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APPOINTMENT HISTORY:

Assistant Professor of Chemistry, Wayne State University	1993-98
Associate Professor of Chemistry, Wayne State University	1998-02
Professor of Chemistry, Wayne State University	2002-05
Professor of Chemistry, University of Michigan	2005-present
Margaret and Herman Sokol Professor in Medicinal or Synthetic Chemistry	2013-present

AFFILIATIONS:

NIH Chemistry-Biology Interface Training Program Faculty, University of Michigan	2005-present
Interdepartmental Faculty in Medicinal Chemistry, University of Michigan	2006-present
NIH Pharmacological Sciences Training Program Faculty, University of Michigan	2007-present
Visiting Professor, Institute of Chemical Research of Catalonia (ICIQ), Tarragona, Spain	Winter 2011
NIH Chemistry-Biology Interface Training Program Director, University of Michigan	2013-present

EDUCATION

Baccalaureate: A.B. University of North Carolina, Chapel Hill, NC - 1987
(advisors Prof. J. L. Templeton and Prof. M. S. Brookhart)

Graduate: Ph.D. Colorado State - 1991
(advisor Prof. L. S. Hegedus)

Post Graduate (postdoctoral): American Cancer Society Fellowship, University of California-Irvine - 1991-1993
(advisor Prof. L. E. Overman)

PROFESSIONAL SOCIETY MEMBERSHIPS

American Chemical Society
Alpha Chi Sigma
Phi Lambda Upsilon
American Association for the Advancement of Science

HONORS AND AWARDS

National / International

Fellow of the American Association for the Advancement of Science (AAAS) 2011
Pfizer Michigan Green Chemistry Award, 2007
ACS Arthur C. Cope Scholar Award, 2001
Johnson and Johnson Focused Giving Grant, 2001
Camille Dreyfus Teacher Scholar Award, 1998
National Science Foundation CAREER Award, 1996-2000
3M Corporation New Faculty Award, 1996
American Cancer Society Postdoctoral Fellowship (University of California at Irvine), 1992-1993

Invited Lectureships

Bristol-Myers Squibb Lecturer, University of California at Irvine, August 9, 2012
Earl H. and Marian A. Beling Lecturer, Illinois Wesleyan, March 26, 2012
Lilly Symposium Speaker, Princeton University, February 7, 2012
4th Negishi-Brown Lectures, Purdue University, October 12-13, 2009
W. S. Johnson Symposium, Stanford University, October 3-4, 2008
Bristol-Myers Squibb Lecturer, Scripps Research Institute, November 20, 2006
Boehringer Ingelheim Distinguished Lecturer, Univ. of Sherbrooke, March 29-30, 2006
Pfizer Lecturer, University of Ottawa, February 18, 2005
Bristol-Myers Squibb Lecturer, University of California at Berkeley, November 13, 2004
Princeton Organic Symposium, October 1, 2004
Allergan Lectureship, University of California at Irvine, Nov. 13, 2002
1st Annual Caltech-Merck Organic Chemistry Symposium Lecturer, Pasadena, CA, 2002

PUBLICATIONS

A. Journal articles published

- (1) Hegedus, L.S.; Schultze, L.M.; Montgomery, J. "Synthesis and Properties of (O-Acyl imidato)carbene Complexes of Chromium, Molybdenum, and Tungsten," *Organometallics*, **1989**, 8, 2189-2195.
- (2) Montgomery, J.; Wieber, G.M.; Hegedus, L.S. "Synthesis of Optically Active Ene Carbamates from Chromium Carbene Complexes: Use in Palladium Assisted Synthesis of Relays to (+)-Thienamycin," *J. Am. Chem. Soc.*, **1990**, 112, 6255-6263.
- (3) Hegedus, L.S.; Montgomery, J.; Narukawa, Y.; Snustad, D.C. "A Contribution to the Confusion Surrounding the Reaction of Ketenes with Imines to Produce β -Lactams. A Comparison of Stereoselectivity Dependence of Ketene Generation: Acid Chloride/Triethyl Amine vs. Photolysis of Chromium Carbene Complexes," *J. Am. Chem. Soc.* **1991**, 113, 5784-5791.
- (4) Montgomery, J.; Overman, L.E. "Introduction of the 2-Phenylthioethyl, 2-Phenylsulfinyethyl, and 2,2-Di(phenylthio)ethyl Substituents into Cyclic Ketones," *J. Org. Chem.* **1993**, 58, 6476-6479.

Independent contributions are listed below.

- (5) Montgomery, J.; Savchenko, A. V.; Zhao, Y. "Convenient Preparation of Bis-Enones and Bis-Enoates From Cycloalkenes," *J. Org. Chem.* **1995**, 60, 5699-5701.

