We are at the Table; What Do We Do Now?

Chairperson: P. Dechow

0053 8:00 The UCSF Clinical and Translational Science Institute - Rewriting the Paradigm. J.S. GREENSPAN* (*University of California San Francisco, USA*)

8:15 Implementing CTSA's: How to Enrich the Clinical Research Environment. I. LAMSTER* (*Columbia University, New York, NY, USA*)

8:30 Learning To Be an Oral Health Clinical Researcher in a CTSA Environment. K. PERRY* (*Baylor College of Dentistry, Dallas, TX, USA*)

8:45 Spanning the River - Lessons Learned in Integrating Dental Research into Pan-campus CTSA Initiatives. C. STANFORD* (*University of Iowa, Iowa City, USA*)

9:00 Discussion.

Seq#: 16 **Thursday, 3 April 2008, 8:00 a.m. - 9:30 a.m.**
Symposium, Room: Governors Lecture Hall

Symposium - Host Immunotherapeutic Approaches for the Treatment of Periodontal Diseases

Chairperson: W. Giannobile

0054 8:00 Current Prospects for Periodontal Host Immunotherapies for Periodontics. W.V. GIANNOBILE* (*University of Michigan, Ann Arbor, USA*)

8:15 Molecular Mechanisms Governing Cytokine Expression and Alveolar Bone Loss. K. KIRKWOOD* (*University of Michigan, Ann Arbor, USA*)

8:30 Molecular Basis of Dendritic Cell/T-cell Interactions for Modulating Periodontal Bone Loss *in vivo*. Y.-T.A. TENG* (*University of Rochester, NY, USA*)

8:45 Use of Resolvins in the Treatment of Periodontal Disease. T. VAN DYKE* (*Boston University, MA, USA*)

Seq#: 17 **Thursday, 3 April 2008, 8:00 a.m. - 9:30 a.m.**
Oral Session, Room: Senators Lecture Hall

Behavioral, Epidemiologic, and Health Services Research - Keynote Address and Social Disparities in Oral Health

Chairpersons: J. Weintraub and R. Katz

0055 8:00 Keynote Address: Race and Ethnicity as Social Determinants of Oral Health. L.N. BORRELL* (*Columbia University, New York, NY, USA*)

0056 8:30 Response Rate Disparities in Maryland Children Oral Health Survey 2005-2006. H. CHEN*, R.J. MANSKI, R.R. CH-ENETTE, and S. COLLIER (*University of Maryland Dental School, Baltimore, USA*)

0057 8:45 'Legacy' of the Tuskegee Syphilis Study: Validation Study on Impact. R.V. KATZ*, B.L. GREEN, N. KRESSIN, C. CLAUDIO, M.Q. WANG, and S. RUSSELL (*New York University, USA*)

0058 9:00 Bottled, Filtered, or Tap? Implications for Fluoridated Water Exposure. J.A. WEINTRAUB*, S. ADAMS, K. HOEFT, R. MENDOZA, F. RAMOS-GOMEZ, and J. BARKER (*University of California San Francisco, USA*)

0059 9:15 Survey of Communication Methods for Dental Patients with Limited English Proficiency. K.J. HAMMERSMITH* and J.Y. LEE (*University of North Carolina, Chapel Hill, USA*)

Seq#: 18 **Thursday, 3 April 2008, 8:00 a.m. - 9:30 a.m.**
Oral Session, Room: Miro

Cariology Research - Keynote Address and Clinical Studies, Erosion

Chairpersons: A. Ferreira Zandona and B. Amaechi

0060 8:00 Keynote Address: Improvements in Clinical Diagnosis and Management of Caries. D. ZERO* (*Indiana University School of Dentistry, Indianapolis, USA*)

0061 8:30 Clinical Quantification of Occlusal Caries: *in vivo* Study. M.A. KHALIFE*, P. YAMAN, J.B. DENNISON, J.C. HAMILTON, and J.R. BOYNTON (*University of Michigan, Ann Arbor, USA*)

0062 8:45 Caries Prevalence in Hispanic Children using ICDAS and QLF-I. A. FERREIRA ZANDONA*, H. EGGERTSSON, E. DELGADO, E. SANTIAGO, P. HERNANDEZ, G.J. ECKERT, B. KATZ, M. MAU, J. TRAN, and D. ZERO (*Indiana University School of Dentistry, Indianapolis, USA*)

0063 9:00 School-based Xylitol Gummy Bears Snacks: a Pilot Study. K.A. LY*, C. RIEDY, P. MILGROM, M. ROTHEN, M.C. ROBERTS, and L. ZHOU (*University of Washington, Seattle, USA*)

0064 9:15 Evaluation of Three Assessment Methods: Screening for Dental Erosive Capacity. B.D. SCHMUCK*, J.M. McCracken, and C.M. CAREY (*Paffenbarger Research Center, American Dental Association Foundation, Gaithersburg, MD, USA*)

Seq#: 19 **Thursday, 3 April 2008, 8:00 a.m. - 9:30 a.m.**
Oral Session, Room: Grand Ballroom D

Dental Materials 2: Adhesion - Leakage/Margin Assessments - Keynote Address and Adhesion-Leakage/Margin Assessments

Chairpersons: J. Sun and R. Rusin

0065 8:00 Keynote Address: Adhesive Dentin Interfacial Characterization and Micromechanical Behavior. A. MISRA* (*University of Missouri-Kansas City, USA*)

0066 8:30 Evaluation of Polymerization Shrinkage and Corresponding Microleakage Using μ CT. J. SUN* and S. LIN-GIBSON (*National Institute of Standards and Technology, Gaithersburg, MD, USA*)

0067 8:45 Micro-scale Compositional and Mechanical Analysis of Primary Dentin. A. MISRA*, O. MARANGOS, P. SPENCER, B. BOHATY, M.P. WALKER, and J.L. KATZ (*University of Missouri-Kansas City, USA*)

0068 9:00 Effect of Acid Etching on Dentin Micromechanical Properties. O. MARANGOS*, A. MISRA, P. SPENCER, M. SOHN, H. WANG, and J.L. KATZ (*University of Missouri-Kansas City, USA*)

0069 9:15 Effect of Solvent Content on Micro-scale Mechanics/Chemistry of Adhesive/Dentin Interface. Y. WANG*, X. YAO, A. BENGHANEM, H. SULTAN, and P. SPENCER (*University of Missouri-Kansas City, USA*)

Seq#: 20 Thursday, 3 April 2008, 8:00 a.m. - 9:30 a.m.
Oral Session, Room: Grand Ballroom A

Dental Materials 3: Ceramic-based Materials and Cements - Novel Ceramics: Processing, Resin-bonding, and Osseogenesis

Chairpersons: E. Teixeira and X. Xu

- 0070** 8:00 Porcelain-Fused-to-Metal (PFM) Dental Materials Processed Using Microwave Energy. A. KASHI* and S. SAHA (*SUNY Downstate Medical Center, Brooklyn, NY, USA*)
- 0071** 8:15 Microshear Bond Strength of Different Ceramic Repair Strategies. M.A.C. ANDRADA*, R. BELLI, M. SCHMELING, A. MEYER FILHO, L.C. VIEIRA, and G.C. LOPES (*Universidade Federal de Santa Catarina, Florianópolis- SC, Brazil*)
- 0072** 8:30 Effect of Surface Treatment on Bond Strength to Zirconia Ceramic. X. XU*, G. GUO, L. LING, L. CHEN, and A. RIPPS (*Louisiana State University, New Orleans, USA*)
- 0073** 8:45 Zirconia-Parylene Multilayer Thin-films for Enhanced Fracture Resistance of Dental Porcelain. E.C. TEIXEIRA*, J.R. PIASCIK, B.R. STONER, and J.Y. THOMPSON (*University of North Carolina, Chapel Hill, USA*)
- 0074** 9:00 Bioactive Glass Coatings and Bioglass™ Corrosion Products Enhance Osteoblast Differentiation. V.G. VARANASI*, B. ANCHETA, E. SAIZ, A. TOMSIA, P.M. LOOMER, S.J. MARSHALL, and G.W. MARSHALL (*University of California San Francisco, USA*)
- 0075** 9:15 Hydroxyapatite-βTri-calcium Phosphate Scaffold Assembly and Characterization. C.E. CRETIU-VASILIU*, E. CLARK, M. GURFINKEL, J.L. RICCI, and J.E. SMAY (*Oklahoma State University, Stillwater, USA*)

Seq#: 21 Thursday, 3 April 2008, 8:00 a.m. - 9:30 a.m.
Oral Session, Room: Grand Ballroom B

Dental Materials 6: Polymer-based Materials - Physical Properties and Performance - Physical Properties of Resin Composite Materials

Chairpersons: S. Khajotia and C. Bracho-Troconis

- 0076** 8:00 Wettability of Polymerized Surfaces of Resin Composites at Oral Temperature. S.S. KHAJOTIA, J.K. FLEMING*, and M.G. DUNCANSON, Jr. (*University of Oklahoma Health Sciences Center, Oklahoma City, USA*)
- 0077** 8:15 Effect of Semi-automated Polishing on Nanoscale Topography of Resin Composites. K.H. SMART*, S.S. KHAJOTIA, J.L. FERRACANE, M.G. DUNCANSON, Jr., and E.A. O'REAR, III (*University of Oklahoma Health Sciences Center, Oklahoma City, USA*)
- 0078** 8:30 Fracture Mechanisms of Resin-based Dental Restorative Composites. M.B. SHAH*, J.L. FERRACANE, and J.J. KRIZIC (*Oregon State University, Corvallis, USA*)
- 0079** 8:45 3D Tomography of Crack Interfaces in Dental Composites. J. DRUMMOND*, M. KOTCHE, K. SUN, F. DECARLO, and M. VURAL (*University of Illinois - Chicago, USA*)
- 0080** 9:00 The Effects of Various Hydrophilic Resin Composite Matrices on Strength vs. Time. B. KLEINMAN*, S.M. NEWMAN, and J.W. STANSBURY (*University of Colorado, Aurora, USA*)
- 0081** 9:15 Characterization of a New Dimer Acid-based Resin Nano-hybrid Composite. C. BRACHO-TROCONIS*, S. RUDOLPH, J. BOULDEN, N. WONG, and T. GLOYD (*Confli-Dental Products Co., Louisville, CO, USA*)

Seq#: 22 Thursday, 3 April 2008, 8:00 a.m. - 9:30 a.m.
Oral Session, Room: Sapphire

Diagnostic Sciences - Radiographic Quality Controls; Salivary Markers for Cancer and Cardiac Disease

Chairpersons: L. Otis and T. Heaven

- 0082** 8:00 Condylar Remodeling in Temporomandibular Disorder Using 3D Surface Models. D.G. WALKER*, L.H.S. CEVIDANES, and P.F. LIM (*University of North Carolina, Chapel Hill, USA*)
- 0083** 8:15 Effects of Radiographic Technique on Image Quality and Exposure. T. HEAVEN*, S. WHITE, and R. WEEMS (*University of Alabama, Birmingham, USA*)
- 0084** 8:30 Computer-based Quality Control in Digital Imaging. L. OTIS* (*University of Maryland Baltimore College of Dentistry, USA*)
- 0085** 8:45 Next-generation Cardiac Diagnostics Nano-Bio-Chip Sensors for Oral Fluid Testing. J.T. McDEVITT*, P.N. FLORIANO, N. CHRISTODOULIDES, G. SIMMONS, C. MILLER, J.L. EBERSOLE, J. SPERTUS, D.F. KINANE, M.J. NOVAK, S. ACOSTA, S. MOHANTY, P. DHARSHAN, and S. STEWART (*University of Texas - Austin, USA*)
- 0086** 9:00 Serum and Saliva CEA Determinations via Fluorescent Nanoparticles. J.V. JOKERST*, A. RAMANATHAN, A. POLLARD, P.N. FLORIANO, N. CHRISTODOULIDES, and J.T. McDEVITT (*University of Texas - Austin, USA*)
- 0087** 9:15 Salivary Exon-specific Markers Improve Discriminatory Power for Oral Cancer Detection. B. HENSON*, Z. HU, B. ZIMMERMANN, H. ZHOU, and D. WONG (*University of California - Los Angeles, USA*)

Seq#: 23 Thursday, 3 April 2008, 8:00 a.m. - 9:30 a.m.
Oral Session, Room: Emerald

Mineralized Tissue - Teeth and Associated Structures

Chairpersons: D. Bajaj and L. Ye

- 0088** 8:00 Ameloblastin Overexpression in HERS Cells Causes Defects in Periodontal Structure. X. LUAN*, Y. ITO, C.G. WALKER, S.J. DANGARIA, T. JIN, and T.G.H. DIEKWISCH (*University of Illinois - Chicago, USA*)
- 0089** 8:15 Mineral-binding Region Predicted and Demonstrated within Exon 6ABC of Amelogenin. J.A. HORST*, E.E. OREN, M. GUNGORMUS, C. TAMERLER, M. SARIKAYA, and R. SAMUDRALA (*University of Washington, Seattle, USA*)
- 0090** 8:30 On the Fatigue Crack Growth Resistance of Human Enamel. D. BAJAJ*, A. NAZARI, and D. AROLA (*University of Maryland Baltimore County, USA*)
- 0091** 8:45 M180KI Mouse Enamel: Can Something So Hard Be Made Simple? R.J. RAUTH*, S.N. WHITE, Y. LEI, D. ZHU, M.L. PAINE, and M.L. SNEAD (*UCLA, Los Angeles, CA, USA*)
- 0092** 9:00 Properties of Primary and Secondary Healthy Human Cementum. S.P. HO, R. CHOI, J. LIN*, S.J. MARSHALL, and G.W. MARSHALL (*University of California San Francisco, USA*)
- 0093** 9:15 Dmp1 Null Mice Display Early-onset Periodontal Defects. L. YE*, S. KO, S. ZHANG, M. DALLAS, L.F. BONEWALD, and J.Q. FENG (*University of Missouri - Kansas City, USA*)

Seq#: 24 Thursday, 3 April 2008, 8:00 a.m. - 9:30 a.m.
Oral Session, Room: Metropolitan Ballroom

Oral & Maxillofacial Surgery

Chairpersons: Y. Haddad and S. Chuang

- 0094** 8:00 Differential Expression of DeltaEF1 Predicts Resistance to Erlotinib in HNSCC. Y. HADDAD* and D. McCONKEY (*University of Texas - MD Anderson Cancer Center, Houston, USA*)

Thursday

0095 8:15 Corticosteroids Reduce Post-operative Morbidity following Third Molar Surgery: a Meta-analysis. M.R. MARKIEWICZ*, M.F. BRADY, E.L. DING, and T.B. DODSON (*University at Buffalo, School of Dental Medicine, and Center for Applied Clinical Investigation, Massachusetts General Hospital, Depew, NY, USA*)

0096 8:30

0097 8:45 Retrospective Chart Review of Oral Bisphosphonate-linked Extraction/Implant Healing. M. SORENSEN*, C. STANFORD, G. SEGRAVES, D. DAWSON, and J. XU (*University of Iowa, Iowa City, USA*)

0098 9:00 Transition Risks of Complication and Failure for Dental Implants. S.-K. CHUANG*, T. CAI, and S.-C. CHENG (*Massachusetts General Hospital - Harvard University, Chestnut Hill, USA*)

0099 9:15 Vitamin-D-insufficient, Bisphosphonate-treated Rats Developed Osteonecrosis of the Jaw. I. NISHIMURA*, A. HOKUGO, J.S. ADAMS, and N. GARRETT (*UCLA School of Dentistry, Los Angeles, CA, USA*)

Seq#: 25 Thursday, 3 April 2008, 8:00 a.m. - 12:30 p.m.
Hands-on Workshop, Morocco

Hands-on Workshop - Essentials in Grant Writing

Chairperson: K. Hardwick

0100 8:00 Getting Your Message Out. S. RUSSELL* (*Grant Writers' Seminars and Workshops, Los Olivos, CA, USA*)

Seq#: 26 Thursday, 3 April 2008, 9:45 a.m. - 11:15 a.m.
Hands-on Workshop, Rosetta

Hands-on Workshop - Publishing Your Manuscript — a JDR Perspective

Chairperson: A. Smith

0101 9:45 Publishing Your Manuscript — a JDR Perspective. A. SMITH* (*University of Birmingham, England, UK*)

Seq#: 27 Thursday, 3 April 2008, 9:45 a.m. - 11:15 a.m.
Symposium, Room: Governors Lecture Hall

Symposium - Advances in Imaging Hard Tissues in vivo

Chairperson: L. Opperman

0102 9:45 GFP Imaging of Osteoblasts, Osteocytes, and Odontoblasts in vivo. D.W. ROWE* (*University of Connecticut Health Science Center, Farmington, USA*)

10:15 Live Imaging of Osteoblasts, Osteocytes, and Odontoblasts in vivo. S.L. DALLAS* (*University of Missouri - Kansas City, USA*)

10:45 3D Cortical Bone Structure and Mechanics. P.C. DECHOW* (*Baylor College of Dentistry, Dallas, TX, USA*)

11:15 Imaging Cell Processes in Hard Tissues. J. FENG* (*Baylor College of Dentistry, Dallas, TX, USA*)

Seq#: 28 Thursday, 3 April 2008, 9:45 a.m. - 11:15 a.m.
Symposium, Room: Monet Ballroom

Symposium - Bisphosphonates & Osteonecrosis of the Jaw (ONJ)

Chairperson: S. Huja

9:45 Introductory Remarks. S.S. HUJA* (*Ohio State University, Columbus, USA*)

0103 9:50 Osteonecrosis: Why the Jaw? L. McCAULEY* (*University of Michigan, Ann Arbor, USA*)

10:10 Animal Models for Studying ONJ. M. ALLEN* (*Indiana University, Indianapolis, USA*)

10:30 Animal Models for the Study of Bone Remodeling in Jaws. S.S. HUJA* (*Ohio State University, Columbus, USA*)

10:50 Clinical Aspects of ONJ to Developing Animal Models. S. KOKA* (*Mayo School of Graduate Medical Education, Rochester, MN, USA*)

11:10 Discussion.

Seq. #: 29 appears after Seq. #: 38.

Seq#: 30 Thursday, 3 April 2008, 9:45 a.m. - 11:15 a.m.
Oral Session, Room: Miro

Cariology Research - Caries Lesions, Fluoride, Remineralization

Chairpersons: C. Carey and P. Yaman

0105 9:45 Clinical vs. Radiographic Extension of Class II Caries Lesions. M.S.H. BIN-SHUWAISH, P. YAMAN*, J.B. DENNISON, and G.F. NEIVA (*University of Michigan, Ann Arbor, USA*)

0106 10:00 The Cariostatic Effects of Glass Ionomers with Various Fluoride Quantities. N.P. SMITH*, J.S. WEFEL, J.D. HARLESS, and M.M. HOGAN (*University of Iowa, Iowa City, USA*)

0107 10:15 Remineralization Potential of Casein Phosphopeptide-Amorphous Calcium Phosphate—Confocal Microscopy Study. E.C. KAO*, S. HODNETT, P. NGAN, C. MARTIN, and E. GUNEL (*West Virginia University School of Dentistry, Morgantown, USA*)

0108 10:30 Remineralization of Artificial and Natural Carious Dentin Lesions. M.K. PUGACH, S. HABELITZ, J.D. FEATHERSTONE, S.J. MARSHALL, and G.W. MARSHALL* (*University of California, San Francisco, USA*)

0109 10:45 Surface Rehardening of Softened Enamel by Fluoride Varnishes. R.L. KARLINSEY, K.E. FREDERICK, A.C. MACKEY*, G.K. STOOKEY, and A.M. PFARRER (*Indiana Nanotech, Indianapolis, USA*)

0110 11:00 Effects of Low Concentrations of Fluoride on Dentin and Enamel. C.M. CAREY* and B.D. SCHMUCK (*Paffenbarger Research Center, American Dental Association Foundation, Gaithersburg, MD, USA*)

Seq#: 31 Thursday, 3 April 2008, 9:45 a.m. - 11:15 a.m.
Oral Session, Room: Emerald

Craniofacial Biology - TMJ Developmental Biology and Engineering

Chairpersons: S. Agarwal and S. Kapila

0111 9:45 Role of Notch Signaling in FGF2-regulated Condylar Cartilage Proliferation. S. OWENS*, C. KY, M. SERRANO, S. SO, and R. HINTON (*Baylor College of Dentistry, Dallas, TX, USA*)

0112 10:00 Regulatory Genes Involved in TMJ Formation. P. PURCELL*, M.L. CALICCHIO, T. COLLINS, R.L. MAAS, and C.J. TABIN (*Harvard Medical School, Boston, MA, USA*)

0113 10:15 PTH-stimulated Type X Collagen Deposition is MAP Kinase-dependent. K. VAQUERA*, L. LOVELESS, E. HARRINGTON, K. SVOBODA, J. REED, and R. SPEARS (*Baylor College of Dentistry, Dallas, TX, USA*)

0114 10:30 C3H10T1/2 Cells Utilize Wnt Signaling during Chondrocyte Differentiation in Scaffolds. D. SJOSTROM*, J. NAM, and S. AGARWAL (*Ohio State University, Columbus, USA*)

0115 10:45 Biomechanical Forces Inhibit NF-kappaB Transcriptional Activity in TMJ: Mathematical Analysis. S. AGARWAL*, J. NAM, S. MADHAVAN, B. AGUDA, and B. RATH (*Ohio State University, Columbus, USA*)

0116 11:00 Viscoelastic Shear Properties of Porcine TMJ Discs. Y. WU*, J. KUO, L. ZHANG, and H. YAO (*Clemson University, Charleston, SC, USA*)

Seq#: 32 Thursday, 3 April 2008, 9:45 a.m. - 11:15 a.m.
Oral Session, Room: Grand Ballroom D

Dental Materials 1: Adhesion - Bond Strength Testing and Mechanisms - Keynote Address, Testing and Durability of the Adhesive Interface

Chairpersons: R. Ajlouni and S. Marshall

- 0117** 9:45 Keynote Address: Status of Standardization: 'Adhesion Test Methods to Tooth Structure'. L.G. WATANABE* (*University of California, San Francisco, USA*)
- 0118** 10:15 Durability of Resins Bonded to Water- vs. Ethanol-saturated Acid-etched Dentin. D.H. PASHLEY*, Y. NISHITANI, M. YOSHIYAMA, K. HOSAKA, K. AGEE, W.W. BRACKETT, and F.R. TAY (*Medical College of Georgia, Augusta, USA*)
- 0119** 10:30 Bioactive Glasses in Dentin that Reduce Leakage Maintain Bond Strength. D. ZEIGER, S.J. MARSHALL*, L.G. WATANABE, K. SAEKI, A. TOMSIA, E. SAIZ, and G.W. MARSHALL (*University of California, San Francisco, USA*)
- 0120** 10:45 Alcohol-containing Mouthrinses and the Adhesion of Orthodontic Brackets. R. AJLOUNI*, P.E. ROSSOUW, and S.E. BISHARA (*Baylor College of Dentistry, Dallas, TX, USA*)
- 0121** 11:00 Effect of Residual Heat in Dentin Adhesion after Er,Cr:YSGG Laser Irradiation. J.A. BARROS*, A.C.C. ARANHA, C.D.P. EDUARDO, M.C. PETERS, and D.M. ZECELL (*University of Michigan, Ann Arbor, USA*)

Seq#: 33 Thursday, 3 April 2008, 9:45 a.m. - 11:15 a.m.
Oral Session, Room: Grand Ballroom B

Dental Materials 5: Polymer-based Materials - Chemistry and Composition - Polymerization Kinetics and Effects

Chairpersons: P. Spencer and U. Salz

- 0122** 9:45 Microleakage of Class V Restorations after Conventional and Er:YAG Laser Preparation. Y. KORKMAZ*, E. OZEL, N. ATTAR, O. BICER, and E. FIRATLI (*Baskent University, Ankara, Turkey*)
- 0123** 10:00 Highly Reactive Monomethacrylates as Reactive Diluents for Dimethacrylate-based Dental Composites. N. CRAMER*, H. KILAMBI, L. SCHNEIDEWIND, J.W. STANSBURY, and C. BOWMAN (*University of Colorado, Boulder, USA*)
- 0124** 10:15 Synthesis and Characterization of New Photo-initiators for Self-etching Adhesives. U. SALZ*, T. BOCK, N. MOSZNER, and F. ZEUNER (*Ivoclar Vivadent, Schaan, Liechtenstein*)
- 0125** 10:30 Analysis of Filler Content and Distribution in Nano-filled Composite Resins. D.W. JONES*, J.B. DENNISON, P. YAMAN, S.C. BAYNE, and J.M. POWERS (*University of Michigan, Ann Arbor, USA*)
- 0126** 10:45 Synthesis and Characterization of New Methacrylate Monomers for Dentin Adhesives. P. SPENCER*, J.-G. PARK, Q. YE, E. TOPP, X. YAO, C.H. LEE, E.L. KOSTORYZ, A. MISRA, and Y. WANG (*University of Kansas, Lawrence, USA*)
- 0127** 11:00 New Mechanism for Concurrent Photo-polymerization and Stress Relaxation. C.N. BOWMAN*, C.J. KLOXIN, T.F. SCOTT, and R.B. DRAUGHON (*University of Colorado, Boulder, USA*)

Seq#: 34 Thursday, 3 April 2008, 9:45 a.m. - 11:15 a.m.
Oral Session, Room: Grand Ballroom A

Dental Materials 6: Polymer-based Materials - Physical Properties and Performance - Materials and Remineralization; Elastomers; Mechanical Testing

Chairpersons: S. Dickens and G. Flaim

- 0128** 9:45 Shrinkage Stress and Microleakage of a Resin-based Calcium Phosphate Cement. M. RUDMANN and S.H. DICKENS* (*Paffenbarger Research Center, American Dental Association Foundation, Gaithersburg, MD, USA*)

0129 10:00 Remineralization of Dentin Lesions from Whisker-reinforced, Resin-based Composites. G.M. FLAIM* and S.H. DICKENS* (*Paffenbarger Research Center, American Dental Association Foundation, Gaithersburg, MD, USA*)

0130 10:15 A Remineralizing Root Caries Restorative Material. K.M. HOFFMAN*, G.M. FLAIM, and S.H. DICKENS* (*Paffenbarger Research Center, American Dental Association Foundation, Gaithersburg, MD, USA*)

0131 10:30 Outdoor Weathering of Facial Elastomers Containing Glass Pigments. M.W. BEATTY*, G.K. MAHANNA, K.M. LEWIS, B. SIMETICH, and J. SCHULTE (*Nebraska-Western Iowa Health Care System, VA Medical Center, University of Nebraska Medical Center College of Dentistry, Lincoln, USA*)

0132 10:45 Development/Preliminary Validation of a Modified Notchless Triangular Prism Protocol. J.R. MELANDER*, M.P. WALKER, B. FRICKE, and W.P. DUNN (*University of Missouri-Kansas City, USA*)

0133 11:00 Effect of Molecular Order on Liquid Crystal Monomer Performance Properties. Q. WANG*, P.M. THOMPSON, D.M. JOHNSON, D.P. NICOLELLA, and H.R. RAWLS (*University of Texas HSC, San Antonio, USA*)

Seq#: 35 Thursday, 3 April 2008, 9:45 a.m. - 11:15 a.m.
Oral Session, Room: Metropolitan Ballroom

Microbiology / Immunology and Infection Control - Streptococci

Chairpersons: J. Tanzer and T. Kitten

- 0134** 9:45 Coaggregation between *Actinomyces naeslundii* and *Streptococcus oralis*. P. CHEN* and K.P. LEUNG (*US Army Dental and Trauma Research Detachment, Great Lakes, IL, USA*)
- 0135** 10:00 *Streptococcus in toto*: The Orthologous Gene Database. T.S. BRETTIN, R. TAPIA, J.H. SAW*, R. WEST, C.-H. TSENG, J. SONG, G. XIE, and G.L. MYERS (*Los Alamos National Laboratory, NM, USA*)
- 0136** 10:15 Sucrose-independence of *Streptococcus gordonii*'s Failure to Compete with *Streptococcus mutans*. J. TANZER*, A. THOMPSON, K. SHARMA, M. VICKERMAN, and F.A. SCANNAPIECO (*University of Connecticut, Farmington, USA*)
- 0137** 10:30 Contributions of *Streptococcus sanguinis* Lipoproteins to Endocarditis Virulence. T. KITTEN*, S. DAS, C.L. MUNRO, T. KANAMOTO, and T. UNOKI (*Virginia Commonwealth University, Richmond, USA*)
- 0138** 10:45 Heterologous Expression of the *Streptococcus mutans* Mannitol PTS Genes. A.L. HONEYMAN* (*Baylor College of Dentistry, Dallas, TX, USA*)
- 0139** 11:00 Dominance of Non-SM Acid Streptococci: Incipient Caries in Children. W. McBRIDE*, B. OLSON, J.J. WARREN, and D. DRAKE (*University of Iowa, Iowa City, USA*)

Seq#: 36 Thursday, 3 April 2008, 9:45 a.m. - 11:15 a.m.
Oral Session, Room: Senators Lecture Hall

Neuroscience / TMJ

Chairpersons: C. Hirsch and A. Velly

- 0140** 9:45 Coping Styles in Patients with TMD. D.R. REIB-MANN* and M.T. JOHN (*University of Leipzig, Germany*)
- 0141** 10:00 General Joint Laxity as Risk Factor for TMJ Disc Displacement. C. HIRSCH*, M.T. JOHN, and A. STANG (*University of Leipzig, Germany*)
- 0142** 10:15 Fibromyalgia and Widespread Pain Effect on TMD Pain Disability Onset. A.M. VELLY*, J.O. LOOK, W. KANG, P.A. LENTON, A.K. JACKSON, P.L. CARLSON, and J.R. FRICTON (*University of Minnesota, Minneapolis, USA*)

Thursday

- 0143** 10:30 Pro-inflammatory Cytokine Levels in Saliva/Serum of TMJ Pain Patients. W.R. BOWLES*, S.L. MYERS, A.M. VELLY, S. KAIMAL, P.L. CARLSON, D. SOTILLO, J. SPRINGSTEEN, W. KANG, J. SWIFT, and J. FRICTON (*University of Minnesota, Minneapolis, USA*)
- 0144** 10:45 Viscoelastic Compressive Properties of Porcine TMJ Disc and Condyle Cartilage. J. KUO, Y. WU, J. YUN, and H. YAO* (*Clemson University, SC, USA*)

Seq#: 37 **Thursday, 3 April 2008, 9:45 a.m. - 11:15 a.m.**
Oral Session, Room: Sapphire

Oral Health Research - Keynote Address and Oral Halitosis, Assessment, Treatment, and Management

Chairperson: S. Santos

- 0145** 9:45 Keynote Address: Assessment and Treatment of Oral Malodor. S. NACHNANI* (*University Health Resources Group, Inc., Culver City, CA, USA*)
- 0146** 10:15 RCT Evaluating Combined Oral Hygiene Effects on Overnight Volatile Sulfur. R.W. GERLACH, M.L. BARKER, S. FARRELL, S.K. FIEDLER, A.A. WALANSKI*, and A.R. BIESBROCK (*The Procter & Gamble Company, Mason, OH, USA*)
- 0147** 10:30 Reducing Oral Malodor with a Fluoride- and Zinc-containing Mouthrinse. S. SANTOS*, J.A. MCGUIRE, R. PERFECT, C. BENEDUCE, J. QAQISH, and C.R. GOYAL (*Johnson & Johnson Consumer & Personal Healthcare Products Worldwide, Division of Johnson & Johnson Consumer Companies, Morris Plains, NJ, USA*)
- 0148** 10:45 Oral Health in Patients with Temporomandibular Disorders and Dental Anxiety. O. SCHIERZ*, D.R. REIBMANN, M.T. JOHN, M. MEHRSTEDT, and A. SZENTPÉTERY (*University of Leipzig, Germany*)

Seq#: 38 **Thursday, 3 April 2008, 9:45 a.m. - 11:15 a.m.**
Oral Session, Room: Topaz

Salivary Research - Saliva and Salivary Glands

Chairpersons: O. Baker and E. Salih

- 0149** 9:45 Glutamine-specific Endoprotease Activity in Human Saliva. E.J. HELMERHORST*, X. SUN, E. SALIH, and F.G. OP-PENHEIM (*Boston University, MA, USA*)
- 0150** 10:00 Cellular Signals Underlying β -Adrenergic Receptor-mediated Parotid Gland Enlargement. C.-K. YEH*, A.L. LIN, H. DANG, B. ZHU, and M.S. KATZ (*University of Texas San Antonio / Health Science Ctr., USA*)
- 0151** 10:15 Proteomics Reveals that MUC7-12-mer Induces Cysteine Synthetase Down-regulation in *S. mutans*. A.N. CAMPAGNA*, M. LIS, and L. BOBEK (*State University of New York - Buffalo, USA*) (2006 AADR Student Research Fellowship Winner)
- 0152** 10:30 Neurturin Influences Epithelial Branching Morphogenesis in the Mouse Submandibular Gland. J.S. STEWART*, S.M. KNOX, and M.P. HOFFMAN (*Howard University College of Dentistry, Washington, DC, USA*)
- 0153** 10:45 Phosphoproteome of Oral Fluids by Mass Spectrometry. E. SALIH*, W.L. SIQUEIRA, E.J. HELMERHORST, and F.G. OP-PENHEIM (*Boston University, MA, USA*)
- 0154** 11:00 AU-rich mRNA Binding Proteins Stabilize mRNA in Human Saliva. V. PALANISAMY*, J. WANG, and D. WONG (*University of California - Los Angeles, USA*)

Seq#: 29 **Thursday, 3 April 2008, 9:45 a.m. - 11:45 a.m.**
Symposium, Room: Grand Ballroom E

Symposium - NIDCR's 60th Anniversary Symposium: Looking Toward the Future

Chairperson: K. Hardwick

- 9:45 Introductory Remarks. K.S. HARDWICK* (*NIDCR, Bethesda, MD, USA*)

- 0104** 9:50 Age of Exploration in Oral Sciences: Has *P. gingivalis* Discovered the Fountain of Youth in the Gingiva? O. YILMAZ* (*University of Florida, Gainesville, USA*)

- 10:10 New Relations of Wnt Signaling in Osteogenesis. H. OUYANG* (*University of Pittsburgh, PA, USA*)

- 10:30 Taking Orthodontics beyond 'Face' Value: Genetic and Phenotypic Approaches to the Understanding of Dentofacial Variations. S.A. FRAZIER-BOWERS* (*University of North Carolina, Chapel Hill, USA*)

- 10:50 Mechanisms of IGF1-mediated Rescue of Radiation-induced Salivary Gland Dysfunction. K.H. LIMESAND* (*University of Arizona, Tucson, USA*)

- 11:10 Social Determinants of Oral Health in the US: Evidence on Potential Pathways. L.N. BORRELL* (*Columbia University, New York, NY, USA*)

11:30 Discussion.

Seq#: 39 **Thursday, 3 April 2008, 11:30 a.m. - 12:15 p.m.**
Plenary Session: Stemmons Ballroom

Plenary Session - Engineering the Clinical Research Enterprise in a Multi-institutional and Multidisciplinary Environment

- 0155** 11:30 Engineering the Clinical Research Enterprise in a Multi-institutional and Multidisciplinary Environment. M. PACKER* (*University of Texas Southwestern Medical Center, Dallas, USA*)

Seq#: 40 **Thursday, 3 April 2008, 1:30 p.m. - 2:30 p.m.**
Poster Session, Trinity I - Exhibit Hall

AAADR/Johnson & Johnson Oral Health Products Hatton Awards - Junior Category

- 0156** Caspase-14 Expression Reduced Tumorigenicity of Human Salivary Cancer Cells. F. HUFF*, M. WU, H. QIN, J. LEWIS, J. WATAHA, R.L. MESSER, G.S. SCHUSTER, and S. HSU (*Medical College of Georgia, Augusta, USA*)
- 0157** Use of Three-dimensional Culture Chambers for Osseous Tissue Engineering. J. BOEHRIS*, R. ZAHARIAS, D. SEABOLD, J. LAFFOON, Y.J. KO, and G. SCHNEIDER (*University of Iowa College of Dentistry, Iowa City, USA*) (2007 AADR Student Research Fellowship Winner)
- 0158** Akt Inhibition by RNAi Reverses *P. gingivalis*-induced Survival of Epithelial Cells. B. BARBETTA*, M. DUMAN, L. YAO, T. KOUTOUZIS, and O. YILMAZ (*University of Florida, Gainesville, USA*)
- 0159** Wnt/B-catenin Signaling Regulates Dental Pulp Stem Cell Properties. E.L. SCHELLER*, J. CHANG, and C.-Y. WANG (*University of Michigan, Ann Arbor, USA*)
- 0160** BMP Signaling is Required for Development of the Maxillary Process. B. WANG*, S. FOPPIANO, D. HU, and R.S. MARCUCIO (*University of California - San Francisco, USA*)
- 0161** Beta 1 Adrenergic Receptor Activation and Inhibition of Inflammatory Mediators. J. VELA* and K. HARGREAVES (*University of Texas San Antonio / Health Science Ctr., USA*)
- 0162** Identification of Novel *c-kit* Gene Mutations in Adenoid Cystic Carcinoma. A. CHOU*, S. LIM, R.C.K. JORDAN, and D.P. COX (*University of California, San Francisco, USA*)
- 0163** Characterization and Optimization for PPF/NVP Scaffolds. D.S. AZHAR*, S. YOUNG, A. MIKOS, and M. WONG (*University of Texas - Houston/Health Science Center, USA*)
- 0164** Importance of the bHLH Transcription Factor, Hand2, in Craniofacial Development. N.A. BENNETTS*, F. HYNDMAN, M. HOWARD, and D. CLOUTHIER (*University of Colorado at Denver and Health Sciences Center, Aurora, USA*)

**AADR/Johnson & Johnson Oral Health Products Hatton Awards
- Senior Category**

- 0165** Osteopenia in Twisted Gastrulation-deficient Mice Results from Enhanced Osteoclast Function. J. SOTILLO RODRIGUEZ*, A. CARLSON, B. MACKENZIE, T. SCHWARZ, K. MANSKY, A. PETRYK, and R. GOPALAKRISHNAN (*University of Minnesota, Minneapolis, USA*)
- 0166** Kinetics of Histatin Degradation in Human Saliva. X. SUN*, E. SALIH, F.G. OPPENHEIM, and E.J. HELMERHORST (*Boston University, MA, USA*)
- 0167** DMP1 C-terminal Mutant Mice Recapture the Human ARHR Phenotype. B. JIANG*, Y. XIE, Y. SUN, C. QIN, and J.Q. FENG (*Baylor College of Dentistry, Texas A&M Health Science Center, Dallas, USA*)
- 0168** Methionine Sulfoxide Reductase Protects Surface Adhesins on *Streptococcus gordonii*. Y. LEI*, Y. ZHANG, J. KRETH, and M.C. HERZBERG (*University of Minnesota, Minneapolis, USA*)
- 0169** Tristetraprolin Reduces Alveolar Bone Loss in Experimental Periodontitis. C.S. PATIL*, M. LIU, F. LI, W. ZHAO, N.J. D'SILVA, and K.L. KIRKWOOD (*State University of New York - Buffalo, USA*)
- 0170** Restricted HIV-1 Infection in TERT-2 Oral Keratinocytes. A. VACHARAKSA*, A.C. ASRANI, R.A. GIACAMAN, K.F. ROSS, and M.C. HERZBERG (*University of Minnesota, Minneapolis, USA*)
- 0171** Functional Assays of Human Tooth-derived Stem Cells. T. PENG*, A.C. CAVENDER, J.Q. FENG, C. QIN, and R. D'SOUZA (*Baylor College of Dentistry, Houston, TX, USA*)
- 0172** Development of Genetic Tools for Analysis of *Streptococcus sanguinis*. L.S. TURNER*, S. DAS, T. KANAMOTO, C.L. MUNRO, and T. KITTEN (*Virginia Commonwealth University - VCU/MCV, Richmond, USA*)
- 0173** Frequency of Common Polymorphisms A240PPAX9 and A34GMSX1 in Tooth Agenesis. S. POLLAN-WHITE*, G. MUES, H. KAPADIA, E. SCHNEIDERMAN, and R. D'SOUZA (*Baylor College of Dentistry, Dallas, TX, USA*)

**AADR/Johnson & Johnson Oral Health Products Hatton Awards
- Post-doctoral Category**

- 0174** Genetic and Environmental Factors Associated with Dental Caries in Children. X. WANG*, M. MARAZITA, S.M. LEVY, S. SANTIAGO, B. BROFFITT, B.J. SMITH, A.C. LIDRAL, and M. WILLING (*University of Pittsburgh, PA, USA*)
- 0175** Reduced Surface Alpha-2 Integrin Prevents Osteoblast Differentiation on Microstructured Titanium. R. OLIVARES-NAVARRETE*, J. CHEN, B.D. BOYAN, and Z. SCHWARTZ (*Georgia Institute of Technology, Atlanta, USA*)
- 0176** Induction of New Tooth Formation in Adult Oral Ectoderm. X.-P. WANG*, D. O'CONNELL, M. KURAGUCHI, J.J. LUND, A. TURBE-DOAN, R. KUCHERLAPATI, and R. MAAS (*Brigham and Women's Hospital, and Harvard Medical School, Boston, MA, USA*)
- 0177** Immediate vs. Delayed Implants: Changes in Tissue Position. J.D. ANDERSON* (*University of Texas - San Antonio / Health Science Ctr., USA*)
- 0178** Functional Studies of Human PAX9 Paired Domain Mutations. Y. WANG*, J. WU, R.N. D'SOUZA, and H. KAPADIA (*Baylor College of Dentistry, Dallas, TX, USA*)

- 0179** Dentin Sialoprotein is Catalyzed by MMP-9 and Its Biological Functions. L. CHEN*, G. YUAN, K. DONLY, M. MACDOUGALL, and S. CHEN (*University of Texas - San Antonio / Health Science Ctr., USA*)
- 0180** NG2, Novel Pro-apoptotic Receptor, Opposes Integrin $\alpha 4$ to Mediate Anoikis. N.E. JOO*, T. WATANABE, C. CHEN, M. CHEKENYA, W.B. STALLCUP, and Y. KAPILA (*University of Michigan, Ann Arbor, USA*)
- 0181** *Porphyromonas gingivalis* Increases Keratinocyte Transfer of HIV-1 to Permissive Cells. R.A. GIACAMAN*, A.C. ASRANI, K.H. GEBHARD, E.A. DIETRICH, A. VACHARAKSA, K.F. ROSS, and M.C. HERZBERG (*University of Minnesota, Minneapolis, USA*)
- 0182** Non-viral Gene Delivery of Nanostructured-calcium-phosphate (NanoCaP) Carriers for Bone Regeneration. P.-Y. LEE*, D. OLTON, P. KUMTA, and C. SFEIR (*University of Pittsburgh, PA, USA*)

**Prosthodontics Research - Prosthodontics Research:
Student Abstracts**

- 0183** Composite Bonding to IPS Empress and Cercon. A.K. JRAGH*, K.P. PAREKH, and K.-J. SÖDERHOLM (*University of Florida, Gainesville, USA*)
- 0184** Effect of 3D Adaptation on Fracture Resistance of CAD/CAM All-ceramic Crowns. M. AL-RABAB'AH*, H. DEVLIN, and J.F. McCORD (*University of Manchester, UK*)
- 0185** Optical Properties of CAD-CAM Ceramic as a Function of Thickness. R. KOSONITTIKUL*, S. CHATCHAIWIWATTANA, and N. JUNTAVEE (*Khon Kaen University, Thailand*)
- 0186** WITHDRAWN
- 0187** WITHDRAWN
- 0188** *In vitro* Horizontal Marginal Adaptation Comparison of CAD/CAM Zirconium Copings. A.J.T. SHANNON*, F. QIAN, P. TAN, and D. GRATTON (*University of Iowa, Iowa City, USA*)
- 0189** Effects of Angulation on Tooth Color Determination during Color Matching. X. HU* and W.M. JOHNSTON (*The Ohio State Univ. College of Dentistry, Columbus, USA*)
- 0190** Fracture Strength of Different Quantities of Dentin Remaining in Teeth Restored with Fiber-reinforced Posts. G.A.P. GALHANO, R.M. MELO*, H. ROSA, F. PELÓGIA, L.F. VALANDRO, M.A. BOTTINO, and R. SCOTTI (*São Paulo State University [UNESP/SJC], São José dos Campos, Brazil*)
- 0191** Electrognathographic Evaluation of Mandibular Movement during Speech: a Preliminary Evaluation. K.A. MAYS* (*University of Maryland Baltimore Dental School, USA*)
- 0192** Bacterial Diversity in Abutment Teeth of Removable Partial Denture Users. C. MACHADO-MENGATTO*, C.M. RIZZATTI-BARBOSA, F.G. NOBREGA, L. MARCHINI, and L.A.S. BERNARDES (*State University of Campinas [UNICAMP], Piracicaba Dental School, Piracicaba - SP, Brazil*)
- 0193** Anti-fungal Activities of Amine Oxide against *Candida albicans*. J.M. HART*, D.R. CAGNA, and J.P. BABU (*University of Tennessee, Memphis, USA*)

Dental Materials 1: Adhesion - Bond Strength Testing and Mechanisms - Environmental Influences on Adhesive Bond Strength

- 0194** Effect of Potassium Oxalate on Dentin Adhesive Microtensile Bond Strength. J. PURK, D. KRUSE*, J. ATWOOD, and B. DAWSON (*University of Missouri- Kansas City, USA*)

- 0195** Shear Bond Strength of RMGI Cements following Four Surface Treatments. R. SWIGERT*, T.A. IMBERY, C. JANUS, and P.C. MOON (*Virginia Commonwealth University - VCU/MCV, Richmond, USA*)
- 0196** *In vitro* Effects of OTC Bleaching on Enamel and Dentin Bonding. G. CANARES*, M. PINES, and M.S. WOLFF (*New York University College of Dentistry, USA*)
- 0197** Effect of Disinfection on Bond Strength to Enamel and Dentin. C. CORPODIAN*, J. KAIM, M.S. PINES, and M.S. WOLFF (*New York University, USA*)
- 0198** Microtensile Bond Strength of Composite to Enamel Exposed to Soft Drinks. C. GARIN* and K. VANDEWALLE (*USAF, Lackland AFB, TX, USA*)
- 0199** Effects of Chlorhexidine/Solvent Solutions on Bond Strength to Dentin. A.P. MANSO*, R.H.M. GRANDE, B. SUH, A.K.B. BEDRAN-RUSSO, D.H. PASHLEY, and R.M. CARVALHO (*University of São Paulo, Brazil*)
- 0200** Stiffness of Demineralized Dentin is Affected by Tannic Acid Treatment. K.C. EMA*, K.J. YOO, D. PASHLEY, and A.K.B. BEDRAN-RUSSO (*University of Illinois - Chicago, USA*)
- 0201** Tannic Acid Increases Dentin Matrix Stability against Enzymatic Degradation. K.J. YOO*, K.C. EMA, D.H. PASHLEY, and A.K.B. BEDRAN-RUSSO (*University of Illinois - Chicago, USA*)
- 0202** The Use of Tannic Acid Increases Dentin Bond Strength. A.K.B. BEDRAN-RUSSO*, K.J. YOO, K.C. EMA, and D.H. PASHLEY (*University of Illinois - Chicago, USA*)
- 0203** Effects of N-vinylpyrrolidone Containing Polyelectrolytes on Surface Properties of GICs. A. MOSHAVERINIA*, N. ROOHPOUR, S. ANSARI, M. MOSHAVERINIA, S. SCHRICKER, and I.U. REHMAN (*Ohio State University, Columbus, USA*)
- 0204** Influence of Bleaching and Desensitizer Application on Bracket Bond Strength. Y. KORKMAZ, Y. KILICAL*, N. ATTAR, B. SAGLAM-AYDINATAY, and O. BICER (*Columbia University, New York, NY, USA*)

Seq#: 45 **Thursday, 3 April 2008, 1:30 p.m. - 2:30 p.m.**
Poster Session, Trinity I - Exhibit Hall

Dental Materials 5: Polymer-based Materials - Chemistry and Composition - Polymerization Kinetics Factors

- 0205** Conversion-dependent Mechanical Stress Relaxation Behavior in Crosslinked Polymers. S.M. ABBOTT*, J.W. GARCIA, S.M. NEWMAN, and J.W. STANSBURY (*University of Colorado School of Dentistry, Aurora, USA*)
- 0206** Depth-dependent Photopolymerization Reaction Kinetics in Dental Composites. N.D. WILSON*, S.M. NEWMAN, and J.W. STANSBURY (*University of Colorado School of Dentistry, Aurora, USA*)
- 0207** Effects of Reaction Kinetics and Conversion on Photopolymerization Stress Development. J.W. GARCIA*, P.K. SHAH, C.N. BOWMAN, and J.W. STANSBURY (*University of Colorado School of Dentistry, Aurora, USA*)
- 0208** Rehydration Effects on Physicochemical Properties of a Collagen-based Graft. M.C. BOTTINO*, M.V. JOSE, D. DEAN, and G.M. JANOWSKI (*University of Alabama, Birmingham, USA*)

Seq#: 46 **Thursday, 3 April 2008, 1:30 p.m. - 2:30 p.m.**
Poster Session, Trinity I - Exhibit Hall

Dental Materials 6: Polymer-based Materials - Physical Properties and Performance - Mechanical Testing, Light Curing, Surface Properties

- 0209** Alternative Surface Treatment of an Indirect Composite Resin by MTBS. S.M.A. MICHIDA*, R.O.D.A. SOUZA, F.E. TAKAHASHI, P.C. PEREIRA, D.C. BARCA, and F.C. PELÓGIA (*UNESP SJ, São José dos Campos, Brazil*)

- 0210** Air Bubble Entrapment in Pro Seal™ Using Three Different Applicators. D.M. THUET*, R.N. STALEY, and F. QIAN (*University of Iowa, Iowa City, USA*)
- 0211** Rotating Fatigue Resistance of Resin Composite Restorative Materials. S.H. MIRMOHAMMADI*, C.J. KLEVERLAAN, and A.J. FEILZER (*ACTA Amsterdam, Netherlands and Isfahan University of Medical Sciences, Iran*)
- 0212** Effects of Different Light-curing Modes, Composites, and Storage Times. H. DAWOUD*, L. WATANABE, L.M. PINZON, S.J. MARSHALL, and G. MARSHALL (*University of California - San Francisco, USA*)
- 0213** Stress State of Bonded 'Restorations' after Shrinkage and Mechanical Loading. F.P. RODRIGUES*, I.A.V.P. POIATE, J.B.C. MEIRA, and R.Y. BALLESTER (*University of São Paulo, Brazil*)
- 00214** Designing a Model Dental Shade Guide for a Pediatric Population. J. STALKER, R. PARAVINA, G. MAJKIC, S. KIAT-AMNUAY, and J.-W. CHEN* (*University of Texas - Houston/Health Science Center, USA*)

Seq#: 47 **Thursday, 3 April 2008, 1:30 p.m. - 2:30 p.m.**
Poster Session, Trinity I - Exhibit Hall

Dental Materials 6: Polymer-based Materials - Physical Properties and Performance - Physical Properties of Elastomers

- 0215** Comparison Study between Two Different Mixing Ratios of Polyethers. K. AURBACH*, R. PERRY, and G. KUGEL (*Tufts University, Boston, MA, USA*)
- 0216** Pouring Time and Cast Porosity of Alginate Substitute Impression Materials. F. NAJIB*, D. CAKIR, and L. RAMP (*University of Alabama at Birmingham, USA*)
- 0217** Interfacial Corrections of Elastomers for Kubelka-Munk Theory Using Non-contact Measurements. X. HU, A. GILBERT*, M.C. MOLCUT, and W.M. JOHNSTON (*Ohio State University, Columbus, USA*)
- 0218** Contact Angle Measurement of AdditionType Polyvinyl Siloxane Impression Materials. R. CHAVALI* and J. BURGESS (*University of Alabama, Birmingham, USA*)
- 0219** Mechanical Behavior of Bite Registration and Impression Materials. T. RAUCH*, J. WATERHOUSE, D.W. BERZINS, S. RAMBHIA, and V.B. DHURU (*Marquette University, Milwaukee, WI, USA*)

Seq#: 48 **Thursday, 3 April 2008, 1:30 p.m. - 2:30 p.m.**
Poster Session, Trinity I - Exhibit Hall

Dental Materials 7: Metal-based Materials - Metals (Various)

- 0220** Effect of Alloy and Surface Treatment on Adhesive Cement Strength. A. ABREU-SERRANO*, M.A. LOZA, A. ELIAS-BONETA, S.W. LOONEY, and F.A. RUEGGERBERG (*Medical College of Georgia, Augusta, USA*)
- 0221** Effects of Al and Cu on Mold Filling of Titanium. Y. SATO*, M. KOIKE, A. KRYSIAK, J.P. FORD, T. HOSOI, and T. OKABE (*Tsurumi University, Yokohama, Japan*)
- 0222** Corrosion Behavior of Cast Ti-Al and Ti-Al-Cu Alloys. M. KOIKE, Q. GUO, J.P. FORD, and T. OKABE* (*Baylor College of Dentistry, Dallas, TX, USA*)
- 0223** Bonding Characteristics of Cast Magnetic 'Keeper' to Dental Alloys. I. WATANABE* and Y. TANAKA (*Baylor College of Dentistry, Dallas, TX, USA*)
- 0224** Evaluation of Sorbents in Managing Hg Vapor from Amalgam Waste. D.L. BERRY, M.E. COHEN, M.E. STONE*, U.M. KHAN, and A.D. BUSH (*Naval Institute for Dental and Biomedical Research, Great Lakes, IL, USA*)

Seq#: 49 Thursday, 3 April 2008, 1:30 p.m. - 2:30 p.m.
Poster Session, Trinity I - Exhibit Hall

Dental Materials 7: Metal-based Materials - Student Posters: Titanium Alloys, Ni-Ti Alloys, & Other Metals

- 0225** Effect of Casting Force on Mold Filling of Titanium. A. KRYSIK*, M. KOIKE, and T. OKABE (*Baylor College of Dentistry, Dallas, TX, USA*)
- 0226** Effect of Grinding Time on the Grindability of Cast Titanium. D. JACOBSON*, M. KOIKE, Q. GUO, and T. OKABE (*Baylor College of Dentistry, Dallas, TX, USA*)
- 0227** Mechanical Strength of Ti-CP Rods Subjected to Laser or TIG Welding. J.A. ATOUI*, M.A.A. NÓBILO, V.O. PAGNANO, I.A. ORSI, and O.L. BEZZON (*Faculdade de Odontologia de Ribeirão Preto - USP, Brazil*)
- 0228** Laser Welding between Cast Pure Titanium and Titanium Alloy. P. NEWTON* and I. WATANABE (*Baylor College of Dentistry, Dallas, TX, USA*)
- 0229** Machined Titanium Dental Implant Corrosion under Inflammatory and Hyperglycemic Conditions. F. SETA*, R.L.W. MESSER, J. MICKALONIS, Y. BROWN, G. TACKAS, J. LEWIS, and J. WATAHA (*Medical College of Georgia, Augusta, USA*)
- 0230** Micro-XRD Observations of NiTi Wires for Rotary Endodontic Instruments. M. IJIMA, W.A. BRANTLEY, S. ALAPATI, W.A.T. CLARK, J. LIU*, and W.B. JOHNSON (*The Ohio State University, College of Dentistry, Columbus, USA*)
- 0231** Force and Torque Measurements during Rotational Insertion of Endodontic Files. J.B. ROANE, M.G. DUNCANSON, Jr., T.M. SORESEN*, and S.S. KHAJOTIA (*University of Oklahoma Health Sciences Center, Oklahoma City, USA*)
- 0232** Mechanical and Thermal Properties of Fluoride-/Artificial-saliva-exposed Nickel-Titanium Archwires. D. LEE* and D.W. BERZINS (*Marquette University, Milwaukee, WI, USA*)
- 0233** Shear Bond Strength of a Novel Molar Retentive Base Design. J.L. CHAPMAN* (*Louisiana State University School of Dentistry, New Orleans, USA*)

Seq#: 50 Thursday, 3 April 2008, 1:30 p.m. - 2:30 p.m.
Poster Session, Trinity I - Exhibit Hall

Diagnostic Sciences - Student Posters

- 0234** *In vivo* Determination of Periodontal Inflammation by Near-infrared Spectroscopy. X. XIANG*, K.-Z. LIU, A. MAN, D. SCOTT, A. CHOLAKIS, E. GHIABI, D. SINGER, and M.G. SOWA (*University of Manitoba, Winnipeg, MB, Canada*)
- 0235** Detection of Salivary Oral Cancer Biomarkers by Electrochemical Immunosensor Array. W.J. CHENG*, F. WEI, B.G. ZIMMERMANN, S. HU, C.M. HO, and D.T. WONG (*University of California - Los Angeles, USA*)
- 0236** Adiponectin and IGF-1 in Women with Obesity and/or Breast Cancer. N. CAMARATA*, S. TAPP, J. SCHAEFER, and C. STRECKFUS (*University of Texas - Houston/Health Science Center, USA*)
- 0237** Treatment Planning for Tooth Size Discrepancy Utilizing a Graph Template. H.S. HOPKINS* (*University of Kentucky, Lexington, USA*)
- 0238** Evaluation of Diagnostic Term Extraction from Dental Cases: Preliminary Results. M.H. TORRES-URQUIDY*, T. WALI, and T.K. SCHLEYER (*University of Pittsburgh, PA, USA*)
- 0239** Prevalence of Nasal Septal Aberrations Using Cone Beam Computed Tomography. A.D. MAPLES*, T.S. SAINI, H. BOUREK, P.C. EDWARDS, and N.S. NORTON (*Creighton University, Omaha, NE, USA*)

- 0240** Prevalence of Vertebral Artery Atheromas Using Cone Beam Computed Tomography. J.M. SCHLAIKER*, R.A. GASPARD, III, T.S. SAINI, P.C. EDWARDS, and N.S. NORTON (*Creighton University, Omaha, NE, USA*)
- 0241** Prevalence of Internal Carotid Atheromas Using Cone Beam Computed Tomography. R.A. GASPARD, III*, J.M. SCHLAIKER, T.S. SAINI, P.C. EDWARDS, and N.S. NORTON (*Creighton University, Omaha, NE, USA*)
- 0242** Reliability of High-resolution CBCT Imaging for Tooth Size Measurements. A. ABDELKARIM* and P. NUMMIKOSKI (*University of Texas - San Antonio / Health Science Ctr., USA*)
- 0243** Incidental Sphenoid Sinus Pathosis Recognition in Cone Beam Computed Tomography. H.A. BOUREK*, P.C. EDWARDS, T.S. SAINI, and N.S. NORTON (*Creighton University, Omaha, NE, USA*)
- 0244** Classification of Artifacts on Phosphor Plates. C. COMER*, S. KALATHINGAL, M. SHROUT, and C. BRADY (*Medical College of Georgia, Augusta, USA*)
- 0245** Film-based and Digital Imaging for Detection of Restorative Defects. J.L. MLNARIK*, C. WIESEMAN, and J.W. BRAND (*University of Nebraska Medical Center College of Dentistry, Lincoln, USA*)
- 0246** Horizontal vs. Vertical Bitewing Radiographs in Opening Interproximal Tooth Contacts. P. BOLLU*, S. MARDINI, and A. GOHEL (*Boston University, MA, USA*)
- 0247** Influence of Patient Positioning on Measured Tooth Inclination in Pantomography. T.C. HARDY* and L. SURI (*Tufts University, Boston, MA, USA*)
- 0248** Assessment of Mandibular and Maxillary Transverse Growth using Vertebral Changes. C. PHAM* (*New York University, USA*)
- 0249** Tongue Measurement by Ultrasound in East African Open Bite Patients. I. KHOSH*, D. LEOTTA, V. SHCHERBATYY, and Z.-J. LIU (*University of Washington, Seattle, USA*)

Seq#: 51 Thursday, 3 April 2008, 1:30 p.m. - 2:30 p.m.
Poster Session, Trinity I - Exhibit Hall

Cariology Research - Undergraduate Student Abstracts

- 0250** Bactericidal Effect of Er,Cr:YSGG Laser on Caries-affected Dentin. J.Y. HA*, J.A. BARROS, P.P. KANJIRATH, J.C. FENNO, and M.C. PETERS (*University of Michigan, Ann Arbor, USA*)
- 0251** Protecting Root Surfaces from Demineralization Utilizing Dentin Bonding. J.L. MORRISON* and M.S. WOLFF (*New York University, USA*)
- 0252** Time-gated Raman Microscopy Analysis of Enamel and Dentin. M. MUKHIN*, A. SKLIAROV, A. IACOPINO, V. YAKOVLEV, and V. DHURU (*Marquette University, Milwaukee, WI, USA*)
- 0253** Artificial Caries Inhibited by Experimental Fluoride-releasing Composite and Bonding Agent. W. PUCKETT*, L. BROWN, L. LING, R. SERGENT, X. XU, L. CHEN, Y. WANG, X. DU, and A. RIPPS (*Louisiana State University, New Orleans, USA*)
- 0254** Demineralization in a Secondary Caries Model. D.C. HADERLIE*, J.M. CHALMERS, J.D. HARLESS, M.M. HOGAN, J.S. WEFEL, and F. QIAN (*University of Iowa, Iowa City, USA*)
- 0255** *In vitro* Remineralization Effects of Calcium-containing Pastes in Enamel Lesions. T. SMITH*, M. FONTANA, and C. GONZÁLEZ-CABEZAS (*Indiana University School of Dentistry, Indianapolis, USA*)
- 0256** Calcium/Fluoride Efficacy in Remineralization/Prevention of Caries Progression. D. SMOLENSKI*, J. CHALMERS, F. QIAN, J.D. HARLESS, M.M. HOGAN, and J.S. WEFEL (*University of Iowa, Iowa City, USA*)
- 0257** The Effects of Magnification on Caries Detection. A. STUMP*, C. GONZÁLEZ-CABEZAS, G.J. ECKERT, and M. FONTANA (*Indiana University School of Dentistry, Indianapolis, USA*)

Thursday

0258 Enamel Demineralization Protection of Pro Seal™ after Toothbrush Abrasion. J.S. HOCHSTRASSER*, R.N. STALEY, and F. QIAN (*University of Iowa, Iowa City, USA*)

0259 The Antimicrobial Effect of a Copper-containing Sealant. E.M. COLEMAN*, C. GONZÁLEZ-CABEZAS, D. CATT, and M. FONTANA (*Indiana University School of Dentistry, Indianapolis, USA*)

0260 WITHDRAWN

0261 Inhibition of Sucrose-dependent Biofilm Formation by α -Glucosidase Inhibitors. C. VUONG* and C.I. HOOVER (*University of California - San Francisco, USA*)

Seq#: 52 **Thursday, 3 April 2008, 1:30 p.m. - 2:30 p.m.**
Poster Session, Trinity I - Exhibit Hall

Implantology Research - Implant Clinical and in vivo Studies

0262 WITHDRAWN

0263 WITHDRAWN

0264 Retrospective Analysis of Dental Implants among Air Force Basic Trainees. S. BATTLE*, J. BARTOLONI, R. HANCOCK, and C. CHONG (*USAF, Lackland AFB, TX, USA*)

0265 Comparison of Normalized Facial Form Classification and Masticatory Function. K.T. OCHIAI*, C. NAKAMURA, H. IKEDA, and N. GARRETT (*UCLA School of Dentistry, CA, USA*)

0266 Reliability of a Surgical Stent in Assessing Alveolar Ridge Dimensions. P. NOLAN*, M. SALAS, D.N. TATAKIS, and B. LEBLEBICIOGLU (*Ohio State University, Columbus, USA*)

0267 Histomorphometric Observations of Bone Integration from Cadaveric Subperiosteal Mandibular Implants. J.T. CARLSON, Jr.*, D. WANG, M.Z. ANABTAWI, D.M. MARTIN, and J.E. LEMONS (*University of Alabama at Birmingham, USA*)

0268 Micro-CT vs. SEM Backscatter Imaging of Early Implant Bone Healing. R. LEE*, T.A. MORGAN, N. SCHROEDER, D. DAWSON, X. XIAO, and C. STANFORD (*University of Iowa, Iowa City, USA*)

Seq#: 53 **Thursday, 3 April 2008, 1:30 p.m. - 2:30 p.m.**
Poster Session, Trinity I - Exhibit Hall

Implantology Research - Implant Materials, Cell Culture Studies

0269 Effectiveness of Various Treatments on Ailing and Failing Dental Implants. S. STILES*, S. VELTRI, H. REED, J. THOMAS, and D. GRAY (*West Virginia University, Morgantown, USA*)

0270 Use of PDL in Implant Technology. T. BODINE*, Z. CAI, S. MA, and P. KRAMER (*Baylor College of Dentistry, Texas A&M Health Science Center, Dallas, USA*)

0271 Effect of Silver-doped Hydroxyapatite on Bacterial and Osteoblast Responses. A.P. ONG*, S. OH, W.-H. CHEN, K.-M. LEE, N. OH, J.L. ONG, and M. APPLEFORD (*University of Texas at San Antonio, USA*)

0272 Effects of Preservation Methods on Titanium Wettability and Cell Response. W.B. MOSS*, Y. LIU, and Y. YANG (*University of Tennessee, Memphis, USA*)