- (6) Montgomery, J.; Savchenko, A. V. "Nickel-Catalyzed Cyclizations of Alkynyl Enones with Concomitant Stereoselective Tri- or Tetrasubstituted Alkene Introduction" *J. Am. Chem. Soc.* **1996**, *118*, 2099-2100.
- (7) Savchenko, A. V.; Montgomery, J. "Organozinc / Nickel(0)-Promoted Cyclizations of Bis-Enones" *J. Org. Chem.* **1996**, *61*, 1562-1563.
- (8) Montgomery, J.; Seo, J.; Chui, H. M. P. "Competition Between Insertion and Conjugate Addition in Nickel-Catalyzed Couplings of Enones With Unsaturated Functional Groups" *Tetrahedron Lett.* **1996**, *37*, 6839-6842.
- (9) Montgomery, J.; Oblinger, E.; Savchenko, A. V. "Nickel-Catalyzed Organozinc-Mediated Carbocyclizations of Electron-Deficient Alkenes With Tethered Unsaturation" *J. Am. Chem. Soc.* **1997**, *119*, 4911-4920.
- (10) Oblinger, E.; Montgomery, J. "A New Stereoselective Method for the Preparation of Allylic Alcohols" *J. Am. Chem. Soc.* **1997**, *119*, 9065-9066.
- (11) Montgomery, J.; Chevliakov, M. V.; Briemann, H. L. "Nickel-Catalyzed Heterocycle Construction with Stereoselective Exocyclic Alkene Introduction" *Tetrahedron* **1997**, *53*, 16449-16462, Invited article, Symposium In Print on Synthetic Methods V.
- (12) Montgomery, J.; Seo, J. "Synthetic Studies and Mechanistic Observations in Nickel-Catalyzed Polycyclizations" *Tetrahedron* **1998**, *54*, 1131-1144, Invited article, Symposium In Print on Recent Developments in Organonickel Chemistry.
- (13) Fornicola, R. S.; Oblinger, E.; Montgomery, J. "A New Synthesis of α -Amino Acid Derivatives Employing Methyl Nitroacetate as a Versatile Glycine Template" *J. Org. Chem.* **1998**, *63*, 3528-3529.
- (14) Chevliakov, M. V., Montgomery, J. "Nickel and Palladium Catalysis in the Stereoselective Synthesis of Functionalized Pyrrolidines: Enantioselective Formal Synthesis of (+)- α -Allokainic Acid" *Angew. Chem., Int. Ed. Engl.* **1998**, *37*, 3144-3146.
- (15) Seo, J.; Chui, H. M. P.; Heeg, M. J.; Montgomery, J. "Novel Chemoselectivity and Stereochemical Aspects of Nickel-Catalyzed [2+2+2] Cycloadditions" *J. Am. Chem. Soc.* **1999**, *121*, 476-477.
- (16) Tang, X. Q., Montgomery, J. "Nickel Catalysis in the Stereoselective Preparation of Quinolizidine, Pyrrolizidine, and Indolizidine Alkaloids; Total Synthesis of (+)-Allopumiliotoxin 267A" *J. Am. Chem. Soc.* **1999**, *121*, 6098-6099.
- (17) Seo, J.; Fain, H.; Blanc, J. B.; Montgomery, J. "Nickel-Catalyzed Cyclizations of Enoate Equivalents; Application to the Synthesis of Angular Triquinanes" *J. Org. Chem.* **1999**, *64*, 6060-6065.
- (18) Fornicola, R. S.; Montgomery, J. "Convenient Preparation of Amino Acids With Two ^{13}C Labels" *Tetrahedron Lett.* **1999**, *40*, 8337-8341.
- (19) Chevliakov, M. V.; Montgomery, J. "A Stereodivergent Approach to (-)- α -Kainic Acid and (+)- α -Allokainic Acid Utilizing the Complementarity of Alkyne and Allene Cyclizations" *J. Am. Chem. Soc.* **1999**, *121*, 11139-11143.
- (20) Qi, X.; Montgomery, J. "A New Three-Component Synthesis of 1,3-Dienes" *J. Org. Chem.* **1999**, *64*, 9310-9313.
- (21) Montgomery, J. "Nickel-Catalyzed Cyclizations, Couplings, and Cycloadditions Involving Three Reactive Components" *Acc. Chem. Res.* **2000**, *33*, 467-473.
- (22) Chowdhury, S. K.; Amarasinghe, K. K. D.; Heeg, M. J.; Montgomery, J. "Diverse Reactivity Manifolds of Alkynyl Enone- and Alkynyl Enal-Derived Nickelacycles: Discovery of Nickel-Promoted [3+2] and [2+1] Cycloadditions" *J. Am. Chem. Soc.* **2000**, *122*, 6775-6776.
- (23) Tang, X. Q.; Montgomery, J. "Nickel-Catalyzed Preparation of Bicyclic Heterocycles: Total Synthesis of (+)-Allopumiliotoxin 267A, (+)-Allopumiliotoxin 339A, and (+)-Allopumiliotoxin 339B" *J. Am. Chem. Soc.* **2000**, *122*, 6950.

- (24) Amarasinghe, K. K. D.; Chowdhury, S. K.; Heeg, M. J.; Montgomery, J. "Structure of an η^1 Nickel *O*-Enolate: Mechanistic Implications in Catalytic Enyne Cyclizations" *Organometallics*, **2001**, *20*, 370.
- (25) Lozanov, M.; Montgomery, J. "Nickel-Catalyzed Preparation of Stereodefined Allylic Alcohols Using Silicon-Tethered Ynals" *Tetrahedron Lett.* **2001**, *42*, 3259.
- (26) Fornicola, R. S.; Subburaj, K.; Montgomery, J. "A New Entry to the Isogeissoschizoid Skeleton" *Org. Lett.* **2002**, *4*, 615.
- (27) Montgomery, J.; Amarasinghe, K. K. D.; Chowdhury, S. K.; Oblinger, E.; Seo, J.; Savchenko, A. V. "Nickel-Catalyzed Cyclizations of Alkynyl Enones and Alkynyl Enals" *Pure Appl. Chem.*, **2002**, *74*, 129.
- (28) Lozanov, M.; Montgomery, J. "A New Two-Step Four-Component Synthesis of Highly Functionalized Cyclohexenols By Sequential Nickel-Catalyzed Couplings" *J. Am. Chem. Soc.* **2002**, *124*, 2106.
- (29) Ni, Y.; Amarasinghe, K. K. D.; Montgomery, J. "Nickel-Catalyzed Cyclizations and Couplings With Vinylzirconium Reagents" *Org. Lett.* **2002**, *4*, 1743.
- (30) Amarasinghe, K. K. D.; Montgomery, J. "Enantioselective Total Synthesis of (+)-Testudinariol A Using a New Nickel-Catalyzed Allenyl Aldehyde Cyclization" *J. Am. Chem. Soc.* **2002**, *124*, 9366.
- (31) Montgomery, J.; Song, M. "Preparation of Homoallylic Alcohols by Nickel-Catalyzed Cyclizations of Allenyl Aldehydes" *Org. Lett.* **2002**, *4*, 4009.
- (32) Ni, Y.; Amarasinghe, K. K. D.; Ksebati, B.; Montgomery, J. "First Total Synthesis and Stereochemical Definition of Isodomoic Acid G." *Org. Lett.* **2003**, *5*, 3771.
- (33) Subburaj, K.; Montgomery, J. "A New Catalytic Conjugate Addition / Aldol Strategy That Avoids Preformed Metalated Nucleophiles," *J. Am. Chem. Soc.* **2003**, *125*, 11210.
- (34) Mahandru, G. M.; Skauge, A. R. L.; Chowdhury, S. K.; Amarasinghe, K. K. D.; Heeg, M. J.; Montgomery, J. "Cascade Cyclizations and Couplings Involving Nickel Enolates," *J. Am. Chem. Soc.* **2003**, *125*, 13481.
- (35) Mahandru, G. M.; Liu, G.; Montgomery, J. "Ligand-Dependent Scope and Divergent Mechanistic Behavior in Nickel-Catalyzed Reductive Couplings of Aldehydes and Alkynes," *J. Am. Chem. Soc.* **2004**, *126*, 3698.
- (36) Montgomery, J. "Nickel Catalyzed Reductive Cyclizations and Couplings," *Angew. Chem. Int. Ed.* **2004**, *43*, 3890.
- (37) Hratchian, H.; Chowdhury, S. K.; Gutiérrez-García, V. M.; Amarasinghe, K. K. D., Heeg, M. J.; Schlegel, H. B.; Montgomery, J. "A Combined Experimental and Computational Investigation of the Mechanism of Nickel-Catalyzed Three Component Addition Processes," *Organometallics* **2004**, *23*, 4636.
- (38) Ni, Y.; Montgomery, J. "An Efficient [4+2+1] Entry to Seven-Membered Rings," *J. Am. Chem. Soc.* **2004**, *126*, 11162.
- (39) Song, M.; Montgomery, J. "Nickel-Catalyzed Couplings and Cyclizations Involving Allenes, Aldehydes, and Organozincs," *Tetrahedron* **2005**, *61*, 11440. Invited article in Symposium-in-Print on Multicomponent Couplings Reactions.
- (40) Knapp-Reed, B.; Mahandru, G. M.; Montgomery, J. "Access to Macrocyclic Endocyclic and Exocyclic Allylic Alcohols by Nickel-Catalyzed Reductive Cyclizations of Ynals," *J. Am. Chem. Soc.* **2005**, *127*, 13156.
- (41) Ni, Y.; Montgomery, J. "Synthetic Studies and Mechanistic Insight in Nickel-Catalyzed [4+2+1] Cycloadditions" *J. Am. Chem. Soc.* **2006**, *128*, 2609.
- (42) Liu, L.; Montgomery, J. "Dimerization of Cyclopropyl Ketones and Crossed Reactions of Cyclopropyl Ketones with Enones as an Entry to Five Membered Rings" *J. Am. Chem. Soc.* **2006**, *128*, 5348.