0273 Metal Ions Induce Myofibroblastic Differentiation of Mesenchymal Stem Cells. M. TALBERT*, K. DUBOSE, and J. MURPHY-ULLRICH (*University of Alabama, Birmingham, USA*) (2007 AADR Student Research Fellowship Winner)

00274 Influence of Bioactive Glass Ions on Osteoblast Response during Mineralization. N.S. BARKHORDAR*, V.G. VARANASI, S. HO, B. ANCHETA, E. SAIZ, P.M. LOOMER, A. TOMSIA, S.J. MARSHALL, and G.W. MARSHALL (*University of California - San Francisco, USA*)

Seq#: 54 **Thursday, 3 April 2008, 1:30 p.m. - 2:30 p.m.**
Poster Session, Trinity I - Exhibit Hall

Oral Health Research - Oral Health Services/Quality-of-Life Measures/Epidemiology

0275 Association among Four Oral Diseases in Private Practices' Patient Population. J. CUNHA-CRUZ*, L. MANCL, J. BERG, J. GILLETTE, and T.J. HILTON (*Northwest PRECEDENT - University of Washington, Seattle, USA*)

0276 Use of Caries-preventive Services in the NWPREDENT Dental Network. J. FERRACANE*, T. HILTON, L. ZHOU, J. GILLETTE, P. SPEED MCINTYRE, J. BERG, and N.W. PRECEDENT (*Northwest PRECEDENT - Oregon Health & Science University, Portland, USA*)

0277 Oral Health Impact on Daily Performance of Implant-stabilized Overdentures. B. ERSU* and S. CANAY (*Hacettepe University, Ankara, Turkey*)

0278 Qualitative Study of Researcher Strategies in Forming Productive Research Collaborations. B.S. BUTLER, H. SPALLEK, J.W. RAUCH*, and T.K. SCHLEYER (*University of Pittsburgh, PA, USA*)

0279 Periodontal-Oral-Systemic Education in US Dental Hygiene Curricula. R.S. WILDER, K. THOMAS, and H. JARED* (*University of North Carolina, Chapel Hill, USA*)

0280 WITHDRAWN

0281 WITHDRAWN

0282 Validating an Alternate Version of the Chewing Function Questionnaire. K. BABA*, M.T. JOHN, M. INUKAI, K. ARIDOME, and Y. IGARASHI (*Showa University, Tokyo, Japan*)

0283 The Challenge of Preparing Dental PBRN Practitioners for Practice-based Research. D.L. McEDWARD*, P.A. HARRIS, M.J. THOELE, J.A. LOVE, S.M. SUTPHIN, L.A. WAIWAIOLÉ, G. MORGAN, and the DPBRN COLLABORATIVE GROUP (*University of Florida, Gainesville, USA*)

Seq#: 55 **Thursday, 3 April 2008, 1:30 p.m. - 2:30 p.m.**
Poster Session, Trinity I - Exhibit Hall

Mineralized Tissue - Gene Expression

0284 Effects of Bone Morphogenetic Proteins on Oral Squamous Carcinoma Cells. J.S. LURIA*, B. NUSSENBAUM, W. TONG, and P.H. KREBSBACH (*University of Michigan School of Dentistry, Ann Arbor, USA*) (2007 AADR Student Research Fellowship Winner)

0285 Nicotine and CRLR mRNA Expression in MC3T3-E1 Osteoblasts. R. VANLAECKEN* and L. CROUCH (*University of Nebraska Medical Center College of Dentistry, Lincoln, USA*)

0286 *Prx* Genes in Morphogenesis of Meckel's Cartilage. A. DOUFEXI*, M.-S. KRONENBERG, A.-C. LICHTLER, B. RODGERS, and M. MINA (*University of Connecticut Health Center, Farmington, USA*)

0287 Bisphosphonate Enhances Osteogenic Differentiation of Pulp and Periodontal Cells. N. SAOJI*, S. SITTITAVORNWONG, N. SAID-AL-NAIEF, B.B. REID, J. LAROTA, H. CHEN, H.F. THOMAS, S.E. GUTIERREZ, and A. JAVED (*University of Alabama, Birmingham, USA*)

0288 Down-regulation of Dkk-1 in Response to Mechanical Loading of Bone. A. FERRIS*, N. KIM-WEROHA, S. KOTHA, and M. JOHNSON (*University of Missouri - Kansas City, USA*)

0289 Effect of Transgenic IGF-I Over-expression on Tooth and Alveolar Structures. K. ELIAS*, B.E. KREAM, D.J. ADAMS, and M. MINA (*University of Connecticut Health Center, Farmington, USA*)

0290 WITHDRAWN

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

- 0291** Antimicrobial Activity of *Phoenix dactylifera* Infusum on Mutans Streptococci *in vitro*. T.A. SADIKIN*, A.H. FRANSISCA, A.R. PUTRI, H. WIDODO, and S. MANGUNDJAJA (University of Indonesia, Jakarta)
- 0292** Immune Cell Characterization of Human Fungiform Papillae. L.M. FELDMAN*, P. FENG, K.K. YEE, R. FELDMAN, P.A.S. BRESLIN, and N.E. RAWSON (Barnard College, New York, NY, USA)
- 0293** Evaluation of FruA/FruB in Fructan Catabolism by *Streptococcus mutans*. C. BONESTEEL*, Z.T. WEN, and R.A. BURNE (University of Florida, Gainesville, USA)
- 0294** Screening for Drug-resistant Yeasts with Chromogenic Agar Containing Echinocandins. F.P. HAIKAL*, W.R. KIRKPATRICK, S.W. REDDING, and T.F. PATTERSON (University of Texas - San Antonio / Health Science Ctr., USA)
- 0295** Genetic and Phenotypic Characterization of *adhE* Gene in *Streptococcus mutans*. Z. FRENCH*, Z. ZHANG, I.-H. HUANG, and F. QI (University of Oklahoma College of Dentistry, Oklahoma City, USA)
- 0296** Complex Host-Pathogen Interactions in the Oral Cavity. C. DORSEY*, K. VON LACKUM, J.J. MANS, S. GRIESHABER, R.J. LAMONT, and M. HANDFIELD (University of Florida, Gainesville, USA)
- 0297** Detection of Herpesviruses in Apical Abscesses of Endodontic Origin. V.P. CHEN*, H. LI, J.C. BAUMGARTNER, and C.A. MACHIDA (Oregon Health & Science University, Portland, USA)
- 0298** Assay to Measure Oral Bacterial Alcohol Dehydrogenase Activity. C.D. ALLEY* and J.A. BANAS (University of Iowa, Iowa City, USA)
- 0299** Transcriptional Responses of Mouse Fibroblasts to *Porphyromonas gingivalis* Infection. P. BHARAL*, D. IYER, H. MIYAZAKI, C. ANAYA, J. HE, A. YEUDALL, and J. LEWIS (Virginia Commonwealth University - VCU/MCV, Richmond, USA)
- 0300** Effects of *Porphyromonas gingivalis* and *Streptococcus gordonii* on Cell Cycle. S. WILLIS*, K. VON LACKUM, J.J. MANS, S. POP, R.J. LAMONT, and M. HANDFIELD (University of Florida, Gainesville, USA)
- 0301** Calprotectin S100A9 Structural Motifs Regulate Epithelial Resistance to Bacterial Invasion. C. CHAMPAIBOON*, K.J. SAPPINGTON, K.F. ROSS, and M.C. HERZBERG (University of Minnesota, Minneapolis, USA)
- 0302** Role of Sucrose in the Fitness of *Streptococcus mutans*. L. ZHU*, J. KRETH, J. MERRITT, W. SHI, and F. QI (UCLA School of Dentistry, Los Angeles, CA, USA)
- 0303** Testing a DNA Vaccine for *Aggregatibacter actinomycetemcomitans*, an Oral Pathogen. A. EMERALD, K. WILLIAMS*, A. PASQUALI, and E. KRAIG (University of Texas - San Antonio / Health Science Ctr., USA)
- 0304** Switch Phenotypes of *Peptostreptococcus micros* and Susceptibility to Beta-defensins. M. DRESCHER*, S. JOLY, G. JOHNSON, and J.M. GUTHMILLER (University of Iowa, Iowa City, USA)
- 0305** *Streptococcus mutans* from American Indian Children: Biofilm Formation. M. McEWAN*, B. OLSON, and D. DRAKE (University of Iowa, Iowa City, USA)
- 0306** Impact of *Candida albicans* on β -defensin Expression in Oral Carcinoma. L. COMPTON*, S. JOLY, R. SRIKANTHA, Z. KURAGO, and J.M. GUTHMILLER (University of Iowa, Iowa City, USA)
- 0307** Inhibition of HIV Envelope Glycoprotein-mediated Syncytia Formation by Lectins. A. MICHAEL*, N. OVERLID, K. KONOPKA, and N. DÜZGÜNES (University of the Pacific, San Francisco, CA, USA)

- 0308** Formation of Biofilms Containing *P. gingivalis* using a Static Culture Method. A. GREER*, H. MA, S. JAIN, J. BRYERS, and R. DARVEAU (University of Washington, Seattle, USA)
- 0309** Clonal Analysis of Severe Early Childhood Caries. E. KANASI*, A. MOORE, F. DEWHIRST, J. JOLIVET, M. DAHLAN, C.V. HUGHES, and A.C. TANNER (The Forsyth Institute, Boston, MA, USA)
- 0310** Concordance of *Treponema denticola* Colonization in Families. A.L. BERSOKE*, A.L. GRIFFEN, and E.J. LEYS (The Ohio State University College of Dentistry, Columbus, USA)
- 0311** The Effect of Lactoferrin on Oral Bacterial Adhesion. S. YILDIZ*, K.P. LEUNG, and C.D. WU (University of Illinois-Chicago, USA)
- 0312** Molecular Microbiological Analysis of Severe Caries in Young Permanent Teeth. E.L. GROSS*, K.M. ASNANI, E.J. LEYS, D. JANIES, J.A. SCHWARTZBAUM, S. GASPAROVICH, and A.L. GRIFFEN (Ohio State University, Columbus, USA)
- 0313** Stability of *Streptococcus mutans* Clonal Types in Caries-active Children. B. SCHOW*, B. OLSON, and D. DRAKE (University of Iowa, Iowa City, USA)
- 0314** Oral Pathogen Sequence Databases at Los Alamos National Laboratory. J.H. SAW, G. XIE, J. SONG, C. YANG, C.-H. TSENG, P. SENIN*, and T.S. BRETTIN (Los Alamos National Laboratory, NM, USA)
- 0315** Development of an Agrobacterium-mediated Transformation System for *Candida glabrata*. R.I. CORTEZ*, B. WICKES, and J. FU (University of Texas Health Science Center at San Antonio, USA)

Seq#: 57 Thursday, 3 April 2008, 1:30 p.m. - 2:30 p.m.
Poster Session, Trinity I - Exhibit Hall

Periodontal Research - Diagnosis / Epidemiology - Bacterial and Salivary Diagnostics/ Systemic Conditions

- 0316** Change in Subgingival Microbial Recolonization following Smoking Cessation. R.K. McBRIDE*, P.M. PRESHAW, and P.S. KUMAR (Ohio State University, Columbus, USA)
- 0317** Quantitative Analysis of the Subgingival Microbial Community in Current Smokers. A.Y. SHCHIPKOVA*, M.R. ZIANNI, and P.S. KUMAR (Ohio State University, Columbus, USA)
- 0318** Salivary EGF Levels are Elevated in Adolescents with T2DM. B. STANWORTH*, A.J. MORETTI, J.A. KATANCIK, K. LUCE, J.-W. CHEN, S.V. MCKAY, R.L. WELTMAN, and C.M. FLAITS (University of Texas - Houston/Health Science Center, USA)
- 0319** Association between Periodontal and Respiratory Diseases: Case-Control Study in Brazil. G.D.Á.O. ARAUJO* and E. SABA-CHUJFI (UNIPAL, Brasília, Brazil)

Seq#: 58 Thursday, 3 April 2008, 1:30 p.m. - 2:30 p.m.
Poster Session, Trinity I - Exhibit Hall

Periodontal Research - Pathogenesis - Periodontal Pathology: Host-Bacterial Interactions

- 0320** Adhesion of *Porphyromonas gingivalis* Mutants and Wild-type Strains to HCAEC. G. PALSIS, Jr.*, M. BELANGER, P.H. RODRIGUES, and A. PROGULSKE-FOX (University of Florida, Gainesville, USA)
- 0321** Effects of *Actinobacillus actinomycetemcomitans* on Fibroblast Cytoskeleton and Motility. A. SOUTHERLAND*, M. MEHTA, B. SAFIEJKO-MROCZKA, and J. DMYTRYK (University of Oklahoma, Oklahoma City, USA)
- 0322** Fibroblast Matrix Metalloproteinase Production after Exposure to *Actinobacillus actinomycetemcomitans*. K. WRIGHT*, M. MEHTA, B. SAFIEJKO-MROCZKA, and J. DMYTRYK (University of Oklahoma, Oklahoma City, USA)

- 0323** HBD3 Suppresses Dendritic Cell MAPK Pathways to *P. gingivalis* rHagB. L.C. PINGEL*, K.G. KOHLGRAF, K.K. BURNELL, M. BELANGER, A. PROGULSKE-FOX, J. CAVANAUGH, Z. KURAGO, and K.A. BROGDEN (*University of Iowa, Iowa City, USA*)
- 0324** Human Leukocyte Defensin HNP-1 Binding to LPS of Periodontal Pathogens. F.A. MERENDINO, III*, M.M. JEFFERSON, J.P. BABU, and E.L. THOMAS (*University of Tennessee, Memphis, USA*)
- 0325** Induction of Immune Tolerance by Periodontal Pathogen Lipopolysaccharide. K.C. KENNEDY* and J.P. BABU (*University of Tennessee, Memphis, USA*)
- 0326** Influence of Aerobic/Anaerobic *Actinobacillus actinomycescomitans* on *in vitro* Wound Healing. A. BROWN*, M. MEHTA, B. SAFIEJKO-MROCZKA, and J. DMYTRYK (*University of Oklahoma, Oklahoma City, USA*)
- 0327** Interaction of Vasoactive Intestinal Peptide with Lipopolysaccharide of *Prevotella denticola*. B.M. FOLTZ* and J.P. BABU (*University of Tennessee, Memphis, USA*)
- 0328** Periodontal Pathogen Lipopolysaccharide-induced Secretion of SLPI by Monocytes. J.T. PRIMM* and J.P. BABU (*University of Tennessee, Memphis, USA*)
- 0329** Xylitol Inhibits *Fusobacterium nucleatum* Lipopolysaccharide-mediated Cytokine Secretion by Monocytes. J. HECK* and J.P. BABU (*University of Tennessee, Memphis, USA*)

Seq#: 59 Thursday, 3 April 2008, 1:30 p.m. - 2:30 p.m.
Poster Session, Trinity I - Exhibit Hall

Craniofacial Biology - Psychological and Sociological Aspects of Orthodontics

- 0330** Using Teledentistry to Provide Interceptive Orthodontic Services to Disadvantaged Children. J. BERNDT*, P. LEONE, and G. KING (*University of North Carolina, Chapel Hill, USA*)
- 0331** Sex Differences in the Uptake of Orthodontic Services among Adolescents. B.E. GLASSELL* and E.F. HARRIS (*University of Tennessee, Memphis, USA*)
- 0332** Sex Differences in Esthetic Treatment Needs of Adolescent Orthodontic Patients. R.N. BLAIR* and E.F. HARRIS (*University of Tennessee, Memphis, USA*)
- 0333** Attitudes and Characteristics of Parents Regarding the Facial Reconstruction Team. R.J. GUYMON, B. SHROFF*, R. TRIVELPIECE, and S.J. LINDAUER (*Virginia Commonwealth University - VCU/MCV, Richmond, USA*)
- 0334** Esthetics and Smile Characteristics from the Patient's Perspective, Part I. A.J. KER*, R.W. CHAN, H.W. FIELDS, F.M. BECK, S.F. ROSENSTIEL, and W.M. JOHNSTON (*Ohio State University, Columbus, USA*)
- 0335** Value of Esthetic Orthodontic Appliances. M.D. ROSVALL*, H.W. FIELDS, S.F. ROSENSTIEL, and W.M. JOHNSTON (*Ohio State University, Columbus, USA*)
- 0336** Esthetics and Smile Characteristics from the Patient's Perspective, Part II. R.W. CHAN*, A.J. KER, H.W. FIELDS, F.M. BECK, S.F. ROSENSTIEL, and W. JOHNSTON (*Ohio State University, Columbus, USA*)
- 0337** Pre-treatment Expectations and Post-treatment Perceptions of Adolescent Orthodontic Patients. D.A. BEEBE*, L. KOROLUK, and C. PHILLIPS (*University of North Carolina, Chapel Hill, USA*)
- 0338** Predictors of Failed Orthodontic Appointments. J.A. POWELL*, S.J. LINDAUER, B. LEYPOLDT, and E. TUFEKCI (*Virginia Commonwealth University - VCU/MCV, Richmond, USA*)
- 0339** Predicting White-spot Lesions in an Orthodontic Population. T.T. TAYLOR*, S. ABOD, M. HORTON, J. CLOSE, and J. SCIOTE (*University of Pittsburgh School of Dental Medicine, PA, USA*)

Seq#: 60 Thursday, 3 April 2008, 2:45 p.m. - 3:45 p.m.
Poster Session, Trinity I - Exhibit Hall

Dental Materials 9: Instruments and Equipment - Core Materials, Electrosurgery, Lasers, Burs, Ultrasonic Preparation

- 0340** Diametral Tensile Strength using Composite Cores with Non-metallic Prefabricated Posts. B.E. RAUSCH* and K. VANDEWALLE (*USAF, Lackland AFB, TX, USA*)
- 0341** Histologic Effects of Electrosurgery Device on Dental Soft Tissue. C.N. LE*, S. IRANMANESH, and J.M. WHITE (*University of California - San Francisco, USA*)
- 0342** Effect of Er:YAG Laser Irradiation on Dentin Permeability. M.T. OLIVEIRA*, A.C.C. ARANHA, C.D.P. EDUARDO, C. OXFORD, F.A. RUEGGERBERG, and M. GIANNINI (*Piracicaba School of Dentistry - UNICAMP, Piracicaba, SP, Brazil*)
- 0343** Increased Cutting Efficiency of Diamond Burs with Chemomechanical Sprays. P. O'NEIL*, D. CAKIR, L. RAMP, J. BURGESS, and P. BECK (*University of Alabama at Birmingham, USA*)
- 0344** Ultrasonic Root-end Preparation with Conventional and CVD Diamond Tips. D.A.B.S.D. ANDRADE*, T.R.D. OLIVEIRA, M.C. VALERA, C.H.R. CAMARGO, and S.H.G. OLIVEIRA (*São José dos Campos Dental School, Brazil*)

Seq#: 61 Thursday, 3 April 2008, 2:45 p.m. - 3:45 p.m.
Poster Session, Trinity I - Exhibit Hall

Dental Materials 1: Adhesion - Bond Strength Testing and Mechanisms - Bond Strength: Technique and Substrate

- 0345** Adhesive Bond Strength under Pulpal Pressure at the Gingival Wall. J. PURK, R. SPENCER*, J. ATWOOD, and D. KRUSE (*University of Missouri-Kansas City, USA*)
- 0346** Microtensile Dentin Adhesive Bond Strength under Different Positive Pulpal Pressures. J. PURK, J. ATWOOD*, B. DAWSON, and D. KRUSE (*University of Missouri-Kansas City, USA*)
- 0347** Microtensile Bond Strength of Bonding Agents after High-heat Storage. V.B. MAGGIO* and K. VANDEWALLE (*USAF, Lackland AFB, TX, USA*)
- 0348** Effect of Refrigerated Storage on Bond Strengths of Self-etch Adhesives. J. GRAHAM* and K. VANDEWALLE (*USAF, Lackland AFB, TX, USA*)
- 0349** Effects of Light-unit and Aging Process on Bonding of Composite Restorations. C.B. SANTOS-DARÓZ*, F. VOLTARELLI, A.N. CAVALCANTI, M. ALVES, A. PERIS, and G. MARCHI (*Universidade Estadual de Campinas Piracicaba School of Dentistry, Piracicaba - SP, Brazil*)
- 0350** Composite and Bond Strength Tests: Effects on Adhesive/Enamel Interface. A.M. ANDRADE*, S.K. MOURA, A. MUENCH, A. REIS, A.D. LOGUERCIO, A.C. LASCALA, A.P. MANSO, and R.H.M. GRANDE (*University of São Paulo, São Paulo, Brazil*)
- 0351** Adhesive pH and Microtensile Bond to Non-carious Sclerotic Cervical Dentin. M. PRECISE*, M.Z. ANABTAWI, D. GRAVES, D. CAKIR, and J. BURGESS (*University of Alabama at Birmingham, USA*)
- 0352** Long-term Microtensile Bond Strength of Experimental Fluoride-releasing Bonding Agent. L. HARHAD*, L. LING, J. YUAN, L. CHEN, Y. WANG, and X. XU (*Louisiana State University, New Orleans, USA*)
- 0353** Shear Bond Strength of Three Adhesives to Unground Enamel, Ground Enamel, Dentin. P. KADAM*, R.S. ZADEH, D. CAKIR, J. BURGESS, and L. RAMP (*University of Alabama at Birmingham, USA*)

0354 Shear Bond Strength of Three Adhesives to Enamel and Dentin. P. JAMPANI*, D. CAKIR, J. BURGESS, and L. RAMP (*University of Alabama at Birmingham, USA*)

0355 Bond Strengths of Thiol-ene/Methacrylate Composite Restorative Materials. S. HOWE*, S.M. NEWMAN, and J.W. STANSBURY (*University of Colorado, Aurora, USA*)

0356 Effects of Microbrush and Paper Point on Resin Bond to Root Dentin. D.C. BARCA*, R.O.A. SOUZA, S.M.A. MICHIDA, G.H.L. LOMBARDO, P.C. PEREIRA, F.P. CAMARGO, L.F. VALANDRO, and M.A. BOTTINO (*UNESP SJC, São José dos Campos, Brazil*)

Seq#: 62 Thursday, 3 April 2008, 2:45 p.m. - 3:45 p.m.
Poster Session, Trinity I - Exhibit Hall

Dental Materials 2: Adhesion - Leakage/Margin Assessments - Marginal Integrity of Various Restorations

0357 Molecular Structural Alterations of the Dentin in Non-carious Cervical Lesions. K. KARAN*, X. YAO, C. XU, J.D. EICK, M.P. WALKER, and Y. WANG (*University of Missouri -Kansas City, USA*)

0358 Complex Amalgams Retained by Pins, Amalgapins, and Amalgam Bonding Agents. J.P. COUDRON*, T.A. IMBERY, and P.C. MOON (*Virginia Commonwealth University - VCU/MCV, Richmond, USA*)

0359 Shear Bond Strength of Self-adhesive Cements. T. GHUMAN*, R.S. ZADEH, D. CAKIR, J. BURGESS, L.C. RAMP, and P. BECK (*University of Alabama at Birmingham, USA*)

0360 Enamel-sealing Ability of Self-etch Adhesives. J. PERDIGÃO, P. MONTEIRO*, and G. GOMES (*Instituto Superior Ciencias Saude Egas Moniz, Caparica, Portugal*)

0361 Evaluation of Bonding to Root Caries using Complementary Microscopic Techniques. A. WILLIAMS*, X. YAO, B. BOHATY, L. HONG, and Y. WANG (*University of Missouri-Kansas City, USA*)

0362 Determinants of Interproximal Marginal Excess in Class II Composites. M. BOUSCHLICHER, T. HARBAUGH*, and F. QIAN (*University of Iowa, Iowa City, USA*)

0363 CI V Laser-prepared Composite Restorations—Etching Time and Microleakage. A. OBEIDI*, M.H. SAEED, M. MAZAN-DARANI, P. BECK, L.C. RAMP, P.-R. LIU, and J. BURGESS (*University of Alabama at Birmingham, School of Dentistry, USA*)

0364 Demineralization Inhibition of Glass-ionomer Base in Class V Preparations. A. COOMES* and K. DONLY (*University of Texas - San Antonio / Health Science Ctr., USA*)

0365 Influence of Finishing Time on Marginal Sealing of Direct Restorations. J.C. RAMÍREZ BARRANTES*, L.N. BARATIERI, G. CARPENA LOPES, and E. MEDEIROS DE ARAÚJO JUNIOR (*Federal University of Santa Catarina, Florianopolis, Brazil*)

0366 Evaluation of Varied Repair Methods Applied to CAD/CAM Blocks. K.R. COULTER*, J.E. SCOTT, and T. BONSTEIN (*University of Manitoba, Winnipeg, MB, Canada*)

0367 Marginal Adaptation of Implant-tooth-supported All-ceramic Restorations after Aging. C. MUERNSEER*, M. BEHR, M. ROSENTRITT, and G. HANDEL (*Regensburg University Medical Center, Germany*)

0368 Cusp Coverage for Ceramic Restorations: Marginal Integrity and Enamel Cracks. S. KRIFKA*, M. FEDERLIN, M. STANGL, S. WIESBAUER, K.-A. HILLER, and G. SCHMALZ (*University of Regensburg, Germany*)

0369 Effect of Chemical Pre-treatment of Teeth on Fissure Sealant Microleakage. A. SCHENKEL*, E.A. CLARK, and V.P. THOMPSON (*New York University, USA*)

0370 Penetration and Adhesion Comparison of Conventional and Self-etching Sealants. A.K. PANCIO*, K.B. FRAZIER, F.A. RUEGGERBERG, A.L. OXFORD, and S.W. LOONEY (*Medical College of Georgia, Augusta, USA*)

Seq#: 63 Thursday, 3 April 2008, 2:45 p.m. - 3:45 p.m.
Poster Session, Trinity I - Exhibit Hall

Dental Materials 6: Polymer-based Materials - Physical Properties and Performance - Provisional Materials, Posts, Wear Testing

0371 Selected Mechanical Properties of Temporary Crown and Bridge. V. BABIC*, R. PERRY, and G. KUGEL (*Tufts University, Boston, MA, USA*)

0372 Fracture Toughness of Three Provisional Restorative Materials. L.T. TRAN* and R. PERRY (*Tufts University, Boston, MA, USA*)

0373 Hardness of Composite Resin in Flared Root Canals after Reinforcement. C.S. TEIXEIRA*, Y.T.C. SILVA-SOUSA, and M.D. SOUSA-NETO (*Federal University of Santa Catarina, Florianopolis, Brazil*)

0374 Tensile Bond of Cemented Fiber Posts. D. HESS*, R.S. ZADEH, J. BURGESS, and L.C. RAMP (*LSUHSC - School of Dentistry, New Orleans, LA, USA*)

0375 Wear and Polymerization Shrinkage of Highly Filled and Flowable Composite Materials. C. MICHELSON*, D. CAKIR, and J. BURGESS (*University of Michigan, Ann Arbor, USA*)

0376 Wear of the Enamel Antagonist and Five Restorative Materials. S. CULVER*, D. CAKIR, J. BURGESS, and L. RAMP (*University of Alabama at Birmingham, USA*)

0377 Effects of 4 Media used in *in vitro* Composite Wear Testing. N.C. LAWSON*, C. MICHELSON, D. CAKIR, and J. BURGESS (*University of Alabama at Birmingham, USA*)

0378 Wear in Second-generation Laboratory Composites. V. JAIN*, J. PLATT, B.K. MOORE, and G.A. BORGES (*Indiana University School of Dentistry, Indianapolis, USA*)

Seq#: 64 Thursday, 3 April 2008, 2:45 p.m. - 3:45 p.m.
Poster Session, Trinity I - Exhibit Hall

Dental Materials 8: Other Materials - Chemistry, Properties, and Performance - Endodontic, Orthodontic, and Miscellaneous Materials

0379 Root Canal Obturation Leakage Evidenced by Micro-CT and Dye Penetration. P. PANGILINAN-NUÑEZ*, T. HANIAS-TUTI, K. KOTA, E. SADAKAZU, and E. HOSHINO (*Niigata University Graduate School of Medical and Dental Sciences, Japan*)

0380 *In vitro* Biomineralizing Ability of a New Endodontic Material. J. CHEUK*, S. CHEUK, S.T. THERIOT, and N.K. SARKAR (*Louisiana State University School of Dentistry, New Orleans, USA*)

0381 Dimensional Stability of Orthodontic Alginates. J.W. TENNISON, J. ENGLISH, D.M. MAYER*, K.R. McGRORY, H.I. BUSSA, G.N. FREY, and J.M. POWERS (*University of Texas - Houston/Health Science Center, USA*)

0382 The Accuracy of OrthoCAD Digital Models Compared with Plaster Models. J.H. SHAMBARGER, J.D. ENGLISH, D. DARSEY*, J.M. POWERS, G.N. FREY, R.P. LEE, and H.I. BUSSA (*University of Texas - Houston/Health Science Center, USA*)

0383 Enhancing Tooth Remineralization around Class V Restorations. J. RYPEL*, D. CAKIR, L.C. RAMP, and J. BURGESS (*University of Alabama at Birmingham, USA*)

0384 Effects of Disinfectants on Tear Strength of Impression Materials. A. SAROF*, D. CAKIR, J. BURGESS, and L. RAMP (*University of Alabama at Birmingham, USA*)

0385 A Preliminary *in vitro* Model Assessing Tooth-whitening Agent Effectiveness. B. SORENSEN* and T. BONSTEIN (*University of Manitoba, Winnipeg, MB, Canada*)

0386 Effects of Home-bleaching Systems on Enamel Hardness and Elastic Modulus. E. SANCHEZ, S. AZER, C. MACHADO, R.G. RASHID, and D. LINFORD* (*The Ohio State University College of Dentistry, Columbus, USA*)

Thursday

- 0387** The Effects of Provisional Cements on Retention of Cast Dowels. B. NOOHI*, R. MASRI, C. DRISCOLL, and E. ROMBERG (*University of Maryland Dental School, Baltimore, USA*)
- 0388** Effects of Different Dentin Adhesives on Bacteria Growth Inhibition. S. YASREBI*, C. WALKER, R.A. BURNE, and K.-J. SÖDERHOLM (*University of Florida, Gainesville, USA*)
- 0389** Conversion of Covered Bracket Bonding Adhesive using Various Curing Lights. W. WRIGHT*, D. CLAYDEN, and S.M. NEWMAN (*University of Colorado, Aurora, USA*)
- 0390** Enamel Demineralization around Orthodontic Brackets. E. RUSSELL*, D. CAKIR, and J. BURGESS (*Louisiana State University School of Dentistry, Baton Rouge, USA*)
- 0391** Effects of Excavation on Composite Bonding to Laser-prepared Cavities. M.R. MARSHALL, A. OBEIDI, M. McCracken, P. BECK, L. RAMP, J. BURGESS, R. RAJANNA*, and P.-R. LIU (*University of Alabama at Birmingham, School of Dentistry, USA*)

Seq#: 65 **Thursday, 3 April 2008, 2:45 p.m. - 3:45 p.m.**
Poster Session, Trinity I - Exhibit Hall

Geriatric Oral Research - Student Posters

- 0392** Oral Hygiene Care for Residents in Iowa Intermediate Care Facilities. K. THOLE* (*University of Iowa, Iowa City, USA*)
- 0393** WITHDRAWN
- 0394** Primary Health Care and Oral Health Promotion among the Aged. A.F. BULGARELLI*, W. MESTRINER, Jr., and I.C. PINTO (*Universidade de São Paulo, Ribeirão Preto, Brazil*)
- 0395** Dental Surgeons' Knowledge about Diagnostic Practices for Various Cognitive States. A.R. SANTIFICETUR* (*Associação Paulista de Cirurgiões Dentistas, São Paulo, Brazil*)

Seq#: 66 **Thursday, 3 April 2008, 2:45 p.m. - 3:45 p.m.**
Poster Session, Trinity I - Exhibit Hall

Behavioral, Epidemiologic, and Health Services Research - BEHSR Student Abstracts I

- 0396** WITHDRAWN
- 0397** Quality of Life and Orthodontic Treatment - Patient vs. Provider Evaluations. A.M. KRUKEMEYER*, A.O. ARRUDA, and M.R. INGLEHART (*University of Michigan, Ann Arbor, USA*)
- 0398** WITHDRAWN
- 0399** Longitudinal Outcomes for Child Emergency Patients in a High-risk Population. C.L. CULPEPPER* and K. DONLY (*University of Texas Health Science Center-San Antonio, USA*)
- 0400** WITHDRAWN
- 0401** Geographically Dispersed Dental Researchers can Collaborate via Web-based Meetings. J.Y. IRWIN* and T. SCHLEYER (*University of Pittsburgh, PA, USA*)
- 0402** Oral Health Assessment and Barriers to Care in Kampala, Uganda. C. GUPTA*, H. AMINI, R. GOLDBERG, R. RASHID, and H. SOLLER (*Ohio State University, Columbus, USA*)
- 0403** Beliefs Regarding Thoroughness of Cancer Screening Exams for Women. S.L. RUSSELL, N.R. KRESSIN, K.I. TZVETKOVA*, B.L. GREEN, C. CLAUDIO, M.Q. WANG, and R.V. KATZ (*New York University, USA*)
- 0404** Accuracy of Citations in Five National Dental Journals, 1987 vs. 2007. K.L. SEAGREN*, A.B. BARNES, J.P. HATCH, L.S. LEVY, J. MINTZ, and J.D. RUGH (*University of Texas - San Antonio / Health Science Ctr., USA*)
- 0405** Student-Dentist (SD) Factors Predict Concordance between Patient/SD Pain Ratings. M. URBATIS*, M.W. HEFT, M.E. ROBINSON, D.D. PRICE, M. DENNIS, and U. FOERSTER (*University of Florida, Gainesville, USA*)

- 0406** Treatment Outcomes and Retention in Medicaid and Non-Medicaid Orthodontic Patients. A. GHAFFARI*, B. SHROFF, H.Q. LU, and S.J. LINDAUER (*Virginia Commonwealth University, Richmond, USA*)
- 0407** Knowledge, Behavior, and Self-perception of Oral Health in Kampala, Uganda. R. GOLDBERG*, H. AMINI, C. GUPTA, R. RASHID, and H. SOLLER (*Ohio State University, Columbus, USA*)
- 0408** Adolescent Patients' Treatment Motivation and Satisfaction with Orthognathic Surgery Outcomes. E.A. MEADE* and M.R. INGLEHART (*University of Michigan, Ann Arbor, USA*)
- 0409** Effectiveness of Gloves for Infection Control - Student and Provider Perspectives. A.E. COPLEN*, P.P. KANJIRATH, J.C. CHAPMAN, M.R. INGLEHART, and M. PETERS (*University of Michigan, Ann Arbor, USA*)
- 0410** Youth with Disability: Access to and Impact of Oral Healthcare. R.T. CAPOTE*, R. LEGER, D.A. REDFORD-BADWAL, and R.S. THRALL (*University of Connecticut, Farmington, USA*)
- 0411** Use of 'Bogus Distractors' in Questionnaire Design: a Methodological Analysis. R. GLUZMAN*, L. LI, and R.V. KATZ (*New York University, USA*)
- 0412** Infant Oral Health Examinations - Pediatric Dentists' Attitudes and Behaviors. S. MALCHEFF*, M.R. INGLEHART, T.C. PINK, W. SOHN, and D. BRISKIE (*University of Michigan, Ann Arbor, USA*)
- 0413** A Quantitative Study of Work Flow in a Dental Clinic. J.-W. CHEN, S.L. CHUMBLEY*, and J. ZHANG (*University of Texas - Houston/Health Science Center, USA*)
- 0414** Patient Preferences for Practitioner Gender across Specific Dental Procedures. A. McPHERSON-CANIZALES*, M.B. McCORMICK, M. FIZER, A. MINIGH, and D.W. McNEIL (*West Virginia University, Morgantown, USA*)
- 0415** Fear across Specific Dental Procedures. A. MINIGH, M. FIZER, M.B. McCORMICK*, A. McPHERSON-CANIZALES, and D.W. McNEIL (*West Virginia University, Morgantown, USA*)
- 0416** Esthetic Perceptions of Computer-generated Fluorosis Compared with Other Conditions. M. TRUESDELL* (*University of Missouri - Kansas City, USA*)
- 0417** Comparative Study of Reviewing Patient Records: Preliminary Results. T. WALI*, A. ACHARYA, T.P. THYVALIKAKATH, and T.K. SCHLEYER (*University of Pittsburgh, PA, USA*)

Seq#: 67 **Thursday, 3 April 2008, 2:45 p.m. - 3:45 p.m.**
Poster Session, Trinity I - Exhibit Hall

Cariology Research - Graduate Student Abstracts

- 0418** Rapid One-tube Lysis Method of Oral Samples for Quantitative PCR. K.-L.C. HSU*, R.C. OSGOOD, and N.K. CHILDERS (*University of Alabama at Birmingham, USA*)
- 0419** *Streptococcus mutans* Strain Variability and Dental Caries. D. CHOI*, D. DRAKE, J.A. BANAS, D. GADRE, B. OLSON, R. CROUT, D.W. McNEIL, R.J. WEYANT, and M.L. MARAZITA (*University of Iowa, Iowa City, USA*)
- 0420** Roles of Starch and Sucrose in *Streptococcus mutans* Biofilm Formation. M.I. KLEIN*, S. DUARTE, and H. KOO (*University of Rochester School of Medicine and Dentistry, NY, USA*)
- 0421** Multiple Primer Set Performance Suitability for Multiplex Q-PCR Assay Design. R.C. OSGOOD*, K.-L.C. HSU, and N.K. CHILDERS (*University of Alabama at Birmingham, USA*)
- 0422** FTIR Imaging Studies on Early Dental Caries with/without Polarization. X. YAO*, J.C. WHITT, P. SPENCER, and Y. WANG (*University of Missouri-Kansas City, USA*)

0423 Mutans Streptococci Genotyping by High-throughput REP-PCR. K.C. CHEON*, S.A. MOSER, J.F. WHIDDON, R.C. OS-GOOD, S. MOMENI, B. RAHIMA, J.D. RUBY, and N.K. CHILDERS (*University of Alabama at Birmingham, USA*)

0424 Efficacy of MI Paste Plus in Protecting Overdenture Abutments. B.L. FULLER*, R.L. ETtingER, J.D. HARLESS, M.M. HOGAN, and J.S. WEFEL (*University of Iowa, Iowa City, USA*)

0425 Caries Experiences in Cerebral Palsy Individuals with Oromotor Dysfunction. A.K.B. JACOB*, J.C.D.S. ZIDOI, D.A. DUARTE, and M.T.B.R. SANTOS (*UNICSUL, São Paulo, Brazil*)

0426 Effects of Ozone and CO₂ Laser on Dental Caries Progression. K.A. ALI*, R. SEGHI, M. MOHSEN, M. SALAH EL DIN, M. HASAN, and H. ABD EL MAGUID (*College of Dentistry, Suez Canal University, Egypt, and Ohio State University, Columbus, USA*)

Seq#: 68 **Thursday, 3 April 2008, 2:45 p.m. - 3:45 p.m.**
Poster Session, Trinity I - Exhibit Hall

Dental Anesthesiology Research - Student Posters

0427 Intra-operative Local Anesthesia and Anesthesiologist Intervention during Pediatric Dental Surgery. A.K. WATTS*, T. SMITH, S. THIKKURISY, M. SMILEY, and D. McTIGUE (*The Ohio State University, Columbus, USA*)

0428 Comparing Skin Refrigerant with Topical Anesthetic as a Pre-injection Anesthetic. A. KOSARAJU* and K. VANDEWALLE (*USAF, Lackland AFB, TX, USA*)

0429 Development of a Computer-based Dental Anesthetic Dosage Calculator. J. WRIGHT*, K. ADLER-STORTIHZ, and A. JESKE (*University of Texas Health Science Center at Houston—Dental Branch, USA*) (2006 AADR Student Research Fellowship Winner)

Seq#: 69 **Thursday, 3 April 2008, 2:45 p.m. - 3:45 p.m.**
Poster Session, Trinity I - Exhibit Hall

Mineralized Tissue - Structure/Function of Protein and Mineral

0430 Mechanical Loading is Critical for Enamel and Dentin Formation. D. MA*, S. YU, V. DUSEVICH, P.C. DECHOW, and J.Q. FENG (*Baylor College of Dentistry, TX A&M Health Science Center, Dallas, TX, USA*)

0431 Structure, Composition, and Mechanical Properties of Overlap Cementum at the CEJ. S.P. HO, P. SENKYRIKOVA*, R. CHOI, C. LI, S.J. MARSHALL, W. YUN, and G.W. MARSHALL (*University of California - San Francisco, USA*)

0432 SLE-associated Osteoporosis Due to Increased Osteoclast Activity, Decreased Osteoblast Activity. I.S. KAWAS*, T. YAMAZA, W. SONOYAMA, A. LE, S. SHI, and K. AKIYAMA (*University of Southern California School of Dentistry, Los Angeles, USA*)

0433 Distribution of SIBLING Proteins in Condylar Cartilage of Rat Mandible. V.P. GANDHI*, Y. SUN, I. MACIEJEWSKA, R. HINTON, and C. QIN (*Baylor College of Dentistry, Dallas, TX, USA*)

0434 Effects of Age and Exercise on Bone Tissue Quality. S.R. OBREITER*, N.D. SAHAR, M.S. RON, L.A. WINKEL, and D.H. KOHN (*University of Michigan, Ann Arbor, USA*) (2006 AADR Student Research Fellowship Winner)

0435 Physical-Chemical Conditions for Hierarchical Amelogenin Self-assembly. Y. SEO*, W. LI, L. ZHU, S.J. MARSHALL, G.W. MARSHALL, and S. HABELITZ (*University of California-San Francisco, USA*)

0436 Molecular Structure of the Dentin-Enamel Junction using Confocal Raman Microscopy. C. XU*, X. YAO, M.P. WALKER, and Y. WANG (*University of Missouri-Kansas City, USA*)

0437 Phospho-proteomics of DMP-1. Y. DUAN*, P.N. TENG, B.W. DAY, and C. SFEIR (*University of Pittsburgh, PA, USA*)

0438 Ethnic Background Influences the Crack Growth Resistance of Dentin. D. BAJAJ, J. IVANCIK*, and D. AROLA (*University of Maryland Baltimore County, USA*)

0439 Dynamic Processing of Recombinant Dentin-Sialoprotein-Phosphoryn. V. GODOVIKOVA* and H.H. RITCHIE (*University of Michigan, Ann Arbor, USA*)

Seq#: 70 **Thursday, 3 April 2008, 2:45 p.m. - 3:45 p.m.**
Poster Session, Trinity I - Exhibit Hall

Oral & Maxillofacial Surgery - Student Posters

0440 Caries Experience and Periodontal Pathology in Erupting Third Molars. N. AHMAD, S. GELESKO*, D. SHUGARS, R. WHITE, Jr., G. BLAKEY, R. HAUG, S. OFFENBACHER, and C. PHILLIPS (*University of North Carolina, Chapel Hill, USA*)

0441 Third Molar Periodontal Pathology and a Systemic Inflammatory Response. M. DEMO*, M. PARTRICK, R. WHITE, Jr., G. BLAKEY, S. OFFENBACHER, and C. PHILLIPS (*University of North Carolina, Chapel Hill, USA*)

0442 Third Molars with Orthodontics and Orthognathic Surgery. D.W. PARKER, II*, W.R. PROFFIT, R. WHITE, Jr., C. PHILLIPS, and T.A. TURVEY (*University of North Carolina, Chapel Hill, USA*)

0443 Factors Associated with OMFS Residents Entering Academic Positions. A. SARRAF*, O. ABUBAKER, and D. LASKIN (*Virginia Commonwealth University - VCU/MCV, Richmond, USA*)

0444 Recovery after Orthognathic Surgery: Short-term, Health-related Quality-of-Life Outcomes. C. PHILLIPS, B. LEWALLEN*, G. BLAKEY, and M. JASKOLKA (*University of North Carolina, Chapel Hill, USA*)

0445 3D Analysis of Post-surgical Treatment Changes following Mandibular Advancement. B. BURKE*, L.H.S. CEVIDANES, A. MOTTA, and C. PHILLIPS (*University of North Carolina, Chapel Hill, USA*) (2007 AADR Student Research Fellowship Winner)

0446 VEGF Enhances Bone Regeneration in Critical-sized Bone Defects. K.A. SMITH*, M. ELMOFTY, A. EL-REMESSY, and M. SHARAWY (*Medical College of Georgia, Augusta, USA*)

0447 Novel Insights into Genetic Basis of High-grade Oral Spindle-cell Carcinoma. R. CHUANG* and D.L. CROWE (*USC School of Dentistry, Los Angeles, CA, USA*)

0448 Ethnic Differences in Pain Experience and Side-effects with Oral Surgery. J. OJEDA, Jr.*, M.F. STAVROPOULOS, K. VIRTUSIO, L. QUINTERO, R. BALUYOT, S. TOMALTY, and B. HASTIE (*University of Florida College of Dentistry, Gainesville, USA*)

0449 WITHDRAWN

0450 WITHDRAWN

Seq#: 71 **Thursday, 3 April 2008, 2:45 p.m. - 3:45 p.m.**
Poster Session, Trinity I - Exhibit Hall

Periodontal Research - Diagnosis / Epidemiology - Periodontal Research: Diagnosis/Epidemiology

0451 Factors Affecting Supragingival Biofilm Composition. I. Plaque Mass. N. VEIGA*, M. PATEL, X. SONG, T. YASKELL, R.P. TELES, S. SOCRANSKY, and A.D. HAFFAJEE (*Forsyth Institute, Boston, MA, USA*)

0452 Factors Affecting Supragingival Biofilm Composition. II. Tooth Position. T. YASKELL*, M. PATEL, X. SONG, N. VEIGA, R.P. TELES, S. SOCRANSKY, and A.D. HAFFAJEE (*Forsyth Institute, Boston, MA, USA*)

0453 Periodontal, Bacteriological, Immunological, and Inflammatory Parameters in the Same Subject. A.P. DASANAYAKE*, N. CHHUN, A.C. TANNER, R. CRAIG, A. MOORE, S.C. LU, and A. KAMER (*New York University, USA*)

0454 Periodontal Disease and Prevalence of Periodontal Pathogens in Guatemalan Schoolchildren. E. MILIÁN*, R. AGUIRRE, R. SÁNCHEZ, R. PONCE, M. GONZÁLEZ, V. LIMA, B. AGUIRRE, L. BARRIOS, S. CASTELLANOS, E. COJULÚN, J. CHINCHILLA, I. ECKERT, S. GUTIERREZ, W. HERRERA, F. HIDALGO, A. ORANTES, A. QUEVEDO, and A. RUBIO (*Universidad de San Carlos de Guatemala, Guatemala*)

0455 OOPs III Diagnostic Agars Inoculated with Human Saliva. S. LEITZSCH* and D. RICCI-NITTEL (*Johnson & Johnson Healthcare Products - A Division of McNeil, PPC, Morris Plains, NJ, USA*)

0456 Association of Interleukin-1B Gene Polymorphisms and Haplotype Structure with Periodontitis. S.J. MIN*, P. EMECEN, Ö. ÖZER YÜCEL, E. YILMAZ, R.M. NOHUTCU, and J.D. WALTERS (*Ohio State University, Columbus, USA*)

0457 Association among Periodontal Disease, Diabetes, and Pro-inflammatory Genetic Polymorphisms. N.J. LOPEZ* (*University of Chile, Santiago*)

0458 Association of Periodontal Disease with Gastrointestinal Carcinoma. M.A. REYNOLDS*, A.J.G. BOS, M.E. AICHELMANN-REIDY, K. CHOE, D.M.P. PADILHA, and L. FERRUCCI (*University of Maryland, Baltimore, USA*)

0459 Chronic Kidney Disease Prediction Model Includes Periodontal Status. M.A. FISHER* and G.W. TAYLOR (*Case School of Dental Medicine, Cleveland, OH, USA*)

0460 Risk Estimates of Root-filling Quality in Apical Periodontitis, Multilevel Analyses. M. HAKEBERG* and F. FRISK (*Jönköping University, Sweden*)

Seq#: 72 **Thursday, 3 April 2008, 2:45 p.m. - 3:45 p.m.**
Poster Session, Trinity I - Exhibit Hall

Periodontal Research - Pathogenesis - Periodontal Pathology Host Responses

0461 Interleukin-1 Concentrations within Gingiva during the Progression of Periodontal Disease. S.R. LESTER*, R.B. JOHNSON, J.L. BAIN, and F.G. SERIO (*University of Mississippi Medical Center, Jackson, USA*)

0462 Hyper-responsive Trait among Children with Aggressive Periodontitis. J.L. WIEDEY*, I. MAGNUSSON, M.J. CLARE-SALZLER, I. AUKHIL, L. SHADDOX, and S.M. POP (*University of Florida, Gainesville, USA*)

0463 Evaluation of GCF Local Chemical Mediators in Aggressive Periodontitis Patients. L. ACOSTA, J. TOBLER*, B. ALFANT, E. BIMSTEIN, I. MAGNUSSON, I. AUKHIL, L. SHADDOX, and S. POP (*University of Florida, Gainesville, USA*)

0464 Peripheral Effects of Periodontitis in Rats: Role of Nitric Oxide. B.S. HERRERA*, R. MARTINS-PORTO, P. CAMPI, M. HOLZHAUSEN, S.A. TEIXEIRA, L.C. SPOLIDÓRIO, and M.N. MUSCARA (*University of São Paulo, Brazil*)

0465 Interleukin-11, Interleukin-1β, and Pathogenesis of Periodontal Inflammation. Ö. ÖZER YÜCEL, E. BERKER*, S. GARIBOGLU, and H. OTLU (*Hacettepe University, Ankara, Turkey*)

0466 MMP-3 Regulation by IL-1β in Human Hereditary Gingival Fibromatosis Fibroblasts. W.A. HAMMONTREE*, D. TIPTON, and M. DABBOUS (*University of Tennessee, Memphis, USA*)

0467 Cigarette Smoke Condensate Affects Human Gingival Fibroblasts' Proliferation and Viability. W. ZHANG* and L.J. WINDSOR (*Indiana University School of Dentistry, Indianapolis, USA*)

0468 Analysis of Anthrax 2 Expression in Gingiva and Skin. R. MURALIDHARAN*, P.S. HART, S.I. JANG, D. PALLOS, S.K. LEE, and T.C. HART (*National Institutes of Health, Bethesda, MD, USA*)

0469 Induction of Apoptosis in Senescent Gingival Fibroblasts. P. XENOUDI*, A.Y. SPENCER, S. VASTARDIS, and T.E. LALLIER (*Louisiana State University, New Orleans, USA*)

0470 EMMPRIN Expression in Periodontal Tissues and its Correlation with MMP-9. S. BODAPATI*, R.L. WELTMAN, N. VINGNESWARAN, A.J. MORETTI, and C.M. FLAITSZ (*University of Texas - Houston/Health Science Center, USA*)

0471 Effect of Rosiglitazone on Alveolar Bone Loss in Experimental Periodontitis. R. MARTINS-PORTO*, S.A. TEIXEIRA, A.A. VARRIANO, B.S. HERRERA, P. CAMPI, A. MAIA-DANTAS, T.G. ZANET, M. FENYO-PEREIRA, S.K.P. COSTA, L.C. SPOLIDÓRIO, and M.N. MUSCARA (*University of São Paulo, Brazil*)

Seq#: 73 **Thursday, 3 April 2008, 2:45 p.m. - 3:45 p.m.**
Poster Session, Trinity I - Exhibit Hall

Periodontal Research - Therapy - Student Posters

0472 Clinical Decision-making and Periodontal Treatment - General Dentists' Perspectives. C.A. LEE*, P. RICHARDS, and M.R. INGLEHART (*University of Michigan, Ann Arbor, USA*)

0473 Differences between Biofilm Growth before and after Periodontal Therapy. S. RESPOSO*, J. TOBLER, B. ALFANT, J. GOLLWITZER, C. WALKER, and L. SHADDOX (*University of Florida, Gainesville, USA*)

0474 Ultrasonic Scaler Tip Oscillation and the Effect of Water Flow. B. FELVER*, A.D. WALMSLEY, and S.C. LEA (*University of Birmingham, UK*)

0475 3D Investigation of Ultrasonic Scaling Tip Motion. B. FELVER, R.L. POOLE, A.D. WALMSLEY*, and S.C. LEA (*University of Birmingham, UK*)

0476 Radiographic Assessment of Maxillary Sinus Anatomy Effects on Sinus Augmentation. K.L. TIBBETTS*, P.V. NUMMIKOSKI, and T. OATES (*University of Texas - San Antonio / Health Science Ctr., USA*)

0477 Chlorhexidine Diacetate Delivery System: Phase I Clinical Trial. S.M. VAN SCOYOC*, H.R. HOWELL, A.D. KASHUBA, D.A. BARROW, K.L. MOSS, D.W. PAQUETTE, and S. KALACHANDRA (*University of North Carolina, Chapel Hill, USA*)

0478 Characterization of Clarithromycin Transport by Human Granulocytes. O. GBEMI* and J.D. WALTERS (*Ohio State University, Columbus, USA*)

Seq#: 74 **Thursday, 3 April 2008, 2:45 p.m. - 3:45 p.m.**
Poster Session, Trinity I - Exhibit Hall

Pharmacology, Therapeutics, & Toxicology - Student Posters

0479 Incidence of Osteoradionecrosis with Concurrent Oral Bisphosphonate Therapy. L. STRANGE*, P. SANDOW, D. CHANG, and J. RILEY (*University of Florida, Gainesville, USA*)

0480 Effects of Xanomeline at the M3 Muscarinic Receptor. M.J. NOETZEL*, M.K.O. GRANT, and E.E. EL-FAKAHANY (*University of Minnesota, Minneapolis, USA*)

0481 96-well High-throughput Wound Assay for Cell Migration. R. CLINE, Jr.*, C. COWAN, and K. SVOBODA (*Baylor College of Dentistry, Dallas, TX, USA*)

0482 Identification of Antibacterial Compounds in Lo Han Kuo Fruit Extract. Y. ZHENG*, J.L. EBERSOLE, and C.B. HUANG (*University of Kentucky, Lexington, USA*)

Neuroscience / TMJ - Student Abstracts

- 0483** Peripheral Effects of Cannabinoids are Mediated via TRPV1 and TRPA1. N.B. RUPAREL*, A.M. PATWARDHAN, A.N. AKOPIAN, and K. HARGREAVES (*University of Texas - San Antonio / Health Science Ctr., USA*)
- 0484** Tumor Necrosis Factor Receptor I Expression in Inflamed Human Pulp. K.C. LUFF*, A.A. KHAN, G.M. PERRY, M.A. HENRY, and K.M. HARGREAVES (*University of Texas - San Antonio / Health Science Ctr., USA*)
- 0485** Characterization of a Novel Assay for Orofacial Hyperalgesia and Allodynia. S. PUTTHOFF*, J. FEHRENBACHER, and K.M. HARGREAVES (*University of Texas - San Antonio / Health Science Ctr., USA*)
- 0486** Era Increases following Adjuvant-induced Inflammation in the Female Rat TMJ. J. PURI*, B. HUTCHINS, and P.R. KRAMER (*Baylor College of Dentistry, Dallas, TX, USA*)
- 0487** Regulation of Peptidergic Secretory Granule Transport by Neuronal Stimulation. J. SOBOTA*, B. EIPPER, and R. MAINS (*University of Connecticut, Farmington, USA*)
- 0488** RT-PCR Examination of Pro-inflammatory Cytokine Levels in NPY Knockout Mice. J. REED*, N.D. DAVIS, S. JENKINS, and R. SPEARS (*Baylor College of Dentistry, Dallas, TX, USA*)
- 0489** Diffuse Noxious Inhibitory Controls Observed across the Lifespan. L. ATWELL-RICE*, J. RILEY, C.K. KING, F. WONG, and A.P. MAUDERLI (*University of Florida, Gainesville, USA*)
- 0490** Nerve Density in Normal and Carious/Non-painful Human Dental Pulp. A.A. WOOD*, G.M. PERRY, and M.A. HENRY (*University of Texas - San Antonio / Health Science Ctr., USA*)
- 0491** Nav1.6 Sodium Channel Expression in Rat Model for Trigeminal Neuralgia. J.J. BRUGGEMAN*, G.M. PERRY, S.R. LEVINSON, and M.A. HENRY (*University of Texas - San Antonio / Health Science Ctr., USA*)
- 0492** Decreased Uncertainty of TMJ Disc Position using MRI Intermediate Step. J.J. LONG*, Y.M. GONZALEZ, R. OHRBACH, and K. KARTHA (*State University of New York at Buffalo, USA*)
- 0493** $\beta 1$ Adrenergic Receptor Expression on Human Dental Pulp Neurons. A. MAGGIO*, J. VELA, G.M. PERRY, M.A. HENRY, and K.M. HARGREAVES (*University of Texas - San Antonio / Health Science Ctr., USA*)
- 0494** Functional Imaging of CNS Regulatory Processes. A. CHORAK*, S. FOLGER, S. SMITH, and G. ESSICK (*University of North Carolina, Chapel Hill, USA*) (2007 AADR Student Research Fellowship Winner)
- 0495** Characteristic Mouth Opening: a Precise Measurement of Vertical Mandibular Movements. K.L. DECKER*, M.T. JOHN, D.R. NIXDORF, and E. SCHIFFMAN (*University of Minnesota, Minneapolis, USA*)
- 0496** Regional Stress Relaxation Characteristics in the Porcine Temporomandibular Joint Disc. M.A. KLONOWSKI*, S.O. BURKE, S.D. FENING, and B.J. SINDELAR (*Ohio University, Athens, USA*)
- 0497** Increased Expression of Sodium Channel Na_v1.7 in Painful Human Teeth. S. LUO*, G.M. PERRY, G. HELESIC, S.R. LEVINSON, and M.A. HENRY (*University of Texas - San Antonio / Health Science Ctr., USA*)
- 0498** Estrogen Effects on Signaling in Trigeminal Ganglion during TMJ Inflammation. H. KAMARA*, J. STATESON, J. PURI, and J. REUBEN (*Baylor College of Dentistry/TAMHSC, Dallas, TX, USA*)

- 0499** Fibrochondrocyte Behavior on Titanium Dioxide Nanofilms. S. RONALD* and D.K. MILLS (*Louisiana Tech University, Ruston, USA*)
- 0500** Evaluation of TRPV1 on Thermal Operant Orofacial Pain Behaviors. P. WEAVER*, H. ROSSI, A. JENKINS, W. MALPHURS, and J. NEUBERT (*University of Florida College of Dentistry, Gainesville, USA*)
- 0501** Neuropeptide Y Knockout Results in Altered TMJ Neuropeptide Levels. N.D. DAVIS*, S. JENKINS, P. PRIOUR, and R. SPEARS (*Baylor College of Dentistry, Dallas, TX, USA*)
- 0502** Up-regulation of C5aR Expression during TMJ Inflammation. J. STATESON*, H. KAMARA, J. PURI, and J. REUBEN (*Baylor College of Dentistry/TAMHSC, Dallas, TX, USA*)

Craniofacial Biology - Dental and Profile Changes Accompanying Orthodontic Treatments

- 0503** WITHDRAWN
- 0504** Orthodontic Overjet Correction Effects on Lip Prominences and Form. M.S. MARURI*, R.S. MASELLA, and J.G. BURCH (*Nova Southeastern University, Fort Lauderdale, FL, USA*)
- 0505** Comparing Incisor Inclination in Class III Surgery and Camouflage Patients. B.A. TROY*, H.W. FIELDS, K.W.L. VIG, S. SHANKER, and W.M. JOHNSTON (*Ohio State University, Columbus, USA*)
- 0506** Assessment of Orthodontic Treatment Outcomes using the PAR Index. D. LIBOV*, J.G. BURCH, and P.C. HARDIGAN (*Nova Southeastern University, Fort Lauderdale, FL, USA*)
- 0507** Maxillary Expansion and Stability in Cleft and Non-cleft Patients. T.-L.N. TRAN, S.J. LINDAUER, E. TUFEKCI, and B. SHROFF (*Virginia Commonwealth University - VCU/MCV, Richmond, USA*)
- 0508** Assessing Post-orthodontic Change using Two Occlusal Indices. J.M. D'AGOSTINI* and M. VALIATHAN (*Case Western Reserve University, Cleveland, OH, USA*)
- 0509** Interrelationships of Various Facial Axes, and Anterior and Posterior Facial Heights. L.M. ANDRIA, E. BROPHEY*, and J. FAJA-FERENDEZ (*Medical University of South Carolina, Kiawah Island, USA*)
- 0510** Rating of Canine Substitution Esthetics. C.M. FARAH*, E. TUFEKCI, and S.J. LINDAUER (*Virginia Commonwealth University - VCU/MCV, Richmond, USA*)
- 0511** Self-ligated vs. Elastomeric Orthodontic Brackets: Quantitative Comparison of Plaque Bacteria. P. PELLEGRINI*, R. SAUERWEIN, T. FINLAYSON, J. KIMMELL, I. KASIMI, D. COVELL, Jr., T. MAIER, and C.A. MACHIDA (*Oregon Health & Science University, Portland, USA*)
- 0512** Effect of Pre-cure Movement on Orthodontic Bracket Bond Strength. T.L. ROBERTS, B. LEYPOLDT*, S.J. LINDAUER, and E. TUFEKCI (*Virginia Commonwealth University - VCU/MCV, Richmond, USA*)
- 0513** Validity of Digital and Plaster PAR Index Scores. C.K.-S. ANDREWS*, A. FIRESTONE, F.M. BECK, and R. RASHID (*Ohio State University, Columbus, USA*)

Craniofacial Biology - ECM of the Temporomandibular Joint and Periodontal Ligament

- 0514** Osteopontin and RANKL Expression in Orthodontic Tooth Movement. C. WALKER*, Y. ITO, S. DANGARIA, X. LUAN, and T.G.H. DIEKWISCH (*University of Illinois - Chicago, USA*)
- 0515** BMP2, FGF2, and Dlx3 in Tissue-specific Dental Stem Cell Differentiation. S.J. DANGARIA*, Y. ITO, S. WALKER, X. LUAN, and T. DIEKWISCH (*University of Illinois - Chicago, USA*)
- 0516** Type IX Collagen Distribution in Human Periodontal Ligament. L. DAVIS*, R.W. TAYLOR, and J. REUBEN (*Texas A&M Health Science Center, Baylor College of Dentistry, Dallas, USA*)
- 0517** Microvasculature of Normal Juvenile and Adult Porcine TMJ Discs. M.F. MERRIMAN* (*Ohio University, Athens, USA*)
- 0518** Biphasic Viscoelastic Properties of Human TMJ Disc. J. KUO*, T. BACRO, and H. YAO (*Clemson University, Charleston, SC, USA*)
- 0519** Alternative Splicing of PRG4 in the Temporomandibular Joints of Baboons. J.S. McDANIEL*, S.B. MILAM, and R.G. LEBARON (*University of Texas at San Antonio, USA*)
- 0520** The Role of Neural Crest Cells during Trigeminal Morphogenesis. A.S. GHIYA*, C. MITGUTSCH, K. AU, B. WONG, and R.A. SCHNEIDER (*University of California - San Francisco, USA*)

Plenary Session - Careers in Dental and Craniofacial Research: The Good, The Bad and The Ugly—Mainly the Good!

Chairperson: G.W. Marshall

- 0521** 4:00 Panelist. G.W. TAYLOR* (*University of Michigan, Ann Arbor, USA*)
- 4:15 Panelist. M.W. HEFT* (*University of Florida, Gainesville, USA*)
- 4:30 Panelist. M. MacDOUGALL* (*University of Alabama, Birmingham, USA*)
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Seq#: 79 **Friday, 4 April 2008, 8:00 a.m. - 9:30 a.m.**
Symposium, Room: Monet Ballroom

Symposium - Genomics & Oral Pathogen Research: Making the Connection

Chairpersons: T. Brettin and G. Xie

- 0522** 8:00 My Dependency on *P. gingivalis* Genomics. A. PROGULSKE-FOX* (*University of Florida, Gainesville, USA*)
8:15 Microbial "Barcodes" to Define Oral Health. B.J. PASTER* (*The Forsyth Institute, Boston, MA, USA*)
8:30 Comparative Analyses and Genome Diversity of *Streptococcus gordonii*. S.R. GILL* (*SUNY-Buffalo School of Dental Medicine, NY, USA*)
8:45 The Genomic Story of Iron in *Porphyromonas gingivalis*. J.P. LEWIS* (*Virginia Commonwealth University, Richmond, USA*)
9:00 Human Microbiome Initiative (HMP) at NIH-NIDCR. R.D. LUNS福德* (*National Institute of Dental and Craniofacial Research [NIDCR], Bethesda, MD, USA*)

Seq#: 80 appears after Seq#: 90.