- (43) Chaulagain, M. R.; Mahandru, G. M.; Montgomery, J. "Alkyne Hydrosilylation Catalyzed by Nickel Complexes of *N*-Heterocyclic Carbenes" *Tetrahedron* **2006**, *62*, 7560. Invited article in Symposium-in-Print on Nickel-Catalyzed Reactions.
- (44) ElDouhaibi, A. S.; Lozanov, M.; Montgomery, J. "A Multicomponent Approach to Substituted Benzenes Involving Sequential Nickel-Catalyzed Reactions," *Tetrahedron* **2006**, *62*, 11460. Invited article for MacMillan Young Investigator Award Symposium-in-Print.
- (45) Sa-ei, K.; Montgomery, J. "Highly Diastereoselective Preparation of *anti*-1,2-Diols by Catalytic Addition of Alkynylsilanes to α -Silyloxyaldehydes" *Org. Lett.* **2006**, *8*, 4441.
- (46) Herath, A.; Montgomery, J. "Catalytic Intermolecular Enal-Alkyne [3+2] Reductive Cycloadditions" *J. Am. Chem. Soc.* **2006**, *128*, 14030.
- (47) Chrovian, C. C.; Montgomery, J. "Surprising Role of Aryl Halides in Nickel-Catalyzed Reductive Aldol Reactions" *Org. Lett.* **2007**, *9*, 537.
- (48) Montgomery, J.; Sormunen, G. J. "Nickel-Catalyzed Reductive Couplings of Aldehydes and Alkynes" *Top. Curr. Chem.* **2007**, *279*, 1.
- (49) Herath, A.; Thompson, B. B.; Montgomery, J. "Catalytic Intermolecular Reductive Coupling of Enones and Alkynes," *J. Am. Chem. Soc.* **2007**, *129*, 8712.
- (50) Chaulagain, M. R.; Sormunen, G.; Montgomery, J. "New *N*-Heterocyclic Carbene Ligand and Its Application in Asymmetric Nickel-Catalyzed Aldehyde/Alkyne Reductive Couplings" *J. Am. Chem. Soc.* **2007**, *129*, 9568.
- (51) Liu, L.; Montgomery, J. "[3+2] Cycloaddition Reactions of Cyclopropyl Imines with Enones," *Org. Lett.* **2007**, *9*, 3885.
- (52) Herath, A.; Li, W.; Montgomery, J. "Fully Intermolecular Nickel-Catalyzed Three-Component Couplings Via Internal Redox," *J. Am. Chem. Soc.* **2008**, *130*, 469.
- (53) Chrovian, C. C.; Knapp-Reed, B.; Montgomery, J. "Total Synthesis of Aigialomycin D: Surprising Chemoselectivity Dependence on Alkyne Structure in Nickel-Catalyzed Cyclizations" *Org. Lett.* **2008**, *10*, 811.
- (54) Herath, A.; Montgomery, J. "Highly Chemoselective and Stereoselective Synthesis of *Z*-Enol Silanes," *J. Am. Chem. Soc.* **2008**, *130*, 8132.
- (55) Baxter, R. D.; Montgomery, J. "Dehydrogenative Cyclocondensation of Aldehydes, Alkynes, and Dialkylsilanes," *J. Am. Chem. Soc.* **2008**, *130*, 9662.
- (56) Anzai, Y.; Li, S.; Chaulagain, M. R.; Kinoshita, K.; Kato, F.; Montgomery, J.; Sherman, D. H. "Functional Analysis of MycCI and MycG, Cytochrome P450 Enzymes Involved in Biosynthesis of Mycinamicin Macrolide Antibiotics," *Chem. Biol.* **2008**, *15*, 950.
- (57) Buchan, Z. A.; Bader, S. J.; Montgomery, J. "Ketone Hydrosilylation with Sugar Silanes Followed by Intramolecular Aglycone Delivery: An Orthogonal Glycosylation Strategy" *Angew. Chem. Int. Ed.* **2009**, *48*, 4840.
- (58) Sa-ei, K.; Montgomery, J. "Diastereoselective Nickel-Catalyzed Reductive Couplings of Aminoaldehydes and Alkynylsilanes: Application to the Synthesis of *D*-erythro-Sphingosine," *Tetrahedron* **2009**, *65*, 6707, invited article for Overman Tetrahedron Prize special issue.
- (59) Li, S.; Chaulagain, M. R.; Knauff, A. R.; Podust, L. M.; Montgomery, J.; Sherman, D. H. "Selective Oxidation of Carbonyl C-H Bonds by an Engineered Macrolide P450 Monooxygenase" *Proc. Nat. Acad. Sci.* **2009**, *106*, 18463.
- (60) Li, W.; Herath, A.; Montgomery, J. "Evolution of Efficient Strategies for Enone-Alkyne and Enal-Alkyne Reductive Couplings," *J. Am. Chem. Soc.* **2009**, *131*, 17024.
- (61) Ni, Y.; Kassab, R. M.; Chevliakov, M. V.; Montgomery, J. "Total Syntheses of Isodomoic Acids G and H: An Exercise in Tetrasubstituted Alkene Synthesis," *J. Am. Chem. Soc.* **2009**, *131*, 17714.