Seq#: 81 **Friday, 4 April 2008, 8:00 a.m. - 9:30 a.m.**
Symposium, Room: Grand Ballroom E

Symposium - TMJ Pain Mechanisms

Supported by: Baylor College of Dentistry, Texas A&M Health Science Center

Chairperson: P. Kramer

- 0524** 8:00 Immune Receptor Contributes to TMJ Inflammatory Pain. P.R. KRAMER* (*Baylor College of Dentistry, Dallas, TX, USA*)
8:25 Estrogen Status and Neural Correlates of TMJ Pain. D.A. BEREITER* (*University of Minnesota, Minneapolis, USA*)
8:45 Trigeminal Transition Zone and Deep Orofacial Pain. K. REN* (*University of Maryland, Baltimore, USA*)
9:05 Role of the Neuronal-Glial Cell Interactions with the Trigeminal Ganglia: Implications for TMJ Pathology and Therapy. P.L. DURHAM* (*Missouri State University, Springfield, USA*)

Seq#: 82 **Friday, 4 April 2008, 8:00 a.m. - 9:30 a.m.**
Oral Session, Room: Senators Lecture Hall

Behavioral, Epidemiologic, and Health Services Research - Oral Health in Children

Chairpersons: M. Inglehart and M. Dittmyer

- 0525** 8:00 Amoxicillin Use during Infancy and Late-erupting Permanent Tooth Fluorosis. L. HONG*, S. LEVY, J.J. WARREN, and B. BROFFITT (*University of Missouri-Kansas City, USA*)
0526 8:15 Elementary Schoolteachers and Children's Oral Health - Focus Group Analyses. M.R. INGLEHART*, B. KRITT, and D. BRISKIE (*University of Michigan, Ann Arbor, USA*)
0527 8:30 A Theoretical Model Development for Caries Risk Assessment. M. DITMYER*, C. MOBLEY, and C. DEMOPOULOS (*University of Nevada, Las Vegas, School of Dental Medicine, USA*)
0528 8:45 Is the Placement of Dental Sealants Related to Caries Risk? W. RUSH*, D.B. RINDAL, A.M. SCHMIDT, W. OUYANG, O.V. GODLEVSKY, S.E. ASCHE, and C.W. AMUNDSON (*Health Partners, Minneapolis, MN, USA*)
0529 9:00 Dental Utilization by Medicaid-enrolled Children with Mental Retardation or Developmental Disabilities. D. CHI*, P. DAMIANO, E. MOMANY, R.A. KUTHY, and J. CHALMERS (*University of Iowa, Iowa City, USA*)

0530 9:15 DMFT in Children is Associated with Multiple Maternal Factors. D. POLK*, R. WEYANT, M.L. MARAZITA, R.J. CROUT, D.W. McNEIL, and G. BARKANIC (*University of Pittsburgh, PA, USA*)

Seq#: 83 **Friday, 4 April 2008, 8:00 a.m. - 9:30 a.m.**
Oral Session, Room: Grand Ballroom A

Craniofacial Biology - Craniofacial Developmental Biology and Genetics

Chairpersons: S. Beiraghi and B. Amendt

- 0531** 8:00 Biglycan and Decorin Expressed in MEE Cells during Palatal Fusion. N.E. CRESPO*, W. YU, R. KAYNE, and K.K.H. SVOBODA (*Baylor College of Dentistry, Dallas, TX, USA*)
0532 8:15 EGF Receptor Inhibitor sc-120 Disrupts TGF- β Activity in Sutures. J. KAYNE*, J.T. RAWLINS, C.R. FERNANDEZ, and L.A. OPPERMAN (*Texas A&M Health Science Center, Baylor College of Dentistry, Dallas, USA*)
0533 8:30 TGF- β Signaling Regulates Craniofacial Muscle Development through a Non-autonomous Mechanism. R. HOSOKAWA*, M. URATA, K. OKA, X. XU, P. BRINGAS, Jr., and Y. CHAI (*University of Southern California, Los Angeles, USA*)
0534 8:45 A New Wnt/Beta-catenin Signaling Mechanism Controlling Orofacial Development. M. AMEN, S. ROTHCHILD, J. WANG, and B.A. AMENDT* (*Texas A&M Health Science Center, Houston, USA*)
0535 9:00 Mutation of Wnt5A in Patients with Autosomal-dominant Robinow Syndrome. S. BEIRAGHI*, A.D. PERSON, C.M. SIEBEN, S. HERMANSON, A.N. NEUMANN, M.E. ROBU, J.R. SCHLEIFFARTH, H. VAN BOKHOVEN, J. HOOGEBOOM, J.F. MAZZEU, A. PETRYK, H.G. BRUNNER, S.C. EKKER, and J.L. LOHR (*University of Minnesota, Minneapolis, USA*)
0536 9:15 Homology Modeling and Crystal Structure Determination of BMP Receptor Kinases. J.C. GROPPPE*, M.C. FOSHAY, E.M. SHORE, and F.S. KAPLAN (*Baylor College of Dentistry, Dallas, TX, USA*)

Seq#: 84 **Friday, 4 April 2008, 8:00 a.m. - 9:30 a.m.**
Oral Session, Room: Grand Ballroom D

Dental Materials 4: Clinical Trials, Biocompatibility, and Biologic Effects - Keynote Address and Clinical Trials

Chairpersons: S. Antonson and F. Burke

- 0537** 8:00 Keynote Address: Biocompatibility of Dental Materials: a Confusing and Uncomfortable Science. J.C. WATAHA* (*Medical College of Georgia, Augusta, USA*)
0538 8:30 Variations in Restoration Survival Rates among Individual Dentists. F.J.T. BURKE* and S. LUCAROTTI (*University of Birmingham, England, UK*)
0539 8:45 Clinical Evaluation of CAD/CAM Zirconium Crowns and Fixed Partial Dentures. D.J. FASBINDER*, J.B. DENNISON, and G.F. NEIVA (*University of Michigan, Ann Arbor, USA*)
0540 9:00 Three-year Follow-up Outcomes of Bonded Ceramic Posterior Restorations. C. STANFORD*, D. DAWSON, S. GERALDELI, J.S. WEFEL, S. TIMMONS, D.S. COBB, M. HERNANDEZ, S. GUZMAN-ARMSTRONG, T. FLYNN, C. ASMUSSEN, S. HANSEN, and D. STARK (*University of Iowa, Iowa City, USA*)
0541 9:15 Clinical Study on Surface Protection for Newly Erupting Molars: 6-month Results. S.A. ANTONSON*, J. CRUTCHFIELD, S. BRENER, D.E. ANTONSON, J. LARUMBE, and P. HARDIGAN (*Nova Southeastern University, Fort Lauderdale, FL, USA*)

Seq#: 85 **Friday, 4 April 2008, 8:00 a.m. - 9:30 a.m.**
Oral Session, Room: Grand Ballroom B

Dental Materials 6: Polymer-based Materials - Physical Properties and Performance - Mechanical Testing of Resin Composites

Chairpersons: W. De Rijk and N. Hofmann

0542 8:00 Bi-axial Flexure Strength of Composites Treated with Liquid Polishers. W. DE RIJK* and N.F. PECORA (*University of Tennessee, Memphis, USA*)

0543 8:15 Ormocer Matrix Composites Can Exhibit Sufficient Viscoelastic Stability. M. KALEEM*, J. SATTERTHWAITE, and D. WATTS (*University of Manchester, United Kingdom*)

0544 8:30 Compressive Modulus Testing of Mineralized Silk-based Biomaterial. R.A. DICKINSON*, S. STIPHO, J.R. PLOURDE, G. KUGEL, D. KAPLAN, G. LEISK, and H.J. KIM (*Tufts University, Boston, MA, USA*)

0545 8:45 Shear Strength of Dental Composite vs. Mineralized Silk-based Biomaterial. M.R. WIMMER*, J.R. PLOURDE, R.A. DICKINSON, G. KUGEL, E.H. DOHERTY, S. FERREIRA, and D. KAPLAN (*Tufts University, Boston, MA, USA*)

0546 9:00 Cusp Deflection during Polymerization of a Silorane or Control Materials. N. HOFMANN* and S. GRÜNHAGEN (*University of Wuerzburg, Germany*)

0547 9:15 *In vitro* Wear Resistance of Laboratory-processed Composite Resins. M.A. LATTA, W.W. BARKMEIER, and C. SCANLON, II* (*Creighton University, Omaha, NE, USA*)

Seq#: 86 **Friday, 4 April 2008, 8:00 a.m. - 9:30 a.m.**
Oral Session, Room: Sapphire

Geriatric Oral Research

Chairpersons: J. Jones and A. Papas

0548 8:00 VA Dental Diabetes Study: Twelve-month Results. J.A. JONES*, D. MILLER, C. WEHLER, S. RICH, E. KAYE, L. McCOY, C. CHRISTIANSEN, J. ROTHENDLER, A. EMAM, and R. GARCIA (*Boston University and Department of Veterans Affairs, MA, USA*)

0549 8:15 Inflammation in the Periodontium in Old Age and 21-year Mortality. K. AVLUND* and P. HOLM-PEDERSEN (*University of Copenhagen, Denmark*)

0550 8:30 Reducing Aspiration Pneumonia in Dysphagic Adults: Baseline and 30-day Findings. D. BROTHWELL*, C.-A. YAKIUCHUK, E. GHIABI, M. BERTONE, S. BROWN, and M. LIARAKOS (*University of Manitoba, Winnipeg, MB, Canada*)

0551 8:45 Effects of Sialogogues on the Periodontal Status in Sjögren's Patients. M. SINGH*, P. STARK, M.L. SINGH, and A.S. PAPAS (*Tufts University Dental, Boston, MA, USA*)

0552 9:00 Morphometric Analysis of Crown Angulations in Elderly with Many Teeth. E. MOTEGI*, M. NOMURA, A. FUMA, Y. FUKAGAWA, M. KANOU, K. SUEISHI, and S. OKANO (*Tokyo Dental College, Japan*)

0553 9:15 Use of Sodium Channel Blocker to Relieve Dryness in Sjögren's. M.L. SINGH, A.S. PAPAS*, P.C. FOX, M.T. BRENNAN, J.A. SHIP, K.B. JOHNSON, and J. ST GEORGE (*Tufts University School of Dental Medicine, Boston, MA, USA*)

Seq#: 87 **Friday, 4 April 2008, 8:00 a.m. - 9:30 a.m.**
Oral Session, Room: Emerald

Mineralized Tissue - Keynote Address and Genetic Mutations

Chairpersons: P. Trackman and J. Bartlett

0554 8:00 Keynote Address: Using Human Genetic Approaches to Identify Genes for Common Diseases: Cleft Lip, Palate as a Model. A.C. LIDRAL* (*University of Iowa, Iowa City, USA*)

0555 8:30 Quantification of TDO-associated Phenotypes and DLX3 c.571-574delGGGG Mutation. M. GOVIL*, M.A. TORAIN, M.L. MARAZITA, T.C. HART, D. SIMMONS, and J.T. WRIGHT (*University of Pittsburgh, PA, USA*)

0556 8:45 Increased Apoptosis in Transgenic Mouse Model of Tricho-dento-osseous Syndrome. S.J. CHOI*, J.Q. FENG, and T.C. HART (*National Institutes of Health, Bethesda, MD, USA*)

0557 9:00 Trabecular Bone Phenotype in Lysyl Oxidase Isoform Knockout Mice. L. ALSOFI, J. XU, Z.D. MASON, E.F. MORGAN, Y. DEGUCHI, M. YAMAUCHI, and P.C. TRACKMAN* (*Boston University Goldman School of Dental Medicine, MA, USA*)

0558 9:15 BMP2 is Necessary for Late Stages in Odontogenesis Post-natally. W. YANG*, D. GUO, J. GLUHAK-HEINRICH, M.A. HARRIS, A. LICHTLER, B.E. KREAM, J.Q. FENG, Y. MISHINA, and S.E. HARRIS (*U. of Texas Health Science Center at San Antonio, USA*)

Seq#: 88 **Friday, 4 April 2008, 8:00 a.m. - 9:30 a.m.**
Oral Session, Room: Metropolitan Ballroom

Pharmacology, Therapeutics, & Toxicology

Chairpersons: H. Grad and K. Kirkwood

0559 8:00 *In vitro* Model of Nicotine Penetration through Non-keratinized Oral Mucosa. J.P. TESENE*, C.A. SQUIER, M.J. MANTZ, and P.W. WERTZ (*The University of Iowa, Iowa City, USA*) (2007 AADR Student Research Fellowship Winner)

0560 8:15 Systems-based Analysis of Developmental Programming of Mammary Gland using Bayesian-variable Selection. C. BASTIAN*, T. KNUDSEN, A. SINGH, M. LUIJTEN, A. DEVRIES, and A. PIERSMA (*University of Louisville, KY, USA*)

0561 8:30 Release of Corticosteroids from EVA Copolymer for Oral Lichen Planus. A.E. CURRAN*, O.M. PATEL, J. LI, D.A. BARROW, and S. KALACHANDRA (*University of North Carolina, Chapel Hill, USA*)

0562 8:45 Novel Core-shell Nanocapsules for Localized Growth Factor Delivery. Z.S. HAIDAR*, R.C. HAMDY, and M. TABRIZIAN (*McGill University, Montreal, QC, Canada*)

0563 9:00 Sodium Lauryl Sulfate (SLS) Reduces Salivary and Plaque Fluoride Uptake. G.M. WHITFORD*, H.T. AKINS, and S.M. ADAIR (*Medical College of Georgia, Augusta, USA*)

0564 9:15 Direct Analysis of Triclosan Deposition on Hydroxyapatite by Spectroscopic Methods. J.L. HALUKO*, D. PERU, A. SIEBELS, G. XU, and R. SUBRAMANYAM (*Colgate-Palmolive Company, Piscataway, NJ, USA*)

Seq#: 89 **Friday, 4 April 2008, 8:00 a.m. - 9:30 a.m.**
Oral Session, Room: Miro

Pulp Biology & Regeneration Research - Cell and Molecular Assessments of Pulp Infection, Pain Induction, and Pulp Regeneration

Chairpersons: S. Whitson and A. Fouad

0565 8:00 Diversity of Endodontic Microflora in Patients with Different Clinical Variables. A. FOUAD*, R. NANDAKUMAR, and B.J. PASTER (*University of Maryland, Baltimore, USA*)

0566 8:15 Lentiviral Vector-mediated Transduction of Human Mesenchymal Stem Cells. G.T.-J. HUANG*, S. SHI, F. DJOUAD, and R.S. TUAN (*University of Maryland Dental School, Baltimore, USA*)

0567 8:30 Distinguished Roles of DMP1 and FGF23 in Odontogenesis. S. YU, L. YE, B. JIANG, Y. XIE, and J.Q. FENG* (*Baylor College of Dentistry, TX A&M Health Science Center, Dallas, TX, USA*)

0568 8:45 Toll-like Receptors and Transforming Growth Factor- β 1 Modulate Odontoblast Bacterial Responses. O.V. HORST*, K.A. TOMPKINS, S.R. COATS, P.H. BRAHAM, R.P. DARVEAU, and B.A. DALE (*University of Washington, Seattle, USA*)

0569 9:00 Anatomical Analysis of TRPV1 and TRPV2 Expression in Dental Pulp. J.L. GIBBS* and A.I. BASBAUM (*University of California - San Francisco, USA*)

0570 9:15 Self-assembling Peptide Nanofiber Hydrogels Targeted for Dental Tissue Regeneration. K. GALLER*, V. YUWONO, A.C. CAVENDER, H. DONG, J.D. HARTGERINK, and R.N. D'SOUZA (*Baylor College of Dentistry, Biomedical Sciences, Dallas, TX, USA*)

Seq#: 90 Friday, 4 April 2008, 8:00 a.m. - 9:30 a.m.
Oral Session, Room: Topaz

Salivary Research - Keynote Address and Biomarkers in Saliva

Chairpersons: E. Helmerhorst and C. Miller

0571 8:00 Keynote Address: Proteomic Procedures for the Discovery of Biomarkers for Systemic Cancers. C. STRECKFUS* (*University of Texas - Houston/Health Science Center, USA*)

0572 8:30 Cardiovascular Biomarker Index in Saliva of Cardiac Patients. N. CHRISTODOULIDES*, P.N. FLORIANO, C.S. MILLER, J.L. EBERSOLE, J. SPERTUS, D.F. KINANE, M.J. NOVAK, S. STEWART, S. MOHANTY, P. DHARSHAN, S. ACOSTA, A. GOWRISANKAR, S. STEINHUBL, M. WATKINS, S. CROUCH, and J.T. McDEVITT (*University of Texas - Austin, USA*)

0573 8:45 Pancreatic Cancer Biomarkers in Saliva. B.G. ZIMMERMANN, J. FARRELL, A. AMMAR, M. ZHOU, Q. WEI, W. GHACHAM, B. HENSON, and D.T. WONG* (*University of California - Los Angeles, USA*)

0574 9:00 Effect of Inflammatory Arthritis on Periodontal Disease. J.W. MIRRIELES*, L.J. CROFFORD, V. HODGES, J. STEVENS, J.L. EBERSOLE, and C.S. MILLER (*University of Kentucky, Lexington, USA*)

0575 9:15 Cardiac Biomarkers in Oral Fluids of Acute Coronary Syndrome. C.S. MILLER*, J. STEVENS, D. DAWSON, J. McDEVITT, M.J. NOVAK, S. STEINHUBL, and J.L. EBERSOLE (*University of Kentucky College of Dentistry, Lexington, USA*)

Seq#: 80 Friday, 4 April 2008, 8:00 a.m. - 10:00 a.m.
Symposium, Room: Governors Lecture Hall

Symposium - NIDCR 60th Anniversary Symposium: Dental Practice-based Research - Practitioner-driven Evidence-based Dentistry

Supported by: NIDCR

Chairperson: D. DeNucci

0523 8:00 Practice-based Research Networks: the NIDCR Perspective. D.J. DeNUCCI* (*NIDCR, Bethesda, MD, USA*)

8:15 Practice-based Research: the PEARL Experience. J.A. SHIP* (*New York University, USA*)

8:30 Conducting Research in My Practice: Lessons Learned. Y.J. WONG* (*New York University, USA*)

8:45 Practice-based Research Networks: The PRECEDENT Experience. T. DeROUEN* (*University of Washington, Seattle, USA*)

9:00 Conducting Research in My Practice: Lessons Learned. J. GILLETTE* (*Community Health Partners Dental Practice, Bozeman, MT, USA*)

9:15 Practice-based Research Networks: the DPBRN Experience. G.H. GILBERT* (*University of Alabama, Birmingham, USA*)

9:30 Conducting Research in My Practice: Lessons Learned. P.L. BENJAMIN* (*Private Practice, Miami, FL, USA*)

9:45 Discussion.

Seq#: 91 Friday, 4 April 2008, 9:45 a.m. - 11:15 a.m.
Hands-on Workshop, Rosetta

Hands-on Workshop - Oral Pathogens Sequence Analysis and Comparative Study

Supported by: NIDCR

Chairperson: G. Xie

0576 9:45 Oralgen Database Introduction and Walk-through. T.S. BRETTIN* (*Los Alamos National Laboratory, NM, USA*)

10:30 Example of Comparative Analysis: Reductive Pathway Evolution, Paralog Emergence for New Function. G. XIE* (*Los Alamos National Laboratory, CA, USA*)

Seq#: 92 Friday, 4 April 2008, 9:45 a.m. - 11:15 a.m.
Symposium, Room: Monet Ballroom

Symposium - Bioactive and Caries-inhibiting Resin-based Materials

Chairpersons: J. Ferracane and H. Xu

0577 9:45 Enhanced Polymeric Dental Biomaterials Containing Bioactive Glasses. J.L. FERRACANE* (*Oregon Health & Science University, Portland, USA*)

10:05 Influence of Fluoride Compounds on the Release of Chlorhexidine from Sealing Resins. C. SHEN* (*University of Florida, Gainesville, USA*)

10:25 Remineralizing Resin-based Calcium Phosphate Cements and Compounds. S.H. DICKENS* (*Paffenbarger Research Center, Gaithersburg, MD, USA*)

10:45 Stress-bearing and Caries-inhibiting Nanocomposites. H.H.K. XU* (*University of Maryland, Baltimore, USA*)

11:05 Discussion.

Seq#: 93 Friday, 4 April 2008, 9:45 a.m. - 11:15 a.m.
Symposium, Room: Grand Ballroom E

Symposium - Stem Cells at Work

Chairperson: B. Clarkson

9:45 Stem Cells in Oral Cancer. I. MACKENZIE* (*Barts and The London, Queen Mary's School of Medicine and Dentistry, United Kingdom*)

10:00 Stem Cells in Oral Tissues. P.H. KREBSBACH* (*University of Michigan, Ann Arbor, USA*)

0578 10:15 Stem Cells in Dental Pulp. J.E. NÖR* (*University of Michigan, Ann Arbor, USA*)

Seq#: 94 Friday, 4 April 2008, 9:45 a.m. - 11:15 a.m.
Oral Session, Room: Miro

Cariology Research - Genetics, De-/Remineralization Studies

Chairpersons: A. Modesto and M. Cooper

0579 9:45 Genetic and Other Associations with Dental Caries in Mixed Dentition. M.L. MARAZITA*, M.E. COOPER, S.K. WENDELL, B.A. DILETTUSO, A.L. KUREICHYK, R.L. REGINA, M.L. BROWN, G.E. BARKANIC, R.J. CROUT, D.W. McNEIL, and R.J. WEYANT (*University of Pittsburgh, PA, USA*)

0580 10:00 Association Study of Candidate Genes for Dental Caries in Adults. M.E. COOPER*, S.K. WENDELL, B.A. DILETTUSO, A.L. KUREICHYK, R.L. REGINA, M.L. BROWN, G.E. BARKANIC, R. CROUT, D.W. McNEIL, R.J. WEYANT, and M. MARAZITA (*University of Pittsburgh, PA, USA*)

0581 10:15 NovaMin®+Fluoride Dentifrice Remineralizes Caries in Compromised Salivary Conditions *in vitro*. A.K. BURWELL* (*NovaMin Technology, Inc., Alachua, FL, USA*)

0582 10:30 Nucleating Properties of Hydroxyapatite-Protein Composites in Human Saliva. J.C. PESCHKE*, R. KLISS, T. POTH, C. BUCHERT, C. BRAUNBARTH, and H. SCHWEITZER (*SusTech GmbH & Co. KG, Darmstadt, Germany*)

0583 10:45 Fluoride Bioavailability Close to Professional Fluoride Applications. A.M. PFARRER*, G.D. WOOD, and B.R. SCHEME-HORN (*OMNI Preventive Care, A 3M ESPE Company, West Palm Beach, FL, USA*)

0584 11:00 Effect of Fluoride and Chlorhexidine Combination on Enamel Demineralization/Remineralization. A.R.D. GUIMARÃES, A. MODESTO*, C. TABCHOURY, R.S. VIEIRA, and J.A. CURY (*University of Pittsburgh, PA, USA*)

Seq#: 95 **Friday, 4 April 2008, 9:45 a.m. - 11:15 a.m.**
Oral Session, Room: Emerald

Craniofacial Biology - Dental Development and Genetics

Chairpersons: T. Diekwisch and H. Kapadia

0585 9:45 Enamel Defects in Methylmalonic Acidemia. C.W. BASSIM*, J.-P. GUADAGNINI, D.L. DOMINGO, C.P. VENDITTI, and T.C. HART (*National Institutes of Health, Bethesda, MD, USA*)

0586 10:00 Witkop Syndrome is Not Always Caused by MSX1 Mutation. H. KAPADIA*, G. MUES, S. POLLAN-WHITE, and R. D'SOUZA (*Baylor College of Dentistry, Dallas, TX, USA*)

0587 10:15 CP27 Transgenic Strategies Reveal Dental Lamina Expression and Enamel Phenotypes. Y. ITO, S. DANGARIA, C. WALKER, T. JIN, X. LUAN, and T.G. DIEKWISCH* (*University of Illinois - Chicago, USA*)

0588 10:30 Tbx1 Transcriptional Mechanisms and Tooth Development in Tbx1 Mutant Mice. H. CAO*, A. BALDINI, and B.A. AMENDT (*Texas A&M Health Science Center, Institute of Biosciences and Technology, Houston, USA*)

0589 10:45 Smad-dependent and -independent MAPK Pathways in Mediating Tooth Development. Y.P. HUNG*, X. XU, J. HAN, Y. ITO, C. DENG, and Y. CHAI (*University of Southern California, Los Angeles, USA*)

0590 11:00 Hand Proteins Control the Onset of Osteoblast Differentiation. N. FUNATO*, S. CHAPMAN, A.C. BARBOSA, E.N. OLSON, and H. YANAGISAWA (*University of Texas Southwestern Medical Center, Dallas, USA*)

Seq#: 96 **Friday, 4 April 2008, 9:45 a.m. - 11:15 a.m.**
Oral Session, Room: Grand Ballroom D

Dental Materials 7: Metal-based Materials - Keynote Address and Cast Titanium Alloys and Ni-Ti Endodontic Alloys

Chairpersons: M. Koike and S. Alapati

0591 9:45 Keynote Address: Metallic Materials Used in Dentistry. W.A. BRANTLEY* (*The Ohio State University, College of Dentistry, Columbus, USA*)

0592 10:15 Mechanical Properties of Cast Ti-Al and Ti-Al-Cu Alloys. M. KOIKE*, Q. GUO, J.P. FORD, and T. OKABE (*Baylor College of Dentistry, Dallas, TX, USA*)

0593 10:30 Conventional XRD and Micro-XRD Study of New Ternary Titanium Alloys. H.-C. CHOE*, M. IJIMA, W.A. BRANTLEY, and W.A.T. CLARK (*Chosun University and BK21, Gwangju, South Korea*)

0594 10:45 TMDSC Investigation of Transformations in NiTi Wires for Endodontic Instruments. S. ALAPATI*, R. DRAUGHN, W.A. BRANTLEY, W.A.T. CLARK, M. IJIMA, J. LIU, and W.B. JOHNSON (*Medical University of South Carolina, College of Dental Medicine, Charleston, USA*)

0595 11:00 STEM Observations of NiTi Wires for Rotary Endodontic Instruments. W.A. BRANTLEY*, W.A.T. CLARK, L. KO-VARIK, M. IJIMA, S. ALAPATI, J. LIU, and W.B. JOHNSON (*The Ohio State University, College of Dentistry, Columbus, USA*)

Seq#: 97 **Friday, 4 April 2008, 9:45 a.m. - 11:15 a.m.**
Oral Session, Room: Senators Lecture Hall

Education Research

Chairpersons: L. Johnson and E. Romberg

0596 9:45 Summative Evaluation of Simulations to Teach Genetics in Dental Education. L. JOHNSON*, C.A. MURDOCH-KINCH, J. HU, J. SIMMER, T.-J. OH, R. SLAYTON, H. SHARP, T. GREEN, and C. KLAUSNER (*University of Michigan, Ann Arbor, USA*)

0597 10:00 Effect of a Computer-aided Tool on Caries Detection by Students. L.H. KANO-WILSON*, A.G. FERREIRA ZANDONA, R.S. COMER, X. BAO, G.J. ECKERT, S. HARTANTO, J. KERNICK, and I. ZECKEL (*Indiana University School of Dentistry, Indianapolis, USA*)

0598 10:15 Tobacco Cessation Education in North Carolina Dental Hygiene Programs. J.L. ROOF*, L.L. PATTON, R.S. WILDER, C.A. PETERSON, and A.E. CURRAN (*University of North Carolina, Chapel Hill, USA*)

10:30 Discussion.

Seq#: 98 **Friday, 4 April 2008, 9:45 a.m. - 11:15 a.m.**
Oral Session, Room: Morocco

Implantology Research - Bone Regeneration and Testing Methods

Chairpersons: J. Jansen and E. Kontogiorgos

0599 9:45 Bone Response to CaP Cement Containing TGF- β 1-loaded Gelatin Microparticles. J.A. JANSEN*, D.P. LINK, J.J.P. VAN DEN BEUCKEN, J.G.C. WOLKE, and A. MIKOS (*Radboud University, Nijmegen Medical Center, Netherlands*)

0600 10:00 Ridge Preservation using a Flapless Technique with the Membrane Exposed. J. KIM*, T. GRIFFIN, and W. CHEUNG (*Tufts University, Boston, MA, USA*)

0601 10:15 Investigation of PDL Attachment to Treated Implant Surfaces. A.J. KEITH*, L.A. OPPERMAN, C.J. NELSON, P. PRIOUR, and R. SPEARS (*Texas A&M Health Science Center, Baylor College of Dentistry, Dallas, USA*) (2006 AADR Student Research Fellowship Winner)

0602 10:30 Determining Peri-implant Bone Strength: Is CT the Way Forward? T. GUDA*, S. OH, M. APPLEFORD, and J.L. ONG (*University of Texas at San Antonio, USA*)

0603 10:45 Removal Torque for Dental Implants Placed in Early Regenerate Bone. E.D. KONTOGIORGOS*, L.A. OPPERMAN, P.C. DECHOW, W.W. NAGY, and M.E. ELSALANTY (*Texas A&M Health Science Center, Baylor College of Dentistry, Dallas, USA*)

0604 11:00 Toughness as a Metric for Bone Tissue Engineering Scaffold Success. B. BATES*, T. GUDA, S. OH, M. APPLEFORD, and J. ONG (*University of Texas at San Antonio, USA*)

Seq#: 99 **Friday, 4 April 2008, 9:45 a.m. - 11:15 a.m.**
Oral Session, Room: Metropolitan Ballroom

Microbiology / Immunology and Infection Control - The Effects of Oral Microbes on Cells

Chairpersons: A. Honeyman and J. Mays

0605 9:45 Responses of Differentiated Epithelial Cells to Commensal and Pathogenic Bacteria. A. MOSCHIDIS, T. DESTA*, R. LAMONT, and D.T. GRAVES (*Boston University, MA, USA*)

- 0606** 10:00 Human PBMC Cytokine Response to *Aggregatibacter actinomycetemcomitans*. C. ANDERSON*, S. RHIM, A. DREYER, P. McDONOUGH, H. McDONNELL, D. CAPPELLI, and E. KRAIG (Wilford Hall Medical Center; Lackland AFB, TX, USA)
- 0607** 10:15 CMV-induced CEACAM1 Up-regulation and Effects on the Oral Mucosa. N. ALPERT*, T. TABATA, E. MAIDJI, J. HOOVER-FANG, and L. PEREIRA (University of California - San Francisco, USA)
- 0608** 10:30 Mechanisms of Social Stress Enhancement of Virus-specific Immune Memory. J.W. MAYES*, N.D. POWELL, T.L. PAPENFUSS, M. BAILEY, D.A. PADGETT, and J.F. SHERIDAN (Ohio State University; Columbus, USA)
- 0609** 10:45 WITHDRAWN
- 0610** 11:00 Neonatal-Fc-Receptor-mediated Transport of Bacterial Immune Complex into Periodontal Tissue. K. OHARA*, M. TAUBMAN, P. STASHENKO, and T. KAWAI (Forsyth Institute, Boston, MA, USA)

Seq#: 100 Friday, 4 April 2008, 9:45 a.m. - 11:15 a.m.
Oral Session, Room: Sapphire

Oral Medicine & Pathology - Oral Pathology

Chairpersons: S. Hu and M. Srinivasan

- 0611** 9:45 Human Papillomavirus in Proliferative Verrucous Leukoplakia. N. HOANG*, S. SILVERMAN, and J. PALEFSKY (University of California - San Francisco, USA)
- 0612** 10:00 Human Papillomavirus in Saliva and Tissue of Oral SCC Patients. M. SAHEBJAMEE*, M. BOORGHANI, S. GHAFARI, and G. ASADI (Tehran University of Medical Sciences, Iran)
- 0613** 10:15 Nitric Oxide Promotion of Collagen Expression by Normal/Diabetic Fibroblasts. A. MYERS*, B. SEIFERT, H.-H. CHUANG, W. ZHONG, D. DEAN, and V. SYLVIA (Wilford Hall Medical Center; Lackland AFB, TX, USA)
- 0614** 10:30 Salivary Biomarkers for Chronic Mucosal Inflammation. M. SRINIVASAN* and S. ZUNT (Indiana University School of Dentistry, Indianapolis, USA)
- 0615** 10:45 Role of Hypoxia and Angiogenesis in Oral Cancer (OSCC) Metastasis. K. SHEVCHENKO*, J.F. FLOREZ-ARANGO, J. WU, S. NARENDRAN, and N. VIGNESWARAN (University of Texas - Houston/Health Science Center, USA)
- 0616** 11:00 Proteomic Analysis of Salivary Acinar Cells from EGCG-treated NOD Mice. A. CAMBA*, Y. LIN, K. GILLESPIE, I. KODANI, D. DICKINSON, M. WU, M. MERKLEY, W. DYNAN, J. LEE, K. OGBUREKE, S. LOONEY, G.S. SCHUSTER, and S. HSU (Medical College of Georgia, Augusta, USA)

Seq#: 101 Friday, 4 April 2008, 9:45 a.m. - 11:15 a.m.
Oral Session, Room: Topaz

Periodontal Research - Diagnosis / Epidemiology

Chairpersons: A. Sharma and M. Tezal

- 0617** 9:45 Changes in Subgingival Bacterial Recolonization Profiles following Smoking Cessation. S.C. FULLMER*, P.M. PRESHAW, M.R. ZIANNI, and P.S. KUMAR (Ohio State University, Columbus, USA)
- 0618** 10:00 Clinical Characterization and MMP Levels in Children with Aggressive Periodontitis. L. SHADDOX*, B. ALFANT, J. TOBLER, E. BIMSTEIN, I. MAGNUSSON, I. AUKHIL, and C. WALKER (University of Florida, Gainesville, USA)
- 0619** 10:15 Differential Expression of Gingival Apoptosis Markers in Aged Patients. P. DAS, R.W. BRANSFORD, S.W. ROBINSON, M. CHOPRA, D.G. KERNS, S. VASTARDIS, and A.C. SHARMA* (Baylor College of Dentistry, Dallas, TX, USA)

- 0620** 10:30 Antibody Responses to Periodontal Pathogens in Myocardial Infarction and Periodontitis. V. DOBRE, N. BISSADA, S. NARENDRAN*, and J. ARAUZ-DUTARI (Case Western Reserve University, Cleveland, OH, USA)
- 0621** 10:45 Chronic Periodontitis-Human Papillomavirus Synergy in Head and Neck Cancers. M. TEZAL*, M. SULLIVAN, D. STOLER, T. LOREE, N. RIGUAL, and A. HYLAND (State University of New York - Buffalo, USA)
- 0622** 11:00 Effect of Preventive Dental Care on Periodontal Health of Persons with Down Syndrome. A. KHOCHT* and M. JANAL (Temple University, Philadelphia, PA, USA)

Seq#: 102 Friday, 4 April 2008, 9:45 a.m. - 11:15 a.m.
Oral Session, Room: Grand Ballroom A

Prosthodontics Research - Keynote Address and Advances in Prosthodontics

Chairpersons: S. Rosenstiel and N. Garrett

- 0623** 9:45 Keynote Address: Technological Breakthroughs for More Biocompatible and Bioactive Pre-prosthetic and Prosthetic Devices and Materials. T. OGAWA* (University of California-Los Angeles, USA)
- 0624** 10:15 Multicenter Trial of Chlorinated Polyethylene Elastomer (CPE) for Maxillofacial Prosthetics. L. GETTLEMAN*, M.S. CHAMBERS, R.F. JACOB, J.D. ANDERSON, D.A. JOHNSTON, R.A. SHEPPARD, G.S. HAUGH, and S. KIAT-AMNUAY (University of Louisville, School of Dentistry, KY, USA)
- 0625** 10:30 Effects of Implant/Tissue Support of Dentures on Masticatory Performance. N. GARRETT*, S. ANCOWITZ, D. SZE, J. PUCHER, and J. CALLAHAN (University of California-Los Angeles, USA)
- 0626** 10:45 Quantification of the Esthetics of Dentists' Before-and-After Photographs. S.F. ROSENSTIEL*, M. PAPPAS, M.T. PULIDO, and R. RASHID (Ohio State University, Columbus, USA)
- 0627** 11:00 Novel Superimposition Technique for *in vivo* Quantitative Wear Study. M.K. ETMAN* (University of Saskatchewan, College of Dentistry, Saskatoon, SK, Canada)

Seq#: 103 Friday, 4 April 2008, 11:30 a.m. - 12:15 p.m.
Plenary Session: Stemmons Ballroom

Plenary Session - Genetic Control of Heart Development and Disease

- 0628** 11:30 Genetic Control of Heart Development and Disease. E. OLSON* (UT Southwestern Medical Center, Dallas, TX, USA)

Seq#: 104 Friday, 4 April 2008, 1:30 p.m. - 2:30 p.m.
Poster Session, Trinity I - Exhibit Hall

DENTSPLY/Caulk Competition - Basic Science Category

- 0629** Blue Light Suppresses Tumor Growth and Induces Apoptosis. A. PATEL*, J. LEWIS, J. WATAHA, R.L. MESSER, K. OGBUREKE, V. MCCLOUD, H. QIN, B. RAINWATER, S. HSU, and S. ROTENBERG (Medical College of Georgia, Augusta, USA)
- 0630** Induction of Oral Cancer Apoptosis Signaling by Blue Light. B. RAINWATER*, J. LEWIS, J. WATAHA, R.L. MESSER, P.E. LOCKWOOD, V. MCCLOUD, A. PATEL, K. WALLACE, and S. HSU (Medical College of Georgia, Augusta, USA)
- 0631** VEGF: Autocrine-Paracrine Function in Oral Squamous Cell Carcinoma (OSCC). B.R. LLOYD*, M. TONG, P. PEI, and S.R. MALLERY (Ohio State University, Columbus, USA)
- 0632** Aberrant Expression of CIP2A Overlapping with EGFR in Oral Cancer. M.K. DUCKSWORTH*, C.A. ORLANDO, H.L. LOGAN, C.M. STEWART, J. KATZ, I. BHATTACHARYYA, K.M. PAULEY, A. JAKYMIW, and E.K.L. CHAN (University of Florida, Gainesville, USA)

- 0633** Effects of Bisphosphonates (Etidronate) on Human Alveolar-bone-derived Osteoblasts. J. BERK* and R. DZIAK (*SUNY at Buffalo, School of Dental Medicine, NY, USA*)
- 0634** The Role of N-Glycosylation in Submandibular Gland Branching Morphogenesis. R. DE LUNA*, S. KHALIL, M. NITA LAZAR, and M. KUKURUZINSKA (*Boston University, MA, USA*)
- 0635** Genome-wide Methylation Array Analysis of Saliva for Oral Cancer Diagnosis. C.T. VIET* and B.L. SCHMIDT (*University of California - San Francisco, USA*) (2007 AADR Student Research Fellowship Winner)

Seq#: 105 Friday, 4 April 2008, 1:30 p.m. - 2:30 p.m.
Poster Session, Trinity I - Exhibit Hall

DENTSPLY/Caulk Competition - Clinical Science Category

- 0636** Bead-based Flow-cytometric Analysis of Subgingival Bacterial Levels following Smoking Cessation. S.L. DELIMA*, P.M. PRESHAW, Y.-Z. ZHANG, and P.S. KUMAR (*Ohio State University, Columbus, USA*)
- 0637** Nitrile, Latex, and Vinyl Glove Permeability Testing using *Serratia marcescens*. J. CHAPMAN*, P.P. KANJIRATH, A.E. COPLEN, F. GU, J.C. FENNO, and M.C. PETERS (*University of Michigan, Ann Arbor, USA*)
- 0638** Cone-beam Computed Tomography- Report on Incidental Findings. H. GILL* (*New York University, NY, USA*)
- 0639** Bisphosphonate-associated Osteonecrosis: Survey of Oncologists. A.E. GIBBS*, A. KHERANI, K. WEITZEL, J. BAAR, L. PALOMO, and N. BISSADA (*Case Western Reserve University, Cleveland, OH, USA*)
- 0640** Comparing Parental Dental Functional Health Literacy and Child's Oral Health. G.M. GARRETT* and S.A. GANSKY (*University of California, San Francisco School of Dentistry, USA*)
- 0641** Comparison of Histology Techniques Used for Histomorphometry of Cranial Defects. N. MEHTA* and L.A. OPPERMAN (*Texas A&M Health Science Center, Baylor College of Dentistry, Dallas, USA*)
- 0642** Novel Handheld Device to Determine Physical Properties of Hydrated Dentin. M.C. PETERS, J.C. MILLER*, P.P. KANJIRATH, J.A. BARROS, J.M. WALLACE, and P. HANSMA (*University of Michigan, Ann Arbor, USA*)

Seq#: 106 Friday, 4 April 2008, 1:30 p.m. - 2:30 p.m.
Poster Session, Trinity I - Exhibit Hall

Pulp Biology & Regeneration Research - Pulp Clinical Diagnostics and Treatment

- 0643** Dose-dependent Intracellular Reactive Oxygen Species from Blue Light Chromophores. B. OWEN*, S. BOUILLAGUET, N. LANGE, J. SCHRENZEL, J. LEWIS, R.L. MESSER, P.E. LOCKWOOD, and J. WATAHA (*Medical College of Georgia, Augusta, USA*)
- 0644** WITHDRAWN
- 0645** Dental Pulp Tissue Engineering in a Tooth-slice Scaffold Device. A. JAQUERY*, T.M. BOTERO, J.B. DENNISON, P. MA, P. YAMAN, and J.E. NÖR (*University of Michigan, Ann Arbor, USA*)
- 0646** The Effect of CPP-ACP on Sensitivity Associated with Tooth-whitening. T. GILLEN*, M.P. CARR, and R. RASHID (*Ohio State University, Columbus, USA*)
- 0647** WITHDRAWN

Seq#: 107 Friday, 4 April 2008, 1:30 p.m. - 2:30 p.m.
Poster Session, Trinity I - Exhibit Hall

Dental Materials 3: Ceramic-based Materials and Cements - Ceramics, Cements, and Bonding

- 0648** Optical Properties of Veneer Materials. F.S. HOSAIN*, J.M. POWERS, and R. PARAVINA (*University of Texas Dental Branch at Houston, USA*)
- 0649** Dependence of Translucency on Thickness for Various Ceramic Frameworks. S. VELEZ* and Y. ZHANG (*Archbishop Molloy High School, Jamaica, NY, USA*)
- 0650** Veneer Resin Cement Color Stability after Thermal Cycling *in vitro*. J. LACOURSE*, R. PERRY, J. ORFANIDIS, and J.M. POWERS (*Tufts University, Boston, MA, USA*)
- 0651** Degradation Characteristics of a Novel DCPD Cement Made from MCPM/HA. D.L. ALGE* and T.G. CHU (*Purdue University, West Lafayette, IN, USA*)
- 0652** Properties of Various Mixing Ratios of Carboxylate Cements. H. LOHER*, M. BEHR, V. KOPZON, and G. HANDEL (*Zentrum für Zahn, Mund, und Kieferheilkunde, Regensburg, Germany*)
- 0653** Bond Strength of Pressed and Conventional Porcelain to Zirconia. H. ABU ALNASAR*, R. GIORDANO, and R. POBER (*Boston University, MA, USA*)
- 0654** Effect of Surface Treatment on Damage and Reliability of Y-TZP. P. GUESS*, Y. ZHANG, and V.P. THOMPSON (*New York University, USA*)
- 0655** Comparison of Mechanical Properties with Density of Pre-sintered Zirconia Block. J.-H. SHIN*, S.-W. PARK, J.-T. KOH, G.-J. OH, S.-K. RYU, K.-M. LEE, H.-S. KIM, and Y. YANG (*BK 21 Project, School of Dentistry, Chonnam National University, Gwangju, South Korea*)
- 0656** Effects of Surface Treatment at the Zirconium-Dioxide Veneer Interface. K.M. STEIN*, F. QIAN, and D. GRATTON (*University of Iowa, Iowa City, USA*)
- 0657** Vertical and Internal Discrepancies of Cerec Ceramic Crowns. R.O.A. SOUZA*, S.M.A. MICHIDA, D.C. BARCA, P.C. PEREIRA, F.P. CAMARGO, C.A. PAVANELLI, and M.A. BOTTINO (*UNESP SJC, São José dos Campos, Brazil*)
- 0658** Investigating the Use of Glass Joins for Dental Restoration Systems. M. SAIED*, I.K. LLOYD, and E.D. REKOW (*University of Maryland, College Park, USA*)
- 0659** Evaluation of Zirconia-based Bridges in UK General Practice: Two-year Results. R.J. CRISP* and F.J.T. BURKE (*University of Birmingham, UK*)
- 0660** Tensile Testing of Three Self-etch Cements with Titanium Paraposts. T. DUONG*, R. PERRY, and L. LOPEZ (*Tufts University, Boston, MA, USA*)
- 0661** Apatite Formation on Resin-modified Bioactive Glass-ionomer Cement. F. PELOGIA*, H.B. DAVIS, J.C. MITCHELL, E. TUFEKCI, A. DELLA-BONA, and J.L. FERRACANE (*São Paulo State University, São José dos Campos, Brazil*)
- 0662** MTA Setting Reactions Monitored for Up to One Year. S.C.V. CHEDELLA* and D.W. BERZINS (*Marquette University, Milwaukee, WI, USA*)
- 0663** Microhardness of Dual-cured Resin Cements through Ceramic. M.T. BARBOSA*, G.C. LOPES, G.M. ARCARI, and S. MONTEIRO, Jr. (*Universidade Federal de Santa Catarina, Florianópolis, Brazil*)

Dental Materials 4: Clinical Trials, Biocompatibility, and Biologic Effects - Biocompatibility and Clinical Trials—Student Posters

- 0664** Titanate Nanoparticles for Bidelivery of Gold. R.R. DAVIS*, R. KHASHABA, F. SETA, P.E. LOCKWOOD, J. WATAHA, J. LEWIS, R.L. MESSER, and D.T. HOBBS (*Medical College of Georgia, Augusta, USA*)
- 0665** Cytotoxicity of Endodontic Filling Materials after Extended Aging. A. MARSHALL*, M.G. BRACKETT, P.E. LOCKWOOD, J. LEWIS, R.L. MESSER, S. BOUILLAGUET, and J. WATAHA (*Medical College of Georgia, Augusta, USA*)
- 0666** Ni(II) and LPS Trigger Nrf2 Accumulation in Peripheral Blood Monocytes. A. DOSS*, J. LEWIS, V. MCCLOUD, P.E. LOCKWOOD, R.L. MESSER, S. HSU, and J. WATAHA (*Medical College of Georgia, Augusta, USA*)
- 0667** Long-term Cytotoxicity of Calcium Phosphate Cements. R. KHASHABA*, P.E. LOCKWOOD, J. LEWIS, R.L.W. MESSER, and J. WATAHA (*Medical College of Georgia, Augusta, USA*)
- 0668** Mandibular Distraction Osteogenesis and the Role of PTH—Molecular Mechanisms. H. SHANG, R. WOOD*, A. MA, M. KAKU, J. FERREIRA, L. CHI, and C.-C. KO (*University of North Carolina, Chapel Hill, USA*)
- 0669** Porous Tantalum Stimulates Osteogenesis in Osteoblast Cultures from Elderly Patients. K. SAGOMONYANTS*, M. HAKIM-ZARGAR, A. JHAVERI, M.S. ARONOW, and G. GRONOWICZ (*University of Connecticut Health Center, Farmington, USA*)
- 0670** *In vivo* Bone Regeneration with Two Grafting Materials: a MicroCT Study. M.E.R. COIMBRA*, M. SUZUKI, M. SALLES, M. YOSHIMOTO, and P.G. COELHO (*Instituto Militar de Engenharia [IME-RJ] and New York University [NYU], College of Dentistry, Rio de Janeiro, Brazil*)
- 0671** All-ceramic Restorations Luted with a Self-etching Adhesive: Two-year Report. A.A. ROBLES*, P. YAMAN, J.B. DENNISON, G.F. NEIVA, and M.E. RAZZOOG (*University of Michigan, Ann Arbor, USA*)
- 0672** Clinical Performance of Cervical Restorations with Two Bonding Strategies. G.C. LOPES, A. BALLARIN*, T. BRUGGEMANN, M.T. OLIVEIRA, E. PACHECO, and G. FRETTE (*Universidade Federal de Santa Catarina, Florianópolis, Brazil*)
- 0673** Placebo-controlled *in situ* Study of Enamel Permeability after Bleaching. J.J. FARAONI-ROMANO*, C.P. TURSSI, and M.C. SERRA (*Universidade de São Paulo, Ribeirão Preto, Brazil*)

Dental Materials 6: Polymer-based Materials - Physical Properties and Performance - Physical Properties of Glass Ionomers and Resin Composites

- 0674** Physical Properties of Hybrid Composite Resins Containing Pre-polymerized Filler Particles. J.T. BLACKHAM* and K. VANDEWALLE (*USAF, San Antonio, TX, USA*)
- 0675** Film Thickness of Bioactive Glass-containing Resin-modified Glass-ionomer Orthodontic Cement. E.R. SHELL*, J. MITCHELL, E. TUFEKCI, P. MOON, H.B. DAVIS, and S.J. LINDAUER (*Virginia Commonwealth University - VCU/MCV, Richmond, USA*)
- 0676** Hardness of Resin-modified Bioactive Glass-ionomer Cement. V.P. PHELPS*, E. TUFEKCI, J.C. MITCHELL, H.B. DAVIS, P.C. MOON, D.Z. AHMETOGLU, and S.J. LINDAUER (*Virginia Commonwealth University - VCU/MCV, Richmond, USA*)

- 0677** Shear Bond of Indirect Resin: Effects of Polymerization Units. P.C. PEREIRA*, D.C. BARCA, R.O.A. SOUZA, S.M.A. MICHIDA, F.P. CAMARGO, and M.A. BOTTINO (*São Paulo State University [UNESP/SJC], São José dos Campos, Brazil*)
- 0678** Release of Fluoride and Chlorhexidine from Rosin with Water-soluble Additive. N.-Z. ZHANG*, C. SHEN, and K.J. ANUSAVICE (*University of Florida, Gainesville, USA*)
- 0679** WITHDRAWN
- 0680** Direct Transmittance Characteristics of Resin Composites. N. QUARTEY-PAPAFIO*, N. SILIKAS, and D.C. WATTS (*University of Manchester, School of Dentistry, Biomaterials Science Unit, UK*)
- 0681** Gloss and Roughness Produced by Polishing Kits on Composite Resins. R. S. ZADEH*, D. CAKIR, L.C. RAMP, and J.O. BURGESS (*University of Alabama at Birmingham, USA*)
- 0682** Effects of Exposure Duration on Composite Flexural Strength. A. VICKERS*, E. SWIFT, D. METTENBURG, Z. HASSAN, and F. RUEGGERBERG (*University of North Carolina, Chapel Hill, USA*)
- 0683** Color and Translucency of Resin Composite Color Modifiers. S.J. SWEENEY*, D.C.N. CHAN, and W. BROWNING (*Medical College of Georgia, Augusta, USA*)
- 0684** Microleakage in Class V Restorations *in vitro*. Q.N.T. BUI*, R. PERRY, and G. KUGEL (*Tufts University, Boston, MA, USA*)

Behavioral, Epidemiologic, and Health Services Research - BEHSR Student Abstracts II

- 0685** Malignant Melanoma and Oral Cancer Visible to Dentists in Perspective. R. BANSAL*, J.D. SHULMAN, K.A. BOLIN, and H. ABDELLATIF (*Baylor College of Dentistry, Dallas, TX, USA*)
- 0686** Liberian Middle School Students' Oral Health and Quality of Life. N. ANANABA*, M. WOOLFOLK, and M.R. INGELHART (*University of Michigan, Ann Arbor, USA*)
- 0687** Cultural Adaptation of EORTC Cancer QOL Instruments in Puerto Rico. M.L. AGUILAR*, E. REYES, C. CLAUDIO, and W.J. PSOTER (*University of Puerto Rico-MSU, San Juan, PR, USA*)
- 0688** Oral Cancer Screening Participation and Racial Disparities in Florida. T.G. COOPER*, J.M. WATSON, and S.L. TOMAR (*University of Florida College of Dentistry, Gainesville, USA*)
- 0689** Identifying Optimal Methods for Thermal Quantitative Sensory Testing. G. BENJAMIN* and R. FILLINGIM (*University of Florida, Gainesville, USA*)
- 0690** Epidemiology of Dental Caries in a Rural Area in India. A. MARU* and S. NARENDHAN (*Case Western Reserve University, Cleveland, OH, USA*)
- 0691** Risk Factors for White-spot Lesions Associated with Orthodontic Brackets. L. GREENWALD*, J.J. WARREN, B. BROFFITT, S.M. LEVY, and D. DRAKE (*University of Iowa, Iowa City, USA*)
- 0692** Prevalence and Correlates of Malocclusion in 12- to 14-year-old Tanzanian Schoolchildren. M. MTAYA*, P. BRUDVIK, and A.N. ASTROM (*University of Bergen, Norway*)
- 0693** Dental Caries Experience of Children in a Northern Aboriginal Community. C. HUMPHREYS* and D. BROTHWELL (*University of Manitoba, Winnipeg, MB, Canada*)
- 0694** Comparison of Ages of Eruption of the First Permanent Teeth. M.K. BUSKIRK* and J.E. KOWOLIK (*Indiana University School of Dentistry, Indianapolis, USA*)
- 0695** Dental Habits Related to Adult Cardiovascular Disease and Systemic Inflammation. S.J. FRISBEE, C.B. CHAMBERS*, J.C. FRISBEE, A.G. GOODWILL, and R.J. CROUT (*West Virginia University School of Dentistry, Morgantown, USA*)

- 0696** Bruxism and Risk Factors in a Young Population. M. ZAZUETA, L.F. HERRERA*, and M. SAAVEDRA (*Universidad Autonoma de Campeche, Mexico*)
- 0697** RAS and Depression: Is There an Association? P. VIRAPARIA*, R.A. PARIS, D.W. THERIAQUE, J.J. SHUSTER, M. GERTSEN, I. BHATTACHARYYA, and L. BACCAGLINI (*University of Florida, Gainesville, USA*)
- 0698** Temporomandibular Disorders and Risk Indicators in a Young Population. M. ZAZUETA*, L.F. HERRERA, M. SAAVEDRA, and I. MENDEZ (*Universidad Autonoma de Campeche, Mexico*)
- 0699** Relationship between Food Security in Household and Oral Health Status. Y.-H. CHOI*, A.D. LIESE, B.E. MAYER-DAVIS, K.-B. SONG, and A.T. MERCHANT (*University of South Carolina, Columbia, USA*)
- 0700** Can Socio-economic and Psychosocial Factors Predict Orthodontic Treatment Success? E. JOURY*, A. JOHAL, and W. MARCENES (*Queen Mary's School of Medicine and Dentistry, London, United Kingdom*)
- 0701** Screening and Risk Factors for Oral and Pharyngeal Cancer Patients. A. APANA*, H. LOGAN, P. SANDOW, J. WERNING, S.L. TOMAR, and W. MENDENHALL (*University of Florida, Gainesville, USA*)
- 0702** Detailed Knowledge of the Tuskegee Syphilis Study by Race/Ethnicity. R.V. KATZ, G. JEAN CHARLES*, B.L. GREEN, N.R. KRESSIN, M.Q. WANG, S.L. RUSSELL, and J. OUTLAW (*SUNY at Buffalo School of Dental Medicine, NY, USA*)
- 0703** Does Sense of Coherence Influence the Outcome of Implant Therapy? E. EMAMI*, P. ALLISON, P.H. ROMPRÉ, P. DE GRANDMONT, and J. FEINE (*Université de Montréal, McGill University, Montreal, QC, Canada*)
- 0704** Comparative Burden of Acute Oral and Respiratory Illness in Children. K. MCCOLLUM*, S. THIKKURISY, H. AMINI, R. RASHID, and P. CASAMASSIMO (*The Ohio State University, Columbus, USA*)

Seq#: 111 Friday, 4 April 2008, 1:30 p.m. - 2:30 p.m.
Poster Session, Trinity I - Exhibit Hall

Education Research - Student Posters

- 0705** Dental Hygiene Education about Special Needs Patients - A National Survey. M.J. DEHAITEM*, K. RIDLEY, W. KERSCHBAUM, and M.R. INGLEHART (*University of Michigan, Ann Arbor, USA*)
- 0706** WITHDRAWN
- 0707** Dental Education's Influence on the Treatment of Pediatric Patients. C. COSBY* (*University of Tennessee, Memphis, USA*)
- 0708** Student/Patient Determination of an Effective Clinical Learning Environment. N. GRIMAUDO and M. RAUTH* (*University of Florida, Gainesville, USA*)
- 0709** Changes in Dental Students' Immediate Post-graduation Plans. S.E. ALLEN*, R.A. KUTHY, and F. QIAN (*University of Iowa, Iowa City, USA*)

Seq#: 112 Friday, 4 April 2008, 1:30 p.m. - 2:30 p.m.
Poster Session, Trinity I - Exhibit Hall

Implantology Research - Implant Materials Testing and Mechanical Performance

- 0710** Nanotechnology and Tissue Engineering for Customized Low-cost Zirconia Implants. M.N. ABOUSHELIB*, Z. SALAMEH, H.F. OUNSI, and A.J. FEILZER (*ACTA, Universiteit van Amsterdam and Vrije Universiteit, Netherlands*)

- 0711** Wettability and Drug Delivery of Micro-nanoporous Titanium Surface. S.-K. RYU*, K.-D. YUN, M.-S. VANG, H.-S. YANG, H.-O. PARK, H.-P. LIM, G.-J. OH, J.-H. SHIN, J.-T. KOH, K.-M. LEE, H.-S. KIM, Y. YANG, and S.-W. PARK (*Dental Science Research Institute and BK21, School of Dentistry, Chonnam National University, Gwangju, South Korea*)
- 0712** Resonance Frequency Analysis Applied to Different Implant Surfaces. J. HETHCOX*, S. BANNISTER, S. MALLER, S. MACKEY, R. VERRETT, B. MEALEY, and C. POWELL (*Wilford Hall Medical Center, Lackland AFB, TX, TX, USA*)
- 0713** Factors Affecting Resonance Frequency of One-stage Dental Implants. D. CHOI*, V. SHAPIRO, D.N. TATAKIS, and B. LEBLEBICIOGLU (*Ohio State University, Columbus, USA*)
- 0714** Evaluation of the Sealing Capability of Different Dental Implant Systems. P.A. SUDACK*, P.G. COELHO, N.R.F.A. SILVA, and G.E. ROMANOS (*New York University, USA*)
- 0715** Evaluation of Loosening Torque in Multi-unit Screw-retained Implant-supported Restorations. L.G.D. DAROZ*, G.E.P. HENRIQUES, W.S. FRAGOSO, M.F. MESQUITA, and M.A.A. NÓBILO (*Campinas State University, Piracicaba, Brazil*)
- 0716** Implant-Abutment Fit Measured with Micro-CT vs. Optical Microscopy. F. LOZANO* (*Baylor College of Dentistry, Dallas, TX, USA*)
- 0717** Stress Analysis of Dental Implant and Its Mode Shapes. G.H. KYUNG* (*Temple University, North Wales, PA, USA*)

Seq#: 113 Friday, 4 April 2008, 1:30 p.m. - 2:30 p.m.
Poster Session, Trinity I - Exhibit Hall

Oral Health Research - Student Posters

- 0718** WITHDRAWN
- 0719** WITHDRAWN
- 0720** Evaluating 3 Caries-risk Assessment Tools: CaMBRA, Cariogram, & CAT. P. HAN*, K. AAMODT, T. BUI, B. SAGIER, and S.A. GANSKY (*University of California - Berkeley and San Francisco, USA*)
- 0721** Tooth Loss Patterns in a Clinic Population. C.J. BERKSETH*, M.T. JOHN, and B.S. MICHALOWICZ (*University of Minnesota, Minneapolis, USA*)
- 0722** Comparing Dental Caries Prevalence in African-American Diabetics and Non-diabetics. T. ZANE*, P. HAN, S. KIM, and S. FISHER-OWENS (*University of California - San Francisco, USA*)
- 0723** Oral Health Survey of the Lumbee Tribe in North Carolina. P.L. WELLS*, D. CAPLAN, R.P. STRAUSS, D. BELL, and M.C. GEORGE (*University of North Carolina at Chapel Hill, USA*)
- 0724** WITHDRAWN
- 0725** Pre-natal Care Providers' Oral Health and Pregnancy Knowledge and Behaviors. K.M. THOMAS*, H. JARED, J.Y. LEE, M.K. MOOS, K.A. BOGGESS, and R.S. WILDER (*University of North Carolina, Chapel Hill, USA*)
- 0726** Micro-organisms in Saliva of Diabetic Patients Treated at the UAT. C.A. DÍAZ*, A. LUCERO, P. LIMÓN, V.M. MARTÍNEZ, and J. VILLASEÑOR (*Universidad Autonoma de Tlaxcala, Mexico*)
- 0727** WITHDRAWN
- 0728** Response of Pulpal and Gingival Blood Flow to Physical Activity. S.M.T. NGUYEN* and M.A. POGREL (*University of California - San Francisco, USA*)
- 0729** The pH Measurement of 22 Whitening Toothpastes. M. RAMOS*, C. PARAIZO, A. SANCHEZ, and L. DELGADO (*University of Illinois - Chicago, USA*)

Seq#: 114 Friday, 4 April 2008, 1:30 p.m. - 2:30 p.m.
Poster Session, Trinity I - Exhibit Hall

Mineralized Tissue - Tissue Regeneration and Stem Cells

- 0730** Osseous Healing with BMP-2. D.S. BERRIOS*, E. ATTI, B. KANG, R. FRANCO, and T. AGHALOO (*University of California - Los Angeles, USA*)
- 0731** WITHDRAWN
- 0732** Evaluation of Bioengineered Osteodentin-like Tissue Formation on Silk Scaffolds. W.-P. XU*, W. ZHANG, R. ASRICAN, H.-J. KIM, D. KAPLAN, and P.C. YELICK (*Tufts University, Boston, MA, USA*)
- 0733** Analysis of Human Tissue Response to Bone Graft Substitutes. A. YAMPOLSKY*, J. RICCI, and R. HOROWITZ (*New York University, USA*)
- 0734** Induced Mineral Growth for Mechanical Recovery of Caries-affected Dentin. L.E. BERTASSONI*, M.K. PUGACH, P. SOARES, S.J. MARSHALL, G.W. MARSHALL, and S. HABELITZ (*University of California - San Francisco, USA*)
- 0735** Novel Bioceramic Nano-composite Prepones Osteoblast Differentiation. A. MA*, M. KAKU, K.-L. LIU, and C.-C. KO (*University of North Carolina, Chapel Hill, USA*)
- 0736** Estrogen-deficient Bone Loss Prevented by Calcium-phosphate-based Compound (MZP-CaP). R. LeGEROS, D. MIJARES*, G. CATIG, F. YAO, Q. XI, and J.P. LeGEROS (*New York University, USA*)
- 0737** Bioengineering of Dental Stem Cells in a 3-dimensional Fibrin Hydrogel. K. GALLER, U. KOEKLUE*, A.C. CAVENDER, L. SUGGS, G. SCHMALZ, and R.N. D'SOUZA (*University of Regensburg, Germany*)
- 0738** WITHDRAWN

Seq#: 115 Friday, 4 April 2008, 1:30 p.m. - 2:30 p.m.
Poster Session, Trinity I - Exhibit Hall

Salivary Research - Student Posters

- 0739** Use of Yeast Mutant Collection to Study MUC7-12-mer Peptide Targets. J.R. FUSS*, M. LIS, and L.A. BOBEK (*State University of New York - Buffalo, USA*)
- 0740** Temporal Expression of *Muc19/Smgc* Gene Products in Sublingual Glands. B.I. LLANES*, D. CULP, D. BISWADIP, and M. CASH (*University of Florida, Gainesville, USA*)
- 0741** EGF in Parotid Saliva of Head and Neck Cancer Patients. S. GRIFFITH*, C.A. MURDOCH-KINCH, T. BRAUN, A. EISBRUCH, J.A. SHIP, and N. D'SILVA (*University of Michigan, Ann Arbor, USA*)
- 0742** Reproducibility of Salivary Parameters. M. MAN-SOUR*, S. KHUDER, R.T. GIBSON, H. KESSLER, and I. AL-HASHIMI (*Baylor College of Dentistry, Dallas, TX, USA*)
- 0743** Defective E-cadherin Adhesion in the Salivary Glands from Sjögren's Patients. S. KHALIL*, J.L. JENSEN, H.S. KOPPANG, S.-P. LYGSTADAAS, D. FAUSTMAN, L. BAN, D.M. AFSHAR, and M. KUKURUZINSKA (*Boston University, MA, USA*)
- 0744** WITHDRAWN
- 0745** Salivary Protein Profile Alterations Secondary to Breast Cancer. J. SCHAEFER*, S. TAPP, and N. CAMARATA (*University of Texas - Houston/Health Science Center, USA*)

Seq#: 116 Friday, 4 April 2008, 1:30 p.m. - 2:30 p.m.
Poster Session, Trinity I - Exhibit Hall

Microbiology / Immunology and Infection Control - Immune Mechanisms and the Oral Cavity

- 0746** IL-10 Production in Peripheral B-cells in Autoimmune Disorders. J.M. ROGÈR*, M. ROBERTS, and I. SANZ (*University of Rochester/Marquette University School of Dentistry, USA*)
- 0747** WITHDRAWN

- 0748** Synergistic HIV-1 Activation by Gingival Resident Cell Factors and Periodontopathogens. O.A. GONZALEZ*, J.L. EBERSOLE, and C.B. HUANG (*University of Kentucky, Lexington, USA*)
- 0749** Measurement of the Influence of Androstenediol on TLR Signaling. B. HAN*, A.R. HUFNAGLE, S.F. WRAY, and D.A. PADGETT (*Ohio State University, Columbus, USA*)
- 0750** Salivary IgA Antibody Responses to Oral Bacteria in Down's Syndrome. K. SADEK*, M.J. STEFFEN, E. ABOUL-EZ, and J.L. EBERSOLE (*University of Kentucky, Lexington, USA*)
- 0751** Induction of Cell Death by RELT, a Recently Identified TNFR. M. CHECKETTS*, M. REYLAND, H.-B. SHU, and J. CUSICK (*University of Colorado School of Dentistry, Aurora, USA*)
- 0752** Role of Human Beta Defensin-2 in Mucosal Innate Antiviral Response. A. SABBAAH*, S. KOTA, and S. BOSE (*University of Texas - San Antonio/Health Science Ctr., USA*)
- 0753** Nicotine Affects Anti-tumor Immunity Elicited by Therapeutic Vaccine. A. ANSARI*, E. GUINET, M. ZENG, and M. NOURI-SHIRAZI (*Baylor College of Dentistry, Dallas, TX, USA*)
- 0754** Signaling Mechanisms that Regulate Leukocyte Migration. S. TUMUSIIME, M. RANA, J. GUIDRY, V. KURELLA, D. WORTHYLAKE, and B. WORTHYLAKE* (*Louisiana State University Health Sciences Center, New Orleans, USA*)
- 0755** Th1-, Th2-, & Th17-type Cytokine Profiles in CD4-dnTGFβRII Mice. R.S. GILBERT*, S. SEKINE, R. KOBAYASHI, and K. FUJIIHASHI (*University of Alabama at Birmingham, USA*)
- 0756** Dendritic Cell Responses to a Polymicrobial Challenge with Oral Bacteria. C.B. HUANG*, S. STRANGE, and J.L. EBERSOLE (*University of Kentucky, Lexington, USA*)

Seq#: 117 Friday, 4 April 2008, 1:30 p.m. - 2:30 p.m.
Poster Session, Trinity I - Exhibit Hall

Pharmacology, Therapeutics, & Toxicology - Posters

- 0757** Bleaching of Components Responsible for Tooth Discoloration by Ozone. H. DOMINGO*, M.C. GROOTVELD, J.C. BLACKBURN, C.J. SILWOOD, and E. LYNCH (*Queens University Belfast, Northern Ireland, UK*)
- 0758** Gingival Fibroblast *in vitro* Wounds Treated with Nicotine and/or TGFβ1. C. COWAN, R. CLINE, Jr., and K.K.H. SVOBODA* (*Baylor College of Dentistry, Dallas, TX, USA*)
- 0759** Antiviral and Antimicrobial Drug Release from EVA Copolymer. J. LI*, O.M. PATEL, L. CLINE, M. WATERS, and S. KALACHANDRA (*University of North Carolina, Chapel Hill, USA*)
- 0760** WITHDRAWN
- 0761** Effects of Chronic Bleaching on Enamel Surfaces. D.J. WHITE* and M. KLUKOWSKA (*The Procter & Gamble Company, Mason, OH, USA*)

Seq#: 118 Friday, 4 April 2008, 1:30 p.m. - 2:30 p.m.
Poster Session, Trinity I - Exhibit Hall

Oral Medicine & Pathology - Oral Cancer Student Posters

- 0762** Application of Fluorescent Post-labeling to Detect DNA Change. K.S. RANA* and J.B. GUTTENPLAN (*New York University, USA*)
- 0763** Pilot Study: DP, PKP-1 Expression in Oral Epithelium. J.E. GIST* and T.L. SMITH (*University of Nebraska, Lincoln, USA*)
- 0764** Histopathologic Progression of Proliferative Verrucous Leukoplakia. M. GERVICH*, M. FINKELSTEIN, and J. HELLSTEIN (*University of Iowa, Iowa City, USA*)
- 0765** Khat Induces Abnormal Differentiation of Reconstituted Human Oral Mucosa. O. LUKANDU*, D.E. COSTEA, O.K. VINTERMYR, and A.C. JOHANNESSEN (*University of Bergen, Norway*)

Friday

- 0766** Effect of Extracellular Matrix (ECM) on Motility of Oral Cells. T.M. NGUYEN*, J. DAI, J. McCUTCHEON, and P.G. SACKS (*New York University, USA*)
- 0767** Nucleophosmin as a Biomarker of the Metastatic Phenotype. K. SUMMAR*, M.M. JEFFERSON, L. HANEY, E.L. THOMAS, and M.K. DABBOUS (*University of Tennessee, Memphis, USA*)
- 0768** Cytokeratin 8, a Potential Marker for Early Oral Cancer Detection. J. FRUSTINO*, R. CHENEY, R. SAMMARCO, L. SOLOMON, M. REID, and M. SULLIVAN (*State University of New York - Buffalo, USA*)
- 0769** High-throughput Screens Identify Activators of UPR Signaling and Apoptosis. A. FRIBLEY*, M. LARSEN, P. CAI, N. NERULA, R. NEUBIG, and R. KAUFMAN (*University of Michigan, Ann Arbor, USA*)
- 0770** Mapping the Interactive Domain between p12^{CDK2-AP1} and MBD3. J.J. KIM*, Y. KIM, and D.T. WONG (*UCLA, Los Angeles, CA, USA*) (2007 AADR Student Research Fellowship Winner)
- 0771** Different Transfection Methods for Human Bone and Dental Stem Cells. S. DAR*, T. PENG, A.C. CAVENDER, and R.N. D'SOUZA (*Baylor College of Dentistry, Dallas, TX, USA*)
- 0772** Muco-adhesive Patches for Intra-oral Delivery of Immune Response Modifiers. J.D. CHRISTENSEN*, L. CUNNINGHAM, and D. PULEO (*University of Kentucky, Lexington, USA*)

Seq#: 119 Friday, 4 April 2008, 1:30 p.m. - 2:30 p.m.
Poster Session, Trinity I - Exhibit Hall

Oral Medicine & Pathology - Oral Pathology Student Posters

- 0773** Interferon-regulated Serum Biomarkers in Primary Sjögren's Syndrome. A.N.M. NAZMUL-HOSSAIN*, E.S. EMAMIAN, J.M. LEON, J.W. BAUER, N.L. RHODUS, and K.L. MOSER (*University of Minnesota, Minneapolis, USA*)
- 0774** Ectodermal Dysplasia Molecular Pathways: Functional Interaction of EDARADD and TRAFs. W. WEBSTER* (*University of Texas - Houston/Health Science Center, USA*)
- 0775** Effects of Inhibitors of Oxidation on Lipid Peroxidation in Mice. J.H. KIM* (*New York University, USA*)
- 0776** Dairy Intake and Lactose Intolerance in Recurrent Aphthous Stomatitis. N.C. MARTINO*, D.W. THERIAQUE, J.J. SHUSTER, M.L. BRANTLY, and L. BACCAGLINI (*University of Florida, Gainesville, USA*)
- 0777** Angiogenic Immunoprofile of Variably Aggressive Central Giant Cell Lesions. V.C. COOK*, F.J. KRATOCHVIL, and J.C.B. STEWART (*Oregon Health & Science University, Portland, USA*)
- 0778** Posaconazole with Caspofungin against *Candida glabrata* in a Mouse Model. A.W. RAY*, L.K. NAJVAR, J.R. GRAYBILL, W.R. KIRKPATRICK, R.A. BOCANEGRA, T.F. PATTERSON, and S.W. REDDING (*The University of Texas Health Science Center at San Antonio, USA*)
- 0779** Methotrexate-induced Allergic Stomatitis Tending toward Erythema Multiforme. M. UKPEBOR*, F.O. OMOREGIE, and B.D.O. SAHEEB (*University of Benin Teaching Hospital, Nigeria*)
- 0780** Effects of Gender and Periapical Inflammation on Rat Adipose Tissue. S.A. RITTER*, L.C. SANDIFER, K.E. BALIUS, C.P. CASKEY, R.B. JOHNSON, and J.L. BAIN (*University of Mississippi Medical Center, Jackson, USA*)
- 0781** Effects of Gender and Periapical Inflammation on the Rat Heart. L.C. SANDIFER*, J.L. BAIN, C.P. CASKEY, R.B. JOHNSON, J.P. NAFTEL, K.E. BALIUS, and S.A. RITTER (*University of Mississippi Medical Center, Jackson, USA*)
- 0782** Maternal Rat Periapical Abscesses Affect Brain Norepinephrine Levels in Offspring. W.D. HENRY*, J.L. BAIN, S.R. LESTER, J.P. NAFTEL, and R.B. JOHNSON (*University of Mississippi Medical Center, Jackson, USA*)

- 0783** Maternal Rat Periapical Abscesses and Pro-inflammatory Cytokines in Pup Brains. K.E. BALIUS*, J.L. BAIN, S.R. LESTER, W.D. HENRY, S.A. RITTER, L.C. SANDIFER, C.P. CASKEY, J.P. NAFTEL, and R.B. JOHNSON (*University of Mississippi Medical Center, Jackson, USA*)
- 0784** Gender Serum Cytokine Differences in Rats with Periapical Abscesses. J.L. BAIN*, W.D. HENRY, L.C. SANDIFER, K.E. BALIUS, C.P. CASKEY, S. RITTER, S. TOMLINSON, J.P. NAFTEL, and R.B. JOHNSON (*University of Mississippi Medical Center, Jackson, USA*)

Seq#: 120 Friday, 4 April 2008, 1:30 p.m. - 2:30 p.m.
Poster Session, Trinity I - Exhibit Hall

Craniofacial Biology - Biometrics in Orthodontics

- 0785** WITHDRAWN
- 0786** Identification of Stable Craniofacial Landmarks for Superimposition. A.K. LEE*, A.J. MILLER, and J.C. HUANG (*University of California - San Francisco, USA*)
- 0787** Technique Comparison for Efficient Orthodontic Tooth Measurements Using Digital Models. H. HORTON* and B. LARSON (*University of Minnesota, Minneapolis, USA*)
- 0788** WITHDRAWN
- 0789** Stepwise Regression Model in Predicting Excessive Mandibular Growth. C. PRETTYMAN*, M. O'DELL, P. NGAN, and E. GUNEL (*West Virginia University, Morgantown, USA*)
- 0790** Quantitative Longitudinal Analysis of Root Growth in Maxillary First Molars. A.J. DOMEYER*, R.N. STALEY, and F. QIAN (*University of Iowa, Iowa City, USA*)
- 0791** Longitudinal Study of Root Growth in Maxillary Second Molars. T.C. RUDD*, R.N. STALEY, and F. QIAN (*University of Iowa, Iowa City, USA*)
- 0792** Denver Growth Study: Body Images with Scaled Sketches. M. FLINT* and G.F. CURRIER (*University of Oklahoma, Oklahoma City, USA*)
- 0793** Malocclusion Trends among the Kuwaiti Population Seeking Orthodontic Treatment. D. BHAT*, A.K. BHAT, and N. DE FELIPPE (*University of Illinois - Chicago, USA*)
- 0794** Citation Accuracy of Two Orthodontic and One Dental Research Journal. J.C. OLIVER*, A.B. BARNES, K.L. SEAGREN, J.P. HATCH, and J.D. RUGH (*University of Texas Health Science Center at San Antonio, USA*)

Seq#: 121 Friday, 4 April 2008, 1:30 p.m. - 2:30 p.m.
Poster Session, Trinity I - Exhibit Hall

Craniofacial Biology - Bone, Cartilage, and Suture Biomechanics

- 0795** Is There a Relationship between Dental Occlusion and Masticatory Function? S. PARKER*, C. LEPPLEY, P. BUSCHANG, and G.S. THROCKMORTON (*Baylor College of Dentistry, Dallas, TX, USA*)
- 0796** Masticatory Musculature Does Not Increase Intracranial Volume in Myostatin-knockout Mice. J.J. CRAY, Jr.*, J. MILLER, L. VECCHIONE, C. BYRON, G.M. COOPER, T. BARBANO, M.I. SIEGEL, M. HAMRICK, J. SCIOTE, and M.P. MOONEY (*University of Pittsburgh, PA, USA*)
- 0797** Mandibular Distraction Osteogenesis: Bone Growth and Masticatory Loading. Z. SUN*, K.L. RAFFERTY, M.A. EGBERT, and S.W. HERRING (*University of Washington, Seattle, USA*)
- 0798** Deformation of Nasal Septal Cartilage during Mastication. A. AL DAYEH*, K. RAFFERTY, M. EGBERT, and S.W. HERRING (*University of Washington, Seattle, USA*)
- 0799** Facial Suture Plating Alters Sutural Interdigitation in *Sus scrofa*. K.E. SWENSON*, N.E. HOLTON, R.G. FRANCISCUS, M.A. NIEVES, S.D. MARSHALL, F. QIAN, and T. SOUTHARD (*University of Iowa, Iowa City, USA*)

- 0800** Microstructural Correlates of Anisotropy in Human Zygomatic Cortical Bone. P. PATEL*, S. ALAQEEL, and P.C. DECHOW (Texas A&M Health Science Center Baylor College of Dentistry, Dallas, USA)
- 0801** Mechanical Properties of Mandibular Cortical Bone in the American Alligator. U. ZAPATA*, K. METZGER, Q. WANG, C.F. ROSS, and P.C. DECHOW (Baylor College of Dentistry, Dallas, TX, USA)
- 0802** Material Property Analysis in Craniofacial Cortical Bone of Small Mammals. D.A. MOURITSEN*, E.R. DUMONT, and P.C. DECHOW (Texas A&M Health Science Center Baylor College of Dentistry, Dallas, USA)
- 0803** Density and Material Orientation in Ape Craniofacial Cortical Bone. B.P. MORGAN*, C.D. BYRON, J. CHALK, I.R. GROSSE, P.W. LUCAS, B.G. RICHMOND, C.F. ROSS, D.E. SLICE, A.L. SMITH, M.A. SPENCER, D. STRAIT, Q. WANG, G.W. WEBER, B.W. WRIGHT, and P.C. DECHOW (University of Massachusetts, Amherst, USA)
- 0804** Is the Lower Molar Eruption Adapting to Mandibular Displacement? S.S.-Y. LIU* and P.H. BUSCHANG (Baylor College of Dentistry, Dallas, TX, USA)
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- Seq#: 122** **Friday, 4 April 2008, 1:30 p.m. - 2:30 p.m.**
Poster Session, Trinity I - Exhibit Hall
- Craniofacial Biology - Normal and Abnormal Craniofacial Development**
- 0805** shRNA Knockdown of Chick MID1 and MID2 with the Use of Recombinant Lentivirus. C. HSU*, C.-L. SOH, and T. COX (University of Washington, Seattle, USA)
- 0806** Down-regulation of Msx1 Antisense RNA Expression by 1,25(OH)₂Vitamin D3 in Ameloblasts. R.J. PINHEIRO*, F. LEZOT, D. HOTTON, S. BABAJKO, A. BERDAL, and I. FERNANDES (INSERM, Paris, France)
- 0807** DMP-1 Signaling Role in hMSC, MC3T3, and MDPC23 Cells. H. WU, J. LI, P.N. TENG, P.-Y. LEE, J.Q. FENG, and C. SFEIR* (University of Pittsburgh, PA, USA)
- 0808** Transcriptional Mechanisms between Islet-1 and PITX2 Regulating Craniofacial Morphogenesis. C. YIN*, S.R. VENUGOPALAN, M. AKERLUND, T.A. HJALT, and B.A. AMENDT (Texas A & M University Health Science Center, Institute of Biosciences and Technology, Houston, USA)
- 0809** BMP Regulates Endochondral Growth in the Cranial Base Synchondroses. B.T. NGUYEN* and P.T. GAKUNGA (University of Texas - San Antonio / Health Science Ctr., USA)
- 0810** CSF-1 and ODF Expression during Tooth Eruption in Mice. L.D. SCARBOROUGH, Jr.*, E. NGUYEN, B. SHROFF, and S.J. LINDAUER (Virginia Commonwealth University - VCU/MCV, Richmond, USA)
- 0811** Lip Abnormalities in Irf6-deficient Mice. A.M. WILLIAMS*, K.J. TROUT, J. MURRAY, and B.C. SCHUTTE (University of Iowa, Iowa City, USA)
- 0812** The Role of the HAND Genes in Pierre Robin Sequence. E. ZARCHI*, G. MUES, Y. WANG, R.N. D'SOUZA, and H. KAPADIA (Baylor College of Dentistry, Dallas, TX, USA)
- 0813** Novel Expression and Regulation of FoxJ1 during Craniofacial/Tooth Morphogenesis. S.R. VENUGOPALAN*, M. AMEN, J. WANG, A.C. CAVENDER, R. D'SOUZA, M. AKERLUND, S.L. BRODY, T.A. HJALT, and B.A. AMENDT (Texas A&M University Health Science Center, Houston, USA)
- 0814** A Novel Mutation in EDA Causes X-linked Recessive Tooth Agenesis. R. SEAMAN*, R. D'SOUZA, and G. MUES (Baylor College of Dentistry, Dallas, TX, USA)

- 0815** Craniofacial Growth Following Anti-Tgf-B2 Therapy in Rabbits with Uniconal Synostosis. J. KNEIB*, J.J. CRAY, Jr., A.M. MOURSI, A. BURROWS, T. BARBANO, G.M. COOPER, L. VECCHIONE, J. CACCAMESE, C. NORBUTT, S. EDWARDS, B. COSTELLO, J.E. LOSEE, M.I. SIEGEL, and M.P. MOONEY (University of Pittsburgh, PA, USA)
- 0816** Suturectomy Site Healing following Post-operative TGF-β3 Therapy in Craniosynostotic Rabbits. M. KARSKI*, T.E. BARBANO, T.D. SMITH, J.M. CASS, C. NORBUTT, M. DUDZIAK, B.J. COSTELLO, J.J. CRAY, Jr., G.M. COOPER, J.E. LOSEE, M.I. SIEGEL, A.M. MOURSI, and M.P. MOONEY (University of Pittsburgh, PA, USA)
- 0817** Development of Embryonic Mouse Heads Embedded in Alginate. S.J. CHEN* and P.J. DUKE (University of Texas - Houston/Health Science Center, USA)

Seq#: 123 **Friday, 4 April 2008, 2:45 p.m. - 3:45 p.m.**
Poster Session, Trinity I - Exhibit Hall

Prosthodontics Research - Biomechanics and Materials Considerations in Prosthodontics

- 0818** A Novel *in vitro* Model for Detail Reproduction of Elastomers. A. SHAH*, J. BURGESS, M.S. LITAKER, and P. BECK (UAB School of Dentistry, Birmingham, AL, USA)
- 0819** WITHDRAWN
- 0820** Disinfection Effect on Tear Strength of Hydrophilic PVS Impression Materials. E.W. ESTAFANOUS*, J.A. PLATT, C. PALENIK, C. ANDRES, D.T. BROWN, and S.T. HOVIJITRA (The University of Iowa College of Dentistry, Iowa City, USA)
- 0821** Profilometric Evaluation of Casts Obtained from Irreversible Hydrocolloid Impressions. A. PEREGRINA*, M.F. LAND, and W.M. JOHNSTON (The Ohio State University, Columbus, USA)

Seq#: 124 **Friday, 4 April 2008, 2:45 p.m. - 3:45 p.m.**
Poster Session, Trinity I - Exhibit Hall

Prosthodontics Research - Ceramics, Color Science, and Esthetics

- 0822** Evaluation of Prosth-orthodontic Treatments for Maxillary Protrusion in Elderly Adults. P. XU* and H. LIU (Shanghai Xuhui Dental Hospital, China)
- 0823** Variations in L*a*b* Values of Vitapan 3D Master Shade Guide. K. KING* and W. DE RIJK (UNMC College of Dentistry, Omaha, NE, USA)
- 0824** Effect of Non-perpendicular Measurement Orientation on Easyshade Color Measurement. P.S. LUND* (University of Iowa, Iowa City, USA)

Seq#: 125 **Friday, 4 April 2008, 2:45 p.m. - 3:45 p.m.**
Poster Session, Trinity I - Exhibit Hall

Dental Materials 1: Adhesion - Bond Strength Testing and Mechanisms - Environment, Material, and Technique Impacts on Bond Strength

- 0825** Bond Strengths of Self-etching Bonding Systems to Dentin and Enamel. R.B. PRICE, M. McLEOD*, and C.M. FELIX (Dalhousie University, Halifax, NS, Canada)
- 0826** Microtensile Bond Strength of Self-etch Adhesives with the Total-etch Technique. T. HOHNSTEIN, R. VANDELDELDE, K. VANDEWALLE*, and J. LINDEMUTH (USAF, Lackland AFB, TX, USA)
- 0827** Bond Strength of SE Adhesives with Phosphoric Acid Etching. J.-L. RUIZ* and A. KOBASHIGAWA (University of Southern California, Los Angeles, USA)

- 0828** Eighteen-month Storage Adhesion Study of Adper™ Scotchbond™ SE Self-etch Adhesive. B.A. SHUKLA*, V.A. RUSSELL, R.R. WERTISH, and S.M. AASEN (*3M ESPE Dental Products, Saint Paul, MN, USA*)
- 0829** Bond Strength of OptiBond All-In-One on Enamel. O. BAGATCHENKO, X. CHEN*, X. QIAN, and D. TOBIA (*Kerr Corporation, Orange, CA, USA*)
- 0830** *In vitro* Microtensile Bond Strength of Four Self-etch Adhesives. J. PURK*, V. DUSEVICH, A. GLAROS, and J.D. EICK (*University of Missouri-Kansas City, USA*)
- 0831** Age of 3 Self-etch One-bottle Adhesives - Shear Bond Strength. M.Z. ANABTAWI*, L. RAMP, and J.O. BURGESS (*University of Alabama at Birmingham, USA*)
- 0832** Long-term Dentin Bond Strength of Belleglass-NG with New Cementation System. C.J.E. FLOYD*, A. KOBASHIGAWA, X. QIAN, and X. CHEN (*Kerr Corporation, Orange, CA, USA*)
- 0833** Effect of Enamel Etching Time on Roughness and Bond Strength. W.W. BARKMEIER*, R.L. ERICKSON, N.S. KIMMES, M.A. LATTA, and T.M. WILWERDING (*Creighton University, Omaha, NE, USA*)
- 0834** One- vs. Two-step Self-etch Application Mode on Bond Strength. M. SCHILTZ-TAING, R.M. CARVALHO*, and B. SUH (*Bisco, Inc., Schaumburg, IL, USA*)
- 0835** Adhesive Shear Bond Strengths with Recommended and Extended Treatment Times. N.S. KIMMES*, W.W. BARKMEIER, and R.L. ERICKSON (*Creighton University, Omaha, NE, USA*)
- 0836** Effect of Enamel Bleaching on Orthodontic Bond Strength *in vitro*. C.A. MARTIN*, J. MULLINS, E. KAO, and P. NGAN (*West Virginia University, Morgantown, USA*)

Seq#: 126 Friday, 4 April 2008, 2:45 p.m. - 3:45 p.m.
Poster Session, Trinity I - Exhibit Hall

Dental Materials 3: Ceramic-based Materials and Cements - Bond Strength of Resin Cements

- 0837** Dentin Bond Strength of Self-adhesive Luting Materials. W.T. NAUGHTON* and M.A. LATTA (*Creighton University, Omaha, NE, USA*)
- 0838** Dentin Bond Strength of NX3 Resin Cement. X. QIAN*, H. BUI, and D. TOBIA (*Kerr Corporation, Orange, CA, USA*)
- 0839** Bond Strengths of Four Self-adhesive Resin Cements to Zirconia Ceramic. K. YOSHIDA*, K. KAMADA, and M. ATSUTA (*Nagasaki University Hospital of Medicine and Dentistry, Japan*)
- 0840** Properties of a Newly Developed Self-adhesive Resin Cement. A. BARG*, W. KRUMME, R. MALETZ, and M. DANE-BROCK (*VOCO GmbH, Cuxhaven, Germany*)
- 0841** Long-term Bonding to Modified Zirconia Surface. J.-H. PHARK*, S. DUARTE, M.B. BLATZ, and A. SADAN (*Case Western Reserve University, Cleveland, OH, USA*)
- 0842** Retention of Zirconia Crowns Bonded with Five Adhesive Cements. D. CAKIR*, T.E. PRENTICE, A. MILLER, J. BURGESS, and L.C. RAMP (*University of Alabama at Birmingham, USA*)
- 0843** Shear Bond Strength of Zirconia All-ceramics at the Core-Veneer Interface. K.M. STEIN, F. QIAN, and D. GRATTON* (*University of Iowa, Iowa City, USA*)

Seq#: 127 Friday, 4 April 2008, 2:45 p.m. - 3:45 p.m.
Poster Session, Trinity I - Exhibit Hall

Dental Materials 6: Polymer-based Materials - Physical Properties and Performance - Physical Properties of Resin Composites and Glass Ionomers

- 0844** Fluoride Recharge of a Nano-ionomer Restorative Material. T. TON*, J. THALACKER, A. FALSAFI, J. OXMAN, S. MITRA, and H.T. BUI (*3M ESPE Dental Products, Saint Paul, MN, USA*)

- 0845** Fluoride Release from a New Protective Coating. J. FITCH*, K.M. CUMMINGS, and R. RUSIN (*3M ESPE Dental Products, Saint Paul, MN, USA*)
- 0846** Strength of a New Protective Coating. K.M. CUMMINGS* and R. RUSIN (*3M ESPE Dental Products, Saint Paul, MN, USA*)
- 0847** Trans-enamel Polymerization: Effect on Composite Hardness. G. GOMES* and J. PERDIGÃO (*Instituto Superior Ciencias Saude Egas Moniz, Caparica, Portugal*)
- 0848** Effects of Restorative Polymerization Stress on Composite Matrix. S. BERTRAND*, Q. DAI, X. JIN, and M. O'CONNOR (*Dentsply International, Milford, DE, USA*)
- 0849** Polymerization Contraction Stress as a Function of C-factor. L. FENG* and B. SUH (*Bisco, Inc., Schaumburg, IL, USA*)
- 0850** Evaluation of Adhesive Resin Cements with a Crown Pull-off Test. M.A. McBRIDE*, J. HARRISON, J.F. SIMON, and W. DE RIJK (*University of Tennessee, Memphis, USA*)
- 0851** A Novel Intermediate Chairside Composite Crown System. F. SUN*, B.H. HUGHES, and M. O'CONNOR (*Dentsply International/L.D. Caulk, Milford, DE, USA*)
- 0852** Property Evaluation of Self-etch Flowable Composites. S. JIN*, W. JIA, and J. TURCOTTE (*Pentron Clinical Technologies, Wallingford, CT, USA*)
- 0853** Bi-axial Flexural Strength and Modulus of Filled and Unfilled Adhesives. M. GIANNINI*, M.S. LIBERTI, C.A.G. ARRAIS, D. METTENBURG, and F.A. RUEGGEBERG (*Dental School of Piracicaba - UNICAMP, Piracicaba, SP, Brazil*)
- 0854** Evaluation of the Cohesive Strength of the Composite with Different Monomers. C.R. PUCCI*, D.C. BARCELLOS, C.R.G. TORRES, M.F.R.L. HUTHALA, M.A.M. ARAUJO, S.E.D.P. GONÇALVES, A.B. BORGES, C. PAGANI, and J.R. RODRIGUES (*Universidade Est. Paulista Julio Mesquita, São José dos Campos, SP, Brazil*)
- 0855** Fracture Resistance of the Undermined Cavities Filled with Composite Resin. D.-H. SHIN* and H. CHOI (*Dankook University, Chuncheon, Choong-Nam, South Korea*)
- 0856** Fatigue Property of a New Indirect Composite Laminated with FRC. S. SUZUKI*, Y. SAIMI, T. ONO, and M. TSUCHIKAWA (*University of Alabama, Birmingham, USA*)
- 0857** Thermal Pre-treatment and Characterization of Silica Dental Fillers. Q. WAN*, J. SHEFFIELD, J. MCCOOL, and G. BARAN (*Temple University, Philadelphia, PA, USA*)
- 0858** Effect of Wear Resistance Improvement of Nano-filled Resin Coating. D. MACHIDA*, T. KUMAGAI, T. SAKUMA, and S. AKAHANE (*GC Corporation, Tokyo, Japan*)
- 0859** Mechanical Properties of Novel Self-etch Resin-based Endodontic Sealer. K. SAEKI*, S. ZARTOSHTIMANESH, M. STANINEC, L.G. WATANABE, S.J. MARSHALL, and G.W. MARSHALL (*University of California, San Francisco, USA*)
- 0860** Initiator and Primer Photopolymerization Effects on Bonding with PMDM/HEMA-based Primers. C. STEPHEN-HAS-SARD*, G.E. SCHUMACHER, A. GIUSEPPEPPI, and J.M. ANTONUCCI (*U.S. Navy Dental Corps, Bethesda, MD, USA*)
- 0861** Enzymatic Degradation of Dentin Adhesives Containing New Urethane-linked Trimethacrylate Monomer. J.-G. PARK*, Q. YE, H. DAVIS, N. DAVYDOVA, E. TOPP, E.L. KOSTORYZ, X. YAO, C.H. LEE, Y. WANG, and P. SPENCER (*University of Missouri-Kansas City, USA*)
- 0862** Accelerated Aging Effects on Color, Translucency, and Gloss of Composites. R.D. PARAVINA, L. ROEDER*, F.S. HOS-SAIN, and J.M. POWERS (*University of Texas Dental Branch at Houston, USA*)
- 0863** Coffee Stain Resistance and Enamel Bond Strength of Surface Sealant. X. HUO* (*Dentsply Caulk, Milford, DE, USA*)

Seq#: 128 Friday, 4 April 2008, 2:45 p.m. - 3:45 p.m.
Poster Session, Trinity I - Exhibit Hall

Diagnostic Sciences - Posters

0864 WITHDRAWN

0865 The Timing and Amplitude of Masticatory Muscle Activity. J. RADKE and T. SCHAEFER* (*Bio-Research Associates Inc., Milwaukee, WI, USA*)

0866 Three-dimensional and Cephalometric Evaluations in Children with Craniofacial Anomalies. O. TULUNOGLU*, A. GULSEN, I.F. TULUNOGLU, and S. OZMEN (*Gazi Universitesi, Ankara, Turkey*)

0867 Cone-Beam Computed Tomography Analysis of Inferior Alveolar Canal Location. J. STEWART*, H. MINCER, J. CHAUDHRY, and M. SCARBECZ (*University of Tennessee, Columbia, USA*)

0868 Technique Error Comparison with Two Digital Sensor/Paralleling Device Combinations. J. BRAME*, S.M. MAURIELLO, V.P. OVERMAN, and C.A. PETERSON (*University of North Carolina, Chapel Hill, USA*)

0869 WITHDRAWN

0870 Radiographic Evaluation of Densities of Different Root Canal Sealers. B. PENUGONDA*, S. BODEPUDI, S. KOTTAL, and E. HITTELMAN (*New York University College of Dentistry, USA*)

0871 Diagnostic Agreement between Panoramic and Color Doppler of Carotid Atheroma. C.M. ROMANO-SOUSA, L. NEVES*, and M. FENYO-PEREIRA (*Universidade Federal Fluminense, Valeça - Rio de Janeiro, Brazil*)

0872 Increased Sensitivity of a Papillary Inflammation Bleeding Gingivitis Index. T. HE, J.L. MILLEMAN*, K.R. MILLEMAN, M.S. PUTT, R.D. GIBB, R.W. GERLACH, and A.R. BIESBROCK (*University Park Research Center, Fort Wayne, IN, USA*)

0873 Tooth Color Measurement Reproducibility with Digital Imaging. M. BARKER, M.K. ANASTASIA, M. RUBUSH, R.W. GERLACH, B. HALES, B. THACKER, W. WOLF*, and I. MAGNUSSON (*University of Florida, Gainesville, USA*)

0874 Determination of the Perceptual Threshold for Complex Visual Color Matching. J. DASILVA*, S. PARK, and S. ISHIKAWA-NAGAI (*Harvard School of Dental Medicine, Boston, MA, USA*)

0875 Feasibility of Gloss Measurement on Coated Enamel with Digital Imaging. A. NOWAK*, L. OTIS, and J.G. MASTERS (*Colgate-Palmolive, Piscataway, NJ, USA*)

Seq#: 129 Friday, 4 April 2008, 2:45 p.m. - 3:45 p.m.
Poster Session, Trinity I - Exhibit Hall

Behavioral, Epidemiologic, and Health Services Research - Health Services and Behavioral Research

0876 Parental Anxiety during Child's Dental Sedation: Picture Book Effects. N. SCOTT, S. FADAVI, A. KOERBER, I.C. PUNWANI, and R.J. VERGOTINE* (*University of Illinois - Chicago, USA*)

0877 WITHDRAWN

0878 Orthodontic Visits and Expenditures among Children, 2004. T.P. WALL*, A.H. GUAY, and L.J. BROWN (*American Dental Association, Chicago, IL, USA*)

0879 Dental Fear among Youth in Appalachia. D.W. McNEIL*, S.A. HENDERSON, R.J. CROUT, D. POLK, R.J. WEYANT, and M.L. MARAZITA (*West Virginia University, Morgantown, USA*)

0880 Acceptability and Preferences for Early Childhood Caries Preventive Treatments. S.H. ADAMS*, S. HYDE, and S.H. HUSTING (*University of California - San Francisco, USA*)

0881 Impact of Oral Health Promotion on Study Participants and Families. N.B. PORTEOUS*, L.A. ARCHILA, R.D. BARTIZEK, A.R. BIESBROCK, and G.T. TEREZHALMY (*University of Texas - San Antonio / Health Science Ctr., USA*)

0882 Children's Oral Health Behavior and Quality of Life - Panel Study. A. ARRUDA*, W. SOHN, and M.R. INGLEHART (*University of Michigan, Ann Arbor, USA*)

0883 How Consumers Rate Dentists on the Internet. M.F. WALJI* and J.A. VALENZA (*University of Texas - Houston/Health Science Center, USA*)

0884 Accuracy of NicAlert™ Strips Tested with Urine and Saliva. K. NEISWANGER*, R.J. WEYANT, R.J. CROUT, D.W. McNEIL, and M.L. MARAZITA (*University of Pittsburgh, PA, USA*)

Seq#: 130 Friday, 4 April 2008, 2:45 p.m. - 3:45 p.m.
Poster Session, Trinity I - Exhibit Hall

Nutrition - Nutrition

0885 Increased Leptin and Decreased Caries in Overweight or Obese Children. R. TSENG*, J.T. WRIGHT, and M.A. BECK (*University of North Carolina, Chapel Hill, USA*)

0886 Nutrition and Healthy Lifestyle Promotion in Pediatric Dental Practices. K. BOYD*, M. HILLMAN, and E. WILLIAMS (*Northwestern University/Children's Memorial Hospital, Chicago, IL, USA*)

0887 Sour Candies are More Erosive than Their Standard Counterparts. S.N. WAGONER*, T.A. MARSHALL, F. QIAN, M.M. HOGAN, J.D. HARLESS, and J.S. WEFEL (*University of Iowa, Iowa City, USA*)

0888 Enamel Erosion from Comparable United Kingdom and United States Beverages. S.E. MURRELL*, T.A. MARSHALL, P. MOYNIHAN, F. QIAN, J.S. WEFEL, J.D. HARLESS, M.M. HOGAN, and J. HEILMAN (*University of Iowa, Iowa City, USA*)

0889 Raisin Effects on *in vitro* Demineralization of Human Teeth. J.L. ROSE*, K.M. HOFFMAN, B.D. SCHMUCK, S.H. DICKENS, and C.M. CAREY (*Paffenbarger Research Center, American Dental Association Foundation, Gaithersburg, MD, USA*)

0890 Dietary Beverages Create Surfaces Conducive to Microbial Biofilm Development. M.J. JOHNSON*, J. LAFFOON, K.K. BURNELL, J.D. HARLESS, F. QIAN, T.A. MARSHALL, and K.A. BROGDEN (*University of Iowa, Iowa City, USA*)

0891 Caries Protection Afforded by Milk Intake. T.A. MARSHALL*, J.M. EICHENBERGER-GILMORE, B. BROFFITT, J.J. WARREN, and S. LEVY (*University of Iowa, Iowa City, USA*)

Seq#: 131 Friday, 4 April 2008, 2:45 p.m. - 3:45 p.m.
Poster Session, Trinity I - Exhibit Hall

Cariology Research - Caries Management, Sealants

0892 Frequency of Fluoride Varnish Application in Prevention of Dental Caries. M.E. IRIGOYEN, I. LUENGAS*, M.A. ZEPEDA, and L.T. SÁNCHEZ-PÉREZ (*Universidad Autónoma Metropolitana-Xochimilco, Mexico*)

0893 ACP Remineralizing Agents: Effect on *in vitro* Enamel Caries. J. HICKS and C. FLAITSZ* (*University of Texas Houston/Health Science Center, USA*)

0894 Enamel Remineralization and Fluoride Uptake from 5000-ppm-fluoride Pastes. R.L. KARLINSEY*, A.C. MACKEY, G.K. STOOKEY, and A.M. PFARRER (*Indiana Nanotech, Indianapolis, USA*)

0895 Er,Cr:YSGG Laser-treated Enamel Demineralization. P.M. FREITAS*, M.L. RAPOZO-HILO, C.D.P. EDUARDO, and J.D. FEATHERSTONE (*University of São Paulo, Brazil*)

0896 Enamel Surface Restoration by Toothpastes. T. POTH*, J.C. PESCHKE, R. KLISS, C. BUCHERT, and H. SCHWEITZER (*SusTech GmbH & Co. KG, Darmstadt, Germany*)

Friday

0897 Fluoride Uptake from Professional Fluoride Applications Applied Directly onto Lesions. B.R. SCHEMEHORN*, G.D. WOOD, and A.M. PFARRER (*Dental Products Testing, Indianapolis, IN, USA*)

0898 Light-cured Filled Sealant Prevented Enamel Demineralization around Orthodontic Brackets. A.R. PATEL, I.S. MUGISA, P.T. GAKUNGA, J.P. HATCH, and B.T. AMAECHI* (*University of Texas - San Antonio / Health Science Ctr., USA*)

0899 Use of QLF *in vitro* to Assess Sealed Caries Lesions. M. FONTANA*, M. ANDO, A.E. SOTO-ROJAS, C. GONZÁLEZ-CABEZAS, and G.J. ECKERT (*Indiana University School of Dentistry, Indianapolis, USA*)

Seq#: 132 Friday, 4 April 2008, 2:45 p.m. - 3:45 p.m.
Poster Session, Trinity I - Exhibit Hall

Cariology Research - Erosion, Molecular Biology, Clinical Studies

0900 WITHDRAWN

0901 Oxidation of Biomolecules by Ozone. E. LYNCH*, J.C. BLACKBURN, C.J. SILWOOD, and M.C. GROOTVELD (*Queens University Belfast, Northern Ireland, UK*)

0902 Human Acquired Enamel Pellicle Peptidome. W.L. SIQUEIRA*, E. SALIH, E.J. HELMERHORST, and F.G. OPPENHEIM (*Boston University, MA, USA*)

0903 Association of Candidate Genes with Dental Caries in Young Children. S.K. WENDELL*, M.E. COOPER, B.A. DILETTUSO, A.L. KUREICHYK, M.L. BROWN, R.L. REGINA, G.E. BARKANIC, R. CROUT, D.W. McNEIL, R.J. WEYANT, and M. MARAZITA (*University of Pittsburgh, PA, USA*)

0904 Clinical Evaluation of Caries Risk Assessment Instrument for Young Adults. A.J. ROBBINS-NUNEZ*, R.L. ISAACS, V.A. WHITE, M. IZU, G.J. ECKERT, and G.K. STOOKEY (*Therametric Technologies, Inc., Indianapolis, IN, USA*)

0905 Prevalence of Caries among Siblings with and without Asthma. B.T. AMAECHI and J. LOZANO-PINEDA* (*University of Texas Health Science Ctr. at San Antonio, USA*)

0906 Testing of Dental Caries Preventives by Deciduous Molar Count. J.M. GOODSON*, R. NIEDERMAN, R. GOULD, J. SONCINI, M. TAVARES, and V. OSBORN (*Forsyth Institute, Boston, MA, USA*)

0907 Comparison of Caries Detection in Clinic using ICDAS and QLF-I. H. EGGERTSSON*, A. ZANDONA, E. DELGADO, E. SANTIAGO, P. HERNANDEZ, G.J. ECKERT, B. KATZ, M. MAU, J. TRAN, and D.T. ZERO (*Indiana University School of Dentistry, Indianapolis, USA*)

Seq#: 133 Friday, 4 April 2008, 2:45 p.m. - 3:45 p.m.
Poster Session, Trinity I - Exhibit Hall

Dental Anesthesiology Research

0908 Rate and Differences of Blood Aspiration during IANB in Children. M. BARGRIZAN* and N. TADAYON (*Shahid Beheshti Medical Sciences-Dental School, Tehran, Iran*)

0909 Sublingual Triazolam's Effect on Intra-osseous Injection Pain with Irreversible Pulpitis. M. DRUM*, M. LINDEMANN, A. READER, J. NUSSTEIN, and F.M. BECK (*Ohio State University, Columbus, USA*)

0910 Comparative Efficacy of Topical Anesthetics for Placement of Orthodontic Anchors. D.S. REZNIK, A.H. JESKE*, J.D. ENGLISH, J.-W. CHEN, J.A. CORBETT, and H.I. BUSSA (*University of Texas - Houston/Health Science Center, USA*)

Seq#: 134 Friday, 4 April 2008, 2:45 p.m. - 3:45 p.m.
Poster Session, Trinity I - Exhibit Hall

Oral Health Research - Whitening/Stain/Bleaching/Dentifrices

0911 Natural Toothpaste Effects on Bacterial Co-adhesion at Pellicle-coated Surfaces. H.C. VAN DER MEI*, D.J. WHITE, G.I. GEERTSEMA-DOORNBUSCH, J. ATEMA-SMIT, and H.J. BUSSCHER (*University Medical Center Groningen and University of Groningen, Netherlands*)

0912 Extrinsic Tooth Stain Removal with Proteases. C.J. MORDAS*, A. MEHTA, M. MOORE, and R.J. GAMBOGI (*Johnson & Johnson Healthcare Products, a Division of McNeil PPC, Skillman, NJ, USA*)

0913 Stain Removal Performance of an Improved Dentifrice. P. CHAKNIS* (*Colgate-Palmolive Company, Piscataway, NJ, USA*)

0914 Silica Abrasivity and STP: Effect on Tooth Stain Removal *in vivo*. J. CREETH*, M.P. BOSMA, A. BUTLER, S. SMITH, S. LITTLEJOHN, N. SHARMA, C.J. KLEBER, J.L. MILLEMAN, K. MILLEMAN, E. CHAVES, and A. GALLAGHER (*GlaxoSmithKline, Weybridge, United Kingdom*)

0915 Determination of the Efficacy and Safety of Tooth-whitening Agents. A. BORDAS*, M.P. BOSMA, J. DUROCHER, C. KOLLAR, C.J. KLEBER, and K. MILLEMAN (*GlaxoSmithKline, Weybridge, United Kingdom*)

0916 Investigation of a Modified Treatment with Aquafresh® White Trays™ Revive™. M.P. BOSMA*, D. TARGETT, J. DUROCHER, C.J. KLEBER, and K.R. MILLEMAN (*GlaxoSmithKline, Weybridge, United Kingdom*)

0917 Safety and Efficacy of a Toothpaste Whitening Booster. J. FORMAN*, E. MAJOR, A.J. CHARIG, and A.E. WINSTON (*Church & Dwight Co., Inc., Princeton, NJ, USA*)

0918 Development & Evaluation of an *in vitro* Whitening Model. S. JEFFERIES*, M. AMANDA, K. MOORE, S. PODRAY, D. BOSTON, and E. WHITAKER (*Temple University, Philadelphia, PA, USA*)

0919 A Clinically Validated *in vitro* Method for Evaluating Tooth Whitening. M.S. PUTT, M.H. MOORE, A.J. CHARIG, and A.E. WINSTON* (*Church & Dwight Co., Inc., Princeton, NJ, USA*)

0920 Enamel Polish Evaluation *in vitro* of Various Commercial Dentifrices. M.H. MOORE* and M.S. PUTT (*Indiana University-Purdue University, Fort Wayne, USA*)

0921 Clinical Study Evaluating Anti-plaque Efficacy of Colgate® Total® Advanced Toothpaste. V.M. BARNES*, R. RICHTER, and T. XU (*Colgate-Palmolive Technology Center, Piscataway, NJ, USA*)

Seq#: 135 Friday, 4 April 2008, 2:45 p.m. - 3:45 p.m.
Poster Session, Trinity I - Exhibit Hall

Mineralized Tissue - Enamel and Mineralization

0922 WITHDRAWN

0923 Deposition of Amelogenin-Apatite Composite on Human Tooth Enamel. Y. FAN* and J. MORADIAN-OLDAK (*University of Southern California, Los Angeles, USA*)

0924 Fluoride Exposure Significantly Reduces Protein Secretion in Cultured LS8 Cells. R. SHARMA, M. TSUCHIYA, and J.D. BARTLETT* (*Forsyth Institute, Boston, MA, USA*)

0925 Variation in Daily Enamel Increments in Fossil Hominins. R. LACRUZ*, M.C. DEAN, F. RAMIREZ ROZZI, and T.G. BROMAGE (*University of Southern California, Los Angeles, USA*)

0926 Enamel-hardening Properties of Two Dental Pastes. V.J. SETIEN*, M. KOIKE, P. RAGHUNATH, and K. AJLOUNI (*Baylor College of Dentistry, Dallas, TX, USA*)

- 0927** WITHDRAWN
0928 Role of Phosphophoryn in Mineralizing and Non-mineralizing Mammalian Cells. P. KUMTA*, D. LEE, C. SFEIR, and X. ZHANG (*University of Pittsburgh, PA, USA*)

Seq#: 136 **Friday, 4 April 2008, 2:45 p.m. - 3:45 p.m.**
Poster Session, Trinity I - Exhibit Hall

Microbiology / Immunology and Infection Control - Infection Control

- 0929** Effectiveness of Dental Unit Waterline Decontamination by Combining Shock and Continuous Treatment. C. UDOMCHAROENCHAIKIJ*, P. SRICHANTRA, and R. AMPORNARAMVETH (*Chulalongkorn University, Bangkok, Thailand*)
0930 Germicidal Activity of Antimicrobials and VIOlight® Personal Travel Toothbrush Sanitizer. C. BENEDUCE, K.A. BAXTER, J. BOWMAN, M. HAINES, and S. ANDREANA* (*Loma Linda University, CA, USA*)
0931 Antimicrobial Efficacy of an Alcohol-based Hand Cleanser. R. HOLTON, M. HUBER*, and G. TEREZHALMY (*University of Texas - San Antonio / Health Science Ctr., USA*)
0932 Efficacy of Microwave Oven Sterilization of Gypsum Casts. E.S. KO*, D. NICK, M. SHEHATA, W. ZHANG, H. LU, J. KIM, R. APRECIO, and D.B. ROBERTS (*Loma Linda University, CA, USA*)
0933 Comparison of Antiseptic Mouthrinse Products on Toothbrush Disinfection. B. CHUNG*, D.M. HENSLEY, and K. VANDEWALLE (*USAF, Lackland AFB, TX, USA*)
0934 *In vitro* Determination of Contamination of Low-speed Handpieces. M.L. RASCHE*, J.R. CHIN, C. PALENIK, and L. VU (*Indiana University School of Dentistry, Indianapolis, USA*)
0935 Exposure Time of Sodium Hypochlorite on Growth of *E. faecalis*. J.R. HOFFMAN*, D. HENSLEY, K. SABEY, and K. VANDEWALLE (*USAF, Lackland AFB, TX, USA*)
0936 Triclosan/Copolymer/NaF Dentifrice in Controlling Oral Malodor and Plaque Bacteria. Y.P. ZHANG*, D. HU, and W. DEVIZIO (*Colgate-Palmolive Company, Piscataway, NJ, USA*)
0937 Differential Sterilization of Dental Handpiece Turbines. P. KANG*, S. GRUNINGER, K. VOGT, J. KUEHNE, and C. SIEW (*American Dental Association, Chicago, IL, USA*)
0938 Effects of Triclosan Dentifrice and Tongue Cleaning on Oral Halitosis. P. MOSES*, B. CLARK, V.I. HARASZTHY, P.K. SREENIVASAN, and J.J. ZAMBON (*State University of New York - Buffalo, USA*)
0939 Compatibility of H₂O₂-based Surface Disinfectant with Elastomeric Impression Materials. R. PUTTAIAH, J. SMITH*, S.-M. LIN, and V.J. SETIEN (*Baylor College of Dentistry TAMUS HSC, Dallas, TX, USA*)
0940 Antimicrobial Potential of Two Oral Care Gels. R.M. APRECIO*, W. ZHANG, S.S. LEE, and Y. LI (*Loma Linda University, CA, USA*)
0941 Controlling Opportunistic Pathogenic Microbial Contamination in DUWLs with Citrisil. W. ZHANG*, R.N. KHOIE, P. STURMAN, J. MAVI, E.K.W. TSENG, and Y. LI (*Loma Linda University, CA, USA*)
0942 Periowave Eradicates Biofilms from Dental Implants without Altering Surface Chemistry. R.J. SCOTT*, L. PEDIGO, N.G. LOEBEL, and C.N. STREET (*Ondine Research Laboratories, Bothell, WA, USA*)
0943 WITHDRAWN
0944 Percutaneous Injuries in Practicing US Dentists, 1992-2006. S.E. GRUNINGER*, P. KANG, and C. SIEW (*American Dental Association, Chicago, IL, USA*)

- 0945** Preventing Re-infection of the Root Canal with Endodontic Irrigants. B.J. RASIMICK*, R.P. SHAH, B.L. MUSIKANT, and A.S. DEUTSCH (*Essential Dental Systems, South Hackensack, NJ, USA*)
0946 Bactericidal Activity of a Stabilized Chlorine Dioxide Rinse. A. VILLHAUER*, J. HORST, B. OLSON, and D. DRAKE (*University of Iowa, Iowa City, USA*)
0947 WITHDRAWN

Seq#: 137 **Friday, 4 April 2008, 2:45 p.m. - 3:45 p.m.**
Poster Session, Trinity I - Exhibit Hall

Periodontal Research - Therapy - Lasers

- 0948** Effect of Laser on TNF-alpha in Inflamed Human Gingival Tissue. S. PESEVSKA, M. NAKOVA, I. GJORGOSKI, N. ANGELOV*, K. IVANOVSKI, S. MINDOVA, D. ANGELOVA, and S. ANDREANA (*Loma Linda University, CA, USA*)
0949 Low-level Diode Laser Periodontal Treatment: Clinical Findings. S. PESEVSKA, M. NAKOVA, I. GJORGOSKI, N. ANGELOV, K. IVANOVSKI, D. ANGELOVA, C. BENEDUCE*, and S. ANDREANA (*Loma Linda University, CA, USA*)
0950 Thermal Propagation of 810-nm-diode Laser in Porcine Dermal Tissues. C. BENEDUCE, D. ANGELOVA*, N. ANGELOV, and S. ANDREANA (*Loma Linda University, CA, USA*)

Seq#: 138 **Friday, 4 April 2008, 2:45 p.m. - 3:45 p.m.**
Poster Session, Trinity I - Exhibit Hall

Craniofacial Biology - Dental Developmental Biology

- 0951** PIAS1 Interacts with and Activates PITX2 Transcriptional Activity. J. WANG* and B.A. AMENDT (*Texas A&M University Health Science Center, Institute of Biosciences and Technology, Houston, USA*)
0952 Identification and Functional Analysis of Two Novel PAX9 Mutations. H. WU, Y. WANG, J. WU*, H.S. ZHAO, X. ZHANG, H. FENG, H. KAPADIA, and R.N. D'SOUZA (*Baylor College of Dentistry, Dallas, TX, USA*)
0953 Gene Expression during Early Murine Odontogenesis. M. LANDIN, S. RISNES, and H. OSMUNDSEN* (*University of Oslo, Norway*)
0954 Fate of HERS during Molar Root Development in Mice. X. HUANG, Sr.*, X. XU, and Y. CHAI (*University of Southern California, Los Angeles, USA*)
0955 TNF-α Up-regulates Bone Morphogenetic Proteins in Dental Follicle Cells. S. YAO*, V. PRPIC, F. PAN, and G.E. WISE (*Louisiana State University, Baton Rouge, USA*)
0956 Osteogenic Differentiation of Stem Cells from Human Exfoliated Deciduous Teeth. J.M. YOCHIM*, K. CHADIPIRALLA, B. BAHULEYAN, P.E. MURRAY, F. GARCIA-GODOY, E.J. STERNICKI, and C.-Y.C. HUANG (*Nova Southeastern University, Ft. Lauderdale, FL, USA*)
0957 Analysis of Over-erupted Incisors in Twist-1-deficient Mice. A. YASUE*, O. KLEIN, A.C. CAVENDER, and R.N. D'SOUZA (*Baylor College of Dentistry, Dallas, TX, USA*)
0958 Investigating the Association of Ovarian Disease with Tooth Agenesis. G. MUES*, S. POLLAN-WHITE, L.A. CHALOTHORN, C.S. BEEMAN, and R. D'SOUZA (*Baylor College of Dentistry, Dallas, TX, USA*)

Friday

Craniofacial Biology - Orthodontic Treatment Outcomes and Esthetics

0959 3D Analysis at Completion of Orthodontics following Class III Surgery. K.S. SPYRIDES*, L.H.S. CEVIDANES, C. PHILLIPS, A.E.F. OLIVEIRA, and D. TYNDALL (*University of North Carolina, Chapel Hill, USA*)

0960 Alveolar Arch Growth following Palatal Surgery in Cleft Lip/Palate. C. DOLCE*, T.O. OZAWA, V.A. CAVASSAN, A. DE ALMEIDA, R.M. LAURIS, O.G. SILVA, M.I. PEGORARO-KROOK, W. WILLIAMS, M.B. SEAGLE, J.R. DUTKA-SOUZA, S. MCGORRAY, and J.A. NACKASHI (*University of Florida, Gainesville, USA*)

0961 Evaluation of Bionator Therapy in Treatment of Class II Malocclusions. E.F. HARRIS* and D.C. SAWRIE (*University of Tennessee, Memphis, USA*)

0962 Concurrent Whitening and Orthodontic Treatment. J.T. GLADWELL, E. TUFEKCI*, S.J. LINDAUER, and B. SHROFF (*Virginia Commonwealth University - VCU/MCV, Richmond, USA*)

0963 Overbite Correction and Smile Esthetics. S.J. LINDAUER*, K.E. KELLEHER, S.N. ELHADY, S.M. LEWIS, and B. SHROFF (*Virginia Commonwealth University - VCU/MCV, Richmond, USA*)

0964 Individual Preferences for Profile Attractiveness on Two Diagnostic Techniques. P. NGAN*, J. HAMILTON, C.A. MARTIN, M. BAGBY, T. TREMONT, and E. GUNEL (*West Virginia University, Morgantown, USA*)

0965 Esthetic Preferences of American and Japanese Laypersons and Dental Students. M. NOMURA*, E. MOTEGI, J.P. HATCH, E. MOHEBZAD, J.D. RUGH, and K. SUEISHI (*Tokyo Dental College, Chiba, Japan*)

0966 Survey-based Study of the Most Common Retention Protocols. E. HUGHES, M. VALIATHAN*, M.G. HANS, and S. NELSON (*Case Western Reserve University, Cleveland, OH, USA*)



Seq#: 140 **Saturday, 5 April 2008, 9:00 a.m. - 10:30 a.m.**
Symposium, Room: Governors Lecture Hall

Symposium - Local Anesthesia: New and Improved?

Supported by: Dentsply Professional, and Novalar Pharmaceuticals, Inc.

Chairperson: S. Gordon

0967 9:00 Mechanisms of Local Anesthesia. J. YAGIELA* (UCLA, Los Angeles, CA, USA)

9:10 Effectiveness of Articaine vs. Lidocaine for Mandibular Injections. J.G. MEECHAN* (Newcastle University, United Kingdom)

9:20 Effectiveness of Articaine at Two Concentrations of Epinephrine. P.A. MOORE* (University of Pittsburgh, PA, USA)

9:30 Paradoxical Effects of Bupivacaine on Inflammation and Pain. R. DIONNE* (Natl. Institute of Nursing Research, Bethesda, MD, USA)

9:40 Pharmacokinetic Changes in Lidocaine after Phentolamine. P.A. MOORE* (University of Pittsburgh, PA, USA)

9:50 Efficacy of a Novel Local Anesthetic Reversal Agent. E. HERSH* (University of Pennsylvania, Philadelphia, USA)

Seq#: 141 **Saturday, 5 April 2008, 9:00 a.m. - 10:30 a.m.**
Symposium, Room: Grand Ballroom E

Symposium - Mechanotransduction in Mineralized Tissues

Chairperson: L. Bonewald

0968 9:00 Overview of Mechanotransduction in Mineralized Tissues. M. SCHAFFLER* (Mount Sinai School of Medicine, New York, NY, USA)

9:15 $\alpha 5$ Integrin Association with Connexin 43 Regulates the Function of Osteocyte Hemichannels in Response to Fluid Flow Shear Stress. J. JIANG* (University of Texas - San Antonio / Health Science Ctr., USA)

9:30 ATP and Bone Cell Mechanotransduction. H. DON-AHUE* (Pennsylvania State University, Hershey, USA)

9:45 Clinical Perspective of Mechanical Loading and Osteointegration. C. STANFORD* (University of Iowa, Iowa City, USA)

Seq#: 142 appears after Seq#: 150.

Seq#: 143 **Saturday, 5 April 2008, 9:00 a.m. - 10:30 a.m.**
Oral Session, Room: Senators Lecture Hall

Behavioral, Epidemiologic, and Health Services Research - Dental Behavior of Private Practice Dentists

Chairpersons: V. Gordan and C. Kunzel

0970 9:00 Providers' Assessment and Management of Dental Fear: a Qualitative Analysis. L.J. HEATON*, L.F. VALBUENA, C.A. RIEDY, R.E. CONTOS, and S.E. COLDWELL (University of Washington, Seattle, USA)

0971 9:15 Restorative Treatment Thresholds for Primary Caries by Dental PBRN Dentists. V.V. GORDAN*, J.D. BADER, C.W. GARVAN, V. QVIST, J. RICHMAN, I. MJÖR, G.H. GILBERT, and for the DPBRN COLLABORATIVE GROUP (University of Florida, Gainesville, USA)

0972 9:30 Pediatric and General Dentists' Knowledge and Use of Fluoride Varnish. R.M. HOLCOMBE, A. KOERBER, I. PUNWANI, S. FADAVI, S. ALRAYYES*, and G.D. KLASSER (University of Illinois - Chicago, USA)

0973 9:45 Data Collection with Electronic Dental Records: Dental PBRN Applications. M.J. THOELE*, D.B. RINDAL, G.H. GILBERT, C.L. HUNTLEY, J. RICHMAN, and for the DPBRN COLLABORATIVE GROUP (HealthPartners Research Foundation, Minneapolis, MN, USA)

0974 10:00 Survey of Louisiana General Dentists Regarding Age 1 Dental Visit. P. RITWIK*, J. YALE, T.M. PERKINS, V. LIBERTO, and R. MUSSELMAN (LSU HSC School of Dentistry, Metairie, LA, USA)

0975 10:15 Contrasting Management of Diabetic Patients by General Dentists' Practice Locations. C. KUNZEL*, E. LALLA, and I. LAMSTER (Columbia University, New York, NY, USA)

Seq#: 144 **Saturday, 5 April 2008, 9:00 a.m. - 10:30 a.m.**
Oral Session, Room: Emerald

Craniofacial Biology - Contemporary Adjuncts to Orthodontic Diagnosis and Treatments

Chairpersons: P. Rossouw and J. Palomo

0976 9:00 Orthodontic Mini-implant Insertion Variables: Effects on Retention. J.S. PETREY*, M.M. SAUNDERS, G.T. KLUEMPER, C.S. BEEMAN, and L.L. CUNNINGHAM (University of Kentucky, Lexington, USA)

0977 9:15 Response to Intentional Root Damage with Miniscrew Implants. M. HEMBREE, R. CARRILLO*, P.H. BUSCHANG, P.E. ROSSOUW, and R. SPEARS (Baylor College of Dentistry, Dallas, TX, USA)

0978 9:30 Tissue Healing following Miniscrew Implant Damage. C. CASAS, P.E. ROSSOUW*, P.H. BUSCHANG, R. CARRILLO, and R. SPEARS (Baylor College of Dentistry, Dallas, TX, USA)

0979 9:45 Experimental Effects of Alveolar Corticotomies on Tooth Movements. P. SANJIDEH, P. BUSCHANG*, P.E. ROSSOUW, and P. CAMPBELL (Baylor College of Dentistry, Dallas, TX, USA)

0980 10:00 Effectiveness of Corticotomy Compared with Traditional Technique of Orthodontic Treatment. H.A. PURANI*, T.E. SCOTT, and A.K. MASCARENHAS (Boston University, MA, USA)

0981 10:15 Image Distortion and Spatial Resolution of a Commercially Available CBCT. J.M. PALOMO*, J. BALLRICK, E. RUCH, D. AMBERMAN, and M.G. HANS (Case Western Reserve University, Cleveland, OH, USA)

Seq#: 145 **Saturday, 5 April 2008, 9:00 a.m. - 10:30 a.m.**
Oral Session, Room: Grand Ballroom A

Dental Materials 8: Other Materials - Chemistry, Properties, and Performance - Enamel Properties: Agents Released from Novel Materials

Chairpersons: D. Arola and M. Tung

0982 9:00 Surface Enamel Characterization by Gas Adsorption. M.F. ORELLANA*, S.J. MARSHALL, and G.W. MARSHALL (University of California-San Francisco, USA)

0983 9:15 On the Brittleness of Human Enamel. S. PARK and D. AROLA* (University of Maryland Baltimore County, USA)

0984 9:30 Physico-Chemical Properties, *in vitro* Bioactivity of Carbonate-Fluoride-substituted Apatite. F. YAO*, J.P. LeGEROS, and R.Z. LeGEROS (New York University, USA)

0985 9:45 Effect of Calcium-phosphate-containing Fluoride Varnish on Dentin Permeability. M.S. TUNG* and J. TORRES (Paffenbarger Research Center, Gaithersburg, MD, USA)

0986 10:00 WITHDRAWN

0987 10:15 Fluoride Release of a New Nano-ionomer Restorative Material. H.T. BUI, A. FALSAFI, S. MITRA, J. OXMAN*, and T. TON (3M ESPE Dental Products, Saint Paul, MN, USA)

Seq#: 146 **Saturday, 5 April 2008, 9:00 a.m. - 10:30 a.m.**
Oral Session, Room: Grand Ballroom D

Dental Materials 9 : Instruments and Equipment -
Keynote Address and Dental Light-curing Units

Chairpersons: R. Price and C. Felix

0988 9:00 Keynote Address: The History of Photopolymerization Units in Dentistry. F. RUEGGEBERG* (*Medical College of Georgia, Augusta, USA*)

0989 9:30 Ability of a Polywave LED Light to Cure Five Composites. R.B. PRICE*, C.M. FELIX, and T.J. FAHEY (*Dalhousie University, Halifax, NS, Canada*)

0990 9:45 Correlation of Power Density with Simulated *in vitro* Intrapulpal Temperature Rise. F.A. RUEGGEBERG*, L. MOSS, B.E. HERRIN, and R.J. COX (*Medical College of Georgia, Augusta, USA*)

0991 10:00 Effect of Distance on Irradiance Received from Ten Curing Lights. R.B. PRICE, C.M. FELIX*, and M. McLEOD (*Dalhousie University, Halifax, NS, Canada*)

10:15 Discussion.