- (62) Malik, H. A.; Chaulagain, M. R.; Montgomery, J. "Cooperativity of Regiochemistry Control Strategies in Reductive Couplings of Propargyl Alcohols and Aldehydes," *Org. Lett.* **2009**, *11*, 5734.
- (63) Malik, H. A.; Sormunen, G. J.; Montgomery, J. "A General Strategy for Regiocontrol in Nickel-Catalyzed Reductive Couplings of Aldehydes and Alkynes" *J. Am. Chem. Soc.* **2010**, *132*, 6304. Highlighted as News of the Week (*Chem. Eng. News.* **2010**, 88, (17) 10) and Editor's Choice (*Science*, **2010**, 328, 549).
- (64) Li, W.; Chen, N.; Montgomery, J. "Regioselective Nickel-Catalyzed Reductive Couplings of Enones and Allenes" *Angew. Chem. Int. Ed.* **2010**, *49*, 8712-8716.
- (65) Phillips, J. H.; Montgomery, J. "Mechanistic Insights in Nickel-Catalyzed Cycloisomerizations" *Org. Lett.* **2010**, *12*, 4556-4559.
- (66) Baxter, R. D.; Montgomery, J. "Mechanistic Study of Nickel-Catalyzed Ynal Reductive Cyclizations through Kinetic Analysis" *J. Am. Chem. Soc.* **2011**, *133*, 5728-5731.
- (67) ElDouhaibi, A. S.; Kassab, R. M.; Song, M.; Montgomery, J. "Nickel-Catalyzed Cyclizations of Enoates and Chiral Allenes: An Approach to Domoic Acid" *Chem. Eur. J.* **2011**, *17*, 6326-6329.
- (68) Liu, P.; Montgomery, J.; Houk, K. N. "Ligand Steric Contours to Understand the Effects of *N*-Heterocyclic Carbene Ligands on the Reversal of Regioselectivity in Ni-Catalyzed Reductive Couplings of Alkynes and Aldehydes" *J. Am. Chem. Soc.* **2011**, *133*, 6956-6959.
- (69) Thompson, B. B.; Montgomery, J. "Enone-Alkyne Reductive Coupling: a Versatile Entry to Substituted Pyrroles" *Org. Lett.* **2011**, *13*, 3289-3291.
- (70) Jenkins, A. D.; Herath, A.; Song, M.; Montgomery, J. "Synthesis of Cyclopentenols and Cyclopentenones via Nickel-Catalyzed Reductive Cycloaddition" *J. Am. Chem. Soc.* **2011**, *133*, 14460-14466.
- (71) Montgomery, J. "High-Throughput Discovery of New Chemical Reactions" *Science* **2011**, *333*, 1387-1388 (Perspective).
- (72) Shareef, A.-R.; Sherman, D. H.; Montgomery, J. "Nickel-Catalyzed Regiodivergent Approach to Macrolide Motifs" *Chem. Sci.* **2012**, *3*, 892-895.
- (73) Li, W.; Montgomery, J. "Ligand-Guided Pathway Selection in Nickel-Catalyzed Couplings of Enals and Alkynes" *Chem. Commun.* **2012**, *48*, 1114-1116, invited themed issue on "New Advances in Catalytic C-C Bond Formation via Late Transition Metals."
- (74) Lage, M. L.; Bader, S. J.; Sa-ei, K.; Montgomery, J. "Chemoselective Hydrosilylation of Hydroxyketones" *Tetrahedron* **2013**, *69*, 5609-5613, Special issue for Melanie Sanford's receipt of TYI prize (PMCID: PMC3752928).
- (75) Partridge, K. M.; Bader, S. J.; Buchan, Z. A.; Taylor, C. E.; Montgomery, J. "A Streamlined Strategy for Aglycone Assembly and Glycosylation" *Angew. Chem. Int. Ed.* **2013**, *52*, 13647-13650.
- (76) Miller, Z. D.; Li, W.; Belderrain, T. R.; Montgomery, J. "Regioselective Allene Hydrosilylation Catalyzed by NHC Complexes of Nickel and Palladium" *J. Am. Chem. Soc.* **2013**, *135*, 15282-15285 (PMCID: PMC3752928).
- (77) Chiou, K. C.; Negretti, S.; Kells, P. M.; Narayan, A. R.; Podust, L. M.; Montgomery, J.; Sherman, D. H. "Regioselective C-H Bond Oxidation by an Engineered P450 Monooxygenase Employing Simple Removable Directing Groups" *J. Am. Chem. Soc.* **2014**, *136*, 4901-4904.

B. Chapters published:

- (1) Montgomery, J. "Organometallic Complexes of Nickel" in *Science of Synthesis*, Trost, B. M.; Lautens, M., Eds.; Thieme: Stuttgart, **2001**; Vol. 1, pp. 11-62.

- (2) Malik, H. A.; Baxter, R. D.; Montgomery, J. "Nickel-Catalyzed Reductive Couplings and Cyclizations" in *Catalysis Without Precious Metals*, Bullock, R. M., Ed.; Wiley-VCH: Weinheim, Germany, **2010**, pp. 181-212.
- (3) Montgomery, J. "Organonickel Chemistry" to appear in *Organometallics in Synthesis: A Manual*, Vol 5. Lipshutz, B. H. (Ed.) Wiley, Chichester **2013**, in press.

MEETINGS AND SYMPOSIA

- (1) 209th ACS National Meeting, San Francisco, CA, April 5, 1995 (short talk).
- (2) Gordon Research Conference on Natural Products Chemistry, Henniker, New Hampshire, July 2-7, 1995 (poster).
- (3) 210th ACS National Meeting, Chicago, IL, August 24, 1995 (short talk).
- (4) Gordon Research Conference on Stereochemistry, Newport, Rhode Island, June 9-14, 1996 (short talk).
- (5) Gordon Research Conference on Organic Reactions and Processes, New Hampton, New Hampshire, July 14-19, 1996 (poster).
- (6) 30th ACS Great Lakes Regional Meeting, Chicago, IL, May 29, 1997, Symposium on Catalysis in Asymmetric Synthesis (invited lecture).
- (7) 80th Canadian Society for Chemistry Conference and Exhibition, Windsor, Ontario, June 2, 1997, Symposium on Organic Chemistry of Organometallics (short talk).
- (8) Gordon Research Conference on Heterocyclic Compounds, Newport, Rhode Island, June 29 - July 4, 1997 (short talk).
- (9) Gordon Research Conference on Heterocyclic Compounds, Newport, Rhode Island, June 29 - July 4, 1997 (poster).
- (10) Gordon Research Conference on Reactions and Processes, Henniker, New Hampshire, August 3-8, 1997 (poster).
- (11) 16th International Congress of Heterocyclic Chemistry, Bozeman, Montana, August 10-15, 1997 (short talk).
- (12) 215th ACS National Meeting, Dallas, Texas, March 29, 1998, (invited lecture, symposium for ACS Organometallic Award to Negishi).
- (13) Gordon Research Conference on Organic Reactions and Processes, Henniker, New Hampshire, July 12-17, 1998 (short talk).
- (14) NSF Workshop on Organic Synthesis, July 15-19, 1999.
- (15) Gordon Research Conference on Organometallic Chemistry, Newport, Rhode Island, July 25-30, 1999 (short talk).
- (16) Mid-Atlantic Regional Meeting (MARM) Wilmington, Delaware, May 15, 2000 (invited lecture).
- (17) Midwest Regional ACS meeting, St. Louis, MO October 27, 2000 (invited lecture).
- (18) Pacifichem 2000, Symposium on New Strategies to Transition Metal Catalyzed or Mediated Organic Synthesis, Honolulu, Hawaii, December 17, 2000 (invited lecture).
- (19) IUPAC International Symposium on Organometallic Chemistry Directed Towards Organic Synthesis (OMCOS), Taipei, Taiwan, July 22-26, 2001 (invited lecture).
- (20) Gordon Research Conference on Natural Products Chemistry, Tilton School, July 29-August 2, 2001 (invited lecture).
- (21) Award Address for receipt of Arthur C. Cope Scholar Award, 222nd ACS National Meeting, Chicago, IL, August 28, 2001.
- (22) Merck / Caltech Organic Chemistry Symposium, Pasadena, CA March 23, 2002 (invited lecture).
- (23) CU-Roche Colorado Symposium on Synthetic Organic Chemistry, Boulder, CO, June 5-7, 2002 (invited lecture).