Seq#: 147 **Saturday, 5 April 2008, 9:00 a.m. - 10:30 a.m.**
Oral Session, Room: Metropolitan Ballroom

Microbiology / Immunology and Infection Control

Chairpersons: J. Lewis and Q. Rupp

0992 9:00 The Influence of Neuro-hormones on Periodontal Pathogens. Q. RUPP*, Y. LAI, D. CAPPELLI, J.P. HATCH, J.D. RUGH, and L. CHU (*University of Texas San Antonio / Health Science Ctr., USA*)

0993 9:15 Genetic Defect of *ED1* Gene Underlies Non-syndromic Hypodontia/Oligodontia. D. HAN*, S. SONG, Y. GONG, X. ZHANG, H. WU, X. WANG, M. YAN, N. ZHONG, and H. FENG (*Peking University School of Stomatology, Beijing, China*)

0994 9:30 Comparative 12-hour Antibacterial Effectiveness of a 0.454% Stannous Fluoride Dentifrice. S. FARRELL*, M.L. BARKER, A.R. BIESBROCK, D.L. BOOKER, R.W. GERLACH, K.R. MILLEMAN, and M.S. PUTT (*The Procter & Gamble Company, Mason, OH, USA*)

0995 9:45 Cytokine Modulation by the *Porphyromonas gingivalis* HtpG in THP-1 Cells. D.G. SWEIER*, M. COOPAMAH, D. LOPATIN, J.C. FENNO, and C. SHELburne (*The University of Michigan School of Dentistry, Ann Arbor, USA*)

0996 10:00 Bactericidal Activity of Sphingosine against Periodontal Pathogens. S. GELFOND*, B. OLSON, P. WERTZ, and D. DRAKE (*University of Iowa, Iowa City, USA*)

0997 10:15 Identification and Characterization of Adhesins from *Prevotella intermedia* 17. J.P. LEWIS*, D. IYER, J. HE, H. MIYAZAKI, A. YEUDALL, and C. ANAYA (*Virginia Commonwealth University, Richmond, USA*)

Seq#: 148 **Saturday, 5 April 2008, 9:00 a.m. - 10:30 a.m.**
Oral Session, Room: Sapphire

Mineralized Tissue - Dentin and Bone

Chairpersons: B. Boyan and A. Boskey

0998 9:00 MMP-2 Regulation of Osteoclast Formation. B.E. CAPPS*, L. MAILE, A. ADAY, E.T. EVERETT, and D. CLEMMONS (*University of North Carolina, Chapel Hill, USA*)

0999 9:15 Characteristics of Unusual Endocytic Trafficking in Osteoclasts. S.C. LUCCEUS*, R.D. RICAFORT, S.S. GRIESHABER, and L.S. HOLLIDAY (*University of Florida, Gainesville, USA*)

1000 9:30 VDR-null Mice Lack Mineralized Tethers Stabilizing Epiphyseal and Metaphyseal Bone. J. CHEN, D.M. RANLY, Z. SCHWARTZ, and B.D. BOYAN* (*Georgia Institute of Technology, Atlanta, USA*)

1001 9:45 Role of NO/cGMP Pathway in Endochondral Bone Formation. C.C. TEIXEIRA*, D. KALMAN, and Y. NEMELIVSKY (*New York University, USA*)

1002 10:00 DMP1 Fragments Distribute Differently in Bone, Dentin, and Cells. I. MACIEJEWSKA*, K. SVOBODA, M. PRASAD, W.T. BUTLER, and C. QIN (*Baylor College of Dentistry, Dallas, TX, USA*)

1003 10:15 Differential Effects of Post-translational Modification on Osteopontin-mediated *in vitro* Mineralization. A.L. BOSKEY*, H. TALEB, and E.S. SORENSEN (*Hospital for Special Surgery, New York, NY, USA*)

Seq#: 149 **Saturday, 5 April 2008, 9:00 a.m. - 10:30 a.m.**
Oral Session, Room: Miro

Oral Health Research - Toothbrushes, Toothpaste, Dental Floss, and Rinses

Chairpersons: M. Klukowska and A. Charig

1004 9:00 Clinical Gingivitis Assessment: Evaluation of a Short-term, Partial Grading Model. R.W. GERLACH, R.D. GIBB, J.M. DUNAVENT, B. HO, A.R. BIESBROCK, K.R. MILLEMAN*, and M.S. PUTT (*University Park Research Center, Fort Wayne, IN, USA*)

1005 9:15 Influence of Cleansing Regimen on Denture Water Sorption and Solubility. J.A. VON FRAUNHOFER*, K. BROGDEN, S. LECH, Z. LOEWY, and S. WETTERER (*University of Maryland, Baltimore, USA*)

1006 9:30 Plaque Effects of a Power Brush, Paste, and Floss Combination. K.B. WILLIAMS*, J. HAUN, P.A. WALTERS, R.D. BARTIZEK, R.W. GERLACH, and A.R. BIESBROCK (*University of Missouri-Kansas City, USA*)

1007 9:45 4-week Study of Expanded Polytetrafluoroethylene Floss and Established Gingivitis. R.W. GERLACH, A.R. BIESBROCK, J.M. DUNAVENT, R.D. GIBB, and L. ARCHILA* (*University of Texas - San Antonio / Health Science Ctr., USA*)

1008 10:00 Effect of Brushing Time on Plaque Removal with Manual Toothbrushing. M. KLUKOWSKA*, D.J. WHITE, and M.L. BARKER (*The Procter & Gamble Company, Mason, OH, USA*)

1009 10:15 Design-Efficacy Relationship of Some Electric Toothbrush Heads. V.M. PATEL, G. HUY, X. SHI, S.L. YANKELL, and A.J. CHARIG* (*Church & Dwight Co., Inc., Princeton, NJ, USA*)

Seq#: 150 **Saturday, 5 April 2008, 9:00 a.m. - 10:30 a.m.**
Oral Session, Room: Topaz

Periodontal Research - Pathogenesis - Periodontal Pathology: Host Responses

Chairpersons: A. Kantarci and A. Ghosh

1010 9:00 Resolvin E1 on PKC Activity in Neutrophils from LAP Patients. J.J. KIM*, Y. UCHIDA, K. OMORI, T. OHIRA, A. KANTARCI, H. HASTURK, J.D. WATERFIELD, and T.E. VAN DYKE (*Boston University, MA, USA*)

1011 9:15 The Role of PAR1 and PAR2 in Gingival Inflammatory Responses. M.G. ROHANI*, B. HACKER, H. DOMMISCH, W. CHUNG, and B.A. DALE (*University of Washington, Seattle, USA*)

1012 9:30 Competitive Inhibition of proMMP-2 Activation. S. BABER*, B. STEFFENSEN, Z. CHEN, M. MIKHAILOVA, S. PAL, and X. XU (*University of Texas - San Antonio / Health Science Ctr., USA*)

1013 9:45 Microarray Analysis of *in vitro* Senescence of Human Gingival Fibroblasts. S. VASTARDIS*, E. WALKER, A.Y. SPENCER, D.H. NGUYEN, and T.E. LALLIER (*Louisiana State University, New Orleans, USA*)

1014 10:00 Hyperglycemia Suppresses Diacylglycerol Kinase- α Expression in Human Neutrophils. H. LIU, A. KANTARCI*, S. AYILAVARAPU, E. BATISTA, Y. UCHIDA, K. OMORI, H. HASTURK, and T.E. VAN DYKE (*Boston University, MA, USA*)

1015 10:15 Disease-associated Fibronectin Fragment Generates Nitric Oxide in Human Periodontal Cells. A. GHOSH* and Y. KAPILA (*University of Michigan, Ann Arbor, USA*)

Seq#: 142 **Saturday, 5 April 2008, 9:00 a.m. - 11:00 a.m.**
Symposium, Room: Grand Ballroom B

Symposium - NIDCR's 60th Anniversary Symposium: Building on Our Strengths

Chairperson: P. McInnes

9:00 Introductory Remarks. P.M. McINNES* (*NIDCR, Vienna, VA, USA*)

0969 9:05 TGF- β Signaling Mechanism in Regulating Craniofacial Morphogenesis. Y. CHAI* (*University of Southern California, Los Angeles, USA*)

9:30 Genetic and Phenotypic Studies of Cleft Lip with or without Cleft Palate. M. MARAZITA* (*University of Pittsburgh, PA, USA*)

9:55 Molecular Identification of the Salivary Gland Secretion Mechanism. J. MELVIN* (*University of Rochester, NY, USA*)

10:20 Oral Health Disparities Research to Inform Clinical Practice and Health Policy. J.A. WEINTRAUB* (*University of California - San Francisco, USA*)

10:45 Discussion.

Seq#: 151 **Saturday, 5 April 2008, 10:45 a.m. - 11:45 a.m.**
Poster Session, Trinity I - Exhibit Hall

Dental Materials 9: Instruments and Equipment - Cutting, Finishing, Polishing, Endodontic Posts, New Treatment Devices, Impression Mixers

1016 Mix Quality and Dispensing Rate for Two Automatic Mixing Units. J. GRAMANN*, T. KLETTKE, and S. STARR (*3M ESPE AG, Seefeld, Germany*)

1017 Extrusion Speed and Performance of Automated Mixing Units. T. KLETTKE* and J. GRAMANN (*3M ESPE, Seefeld, Germany*)

1018 Comparison of Ultrasonic Scaling Wear and Roughness Produced *in vitro*. S.K. HARREL, F. RIVERA-HIDALGO*, K. HAMILTON, and J. SHULMAN (*Baylor College of Dentistry, Dallas, TX, USA*)

1019 Photoelastic Stress Comparison of Three Different Post Systems. S. SHARMA*, G. KUGEL, G. GREYSTONE, and P. STARK (*Tufts University School of Dental Medicine, Boston, MA, USA*)

1020 Comparison of Surgical Instrumentation Systems for Minimally Invasive Periodontal Surgery. S.K. HARREL*, F. RIVERA-HIDALGO, and J. SHULMAN (*Baylor College of Dentistry, Dallas, TX, USA*)

1021 Comparison of Cutting Efficiency of Dentated Burs. L.G. SENSI* and H. STRASSLER (*University of Maryland Dental School, Baltimore, USA*)

1022 Assessment of Potential Silica Exposure during Finishing of Dental Restorative. A. BOGDAN* (*3M ESPE Dental Products, St. Paul, MN, USA*)

1023 Comparison of Visual Shade Guide Results with Colorimeter Data. S.S. LEE*, Y. LI, W. ZHANG, N. ABDEL-SALAM, and J. KIM (*Loma Linda University, CA, USA*)

Seq#: 152 **Saturday, 5 April 2008, 10:45 a.m. - 11:45 a.m.**
Poster Session, Trinity I - Exhibit Hall

Pulp Biology & Regeneration Research - Pulp Diagnostics and Pulp Regeneration

1024 Clinical Effects of Increasing Toothpaste Abrasivity on Tooth Hypersensitivity. F.A. CURRO*, R.D. HAYS, B. STEWART, and J.G. MASTERS (*New York University College of Dentistry, USA*)

1025 Tissue-specific Binding and Remineralization of Tooth Surfaces by Peptides. E. HAGERMAN, D.K. YARBROUGH, S. MEGERDICHIAN*, F. QI, R. ECKERT, J. HE, B. WU, and W. SHI (*University of California - Los Angeles, USA*)

1026 Reactive Oxygen Species in Monocytes Generated by Blue-light-activated Chromophores. S. BOUILLAGUET*, B. OWEN, N. LANGE, J. SCHRENZEL, J. LEWIS, R.L. MESSER, P.E. LOCKWOOD, and J. WATAHA (*Section de Médecine Dentaire, Genève, Switzerland*)

1027 Presence of Betalactamase Gene in Micro-organisms of Primary Teeth Infection. G. ANSARI* and M. TABARI (*Shaheed Beheshti University of Medical Sciences, Tehran, Iran*)

1028 Tissue-engineered Dental Pulp Implanted within Endodontically Treated Teeth. P.E. MURRAY*, E. GOTLIEB, and F. GARCIA-GODOY (*Nova Southeastern University, Fort Lauderdale, FL, USA*)

1029 Dental Materials Biocompatibility Measured with Heat-shock Protein Expression. F. GARCIA-GODOY* and P.E. MURRAY (*Nova Southeastern University, Fort Lauderdale, FL, USA*)

1030 WITHDRAWN

1031 Dental Pulp Cell Stimulation via Integrin-targeted Inductive Nano-therapeutics. E. HILL*, J.K. KIM, and R. SUKLA (*University of Michigan, Ann Arbor, MN, USA*)

1032 A Retrospective Study of Direct-pulp-capping Success Rates. B. WILLERSHAUSEN*, A. KASAJ, A. SCHATTENBERG, and B. BRISEÑO (*University of Mainz, Germany*)

1033 Smear Layer Removal after Various Irrigation Times with 17% EDTA. K. SAITO* (*US Navy Dental Corps, Bethesda, MD, USA*)

1034 Morphological Characteristics of the Bifurcation Area of First Mandibular Molars. B. BRISEÑO MARROQUÍN*, S. WENTASCHEK, and B. WILLERSHAUSEN (*University of Mainz, Germany*)

Seq#: 153 **Saturday, 5 April 2008, 10:45 a.m. - 11:45 a.m.**
Poster Session, Trinity I - Exhibit Hall

Prosthodontics Research - Removable Prosthodontics and Endodontic Restorations

1035 Thermal Stresses in Various Post and Core Restorative Materials. G. ASADI*, F. GERAMIPANAH, S. NOKAR, and A. SHAFIEE (*Tehran University of Medical Sciences, Iran*)

1036 Fracture Resistance of Structurally Compromised Roots with Aesthetic Dowel Systems. M.F. AYAD*, S.A. BAHANNAN, and S.F. ROSENSTIEL (*University of Tanta, Egypt*)

1037 Bond Strength of Denture Teeth Determined by 3-point Bending Test. R. LANG*, U. SCHOTT, M. ROSENTRITT, and G. HANDEL (*University of Regensburg, Germany*)

1038 WITHDRAWN

1039 WITHDRAWN

Seq#: 154 Saturday, 5 April 2008, 10:45 a.m. – 11:45 a.m.
Poster Session, Trinity I - Exhibit Hall

**Dental Materials 2: Adhesion - Leakage/Margin Assessments -
Adhesive Materials**

- 1040** Coronal Microleakage of Root Canal Filling Material in Primary Teeth. F. SALAMA*, B. AUGUSTYN, T. DURHAM, and K. KING (*UNMC College of Dentistry, Omaha, NE, USA*)
- 1041** Dentin Permeability of a New Protective Coating Material. R. RUSIN*, K. AGEE, M. SUCHKO, K.M. CUMMINGS, and D.H. PASHLEY (*3M ESPE Dental Products, Saint Paul, MN, USA*)
- 1042** WITHDRAWN
- 1043** Bond Strength of Amalgam to Dentin with Various Bonding Agents. N.Z. BABA*, M. LEHNHOF, F.A. BERRY, and H. LU (*Loma Linda University, CA, USA*)
- 1044** Staining and Microleakage Evaluation of Re-sealing in Class V Restorations. M. KINA, G.C. LOPES, and S. MONTEIRO, Jr.* (*Universidade Federal de Santa Catarina, Florianópolis, Brazil*)
- 1045** SEM Evaluation of Roots Obturated with Adhesive Root Canal Sealers. H. OTSUKI*, T. ORI, S. WAKAMATSU, T. KAWASHIMA, K. MATSUSHIMA, and T. IKEMI (*Sun Medical Co., Ltd., Moriama, Japan*)
- 1046** Chemical Analyses of a Self-etch Adhesive Root Canal Sealer. C. NISHIMOTO*, T. ORI, S. WAKAMATSU, T. KAWASHIMA, K. MATSUSHIMA, and T. IKEMI (*Sun Medical Co., Ltd., Moriama, Japan*)
- 1047** Influence of Adhesion on Wear Resistance of Resin-coating Materials. T. YAMAMOTO*, H. OTSUKI, C. NISHIMOTO, S. IWASAKI, T. NIKAI, and J. TAGAMI (*Sun Medical Co., Ltd., Moriama, Japan*)
- 1048** Push-out Testing and SEM Evaluation of Adhesive Root Canal Sealers. T. ORI*, H. OTSUKI, S. WAKAMATSU, T. KAWASHIMA, K. MATSUSHIMA, and T. IKEMI (*Sun Medical Co., Ltd., Moriama, Japan*)
- 1049** Evaluation of Push-out Bond Strength at Different Root Dentin Levels. H. UEKI*, S. IWASAKI, H. OTSUKI, K. NAKANO, L. LAU, T. KAWAI, H. MASUDA, and A. SENDA (*Sun Medical Co., Ltd., Moriama, Japan*)
- 1050** Bonding to Old and Young Dentin – an SEM Observation. G.C. LOPES*, L.C.C. VIEIRA, and E. ARAÚJO (*Universidade Federal de Santa Catarina, Florianópolis SC, Brazil*)
- 1051** Cyclic Fatigue of Root Canals Obturated with Different Material Systems. C.D. BISHOP, J.A. GRIGGS*, and J. HE (*University of Mississippi Medical Center, Jackson, USA*)
- 1052** Interfacial Structure, Bond Strength, and Nanomechanical Properties of Two Sealants. L.M. PINZON*, F. RAMOS-GOMEZ, L.G. WATANABE, S.A. GANSKY, J.A. WEINTRAUB, A. TOMSIA, S.J. MARSHALL, and G.W. MARSHALL (*University of California-San Francisco, USA*)
- 1053** WITHDRAWN

Seq#: 155 Saturday, 5 April 2008, 10:45 a.m. – 11:45 a.m.
Poster Session, Trinity I - Exhibit Hall

**Dental Materials 2: Adhesion - Leakage/Margin Assessments -
Ceramic, Composite Adhesion**

- 1054** Marginal Fit of a Nobel Biocare Implant Temporization System. L.T. LE*, J. BOLINA, E. LAUTENSCHLAGER, and P. MONAGHAN (*Sherman Dental Associates of Evanston, LTD, IL, USA*)
- 1055** Shear Bond Strength of a Leucite-reinforced Glass Ceramic to Enamel. J. DAVIS, K. VANDEWALLE, J. LINDEMUTH, and M. KLEPCZYK* (*USAF, Lackland AFB, TX, USA*)

- 1056** *In vitro* Shear Bond Strength of Nobel Rondo Pressed Ceramics. B. ABBO*, M. RAZZOOG, M. SIERRAALTA, and F. GEORGE (*University of Michigan, Ann Arbor, USA*)
- 1057** Bond Stability of Auto-mix Self-adhesive Resin Cement, GAM-100. H. TOKUI*, N. MATSUMOTO, H. YARIMIZU, H. NAKASEKO, T. SAKUMA, and S. AKAHANE (*GC Corporation, Tokyo, Japan*)
- 1058** Micro-shear Bond Strength of Composite Resin to MTA with Different Treatments. P. SAMIMI* and M. KAZEMIAN (*Dental School of Isfahan, Iran*)
- 1059** Long-term Bond Strength to Zirconia Ceramic after Different Surface-conditioning Parameters. M. KERN*, A. BARLOI, and B. YANG (*Christian-Albrechts University at Kiel, Germany*)
- 1060** Bond Strength of Composite Resin to Pre-veneered Stainless Steel Crowns. M. DIAB*, S. WEYERS, J. WALKER, and F. SALAMA (*King Abdulaziz Airbase Hospital, Dhahran, Saudi Arabia*)
- 1061** Microleakage of Pre-veneered Stainless Steel Crown Repair Material. S. HACKMYER*, C. ADAMS, J. WALKER, and F. SALAMA (*University of Nevada, Las Vegas, USA*)
- 1062** Evaluation of Marginal Leakage of a Polyvinylsiloxane Temporary Cement. J. FRANZKE* (*US Navy Dental Corps, Bethesda, MD, USA*)
- 1063** Sealing Ability of Three Fiber Post Systems. J. PERDIGÃO*, V. SANTOS, G. GOMES, and A.L. SILVA (*University of Minnesota, Minneapolis, USA*)
- 1064** WITHDRAWN
- 1065** Effects of Rebonding and Type of Liner on Amalgam Microleakage. H. MOOSAVI* and S. SADEGHI (*Dental Research Center, Mashhad University of Medical Science, Iran*)

Seq#: 156 Saturday, 5 April 2008, 10:45 a.m. – 11:45 a.m.
Poster Session, Trinity I - Exhibit Hall

**Dental Materials 3: Ceramic-based Materials and Cements -
Adhesive/Cement Bonding to Ceramics**

- 1066** Long-term Compressive and Diametral Tensile Strength of RMGI Liner Materials. H.T. BUI*, S. MITRA, J.C. ROLF, E.A. CRAWFORD, K.M. CUMMINGS, R. RANDALL, and R. RUSIN (*3M ESPE Dental Products, Saint Paul, MN, USA*)
- 1067** WITHDRAWN
- 1068** Reaction between CSH and Phosphate-buffered Saline Solution. S.T. THERIOT*, S. CHOWDHURY, and N.K. SARKAR (*Louisiana State University School of Dentistry, New Orleans, USA*)
- 1069** Effects of Substrate Shades on the Color of Ceramic Laminates. S.S. AZER*, R.R. SEGHI, L.S. KULICK, and W.M. JOHNSTON (*Ohio State University, Columbus, USA*)
- 1070** 24-month Clinical Evaluation of Cercon Zirconia All-ceramic Restorations. D.M. BARNES*, A. ARRIBAS, J. GINGELL, J. RAJASKI, V. SUNDAR, and P. WARREN (*University of Maryland Dental School, Baltimore, USA*)
- 1071** Select Physical and Mechanical Properties of Three Machinable Ceramic Materials. D. CHARLTON, H.W. ROBERTS, and A. TIBA* (*Naval Institute for Dental and Biomedical Research, Great Lakes, IL, USA*)
- 1072** Effect of an RMGI Liner on Polymerization Shrinkage of Composites. S. MITRA*, J.C. ROLF, H.T. BUI, K.M. CUMMINGS, R. RANDALL, and R. RUSIN (*3M ESPE Dental Products, Saint Paul, MN, USA*)
- 1073** Evaluation of Additives on MTA Setting and Product Formation. D.W. BERZINS* and S.C.V. CHEDELLA (*Marquette University, Milwaukee, WI, USA*)
- 1074** Effects of Powder-to-Liquid Ratio on Novel DCPD Cement. G.S. CRUZ, D.L. ALGE, and T.G. CHU* (*Indiana University, Indianapolis, USA*)

Seq#: 157 Saturday, 5 April 2008, 10:45 a.m. – 11:45 a.m.
Poster Session, Trinity I - Exhibit Hall

Dental Materials 4: Clinical Trials, Biocompatibility, and Biologic Effects - Bleaching and Dentifrices

1075 MI Paste Effect on Longitudinal Sensitivity & Shade with Bleaching. S. SHEHARYAR*, D.S. COBB, D.V. DAWSON, X. XIO, G. DENEHY, and J.M. CHALMERS (*University of Iowa, Iowa City, USA*)

1076 WITHDRAWN

1077 *In situ* Study of Tooth Wear and Dentifrice RDA. M.F. DE ANDRADE SILVA*, N.B. SANTOS, A. NOWAK, B. STEWART, and J.G. MASTERS (*Universidade Federal de Alagoas, Maceio, AL, Brazil*)

1078 Clinical Evaluation of 10% Hydrogen Peroxide Strips Relative to Placebo. K. DONLY, A. SEGURA*, M.L. BARKER, and R.W. GERLACH (*University of Texas - San Antonio / Health Science Ctr., USA*)

1079 Placebo-controlled Trial of Daily Hydrogen Peroxide Whitening Strips. F. GARCIA-GODOY, C. GARCIA-GODOY*, M.L. BARKER, J.K. CARSON, S. FARRELL, and R.W. GERLACH (*Nova Southeastern University, Fort Lauderdale, FL, USA*)

1080 Clinical Comparison of Bleaching Effects of In-office and Home Bleaching. S. KIM-PUSATERI, S.G. CIANCIO*, M. BESSINGER, and A. HO (*State University of New York - Buffalo, USA*)

1081 Clinical Evaluation of a Chairside Whitening Lamp and Bleaching Efficacy. J.C. ONTIVEROS*, R.D. PARAVINA, and M.T. WARD (*University of Texas, Dental Branch, Houston, USA*)

1082 Evaluation of Tooth Color Modifications with FP137 Take-home Whitening Gels. J. TOWERS*, R. PERRY, S. FERREIRA, and S. SHARMA (*Tufts University School of Dental Medicine, Boston, MA, USA*)

1083 3-month Anti-tartar Efficacy of Daily 6% Hydrogen Peroxide Strips. P.A. SAGEL*, M.L. BARKER, S. FARRELL, R.W. GERLACH, J.L. MILLEMAN, and M.S. PUTT (*The Procter & Gamble Company, Mason, OH, USA*)

1084 Superior Anti-calculus Efficacy of an Experimental 0.454% SnF₂ Dentifrice. T. HE*, L. WINSTON, S. FIEDLER, and R. BAKER (*The Procter & Gamble Company, Mason, OH, USA*)

Seq#: 158 Saturday, 5 April 2008, 10:45 a.m. – 11:45 a.m.
Poster Session, Trinity I - Exhibit Hall

Dental Materials 4: Clinical Trials, Biocompatibility, and Biologic Effects - Clinical Trials Posters

1085 Two-year Clinical Evaluation of Zirconia Bridges. R. PERRY*, S. SHARMA, S. FERREIRA, G. KUGEL, and J. ORFANIDIS (*Tufts University School of Dental Medicine, Boston, MA, USA*)

1086 Post-operative Hypersensitivity in Class I RBC Restorations: a PEARL Study. G. BERKOWITZ*, S. BERSTEIN, A.J. HOROWITZ, R.G. CRAIG, F.A. CURRO, J.L. SHIP, V.P. THOMPSON, D. VENA, and K. MOSBY (*New York University, USA*)

1087 WITHDRAWN

1088 Carbon vs. Polyethylene Fiber-reinforced Composite Posts: 3-year Results. S. DELIPERI*, D.N. BARDWELL, and K.H. ZAWAWI (*Cagliari, Italy*)

1089 36-month Clinical Evaluation of a Self-etch Bonding Agent. H.S. MALMSTRÖM*, R. CACCIATO, Y.-F. REN, M. YUNKER, and T. DEROSA (*University of Rochester School of Medicine and Dentistry, NY, USA*)

1090 2-year Clinical Evaluation of Self-etch Adhesives in Posterior Restorations. C. ANAUATE-NETTO*, J. PERDIGÃO, M. DUTRA-CORREA, N. CASTILHOS, A.R. CARMO, H.R. LEWGOY, R. AMORE, and H.J. CORDEIRO (*Universidade Bandeirante de São Paulo, Brazil*)

1091 Effects of Fluoride Varnishes on Enamel Decalcification around Orthodontic Appliances. M.D. BAGBY*, G.A. BOYLES, C. MARTIN, E. KAO, P. NGAN, and E. GUNEL (*West Virginia University, Morgantown, USA*)

1092 Association between Caries Location and Restorative Material Treatment Provided. T. HILTON*, J.L. FERRACANE, A. KORPAK, and B. BURTON (*Northwest PRECEDENT - Oregon Health & Science University, Portland, USA*)

1093 DMG-IADR Abstract Research Patterns by Type, Focus, and Funding. S.C. BAYNE* and S.K. GRAYDEN (*University of Michigan School of Dentistry, Ann Arbor, USA*)

Seq#: 159 Saturday, 5 April 2008, 10:45 a.m. – 11:45 a.m.
Poster Session, Trinity I - Exhibit Hall

Dental Materials 4: Clinical Trials, Biocompatibility, and Biologic Effects - Toxicology and Biocompatibility

1094 Biocompatibility of Three Orthodontic Composite Resins on Human Oral Fibroblasts. S. SADEGHIAN*, H. NASR ESFAHANI, and M. VATANI (*Azad Khorsgan School of Dentistry, Isfahan, Iran*)

1095 Effect of TEGDMA on the Activation of p38 and ERK1/2. G. SCHMALZ*, A. ECKHARDT, K.-A. HILLER, G. SPAGNUOLO, N. GERSTMAYR, and H. SCHWEIKL (*University of Regensburg, Germany*)

1096 Cytocompatibility of Dental Composites: Effects of Conversion, Filler, and Roughness. N. LIN*, H. HU, L. SUNG, and S. LIN-GIBSON (*National Institute of Standards and Technology, Gaithersburg, MD, USA*)

1097 *In vitro* Biocompatibility of Novel Fluoride-releasing Monomers and Materials. L. LING*, E. BOLAND, X. XU, and H.R. RAWLS (*Louisiana State University, New Orleans, USA*)

1098 Osteoconductive and Carrier-filled 3D Scaffolds for Bone Repair and Replacement. E. CLARK*, C. CRETU-VASILIU, A.M. SAILON, A.C. ALLORI, S.M. WARREN, J. SMAY, and J.L. RICCI (*New York University College of Dentistry, USA*)

Seq#: 160 Saturday, 5 April 2008, 10:45 a.m. – 11:45 a.m.
Poster Session, Trinity I - Exhibit Hall

Dental Materials 5: Polymer-based Materials - Chemistry and Composition - Properties of Polymers

1099 New Antimicrobial Macromers for Dental Self-etch Adhesives. T. BOCK*, D. POPPE, U. SALZ, C. WASCHINSKI, and J. TILLER (*Ivoclar Vivadent AG, Schaan, Liechtenstein*)

1100 Nano-scale Heterogeneity of Dentin Adhesive following Environmental Stress. Q. YE*, J.-G. PARK, A. MISRA, O. MARANGOS, J. ESLICK, J. EINHELIG, Y. WANG, X.M. YAO, and P. SPENCER (*University of Missouri-Kansas City, USA*)

1101 Fracture Toughness of UDMA-based Dental Composites. M.A. LATTA*, S. GROSS, and B. WERTZBERGER (*Creighton University, Omaha, NE, USA*)

1102 A Novel Polyurethane-based Root Canal Obturation Material: Push-out Bond Strength. C.-P. LIN, B.-S. LEE, C.-Y. LEE, K.-H. LIAO, T.-C. KUO*, and K.-H. HSIEH (*National Taiwan University, Taipei, Taiwan*)

1103 Silanation of Compliant Aggregates Improves Mechanical Properties of Composite Resin. S.N. PERCY*, H.L. CARDENAS, H.R. RAWLS, and V.A. LEE (*University of Texas - San Antonio / Health Science Ctr., USA*)

Seq#: 161 **Saturday, 5 April 2008, 10:45 a.m. – 11:45 a.m.**
Poster Session, Trinity I - Exhibit Hall

Dental Materials 6: Polymer-based Materials - Physical Properties and Performance - Physical Properties of Elastomeric and Provisional Materials

- 1104** Tear Strength of Low-viscosity Vinyl Polysiloxane Elastomeric Impression Materials. A.A. BOGHOSIAN* and E. LAUTEN-SCHLAGER (*Northwestern University, Chicago, IL, USA*)
- 1105** Vinylpolysiloxane Wetting Ability during Setting Time: a Contact Angle Analysis. I.C. CORREA* and M.J.D.S. ALENCAR (*Universidade Federal do Rio de Janeiro, Brazil*)
- 1106** Mechanical Properties of Monophase Impression Materials. R.A. YAPP and J.M. POWERS* (*Dental Consultants, Inc., Ann Arbor, MI, USA*)
- 1107** Flow under Pressure of Fifteen Impression Materials. E.H. DOHERTY*, G. CHAO, G. KUGEL, and P. STARK (*Tufts University, Boston, MA, USA*)
- 1108** Evaluation of a New Temporary Lining Material. M. HASHIGUCHI*, A. TERAKADO, F. UKAJI, and H. KAZAMA (*Tokuyama Dental Corporation, Tsukuba, Japan*)
- 1109** Physical Properties of Bis-Acrylic Provisional Resin Materials. M.T. PULIDO*, L.A. KNOBLOCH, R.E. KERBY, M.A. BAECHE, and W.M. JOHNSTON (*Ohio State University, Columbus, USA*)
- 1110** Fast Fracture Strength and Fracture Toughness of Provisional Materials. B. SUN*, A. YOUNG, S. SHAFFER, J. NOTH-NAGLE, and C. GHERGULESCU (*Dentsply International, York, PA, USA*)
- 1111** WITHDRAWN
- 1112** Concentration Additivity of Coefficients for Elastomer Pigmented to Skin Colors. X. HU, A. GILBERT, M.C. MOLCUT, and W.M. JOHNSTON* (*Ohio State University, Columbus, USA*)
- 1113** Powdered Rubber: Fabrication and Evaluation of Its Physical/Biological Properties. N. THAMRONGANANSKUL*, J. BOONJAWAT, and S. SWASDISON (*Chulalongkorn University, Bangkok, Thailand*)

Seq#: 162 **Saturday, 5 April 2008, 10:45 a.m. – 11:45 a.m.**
Poster Session, Trinity I - Exhibit Hall

Dental Materials 8: Other Materials - Chemistry, Properties, and Performance - Miscellaneous Topics

- 1114** 12-month Bottom/Top Knoop Hardness Ratios of Resin-modified Glass-ionomer Restorative Materials. H.W. ROBERTS*, D.W. BERZINS, and D. CHARLTON (*USAF Dental Evaluation and Consultation Service, Great Lakes, IL, USA*)
- 1115** A New Binding Model Based on Classic Friction. M.-L. LAI* and G. THORSTENSON (*3M Unitek, Monrovia, CA, USA*)
- 1116** Effects of Operatory Light Settings on Polymerization of Orthodontic Resin. A.N. MULLASSERIL, S.S. KHAJOTIA*, G. LOLLI, and G.F. CURRIER (*University of Oklahoma Health Sciences Center, Oklahoma City, USA*)
- 1117** Effect of Polyether Retarder on the Flowability of Impregum Soft. N. AIMJIRAKUL* (*Srinakharinwirot University, Bangkok, Thailand*)
- 1118** Bond Strength of Auto-mixed Alginate Impression Paste to Tray. M. OGURI*, F. UKAJI, and H. KAZAMA (*Tokuyama Dental Corp., Tsukuba, Japan*)
- 1119** Comparison of Digital vs. Conventional Impression Systems for Marginal Accuracy. G. KUGEL*, N. CHAIMATTAYOMPOL, R. PERRY, S. FERREIRA, S. SHARMA, J. TOWERS, and P. STARK (*Tufts University School of Dental Medicine, Boston, MA, USA*)

- 1120** Colgate Total—Novel Approach to Advanced Cleaning and Whitening Performance. M. PRENCIPE*, Y.P. ZHANG, J.G. MASTERS, P. PIMENTA, M. HORCHOS, L. FRUGE, and T. HYMAN (*Colgate-Palmolive Company, Piscataway, NJ, USA*)
- 1121** Fluoride, Calcium, and Phosphorus Release from Novel NovaMin®-containing Fluoride Varnish. A.H. STONE* and A.K. BURWELL (*NovaMin Technology, Inc., Alachua, FL, USA*)

Seq#: 163 **Saturday, 5 April 2008, 10:45 a.m. – 11:45 a.m.**
Poster Session, Trinity I - Exhibit Hall

Behavioral, Epidemiologic, and Health Services Research - Epidemiology and Behavioral Research

- 1122** Oral Health Knowledge of African-American and Hispanic Mothers. J. SMITH, A. KOERBER, I. PUNWANI, S. FADAVI, G. ADAMI, and M. MONTERO* (*University of Illinois - Chicago, USA*)
- 1123** Assessment of Caries Risk by Dental PBRN Dentists. V.V. GORDAN, D.B. RINDAL*, M.W. DAWSON, C.W. GARVAN, J. RICHMAN, O.D. WILLIAMS, and for the DPBRN COLLABORATIVE GROUP (*Health Partners, St. Paul, MN, USA*)
- 1124** How Dental PBRN Dentists Diagnose and Treat Existing Restorations. V.V. GORDAN, V. QVIST, C.W. GARVAN, J.L. FELLOWS*, J. RICHMAN, I. MJÖR, G.H. GILBERT, and for the DPBRN COLLABORATIVE GROUP (*Center for Health Research, Kaiser Permanente Northwest, Portland, OR, USA*)
- 1125** Illinois Pediatricians' and Pediatric Dentists' Practices Regarding Infant Oral Health. M. ALBERT, I.C. PUNWANI*, A. KOERBER, S. FADAVI, and L.G. NIEDERMAN (*University of Illinois - Chicago, USA*)
- 1126** Methods Used by Dental PBRN Clinicians to Diagnose Dental Caries. V.V. GORDAN, P.L. BENJAMIN*, D. PIHLSTROM, C.W. GARVAN, J. RICHMAN, O.D. WILLIAMS, and for the DPBRN COLLABORATIVE GROUP (*Private Practice, Miami, FL, USA*)
- 1127** Comparison of Mid-Appalachian and National OB/GYNs' Oral Health Education Needs. R.C. WIENER*, R. CROUT, and W. STANLEY (*West Virginia University, Morgantown, USA*)
- 1128** Comparing Mid-Appalachian OB/GYNs and WV Internists in Oral Health Screenings. M.A. WIENER*, R. CROUT, and S. WEARDEN (*West Virginia University, Morgantown, USA*)
- 1129** Support of Clinical Dental Faculty for Tobacco Cessation Training. M. MARTINSEN*, N. KWEIK, K.V. RANKIN, D.L. JONES, and H. ABDELLATIF (*Baylor College of Dentistry, Texas A&M Health Science Center, Dallas, USA*)
- 1130** Effect of a Copayment on Dental Treatment Choices in Children. T.H. BRICKHOUSE*, J.H. UNKEL, and D.L. HOWELL (*Virginia Commonwealth University, Richmond, USA*)

Seq#: 164 **Saturday, 5 April 2008, 10:45 a.m. – 11:45 a.m.**
Poster Session, Trinity I - Exhibit Hall

Behavioral, Epidemiologic, and Health Services Research - Epidemiology of Oral Diseases

- 1131** WITHDRAWN
- 1132** WITHDRAWN
- 1133** Early Adolescent Caries Incidence and Risk Factors. B. BROFFITT*, S.M. LEVY, J.J. WARREN, T.A. MARSHALL, and J. CAVANAUGH (*University of Iowa, Iowa City, USA*)
- 1134** Smokeless Tobacco Use and Periodontal Disease in Rural Appalachia. A.G. WEE*, M. MOESCHBERGER, G. PHILLIPS, P. KUUN, J. SHULTZ, and M.E. WEWERS (*University of Nebraska Medical Center, Omaha, USA*)
- 1135** Factors Associated with Dental Caries at a Dental Student Clinic. J.M. SORENSEN, J.J. WARREN*, and S. GUZMAN-ARMSTRONG (*University of Iowa, Iowa City, USA*)

- 1136** OHIP for Children with Special Health Care Needs. H.C. LEWIS*, T.H. BRICKHOUSE, and M.D. WEBB (*Virginia Commonwealth University - VCU/MCV, Richmond, USA*)
- 1137** Demography and Treatment Utilization in a High-risk Dental Clinic. R. MUNGA*, K.J. DONLY, M.A. GARCIA, and J.D. SCHOOLFIELD (*University of Texas - San Antonio / Health Science Ctr., USA*)
- 1138** Oral Health Habits and Behavior during Pregnancy. E. BARAN, H. AMINI*, R. RASHID, and P. CASAMASSIMO (*Ohio State University, Columbus, USA*)
- 1139** Social Gradients in Dental Health among Low-income Mothers. D. GREMBOWSKI*, C. SPIEKERMAN, and P. MILGROM (*University of Washington, Seattle, USA*)

Seq#: 165 **Saturday, 5 April 2008, 10:45 a.m. – 11:45 a.m.**
Poster Session, Trinity I - Exhibit Hall

Education Research - Education Research Posters

- 1140** The Effectiveness of Training for a Spectrophotometer Color Matching System. J. DASILVA, S. PARK*, and S. ISHIKAWA-NAGAI (*Harvard School of Dental Medicine, Boston, MA, USA*)
- 1141** Comparative Career Decision-making Survey Results, by Dental Student Status. R.A. KUTHY*, S.E. ALLEN, and F. QIAN (*University of Iowa, Iowa City, USA*)
- 1142** Pre-clinical Sources of Stress among Military Dental Students in Taiwan. K.C. CHIU*, Y.-S. SHIEH, L.C. CHANG, H.C. SU, C.H. CHEN, S.H. LEE, and S. CHIU (*Tri-Service General Hospital, National Defense Medical Center, Taipei, Taiwan*)
- 1143** A Predictive Model of Dental Hygiene National Board Success. S.M. MAURIELLO*, C.A. PETERSON, L. PAQUETTE, J. MULNICK, and D.J. CAPLAN (*University of North Carolina, Chapel Hill, USA*)

Seq#: 166 **Saturday, 5 April 2008, 10:45 a.m. – 11:45 a.m.**
Poster Session, Trinity I - Exhibit Hall

Implantology Research - Bone Growth and Response to Implants

- 1144** WITHDRAWN
- 1145** Prior Endodontic Therapy as a Risk Factor for Implant Failure. X. MATA*, K. CHOE, M.E. AICHELMANN-REIDY, and M.A. REYNOLDS (*University of Maryland, Baltimore, USA*)
- 1146** Survival of Dental Implants Placed in Sites of Previous Failures. S. MASTRONIKOLAS, X. MATA, M.E. AICHELMANN-REIDY*, and M.A. REYNOLDS (*University of Maryland, Baltimore, USA*)
- 1147** Relationship between Peri-implant Bone Properties and Implant Stability. R. HUDSON, III, C.F. ZHU*, and J.D. JONES (*University of Texas - San Antonio / Health Science Ctr., USA*)
- 1148** Evaluation of Bone Mineral Content - Time after Dental Implant Placement. R. HUDSON, III, C.-F. ZHU, and J.D. JONES* (*University of Texas - San Antonio / Health Science Ctr., USA*)
- 1149** 3D Culture Enhances Osteoblast Mineralization on Dental Implant Surfaces. Y.J. KO*, R. ZAHARIAS, D. SEABOLD, and G. SCHNEIDER (*University of Iowa, Iowa City, USA*)
- 1150** Cadaveric Specimen Analysis of Hydroxyapatite Particulates. Bone, and Subperiosteal Implants. P. BECK* and J. LEMONS (*UAB School of Dentistry, Birmingham, AL, USA*)
- 1151** Does FAK Mediate Implant Surface Microtopography Effects on Osteoblast Differentiation? G. SCHNEIDER*, R. ZAHARIAS, and D. SEABOLD (*University of Iowa College of Dentistry, Iowa City, USA*)

Seq#: 167 **Saturday, 5 April 2008, 10:45 a.m. – 11:45 a.m.**
Poster Session, Trinity I - Exhibit Hall

Oral Health Research - Toothbrushes, Floss, and Plaque Control

- 1152** Comparative Efficacy of Two High-frequency Power Toothbrushes on Plaque. A.S. MASTER*, W. JENKINS, J. WEI, and J. STRATE (*Philips Oral Healthcare, Snoqualmie, WA, USA*)
- 1153** Comparative Efficacy of Two Sonic Toothbrushes on Plaque. J.S. HOLT*, M. McGRADY, W. JENKINS, P. SCHMITT, D. STURM, and A.F. HEFTI (*4-Front Research Ltd., Chester, England, UK*)
- 1154** Comparative Efficacy of Two Power Toothbrushes on Plaque. K. MORITIS*, W. JENKINS, P. SCHMITT, and J. STRATE (*Philips Oral Healthcare, Snoqualmie, WA, USA*)
- 1155** Total Protein and Viable Counts to Evaluate Interproximal Biofilm Removal. M.B. ASPIRAS*, N. ELLIOTT, R. NELSON, J. HIX, M. JOHNSON, and M. DE JAGER (*Philips Oral Healthcare, Snoqualmie, WA, USA*)
- 1156** Comparison of Interproximal Biofilm Removal with Sonicare Elite and Ultreo. M. DE JAGER*, M.B. ASPIRAS, N. ELLIOTT, R. NELSON, J. HIX, and M. JOHNSON (*Philips Oral Healthcare, Snoqualmie, WA, USA*)
- 1157** WITHDRAWN
- 1158** Persistence of Scratching Induced by Toothpaste Brushing of Denture Acrylic. S.M. WETTERER*, G. CHU, and Z. LOEWY (*GlaxoSmithKline, Parsippany, NJ, USA*)
- 1159** Impact of Toothpaste Brushing of Denture Material on Bacterial Attachment. P.E. WEST* (*GlaxoSmithKline Consumer Healthcare, Parsippany, NJ, USA*)
- 1160** Fluoride Uptake in Incipient Enamel Lesions from Mouthrinse Treatments. D. RICCI-NITTEL*, S. ANDREANA, C. GONZALEZ-CABEZAS, and J. O'BRYAN EDER (*Johnson & Johnson Healthcare Products - A Division of McNeil, PPC, Morris Plains, NJ, USA*)
- 1161** Erosivity Potential Method Development. M.D. MARTINEZ*, C. CAREY, and D. RICCI-NITTEL (*Johnson & Johnson Healthcare Products-Division of McNeil PPC, Morris Plains, NJ, USA*)
- 1162** Plaque Removal Efficacy of a Novel Toothbrush. S.J. BLANCHARD*, M. HARRIS, J.F. COELHO, J. QAQISH, C.R. GOYAL, and P. AMINI (*Johnson & Johnson Healthcare Products, A Division of McNeil PPC, Skillman, NJ, USA*)
- 1163** WITHDRAWN

Seq#: 168 **Saturday, 5 April 2008, 10:45 a.m. – 11:45 a.m.**
Poster Session, Trinity I - Exhibit Hall

Mineralized Tissue - Bone, Dentin, and Cementum

- 1164** WITHDRAWN
- 1165** A Novel Mechanism of Ultrasound's Effect on Orthodontic Root Resorption. D. LIU* (*Marquette University, Milwaukee, WI, USA*)
- 1166** Pulp Calcification: SEM Analysis on a Nanoscale Level. T. BONSTEIN* (*University of Manitoba, Winnipeg, MB, Canada*)
- 1167** The Role of Biglycan in Properties of Murine Cementum. S.P. HO*, B. YU, M. YOUNG, S.J. MARSHALL, and G.W. MARSHALL (*University of California-San Francisco, USA*)
- 1168** Reconstructing Mandibular Defects with Autologous Bioengineered Tooth and Bone. W. ZHANG*, H. ABUKAWA, C. YOUNG, J.P. VACANTI, L. KABAN, M. TROULIS, and P.C. YELICK (*Tufts University, Boston, MA, USA*)
- 1169** Bone-like Extracellular Matrix Enhances Osteoblastic Differentiation of BMSCs. A.C. CAVENDER*, Q.P. PHAM, A.G. MIKOS, and R.N. D'SOUZA (*Baylor College of Dentistry, Dallas, TX, USA*)

- 1170** Study of SIBLING Proteins in the Dentin of Hyp Mice. Y. SUN*, B. ZHANG, I. MACIEJEWSKA, and C. QIN (*Baylor College of Dentistry, Texas A&M Health Science Center, Dallas, USA*)
- 1171** Effects of Angiopoietin-1 on Bone Morphogenetic Protein-2-induced Osteoblast Differentiation. B.-C. JEONG, H.J. KIM, S.H. SONG, W.-M. OH, S.-W. PARK, G.Y. KOH, K.-M. LEE, R.T. FRANCESCHI, S.-H. KIM, and J.-T. KOH* (*Chonnam National University, Gwangju, South Korea*)
- 1172** Fourier Transform Infrared Imaging Analysis of Hyp Mouse Bone. K. VERDELIS*, M.D. McKEE, and A.L. BOSKEY (*Hospital for Special Surgery, New York, USA*)
- 1173** Recombinant DSP-PP and Native HP Protein Reveal Proteolytic Activity. H.H. RITCHIE* and V. GODOVIKOVA (*University of Michigan, Ann Arbor, USA*)

Seq#: 169 **Saturday, 5 April 2008, 10:45 a.m. – 11:45 a.m.**
Poster Session, Trinity I - Exhibit Hall

Salivary Research

- 1174** Influence of Saliva Substitute Pellicles on Initial *Streptococcus mutans* Adhesion. S. HAHNEL*, R. BÜRGERS, M. ROSENTRITT, and G. HANDEL (*University Medical Center Regensburg, Germany*)
- 1175** The Rat Parotid Binds the COOH-terminal Tetrapeptide of Gastrin/Cholecystokinin. M. LORBER* (*Georgetown University School of Medicine, Washington, DC, USA*)
- 1176** NCI-EDRN Validation of Salivary Oral Cancer Biomarkers. J. WANG*, J. REISS, B. ZIMMERMANN, H. ZHOU, D. ELASHOFF, D. CHIA, and D.T. WONG (*University of California, Los Angeles, USA*)
- 1177** P2Y2R Activation Mediates Cytokine Release Leading to Salivary Gland Dysfunction. O.J. BAKER*, J.M. CAMDEN, R.S. REDMAN, and G.A. WEISMAN (*University of Missouri-Columbia, USA*)
- 1178** Study on a Method for the Accurate Diagnosis of Oral Moisture. F. TAKAHASHI*, M. TAKAHASHI, R. MIZUHASHI, and O. MORITA (*Nippon Dental University, Niigata, Japan*)
- 1179** Salivaomics Knowledge Base (SKB). W. YAN, W. YU, S. THAN, Z. HU, H. ZHOU*, and D.T. WONG (*University of California-Los Angeles, USA*)
- 1180** Salivary Biomarkers of Periodontal Disease and Therapeutic Outcome. W.M. SEXTON*, D.R. DAWSON, D. DAWSON, J. STEVENS, and C.S. MILLER (*University of Kentucky, Lexington, USA*)
- 1181** Network Analysis of Dedifferentiation of Parotid Acinar Cells. S.G. VENKATESH*, J. TAN, A.S. CURRIE, and D.S. DARLING (*University of Louisville, KY, USA*)
- 1182** Comparison of Salivary Cotinine in Smokers' and Non-smokers' Health Assessments. S. TAPP*, N. CAMARATA, J. SCHAEFER, and C. STRECKFUS (*University of Texas - Houston/Health Science Center, USA*)

Seq#: 170 **Saturday, 5 April 2008, 10:45 a.m. – 11:45 a.m.**
Poster Session, Trinity I - Exhibit Hall

Microbiology / Immunology and Infection Control

- 1183** Host Responses against Periodontopathic Bacterial Challenge. M. YONEDA*, H. ANAN, Y. ISHIHARA, T. NAITO, N. SUZUKI, T. IWAMOTO, K. YAMADA, K. HISAMA, I. OKADA, T. YOSHIKANE, K. MAEDA, and T. HIROFUJI (*Fukuoka Dental College, Japan*)
- 1184** Antimicrobial Activity of *P. betle* in Dentifrice on Mutans Streptococci *in vitro*. S. MANGUNDJAJA*, H. SUTADI, F. SAPTARIA, and A. TRIDEWO (*University of Indonesia, Jakarta*)

- 1185** Epitopes Shared among Pioneer Oral Flora and *S. mutans* GbpB. W.F. KING*, R.D. NOGUEIRA, R.O. MATTOS-GRANER, T. CHEN, and D.J. SMITH (*Forsyth Institute, Boston, MA, USA*)

1186 WITHDRAWN

- 1187** Autophagy in the Oral Pathogen *Candida albicans*. M. KELLY and G. PALMER* (*Louisiana State University, New Orleans, USA*)

- 1188** Antifungal Activity of *Morinda citrifolia* Fruit Extract against *Candida albicans*. A. JAINKITTIVONG* and T. BUT-SARAKAMRUHA (*Chulalongkorn University, Bangkok, Thailand*)

- 1189** Effect of Flow Rate on *Streptococcus mutans* Gene Expression. R.L. GREGORY* and Z. CHEN (*Indiana University, Indianapolis, USA*)

- 1190** Defining an Oral Microbial Signature (OMS) in an Appalachian Population. R.J. CROUT*, J.G. THOMAS, D.M. GRAY, D.W. McNEIL, R.J. WEYANT, and M. MARAZITA (*West Virginia University, School of Dentistry, Morgantown, USA*)

- 1191** Adaptive Responses of hMSC-derived Osteoprogenitors to LPS-enriched Environment. K.H.K. YIP*, I.F. MO, H.K. LAW, Y.L. LAU, and G.C. CHAN (*University of Hong Kong*)

- 1192** A Link between p53 Tumor Suppressor and KSHV K-cyclin. P.-C. CHANG and M. LI* (*University of Kentucky, Lexington, USA*)

- 1193** Subcellular Localization of Mitf in Monocytic Cells is Attachment-dependent. Y.-L. LIN* (*University of Kentucky, Lexington, USA*)

- 1194** Prevalence of *Solobacterium moorei* in Subjects with and without Halitosis. B. CLARK*, P. MOSES, V.I. HARASZTHY, P.K. SREENIVASAN, and J.J. ZAMBON (*State University of New York - Buffalo, USA*)

- 1195** Isolation of Human Monoclonal Antibodies to Glucosyltransferase by Phage Display. J. SUI, W.F. KING, D.J. SMITH, W.A. MARASCO, and M.A. TAUBMAN* (*The Forsyth Institute, Boston, MA, USA*)

- 1196** Macrophage Responses to a Polymicrobial Challenge with Oral Bacteria. Y.V. ALIMOVA*, J.L. EBERSOLE, and C.B. HUANG (*University of Kentucky, Lexington, USA*)

- 1197** Development of a Quick DNA Extraction Method for *Streptococcus mutans*. B. OLSON*, M. McEWAN, and D. DRAKE (*University of Iowa, Iowa City, USA*)

- 1198** *S. mutans* and Aciduric and Acidogenic Bacteria from Early Childhood Caries. C.V. HUGHES*, M. DAHLAN, E. PAPADOPOULOU, L. NELSON, S.C. LU, J. JOLIVET, E. KANASI, R. KENT, and A.C. TANNER (*Boston University, MA, USA*)

- 1199** ZnCl₂ Inhibits *Fusobacterium nucleatum* H₂S Production by Repressing L-cysteine Desulfhydrase. J. COULBURN*, A. KALININA, S. BAGCHI, and C.D. WU (*University of Illinois at Chicago, USA*)

1200 WITHDRAWN

- 1201** Insertion Sequence Search in Oral Pathogens. C. YANG, C.-H. CHANG, and G. XIE* (*Los Alamos National Laboratory, NM, USA*)

Seq#: 171 **Saturday, 5 April 2008, 10:45 a.m. – 11:45 a.m.**
Poster Session, Trinity I - Exhibit Hall

Oral & Maxillofacial Surgery - Poster Presentations

- 1202** Effect of h1 Blocker on Soft-tissue Wound Healing. S.H. SHAYEI MOOSAVI* and M. YAGHMAEI (*Shaheed Beheshti Dental School, Tehran, Iran*)

- 1203** 3D Condylar Surface Remodeling following Skeletal Class III Surgery. L.H.S. CEVIDANES*, C. PHILLIPS, A.E.F. OLIVEIRA, Y. LI, and M. STYNER (*University of North Carolina, Chapel Hill, USA*)

1204 Citation Accuracy in the Oral and Maxillofacial Surgery Literature. A.E. MOHAMMAD* and D. LASKIN (*Virginia Commonwealth University - VCU/MCV, Richmond, USA*)

1205 Gene Delivery of Heparan Sulfate Proteoglycan Core Enhances Bone Regeneration. A.A. DECARLO*, A.L. ELLIS, E. SEALES, G. YANG, L. LI, and J.M. WHITELOCK (*Agenta Biotechnologies, Inc., Birmingham, AL, USA*)

Seq#: 172 **Saturday, 5 April 2008, 10:45 a.m. – 11:45 a.m.**
Poster Session, Trinity I - Exhibit Hall

Periodontal Research - Pathogenesis - Posters

1206 Fibrogenic Effects of Cannabidiol on Human Gingival Fibroblasts. S.Y. RAWAL* and D.A. TIPTON (*University of Tennessee, Memphis, USA*)

1207 Characterization of Immortalized Human Gingival Fibroblasts by hTERT. S. VARDAR-SENGUL*, S. ARORA, P. ITKIN-ANSARI, F. LEVINE, E. ADAMSON, and D. MERCOLA (*University of California, Irvine, USA*)

1208 WITHDRAWN

1209 n-3 PUFA Effects on Local and Systemic Host Responses. M.J. STEFFEN*, D.R. DAWSON, III, M.J. NOVAK, and J.L. EBERSOLE (*University of Kentucky, Lexington, USA*)

1210 Angiopoietin-1 and the Progression of Gingival Inflammation. B.D. HARRELSON, S.R. LESTER, F.G. SERIO, and R.B. JOHNSON* (*University of Mississippi Medical Center, Jackson, USA*)

1211 Increased PAF Acetylhydrolase Expression following LPS Exposure in MM6 Cells. K.M. HOWARD* (*UNLV School of Dental Medicine, Las Vegas, NV, USA*)

1212 Formation of Prothrombinase Complex on Human Platelets Stimulated by Gingipain-R. E. WHITAKER*, C. TIMBY, and B. HAMMOND (*Temple University, Philadelphia, PA, USA*)

1213 *Porphyromonas gingivalis* and *Treponema denticola* Induced Mixed Microbial Periodontal Disease. S. RAJAPAKSE, R. VERMA, A. MEKA, I. BHATTACHARYYA, I. AUKHIL, and L. KE-SAVALU* (*University of Florida, Gainesville, USA*)

1214 Single Nucleotide Polymorphisms of Toll-like Receptors and Chronic Periodontitis. S.E. SAHINGUR*, E. DE NARDIN, J. GUNSOLLEY, R. GENCO, and H.A. SCHENKEIN (*Virginia Commonwealth University - VCU/MCV, Richmond, USA*)

1215 Effects of Periodontitis on Onset and Severity of Insulin Resistance. K. WATANABE*, B. PETRO, A. SHLIMON, and T. UNTERMAN (*University of Illinois at Chicago, USA*)

1216 Periodontal IL-6 Expression in Diabetic and Non-diabetic Patients. C. COLE*, K. SUNDARARAJ, R. LEITE, A. NAREIKA, E. SLATE, J.J. SANDERS, M.F. LOPES-VIRELLA, and Y. HUANG (*Medical University of South Carolina, Charleston, USA*)

Seq#: 173 **Saturday, 5 April 2008, 10:45 a.m. – 11:45 a.m.**
Poster Session, Trinity I - Exhibit Hall

Periodontal Research - Therapy - Periodontal Therapy: Regeneration, Antimicrobials, and Prognosis

1217 Behavior of Adipose-derived Stem Cells in Periodontal Tissue Regeneration. M. TOBITA*, H. MIZUNO, C.A. UYSAL, Y. ITOI, R. OGAWA, and H. HYAKUSOKU (*Nippon Medical School, Tokyo, Japan*)

1218 Cementum Attachment after Treatment with either Citric Acid or Tetracycline. A. POLSON*, K. GUTIERREZ, B. FRANTZ, P. HANES, and Y. REFAAT (*Univ. of Pennsylvania Sch. of Dent. Med., Philadelphia, USA*)

1219 Regenerative Periodontal Surgery with PRP and Anorganic Bovine Bone Mineral. F. DORI*, V. KOVÁCS, T. HUSZAR, I. GERA, N.B. ARWEILER, D. NIKOLIDAKIS, and A. SCULEAN (*Semmelweis University of Medicine, Budapest, Hungary*)

1220 Metronidazole Plus Amoxicillin Activity on Antibiotic-resistant *Aggregatibacter actinomycetemcomitans*. T.E. RAMS*, D. FEIK, and A.J. VAN WINKELHOFF (*Temple University, Philadelphia, PA, USA*)

1221 Gingivitis Treatment with 0.454% Stannous Fluoride Dentifrice: Clinical Meta-analysis. R.W. GERLACH*, R.D. BARTIZEK, R.D. GIBB, and A.R. BIESBROCK (*The Procter & Gamble Company, Mason, OH, USA*)

1222 Meta-analysis of Three Chronic Periodontitis Trials with Periowave™ Photodisinfection. N.G. LOEBEL*, R. ANDERSEN, Y. LI, R. SHU, and X. ZHANG (*Ondine Research Laboratories, Bothell, WA, USA*)

1223 Comparison of the Clinical and Microbiological Effects of 4 Mouthrinses. C. ROBERTS*, L. MURRAY, N. VEIGA, R.P. TELES, F. TELES, L. MARTIN, S. SOCRANSKY, and A.D. HAFFAJEE (*Forsyth Institute, Boston, MA, USA*)

1224 Correlation of Laser Vibrometric and Laser Profilometric Scaler Instrumentation Damage. S.C. LEA*, B. FELVER, V. PATEL, and A.D. WALMSLEY (*University of Birmingham, United Kingdom*)

1225 Compliance as a Prognostic Indicator II: Outcome of 11,545 Teeth. T. MIYAMOTO*, T. KUMAGAI, and M.E. NUNN (*Creighton University, Omaha, NE, USA*)

Seq#: 174 **Saturday, 5 April 2008, 10:45 a.m. – 11:45 a.m.**
Poster Session, Trinity I - Exhibit Hall

Neuroscience / TMJ - Poster Presentations

1226 Relationship of Daily Stress and Temporomandibular Pain. L. LeRESCHÉ*, L. MANCL, and J. TURNER (*University of Washington, Seattle, USA*)

1227 Brain Activation and Dental Wear Correlations in Bruxers and Non-bruxers. K.E. BYRD*, M. DZEMIDZIC, L.M. ROMITO, T.M. TALAVAGE, and D. WONG (*Indiana University School of Medicine, Indianapolis, USA*)

1228 Glial and Immune Cell Responses following Rat Infra-orbital Nerve Lesion. G.M. PERRY*, L.R. JOHNSON, S.R. LEVINSON, and M.A. HENRY (*University of Texas - San Antonio / Health Science Ctr., USA*)

1229 Application of the Delphi Technique to Derive a TMD Taxonomy. M.T. JOHN* and E. SCHIFFMAN (*University of Minnesota, Minneapolis, USA*)

1230 Growth Factor Effects on Fibrochondrocytes Seeded on Electrospun Polycaprolactone Scaffolds. D.K. MILLS*, D. PAKALAPATI, P. TURNER, K. PINNAMARJU, S. NAG, and P.S. SIT (*Louisiana Tech University, Ruston, USA*)

1231 Psychometric Properties of the Modified Symptom Severity Index (SSI). D.R. NIXDORF*, M.T. JOHN, M.M. ALL, and E. SCHIFFMAN (*University of Minnesota, Minneapolis, USA*)

1232 2008 Report of NIDCR's TMJ Implant Registry and Repository. J. FRICTON, S.L. MYERS*, A.M. VELLY, S. KAIMAL, P. CARLSON, D. SOTILLO, J. SPRINGSTEEN, P. HUGHES, M. SABINO, W. BOWLES, W. KANG, J. SWIFT, D. BASI, L. KEHL, C.-C. KO, and J. FERREIRA (*University of Minnesota, Minneapolis, USA*)

Seq#: 175 **Saturday, 5 April 2008, 10:45 a.m. – 11:45 a.m.**
Poster Session, Trinity I - Exhibit Hall

Oral Medicine & Pathology - Oral Cancer, Wound Healing

1233 Zoledronic Acid Reduces Heparin-binding Growth Factor in Endothelial Cells. S.W. LEE*, A. MARIASH, S. HELFMAN, and D.L. BASI (*Inje University Busan Paik Hospital, Busan, South Korea*)

- 1234** Folate Receptor-mediated Gene Delivery to Oral Cancer Cells. E. GEDERI*, N. OVERLID, K. KONOPKA, and N. DÜZGÜNES (*University of the Pacific, San Francisco, CA, USA*)
- 1235** Perp Expression in Oral Squamous Cell Carcinoma Cell Lines. D. MENSAH-BOATENG* and J.K. WAHL (*University of Nebraska, Lincoln, USA*)
- 1236** Identification of Stathmin in Oral Squamous Cell Carcinoma by Microarray. A. BAJPAI*, M. FAN, W. GU, L. PFEFFER, and C. NOSRAT (*University of Tennessee, Memphis, USA*)
- 1237** Osteopontin Expression and Its Role in Oral Epithelial Tumorigenesis. S. SWADISON*, S. YODSANGA, K. DHANUTHAI, K. SAPPAYATOSOK, and P.L. CHANG (*Chulalongkorn University, Bangkok, Thailand*)
- 1238** Novel *in vitro* Oral Cancer Gene Identification Assay. J.R. HILL*, M.R. GAVIN, and D.A. LARGAESPADAS (*University of Minnesota Craniofacial Research Training Program, Minneapolis, USA*)
- 1239** Potential Risk Factors of Bisphosphonate-related Osteonecrosis of the Jaws. V. THUMBIGERE-MATH, L. TU*, R. GOPALAKRISHNAN, M. SABINO, S. BASU, S. HUCKABAY, J. WHITE, J. LEACH, K. SWENSON, A. DUDEK, P. HUGHES, J. SWIFT, and D. BASI (*University of Minnesota, Minneapolis, USA*)
- 1240** Risk Assessment of Bisphosphonate-related Osteonecrosis of the Maxilla and Mandible. R. CAINE, Jr.* and S. QUEK (*UMDNJ, Newark, NJ, USA*)
- 1241** Stress Dysregulates Plasma Cytokines during Human Mucosal Healing. P.T. MARUCHA*, Z. FONG, and C. ENGELAND (*University of Illinois - Chicago, USA*)
- 1242** Diabetes Increases TNF- α , FOXO1, & Fibroblast Apoptosis in Healing Gingival Wounds. J. LI, T. DESTA, N. KROTHAPALLI, and D.T. GRAVES* (*Boston University, MA, USA*)

Seq#: 176 Saturday, 5 April 2008, 10:45 a.m. – 11:45 a.m.
Poster Session, Trinity I - Exhibit Hall

Oral Medicine & Pathology - Oral Pathology Posters

- 1243** Involvement of PKC in Increased Expression of Beta-defensins in Keratinocytes. M. YAMAZAKI*, M. SAITOH, S. NAKAMURA, M. NISHIMURA, T. KAKU, and Y. ABIKO (*Health Sciences University of Hokkaido, Ishikari, Japan*)
- 1244** Proteomic Analysis to Identify Oral Epithelial Cell-Antifungal Effector Protein Candidates. E. LILLY*, J. YANO, and P.L. FIDEL (*Louisiana State University Health Sciences Center, New Orleans, USA*)
- 1245** Evaluation of Prevalence of Oral *Entamoeba gingivalis* and *Trichomonas tenax*. M. DAGHIGH AFKAR* and J. GHABANCHI (*Shiraz University of Medical Sciences, Iran*)
- 1246** Evaluation of Prevalence of Oral Lichen Planus in HCV+ Patients. J. GHABANCHI* (*Shiraz University of Medical Sciences Dental School, Iran*)
- 1247** Differential Bacterial induction of Oral Viral Pathogenesis. J. WEBSTER-CYRIAQUE*, T. MORRIS, and R. ROTHWELL (*University of North Carolina, Chapel Hill, USA*)
- 1248** Preventive Effects of Bioactive B12 in Adhering Discs for RAU. J.A. BURGESS and J. HALEY* (*Orahealth Corporation, Bellevue, WA, USA*)
- 1249** Association between Aphthous/Intra-oral Ulcers and Body Mass Index. L. BACCAGLINI*, D.W. THERIAQUE, N.C. MARTINO, R.J. LAMONT, C. SEUNGHEE, M. HANDFIELD, M.L. BRANTLY, and J.J. SHUSTER (*University of Florida, Gainesville, USA*)
- 1250** Topical Corticosteroids in Recurrent Aphthous Stomatitis. Systematic Review. M. RODRIGUEZ* (*Universidad Nacional de Colombia, Bogota*)