- (24) Gordon Research Conference on Heterocyclic Chemistry, Newport, RI, July 7-12, 2002 (invited lecture).
- (25) L. E. Overman 60th Birthday Symposium, Irvine, CA, March 28-30, 2003 (invited lecture).
- (26) L. S. Hegeudus 60th Birthday Symposium, Fort Collins, CO, May 10, 2003 (invited lecture).
- (27) 227th ACS National Meeting, Symposium on "Half-a-Century of Organozirconium Chemistry" Anaheim, CA, March 28 – April 1, 2004 (invited lecture).
- (28) International Conference on New Directions in Chemical Synthesis, Edinburgh, Scotland, July 27-31, 2004 (invited lecture).
- (29) 2004 Princeton Organic Symposium of the ACS, October 1, 2004 (invited lecture).
- (30) Third International Symposium on Integrated Synthesis (ISIS-3), Osaka, Japan, September 30 - October 1, 2005 (invited lecture).
- (31) Pacifichem 2005, Symposium on Recent Advances in Nickel and Palladium-Catalyzed Reactions, Honolulu, Hawaii, December 15, 2005 (invited lecture).
- (32) Johnson & Johnson 25th Anniversary Focused Giving Symposium, November 28, 2006 (invited lecture)
- (33) 233rd ACS National Meeting, Chicago, IL, March 22, 2007, (invited lecture, symposium for ACS Elias J. Corey Award to Krische).
- (34) Modern Synthetic Methods and Chiral USA, Philadelphia, PA, July 12, 2007 (invited lecture)
- (35) Institute of Chemical Research of Catalonia (ICIQ) Summer School, Tarragona, Spain, July 25-26, 2007 (invited lectures)
- (36) 29th Gulf Coast Chemistry Conference, Pensacola, FL, August 11, 2007 (invited lecture)
- (37) 9th Anglo-Norman Organic Chemistry Colloquium, Le Havre, Normandy, France, April 3-5, 2008 (invited lecture)
- (38) Symposium on Green Chemistry For Catalytic C-C Bond Formation: USA - Japan Young Chemist Exchange, University of Texas at Austin, July 11-12, 2008 (invited lecture)
- (39) W. S. Johnson Symposium, Stanford University, October 3-4, 2008 (invited lecture)
- (40) Tenth International Symposium on the Synthesis and Applications of Isotopes and Isotopically Labelled Compounds, Chicago, IL, June 16, 2009 (invited lecture)
- (41) IUPAC International Symposium on Organometallic Chemistry Directed Towards Organic Synthesis (OMCOS), Glasgow, Scotland, July 26-30, 2009 (invited lecture)
- (42) 4th Negishi Brown Lectures Symposium, Purdue University, Oct 12-13, 2009
- (43) 239th ACS National Meeting, Chicago, IL, March 22, 2010, (invited lecture, symposium for ACS H. C. Brown Award to Overman)
- (44) University of Michigan Chemistry Biology Interface Symposium, April 2, 2010
- (45) 30th Anniversary Meeting of the Organometallic Division of the Royal Spanish Society, Madrid, Spain (invited lecture) May 24, 2011
- (46) 94th Canadian Chemistry Conference, Montreal, Canada, invited lecture, Keith Fagnou Memorial Symposium, invited lecture, June 6, 2011
- (47) 12th Tetrahedron Symposium on Challenges in Organic and Bioorganic Chemistry, Sitges, Spain, invited lecture, June 21-24, 2011
- (48) Chicago Organic Symposium, University of Illinois at Chicago, April 30, 2012
- (49) 246th ACS National Meeting, Indianapolis, IN, (invited lecture, symposium on Non-Precious Metal Catalysis: Opportunities and Impacts), September 8-9, 2013
- (50) French American Chemical Society (FACS XV), Avignon, France, June 2, 2014
- (51) Gordon Research Conference on Natural Products, July 20-25, 2014 (invited lecture)

OTHER INVITED SEMINARS OR LECTURES

- (1) University of Nevada at Reno, Department of Chemistry, November 27, 1992
- (2) University of Illinois at Chicago, Department of Chemistry, December 3, 1992