- 1251** Labial Salivary Gland Biopsy: Inter-rater Reliability and Clinical Correlations. C.M. STEWART*, I. BHATTACHARYYA, K. BERG, D. COHEN, J. OJHA, N. ISLAM, C. ORLANDO, and P. DREW (*University of Florida College of Dentistry, Gainesville, USA*)
- 1252** Panoramic Radiograph Pathology in a Military Treatment Population. L. FRANKLIN* (*Armed Forces Institute of Pathology, Washington, DC, USA*)

Seq#: 177 Saturday, 5 April 2008, 10:45 a.m. – 11:45 a.m.
Poster Session, Trinity I - Exhibit Hall

Craniofacial Biology - Normal and Abnormal Craniofacial Growth

- 1253** Craniosynostotic Rabbit Dura Mater Inhibits Osteogenic Differentiation of Bone-derived Cells. G.M. COOPER*, E.L. LENSIE, T.E. BARBANO, G.E. DECESARE, J.J. CRAY, M.P. MOONEY, and J.E. LOSEE (*University of Pittsburgh, PA, USA*)
- 1254** Effects of Sex Hormone Deficiency on Craniofacial Growth in Rats. M. SEIFI*, M. HEDAYATI, and M. ASHIRI (*Shaheed Beheshti University of Medical Sciences, Iran Center for Dental Research, Tehran, Iran*)
- 1255** Non-syndromic Cleft Lip and Palate in Philippines and MTHFR C677T Polymorphism. N. CHANDWANI*, J. KOMURA, A. DELURGIO, M. TOLAR, T. PAWAR, M. ABU-AL MELH, M. GOMEZ, N. BAUTER, M. KAI, and M.M. TOLAROVA (*University of the Pacific, San Francisco, CA, USA*)
- 1256** TGFB3 rs2300607 A/T Polymorphism and Non-syndromic Cleft Lip and Palate. R. SALAHUDDIN*, A. AL-ABEITI, M. GOMEZ, M. TOLAR, N. BAUTER, J. KOMURA, S. PATIL, M. ABU-AL MELH, A. DELURGIO, W. SOLIMAN, P. MISHRA, and M.M. TOLAROVA (*University of the Pacific, San Francisco, CA, USA*)
- 1257** Cleft Lip and Palate Anomaly and TGFB3 rs2268625 C/T Polymorphism. A. AL-JABEITI*, M. TOLAR, R. SALAHUDDIN, M. GOMEZ, N. BAUTER, J. KOMURA, M. ABU-AL MELH, A. DELURGIO, W. SOLIMAN, P. MISHRA, S. PATIL, and M.M. TOLAROVA (*University of the Pacific, San Francisco, CA, USA*)
- 1258** Comparative Neural Differentiation of Orofacial and Iliac Marrow Stromal Cells. M. VELASCO*, M. DAMEK-POPRAWA, and S.O. AKINTOYE (*University of Pennsylvania School of Dental Medicine, Philadelphia, USA*)
- 1259** Disease-associated Matrix Fragment Suppresses Osteoblastic Differentiation by Inducing MMP-1. J. JOSEPH*, Y. KAPILA, T. HAYAMI, and S. KAPILA (*University of Michigan, Ann Arbor, USA*)

Seq#: 178 Saturday, 5 April 2008, 10:45 a.m. – 11:45 a.m.
Poster Session, Trinity I - Exhibit Hall

Craniofacial Biology - Orthodontic Diagnostic Aids

- 1260** Evaluation of Cervical Vertebral Dimensions for Skeletal Maturity Assessment. S.H. HAN*, K. FREEMAN, and B. CHOW (*New York University, USA*)
- 1261** Hyoid Bone Position Changes following Rapid Palatal Expansion in Adolescents. P. AUSTIN, B. DENNIS, N. SUCHITRA, K. STROHL, and M.G. HANS* (*Case Western Reserve University, Cleveland, OH, USA*)
- 1262** Length of the Skeletal Airway to the Soft Tissue Airway. L.M. ANDRIA and J. RAMAN* (*Medical University of South Carolina, Charleston, USA*)
- 1263** Evaluating Ricketts' Cephalometric Analysis as a Diagnostic Aid in Black Females. E.R. RICHARDSON* (*Center for the Study of Human Growth and Development, Nashville, TN, USA*)
- 1264** Reliability of Digital and Plaster PAR Index Scores. C.K.-S. ANDREWS, A.R. FIRESTONE*, F.M. BECK, and R. RASHID (*Ohio State University, Columbus, USA*)



1265 Numeric Code Identifies Tooth Pattern, Jaw Symmetry in Ectodermal Dysplasia. C. ASMUSSEN*, A. VAN WIJK, C. STANFORD, F. FARRINGTON, and M. FETE (*University of Iowa, Iowa City, USA*)

Seq#: 179 **Saturday, 5 April 2008, 10:45 a.m. – 11:45 a.m.**
Poster Session. Trinity I - Exhibit Hall

Late-breaking News – Late-breaking News

1266 Fluoride Recharge of a New Protective Coating. J.A. FITCH, J.E. SWANSON*, K.M. CUMMINGS, A.M. PFARRER, and R.P. RUSIN (*3M ESPE Dental Products, Saint Paul, MN, USA*)

1267 Dental Students' Opinions Regarding Caries Management by Risk Assessment Program. J. AUTIO-GOLD* (*University of Florida, Gainesville, USA*)

1268 Solubility, Sorption, and Degree of Conversion of Nanocomposite: Polymerization Mode Influence. G.S. ALMEIDA*, E.M. SILVA, L.T. PORKUS, J.G. GUIMARÃES, and A.A.L. BARCELOS (*UFF, Rio de Janeiro, Brazil*)

1269 Holographic Microrheology of *Streptococcus mutans* Insoluble Polysaccharides. F.C. CHEONG, S. DUARTE*, S.-H. LEE, and D.G. GRIER (*New York University, USA*)

1270 Laminated Orthodontic Removable Aligner for Molar Uprighting. T.K. KALILI, A. CAPUTO*, R. MITO, I. NISHIMURA, S. KHALILNIA, A. AJDAHARIAN, and T. DO (*UCLA School of Dentistry, Los Angeles, CA, USA*)

1271 Peptide Inhibitors of *Porphyromonas gingivalis* Colonization of Dental Plaque. D.R. DEMUTH*, R.J. LAMONT, and C. DAEP (*University of Louisville, KY, USA*)

1272 TMD Signs and Symptoms in Young People. P. FALCHET*, J.M. NEGRÃO, P.C. MACHADO, and A.S. GUIMARÃES (*Universidade Federal de São Paulo, Brazil*)

1273 Exploring Stem Cells from Clinically Compromised Dental Pulp. J. PAN, J.T. WRIGHT, E.T. EVERETT, C. MOORE, F. TEIXEIRA, and Z. WANG* (*University of North Carolina at Chapel Hill, USA*)

1274 WITHDRAWN

1275 Salivary SLPI in Oral Candidiasis among HIV-positive and At-risk HIV-negative Women. A. CHATTOPADHYAY*, D.C. SHUGARS, K. WEBER, M.H. COHEN, M. ALVES, and M. NAVAZESH (*University of Kentucky, Lexington, USA*)

1276 Dental Pulp Stem Cell (DPSC) Growth on Fluorapatite (FA) Surfaces. J. LIU*, T. JIN, S. CHANG, A. CZAJKA-JAKUBOWSKA, and B. CLARKSON (*University of Michigan, Ann Arbor, USA*)

1277 Synthesis of Ordered and Disordered Nanofluorapatite Biomimetic Surfaces. S. CHANG*, J. LIU, H. CHEN, A. CZAJKA-JAKUBOWSKA, and B.H. CLARKSON (*University of Michigan, Ann Arbor, USA*)

1278 CT Scan Evaluation of Periapical Repair after Root Canal Treatment. F.W.G.P. SILVA*, M.R. LEONARDO, M.-K. WU, and L.A.B. SILVA (*Universidade de São Paulo, Ribeirão Preto, Brazil*)

1279 Sample Preparation Affects Bacterial Adhesion to Dental Polymers. D.N. ZEIGER*, N.J. LIN, J.M. ANTONUCCI, J. SOTOMAYOR-ALBINO, and S. LIN-GIBSON (*National Institute of Standards and Technology, Gaithersburg, MD, USA*)

1280 Inequalities in Dental Implant Provision in the United States. C.E. OKUNSERI* and N.M. PAJEWSKI (*Marquette University, Milwaukee, WI, USA*)

1281 Importance of the Initial Orthodontic Visit: Development of a Questionnaire. B. ST. LOUIS*, A. FIRESTONE, K. VIG, W. JOHNSTON, and S. SHANKER (*Ohio State University, Columbus, USA*)

1282 Internal Kinematics of the Volume-reduced Tongue: a Longitudinal Study. V. SHCHERBATYY*, J.A. PERKINS, and Z.-J. LIU (*University of Washington, Seattle, USA*)

A

- AAMODT, K., 720
 AASEN, S.M., 828
 ABBO, B., **1056**
 ABBOTT, S.M., **205**
 ABD EL MAGUID, H., 426
 ABDEL-SALAM, N., 1023
 ABDELKARIM, A., **242**
 ABDELLATIF, H., 685, 1129
 ABIKO, Y., 1243
 ABOD, S., 339
 ABOUL-EZ, E., 750
 ABOUSHELIB, M.N., **710**
 ABREU-SERRANO, A., **220**
 ABU ALNASAR, H., **653**
 ABU-AL MELH, M., 1255, 1256, 1257
 ABUBAKER, O., 443
 ABUKAWA, H., 1168
 ACHARYA, A., 417
 ACOSTA, L., 463
 ACOSTA, S., 85, 572
 ADAIR, S.M., 563
 ADAMI, G., 1122
 ADAMS, C., 1061
 ADAMS, D.J., 289
 ADAMS, J.S., 99
 ADAMS, S.H., 58, **880**
 ADAMSON, E., 1207
 ADAY, A., 998
 ADLER-STORTHZ, K., 429
 AFSHAR, D.M., 743
 AGARWAL, S., 114, **115**
 AGE, K., 118, 1041
 AGHALOO, T., 730
 AGUDA, B., 115
 AGUILAR, M.L., **687**
 AGUIRRE, B., 454
 AGUIRRE, R., 454
 AHMAD, N., 440
 AHMETOGLU, D.Z., 676
 AICHEL-MANN-REIDY, M.E., 458, 1145, **1146**
 AIMJIRAKUL, N., **1117**
 AJDAHARIAN, A., 1270
 AJLOUNI, K., 926
 AJLOUNI, R., **120**
 AKAHANE, S., 858, 1057
 AKERLUND, M., 808, 813
 AKINS, H.T., 563
 AKINTOYE, S.O., 1258
 AKIYAMA, K., 432
 AKOPIAN, A.N., 483
 AL DAYEH, A., **798**
 AL-HASHIMI, I., 742
 AL-JABEITI, A., 1256, **1257**
 AL-RABABAH, M., **184**
 AL-ZAHRANI, M., 42
 ALAPATI, S., 230, **594**, 595
 ALAQEEL, S., 800
 ALBERT, M., 1125
 ALENCAR, M.J.D.S., 1105
 ALFANT, B., 463, 473, 618
 ALGE, D.L., **651**, 1074
 ALI, K.A., **426**
 ALIMOVA, Y.V., **1196**
 ALLEN, C.M., 51
 ALLEN, M., **103**
 ALLEN, S.E., **709**, 1141
 ALLEY, C.D., **298**
 ALLISON, P., 703
 ALLORI, A.C., 1098
 ALMEIDA, G.S., **1268**
 ALPERT, N., **607**
 ALRAYYES, S., **972**
 ALSOFI, L., 557
 ALVES, M., 349, 1275
 AMAECHI, B.T., **898**, 905
 AMANDA, M., 918
 AMBERMAN, D., 981
 AMEN, M., 534, 813
 AMENDT, B.A., **4, 534**, 588, 808, 813, 951
 AMINI, H., 402, 407, 704, **1138**
 AMINI, P., 1162
 AMMAR, A., 573
 AMORE, R., 1090
 AMPORNARAVETH, R., 929
 AMUNDSON, C.W., 528
 ANABTAWI, M.Z., 267, 351, **831**
 ANAN, H., 1183
 ANANABA, N., **686**
 ANASTASIA, M.K., 873
 ANAUATE-NETTO, C., **1090**
 ANAYA, C., 299, 997
 ANCHETA, B., 74, 274
 ANCOWITZ, S., 625
 ANDERSEN, R., 1222
 ANDERSON, C., **606**
 ANDERSON, J.D., **177**
 ANDERSON, J.D., 624
 ANDO, M., 899
 ANDRADA, M.A.C., **71**
 ANDRADE, A.M., **350**
 ANDRADE, D.A.B.S.D., **344**
 ANDREANA, S., 1160
 ANDREANA, S., **930**, 948, 949, 950
 ANDRES, C., 820
 ANDREWS, C.K.S., **513**, 1264
 ANDRIA, L.M., 509, 1262
 ANDRY, C., 44
 ANGELOV, N., **948**, 949, 950
 ANGELOVA, D., 948, 949, **950**
 ANSARI, A., **753**
 ANSARI, G., **1027**
 ANSARI, S., 203
 ANTONSON, D.E., 541
 ANTONSON, S.A., **541**
 ANTONUCCI, J.M., 860, 1279
 ANUSAVICE, K.J., 16, 678
 APANA, A., **701**
 APPLEFORD, M., 271, 602, 604
 APRECIO, R.M., 932, **940**
 ARANHA, A.C.C., 121, 342
 ARAUJO, E., 1050
 ARAUJO, G.D.A.O., **319**
 ARAUJO, M.A.M., 854
 ARAUJO, M.W.B., **31**
 ARAUZ-DUTARI, J., 620
 ARCARI, G.M., 663
 ARCHILA, L.A., 881, **1007**
 ARIDOME, K., 282
 AROLA, D., 90, 438, **983**
 ARONOW, M.S., 669
 ARORA, S., 1207
 ARRAIS, C.A.G., 853
 ARRIBAS, A.R., 1070
 ARRUDA, A.O., 397, **882**
 ARWEILER, N.B., 1219
 ASADI, G., 612, **1035**
 ASCHE, S.E., 528
 ASHIRI, M., 1254
 ASKARI, A., 42
 ASMUSSEN, C., 540, **1265**
 ASNANI, K.M., 312
 ASPIRAS, M.B., **1155**, 1156
 ASRANI, A.C., 170, 181
 ASRICAN, R., 732
 ASTROM, A.N., 692
 ATEMA-SMIT, J., 911
 ATOULI, J.A., **227**
 ATSUTA, M., 839
 ATTAR, N., 122, 204
 ATTI, E., 730
 ATWELL-RICE, L., **489**
 ATWOOD, J., 194, 345, **346**
 AU, K., 520
 AUGUSTYN, B., 1040
 AUKHIL, I., 462, 463, 618, 1213
 AURBACH, K., **215**
 AUSTIN, P., 1261
 AUTIO-GOLD, J., **1267**
 AVLUND, K., **549**
 AYAD, M.F., **1036**
 AYILAVARAPU, S., 1014
 AZER, S.S., 386, **1069**
 AZHAR, D.S., **163**
B
 BAAR, J., 639
 BABA, K., **282**
 BABA, N.Z., **1043**
 BABAJKO, S., 806
 BABIC, V., **371**
 BABER, S., **1012**
 BABU, J.P., 193, 324, 325, 327, 328, 329
 BACCAGLINI, L., 6, 697, 776, **1249**
 BACRO, T., 518
 BADER, J.D., 971
 BAECHE, M.A., 1109
 BAGATCHENKO, O., 829
 BAGBY, M.D., 964, **1091**
 BAGCHI, S., 1199
 BAHANNAN, S.A., 1036
 BAHULEYAN, B., 956
 BAILEY, M.T., **26**, 608
 BAIN, J.L., 461, 780, 781, 782, 783, **784**
 BAJAJ, D., **90**, 438
 BAJPAL, A., **1236**
 BAKER, J., **1**
 BAKER, O.J., **1177**
 BAKER, R., 1084
 BALDINI, A., 588
 BALIUS, K.E., 780, 781, **783**, 784
 BALLARIN, A., **672**
 BALLESTER, R.Y., 213
 BALLRICK, J., 981
 BALUYOT, R., 448
 BAN, L., 743
 BANAS, J.A., 298, 419
 BANNISTER, S., 712
 BANSAL, R., **685**
 BAO, X., 597
 BARAN, E., 1138
 BARAN, G., 857
 BARATIERI, L.N., 365
 BARBANO, T.E., 796, 815, 816, 1253
 BARBETTA, B., **158**
 BARBOSA, A.C., 590
 BARBOSA, M.T., **663**
 BARCA, D.C., 209, **356**, 657, 677
 BARCELLOS, D.C., 854
 BARCELOS, A.A.L., 1268
 BARDWELL, D.N., 1088
 BARG, A., **840**
 BARGIZAN, M., **908**
 BARKANIC, G.E., 530, 579, 580, 903
 BARKER, J., 58
 BARKER, M. L., 146, 873, 994, 1008, 1078, 1079, 1083
 BARKHORDAR, N.S., **274**
 BARKMEIER, W.W., 547, **833**, 835
 BARLOI, A., 1059
 BARNES, A.B., 404, 794

- BARNES, D.M., **1070**
 BARNES, V.M., **921**
 BARRIOS, L., 454
 BARROS, J.A., **121**, 250, 642
 BARROW, D.A., 477, 561
 BARTIZEK, R.D., 45, 881, 1006, 1221
 BARTLETT, J.D., **924**
 BARTOLONI, J., 264
 BASBAUM, A.I., 569
 BASI, D.L., 1232, 1233, 1239
 BASSIM, C.W., **585**
 BASTIAN, C., **560**
 BASU, S., 1239
 BATES, B., **604**
 BATISTA, E., 1014
 BATTLE, S., **264**
 BAUER, J.W., 773
 BAUMGARTNER, J.C., 297
 BAUTER, N., 1255, 1256, 1257
 BAXTER, K.A., 930
 BAYNE, S.C., 125, **1093**
 BEATTY, M.W., **131**
 BECK, F.M., 334, 336, 513, 909, 1264
 BECK, M.A., 885
 BECK, P., 343, 359, 363, 391, 818, **1150**
 BEDRAN-RUSSO, A.K.B., 199, 200, 201, **202**
 BEEBE, D.A., **337**
 BEEMAN, C.S., 958, 976
 BEHFARNIA, P., **32**
 BEHR, M., 367, 652
 BEIRAGHI, S., **535**
 BELANGER, M., 25, 320, 323
 BELL, D., 723
 BELL, R., 71
 BENEDUCE, C., 147, 930, **949**, 950
 BENGHANEM, A., 69
 BENJAMIN, G., **689**
 BENJAMIN, P.L., **523**, **1126**
 BENNETTS, N.A., **164**
 BERDAL, A., 806
 BEREITER, D.A., **524**
 BERG, J., 275, 276
 BERG, K., 1251
 BERK, J., **633**
 BERKER, E., **465**
 BERKEY, D., **3**
 BERKOWITZ, G., **1086**
 BERKSETH, C.J., **721**
 BERNARDES, L.A.S., 192
 BERNDT, J., **330**
 BEROSKE, A.L., **310**
 BERRIOS, D.S., **730**
 BERRY, D.L., 224
 BERRY, F.A., 1043
 BERSTEIN, S., 1086
 BERTASSONI, L.E., **734**
 BERTONE, M., 550
 BERTRAND, S., **848**
 BERZINS, D.W., 219, 232, 662, **1073**, 1114
 BESSINGER, M., 1080
 BEST, H., **3**
 BEZZON, O.L., 227
 BHARAL, P., **299**
 BHAT, A.K., 793
 BHAT, D., **793**
 BHATTACHARYA, I., 632, 697, 1213, 1251
 BICER, O., 122, 204
 BIESBROCK, A.R., 45, 146, 872, 881, 994, 1004, 1006, 1007, 1221
 BIMSTEIN, E., 463, 618
 BIN-SHUWAISH, M.S.H., 105
 BISHARA, S.E., 120
 BISHOP, C.D., 1051
 BISSADA, N., 42, 620, 639
 BISWADIP, D., 740
 BLACKBURN, J.C., 757, 901
 BLACKHAM, J.T., **674**
 BLACKWOOD, A., 44
 BLAIR, R.N., **332**
 BLAKEY, G., 440, 441, 444
 BLANCHARD, S.J., **1162**
 BLATZ, M.B., 841
 BOBEK, L.A., 151, 739
 BOCANEGRA, R.A., 778
 BOCK, T., 124, **1099**
 BODAPATI, S., **470**
 BODEPUDI, S., 870
 BODINE, T., **270**
 BOEHRS, J., **157**
 BOGDAN, A., **1022**
 BOGGESS, K.A., 725
 BOGHOSIAN, A.A., **1104**
 BOHATY, B., 67, 361
 BOLAND, E., 1097
 BOLIN, K.A., 685
 BOLINA, J., 1054
 BOLLU, P., **246**
 BONESTEEL, C., **293**
 BONEWALD, L.F., 93
 BONFANTE, E.A., 13
 BONSTEIN, T., 366, 385, **1166**
 BOOKER, D.L., 994
 BOONJAWAT, J., 1113
 BOORGHANI, M., 612
 BORDAS, A., **915**
 BORGES, A.B., 854
 BORGES, G.A., 16, 378
 BORRELL, L.N., **55**, **104**
 BOS, A.J.G., 458
 BOSE, S., 752
 BOSKEY, A.L., **1003**, 1172
 BOSMA, M.P., 914, 915, **916**
 BOSTON, D., 918
 BOTERO, T.M., 645
 BOTTINO, M.A., 190, 356, 657, 677
 BOTTINO, M.C., **208**
 BOUILLAGUET, S., 643, 665, **1026**
 BOULDEN, J., 81
 BOUREK, H.A., 239, **243**
 BOUSCHLICHER, M., 362
 BOWLES, W.R., **143**, 1232
 BOWMAN, C.N., 123, **127**, 207
 BOWMAN, J., 930
 BOYAN, B.D., 175, **1000**
 BOYD, K., **886**
 BOYLES, G.A., 1091
 BOYNTON, J.R., 61
 BRACHO-TROCONIS, C., **81**
 BRACKETT, M.G., 665
 BRACKETT, W.W., 118
 BRADFORD, C.R., 37
 BRADY, C., 244
 BRADY, M.F., 95
 BRAHAM, P.H., 568
 BRAME, J.L., **868**
 BRAND, J.W., 245
 BRANSFORD, R.W., 619
 BRANTLEY, W.A., 230, **591**, 593, 594, **595**
 BRANTLY, M.L., 776, 1249
 BRAUN, T., 741
 BRAUNBARTH, C., 582
 BRENER, S., 541
 BRENNAN, M.T., 553
 BRESLIN, P.A.S., 292
 BRETTIN, T.S., 135, 314, **576**
 BRICKHOUSE, T.H., **1130**, 1136
 BRINGAS, P., Jr., 533
 BRISEÑO MARROQUÍN, B., **1034**
 BRISEÑO, B., 1032
 BRISKIE, D., 412, 526
 BRODY, S.L., 813
 BROFFITT, B., 174, 525, 691, 891, **1133**
 BROGDEN, K., 1005
 BROGDEN, K.A., 23, 323, 890
 BROMAGE, T.G., 925
 BROPHEY, E., **509**
 BROTHWELL, D., **550**, 693
 BROWN, A., **326**
 BROWN, D.T., 820
 BROWN, L., 253
 BROWN, L.J., 878
 BROWN, M.L., 579, 580, 903
 BROWN, S., 550
 BROWN, Y., 229
 BROWNING, W., 683
 BRUDVIK, P., 692
 BRUGGEMAN, J.J., **491**
 BRUGGEMANN, T., 672
 BRUNNER, H.G., 535
 BRYERS, J., 308
 BUCHERT, C., 582, 896
 BUI, H., 838
 BUI, H.T., 844, 987, **1066**, 1072
 BUI, Q.N.T., **684**
 BUI, T., 720
 BULGARELLI, A.F., **394**
 BURCH, J.G., 504, 506
 BÜRGERS, R., 1174
 BURGESS, J.A., 1248
 BURGESS, J.O., 218, 343, 351, 353, 354, 359, 363, 374, 375, 376, 377, 383, 384, 390, 391, 681, 818, 831, 842
 BURKE, B., **445**
 BURKE, F.J.T., **538**, 659
 BURKE, S.O., 496
 BURNE, R.A., 293, 388
 BURNELL, K.K., 323, 890
 BURROWS, A., 815
 BURTON, B., 1092
 BURWELL, A.K., **581**, 1121
 BUSCHANG, P.H., 51, 795, 804, 977, 978, **979**
 BUSH, A.D., 224
 BUSKIRK, M.K., **694**
 BUSSA, H.I., 381, 382, 910
 BUSSCHER, H.J., 911
 BUTLER, A., 914
 BUTLER, B.S., 278
 BUTLER, W.T., 1002
 BUTSARAKAMRUHA, T., 1188
 BYRD, K.E., **1227**
 BYRON, C., 796
 BYRON, C.D., 803
 C
 CABRAL, H., 11
 CABRERA, M., 13
 CACCAMESE, J., 815
 CACCIATO, R., 1089
 CAGNA, D. R., 193
 CAI, P., 769
 CAI, T., 98
 CAI, Z., 270
 CAINE, R., **1240**
 CAKIR, D., 216, 343, 351, 353, 354, 359, 375, 376, 377, 383, 384, 390, 681, **842**
 CALICCHIO, M.L., 112
 CALLAHAN, J., 625
 CAMARATA, N., **236**, 745, 1182
 CAMARGO, C.H.R., 344
 CAMARGO, F.P., 356, 657, 677
 CAMBA, A., **616**
 CAMDEN, J.M., 1177
 CAMPAGNA, A.N., **151**
 CAMPBELL, P., 979
 CAMPI, P., 464, 471
 CAMPOS-NETO, A., 24
 CANARES, G., **196**
 CANAY, S., 277
 CAO, H., **588**
 CAPLAN, D., 723
 CAPLAN, D.J., 1143

- CAPOTE, R.T., **410**
 CAPPELLI, D., 606, 992
 CAPPS, B.E., **998**
 CAPUTO, A., **1270**
 CARDENAS, H.L., 1103
 CAREY, C.M., 64, **110**, 889, 1161
 CAREY, T.E., 37
 CARLIS, J., 34
 CARLSON, A., 165
 CARLSON, J.T., **267**
 CARLSON, P., 1232
 CARLSON, P.L., 142, 143
 CARMO, A.R., 1090
 CARNU, O.I., 40
 CARPENA LOPES, G., 365
 CARR, M.P., 646
 CARRILLO, R., **977**, 978
 CARSON, J.K., 1079
 CARTSOS, V., **52**
 CARVALHO, R.M., 199, **834**
 CASAMASSIMO, P., 704, 1138
 CASAS, C., 978
 CASH, M., 740
 CASKEY, C.P., 780, 781, 783, 784
 CASS, J.M., 816
 CASTANEDA, S.D., 31
 CASTELLANOS, S., 454
 CASTILHOS, N., 1090
 CATIG, G., 736
 CATT, D., 259
 CAVALCANTI, A.N., 349
 CAVANAUGH, J., 323, 1133
 CAVASSAN, A., 960
 CAVENDER, A.C., 171, 570, 737, 771, 813, 957, **1169**
 CEVIDANES, L.H.S., 82, 445, 959, **1203**
 CHADIPIRALLA, K., 956
 CHAI, Y., 533, 589, 954, **969**
 CHAIMATTAYOMPOL, N., 1119
 CHAKNIS, P., **913**
 CHALK, J., 803
 CHALMERS, J.M., 254, 256, 529, 1075
 CHALOTHORN, L.A., 958
 CHAMBERS, C.B., 8, **695**
 CHAMBERS, M.S., 624
 CHAMPAIBOON, C., **301**
 CHAN, D.C.N., 683
 CHAN, E.K.L., 632
 CHAN, G.C., 1191
 CHAN, R.W., 334, **336**
 CHANDWANI, N., **1255**
 CHANG, C.H., 1201
 CHANG, D., 479
 CHANG, J., 159
 CHANG, L.C., 1142
 CHANG, P.C., 1192
 CHANG, P.L., 1237
 CHANG, S., 1276, **1277**
 CHAO, G., 1107
 CHAPMAN, J.C., 409, **637**
 CHAPMAN, J.L., **233**
 CHAPMAN, S., 590
 CHARIG, A.J., 917, 919, **1009**
 CHARLTON, D., 1071, 1114
 CHATCHAIWATTANA, S., 185
 CHATTOPADHYAY, A., **1275**
 CHAUDHRY, J., 867
 CHAVALI, R., **218**
 CHAVES, E., 914
 CHECKETTS, M., **751**
 CHEDELLA, S.C.V., **662**, 1073
 CHEKENYA, M., 180
 CHEN, C., 180
 CHEN, C.H., 1142
 CHEN, H., 287
 CHEN, H., **56**
 CHEN, H., 1277
 CHEN, J., 175, 1000
 CHEN, J.W., **214**, 318, 413, 910
 CHEN, L., 72, 253, 352
 CHEN, L., **179**
 CHEN, P., **134**
 CHEN, S., 179
 CHEN, S.J., **817**
 CHEN, T., 1185
 CHEN, V.P., **297**
 CHEN, W.H., 271
 CHEN, X., **829**, 832
 CHEN, Z., 1189
 CHEN, Z., 1012
 CHENETTE, R.R., 56
 CHENEY, R., 768
 CHENG, S.C., 98
 CHENG, W.J., **235**
 CHEON, K.C., **423**
 CHEONG, F.C., 1269
 CHEUK, J., **380**
 CHEUK, S., 380
 CHEUNG, W., 600
 CHHUN, N., 453
 CHI, D., **529**
 CHI, L., 668
 CHIA, D., 1176
 CHILDERS, N.K., 418, 421, 423
 CHIN, J.R., 934
 CHINCHILLA, J., 454
 CHIU, K.C., **1142**
 CHIU, S., 1142
 CHOE, H.C., **593**
 CHOE, K., 458, 1145
 CHOI, D., **713**
 CHOI, D., **419**
 CHOI, H., 855
 CHOI, R., 92, 431
 CHOI, S.J., **556**
 CHOI, Y.H., **699**
 CHOLAKIS, A., 234
 CHOMITZ, V., 11
 CHONG, C., 264
 CHOPRA, M., 619
 CHORAK, A., **494**
 CHOU, A., **162**
 CHOW, B., 1260
 CHOWDHURY, S., 1068
 CHRISTENSEN, J.D., **772**
 CHRISTIANSEN, C., 548
 CHRISTODOULIDES, N., 35, 85, 86, **572**
 CHU, G., 1158
 CHU, L., 992
 CHU, T.G., 651, **1074**
 CHUANG, H.H., 613
 CHUANG, R., **36**
 CHUANG, R.Y., **447**
 CHUANG, S.K., **98**
 CHUMBLEY, S.L., **413**
 CHUNG, B., **933**
 CHUNG, W., 1011
 CIANCIO, S.G., **1080**
 CLARE-SALZLER, M.J., 462
 CLARK, B., 938, **1194**
 CLARK, E.A., 75, 369, **1098**
 CLARK, W.A.T., 230, 593, 594, 595
 CLARKSON, B., 1276, 1277
 CLAUDIO, C., 57, 403, 687
 CLAYDEN, D., 389
 CLEMMONS, D., 998
 CLINE, L., 759
 CLINE, R., **481**, 758
 CLOSE, J., 339
 CLOUTHIER, D., 164
 COATS, S.R., 568
 COBB, D.S., 540, 1075
 COELHO, J.F., 1162
 COELHO, P.G., **13**, 15, 670, 714
 COHEN, D., 1251
 COHEN, M.E., 224
 COHEN, M.H., 1275
 COIMBRA, M.E.R., **670**
 COJULÚN, E., 454
 COLDWELL, S.E., 970
 COLE, C., **1216**
 COLEMAN, E.M., **259**
 COLLIER, S., 56
 COLLINS, T., 112
 COMER, C., **244**
 COMER, R.S., 597
 COMPTON, L., **306**
 CONTOS, R.E., 970
 COOK, V.C., **777**
 COOMES, A., **364**
 COOPAMAH, M., 995
 COOPER, G.M., 796, 815, 816, **1253**
 COOPER, M.E., 579, **580**, 903
 COOPER, T.G., **688**
 COPLEN, A.E., **409**, 637
 CORBETT, J.A., 910
 CORDEIRO, H.J., 1090
 CORDELL, K.G., 37
 CORPODIAN, C., **197**
 CORREA, I.C., **1105**
 CORTEZ, R.I., **315**
 COSBY, C., **707**
 COSTA, S.K.P., 471
 COSTEA, D.E., 765
 COSTELLO, B.J., 815, 816
 COUDRON, J.P., **358**
 COULBURN, J., **1199**
 COULTER, K.R., **366**
 COVELL, D., 511
 COWAN, C., 481, 758
 COX, D.P., 162
 COX, R.J., 990
 COX, T., 805
 CRAIG, R.G., 453, 1086
 CRAMER, N., **123**
 CRAWFORD, E.A., 1066
 CRAY, J.J., **796**, 815, 816, 1253
 CREETH, J., **914**
 CRESPO, N.E., **531**
 CRETU-VASILIU, C.E., **75**, 1098
 CRISP, R.J., **659**
 CROFFORD, L.J., 574
 CROUCH, L., 285
 CROUCH, S., 572
 CROUT, R.J., 8, 419, 530, 579, 580, 695, 879, 884, 903, 1127, 1128, **1190**
 CROWE, D.L., 447
 CRUTCHFIELD, J., 541
 CRUZ, G.S., 1074
 CULP, D., 740
 CULPEPPER, C.L., **399**
 CULVER, S., **376**
 CUMMINGS, K.M., 845, **846**, 1041, 1066, 1072, 1266
 CUNHA-CRUZ, J., **275**
 CUNNINGHAM, L.L., 772, 976
 CURRAN, A.E., **561**, 598
 CURRIE, A.S., 1181
 CURRIER, G.F., 792, 1116
 CURRO, F.A., **1024**, 1086
 CURY, J.A., 584
 CUSICK, J., 751
 CZAJKA-JAKUBOWSKA, A., 1276, 1277
 D
 D'AGOSTINI, J.M., **508**
 D'SILVA, N.J., **37**, 169, 741
 D'SOUZA, R.N., 171, 173, 178, 570, 586, 737, 771, 812, 813, 814, 952, 957, 958, 1169
 DABBOUS, M.K., 466, 767
 DAEP, C., 1271
 DAGHIGH AFKAR, M., **1245**
 DAHLAN, M., 309, 1198
 DAI, J., 766
 DAI, Q., 848
 DALE, B.A., 568, 1011
 DALLAS, M., 93

- DALLAS, S.L., **102**
DAMEK-POPRAWA, M., 1258
DAMIANO, P., 529
DANEBROCK, M., 840
DANG, H., 150
DANGARIA, S.J., 88, 514, **515**, 587
DAR, S., **771**
DARLING, D.S., 1181
DAROZ, L.G.D., **715**
DARSEY, D., **382**
DARVEAU, R.P., 308, 568
DAS, P., 619
DAS, S., 137, 172
DASANAYAKE, A.P., **453**
DASILVA, J., **874**, 1140
DAVIS, H., 861
DAVIS, H.B., 20, **21**, 661, 675, 676
DAVIS, J., 1055
DAVIS, L., **516**
DAVIS, N.D., 488, **501**
DAVIS, R.R., **664**
DAVYDOVA, N., 861
DAWOUD, H., **212**
DAWSON, B., 194, 346
DAWSON, D., 575, 1180
DAWSON, D.R., **41**, 1180, 1209
DAWSON, D.V., 23, 97, 268, 540, 1075
DAWSON, M.W., 1123
DAY, B.W., 437
DE ALMEIDA, A., 960
DE ANDRADE SILVA, M.F., **1077**
DE FELIPPE, N., 793
DE GRANDMONT, P., 703
DE JAGER, M., 1155, **1156**
DE LUNA, R., **634**
DE NARDIN, E., 1214
DE RIJK, W., **542**, 823, 850
DEAN, D., 208
DEAN, D., 613
DEAN, M.C., 925
DECARLO, A.A., **1205**
DECARLO, F., 79
DECESARE, G.E., 1253
DECHOW, P.C., **102**, 430, 603, 800, 801, 802, 803
DECKER, K.L., **495**
DEGUCHI, Y., 557
DEHAITEM, M.J., **705**
DELGADO, E., 62, 907
DELGADO, L., 729
DELIMA, S.L., **636**
DELIPERI, S., **1088**
DELLA-BONA, A., 661
DELURGIO, A., 1255, 1256, 1257
DEMO, M., **441**
DEMOPOULOS, C., 527
DEMUTH, D.R., **1271**
DENEHY, G., 1075
DENG, C., 589
DENNIS, B., 1261
DENNIS, M., 405
DENNISON, J.B., **46**, 61, 105, 125, 539, 645, 671
DENRY, I., 47
DENUCCI, D.J., **523**
DEROSA, T., 1089
DEROUEN, T., **523**
DESTA, T., **605**, 1242
DEUTSCH, A.S., 945
DEVIZIO, W., 936
DEVLIN, H., 184
DEVRIES, A., 560
DEWHIRST, F., 27, 309
DHAMI, A., 40
DHANUTHAI, K., 1237
DHARSHAN, P., 85, 572
DHURU, V.B., 219, 252
DIAB, M., **1060**
DÍAZ, C.A., **726**
DICKENS, S.H., **128**, 129, 130, **577**, 889
DICKINSON, D., 616
DICKINSON, R.A., **544**, 545
DIEKWISCH, T.G., 88, 514, 515, **587**
DIETRICH, D.E., **23**
DIETRICH, E.A., 181
DILETTUSO, B.A., 579, 580, 903
DING, E.L., 95
DIONNE, R., **967**
DITMYER, M., **527**
DJOUAD, F., 566
DMYTRYK, J., 321, 322, 326
DO, T., 1270
DOBRE, V., 620
DODSON, T.B., 95
DOHERTY, E.H., 545, **1107**
DOLCE, C., **960**
DOMEYER, A.J., **790**
DOMINGO, D.L., 585
DOMINGO, H., **757**
DOMMISCH, H., 1011
DONAHUE, H., **968**
DONG, H., 570
DONLY, K.J., 179, 364, 399, 1078, 1137
DORI, F., **1219**
DORSEY, C., **296**
DOSS, A., **666**
DOUFEXI, A., **286**
DPBRN COLLABORATIVE GROUP, 283, 971, 973, 1123, 1124, 1126
DRAKE, D., 139, 305, 313, 419, 691, 946, 996, 1197
DRAUGHN, R., 594
DRAUGHON, R.B., 127
DRESCHER, M., **304**
DREW, P., 1251
DREYER, A., 606
DRISCOLL, C., 387
DRUM, M., **909**
DRUMMOND, J., **79**
DU, X., 253
DUAN, Y., **437**
DUARTE, D.A., 425
DUARTE, S., 841
DUARTE, S., 420
DUARTE, S., **1269**
DUBOSE, K., 273
DUCKSWORTH, M.K., **632**
DUDEK, A., 1239
DUDZIAK, M., 816
DUKE, P.J., 817
DUMAN, M., 22, 158
DUMONT, E.R., 802
DUNAVENT, J.M., 1004, 1007
DUNCAN, M., 27
DUNCANSON, M.G., 76, 77, 231
DUNN, W.P., 132
DUONG, T., **660**
DURHAM, P.L., **524**
DURHAM, T., 1040
DUROCHER, J., 915, 916
DUSEVICH, V., 430, 830
DUTKA-SOUZA, J.R., 960
DUTRA-CORREA, M., 1090
DÜZGÜNES, N., 307, 1234
DYNAN, W., 616
DZEMIDZIC, M., 1227
DZIAK, R., 633
E
EBERSOLE, J.L., 9, 41, 85, 482, 572, 574, 575, 748, 750, 756, 1196, 1209
ECKERT, G.J., 62, 257, 597, 899, 904, 907
ECKERT, I., 454
ECKERT, R., 1025
ECKHARDT, A., 1095
EDUARDO, C.D.P., 121, 342, 895
EDWARDS, P.C., 239, 240, 241, 243
EDWARDS, S., 815
EFTEKHARI, S., 40
EGBERT, M.A., 797, 798
EGGERTSSON, H., 62, **907**
EICHENBERGER-GILMORE, J.M., 891
EICK, J.D., 357, 830
EINHELIG, J., 1100
EIPPER, B., 487
EISBRUCH, A., 741
EKKER, S.C., 535
EL-FAKAHANY, E.E., 480
EL-REMESSY, A., 446
ELASHOFF, D., 1176
ELHADY, S.N., 963
ELIAS, K., **289**
ELIAS-BONETA, A., 220
ELLIOTT, N., 1155, 1156
ELLIS, A.L., 1205
ELMOFFY, M., 446
ELSALANTY, M.E., **5**, 603
EMA, K.C., **200**, 201, 202
EMAM, A., 548
EMAMI, E., **703**
EMAMIAN, E.S., 773
EMECEN, P., 456
EMERALD, A., 303
ENGELAND, C., 1241
ENGLISH, J.D., 381, 382, 910
ERICKSON, R.L., 833, 835
ERSU, B., **277**
ESLICK, J., 1100
ESSICK, G., 494
ESTAFANOUS, E.W., **820**
ETMAN, M.K., **627**
ETTINGER, R.L., 424
EVERETT, E.T., 998, 1273
F
FADAVI, S., **28**, 876, 972, 1122, 1125
FAHEY, T.J., 989
FAJA-FERENDEZ, J., 509
FALCHET, P., **1272**
FALSAFI, A., 844, 987
FAN, M., 1236
FAN, Y., **923**
FAHAH, C.M., **510**
FARAONI-ROMANO, J.J., **673**
FARRELL, J., 573
FARRELL, S., 146, **994**, 1079, 1083
FARRINGTON, F., 1265
FASBINDER, D.J., **539**
FAUSTMAN, D., 743
FEATHERSTONE, J.D., 108, 895
FEDERLIN, M., 368
FEHRENBACHER, J., 485
FEIK, D., 1220
FEILZER, A.J., 211, 710
FEINE, J., 703
FELDMAN, L.M., **292**
FELDMAN, R., 292
FELIX, C.M., 825, 989, **991**
FELLOWS, J.L., **1124**
FELVER, B., **474**, 475, 1224
FENG, H., 952, 993
FENG, J.Q., 93, **102**, 167, 171, 430, 556, 558, **567**, 807
FENG, L., **849**
FENG, P., 292
FENING, S.D., 496
FENNO, J.C., 250, 637, 995
FENYO-PEREIRA, M., 471, 871
FERNANDES, I., 806

FERNANDEZ, C.R., 532
 FERRACANE, J.L., 77, 78, **276**,
577, 661, 1092
 FERREIRA ZANDONA, A.G., **62**,
 597
 FERREIRA, J., 668, 1232
 FERREIRA, S., 545, 1082, 1085,
 1119
 FERRIS, A., **288**
 FERRUCCI, L., 458
 FETE, M., 1265
 FETNER, A.J., **25**
 FIDEL, P.L., 1244
 FIEDLER, S.K., 146, 1084
 FIELDS, H.W., 334, 335, 336, 505
 FILLINGIM, R., 689
 FINKELSTEIN, M., 764
 FINLAYSON, T., 511
 FIRATLI, E., 122
 FIRESTONE, A., 1281
 FIRESTONE, A.R., 513, **1264**
 FISHER, M.A., **459**
 FISHER-OWENS, S., 722
 FITCH, J., **845**
 FITCH, J.A., 1266
 FIZER, M., 414, 415
 FLAIM, G.M., **129**, 130
 FLAITS, C.M., 318, 470, **893**
 FLEMING, J.K., **76**
 FLINT, M., **792**
 FLOREZ-ARANGO, J.F., 615
 FLORIANO, P.N., 35, 85, 86, 572
 FLOYD, C.J.E., **832**
 FLYNN, T., 540
 FOERSTER, U., 405
 FOLGER, S., 494
 FOLTZ, B.M., **327**
 FONG, Z., 1241
 FONTANA, M., 255, 257, 259,
899
 FOPPIANO, S., 160
 FORD, J.P., 221, 222, 592
 FORMAN, J., **917**
 FOSHAY, M.C., 536
 FOUAD, A., **565**
 FOX, P.C., 553
 FRAGA, D., 6
 FRAGOSO, W.S., 715
 FRANCESCHI, R.T., 1171
 FRANCISCUS, R.G., 799
 FRANCO, R., 730
 FRANKLIN, L., **1252**
 FRANSISCA, A.H., 291
 FRANTZ, B., 1218
 FRANZKE, J., **1062**
 FRAZIER, K.B., 370
 FRAZIER-BOWERS, S.A., **104**
 FREDERICK, K.E., 109
 FREEMAN, K., 1260
 FREITAS, P.M., **895**
 FRENCH, Z., **295**
 FRETTE, G., 672

FREY, G.N., 381, 382
 FRIBLEY, A., **769**
 FRICKE, B., 132
 FRICTON, J.R., 142, 143, 1232
 FRISBEE, J.C., 8, 695
 FRISBEE, S.J., **8**, 695
 FRISK, F., 460
 FRUGE, L., 1120
 FRUSTINO, J., **768**
 FU, J., 315
 FUJIIHASHI, K., 755
 FUJIMARA, A., 24
 FUKAGAWA, Y., 552
 FULLEM, C.M., 31
 FULLER, B.L., **424**
 FULLMER, S.C., **617**
 FUMA, A., 552
 FUNATO, N., **590**
 FUSS, J.R., **739**

G

GADRE, D., 419
 GAKUNGA, P.T., 809, 898
 GALHANO, G.A.P., 190
 GALLAGHER, A., 914
 GALLER, K., **570**, 737
 GAMBOGI, R.J., 912
 GANDHI, V.P., **433**
 GANSKY, S.A., 640, 720, 1052
 GARCIA, J.W., 205, **207**
 GARCIA, M.A., 1137
 GARCIA, R., 548
 GARCIA-GODOY, C., **1079**
 GARCIA-GODOY, F., 956, 1028,
1029, 1079
 GARIBOGLU, S., 465
 GARIN, C., **198**
 GARRETT, G.M., **640**
 GARRETT, N., 99, 265, **625**
 GARVAN, C.W., 971, 1123,
 1124, 1126
 GASPARD, R.A., 240, **241**
 GASPAROVICH, S., 312
 GAVIN, M.R., 1238
 GBEMI, O., **478**
 GEBHARD, K.H., 181
 GEDERI, E., **1234**
 GEERTSEMA-DOORNBUSCH,
 G.I., 911
 GELESKO, S., **440**
 GELFOND, S., **996**
 GENCO, R., 1214
 GEORGE, F., 1056
 GEORGE, M.C., 723
 GERA, I., 1219
 GERALDELI, S., 540
 GERAMIPANAH, F., 1035
 GERLACH, R.W., 45, 146, 872,
 873, 994, 1004, 1006, 1007,
 1078, 1079, 1083, **1221**
 GERSTMAYR, N., 1095

GERTSEN, M., 697
 GERVICH, M., **764**
 GETTLEMAN, L., **624**
 GHABANCHI, J., 1245, **1246**
 GHACHAM, W., 573
 GHAFARI, A., **406**
 GHAFARI, S., 612
 GHERGULESCU, C., 1110
 GHIABI, E., 234, 550
 GHIYA, A.S., **520**
 GHOSH, A., **1015**
 GHUMAN, T., **359**
 GIACAMAN, R.A., 170, **181**
 GIANNINI, M., 342, **853**
 GIANNOBILE, W.V., **54**
 GIBB, R.D., 872, 1004, 1007,
 1221
 GIBBS, A.E., **639**
 GIBBS, J.L., **569**
 GIBSON, R.T., 742
 GILBERT, A., **217**, 1112
 GILBERT, G.H., **523**, 971, 973,
 1124
 GILBERT, R.S., **755**
 GILL, H., **638**
 GILL, S.R., **522**
 GILLEN, T., **646**
 GILLESPIE, K., 616
 GILLETTE, J., 275, 276, **523**
 GINGELL, J., 1070
 GIORDANO, R., 653
 GIST, J.E., **763**
 GIUSEPPE, A.A., 860
 GJORGOSKI, I., 948, 949
 GLADWELL, J.T., 962
 GLAROS, A., 830
 GLASSELL, B.E., **331**
 GLOYD, T., 81
 GLUHAK-HEINRICH, J., 558
 GLUZMAN, R., **411**
 GODLEVSKY, O.V., 528
 GODOVIKOVA, V., **439**, 1173
 GOHEL, A., 246
 GOLDBERG, R., 402, **407**
 GOLLWITZER, J., 473
 GOLUB, L. M., 40
 GOMES, G., 360, **847**, 1063
 GOMEZ, M., 1255, 1256, 1257
 GONÇALVES, S.E.D.P., 854
 GONG, Y., 993
 GONZÁLEZ, M., 454
 GONZÁLEZ, O.A., **748**
 GONZÁLEZ, Y.M., 492
 GONZÁLEZ-CABEZAS, C., 255,
 257, 259, 899, 1160
 GOODSON, J.M., **906**
 GOODWILL, A.G., 8, 695
 GOPALAKRISHNAN, R., 165,
 1239
 GORDAN, V.V., **971**, 1123,
 1124, 1126
 GOTLIEB, E., 1028

GOTO, M., 37
 GOULD, R., 906
 GOVIL, M., **555**
 GOWRISANKAR, A., 572
 GOYAL, C.R., 147, 1162
 GRAHAM, J., **348**
 GRAMANN, J., **1016**, 1017
 GRANDE, R.H.M., 199, 350
 GRANT, M.K.O., 480
 GRATTON, D., 188, 656, **843**
 GRAVES, D., 351
 GRAVES, D.T., 605, **1242**
 GRAY, D., 269
 GRAY, D.M., 1190
 GRAYBILL, J.R., 778
 GRAYDEN, S.K., 1093
 GREEN, B.L., 57, 403, 702
 GREEN, T., 596
 GREENSPAN, J.S., **53**
 GREENWALD, L., **691**
 GREER, A., **308**
 GREGORY, R.L., **1189**
 GREMBOWSKI, D., **1139**
 GREYSTONE, G., 1019
 GRIER, D.G., 1269
 GRIESHABER, S.S., 296, 999
 GRIFFEN, A.L., 310, 312
 GRIFFIN, R., 34
 GRIFFIN, T., 600
 GRIFFIN, T., 34
 GRIFFITH, S., **741**
 GRIGGS, J.A., **1051**
 GRIMAUDO, N., 708
 GRONOWICZ, G., 669
 GROOTVELD, M.C., 757, 901
 GROPE, J.C., **536**
 GROSS, E.L., **312**
 GROSS, S., 1101
 GROSSE, I.R., 803
 GRÜNHAGEN, S., 546
 GRUNINGER, S.E., 937, **944**
 GU, F., 637
 GU, W., 1236
 GUADAGNINI, J.P., 585
 GUAY, A.H., 878
 GUDA, T., **602**, 604
 GUESS, P., **654**
 GUIDRY, J., 754
 GUIMARÃES, A.R.D., 584
 GUIMARÃES, A.S., 1272
 GUIMARÃES, J.G., 1268
 GUINET, E., 753
 GULSEN, A., 866
 GUNEL, E., 107, 789, 964, 1091
 GUNGORMUS, M., 89
 GUNSOLLEY, J., 1214
 GUO, D., 558
 GUO, G., 72
 GUO, Q., 222, 226, 592
 GUPTA, C., **402**, 407
 GURFINKEL, M., 75
 GUTHMILLER, J.M., 304, 306

GUTIERREZ, K., 1218
 GUTIERREZ, S., 454
 GUTIERREZ, S.E., 287
 GUTTENPLAN, J.B., 762
 GUYMAN, J.J., 333
 GUZMAN-ARMSTRONG, S.,
 540, 1135

H

HA, J.Y., **250**
 HABELITZ, S., 108, 435, 734
 HACKER, B., 1011
 HACKMYER, S., **1061**
 HADDAD, Y., **94**
 HADERLIE, D.C., **254**
 HAFFAJEE, A.D., **43**, 451, 452,
 1223
 HAGERMAN, E., 1025
 HAHNEL, S., **1174**
 HAIDAR, Z.S., **562**
 HAIKAL, F.P., **294**
 HAINES, M., 930
 HAKEBERG, M., **460**
 HAKIM-ZARGAR, M., 669
 HALES, B., 873
 HALEY, J., **1248**
 HALUKO, J.L., **564**
 HAMDY, R.C., 562
 HAMILTON, J., 964
 HAMILTON, J.C., 61
 HAMILTON, K., 1018
 HAMMERSMITH, K.J., **59**
 HAMMOND, B., 1212
 HAMMONTREE, W.A., **466**
 HAMRICK, M., 796
 HAN, B., **749**
 HAN, D., **993**
 HAN, J., 589
 HAN, P., **720**, 722
 HAN, S.H., **1260**
 HAN, Y., 42
 HANCOCK, R., 264
 HANDEL, G., 367, 652, 1037,
 1174
 HANDFIELD, M., 296, 300, 1249
 HANES, P., 1218
 HANEY, L., 767
 HANIASTUTI, T., 379
 HANS, M.G., 966, 981, **1261**
 HANSEN, S., 540
 HANSMA, P., 642
 HARASZTHY, V.I., 938, 1194
 HARBAUGH, T., **362**
 HARDIGAN, P.C., 506, 541
 HARDY, T.C., **247**
 HARGREAVES, K.M., 161, 483,
 484, 485, 493
 HARHAD, L., **352**
 HARLESS, J.D., 106, 254, 256,
 424, 887, 888, 890
 HARREL, S.K., 1018, **1020**

HARRELSON, B.D., 1210
 HARRINGTON, E., 113
 HARRIS, E.F., 331, 332, **961**
 HARRIS, M., 1162
 HARRIS, M.A., 558
 HARRIS, P.A., 283
 HARRIS, S.E., 558
 HARRISON, J., 850
 HART, J.M., **193**
 HART, P.S., 468
 HART, T.C., 468, 555, 556, 585
 HARTANTO, S., 597
 HARTGERINK, J.D., 570
 HASAN, M., 426
 HASHIGUCHI, M., **1108**
 HASSAN, Z., 682
 HASTIE, B., 448
 HASTURK, H., **44**, 1010, 1014
 HATCH, J.P., 404, 794, 898, 965,
 992
 HAUG, R., 440
 HAUGH, G.S., 624
 HAUN, J., 1006
 HAYAMI, T., 1259
 HAYS, R.D., 1024
 HE, J., 1051
 HE, J., 1025
 HE, J., 299, 997
 HE, T., 872, **1084**
 HEATON, L.J., **970**
 HEAVEN, T., **83**
 HECK, J., **329**
 HEDAYATI, M., 1254
 HEFT, M.W., 405, **521**
 HEFTI, A.F., 1153
 HEILMAN, J., 888
 HELESIC, G., 497
 HELFMAN, S., 1233
 HELLSTEIN, J., 764
 HELMERHORST, E.J., **149**, 153,
 166, 902
 HEMBREE, M., 977
 HENDERSON, S.A., 879
 HENRIQUES, G.E.P., 715
 HENRY, M.A., 484, 490, 491,
 493, 497, 1228
 HENRY, W.D., **782**, 783, 784
 HENSLEY, D.M., 933, 935
 HENSON, B., **87**, 573
 HERMANSON, S., 535
 HERNANDEZ, M., 540
 HERNANDEZ, P., 62, 907
 HERRERA, B.S., **464**, 471
 HERRERA, L.F., **696**, 698
 HERRERA, W., 454
 HERRIN, B.E., 990
 HERRING, S.W., 797, 798
 HERSH, E., **967**
 HERZBERG, M.C., 168, 170,
 181, 301
 HESS, D., **374**
 HETHCOX, J., **712**

HICKS, J., 893
 HIDALGO, F., 454
 HILL, E., **1031**
 HILL, J.R., **1238**
 HILLER, K.A., 368, 1095
 HILLMAN, M., 886
 HILTON, T.J., 275, 276, **1092**
 HINTON, R., 111, 433
 HIROFUJI, T., 1183
 HIRSCH, C., **141**
 HISAMA, K., 1183
 HITTELMAN, E., 870
 HIX, J., 1155, 1156
 HJALT, T.A., 808, 813
 HO, A., 1080
 HO, B., 1004
 HO, C.M., 235
 HO, S., 274
 HO, S.P., 92, 431, **1167**
 HOANG, N., **611**
 HOBBS, D.T., 664
 HOCHSTRASSER, J.S., **258**
 HODGES, V., 574
 HODNETT, S., 107
 HOEFT, K., 58
 HOFFMAN, J.R., **935**
 HOFFMAN, K.M., **130**, 889
 HOFFMAN, M.P., 152
 HOFMANN, N., **546**
 HOGAN, M.M., 106, 254, 256,
 424, 887, 888
 HOHNSTEIN, T., 826
 HOKUGO, A., 99
 HOLCOMBE, R.M., 972
 HOLLIDAY, L.S., 999
 HOLLOWAY, J., 47
 HOLM-PEDERSEN, P., 549
 HOLT, J.S., **1153**
 HOLTON, N.E., 799
 HOLTON, R., 931
 HOLZHAUSEN, M., 464
 HONEYMAN, A.L., **138**
 HONG, L., 361
 HONG, L., **525**
 HOOGEBOOM, J., 535
 HOOVER, C.I., 261
 HOOVER-FANG, J., 607
 HOPKINS, H.S., **237**
 HORCHOS, M., 1120
 HOROWITZ, A.J., 1086
 HOROWITZ, R., 733
 HORST, J., 946
 HORST, J.A., **89**
 HORST, O.V., **568**
 HORTON, H., **787**
 HORTON, M., 339
 HOSAKA, K., 118
 HOSHINO, E., 379
 HOSOI, T., 221
 HOSOKAWA, R., **533**
 HOSSAIN, F.S., **648**, 862
 HOTTON, D., 806

HOVIJITRA, S.T., 820
 HOWARD, K.M., **1211**
 HOWARD, M., 164
 HOWE, S., **355**
 HOWELL, D.L., 1130
 HOWELL, H.R., 477
 HSIEH, K.H., 1102
 HSU, C., **805**
 HSU, K.L.C., **418**, 421
 HSU, S., 156, 616, 629, 630, 666
 HU, D., 160
 HU, D., 936
 HU, H., 1096
 HU, J., 596
 HU, S., **38**, 235
 HU, X., **189**, 217, 1112
 HU, Z., 87, 1179
 HUANG, C.B., 482, 748, **756**,
 1196
 HUANG, C.-Y.C., 956
 HUANG, G.T.-J., **566**
 HUANG, I.H., 295
 HUANG, J.C., 786
 HUANG, X., **954**
 HUANG, Y., 1216
 HUBER, M., **931**
 HUCKABAY, S., 1239
 HUDSON, R., 1147, 1148
 HUFF, E., **156**
 HUFNAGLE, A.R., 749
 HUGHES, B.H., 851
 HUGHES, C.V., 309, **1198**
 HUGHES, E., 966
 HUGHES, P., 1232, 1239
 HUJA, S.S., **103**
 HUMPHREYS, C., **693**
 HUNG, Y.P., **589**
 HUNTLEY, C.L., 973
 HUO, X., **863**
 HUSTING, S.H., 880
 HUSZAR, T., 1219
 HUTCHINS, B., 486
 HUTHALA, M.F.R.L., 854
 HUYNH, G., 1009
 HYAKUSOKU, H., 1217
 HYDE, S., 880
 HYLAND, A., 621
 HYMAN, T., 1120
 HYNDMAN, F., 164

I

IACOPINO, A., 252
 IGARASHI, Y., 282
 IJIMA, M., 230, 593, 594, 595
 IKEDA, H., 265
 IKEMI, T., 1045, 1046, 1048
 IMBERY, T.A., 195, 358
 INGLEHART, M.R., 397, 408,
 409, 412, 472, **526**, 686,
 705, 882
 INUKAI, M., 282

IRANMANESH, S., 341
IRIGOYEN, M.E., 892
IRWIN, J.Y., **401**
ISAACS, R.L., 904
ISHIHARA, Y., 1183
ISHIKAWA-NAGAI, S., 874, 1140
ISLAM, N., 1251
ITKIN-ANSARI, P., 1207
ITO, Y., 88, 514, 515, 587, 589
ITOI, Y., 1217
IVANCIK, J., **438**
IVANOVSKI, K., 948, 949
IWAMOTO, T., 1183
IWASAKI, S., 1047, 1049
IYER, D., 299, 997
IZU, M., 904

J

JACKSON, A.K., 142
JACOB, A.K.B., **425**
JACOB, R.F., 624
JACOBSON, D., **226**
JAIN, S., 308
JAIN, V., **378**
JAINKITTIVONG, A., **1188**
JAKYMIW, A., 632
JAMPANI, P., **354**
JANAL, M., 622
JANG, S.I., 468
JANIES, D., 312
JANOWSKI, G.M., 208
JANSEN, J.A., **599**
JANUS, C., 195
JAQUERY, A., **645**
JARED, H., **279**, 725
JASKOLKA, M., 444
JAVED, A., 287
JEAN CHARLES, G., **702**
JEFFERIES, S., **918**
JEFFERSON, M.M., 324, 767
JENKINS, A., 500
JENKINS, S., 488, 501
JENKINS, W., 1152, 1153, 1154
JENSEN, J.L., 743
JEONG, B.C., 1171
JESKE, A.H., 429, **910**
JHAVERI, A., 669
JI, H., 19
JIA, W., 852
JIANG, B., **167**, 567
JIANG, J., 38
JIANG, J., **968**
JIN, S., **852**
JIN, T., 88, 587, 1276
JIN, X., 848
JOHAL, A., 700
JOHANNESSEN, A.C., 765
JOHN, M.T., 140, 141, 148, 282, 495, 721, **1229**, 1231
JOHNSON, D.M., 133
JOHNSON, G., 304

JOHNSON, K.B., 553
JOHNSON, L., **596**
JOHNSON, L.R., 1228
JOHNSON, M., 1155, 1156
JOHNSON, M., 288
JOHNSON, M.J., **890**
JOHNSON, R.B., 461, 780, 781, 782, 783, 784, **1210**
JOHNSON, W.B., 230, 594, 595
JOHNSTON, D.A., 624
JOHNSTON, W.M., 189, 217, 334, 335, 336, 505, 821, 1069, 1109, **1112**, 1281
JOKERST, J.V., **86**
JOLIVET, J., 309, 1198
JOLY, S., 304, 306
JONES, D.L., 1129
JONES, D.W., **125**
JONES, J.A., **548**
JONES, J.D., 49, 1147, **1148**
JOO, N.E., **180**
JORDAN, R.C.K., 162
JOSE, M.V., 208
JOSEPH, J., **1259**
JOURY, E., **700**
JRAGH, A.K., **183**

K

KABAN, L., 1168
KADAM, P., **353**
KAI, M., 1255
KAIM, J., 197
KAIMAL, S., 143, 1232
KAKU, M., 668, 735
KAKU, T., 1243
KALACHANDRA, S., 477, 561, 759
KALATHINGAL, S., 244
KALEEM, M., **543**
KALILI, T.K., 1270
KALININA, A., 1199
KALMAN, D., 1001
KAMADA, K., 839
KAMARA, H., **498**, 502
KAMER, A., 453
KANAMOTO, T., 137, 172
KANASI, E., **309**, 1198
KANG, B., 730
KANG, J.Y., 50
KANG, P., **937**, 944
KANG, W., 142, 143, 1232
KANJIRATH, P.P., 250, 409, 637, 642
KANO-WILSON, L.H., **597**
KANOU, M., 552
KANTARCI, A., 44, 1010, **1014**
KAO, E.C., **107**, 836, 1091
KAPADIA, H., 173, 178, **586**, 812, 952
KAPILA, S., 1259

KAPILA, Y., 180, 1015, 1259
KAPLAN, D., 544, 545, 732
KAPLAN, F.S., 536
KARAN, K., **357**
KARLINSEY, R.L., 109, **894**
KARPINIA, K., **45**
KARSKI, M., **816**
KARTHA, K., 492
KASAJ, A., 1032
KASHI, A., **70**
KASHINO, S., 24
KASHUBA, A.D., 477
KASIMI, I., 511
KATANCIC, J.A., 318
KATZ, B., 62, 907
KATZ, J., 632
KATZ, J.L., 67, 68
KATZ, M.S., 150
KATZ, R.V., **57**, 403, 411, 702
KAUFMAN, R., 769
KAWAI, T., 1049
KAWAI, T., **27**, 610
KAWAS, I.S., **432**
KAWASHIMA, T., 1045, 1046, 1048
KAYE, E., 548
KAYNE, J., **532**
KAYNE, R., 531
KAZAMA, H., 1108, 1118
KAZEMIAN, M., 1058
KEHL, L., 1232
KEITH, A.J., **601**
KELLEHER, K.E., 963
KELLY, M., 1187
KENNEDY, K.C., **325**
KENT, R., 1198
KER, A.J., **334**, 336
KERBY, R.E., 1109
KERN, M., **1059**
KERNICK, J., 597
KERN, D.G., 619
KERSCHBAUM, W., 705
KESAVALU, L., **1213**
KESSLER, H., 742
KHAJOTIA, S.S., 76, 77, 231, **1116**
KHALIFE, M.A., **61**
KHALIL, S., 634, **743**
KHALILNIA, S., 1270
KHAN, A.A., 484
KHAN, U.M., 224
KHASHABA, R., 664, **667**
KHERANI, A., 639
KHOCHT, A., **622**
KHOIE, R.N., 941
KHOSH, I., **249**
KHUDER, S., 742
KIAT-AMNUAY, S., 214, 624
KILAMBI, H., 123
KILICAL, Y., **204**
KIM, H.J., 1171
KIM, H.J., 544, 732