- (3) Wayne State University, Department of Chemistry, December 7, 1992
- (4) The Ohio State University, Department of Chemistry, December 14, 1992
- (5) University of Nebraska, Department of Chemistry, December 17, 1992
- (6) The Johns Hopkins University, Department of Chemistry, January 11, 1993
- (7) University of California at San Diego, Department of Chemistry, January 15, 1993
- (8) Oakland University, Department of Chemistry, January 17, 1996
- (9) Parke-Davis Pharmaceutical Research, Ann Arbor, Michigan, September 17, 1996
- (10) Glaxo-Wellcome Pharmaceuticals, NC, September 26, 1996
- (11) University of Toronto, Department of Chemistry, September 30, 1996
- (12) University of Windsor, Department of Chemistry, November 15, 1996
- (13) Searle Corp., Skokie, IL, February 10, 1997
- (14) Wayne State University, Department of Chemistry, March 24, 1997
- (15) Eli Lilly Corp., Indianapolis, IN, July 24, 1997
- (16) Eastern Michigan University, Department of Chemistry, September 15, 1997
- (17) Emory University, Department of Chemistry, September 17, 1997
- (18) University of California at San Diego, Department of Chemistry, October 6, 1997
- (19) California Institute of Technology, Department of Chemistry, October 7, 1997
- (20) University of California at Irvine, Department of Chemistry, October 8, 1997
- (21) University of California at Los Angeles, Department of Chemistry, October 9, 1997
- (22) University of California at Riverside, Department of Chemistry, October 10, 1997
- (23) University of Notre Dame, Department of Chemistry, October 15, 1997
- (24) Northwestern University, Department of Chemistry, October 23, 1997
- (25) SmithKline Beecham Pharmaceuticals, November 4, 1997
- (26) University of Pennsylvania, November 5, 1997
- (27) Indiana University, November 10, 1997
- (28) Northern Michigan University, November 13, 1997
- (29) Michigan Tech, November 14, 1997
- (30) Boston College, Department of Chemistry, December 2, 1997
- (31) Yale University, Department of Chemistry, December 3, 1997
- (32) University of Chicago, Department of Chemistry, December 12, 1997
- (33) Texas A&M, Department of Chemistry, January 29, 1998
- (34) Bristol Myers Squibb, February 23, 1998
- (35) Michigan State University, Department of Chemistry, March 18, 1998
- (36) 3M Pharmaceuticals, St. Paul, Minnesota, March 20, 1998
- (37) Eastman Kodak, April 2, 1998
- (38) University of Rochester, Department of Chemistry, April 3, 1998
- (39) West Virginia University, Department of Chemistry, May 6, 1998
- (40) University of Pittsburgh, Department of Chemistry, May 7, 1998
- (41) Pennsylvania State University, Department of Chemistry, May 8, 1998
- (42) Merck Process Research, May 15, 1998
- (43) Florida State University, September 1, 1998
- (44) University of Delaware, September 16, 1998
- (45) Ohio State University, October 1, 1998
- (46) Wayne State University, Department of Pharmaceutical Sciences, October 14, 1998
- (47) Kent State, October 29, 1998
- (48) Pfizer Central Research, Groton, CT, November 19, 1998
- (49) University of Missouri-Columbia, December 11, 1998
- (50) Washington University at St. Louis, January 21, 1999
- (51) North Dakota State University, February 4, 1999.
- (52) University of Minnesota, February 5, 1999
- (53) Colorado State University, February 22, 1999

- (54) University of Colorado, February 23, 1999
- (55) SUNY Stony Brook, March 4, 1999
- (56) Pharmacia and Upjohn, Kalamazoo, MI, March 11, 1999
- (57) Wake Forest University, March 25, 1999
- (58) Virginia Polytechnic Institute, March 26, 1999
- (59) Bowling Green State University, March 31, 1999
- (60) Merck, West Point, April 6, 1999
- (61) University of California at Berkeley, October 12, 1999
- (62) Stanford University, October 13, 1999
- (63) Indiana State University, October 26, 1999.
- (64) University of Michigan, October 28, 1999
- (65) University of Illinois at Chicago, February 15, 2000
- (66) North Carolina State University, April 12, 2000
- (67) Duke University, April 13, 2000
- (68) University of North Carolina at Chapel Hill, April 14, 2000
- (69) Wyeth-Ayerst, Princeton, NJ, August 2, 2000
- (70) Indiana University Purdue University of Indianapolis, September 13, 2000
- (71) Bristol-Myers Squibb, October 16, 2000
- (72) Sepracor, October 31, 2000
- (73) Albion College, December 1, 2000
- (74) Western Michigan University, February 5, 2001
- (75) Purdue University, February 20, 2001
- (76) Dow AgroSciences, Indianapolis, IN, May 7, 2001
- (77) Schering Plough, June 13, 2001
- (78) Abbott Laboratories, Chicago, Illinois, June 20, 2001
- (79) Chulabhorn Research Institute, Bangkok, Thailand, July 19, 2001
- (80) Wyeth Ayerst, Cambridge, Massachusetts, September 11, 2001
- (81) Array Biopharma, Boulder, CO February 8, 2002
- (82) Brigham Young University, March 20, 2002
- (83) University of Utah, March 21, 2002
- (84) University of California at Riverside, May 3, 2002
- (85) University of Western Ontario, October 23, 2002
- (86) Allergan Lectureship, University of California at Irvine, Nov. 13, 2002
- (87) Albany Molecular, February 7, 2003
- (88) Wayne State University, Frontiers in Chemistry seminar, February 10, 2003
- (89) UC-San Diego, February 17, 2003
- (90) Scripps Research Institute, February 18, 2003
- (91) Johnson and Johnson, LaJolla, CA, March 26, 2003
- (92) Merck Process Research, May 15, 2003
- (93) Wyeth Ayerst, Pearl River, NY, May 16, 2003
- (94) Indiana University, May 21, 2003
- (95) Hope College, September 18, 2003
- (96) Calvin College, September 19, 2003
- (97) University of British Columbia, October 6, 2003
- (98) Colorado State University, October 27, 2003
- (99) University of Toledo, November 5, 2003.
- (100) Oregon State University, November 17, 2003
- (101) University of Oregon, November 18, 2003
- (102) Johnson and Johnson, Raritan, NJ, December 1, 2003
- (103) Amgen, Thousand Oaks, CA, February 3, 2004
- (104) Andrews University, March 4, 2004

- (105) Michigan State University, September 1, 2004
- (106) Ligand Pharmaceuticals, November 2, 2004
- (107) Stanford University, November 3, 2004
- (108) BristolMyers Squibb Lecture, University of California at Berkeley, Nov. 13, 2004
- (109) Northern Illinois University, January 24, 2005
- (110) Pfizer Lecturer, University of Ottawa, February 18, 2005
- (111) Abbott Laboratories, February 24, 2005
- (112) University of Chicago, February 25, 2005
- (113) Genentech, April 11, 2005
- (114) University of Arizona, May 5, 2005
- (115) Pfizer, Groton, June 2, 2005
- (116) Amgen - Cambridge, June 3, 2005
- (117) Yale University, September 14, 2005
- (118) Osaka University, Toyonaka campus, September 29, 2005
- (119) Osaka University University, Suita campus, October 3, 2005
- (120) Nagasaki University, October 4, 2005
- (121) Kyoto University, October 6, 2005
- (122) Hokkaido University, October 7, 2005
- (123) Albany Molecular, Syracuse, November 10, 2005
- (124) York University, November 17, 2005
- (125) University of Michigan, Dept. of Medicinal Chemistry, January 12, 2006
- (126) Boehringer Ingelheim Distinguished Lecturer, Sherbrooke University, March 29, 2006
- (127) Boehringer Ingelheim, Montreal, CA March 30, 2006
- (128) SUNY Buffalo, student-invited seminar, September 8, 2006
- (129) University of Michigan, Center for Chemical Genomics, October 20, 2006
- (130) Scripps Research Institute, Bristol-Myers Squibb Lecturer. Nov. 20, 2006
- (131) Hoffman La Roche, Nutley, NJ, January 25, 2007
- (132) UT Southwestern Medical Center, January 30, 2007
- (133) Boston College, February 20, 2007
- (134) Universidad de Santiago de Compostela, Spain, July 23, 2007
- (135) Oakland University, September 26, 2007
- (136) Roche Palo Alto, November 9, 2007
- (137) The Ohio State University, March 13, 2008
- (138) University of Minnesota, October 23, 2008
- (139) University of Wisconsin Eau Claire, October 24, 2008
- (140) Washington State University, November 10, 2008
- (141) Emory University, December 10, 2008
- (142) Michigan State (inorganic), January 26, 2009
- (143) Columbia University, March 5, 2009
- (144) Calvin College, November 19, 2009
- (145) Hope College, November 20, 2009
- (146) Northwestern University, January 21, 2010
- (147) McGill University, April 20, 2010
- (148) University of Montreal, April 21, 2010
- (149) University of Rochester, September 15, 2010
- (150) University of Wisconsin, Pharmaceutical Sciences, October 15, 2010
- (151) Institut Catala d'Investigacio Quimica (ICIQ), Tarragona, Spain, January 21, 2011
- (152) University of Granada, Granada, Spain, February 21, 2011
- (153) Instituto de Investigaciones Quimicas (CSIC), Sevilla, Spain, February 24, 2011
- (154) University of Huelva, Huelva, Spain, February 25, 2011
- (155) Universidad Complutense, Madrid, Spain, April 6, 2011

- (156) Universidad Autonoma, Madrid, Spain, April 7, 2011
- (157) Instituto de Quimica Organica General (CSIC), Madrid, Spain, April 8, 2011
- (158) Universitat de Barcelona, Dept. of Organic Chemistry, May 5, 2011
- (159) Universidad del Pais Vasco, San Sebastian, Spain, May 9, 2011
- (160) University of Alicante, Alicante, Spain, May 26, 2011
- (161) University of Castellon, Castellon, Spain, May 27, 2011
- (162) Universitat de Barcelona, Dept. of Pharmacology, May 31, 2011
- (163) Institut de Recerca Biomedica, Dept. of Chemistry and Molecular Pharmacology, Barcelona, Spain, June 16, 2011
- (164) Saginaw Valley State University, January 31, 2012
- (165) Princeton University, Lilly Symposium Speaker, February 6, 2012
- (166) IUPUI, Indianapolis, IN, March 21, 2012
- (167) Illinois Wesleyan, March 26, 2012
- (168) Abbott Laboratories, Chicago, IL July 31, 2012
- (169) University of California at Irvine, Bristol-Myers Squibb Lecturer, August 9, 2012
- (170) Miami of Ohio, Oxford, OH, April 18, 2013
- (171) Amgen, Cambridge, MA June 11, 2013
- (172) Georgia State University, Atlanta, GA, April 25, 2014
- (173) Hong Kong University of Science and Technology, May 20, 2014
- (174) Hong Kong University, May 21, 2014