KIM, H.S., 19
KIM, H.S., 655, 711
KIM, J., 932, 1023
KIM, J., **600**
KIM, J.H., 48, **775**
KIM, J.J., **1010**
KIM, J.J., **770**
KIM, J.K., 1031
KIM, J.W., **48**
KIM, K., 19
KIM, S., 722
KIM, S.H., 1171
KIM, Y., 770
KIM-PUSATERI, S., 1080
KIM-WEROHA, N., 288
KIMMELL, J., 511
KIMMES, N.S., 833, **835**
KINA, M., 1044
KINANE, D.F., **30**, 85, 572
KING, C.K., 489
KING, G., 330
KING, K., **823**, 1040
KING, W.F., **1185**, 1195
KIRAKODU, S.S., 41
KIRKPATRICK, W.R., 294, 778
KIRKWOOD, K.L., 37, **54**, 169
KITTEN, T., **137**, 172
KLASSER, G.D., 972
KLAUSNER, C., 596
KLEBER, C.J., 914, 915, 916
KLEIN, M.I., **420**
KLEIN, O., **4**, 957
KLEINMAN, B., **80**
KLEPCZYK, M., **1055**
KLETTKE, T., 1016, **1017**
KLEVERLAAN, C.J., 211
KLISS, R., 582, 896
KLONOWSKI, M.A., **496**
KLOXIN, C.J., 127
KLUEMPER, G.T., 976
KLUKOWSKA, M., 761, **1008**
KNEIB, J., **815**
KNOBLOCH, L.A., 1109
KNOX, S.M., 152
KNUDSEN, T., 560
KO, C.C., 668, 735, 1232
KO, E.S., **932**
KO, S., 93
KO, Y.J., 157, **1149**
KOBASHIGAWA, A., 827, 832
KOBAYASHI, R., 755
KODANI, I., 616
KOEKLUE, U., **737**
KOERBER, A., 28, 876, 972, 1122, 1125
KOH, G.Y., 1171
KOH, J.T., 19, 655, 711, **1171**
KOHLMGRAF, K.G., 323
KOHN, D.H., 434
KOIKE, M., 221, 222, 225, 226, **592**, 926
KOKA, S., **103**

KOLLAR, C., 915
 KOMURA, J., 1255, 1256, 1257
 KONOPKA, K., 307, 1234
 KONTOGIORGOS, E.D., **603**
 KOO, H., 420
 KOPPANG, H.S., 743
 KOPZON, V., 652
 KORKMAZ, Y., **122**, 204
 KOROLUK, L., 337
 KORPAK, A., 1092
 KOSARAJU, A., **428**
 KOSONITTIKUL, R., **185**
 KOSTORYZ, E.L., 126, 861
 KOTA, K., 379
 KOTA, S., 752
 KOTCHE, M., 79
 KOTHA, S., 288
 KOTTAL, S., 870
 KOUTOUZIS, T., 158
 KOVÁCS, V., 1219
 KOVARIK, L., 595
 KOVARIK, R., **9**
 KOWOLIK, J.E., 694
 KRAIG, E., 303, 606
 KRAMER, P.R., 270, 486, **524**
 KRATOCHVIL, F.J., 777
 KREAM, B.E., 289, 558
 KREBSBACH, P.H., 284, **578**
 KRESSIN, N.R., 57, 403, 702
 KRETH, J., 168, 302
 KRIFKA, S., **368**
 KRITT, B., 526
 KRONENBERG, M.S., 286
 KROTHAPALLI, N., 1242
 KRUKEMEYER, A.M., **397**
 KRUMME, W., 840
 KRUSE, D., **194**, 345, 346
 KRUZIC, J.J., 78
 KRYSIAK, A., 221, **225**
 KUCHERLAPATI, R., 176
 KUEHNE, J., 937
 KUGEL, G., 215, 371, 544, 545, 684, 1019, 1085, 1107, **1119**
 KUKURUZINSKA, M., 634, 743
 KULICK, L.S., 1069
 KUMAGAI, T., 858
 KUMAGAI, T., 1225
 KUMAR, P.S., 316, 317, 617, 636
 KUMTA, P., 182, **928**
 KUNZEL, C., **975**
 KUO, J., 116, 144, **518**
 KUO, T.-C., **1102**
 KURAGO, Z., 306, 323
 KURAGUCHI, M., 176
 KUREICHYK, A.L., 579, 580, 903
 KURELLA, V., 754
 KUTHY, R.A., 529, 709, **1141**
 KUUN, P., 1134
 KWEIK, N., 1129
 KY, C., 111
 KYUNG, G.H., **717**

L

LACOURSE, J., **650**
 LACRUZ, R., **925**
 LAFFOON, J., 157, 890
 LAI, M.L., **1115**
 LAI, Y., 992
 LALLA, E., 975
 LALLIER, T.E., 469, 1013
 LAMONT, R.J., 296, 300, 605, 1249, 1271
 LAMSTER, I., **53**, 975
 LAND, M.F., 821
 LANDIN, M., 953
 LANG, R., **1037**
 LANGE, N., 643, 1026
 LARGAESPADA, D.A., 1238
 LAROTA, J., 287
 LARSEN, M., 769
 LARSON, B., 787
 LARUMBE, J., 541
 LASCALA, A.C., 350
 LASKIN, D., 443, 1204
 LATTA, M.A., 547, 833, 837, **1101**
 LAU, L., 1049
 LAU, Y.L., 1191
 LAURIS, R.M., 960
 LAUTENSCHLAGER, E., 1054, 1104
 LAW, H.K., 1191
 LAWSON, N.C., **377**
 LE, A., 432
 LE, C.N., **341**
 LE, L.T., **1054**
 LEA, S.C., 474, 475, **1224**
 LEACH, J., 1239
 LEBARON, R.G., 519
 LEBLEBICIOGLU, B., 26, 266, 713
 LECH, S., 1005
 LEE, A.K., **786**
 LEE, B.S., 1102
 LEE, C.A., **472**
 LEE, C.H., 861, 126
 LEE, C.Y., 1102
 LEE, D., 928
 LEE, D., **232**
 LEE, H.M., 40
 LEE, J., 616
 LEE, J.S., 37
 LEE, J.Y., 59, 725
 LEE, K.M., 19, 271, 655, 711, 1171
 LEE, P.Y., **182**, 807
 LEE, R., **7**
 LEE, R., **268**
 LEE, R.P., 382
 LEE, S.H., 1142, 1269
 LEE, S.K., 468
 LEE, S.S., 940, **1023**
 LEE, S.W., **1233**

LEE, V.A., 1103
 LEGER, R., 410
 LeGEROS, J.P., 736, 984
 LeGEROS, R.Z., 736, 984
 LEHNHOF, M., 1043
 LEI, Y., **168**
 LEI, Y., 91
 LEISK, G., 544
 LEITE, R., 1216
 LEITZSCH, S., **455**
 LEMONS, J.E., **2**, 267, 1150
 LENSIE, E.L., 1253
 LENTON, P.A., 142
 LEON, J.M., 773
 LEONARDO, M.R., 1278
 LEONE, P., 330
 LEOTTA, D., 249
 LEPLY, C., 795
 LeRESCHÉ, L., **1226**
 LESHAM, O., 24
 LESTER, S.R., **461**, 782, 783, 1210
 LEUNG, K.P., 134, 311
 LEVINE, F., 1207
 LEVINS, R., 7
 LEVINSON, S.R., 491, 497, 1228
 LEVY, L.S., 404
 LEVY, S.M., 174, 525, 691, 891, 1133
 LEWALLEN, B., **444**
 LEWGOY, H.R., 1090
 LEWIS, H.C., **1136**
 LEWIS, J., 156, 229, 629, 630, 643, 664, 665, 666, 667, 1026
 LEWIS, J.P., 299, **522**, **997**
 LEWIS, K.M., 131
 LEWIS, S.M., 963
 LEYPOLDT, B., 338, **512**
 LEYS, E.J., 310, 312
 LEZOT, F., 806
 LI, C., 431
 LI, F., 169
 LI, H., 297
 LI, J., 1242
 LI, J., 561, **759**
 LI, J., 807
 LI, L., 411
 LI, L., 1205
 LI, L., 31
 LI, M., **1192**
 LI, W., 435
 LI, Y., 940, 941, 1023, 1222
 LI, Y., 1203
 LIAO, K.H., 1102
 LIARAKOS, M., 550
 LIBERTI, M.S., 853
 LIBERTO, V., 974
 LIBOV, D., **506**
 LICHTLER, A.C., 286, 558
 LIDRAL, A.C., 174, **554**
 LIESE, A.D., 699

LILLY, E., **1244**
 LIM, H.P., 711
 LIM, P.F., 82
 LIM, S., 162
 LIMA, V., 454
 LIMESAND, K.H., **104**
 LIMÓN, P., 726
 LIN, A.L., 150
 LIN, C.P., 1102
 LIN, J., **92**
 LIN, N., **1096**
 LIN, N.J., 1279
 LIN, S.M., 939
 LIN, Y., 616
 LIN, Y.L., **1193**
 LIN-GIBSON, S., **2**, 66, 1096, 1279
 LINDAUER, S.J., 333, 338, 406, 507, 510, 512, 675, 676, 810, 962, **963**
 LINDEMANN, M., 909
 LINDEMUTH, J., 826, 1055
 LINFORD, D., **386**
 LING, L., 72, 253, 352, **1097**
 LINK, D.P., 599
 LIS, M., 151, 739
 LITAKER, M.S., 818
 LITTLEJOHN, S., 914
 LIU, D., **1165**
 LIU, H., 1014
 LIU, H., 822
 LIU, J., **230**, 594, 595
 LIU, J., **1276**, 1277
 LIU, K.L., 735
 LIU, K.Z., 234
 LIU, M., 169
 LIU, P.R., 363, 391
 LIU, S.S.Y., **804**
 LIU, Y., 19, 272
 LIU, Z.J., 249, 1282
 LLANES, B.I., **740**
 LLOYD, B.R., **631**
 LLOYD, I.K., 658
 LOCKWOOD, P.E., 630, 643, 664, 665, 666, 667, 1026
 LOEBEL, N.G., 942, **1222**
 LOEWY, Z., 1005, 1158
 LOGAN, H.L., 632, 701
 LOGUERCIO, A.D., 350
 LOHER, H., **652**
 LOHR, J.L., 535
 LOLLI, G., 1116
 LOMBARDO, G.H.L., 356
 LONG, J.J., **492**
 LOOK, J.O., 142
 LOOMER, P.M., 74, 274
 LOONEY, S.W., 220, 370, 616
 LOPATIN, D., 995
 LOPES, G.C., 71, 663, 1044, **1050**
 LOPES-VIRELLA, M.F., 1216
 LOPEZ, L., 660

- LOPEZ, N.J., **457**
 LORBER, M., **1175**
 LOREE, T., 621
 LOSEE, J.E., 815, 816, 1253
 LOVE, J.A., 283
 LOVELESS, L., 113
 LOZA, M.A., 220
 LOZANO, F., **716**
 LOZANO-PINEDA, J., **905**
 LU, H., 932, 1043
 LU, H.Q., 406
 LU, S.C., 453, 1198
 LUAN, X., **88**, 514, 515, 587
 LUCAROTTI, S., 538
 LUCAS, P.W., 803
 LUCCEUS, S.C., **999**
 LUCE, K., 318
 LUCERO, A., 726
 LUENGAS, I., **892**
 LUFF, K.C., **484**
 LUIJTEN, M., 560
 LUKANDU, O., **765**
 LUND, J.J., 176
 LUND, P.S., **824**
 LUNSFORD, R.D., **522**
 LUO, S., **497**
 LURIA, J.S., **284**
 LUX, R., 31
 LY, K.A., **63**
 LYNCH, E., 757, **901**
 LYNSTADAAS, S.P., 743
- M**
- MA, A., 668, **735**
 MA, D., **430**
 MA, H., 308
 MA, P., 645
 MA, S., 270
 MAAS, R.L., 112, 176
 MacDOUGALL, M., 179, **521**
 MACHADO, C., 386
 MACHADO, M., **33**
 MACHADO, P.C., 1272
 MACHADO-MENGATTO, C.,
192
 MACHIDA, C.A., 297, 511
 MACHIDA, D., **858**
 MACIEJEWSKA, I., 433, **1002**,
 1170
 MACKENZIE, B., 165
 MACKENZIE, I., **578**
 MACKAY, A.C., **109**, 894
 MACKAY, S., 712
 MADHAVAN, S., 115
 MAEDA, K., 1183
 MAGGIO, A., **493**
 MAGGIO, V.B., **347**
 MAGNUSSON, I., 45, 462, 463,
 618, 873
 MAHANNA, G.K., 131
 MAIA-DANTAS, A., 471
- MAIDJI, E., 607
 MAIER, T., 511
 MAILE, L., 998
 MAINS, R., 487
 MAJKIC, G., 214
 MAJOR, E., 917
 MALCHEFF, S., **412**
 MALDONADO, D., 37
 MALETZ, R., 840
 MALLER, S., 712
 MALLERY, S.R., 631
 MALMSTRÖM, H.S., **1089**
 MALPHURS, W., 500
 MAN, A., 234
 MANCL, L., 275, 1226
 MANGUNDJAJA, S., 291, **1184**
 MANS, J.J., 296, 300
 MANSKI, R.J., 56
 MANSKY, K., 165
 MANSO, A.P., **199**, 350
 MANSOUR, M., **742**
 MANTZ, M.J., 559
 MAPLES, A.D., **239**
 MARANGOS, O., 67, **68**, 1100
 MARASCO, W.A., 1195
 MARAZITA, M.L., 174, 419, 530,
 555, **579**, 580, 879, 884,
 903, **969**, 1190
 MARCATO, P., 33
 MARCENES, W., 700
 MARCHI, G., 349
 MARCHINI, L., 192
 MARCUCIO, R.S., 160
 MARDINI, S., 246
 MARIASH, A., 1233
 MARKIEWICZ, M.R., **95**
 MARSHALL, A., **665**
 MARSHALL, G.W., 74, 92, **108**,
 119, 212, 274, 431, 435,
 734, 859, 982, 1052, 1167
 MARSHALL, M.R., 391
 MARSHALL, S.D., 799
 MARSHALL, S.J., 74, 92, 108,
119, 212, 274, 431, 435,
 734, 859, 982, 1052, 1167
 MARSHALL, T.A., 887, 888, 890,
891, 1133
 MARTIN, C.A., 107, **836**, 964,
 1091
 MARTIN, D.M., 267
 MARTIN, L., 43, 1223
 MARTINEZ, M.D., **1161**
 MARTÍNEZ, V.M., 726
 MARTINO, N.C., 6, **776**, 1249
 MARTINS-PORTO, R., 464, **471**
 MARTINSEN, M., **1129**
 MARU, A., **690**
 MARUCHA, P.T., **1241**
 MARURI, M.S., **504**
 MASCARENHAS, A.K., 11, 980
 MASELLA, R.S., 504
 MASON, Z.D., 557
- MASRI, R., 387
 MASTER, A.S., **1152**
 MASTERS, J.G., 875, 1024, 1077,
 1120
 MASTRONIKOLAS, S., 1146
 MASUDA, H., 1049
 MATA, X., **1145**, 1146
 MATSUMOTO, N., 1057
 MATSUSHIMA, K., 1045, 1046,
 1048
 MATTOS-GRANER, R.O., 1185
 MAU, M., 62, 907
 MAUDERLI, A.P., 489
 MAURIELLO, S.M., 868, **1143**
 MAVI, J., 941
 MAYER, D.M., **381**
 MAYER-DAVIS, B.E., 699
 MAYS, J.W., **608**
 MAYS, K.A., **191**
 MAZANDARANI, M., 363
 MAZZEU, J.F., 535
 McBRIDE, M.A., **850**
 McBRIDE, R.K., **316**
 McBRIDE, W., **139**
 McCAULEY, L., **103**
 McCLOUD, V., 629, 630, 666
 McCOLLUM, K., **704**
 McCONKEY, D., 94
 McCOOL, J., 857
 McCORD, J.F., 184
 McCORMICK, M.B., 414, **415**
 McCOY, L., 548
 McCracken, J.M., 64
 McCracken, M., 391
 McCUTCHEON, J., 766
 McDANIEL, J.S., **519**
 McDEVITT, J.T., 35, **85**, 86, 572,
 575
 McDONNELL, H., 606
 McDONOUGH, P., 606
 McEDWARD, D.L., **283**
 McEWAN, M., **305**, 1197
 McGORRAY, S., 960
 McGRADY, M., 1153
 McGRORY, K.R., 381
 McGuire, J.A., 147
 McINNES, P.M., **969**
 McKAY, S.V., 318
 McKEE, M.D., 1172
 McLEOD, M., **825**, 991
 McNEIL, D.W., 414, 415, 419,
 530, 579, 580, **879**, 884,
 903, 1190
 McPHERSON-CANIZALES, A.,
414, 415
 McTIGUE, D., 427
 MEADE, E.A., **408**
 MEALEY, B., 712
 MECHOLSKY, J.J., 16
 MEDEIROS de ARAÚJO JUNIOR,
 E., 365
 MEECHAN, J.G., **967**
- MEGERDICHIAN, S., **1025**
 MEGREMIS, S.J., **2**
 MEHRSTEDT, M., 148
 MEHTA, A., 912
 MEHTA, M., 321, 322, 326
 MEHTA, N., **641**
 MEIRA, J.B.C., 213
 MEKA, A., 1213
 MELANDER, J.R., **132**
 MELO, R.M., **190**
 MELVIN, J., **969**
 MENDENHALL, W., 701
 MENDEZ, I., 698
 MENDOZA, R., 58
 MENG, X., 19
 MENSAH-BOATENG, D., **1235**
 MERCHANT, A.T., 699
 MERCOLA, D., 1207
 MERENDINO, F.A., **324**
 MERKLEY, M., 616
 MERRIMAN, M.F., **517**
 MERRITT, J., 302
 MESQUITA, M.F., 715
 MESSER, R.L., 156, 229, 629,
 630, 643, 664, 665, 666,
 667, 1026
 MESTRINER, W., Jr., 394
 METTENBURG, D., 682, 853
 METZGER, K., 801
 MEYER FILHO, A., 71
 MICHAEL, A., **307**
 MICHALOWICZ, B.S., 721
 MICHELSON, C., **375**, 377
 MICHIDA, S.M.A., **209**, 356,
 657, 677
 MICKALONIS, J., 229
 MIJARES, D., **736**
 MIKHAILOVA, M., 1012
 MIKOS, A.G., 163, 599, 1169
 MILAM, S.B., 519
 MILGROM, P., 63, 1139
 MILIÁN, E., **454**
 MILLEMAN, J.L., **872**, 914, 1083
 MILLEMAN, K.R., 872, 914, 915,
 916, 994, **1004**
 MILLER, A., 842
 MILLER, A.J., 786
 MILLER, C.S., 85, 572, 574, **575**,
 1180
 MILLER, D., 548
 MILLER, J., 796
 MILLER, J.C., **642**
 MILLS, D.K., 499, **1230**
 MIN, S.J., **456**
 MINA, M., 286, 289
 MINCER, H., 867
 MINDOVA, S., 948
 MINIGH, A., 414, 415
 MINTZ, J., 404
 MIRMOHAMMADI, S.H., **211**
 MIRRIELES, J.W., **574**
 MISHINA, Y., 558

- MISHRA, P., 1256, 1257
 MISRA, A., **65**, **67**, 68, 126, 1100
 MITCHELL, J.C., **20**, 21, 661, 675, 676
 MITGUTSCH, C., 520
 MITO, R., 1270
 MITRA, R.S., 37
 MITRA, S., 844, 987, 1066, **1072**
 MIYAMOTO, T., **1225**
 MIYAZAKI, H., 299, 997
 MIZUHASHI, R., 1178
 MIZUNO, H., 1217
 MJÖR, I., 971, 1124
 MLNARIK, J.L., **245**
 MO, I.F., 1191
 MOBLEY, C., 527
 MODESTO, A., **584**
 MOESCHBERGER, M., 1134
 MOHAMMAD, A.E., **1204**
 MOHANTY, S., 85, 572
 MOHEBZAD, E., 965
 MOHSEN, M., 426
 MOLCUT, M.C., 217, 1112
 MOMANY, E., 529
 MOMENI, S., 423
 MONAGHAN, P., 1054
 MONTEIRO, S., Jr., 663, **1044**
 MONTEIRO, P., **360**
 MONTERO, M., **1122**
 MOON, P.C., 195, 358, 675, 676
 MOONEY, M.P., 796, 815, 816, 1253
 MOORE, A., 309
 MOORE, A., 453
 MOORE, B.K., 378
 MOORE, C., 1273
 MOORE, K., 918
 MOORE, M.H., 912, 919, **920**
 MOORE, P.A., **967**
 MOOS, M.K., 725
 MOOSAVI, H., **1065**
 MORADIAN-OLDAK, J., 923
 MORDAS, C.J., **912**
 MORETTI, A.J., 318, 470
 MORGAN, B.P., **803**
 MORGAN, E.F., 557
 MORGAN, G., 283
 MORGAN, T.A., 268
 MORITA, O., 1178
 MORITIS, K., **1154**
 MORRIS, T., 1247
 MORRISON, B.D., 23
 MORRISON, J.L., **251**
 MOSBY, K., 1086
 MOSCHIDIS, A., 605
 MOSER, K.L., 773
 MOSER, S.A., 423
 MOSES, P., **938**, 1194
 MOSHAVERINIA, A., **203**
 MOSHAVERINIA, M., 203
 MOSS, K.L., 477
 MOSS, L., 990
 MOSS, W.B., **272**
 MOSZNER, N., 124
 MOTEGLI, E., **552**, 965
 MOTTA, A., 445
 MOURA, S.K., 350
 MOURITSEN, D.A., **802**
 MOURSİ, A.M., 815, 816
 MOYNIHAN, P., 888
 MTAYA, M., **692**
 MUENCH, A., 350
 MUERNSEER, C., **367**
 MUES, G., 173, 586, 812, 814, **958**
 MUGISA, I.S., 898
 MUKHIN, M., **252**
 MULLASSERIL, A.N., 1116
 MULLINS, J., 836
 MULLINS, M.R., 9
 MULNICK, J., 1143
 MUNGIA, R., **1137**
 MUNRO, C.L., 137, 172
 MURALIDHARAN, R., **468**
 MURDOCH-KINCH, C.A., 596, 741
 MURPHY-ULLRICH, J., 273
 MURRAY, J., 811
 MURRAY, L., 1223
 MURRAY, P.E., 956, **1028**, 1029
 MURRELL, S.E., **888**
 MUSCARA, M.N., 464, 471
 MUSIKANT, B.L., 945
 MUSSELMAN, R., 974
 MYERS, A., **613**
 MYERS, G.L., 135
 MYERS, S.L., 143, **1232**
- N**
- NACHNANI, S., **145**
 NACKASHI, J.A., 960
 NAFTEL, J.P., 781, 782, 783, 784
 NAG, S., 1230
 NAGY, W.W., **51**, 603
 NAITO, T., 1183
 NAJIB, F., **216**
 NAJVAR, L.K., 778
 NAKAMURA, C., 265
 NAKAMURA, S., 1243
 NAKANO, K., 1049
 NAKASEKO, H., 1057
 NAKOVA, M., 948, 949
 NAM, J., 114, 115
 NANDAKUMAR, R., 565
 NAREIKA, A., 1216
 NARENDRAN, S., 615, **620**, 690
 NASR ESFAHANI, H., 1094
 NAUGHTON, W.T., **837**
 NAVAZESH, M., 1275
 NAZARI, A., 90
 NAZMUL-HOSSAIN, A.N.M., **773**
 NEGRÃO, J.M., 1272
 NEISWANGER, K., **884**
 NEIVA, G.F., 105, 539, 671
 NELSON, C.J., 601
 NELSON, L., 1198
 NELSON, R., 1155, 1156
 NELSON, S., 966
 NEMELIVSKY, Y., 1001
 NERULA, N., 769
 NEUBERT, J., 500
 NEUBIG, R., 769
 NEUMANN, A.N., 535
 NEVES, L., **871**
 NEWMAN, S.M., 80, 205, 206, 355, 389
 NEWTON, P., **228**
 NGAN, P., 107, 789, 836, **964**, 1091
 NGUYEN, B.T., **809**
 NGUYEN, D.H., 1013
 NGUYEN, E., 810
 NGUYEN, S.M.T., **728**
 NGUYEN, T.M., **766**
 NICHOLS, F., 27
 NICK, D., 932
 NICOLELLA, D.P., 133
 NIEDERMAN, L.G., 1125
 NIEDERMAN, R., 906
 NIEVES, M.A., 799
 NIKAIIDO, T., 1047
 NIKOLIDAKIS, D., 1219
 NISHIMOTO, C., **1046**, 1047
 NISHIMURA, I., **17**, **99**, 1270
 NISHIMURA, M., 1243
 NISHITANI, Y., 118
 NITA LAZAR, M., 634
 NIXDORF, D.R., 495, **1231**
 NÓBILO, M.A.A., 227, 715
 NOBREGA, F.G., 192
 NOETZEL, M.J., **480**
 NOGUEIRA, R.D., 1185
 NOHUTCU, R.M., 456
 NOKAR, S., 1035
 NOLAN, P., **266**
 NOMURA, M., 552, **965**
 NOOHI, B., **387**
 NÖR, J.E., **578**, 645
 NORBUTT, C., 815, 816
 NORTHWEST PRECEDENT Dental Network, 276
 NORTON, N.S., 239, 240, 241, 243
 NOSRAT, C., 1236
 NOTHNAGLE, J., 1110
 NOURI-SHIRAZI, M., 753
 NOVAK, K., 41
 NOVAK, M.J., 41, 85, 572, 575, 1209
 NOWAK, A., **875**, 1077
 NUMMIKOSKI, P.V., 242, 476
 NUNN, M.E., 1225
 NUSSENBAUM, B., 284
 NUSSTEIN, J., 909
- O**
- O'BRYAN EDER, J., 1160
 O'CONNELL, D., 176
 O'CONNOR, M., 848, 851
 O'DELL, M., 789
 O'NEIL, P., **343**
 O'REAR, E.A., 77
 OATES, T., 476
 OBEIDI, A., **363**, 391
 OBREITER, S.R., **434**
 OCAMPO, J.A., 46
 OCHIAI, K.T., **265**
 OFFENBACHER, S., 440, 441
 OGAWA, R., 1217
 OGAWA, T., **623**
 OGBUREKE, K., 616, 629
 OGURI, M., **1118**
 OH, G.J., 655, 711
 OH, N., 271
 OH, S., 271, 602, 604
 OH, T.J., 596
 OH, W.M., 1171
 OHARA, K., 27, **610**
 OHIRA, T., 1010
 OHRBACH, R., 492
 OJCIUS, D.M., **22**
 OJEDA, J., **448**
 OJHA, J., 1251
 OKA, K., 533
 OKABE, T., 221, **222**, 225, 226, 592
 OKADA, I., 1183
 OKANO, S., 552
 OKUNSERI, C.E., **1280**
 OLIVARES-NAVARRETE, R., **175**
 OLIVEIRA, A.E.F., 959, 1203
 OLIVEIRA, M.T., **342**, 672
 OLIVEIRA, S.H.G., 344
 OLIVEIRA, T.M., 33
 OLIVEIRA, T.R.D., 344
 OLIVER, J.C., **794**
 OLSON, B., 139, 305, 313, 419, 946, 996, **1197**
 OLSON, E.N., 590, **628**
 OLTON, D., 182
 OMOREGIE, F.O., 779
 OMORI, K., 1010, 1014
 ONG, A.P., **271**
 ONG, J.L., 18, 19, 271, 602, 604
 ONO, T., 856
 ONODERA, M., 24
 ONSONGO, G., 34
 ONTIVEROS, J.C., **1081**
 OPPENHEIM, F.G., 149, 153, 166, 902
 OPPERMAN, L.A., **5**, 532, 601, 603, 641
 ORANTES, A., 454
 ORELLANA, M.F., **982**
 OREN, E.E., 89
 ORFANIDIS, J., 650, 1085

ORI, T., 1045, 1046, **1048**
 ORLANDO, C.A., 632, 1251
 ORSI, I.A., 227
 ORTIZ, P., **42**
 OSBORN, V., 906
 OSGOOD, R.C., 418, **421**, 423
 OSMUNDSEN, H., **953**
 OTIS, L., **84**, 875
 OTLU, H., 465
 OTSUKI, H., **1045**, 1047, 1048, 1049
 OUNSI, H.F., 710
 OUTLAW, J., 702
 OUYANG, H., **104**
 OUYANG, W., 528
 OVERLID, N., 307, 1234
 OVERMAN, V.P., 868
 OWEN, B., **643**, 1026
 OWENS, S., **111**
 OXFORD, A.L., 370
 OXFORD, C., 342
 OXMAN, J., 844, **987**
 OZAWA, T.O., 960
 OZEL, E., 122
 ÖZER YUCEL, O., 456, 465
 OZMEN, S., 866

P

PACHECO, E., 672
 PACKER, M., **155**
 PADGETT, D.A., 26, 608, 749
 PADILHA, D.M.P., 458
 PAGANI, C., 854
 PAGNANO, V.O., 227
 PAINE, M.L., 91
 PAJEWSKI, N.M., 1280
 PAKALAPATI, D., 1230
 PAL, S., 1012
 PALANISAMY, V., **154**
 PALEFSKY, J., 611
 PALENIK, C., 820, 934
 PALLOS, D., 468
 PALMER, G., **1187**
 PALOMO, J.M., **981**
 PALOMO, L., 42, 639
 PALSIS, G., **320**
 PAN, F., 955
 PAN, J., 1273
 PAN, P., 31
 PAN, Q., 37
 PANCIO, A.K., **370**
 PANGILINAN-NUÑEZ, P., **379**
 PAPADOPOULOU, E., 1198
 PAPAS, A.S., 551, **553**
 PAPENFUSS, T.L., 608
 PAPPAS, M., 626
 PAQUETTE, D.W., 477
 PAQUETTE, L., 1143
 PARAIZO, C., 729
 PARAVINA, R.D., 214, 648, 862, 1081

PAREKH, K.P., 183
 PARIS, R.A., **6**, 697
 PARK, H.O., 711
 PARK, J.G., 126, **861**, 1100
 PARK, S., 874, **1140**
 PARK, S., 983
 PARK, S.W., 19, 655, 711, 1171
 PARKER, D.W., **442**
 PARKER, S., **795**
 PARRY, E.E., 14
 PARTRICK, M., 441
 PASHLEY, D.H., **118**, 199, 200, 201, 202, 1041
 PASQUALI, A., 303
 PASTER, B.J., **522**, 565
 PATEL, A., **629**, 630
 PATEL, A.R., 898
 PATEL, M., 451, 452
 PATEL, O.M., 561, 759
 PATEL, P., **800**
 PATEL, V., 1224
 PATEL, V.M., 1009
 PATIL, C.S., **169**
 PATIL, S., 1256, 1257
 PATTERSON, T.F., 294, 778
 PATTON, L.L., 598
 PATWARDHAN, A.M., 483
 PAULEY, K.M., 632
 PAVANELLI, C.A., 657
 PAWAR, T., 1255
 PEACOCK, J.J., **47**
 PECORA, N.F., 542
 PEDIGO, L., 942
 PEGORARO-KROOK, M.I., 960
 PEI, P., 631
 PELLEGRINI, P., **511**
 PELÓGIA, F.C., 190, 209, **661**
 PENG, T., **171**, 771
 PENUGONDA, B., **870**
 PERCY, S.N., **1103**
 PERDIGÃO, J., 360, 847, **1063**, 1090
 PEREGRINA, A., **821**
 PEREIRA, L., 607
 PEREIRA, P.C., 209, 356, 657, **677**
 PERFECT, R., 147
 PERIS, A., 349
 PERKINS, J.A., 1282
 PERKINS, T.M., 974
 PERRY, G.M., 484, 490, 491, 493, 497, **1228**
 PERRY, K., **53**
 PERRY, R., 215, 371, 372, 650, 660, 684, 1082, **1085**, 1119
 PERSON, A.D., 535
 PERU, D., 564
 PESCHKE, J.C., **582**, 896
 PESEVSKA, S., 948, 949
 PETERS, M.C., 121, 250, 409, 637, 642
 PETERSON, C.A., 598, 868, 1143

PETREY, J.S., **976**
 PETRO, B., 1215
 PETRYK, A., 165, 535
 PETTENGILL, M., 22
 PFARRER, A.M., 109, **583**, 894, 897, 1266
 PFEFFER, L., 1236
 PHAM, C., **248**
 PHAM, Q.P., 1169
 PHARK, J.H., **841**
 PHELPS, V.P., **676**
 PHILLIPS, C., 337, 440, 441, 442, 444, 445, 959, 1203
 PHILLIPS, G., 1134
 PIASCIK, J.R., 73
 PIEREMA, A., 560
 PIHLSTROM, D., 1126
 PIMENTA, P., 1120
 PINES, M.S., 196, 197
 PINGEL, L.C., **323**
 PINHEIRO, R.J., **806**
 PINK, T.C., 412
 PINNAMARJU, K., 1230
 PINTO, I.C., 394
 PINZON, L.M., 212, **1052**
 PLATT, J.A., 378, 820
 PLOURDE, J.R., 544, 545
 POBER, R., 653
 PODRAY, S., 918
 POGREL, M.A., 728
 POIATE, I.A.V.P., 213
 POLK, D., **530**, 879
 POLLAN-WHITE, S., **173**, 586, 958
 POLLARD, A., 86
 POLSON, A., **1218**
 PONCE, R., 454
 POOLE, R.L., 475
 POP, S.M., 300, 462, 463
 POPPE, D., 1099
 PORKUS, L.T., 1268
 PORTEOUS, N.B., **881**
 POTH, T., 582, **896**
 POWELL, C., 712
 POWELL, J.A., **338**
 POWELL, N.D., 608
 POWERS, J.M., 125, 381, 382, 648, 650, 862, **1106**
 PRASAD, M., 1002
 PRECISE, M., **351**
 PRENCIPE, M., **1120**
 PRENTICE, T.E., 842
 PRESHAW, P.M., 316, 617, 636
 PRETTYMAN, C., **789**
 PRICE, D.D., 405
 PRICE, R.B., 825, **989**, 991
 PRIMM, J.T., **328**
 PRINCE, M.E., 37
 PRIOUR, P., 501, 601
 PROFFIT, W.R., 442
 PROGULSKE-FOX, A., 25, 320, 323, **522**

PRPIC, V., 955
 PSOTER, W.J., 687
 PUCCI, C.R., **854**
 PUCHER, J., 625
 PUCKETT, W., **253**
 PUGACH, M.K., 108, 734
 PULEO, D., 772
 PULIDO, M.T., 626, **1109**
 PUNWANI, I.C., 28, 876, 972, 1122, **1125**
 PURANI, H.A., **980**
 PURCELL, P., **112**
 PURI, J., **486**, 498, 502
 PURK, J., 194, 345, 346, **830**
 PUTRI, A.R., 291
 PUTT, M.S., 872, 919, 920, 994, 1004, 1083
 PUTTAIAH, R., 939
 PUTTHOFF, S., **485**

Q

QAQISH, J., 147, 1162
 QI, F., 295, 302, 1025
 QIAN, F., 188, 210, 254, 256, 258, 362, 656, 709, 790, 791, 799, 843, 887, 888, 890, 1141
 QIAN, X., 829, 832, **838**
 QIN, C., 167, 171, 433, 1002, 1170
 QIN, H., 156, 629
 QUARTEY-PAPAFIO, N., **680**
 QUEK, S., 1240
 QUEVEDO, A., 454
 QUINN, J.B., **14**
 QUINTERO, L., 448
 QVIST, V., 971, 1124

R

RAAMANATHAN, A., 86
 RADKE, J., 865
 RAFFERTY, K.L., 797, 798
 RAGHUNATH, P., 926
 RAHIMA, B., 423
 RAINWATER, B., 629, **630**
 RAJANNA, R., **391**
 RAJAPAKSE, S., 1213
 RAJASKI, J., 1070
 RAMAN, J., **1262**
 RAMBHA, S., 219
 RAMÍREZ BARRANTES, J.C., **365**
 RAMIREZ ROZZI, F., 925
 RAMOS, M., **729**
 RAMOS-GOMEZ, F., 58, 1052
 RAMP, L.C., 216, 343, 353, 354, 359, 363, 374, 376, 383, 384, 391, 681, 831, 842
 RAMS, T.E., **1220**
 RANA, K.S., **762**
 RANA, M., 754
 RANDALL, R., 1066, 1072

- RANKIN, K.V., 1129
 RANLY, D.M., 1000
 RAPOZO-HILO, M.L., 895
 RASCHE, M.L., **934**
 RASHID, R.G., 386, 402, 407, 513, 626, 646, 704, 1138, 1264
 RASIMICK, B.J., **945**
 RATH, B., 115
 RAUCH, J.W., **278**
 RAUCH, T., **219**
 RAUSCH, B.E., **340**
 RAUTH, M., **708**
 RAUTH, R.J., **91**
 RAWAL, S.Y., **1206**
 RAWLINS, J.T., 532
 RAWLS, H.R., 133, 1097, 1103
 RAWSON, N.E., 292
 RAY, A.W., **778**
 RAZZOOG, M.E., 671, 1056
 READER, A., 909
 REDDING, S.W., 35, 294, 778
 REDFORD-BADWAL, D.A., 410
 REDMAN, R.S., 1177
 REED, H., 269
 REED, J., 113, **488**
 REFAAT, Y., 1218
 REGINA, R.L., 579, 580, 903
 REHMAN, I.U., 203
 REID, B.B., 287
 REID, M., 768
 REIS, A., 350
 REISS, J., 1176
 REIBMANN, D.R., **140**, 148
 REKOW, E.D., 13, 15, 48, 658
 REN, K., **524**
 REN, Y.F., 1089
 RESPOSO, S., **473**
 REUBEN, J., 498, 502, 516
 REYES, E., 687
 REYLAND, M., 751
 REYNOLDS, M.A., **458**, 1145, 1146
 REZNIK, D.S., 910
 RHIM, S., 606
 RHODUS, N.L., **34**, 773
 RICAFORT, R.D., 999
 RICCI, J.L., 75, 733, 1098
 RICCI-NITTEL, D., 455, **1160**, 1161
 RICH, S., 548
 RICHARDS, P., 472
 RICHARDSON, E.R., **1263**
 RICHMAN, J., 971, 973, 1123, 1124, 1126
 RICHMOND, B.G., 803
 RICHTER, R., 921
 RIDLEY, K., 705
 RIEDY, C.A., 63, 970
 RIGUAL, N., 621
 RILEY, J., 479, 489
 RINDAL, D.B., 528, 973, **1123**
 RIPPES, A., 72, 253
 RISNES, S., 953
 RITCHIE, H.H., 439, **1173**
 RITTER, S.A., 784, **780**, 781, 783
 RITWIK, P., **974**
 RIVERA-HIDALGO, F., **1018**, 1020
 RIZZATTI-BARBOSA, C.M., 192
 ROANE, J.B., 231
 ROBBINS-NUNEZ, A.J., **904**
 ROBERT, Y., 49
 ROBERTS, C., **1223**
 ROBERTS, D.B., 932
 ROBERTS, H.W., 1071, **1114**
 ROBERTS, M., 746
 ROBERTS, M.C., 63
 ROBERTS, T.L., 512
 ROBINSON, M.E., 405
 ROBINSON, S.W., 619
 ROBLES, A.A., **671**
 ROBU, M.E., 535
 RODGERS, B., 286
 RODRIGUES, F.P., **213**
 RODRIGUES, J.R., 854
 RODRIGUES, P.H., 25, 320
 RODRIGUEZ, M., **1250**
 ROEDER, L., **862**
 ROGER, J.M., **746**
 ROHANI, M.G., **1011**
 ROLF, J.C., 1066, 1072
 ROMANO-SOUSA, C.M., 871
 ROMANOS, G.E., 714
 ROMBERG, E., 387
 ROMITO, L.M., 1227
 ROMPRÉ, P.H., 703
 RON, M.S., 434
 RONALD, S., **499**
 ROOF, J.L., **598**
 ROOHPOUR, N., 203
 ROSA, H., 190
 ROSE, J.L., **889**
 ROSENSTIEL, S.F., 334, 335, 336, **626**, 1036
 ROSENTRITT, M., 367, 1037, 1174
 ROSS, C.F., 801, 803
 ROSS, K.F., 170, 181, 301
 ROSSI, H., 500
 ROSSOUW, P.E., 120, 977, **978**, 979
 ROSVALL, M.D., **335**
 ROTENBERG, S., 629
 ROTHCHILD, S., 534
 ROTHEN, M., 63
 ROTHENDLER, J., 548
 ROTHWELL, R., 1247
 ROWE, D.W., **102**
 RUBIO, A., 454
 RUBUSH, M., 873
 RUBY, J.D., 423
 RUCH, E., 981
 RUDD, T.C., **791**
 RUDMANN, M., 128
 RUDOLPH, S., 81
 RUEGGERBERG, F.A., 220, 342, 370, 682, 853, **988**, **990**
 RUGH, J.D., 404, 794, 965, 992
 RUIZ, J.L., **827**
 RUNGTA, A., 29
 RUPAREL, N.B., **483**
 RUPP, Q., **992**
 RUSH, W., **528**
 RUSIN, R., 845, 846, **1041**, 1066, 1072, 1266
 RUSSELL, E., **390**
 RUSSELL, S., **100**
 RUSSELL, S.L., 57, 403, 702
 RUSSELL, V.A., 828
 RYAN, M.E., **40**
 RYPEL, J., **383**
 RYU, S.K., 655, **711**
 S
 SAAVEDRA, M., 696, 698
 SABA-CHUIFI, E., 319
 SABBAAH, A., **752**
 SABEY, K., 935
 SABINO, M., 1232, 1239
 SACKS, P.G., 766
 SADAKAZU, E., 379
 SADAN, A., 841
 SADEGHI, S., 1065
 SADEGHIAN, S., **1094**
 SADEK, K., **750**
 SADIKIN, T.A., **291**
 SAEED, M.H., 363
 SAEKI, K., 119, **859**
 SAFIEJKO-MROCZKA, B., 321, 322, 326
 SAGEL, P.A., **1083**
 SAGIER, B., 720
 SAGLAM-AYDINATAY, B., 204
 SAGOMONYANTS, K., **669**
 SAHA, S., 70
 SAHAR, N.D., 434
 SAHEBJAMEE, M., **612**
 SAHEEB, B.D.O., 779
 SAHINGUR, S.E., **1214**
 SAID-AL-NAIEF, N., 287
 SAIED, M., **658**
 SAILON, A.M., 1098
 SAIMI, Y., 856
 SAINI, T.S., 239, 240, 241, 243
 SAITO, K., **1033**
 SAITOH, M., 1243
 SAIZ, E., 74, 119, 274
 SAKAI, V.T., 33
 SAKUMA, T., 858, 1057
 SALAH EL DIN, M., 426
 SALAHUDDIN, R., **1256**, 1257
 SALAMA, F., **1040**, 1060, 1061
 SALAMEH, Z., 710
 SALAS, M., 266
 SALIH, E., 149, **153**, 166, 902
 SALLES, M., 670
 SALZ, U., **124**, 1099
 SAMIMI, P., **1058**
 SAMMARCO, R., 768
 SAMUDRALA, R., 89
 SANCHEZ, A., 729
 SANCHEZ, E., 386
 SANCHEZ, R., 454
 SANCHEZ-PÉREZ, L.T., 892
 SANDERS, J.J., 1216
 SANDIFER, L.C., 780, **781**, 783, 784
 SANDOW, P., 479, 701
 SANJIDEH, P., 979
 SANTIAGO, E., 62, 907
 SANTIAGO, S., 174
 SANTIFICETUR, A.R., **395**
 SANTOS, M.T.B.R., 425
 SANTOS, N.B., 1077
 SANTOS, S., **147**
 SANTOS, V., 1063
 SANTOS-DAROZ, C.B., **349**
 SANZ, I., 746
 SAOJI, N., **287**
 SAPPAYATOSOK, K., 1237
 SAPPINGTON, K.J., 301
 SAPTARIA, F., 1184
 SARIKAYA, M., 89
 SARKAR, N.K., 380, 1068
 SAROF, A., **384**
 SARRAF, A., **443**
 SASAKI, H., 24
 SATER, A.A., 22
 SATO, Y., **221**
 SATSANGI, A., 18
 SATSANGI, N., **18**
 SATSANGI, R.K., 18
 SATTERTHWAITE, J., 543
 SAUERWEIN, R., 511
 SAUNDERS, M.M., 976
 SAW, J.H., **135**, 314
 SAWRIE, D.C., 961
 SCANLON, C., **547**
 SCANNAPIECO, F.A., 136
 SCARBECZ, M., 867
 SCARBOROUGH, L.D., **810**
 SCHAEFER, J., 236, **745**, 1182
 SCHAEFER, T., **865**
 SCHAFFLER, M., **968**
 SCHATTENBERG, A., 1032
 SCHELLER, E.L., **159**
 SCHEMEHORN, B.R., 583, **897**
 SCHENKEIN, H.A., 1214
 SCHENKEL, A., **369**
 SCHERRER, S.S., **12**
 SCHIERZ, O., **148**
 SCHIFFMAN, E., 495, 1229, 1231
 SCHILTZ-TAING, M., 834
 SCHLAIKJER, J.M., **240**, 241
 SCHLEIFFARTH, J.R., 535

- SCHLEYER, T.K., 238, 278, 401, 417
 SCHMALZ, G., 368, 737, **1095**
 SCHMELING, M., 71
 SCHMIDT, A.M., 528
 SCHMIDT, B.L., 635
 SCHMITT, P., 1153, 1154
 SCHMUCK, B.D., **64**, 110, 889
 SCHNEIDER, G., 157, 1149, **1151**
 SCHNEIDER, R.A., 520
 SCHNEIDERMAN, E., 173
 SCHNEIDEWIND, L., 123
 SCHOOLFIELD, J.D., 1137
 SCHOTT, U., 1037
 SCHOW, B., **313**
 SCHRENZEL, J., 643, 1026
 SCHRICKER, S., 203
 SCHROEDER, N., 268
 SCHULTE, J., 131
 SCHUMACHER, G.E., 860
 SCHUSTER, G.S., 156, 616
 SCHUTTE, B.C., 811
 SCHWARTZ, Z., 175, 1000
 SCHWARTZBAUM, J.A., 312
 SCHWARZ, T., 165
 SCHWEIKL, H., 1095
 SCHWEITZER, H., 582, 896
 SCIOTE, J., 339, 796
 SCOTT, D., 234
 SCOTT, J.E., 366
 SCOTT, N., 876
 SCOTT, R.J., **942**
 SCOTT, T.E., 980
 SCOTT, T.F., 127
 SCOTTI, R., 190
 SCULEAN, A., 1219
 SEABOLD, D., 157, 1149, 1151
 SEAGLE, M.B., 960
 SEAGREN, K.L., **404**, 794
 SEALES, E., 1205
 SEAMAN, R., **814**
 SEGHI, R.R., 426, 1069
 SEGRAVES, G., 97
 SEGURA, A., **1078**
 SEIFERT, B., 613
 SEIFI, M., **1254**
 SEKINE, S., 755
 SENDA, A., 1049
 SENIN, P., **314**
 SENKYRIKOVA, P., **431**
 SENSI, L.G., **1021**
 SEO, Y., **435**
 SERGENT, R., 253
 SERIO, F.G., 461, 1210
 SERRA, M.C., 673
 SERRANO, M., 111
 SETA, F., **229**, 664
 SETIEN, V.J., **926**, 939
 SEUNGHEE, C., 1249
 SEVANDAL, M., 28
 SEXTON, W.M., **1180**
 SFEIR, C., 182, 437, **807**, 928
 SHADDOX, L., 462, 463, 473, **618**
 SHAFFER, S., 1110
 SHAFIEE, A., 1035
 SHAH, A., **818**
 SHAH, M.B., **78**
 SHAH, P.K., 207
 SHAH, R.P., 945
 SHAMBARGER, J.H., 382
 SHAMBLIN, B., **49**
 SHANG, H., 668
 SHANKER, S., 505, 1281
 SHANNON, A.J.T., **188**
 SHAPIRO, V., 713
 SHARAWY, M., 446
 SHARMA, A.C., **619**
 SHARMA, K., 136
 SHARMA, N., 914
 SHARMA, R., 924
 SHARMA, S., **1019**, 1082, 1085, 1119
 SHARP, H., 596
 SHAYEI MOOSAVI, S.H., **1202**
 SHCHERBATY, V., 249, **1282**
 SHCHIPKOVA, A.Y., **317**
 SHEFFIELD, J., 857
 SHEHARYAR, S., **1075**
 SHEHATA, M., 932
 SHELburne, C., 995
 SHELL, E.R., **675**
 SHEN, C., **577**, 678
 SHEPPARD, R.A., 624
 SHERIDAN, J.F., 26, 608
 SHEVCHENKO, K., **615**
 SHI, S., 432, 566
 SHI, W., 31, 302, 1025
 SHI, X., 1009
 SHIEH, Y.S., 1142
 SHIN, D.H., **855**
 SHIN, J.H., **655**, 711
 SHIP, J.A., **523**, 553, 741
 SHIP, J.L., 1086
 SHLIMON, A., 1215
 SHORE, E.M., 536
 SHROFF, B., **333**, 406, 507, 810, 962, 963
 SHROUT, M., 244
 SHU, H.B., 751
 SHU, R., 1222
 SHUGARS, D., 440
 SHUGARS, D.C., 1275
 SHUKLA, B.A., **828**
 SHULMAN, J.D., 685, 1018, 1020
 SHULTZ, J., 1134
 SHUSTER, J.J., 6, 697, 776, 1249
 SIEBELS, A., 564
 SIEBEN, C.M., 535
 SIEGEL, M.I., 796, 815, 816
 SIERRAALTA, M., 1056
 SIEW, C., 937, 944
 SILIKAS, N., 680
 SILVA, A.L., 1063
 SILVA, E.M., 1268
 SILVA, F.W.G.P., **1278**
 SILVA, L.A.B., 1278*
 SILVA, N.R.F.A., 13, **15**, 714
 SILVA, O.G., 960
 SILVA, S., 33
 SILVA, T.C., 33
 SILVA-SOUSA, Y.T.C., 373
 SILVERMAN, S., 611
 SILWOOD, C.J., 757, 901
 SIMETICH, B., 131
 SIMMER, J., 596
 SIMMONS, D., 555
 SIMMONS, G., 85
 SIMON, J.F., 850
 SINDELAR, B.J., 496
 SINGER, D., 234
 SINGH, A., 560
 SINGH, M., **551**
 SINGH, M.L., 551, 553
 SIQUEIRA, W.L., 153, **902**
 SIT, P.S., 1230
 SITTITAVORNWONG, S., 287
 SJOSTROM, D., **114**
 SKELTON, J., 9
 SKLIAROV, A., 252
 SLATE, E., 1216
 SLAYTON, R., 596
 SLICE, D.E., 803
 SMART, K.H., **77**
 SMAY, J.E., 75, 1098
 SMILEY, M., 427
 SMITH, A., **101**
 SMITH, A.L., 803
 SMITH, B., **3**
 SMITH, B.J., 174
 SMITH, D.J., 1185, 1195
 SMITH, J., **939**
 SMITH, J., 1122
 SMITH, K.A., **446**
 SMITH, N.P., **106**
 SMITH, S., 914
 SMITH, S., 494
 SMITH, T., **255**
 SMITH, T., 427
 SMITH, T.D., 816
 SMITH, T.L., 763
 SMOLENSKI, D., **256**
 SNEAD, M.L., 91
 SO, S., 111
 SOARES, P., 734
 SOBOTA, J., **487**
 SOCRANSKY, S., 43, 451, 452, 1223
 SÖDERHOLM, K.J., 183, 388
 SOH, C.L., 805
 SOHN, M., 68
 SOHN, W., 412, 882
 SOLIMAN, W., 1256, 1257
 SOLLER, H., 402, 407
 SOLOMON, L., 768
 SONCINI, J., 906
 SONG, J., 135, 314
 SONG, K.B., 699
 SONG, S., 993
 SONG, S.H., 1171
 SONG, X., 451, 452
 SONOYAMA, W., 432
 SORENSEN, B., **385**
 SORENSEN, E.S., 1003
 SORENSEN, J.A., **50**
 SORENSEN, J.M., 1135
 SORENSEN, M., **97**
 SORENSEN, T.M., **231**
 SORSA, T., 40
 SOTILLO RODRIGUEZ, J., **165**
 SOTILLO, D., 143, 1232
 SOTO-ROJAS, A.E., 899
 SOTOMAYOR-ALBINO, J., 1279
 SOUSA-NETO, M.D., 373
 SOUTHARD, T., 799
 SOUTHERLAND, A., **321**
 SOUZA, R.O.A., 209, 356, **657**, 677
 SOWA, M.G., 234
 SPAGNUOLO, G., 1095
 SPALLEK, H., 278
 SPEARS, R., 113, 488, 501, 601, 977, 978
 SPEED McINTYRE, P., 276
 SPENCER, A.Y., 469, 1013
 SPENCER, M.A., 803
 SPENCER, P., 67, 68, 69, **126**, 422, 861, 1100
 SPENCER, R., **345**
 SPERTUS, J., 85, 572
 SPIEKERMAN, C., 1139
 SPOLIDÓRIO, L.C., 464, 471
 SPRINGSTEEN, J., 143, 1232
 SPYRIDES, K.S., **959**
 SQUIER, C.A., 559
 SREENIVASAN, P.K., 938, 1194
 SRICHANTRA, P., 929
 SRIKANTHA, R., 306
 SRINIVASAN, M., **614**
 ST GEORGE, J., 553
 ST. LOUIS, B., **1281**
 STALEY, R.N., 210, 258, 790, 791
 STALKER, J., 214
 STALLCUP, W.B., 180
 STANFORD, C., **53**, 97, 268, **540**, **968**, 1265
 STANG, A., 141
 STANGL, M., 368
 STANINEC, M., 859
 STANLEY, W., 1127
 STANSBURY, J.W., **2**, 80, 123, 205, 206, 207, 355
 STANWORTH, B., **318**
 STARK, D., 540
 STARK, P., 551, 1019, 1107, 1119
 STARR, S., 1016

- STASHENKO, P., **24**, 610
 STATESON, J., 498, **502**
 STAVROPOULOS, M.F., 448
 STEFFEN, M.J., 750, **1209**
 STEFFENSEN, B., 1012
 STEIN, K.M., **656**, 843
 STEINHUBL, S., 572, 575
 STELNICKI, E.J., 956
 STEPHEN-HASSARD, C., **860**
 STEVENS, J., 574, 575, 1180
 STEVENS, M., **5**
 STEWART, B., 1024, 1077
 STEWART, C.M., 632, **1251**
 STEWART, J., **867**
 STEWART, J.C.B., 777
 STEWART, J.S., **152**
 STEWART, S., 85, 572
 STILES, S., **269**
 STIPHO, S., 544
 STOLER, D., 621
 STONE, A.H., **1121**
 STONE, M.E., **224**
 STONER, B.R., 73
 STOOKEY, G.K., 109, 894, 904
 STRAIT, D., 803
 STRANGE, L., **479**
 STRANGE, S., 756
 STRASSLER, H., 1021
 STRATE, J., 1152, 1154
 STRAUSS, R.P., 723
 STRECKFUS, C., 236, **571**, 1182
 STREET, C.N., 942
 STROHL, K., 1261
 STULTZ, J., 11
 STUMP, A., **257**
 STURM, D., 1153
 STURMAN, P., 941
 STYNER, M., 1203
 SU, H.C., 1142
 SUBRAMANYAM, R., 564
 SUCHITRA, N., 1261
 SUCHKO, M., 1041
 SUDACK, P.A., **714**
 SUEISHI, K., 552, 965
 SUGGS, L., 737
 SUH, B., 199, 834, 849
 SUI, J., 1195
 SUKLA, R., 1031
 SULLIVAN, M., 621, 768
 SULTAN, H., 69
 SUMMAR, K., **767**
 SUN, B., **1110**
 SUN, F., **851**
 SUN, J., **66**
 SUN, K., 79
 SUN, X., 149, **166**
 SUN, Y., 167, 433, **1170**
 SUN, Z., **797**
 SUNDAR, V., 14, 1070
 SUNDARARAJ, K., 1216
 SUNG, L., 1096
 SURI, L., 247
 SURMENIAN, E., 44
 SUTADI, H., 1184
 SUTPHIN, S.M., 283
 SUZUKI, M., 670
 SUZUKI, N., 1183
 SUZUKI, N., 24
 SUZUKI, S., **856**
 SVOBODA, K.K.H., 113, 481,
 531, **758**, 1002
 SWANSON, J.E., **1266**
 SWASDISON, S., 1113, **1237**
 SWEENEY, S.J., **683**
 SWEIER, D.G., **995**
 SWENSON, K., 1239
 SWENSON, K.E., **799**
 SWIFT, E., 682
 SWIFT, J., 143, 1232, 1239
 SWIGERT, R., **195**
 SYLVIA, V., 613
 SZE, D., 625
 SZENTPÉTERY, A., 148
T
 TABARI, M., 1027
 TABATA, T., 607
 TABCHOURY, C., 584
 TABIN, C.J., 112
 TABRIZIAN, M., 562
 TACKAS, G., 229
 TADAYON, N., 908
 TAGAMI, J., 1047
 TAKAHASHI, F., **1178**
 TAKAHASHI, F.E., 209
 TAKAHASHI, M., 1178
 TALAVAGE, T.M., 1227
 TALBERT, M., **273**
 TALEB, H., 1003
 TAMERLER, C., 89
 TAN, J., 1181
 TAN, P., 188
 TANAKA, Y., 223
 TANDON, S., **29**
 TANNER, A.C., 309, 453, 1198
 TANZER, J., **136**
 TAPIA, R., 135
 TAPP, S., 236, 745, **1182**
 TARGETT, D., 916
 TASKONAK, B., **16**
 TATAKIS, D.N., 266, 713
 TAUBMAN, M.A., 27, 610, **1195**
 TAVAKOLI, A., 32
 TAVARES, M., **11**, 906
 TAY, F.R., 118
 TAYLOR, G.W., 46, 459, **521**
 TAYLOR, J.M., 37
 TAYLOR, R.W., 516
 TAYLOR, T.T., **339**
 TEIXEIRA, C.C., **1001**
 TEIXEIRA, C.S., **373**
 TEIXEIRA, E.C., **73**
 TEIXEIRA, F., 1273
 TEIXEIRA, S.A., 464, 471
 TELES, F., 1223
 TELES, R.P., 451, 452, 1223
 TENG, P.N., 437, 807
 TENG, Y.-T.A., **54**
 TENNISON, J.W., 381
 TENZLER, R., 40
 TERAKADO, A., 1108
 TEREZHALMY, G.T., 881, 931
 TESENE, J.P., **559**
 TEZAL, M., **621**
 THACKER, B., 873
 THALACKER, J., 844
 THAMRONGANANSKUL, N.,
1113
 THAN, S., 1179
 THERIAQUE, D.W., 6, 697, 776,
 1249
 THERIOT, S.T., 380, **1068**
 THIKKURISY, S., 427, 704
 THOELE, M.J., 283, **973**
 THOLE, K., **392**
 THOMAS, E.L., 324, 767
 THOMAS, H.F., 287
 THOMAS, J.G., 269, 1190
 THOMAS, K.M., 279, **725**
 THOMPSON, A., 136
 THOMPSON, J.Y., 73
 THOMPSON, P.M., 133
 THOMPSON, V.P., 13, 15, 48,
 369, 654, 1086
 THORSTENSON, G., 1115
 THRALL, R.S., 410
 THROCKMORTON, G.S., 795
 THUET, D.M., **210**
 THUMBIGERE-MATH, V., 1239
 THYVALIKAKATH, T.P., 417
 TIBA, A., **1071**
 TIBBETTS, K.L., **476**
 TILLER, J., 1099
 TIMBY, C., 1212
 TIMMONS, S., 540
 TIPTON, D.A., 466, 1206
 TOBIA, D., 829, 838
 TOBITA, M., **1217**
 TOBLER, J., **463**, 473, 618
 TODD, L., 9
 TOKUI, H., **1057**
 TOLAR, M., 1255, 1256, 1257
 TOLAROVA, M.M., 1255, 1256,
 1257
 TOMALTY, S., 448
 TOMAR, S.L., 688, 701
 TOMLINSON, S., 784
 TOMPKINS, K.A., 568
 TOMSIA, A., 74, 119, 274, 1052
 TON, T., **844**, 987
 TONG, M., 631
 TONG, W., 284
 TOPP, E., 126, 861
 TORAIN, M.A., 555
 TORRES, C.R.G., 854
 TORRES, J., 985
 TORRES-URQUIDY, M.H., **238**
 TOWERS, J., **1082**, 1119
 TRACKMAN, P.C., **557**
 TRAN, J., 62, 907
 TRAN, L.T., **372**
 TRAN, T.-L.N., **507**
 TREMONT, T., 964
 TRIDEWO, A., 1184
 TRIVELPIECE, R., 333
 TROULIS, M., 1168
 TROUT, K.J., 811
 TROY, B.A., **505**
 TRUESDELL, M., **416**
 TSENG, C.H., 135, 314
 TSENG, E.K.W., 941
 TSENG, R., **885**
 TSUCHIKAWA, M., 856
 TSUCHIYA, M., 924
 TU, L., **1239**
 TUAN, R.S., 566
 TUFEKCI, E., 338, 507, 510, 512,
 661, 675, 676, **962**
 TULUNOGLU, I.F., 866
 TULUNOGLU, O., **866**
 TUMUSIIME, S., 754
 TUNG, M.S., **985**
 TURBE-DOAN, A., 176
 TURCOTTE, J., 852
 TURNER, J., 1226
 TURNER, L.S., **172**
 TURNER, P., 1230
 TURSSI, C.P., 673
 TURVEY, T.A., 442
 TYNDALL, D., 959
 TZVETKOVA, K.I., **403**
U
 UCHIDA, Y., 1010, 1014
 UDOMCHAROENCHAIRIJ, C.,
929
 UEKI, H., **1049**
 UKAJI, F., 1108, 1118
 UKPEBOR, M., **779**
 UNKEL, J.H., 1130
 UNOKI, T., 137
 UNTERMAN, T., 1215
 URATA, M., 533
 URBATIS, M., **405**
 UYSAL, C.A., 1217
V
 VACANTI, J.P., 1168
 VACHARAKSA, A., **170**, 181
 VALANDRO, L.F., 190, 356
 VALBUENA, L.F., 970
 VALENZA, J.A., 883
 VALERA, M.C., 344
 VALIATHAN, M., 508, **966**
 VAN BOKHOVEN, H., 535
 VAN DEN BEUCKEN, J.J.P., 599

VAN DER MEI, H.C., **911**
 VAN DYKE, T.E., 44, **54**, 1010, 1014
 VAN SCOYOC, S.M., **477**
 VAN WIJK, A., 1265
 VAN WINKELHOFF, A.J., 1220
 VANDEVELDE, R., 826
 VANDEWALLE, K., 198, 340, 347, 348, 428, 674, **826**, 933, 935, 1055
 VANG, M.S., 711
 VANLAECKEN, R., **285**
 VAQUERA, K., **113**
 VARANASI, V.G., **74**, 274
 VARDAR-SENGUL, S., **1207**
 VARRIANO, A.A., 471
 VASTARDIS, S., 469, 619, **1013**
 VATANI, M., 1094
 VECCHIONE, L., 796, 815
 VEIGA, N., **451**, 452, 1223
 VELA, J., **161**, 493
 VELASCO, M., **1258**
 VELEZ, S., **649**
 VELLY, A.M., **142**, 143, 1232
 VELTRI, S., 269
 VENA, D., 1086
 VENDITTI, C.P., 585
 VENKATESH, S.G., **1181**
 VENUGOPALAN, S.R., 808, **813**
 VERDELIS, K., **1172**
 VERGOTINE, R.J., **876**
 VERMA, R., 1213
 VERRETT, R., 712
 VICKERMAN, M., 136
 VICKERS, A., **682**
 VIEIRA, L.C.C., 71, 1050
 VIEIRA, R.S., 584
 VIET, C.T., **635**
 VIG, K.W.L., 505, 1281
 VIGNESWARAN, N., 470, 615
 VILLASEÑOR, J., 726
 VILLHAUER, A., **946**
 VINTERMYR, O.K., 765
 VIRAPARIA, P., **697**
 VIRTUSIO, K., 448
 VISSINK, A., 38
 VOGT, K., 937
 VOLTARELLI, F., 349
 VON FRAUNHOFER, J.A., **1005**
 von LACKUM, K., 296, 300
 VU, L., 934
 VUONG, C., **261**
 VURAL, M., 79

W

WAGONER, S.N., **887**
 WAHL, J.K., 1235
 WAIWAIOLÉ, L.A., 283
 WAKAMATSU, S., 1045, 1046, 1048
 WALANSKI, A.A., **146**

WALI, T., 238, **417**
 WALJI, M.F., **883**
 WALKER, C., 388, 473, 618
 WALKER, C.G., 88, **514**, 587
 WALKER, D.G., **82**
 WALKER, E., 1013
 WALKER, J., 1060, 1061
 WALKER, M.P., 67, 132, 357, 436
 WALKER, S., 515
 WALL, M.M., 1231
 WALL, T.P., **878**
 WALLACE, J.M., 642
 WALLACE, K., 630
 WALMSLEY, A.D., 474, **475**, 1224
 WALTERS, J.D., 456, 478
 WALTERS, P.A., 1006
 WAN, Q., **857**
 WANG, B., **160**
 WANG, C., 28
 WANG, C.Y., 159
 WANG, D., 267
 WANG, H., 68
 WANG, J., 534, 813, **951**
 WANG, J., 38, 154, **1176**
 WANG, M.Q., 57, 403, 702
 WANG, Q., 801, 803
 WANG, Q., **133**
 WANG, X., 993
 WANG, X., **174**
 WANG, X., 19
 WANG, X.P., **176**
 WANG, Y., **178**, 812, 952
 WANG, Y., 253, 352
 WANG, Y., 357, 361, 436
 WANG, Y., **69**, 126, 422, 861, 1100
 WANG, Z., **1273**
 WARD, M.T., 1081
 WARREN, J.J., 139, 525, 691, 891, 1133, **1135**
 WARREN, P., 1070
 WARREN, S.M., 1098
 WASCHINSKI, C., 1099
 WATAHA, J.C., 156, 229, **537**, 629, 630, 643, 664, 665, 666, 667, 1026
 WATANABE, I., **223**, 228
 WATANABE, K., **1215**
 WATANABE, L.G., **117**, 119, 212, 859, 1052
 WATANABE, T., 180
 WATERFIELD, J.D., 1010
 WATERHOUSE, J., 219
 WATERS, M., 759
 WATKINS, M., 572
 WATSON, J.M., 688
 WATTS, A.K., **427**
 WATTS, D.C., 543, 680
 WEARDEN, S., 1128
 WEAVER, P., **500**
 WEBB, M.D., 1136
 WEBER, G.W., 803
 WEBER, K., 1275
 WEBSTER, W., **774**
 WEBSTER-CYRIAQUE, J., **1247**
 WEE, A.G., **1134**
 WEEMS, R., 83
 WEFEL, J.S., 106, 254, 256, 424, 540, 887, 888
 WEHLER, C., 548
 WEI, F., 235
 WEI, J., 1152
 WEI, Q., 573
 WEIGUM, S.E., **35**
 WEINTRAUB, J.A., **58**, **969**, 1052
 WEISMAN, G.A., 1177
 WEITZEL, K., 639
 WELLS, P.L., **723**
 WELTMAN, R.L., 318, 470
 WEN, Z.T., 293
 WENDELL, S.K., 579, 580, **903**
 WENTASCHEK, S., 1034
 WERNING, J., 701
 WERTISH, R.R., 828
 WERTZ, P.W., 559, 996
 WERTZBERGER, B., 1101
 WEST, P.E., **1159**
 WEST, R., 135
 WETTERER, S.M., 1005, **1158**
 WEWERS, M.E., 1134
 WEYANT, R.J., 419, 530, 579, 580, 879, 884, 903, 1190
 WEYERS, S., 1060
 WHIDDON, J.F., 423
 WHITAKER, E., 918, **1212**
 WHITE, D.J., **761**, 911, 1008
 WHITE, J., 1239
 WHITE, J.M., 341
 WHITE, R., 440, 441, 442
 WHITE, S., 83
 WHITE, S.N., 91
 WHITE, V.A., 904
 WHITELOCK, J.M., 1205
 WHITFORD, G.M., **563**
 WHITT, J.C., 422
 WICKES, B., 315
 WIDODO, H., 291
 WIEDEY, J.L., **462**
 WIENER, M.A., **1128**
 WIENER, R.C., **1127**
 WIESBAUER, S., 368
 WIESEMAN, C., 245
 WIKESJÖ, U.M., **5**
 WILDER, R.S., 279, 598, 725
 WILKINSON, G., **52**
 WILLERSHAUSEN, B., **1032**, 1034
 WILLIAMS, A., **361**
 WILLIAMS, A.M., **811**
 WILLIAMS, E., 886
 WILLIAMS, K., **303**
 WILLIAMS, K.B., **1006**

WILLIAMS, O.D., 1123, 1126
 WILLIAMS, W., 960
 WILLING, M., 174
 WILLIS, S., **300**
 WILSON, N.D., **206**
 WILWERDING, T.M., 833
 WIMMER, M.R., **545**
 WINDSOR, L.J., 467
 WINKEL, L.A., 434
 WINSTON, A.E., 917, **919**
 WINSTON, L., 1084
 WIRTH, C.G., 51
 WISE, G.E., 955
 WOLF, W., **873**
 WOLFF, M.S., 196, 197, 251
 WOLKE, J.G.C., 599
 WOMACK, S., 9
 WONG, B., 520
 WONG, D., 1227
 WONG, D.T., 38, 87, 154, 235, **573**, 770, 1176, 1179
 WONG, F., 489
 WONG, M., 163
 WONG, N., 81
 WONG, Y.J., **523**
 WOOD, A.A., **490**
 WOOD, G.D., 583, 897
 WOOD, R., **668**
 WOODY, R.D., 51
 WOOLFOLK, M., 686
 WORTHYLAKE, B., **754**
 WORTHYLAKE, D., 754
 WRAY, S.F., 749
 WRIGHT, B.W., 803
 WRIGHT, J., **429**
 WRIGHT, J.T., 555, 885, 1273
 WRIGHT, K., **322**
 WRIGHT, W., **389**
 WU, B., 1025
 WU, C.D., 311, 1199
 WU, H., 952, 993
 WU, H., 807
 WU, J., 178, **952**
 WU, J., 615
 WU, M., 156, 616
 WU, M.-K., 1278
 WU, Y., **116**, 144

X

XENOUDI, P., **469**
 XI, Q., 736
 XIANG, X., **234**
 XIAO, X., 23, 268
 XIE, G., 135, 314, **1201**
 XIE, H., 23
 XIE, H., 34
 XIE, Y., 167, 567
 XIO, X., 1075
 XU, C., 357, **436**
 XU, G., 564
 XU, H.H.K., **577**

XU, J., 557
 XU, J., 97
 XU, P., **822**
 XU, T., 921
 XU, W.P., **732**
 XU, X., **72**, 253, 352, 1097
 XU, X., 533, 589, 954
 XU, X., 1012

Y

YAGHMAEI, M., 1202
 YAGIELA, J., **967**
 YAKIWCHUK, C.A., 550
 YAKOVLEV, V., 252
 YALE, J., 974
 YAMADA, K., 1183
 YAMAMOTO, T., **1047**
 YAMAN, P., 46, 61, **105**, 125, 645, 671
 YAMAUCHI, M., 557
 YAMAZA, T., 432
 YAMAZAKI, M., **1243**
 YAMPOLSKY, A., **733**
 YAN, M., 993
 YAN, W., 1179
 YANAGISAWA, H., **4**, 590
 YANG, B., 1059
 YANG, C., 314, 1201
 YANG, G., 1205
 YANG, H.S., 711
 YANG, W., **558**
 YANG, Y., **19**, 272, 655, 711
 YANKELL, S.L., 1009
 YANO, J., 1244
 YAO, F., 736, **984**

YAO, H., 116, **144**, 518
 YAO, L., 22, 158
 YAO, S., **955**
 YAO, X., 357, 361, 436
 YAO, X., 69, 126, **422**, 861
 YAO, X.M., 1100
 YAPP, R.A., 1106
 YARBROUGH, D.K., 1025
 YARIMIZU, H., 1057
 YASKELL, T., 43, 451, **452**
 YASREBI, S., **388**
 YASUE, A., **957**
 YE, L., **93**, 567
 YE, Q., 126, 861, **1100**
 YEE, K.K., 292
 YEH, C.K., 35, **150**
 YELICK, P.C., 732, 1168
 YELLOWITZ, J., **3**
 YEUDALL, A., 299, 997
 YILDIZ, S., **311**
 YILMAZ, E., 456
 YILMAZ, O., 22, **104**, 158
 YIN, C., **808**
 YIP, K.H.K., **1191**
 YOCHIM, J.M., **956**
 YODSANGA, S., 1237
 YOKOYAMA, K., 50
 YONEDA, M., **1183**
 YOO, K.J., 200, **201**, 202
 YOSHIDA, K., **839**
 YOSHIKANE, T., 1183
 YOSHIMOTO, M., 670
 YOSHIYAMA, M., 118
 YOUNG, A., 1110
 YOUNG, C., 1168
 YOUNG, M., 1167

YOUNG, S., 163
 YU, B., 1167
 YU, S., 430, 567
 YU, W., 531
 YU, W., 1179
 YUAN, G., 179
 YUAN, J., 352
 YUN, J., 144
 YUN, K.D., 711
 YUN, W., 431
 YUNKER, M., 1089
 YUWONO, V., 570

Z

ZADEH, R.S., 353, 359, 374, **681**
 ZAHARIAS, R., 157, 1149, 1151
 ZAMBON, J.J., 938, 1194
 ZANDONA, A., 907
 ZANE, T., **722**
 ZANET, T.G., 471
 ZAPATA, U., **801**
 ZARCHI, E., **812**
 ZARTOSHTIMANESH, S., 859
 ZAVRAS, A., **10**, **52**
 ZAWAWI, K.H., 1088
 ZAZUETA, M., 696, **698**
 ZECKEL, I., 597
 ZEIGER, D., 119
 ZEIGER, D.N., **1279**
 ZENG, M., 753
 ZEPEDA, M.A., 892
 ZERO, D.T., **60**, 62, 907
 ZEUNER, F., 124
 ZEZELE, D.M., 121
 ZHANG, B., 1170
 ZHANG, J., 413
 ZHANG, L., 116
 ZHANG, N.Z., **678**
 ZHANG, S., 93
 ZHANG, W., **467**
 ZHANG, W., 932, 940, **941**, 1023
 ZHANG, W., 732, **1168**
 ZHANG, X., 952, 993
 ZHANG, X., 928
 ZHANG, X., 1222
 ZHANG, Y., 48, 649, 654
 ZHANG, Y., 168
 ZHANG, Y.P., **936**, 1120
 ZHANG, Y.Z., 636
 ZHANG, Z., 295
 ZHAO, H.S., 952
 ZHAO, W., 169
 ZHENG, Y., **482**
 ZHONG, N., 993
 ZHONG, W., 613
 ZHOU, H., 38, 87, 1176, **1179**
 ZHOU, L., 63, 276
 ZHOU, M., 573
 ZHU, B., 150
 ZHU, C.F., **1147**, 1148
 ZHU, D., 91
 ZHU, L., **302**
 ZHU, L., 435
 ZIANNI, M.R., 317, 617
 ZIDOI, J.C.D.S., 425
 ZIMMERMANN, B.G., 87, 235, 573, 1176
 ZUNT, S., 614

KEY WORD INDEX

- A**
- Acceptance** 11, 334, 336, 408, 510, 880, 931, 1130
- Access** 59, 392, 402, 406, 410, 412, 529, 622, 693, 723, 883, 1137, 1138
- Acid etch** 68, 118, 119, 209, 345, 351, 363, 370, 827, 833, 982, 1050, 1090
- Acoustic microscopy** 68
- Acrylics** 133, 193, 851, 1005, 1109, 1158, 1159
- Actinomyces naeslundii** 134
- Adaptation** 184
- Adherence and colonization** 25, 136, 168, 172, 261, 305, 311, 320, 890, 911, 929, 997, 1159, 1174, 1189
- Adhering discs** 1248
- Adhesion** 69, 71, 118, 119, 121, 124, 126, 183, 194, 195, 196, 197, 198, 202, 203, 223, 228, 345, 346, 347, 348, 349, 351, 353, 354, 355, 356, 359, 360, 361, 365, 366, 374, 540, 545, 658, 660, 672, 677, 754, 825, 826, 827, 828, 830, 832, 833, 834, 835, 837, 838, 839, 840, 841, 842, 850, 860, 863, 1036, 1037, 1043, 1045, 1046, 1047, 1048, 1049, 1051, 1052, 1055, 1056, 1057, 1058, 1059, 1061, 1088, 1089, 1090, 1099, 1102, 1118, 1193
- Adhesives; composites; bond strength tests** 350
- Adipose-derived stem cells** 1217
- Adolescence** 28, 332, 337, 397, 408, 462, 463, 506, 527, 686, 691, 694, 804, 879, 961, 1133, 1261
- Adults** 580
- Aggregating factors** 134
- Aging** 92, 395, 434, 438, 489, 517, 552, 553, 619, 775, 834, 867, 1013, 1100
- AIDS** 170, 294
- Alginate** 381
- Alloys** 70, 220, 221, 222, 224, 230, 267, 592, 593, 595, 677
- Amalgams** 358, 1043, 1092
- Ameloblastoma** 1233
- Ameloblasts** 587, 806, 813, 924
- Amelogenin** 923
- American Indian** 723
- Amoxicillin** 525
- Analgesics** 483
- Anatomy** 239, 240, 241, 243, 476, 509, 532, 552, 569, 585, 641, 786, 792, 809, 867, 1000, 1032, 1034, 1230, 1262
- Anesthetics** 427, 428, 429, 908, 910, 1130
- Angulation, color matching** 189
- Animal** 19, 44, 88, 99, 116, 136, 144, 150, 156, 160, 161, 164, 182, 251, 268, 286, 288, 289, 303, 433, 434, 446, 464, 471, 485, 491, 496, 500, 514, 517, 520, 533, 534, 557, 558, 567, 587, 588, 599, 603, 608, 616, 629, 670, 712, 732, 736, 752, 753, 775, 778, 780, 781, 783, 784, 796, 797, 798, 799, 801, 802, 803, 805, 808, 809, 811, 815, 816, 817, 818, 953, 954, 957, 977, 978, 979, 1167, 1168, 1172, 1183, 1202, 1213, 1215, 1218, 1228, 1238
- Anthropology** 401, 792
- Antigens-antibodies** 303, 453, 620, 750, 773, 815, 1175, 1185
- Antimicrobial agents/inhibitors** 23, 31, 259, 261, 301, 304, 306, 324, 911, 929, 931, 933, 938, 940, 941, 946, 994, 996, 1004, 1006, 1099, 1188, 1199, 1221
- Antimicrobials** 43, 151, 269, 291, 294, 478, 643, 739, 820, 930, 931, 935, 936, 939, 941, 945, 946, 996, 1004, 1026, 1033, 1188, 1199, 1220
- Antiseptics** 933
- Anxiety** 414, 415, 696, 876, 879, 909, 970
- Apoptosis** 10, 158, 469, 605, 619, 629, 751, 1242
- Assessment** 257, 407, 417, 508, 598, 705, 708, 720, 1022, 1123, 1124, 1138, 1182, 1204
- Association study** 174
- Asthma** 905
- Atomic force microscopy** 77
- Attachment proteins** 175, 270, 311
- Attrition** 696, 1024
- Automated mixing** 1017
- Autophagy** 1187
- Autosomal-recessive hypophosphatemic rickets (ARHR)** 167
- B**
- Bacterial** 30, 137, 138, 172, 192, 259, 291, 295, 298, 299, 302, 304, 305, 308, 310, 313, 324, 388, 421, 473, 482, 605, 637, 889, 932, 934, 935, 937, 940, 941, 942, 945, 997, 1099, 1159, 1174, 1184, 1189, 1197, 1220
- Bayesian variable selection** 560
- Behavioral science** 9, 10, 11, 28, 57, 140, 397, 401, 402, 403, 404, 405, 407, 411, 413, 414, 415, 417, 500, 526, 530, 687, 689, 701, 702, 703, 876, 879, 880, 881, 882, 883, 904, 970, 975, 1122, 1127, 1128, 1129, 1138, 1139, 1241
- Betalactamase** 1027
- Biochemistry** 34, 149, 153, 154, 166, 439, 482, 536, 717, 754, 775, 808, 1012, 1015, 1170, 1173
- Biocompatibility** 20, 222, 229, 267, 664, 665, 666, 667, 736, 759, 1085, 1094, 1095, 1097
- Bioengineering** 19, 74, 89, 114, 116, 126, 144, 157, 163, 175, 200, 201, 202, 271, 272, 284, 308, 499, 518, 570, 641, 645, 651, 670, 710, 737, 928, 1031, 1168, 1169, 1205, 1230
- Biofilm** 168, 193, 261, 293, 305, 308, 311, 312, 420, 584, 890, 929, 941, 1155, 1156, 1159, 1185
- Biomaterials** 20, 21, 73, 216, 218, 221, 222, 225, 230, 233, 271, 273, 274, 353, 354, 359, 374, 375, 376, 384, 390, 435, 499, 544, 545, 592, 593, 595, 602, 658, 661, 670, 717, 736, 772, 800, 801, 802, 803, 833, 917, 1021, 1029, 1070, 1071, 1074, 1219
- Biomechanics** 108, 116, 132, 144, 434, 518, 717, 800, 801, 802, 803
- Biomimetics** 18, 1277
- Biophysics** 436, 536, 1003, 1172
- Biostatistics** 7, 95, 98, 579, 776, 906, 1249, 1262
- Bisphosphonate osteonecrosis** 1240
- Bleach** 196, 204, 385, 386, 673, 729, 757, 761, 836, 915, 916, 918, 1023, 1078, 1079, 1080, 1081, 1082, 1083
- Blood** 637, 746, 908, 934, 944, 1193, 1209, 1212, 1215, 1232
- BMP** 160
- Bone** 19, 44, 74, 93, 97, 99, 102, 157, 160, 165, 167, 169, 182, 243, 267, 268, 272, 285, 288, 289, 432, 434, 446, 476, 479, 532, 536, 555, 557, 590, 599, 602, 603, 604, 633, 639, 641, 668, 670, 717, 730, 733, 735, 777, 797, 800, 801, 802, 803, 804, 812, 867, 998, 999, 1000, 1001, 1002, 1003, 1147, 1148, 1149, 1150, 1165, 1168, 1172, 1239, 1240, 1253, 1254, 1258, 1262
- Bone repair** 75, 599, 651, 730, 733, 736, 984, 1098, 1205, 1258
- Brackets** 120, 233
- Brightening** 916
- Bruxism** 696, 1227
- C**
- CAD/CAM** 47, 184, 185, 188, 343, 366, 539, 655, 656, 659, 843
- Calcium** 255
- Calcium phosphate** 1074
- Calculus** 1083
- Calprotectin** 301
- Cancer** 458, 770
- Cancer vaccine** 753
- Candida** 778
- Carcinogenesis** 37, 94, 156, 235, 298, 306, 629, 635, 687, 763, 768, 1235, 1238
- Cardiovascular disease** 25, 137, 240, 241, 320, 575, 620, 695, 871

- Caries** 56, 61, 62, 66, 67, 105, 108, 109, 136, 139, 174, 246, 250, 251, 253, 256, 257, 275, 276, 302, 309, 312, 313, 357, 369, 399, 402, 407, 418, 419, 426, 527, 530, 581, 584, 597, 640, 690, 691, 693, 704, 720, 721, 722, 844, 891, 894, 897, 898, 899, 901, 904, 905, 907, 971, 985, 1025, 1086, 1089, 1092, 1121, 1123, 1124, 1126, 1133, 1135, 1184, 1198
- Caries management** 1267
- Caries organisms** 136, 138, 259, 291, 295, 302, 305, 309, 313, 419, 420, 425, 568, 889, 1184, 1190, 1198
- Caries risk** 528, 1135
- Cariogenicity** 293, 722, 889
- Cariology** 61, 62, 63, 64, 105, 106, 110, 251, 254, 255, 256, 257, 258, 259, 261, 309, 313, 421, 422, 425, 440, 579, 580, 583, 597, 885, 892, 893, 895, 898, 899, 901, 902, 903, 904, 905, 906, 907, 1032, 1184, 1198
- Cartilage** 102, 111, 112, 113, 114, 286, 433, 798, 809, 1000, 1001
- Castings** 216, 221, 223, 225, 228, 387
- CBCT** 981
- Cell biology** 102, 111, 157, 180, 287, 466, 487, 499, 516, 558, 566, 634, 666, 667, 710, 743, 754, 755, 756, 758, 805, 928, 955, 956, 999, 1001, 1012, 1015, 1151, 1171, 1181, 1191, 1217, 1230, 1235, 1243, 1253, 1258, 1259
- Cell culture** 18, 19, 74, 94, 96, 96, 114, 161, 175, 179, 181, 229, 271, 273, 274, 285, 287, 299, 306, 321, 321, 322, 325, 326, 327, 328, 329, 439, 466, 467, 469, 478, 480, 487, 487, 562, 566, 568, 570, 601, 604, 607, 613, 630, 633, 643, 664, 665, 710, 737, 749, 752, 758, 766, 767, 769, 770, 771, 808, 933, 956, 956, 997, 1011, 1012, 1013, 1026, 1028, 1095, 1096, 1097, 1098, 1149, 1165, 1169, 1171, 1173, 1181, 1191, 1192, 1193, 1207, 1235, 1238, 1243, 1243, 1259
- Cell-cell adhesion** 634, 763
- Cementoblasts** 954, 1165
- Cements** 71, 128, 130, 195, 220, 374, 387, 539, 540, 650, 651, 652, 660, 662, 663, 832, 837, 838, 839, 840, 841, 842, 850, 1036, 1055, 1056, 1057, 1062, 1063, 1069, 1073, 1074
- Cementum** 88, 92, 93, 424, 431, 954, 1165, 1167, 1218
- Central nervous system/peripheral nervous system** 161, 491, 494, 498, 520, 1227, 1228
- Centric relation** 51
- Cephalometric analysis** 247, 249, 265, 789, 796, 822, 866, 964, 1263
- Ceramics** 13, 14, 15, 16, 46, 47, 48, 50, 70, 71, 72, 73, 75, 184, 185, 340, 366, 367, 368, 539, 540, 599, 604, 626, 648, 649, 650, 653, 654, 655, 656, 657, 658, 659, 663, 733, 837, 839, 841, 842, 843, 850, 983, 1035, 1056, 1059, 1068, 1069, 1070, 1071, 1085, 1098
- Cervical vertebrae** 1260
- Characteristics** 75
- Chemical** 199, 208, 224, 343, 357, 380, 422, 482, 661, 662, 729, 757, 762, 901, 918, 1068, 1073, 1074
- Chemistry** 124, 126, 127, 343, 757, 860, 901
- Chemomechanical** 343
- Chemotaxis** 754
- Children** 11, 62, 139, 174, 214, 249, 309, 399, 427, 468, 526, 530, 618, 693, 694, 704, 866, 876, 878, 879, 880, 882, 885, 891, 892, 903, 905, 906, 907, 972, 1122, 1130, 1136, 1137, 1198
- Chlorhexidine, additive** 678
- Chondrocytes** 115
- Chronic kidney disease** 459
- Class III** 505
- Class V** 363
- Cleaning** 1005, 1120
- Cleft lip-palate** 507, 531, 805, 866, 1255, 1256, 1257
- Clinical trials** 9, 43, 45, 46, 49, 63, 95, 146, 147, 177, 237, 282, 428, 477, 511, 548, 550, 624, 627, 671, 672, 689, 872, 873, 913, 914, 936, 949, 960, 963, 994, 1004, 1006, 1007, 1023, 1032, 1075, 1077, 1078, 1079, 1081, 1082, 1083, 1084, 1088, 1090, 1091, 1092, 1093, 1152, 1153, 1154, 1162, 1209, 1219, 1221, 1223, 1232, 1246
- Cohesion** 384, 854
- Collaboration** 278
- Collagen** 92, 113, 199, 200, 201, 202, 208, 431, 436, 516, 557, 734, 1031, 1167
- Color** 131, 185, 189, 214, 217, 385, 540, 650, 683, 823, 824, 862, 873, 874, 916, 918, 962, 1016, 1023, 1069, 1079, 1080, 1081, 1089, 1112, 1140
- Competency** 362
- Composites** 70, 71, 76, 77, 78, 79, 80, 81, 122, 123, 125, 129, 196, 198, 206, 209, 211, 212, 213, 253, 340, 349, 352, 354, 355, 362, 363, 364, 365, 366, 371, 372, 375, 376, 377, 378, 389, 512, 542, 543, 545, 546, 547, 674, 677, 680, 681, 683, 684, 830, 847, 848, 849, 851, 852, 854, 855, 856, 858, 862, 923, 989, 1022, 1029, 1050, 1058, 1060, 1061, 1069, 1072, 1086, 1089, 1091, 1092, 1094, 1095, 1096, 1101, 1103, 1110, 1116
- Computers** 214, 238, 413, 429, 513, 973, 981, 1264
- Concomitant diseases** 275
- Conductivity** 950
- Connective tissue** 516, 1230
- Consumers** 883
- Contact angle** 76
- Corrosion** 20, 222, 273
- Corticotomies** 979
- Cost** 59, 335, 723
- Cotinine** 1182
- Cracks** 368
- Craniosynostosis** 815, 816
- Creep, viscoelastic stability** 543
- Crevicular fluid** 40, 463, 465, 618, 1209
- Cross-professional** 278
- Crossover studies** 1152
- Crystallinity** 984
- Curing lights** 206, 207, 212, 349, 389, 629, 630, 650, 663, 682, 847, 989, 990, 991
- Curriculum** 279, 598, 705, 708, 725
- Cusp deflection** 546
- Cyclic fatigue** 1051
- Cytokeratin 8** 768
- Cytokine** 22, 24, 26, 40, 143, 169, 325, 327, 328, 329, 456, 457, 461, 462, 463, 465, 484, 524, 536, 574, 608, 630, 741, 745, 755, 780, 781, 783, 784, 885, 948, 955, 995, 1177, 1180, 1215, 1216, 1241, 1242
- D**
- Decision-making** 427, 472, 596, 709, 971, 1124, 1141
- Defensin** 1243
- Degradation** 201, 861
- Degree of conversion** 1096
- Delivery systems** 210, 477, 562, 564, 664, 678, 730, 757, 759, 772, 991, 1016, 1083, 1144
- Demineralization** 64, 67, 68, 110, 198, 254, 255, 257, 258, 339, 364, 383, 390, 422, 424, 425, 511, 675, 676, 889, 893, 895, 897, 898, 1161
- Demography** 1137
- Dental anxiety** 148
- Dental informatics** 401
- Dental materials** 14, 16, 20, 47, 66, 69, 70, 71, 72, 73, 76, 77, 78, 79, 81, 118, 119, 120, 123, 125, 126, 127, 128, 129, 130, 131, 132, 133, 183, 185, 188, 194, 195, 197, 198, 200, 201, 202, 203, 205, 209, 210, 211, 212, 213, 215, 216, 217, 218, 219, 220, 223, 224, 226, 227, 228, 230, 231, 232, 233, 253, 340, 342, 345, 346, 347, 348, 349, 351, 353, 357, 358, 361, 362, 364, 365, 366, 369, 370, 372, 373, 374, 375, 378, 380, 386, 388, 540, 541, 542, 544, 545, 546, 547, 593, 594, 595, 624, 642, 649, 651, 653, 656, 658, 659, 661, 662, 664, 665, 666, 667, 672, 674, 675, 680, 681, 682, 683, 710, 717, 732, 735, 759, 820, 821, 824, 826, 827, 828, 829, 830, 832, 833, 834, 835, 837, 838, 839, 841, 842, 843, 844, 845, 846, 847, 848, 849, 851, 852, 853, 855, 856, 859, 860, 862, 932, 939, 982, 987, 989, 990, 991, 1005, 1017, 1019, 1021, 1022, 1041, 1043, 1047, 1049, 1050, 1054, 1055, 1056, 1057, 1058, 1059, 1060, 1061, 1062, 1066, 1069, 1071, 1072, 1073, 1074, 1078, 1080, 1081, 1082, 1083, 1084, 1085, 1086, 1088, 1090,

Dental materials (continued) 1091, 1092, 1093, 1095, 1096, 1099, 1101, 1102, 1103, 1104, 1105, 1106, 1107, 1108, 1109, 1110, 1114, 1116, 1117, 1118, 1119, 1121, 1158, 1159

Dentated burs 1021

Dentifrices 45, 146, 564, 582, 646, 729, 894, 896, 911, 913, 914, 917, 919, 920, 926, 936, 994, 1024, 1077, 1084, 1120, 1158, 1221

Dentin 69, 106, 108, 118, 119, 121, 129, 130, 159, 194, 196, 197, 199, 200, 201, 202, 204, 250, 251, 254, 289, 342, 346, 347, 349, 351, 353, 355, 357, 361, 365, 383, 391, 424, 430, 438, 439, 490, 545, 556, 567, 581, 642, 672, 684, 732, 734, 818, 825, 826, 827, 828, 832, 834, 835, 861, 985, 1002, 1024, 1025, 1031, 1033, 1034, 1036, 1041, 1043, 1045, 1046, 1047, 1048, 1049, 1050, 1057, 1102, 1170, 1173

Dentin bonding agents 69, 118, 119, 122, 124, 126, 194, 195, 197, 198, 199, 251, 253, 345, 346, 347, 348, 351, 352, 354, 355, 358, 360, 361, 388, 391, 671, 672, 682, 825, 826, 828, 830, 831, 832, 834, 835, 838, 853, 854, 860, 1040, 1043, 1047, 1050, 1066, 1090, 1099, 1100

Dentin matrix protein-I 807

Denture 1108

Desensitizer 204

Design 1009

Desmosome 1235

Detection 899

Diabetes 229, 318, 457, 471, 548, 565, 613, 722, 726, 975, 1014, 1215, 1216, 1242

Diacylglycerol kinase alpha 1014

Diagnosis 34, 61, 82, 83, 87, 105, 234, 235, 238, 242, 244, 245, 246, 265, 334, 336, 472, 492, 573, 635, 745, 767, 787, 865, 866, 870, 871, 872, 874, 907, 965, 971, 1025, 1126, 1178, 1179, 1229, 1252, 1262

Die materials 818, 932

Diet 11, 58, 690, 691, 776, 886, 887, 888, 890, 891, 904

Digital image analysis 105, 129, 268, 716, 787, 867, 873, 875, 1078, 1079

Digital models, 3D 382

Direct transmittance 680

Disability 142, 410

Disinfection 820

Disinfection/sterilization 250, 384, 929, 931, 932, 933, 935, 937, 942, 1005, 1033

Displacement amplitude 474

DMFT, caries risk 527

DMPI, stem cells 171

Down syndrome 622, 750

Drug 759

Drug release 561

DVRT 798

Dysplasia 447, 536, 763, 772, 1265

E

Ecology 451, 452

Economics 338, 704

Ectodermal dysplasia 774

Edge chipping 14

Education research 278, 279, 283, 404, 409, 443, 523, 596, 597, 598, 707, 708, 709, 792, 1127, 1128, 1129, 1140, 1141, 1143, 1182

Effectiveness 283, 359, 385, 409, 597, 702, 708, 980, 1008, 1140

Efficacy 1082

Elasticity 67, 68, 92, 200, 208, 215, 219, 232, 372, 386, 431, 496, 642, 734, 800, 801, 802, 803, 983, 1106, 1167

Elderly 97, 282, 394, 395, 552, 703

Electrochemical immunoassay 235

Electrognathography 191

Embryology 113, 160, 164, 286, 520, 531, 533, 811, 817

EMMPRIN, MMP-9 470

Enamel 89, 90, 91, 106, 107, 110, 120, 196, 197, 233, 254, 256, 258, 339, 353, 376, 386, 390, 391, 422, 430, 435, 556, 582, 585, 587, 673, 761, 818, 825, 828, 829, 835, 863, 887, 888, 889, 890, 893, 895, 896, 898, 914, 917, 919, 920, 923, 924, 925, 926, 982, 1023, 1052, 1077, 1160, 1161

Endocrinology 1000, 1254

Endodontic organisms 565

Endodontics 231, 242, 297, 344, 379, 388, 460, 484, 493, 565, 569, 643, 647, 662, 665, 859, 870, 909, 935, 945, 1019, 1026, 1028, 1033, 1034, 1040, 1045, 1046, 1048, 1051, 1073, 1102, 1145

Enzymes 40, 149, 179, 322, 557, 575, 861, 912, 992, 1100, 1170, 1199, 1212

EORTC 687

Epidemiology 6, 7, 8, 10, 56, 57, 58, 62, 98, 141, 142, 275, 319, 402, 403, 411, 417, 454, 458, 459, 460, 527, 538, 548, 620, 621, 640, 685, 690, 692, 693, 694, 695, 696, 697, 698, 702, 704, 721, 726, 776, 884, 1123, 1126, 1127, 1128, 1135, 1139, 1225, 1231, 1249

Epithelial biology 766, 774, 1235

Epithelium/epithelial 152, 170, 181, 531, 534, 559, 588, 632, 634, 748, 764, 766, 768, 950, 953, 1011, 1177, 1234, 1237, 1244, 1248

Erosion 64, 582, 887, 888, 890, 896

Esthetics 177, 331, 332, 335, 416, 510, 626, 648, 649, 683, 822, 823, 824, 915, 961, 963, 965, 1081

Evaluation 335, 385, 596, 714, 971, 1124, 1166

Excavation 391

Exercise 434

Exo-beta-fructosidase 293

Expectations 337

Exposure 1022

Extracellular matrix molecules 89, 91, 157, 167, 273, 439, 499, 515, 519, 570, 737, 809, 1003, 1012, 1031, 1151, 1169, 1172, 1173, 1237, 1243

F

Facial prostheses 131, 624

Facial reconstruction 333

Fatigue 13, 211

Fatigue 438

Fatigue, microcracks 90

Fiber posts 1063

Fiber-reinforced composites 190, 356, 373, 856, 1036, 1063, 1088

Fibroblasts 152, 180, 287, 321, 322, 326, 466, 467, 469, 481, 613, 748, 758, 1013, 1015, 1094, 1097, 1206, 1207, 1242

Fibronectin 180, 1015, 1206

Fibronectin fragment 1259

Files 231

Fillers 853

Film thickness 675

Finite analysis 213, 1035, 1115

Fluorescent post labeling 762

Fluoride 58, 107, 109, 110, 232, 253, 276, 352, 383, 424, 563, 678, 845, 892, 893, 894, 897, 924, 987, 1091, 1097, 1121, 1133, 1160

Fluoride recharge 844, 1266

Fluorine-containing 584, 678, 844, 923, 985, 987

Fluorosis 416, 924

fMRI 1227

Food security 699

Formation 112, 430, 557, 902, 925, 984

Fossil hominins 925

Fracture 78

Fracture resistance 855

Fracture toughness 132

Function 51, 134, 167, 178, 495, 602, 952

Fungi 294, 778, 1187, 1188, 1244

G

Gas adsorption 982

Gender differences 780, 781, 784

Gene expression 25, 74, 91, 94, 112, 114, 156, 164, 178, 285, 286, 287, 300, 320, 420, 468, 486, 515, 534, 535, 558, 560, 566, 573, 588, 589, 590, 630, 668, 735, 740, 749, 773, 924, 953, 955, 957, 1011, 1013, 1181, 1191, 1205, 1207, 1211, 1216, 1236, 1265

Genetics 10, 112, 135, 173, 314, 457, 468, 534, 535, 555, 579, 580, 585, 586, 588, 596, 805, 808, 811, 812, 813, 903, 952, 957, 958, 1201, 1255, 1256, 1257, 1265

Gerontology 277, 282, 392, 394, 395, 549, 550, 553

Gingivalis 25

Gingivitis 33, 45, 407, 940, 946, 1004, 1007, 1221

Glass ionomers 195, 203, 364, 541, 661, 675, 676, 684, 844, 845, 846, 987, 1041, 1052, 1066, 1072, 1114

Glial fibrillary acidic protein 1228

Gloss 875

Glucans-fructans 293, 302

Glycoproteins 159, 179, 634, 739

Glycosaminoglycans 531

Grafting 1113

Growth 792

Growth & development 102, 111, 113, 164, 178, 248, 249, 286, 331, 332, 520, 532, 533, 535, 558, 560, 587, 589, 590, 774, 789, 790, 791, 796, 809, 812, 815, 817, 867, 960, 961, 964, 1001, 1181, 1253, 1254, 1260, 1263, 1265

Growth factors-media 446

Gypsum products 1098

H

Halitosis 146, 147, 455, 901, 936, 938, 1194, 1199

Hand hygiene 931

Hardness 131, 215, 371, 373, 377, 642, 663, 674, 676, 761, 847, 926, 983, 989, 1052, 1071, 1108, 1114

HCAEC 320

HCV+ patients 1246

Health literacy 640

Health services research 7, 9, 28, 56, 57, 63, 238, 278, 282, 410, 411, 412, 523, 529, 538, 692, 701, 883, 911, 970, 971, 972, 973, 974, 1123, 1124, 1125, 1126, 1127, 1128, 1130

High-resolution thermographic camera 121

Histatin 166

Histology - ultrastructure 432, 433, 737, 1169, 1172

HIV infection 181, 748, 1244

Home care 146, 930, 1006, 1008

Hormones and growth factors 113, 150, 289, 486, 515, 532, 555, 641, 668, 777, 806, 992, 1175, 1206, 1234

Host-microbial interactions 22, 24, 137, 158, 170, 181, 296, 300, 301, 304, 306, 461, 995, 1185, 1187, 1194, 1247

Human 8, 9, 23, 34, 37, 38, 40, 41, 42, 49, 57, 84, 143, 149, 154, 162, 166, 173, 177, 194, 234, 246, 248, 258, 266, 292, 318, 335, 338, 339, 345, 401, 405, 451, 452, 458, 460, 477, 481, 484, 489, 493, 497, 512, 515, 516, 518, 530, 563, 568, 575, 579, 586, 600, 606, 618, 619, 632, 646, 687, 690, 695, 697, 701, 702, 707, 713, 728, 741, 745, 746, 750, 758, 771, 790, 791, 792, 795, 800, 804, 812, 814, 818, 836, 865, 873, 874, 876, 886, 906, 908, 909, 910, 913, 914, 919, 921, 938, 948, 949, 958, 960, 963, 1010, 1014, 1028, 1080, 1082, 1086, 1120, 1134, 1135, 1140, 1143, 1146, 1180, 1193,

1194, 1210, 1216, 1222, 1223, 1226, 1237, 1239, 1241, 1251, 1255, 1256, 1257, 1260, 1261

Human antibody 1195

Human experimentation 57

Human papillomavirus 611, 612

Hydrophilicity 80, 218

Hydroxyapatite 734

Hypodontia 993

I

IGF-I 236

IL-6 441

Immune response 26, 292, 323, 465, 560, 606, 752, 753, 755, 995, 1011, 1175, 1195

Immunohistochemistry 777

Immunology 22, 24, 26, 27, 292, 301, 303, 432, 433, 502, 524, 549, 568, 606, 608, 610, 746, 749, 751, 755, 756, 995, 1185, 1191, 1195, 1241

Implant-supported overdenture 703

Implantology 18, 20, 98, 208, 237, 264, 266, 269, 270, 272, 274, 599, 600, 601, 710, 711, 712, 713, 714, 715, 733, 1054, 1144, 1145, 1146, 1147, 1148, 1149, 1150

Implants 21, 50, 177, 264, 267, 269, 270, 277, 367, 476, 601, 601, 603, 625, 711, 712, 713, 714, 716, 732, 942, 976, 1054, 1144, 1145, 1146, 1147, 1148, 1150, 1151

Impression materials 215, 216, 218, 219, 381, 384, 820, 821, 939, 1016, 1017, 1104, 1105, 1106, 1107, 1117, 1118, 1119

Incidence 1133

Inequalities 1280

Infants 782, 960, 1125

Infection 158, 307, 319, 617, 637, 778, 937, 944, 1191, 1213, 1222

Inflammation 22, 25, 30, 41, 42, 44, 115, 143, 169, 229, 234, 441, 462, 463, 470, 471, 483, 486, 488, 498, 501, 502, 517, 549, 574, 756, 782, 783, 872, 949, 1010, 1177, 1202, 1210, 1211, 1215

Inflammatory mediators 8, 27, 42, 169, 323, 453, 457, 461, 465, 466, 470, 488, 501, 610, 666, 667, 695, 751, 756, 780, 781, 1209, 1210, 1211

Innate immunity 170

Insertional mutagenesis 315

Interdisciplinary 135, 278, 314, 415, 1201

Interfaces 68, 79, 360, 362, 431, 436, 657, 660, 677, 716, 831, 848, 1045, 1046, 1048

Intermediate care facilities 392

Intermediate chairside crown system 851

J

Joint dysfunction 115, 116, 140, 142, 143, 144, 488, 492, 495, 518, 519, 698

Journal, citation accuracy 794

K

Khat 765

Kinematics 1282

Kuwait 793

L

Lab-on-a-chip 85, 86

Laminates 46

Language 59

Lasers 61, 121, 227, 250, 342, 363, 391, 426, 474, 475, 895, 948, 949, 950

Learning 597, 1034

Lip 504, 811

Lipids 27, 775, 996, 1010, 1211

Liquid crystallinity 133

Loading 79, 190, 211, 213, 367, 368, 371, 430, 542, 714, 826, 840, 855, 856, 1051, 1109

Localized aggressive periodontitis 303

Low birthweight 29

Lymphocytes 24, 292

M

Macrophage 462

Macrophage 1196

Magnetic Resonance Imaging 492, 1227

Magnification 257

Malignant melanoma of the face 685

Malocclusion 247, 331, 332, 505, 508, 512, 793, 822, 963, 965, 980, 1261, 1263

Management 264

Mastication 625, 795, 797, 798, 865

Material compatibility 939

Matrix metalloproteinases 466

Measurement 1231

Mechanical loading 288

Medicaid orthodontics 330

Mercury 224

Mesenchymal stem cell 273

Metabolism 567

Metalloproteinases 618

Metals 223, 224, 226, 227, 228, 229, 231, 664, 666, 667, 837

Methodology 98, 248, 404, 411, 413, 455, 564, 627, 702, 1161, 1229

Methotrexate 779

Micro-CT 379, 602

Micro-shear bond strength, MTA 1058

Microbiology 22, 23, 27, 63, 134, 135, 136, 137, 138, 139, 151, 172, 193, 261, 291, 293, 295, 296, 298, 299, 300, 301, 302, 304, 305, 306, 308, 309, 310, 311, 312, 313, 314, 317, 325, 327, 328, 329, 388, 419, 421, 451, 452, 455, 473, 511, 565, 605, 610, 637, 691, 726, 739, 752, 756, 929, 930, 932, 933, 934, 936, 937, 938, 940, 941, 942, 944, 946, 992, 994, 996, 997, 1183, 1184, 1187, 1188, 1189, 1190, 1194, 1197, 1198, 1201, 1247

Micrognathia 164



Microleakage 66, 122, 128, 130, 360, 363, 365, 368, 369, 379, 684, 714, 1044, 1061, 1063
Micromechanics 67
Microrheology 1269
Microvessels 517
Mineralization 21, 89, 91, 159, 171, 274, 289, 380, 430, 433, 435, 439, 515, 555, 556, 585, 735, 923, 928, 957, 1002, 1003, 1148, 1149, 1151, 1166, 1169, 1170, 1171, 1173, 1253
Minerals 357, 435, 436, 544, 1166
Mini-Mental 395
Mitf 1193
Mixed dentition 579
Molecular biology 34, 37, 89, 94, 96, 102, 115, 138, 151, 154, 172, 178, 192, 285, 296, 297, 299, 310, 312, 447, 464, 471, 519, 533, 534, 535, 566, 567, 588, 634, 635, 743, 749, 751, 754, 770, 774, 808, 812, 813, 814, 952, 955, 997, 1189, 1197, 1247, 1255, 1256, 1257
Motivation 408, 1122
Mouthrinses 31, 45, 64, 146, 147, 584, 912, 1004, 1161, 1174, 1223
Mouthwash 1160
MsrA 168
Msx1 806
MTT assay 1094
Mucins 739, 740
Mucoadhesive 772
Mucosal diseases 6, 294, 697, 776, 1248, 1249
Multi-axial 79
Muscle 533, 796, 865
Mutans streptococci 423

N

Nano-filled 858
Nanocomposite 1268
Nanohardness 386
National board preparation 1143
Nav1.6 491
Nav1.7 497
Neoplasia 10, 37, 87, 162, 447, 615, 621, 632, 767, 769, 777, 1192, 1237
Nested polymerase chain reactions 297
Neuronal 161, 490, 783, 1228, 1258
Neuropeptide 487
Neuroscience 140, 480, 483, 485, 487, 489, 490, 491, 493, 494, 495, 500, 501, 524, 569, 1227, 1229, 1232
Neutrophils 23, 478, 1010, 1014
Nicotine 481, 559
Nitric oxide 464
Non-viral gene delivery 182
Norepinephrine 782
Novamin 581, 1121
Nucleic acids 38, 87, 162, 182, 316, 535, 573, 636, 762, 1197
Nutrition 775, 886

O

Obesity 11, 885, 886
Occlusion 48, 265, 331, 372, 376, 506, 508, 513, 795, 798, 980, 1264
Odontoblasts 159, 179, 490, 556, 558, 568, 570, 645, 737, 806, 1029, 1031, 1097
Older adults 548
Omega-3 fatty acid 41
Operatory light 1116
Oral and pharyngeal cancer 701
Oral biology 33, 88, 114, 135, 153, 158, 176, 179, 193, 296, 308, 314, 325, 327, 328, 329, 455, 587, 607, 740, 741, 745, 766, 795, 806, 953, 954, 956, 1161, 1175, 1201, 1207, 1230, 1236, 1239
Oral cancer 35, 630, 1176
Oral hygiene 147, 392, 425, 690, 913, 1006, 1007, 1009, 1245
Oral implantology 19, 175, 265, 267, 268, 270, 271, 272, 603, 625, 715, 716, 977, 978, 1145, 1147, 1148
Oral malodor 147
Oral medicine 6, 30, 141, 447, 479, 551, 553, 574, 611, 612, 613, 697, 701, 722, 762, 767, 769, 776, 780, 782, 784, 786, 928, 1180, 1234, 1240, 1245, 1246, 1247, 1248, 1249, 1251
Oral mucosa 611, 615, 632, 697, 763, 764, 768, 772, 1178, 1236, 1239, 1246
Oral parasitic infection 1245
Oral squamous cell carcinoma 1236
Oral surgery 95, 96, 97, 98, 266, 272, 284, 405, 408, 440, 441, 442, 443, 444, 445, 446, 448, 562, 635, 786, 959, 976, 1202, 1203, 1204
Oral-systemic 7
Organizational setting 523
Orthodontic aligner 1270
Orthodontics 107, 120, 210, 232, 233, 242, 247, 248, 258, 331, 332, 334, 335, 336, 337, 338, 339, 381, 382, 389, 390, 397, 406, 408, 442, 444, 445, 504, 505, 506, 508, 510, 511, 512, 513, 514, 552, 675, 676, 691, 692, 700, 786, 787, 789, 790, 793, 794, 799, 804, 822, 836, 866, 878, 959, 961, 962, 963, 964, 965, 966, 976, 977, 978, 979, 980, 981, 982, 1091, 1094, 1115, 1116, 1165, 1203, 1260, 1261, 1262, 1263, 1264, 1270
Orthognathic 444
Orthopedics 141, 182, 797, 960, 1000
Osseointegration 1151
Osteoblast 669
Osteoblasts/osteoclasts 18, 44, 74, 165, 175, 274, 285, 432, 514, 590, 633, 735, 998, 999, 1149, 1171, 1259
Osteonecrosis 633, 639
Osteonecrosis of the jaw 99
Osteoporosis 97, 287, 288, 633, 999
Osteoradionecrosis 479
Outcome (Health) 7, 399, 406, 459, 523, 527, 538, 622, 688, 703, 1190, 1231

Outcomes (Educational) 417, 443, 495, 1143

Overjet 504

Ozone 426

P

Pain 142, 397, 399, 428, 448, 483, 484, 485, 486, 488, 489, 491, 493, 494, 497, 500, 501, 524, 565, 569, 671, 686, 689, 698, 704, 909, 1024, 1086, 1226, 1228, 1231
Palate 531, 811
Pancreatic cancer 573
PAR index 513, 1264
Parents 1122
Parents/caregivers 880
PARs 1011
Pathogenicity 138, 172, 296, 300, 467, 605, 726, 1187
Pathology 37, 96, 162, 239, 240, 241, 243, 298, 447, 611, 615, 629, 632, 762, 763, 764, 768, 770, 777, 1032, 1202, 1236, 1237, 1238, 1251, 1252
Pax9, mutation 178, 952
Pedodontics 214, 370, 412, 427, 429, 526, 640, 686, 692, 693, 705, 707, 876, 882, 886, 908, 934, 972, 974, 1040, 1060, 1061, 1130
Pellicle 902, 1174
Peptide inhibitor 1271
Peptides 1025
Perception 510, 874
Periapical repair 1278
Periodontal disease 26, 28, 41, 42, 43, 44, 180, 192, 275, 304, 310, 316, 317, 319, 441, 454, 456, 457, 458, 459, 461, 462, 463, 464, 465, 473, 548, 551, 574, 605, 606, 610, 617, 620, 621, 622, 636, 721, 748, 1010, 1013, 1014, 1015, 1020, 1084, 1180, 1183, 1206, 1209, 1212, 1213, 1214, 1216, 1217, 1220, 1222, 1223
Periodontal maintenance 1225
Periodontal organisms 158, 303, 310, 316, 317, 320, 321, 322, 324, 326, 453, 454, 473, 478, 606, 617, 620, 636, 748, 750, 946, 992, 996, 1183, 1190, 1199, 1212, 1213, 1220
Periodontics 31, 33, 42, 43, 45, 46, 93, 169, 234, 266, 279, 299, 318, 319, 321, 322, 323, 324, 325, 326, 327, 328, 329, 440, 453, 454, 458, 459, 461, 467, 470, 472, 473, 474, 475, 476, 477, 478, 549, 600, 610, 618, 619, 622, 725, 872, 940, 948, 949, 950, 954, 977, 1020, 1080, 1134, 1190, 1207, 1210, 1212, 1213, 1218, 1219, 1220, 1221, 1223, 1224, 1225, 1245
Periodontium-gingiva 88, 234, 468, 469, 516, 550, 601, 619, 728, 921, 948, 978, 1007, 1020, 1134, 1210, 1245
Permeability 342, 673, 1041
Pharmacology 33, 95, 161, 429, 477, 480, 482, 483, 559, 563, 778, 910

- Photodisinfection** 1222
Photoinitiator 124
Photostimulable phosphor plates 244
Physical 16, 21, 48, 66, 81, 128, 130, 183, 212, 216, 217, 219, 226, 227, 230, 231, 232, 343, 344, 348, 358, 369, 377, 378, 380, 542, 593, 595, 642, 649, 658, 674, 681, 682, 824, 825, 827, 838, 849, 850, 851, 853, 855, 870, 926, 939, 989, 991, 1009, 1017, 1018, 1037, 1047, 1049, 1054, 1059, 1060, 1068, 1071, 1104, 1106, 1107, 1108, 1110, 1112, 1224
Physiology 728, 865
PITX2 951
PITX2, FoxJ1 813
Plaque 31, 192, 312, 316, 317, 418, 451, 452, 511, 550, 584, 617, 636, 921, 994, 1006, 1008, 1152, 1153, 1154, 1155, 1156, 1162
Plaque fluid 563
Platelet-activating factor 1211
Platelet-rich plasma 1219
Policy 59, 1125
Polish 863, 920
Polishing 681
Polybutadiene 1103
Polymerization 124, 133, 206, 207, 212, 389, 546, 663, 684, 848, 849, 1037, 1116
Polymers 66, 80, 123, 127, 132, 163, 205, 206, 207, 217, 218, 219, 371, 373, 375, 544, 547, 562, 665, 759, 829, 860, 861, 1054, 1100, 1102, 1103, 1108, 1109, 1110, 1112
Polymorphisms 1214
Polysaccharides 420
Porcelain systems 13, 15, 50, 183, 656, 657, 843, 1056, 1085
Post 1019
Post & core 1088
Post-operative sensitivity 671
Power toothbrushes 1154
Practice-based 283
Practice-based research 523, 973
Pre-term infants 725
Pregnancy 9, 28, 453, 530, 725, 782, 783
Prevalence 62
Prevention 526
Preventive dentistry 8, 33, 58, 61, 63, 109, 256, 276, 370, 412, 482, 526, 541, 583, 646, 686, 688, 692, 695, 720, 845, 846, 880, 882, 894, 895, 897, 920, 921, 972, 985, 1007, 1041, 1125, 1129, 1225
Primary health care 394
Program 443, 705
Prophylaxis 276, 1018
Prostheses 49, 277, 624, 821, 1035, 1037, 1110, 1112
Prosthodontics 13, 15, 46, 47, 48, 49, 50, 51, 73, 183, 184, 185, 188, 189, 190, 191, 192, 193, 217, 220, 221, 225, 237, 265, 277, 359, 367, 387, 539, 547, 624, 625, 626, 627, 653, 655, 715, 716, 820, 821, 822, 824, 839, 850, 1005, 1016, 1019, 1035, 1036, 1037, 1059, 1085, 1109, 1112, 1117, 1119, 1158
Protease 166, 199, 1012, 1183
Proteins 38, 149, 151, 153, 165, 235, 284, 307, 324, 435, 498, 562, 567, 616, 767, 770, 773, 816, 902, 912, 952, 1003, 1144, 1171, 1179, 1244
Proteoglycan 4 519
Proteoglycans 180, 1167, 1205
Proteomics 437
Proteomics 572
Providers 409, 412, 414, 472, 725, 883, 972, 975, 1123, 1125
Psychology 140, 405, 414, 415, 448, 879, 970
Psychophysics 448, 489, 648
Psychosocial stress 1226
Public health 58
Pulp 171, 484, 493, 497, 569, 645, 728, 784, 934, 990, 1028, 1029, 1032, 1166
Pulpal disease 275, 643, 1026, 1027
Q
Q-PCR 421
Quality 59, 409, 1016
Quality assurance 84, 244, 404, 417
Quality of life 277, 397, 410, 416, 444, 640, 686, 687, 703, 723, 728, 882, 966, 1136
Quantitative PCR 418
Questionnaire 1281
R
Race 448, 688, 722, 1122, 1263
Radiation 83, 479, 638, 868
Radiology 82, 83, 84, 105, 239, 240, 241, 242, 243, 244, 245, 246, 247, 379, 445, 638, 786, 868, 870, 871, 959, 981, 1252
Radiosurgery 341
Raman 252
Reactive oxygen species 643, 1026
Rebonding, amalgam restorations, microleakage 1065
Recurrent aphthous stomatitis 1250
Refrigeration 348
Regeneration 150, 163, 176, 268, 284, 446, 490, 570, 603, 604, 645, 668, 670, 730, 732, 797, 1217, 1218, 1219, 1258
Rehydration 208
Remineralization 21, 107, 108, 109, 129, 254, 255, 256, 383, 390, 424, 581, 582, 583, 661, 676, 734, 736, 893, 894, 896, 897, 985, 1025, 1121, 1160
Remodeling 82, 165, 177, 284, 288, 514, 733, 998, 1150, 1240
Research pattern 1093
Resin cement 72
Resin composite 1044
Resorption 24, 82, 165, 476, 514, 998, 999, 1147
Respiration 319, 1261
Restoration 1070
Retention 966, 976
Ridge preservation 600
RMGI 987
Root 344, 361, 373, 374, 790, 791, 977, 978, 1034
Root canal fillings 356, 379, 660, 662, 859, 870, 1045, 1046, 1048, 1049, 1051, 1058, 1068, 1073
S
Saliva 31, 34, 87, 110, 149, 151, 153, 154, 166, 235, 255, 298, 311, 318, 418, 421, 455, 541, 551, 563, 573, 574, 575, 581, 612, 614, 635, 637, 726, 739, 740, 741, 742, 745, 750, 884, 902, 912, 930, 1105, 1174, 1176, 1178, 1179, 1180, 1182, 1185, 1189, 1232
Salivary dysfunction 38, 551, 553, 616, 742, 743, 773, 1177, 1178, 1251
Salivary flow rate 742
Salivary glands 38, 150, 152, 154, 156, 162, 553, 616, 740, 742, 743, 1175, 1177, 1181, 1251
Salivary SLPI 1275
Sample preparation 1279
Screening method 64
Sealants 56, 210, 259, 276, 369, 370, 541, 542, 863, 898, 899, 899, 1044, 1044, 1052
Sealer 859
Sealer extrusion 647
Secretion 153, 741
Sectional matrices 362
Sedation 909
Self-adhesive 1057
Self-etch 852
Senescence 469
Sequencing 814
Serum-plasma 8, 441, 773, 885
Sex 414, 689
SHEDs 956
Shelf life 831
Shrinkage 1072
Sialagogues 551
Signaling 498
Silanol 857
Silk 544
Single nucleotide polymorphisms 456
Sintering 70
Sjögren's syndrome 743, 746
Smad4 589
Smartprep 250
Smile esthetics 334, 336
Smoking status 884
Socio-economic position 700
Socio-economic status 1139
Solubility 75, 380, 840, 984, 1068
Sonic power toothbrush 1153
Special-needs patients 705
Stability 712
Stain 650, 761, 863, 912, 914, 916, 918, 919, 1023, 1044
Stem cells 771, 1168, 1273, 1276

Streptococcus mutans 419

Stress 6, 14, 16, 26, 48, 80, 128, 205, 207, 211, 213, 215, 220, 223, 228, 340, 359, 371, 372, 546, 608, 660, 674, 698, 841, 846, 848, 849, 859, 992, 1019, 1035, 1066, 1072, 1100, 1101, 1106, 1142

Structure 78, 92, 125, 133, 230, 422, 431, 593, 595, 602, 856, 1101

Sugars 307, 420

Surface plasmon resonance 23

Surface properties 203

Surfaces 72, 73, 76, 77, 125, 271, 344, 354, 377, 654, 681, 821, 858, 875, 920, 1018, 1096, 1105, 1224

Surgery 43, 520, 600, 713, 799, 815, 816, 980, 1020

Survey response rate 56

Suture development 799

Syndrome 395

Syndromic gingival fibromatosis 468

Systematic review 95, 1204, 1240

Systemic lupus erythematosus 432

T

Teaching 443, 708, 868, 1129, 1143

Tear strength 384, 1104

Technique errors 868

Technology 238, 401, 474, 475, 513, 596, 627, 1021, 1224, 1264

Teeth 30, 106, 167, 176, 189, 247, 334, 336, 347, 367, 368, 383, 436, 440, 451, 452, 508, 552, 585, 586, 589, 646, 696, 761, 804, 813, 814, 836, 842, 872, 873, 874, 905, 913, 915, 916, 921, 953, 957, 979, 990, 1008, 1024, 1029, 1078, 1079, 1084, 1120, 1126, 1140, 1156, 1168, 1224

Temperature 990

Teratogens 817

Terminologies 238

Tetracycline 40, 416

Therapeutics 156, 472, 559, 564, 757, 926, 942, 1075, 1120, 1217, 1222, 1234

Thermal 689

Thermal hyperalgesia 485

Thermal/mechanical simulation 15

Third molar 440, 442

3D scanning laser vibrometer 475

3Y-TZP 47

TIG welding 227

Tissue engineering 18, 75, 91, 157, 270, 1098, 1218

Tissue or organ culture 111, 307, 589, 645, 817, 1001, 1234

Titanium 221, 222, 225, 592

TMD 1272

TMJ and masticatory muscles 82, 111, 112, 115, 116, 140, 141, 142, 143, 144, 486, 488, 492, 495, 496, 498, 499, 501, 502, 517, 518, 519, 524, 698, 1203, 1226, 1229, 1232

Tobacco 316, 317, 467, 559, 598, 617, 636, 753, 1129, 1134, 1182

Toll-like receptor 614

Tongue 249, 292, 938, 1194

Tooth eruption 810, 955

Tooth measurement 242

Tooth whitening 962

Toothbrushes 378, 550, 858, 930, 1008, 1009, 1152, 1153, 1154, 1155, 1156, 1158, 1162

Toughness 604

Toxicology 429, 481, 560

Transcriptome 1179

Transposon 1238

Transverse 248

Tricho-dento-osseous syndrome 555, 556

Triclosan 564

Triglyceride 32

TRPV1 500

Tumor hypoxia 615

U

Ultrasound/sonics 67, 249, 344, 474, 475, 1018, 1152, 1155, 1156

Utilization/demand 264, 338, 399, 415, 529, 639, 723, 878, 1137, 1138

V

VEGF 631

Viral diseases 409, 1192

Viral-phage 1195

Virology 170, 181, 307, 607, 749, 1192, 1247

Virulence 137, 300, 419

Viruses 297, 607, 608, 611, 612, 621, 752, 1192, 1246

Viscoelasticity 16

Vitamins 99, 1248

W

Wear 125, 244, 375, 376, 377, 378, 547, 582, 627, 858, 896, 1018, 1077

Whitening 915, 917

Wnt 159

Women 403

Workflow 413

Wound healing 6, 99, 266, 318, 326, 479, 481, 607, 613, 668, 713, 730, 758, 816, 1146, 1202, 1205, 1239, 1241, 1242

Y

Young adults 904

Z

Zirconia 656, 659, 843



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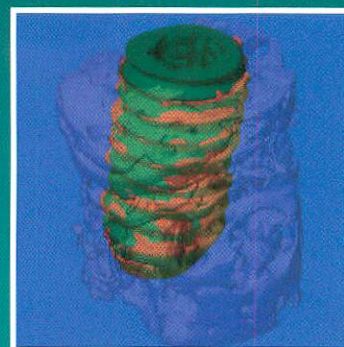
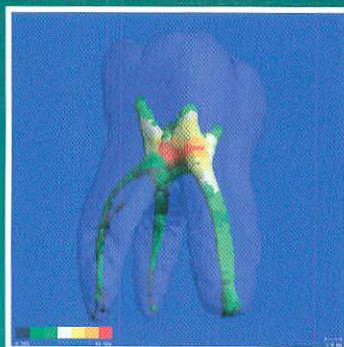
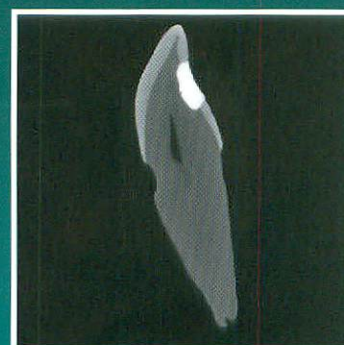
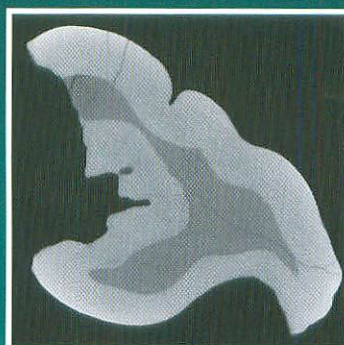
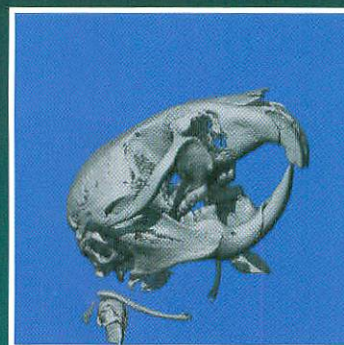
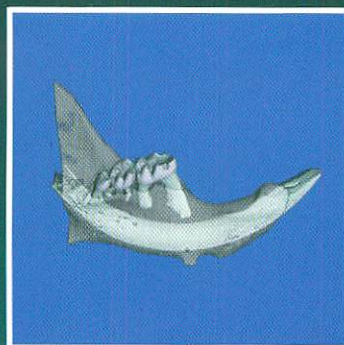
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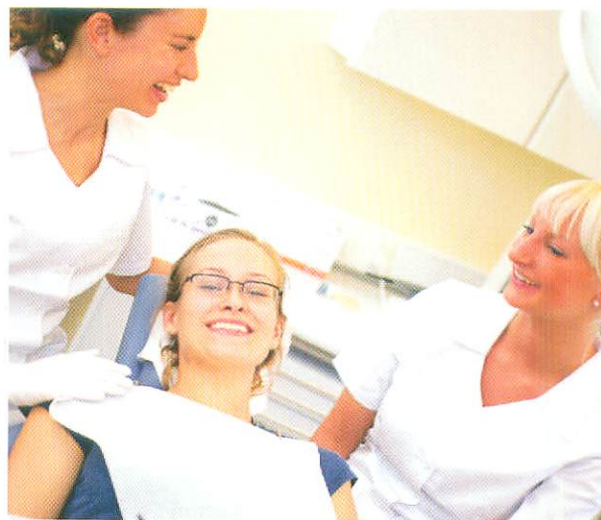


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