

**Curriculum Vitae**  
*M. Christina White, Associate Professor of Chemistry*  
University of Illinois

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Work address: University of Illinois  
Dept. of Chemistry  
Roger Adams Laboratory; Box 58-5  
600 South Mathews Avenue  
Urbana, IL 61801

Tel: 217 333 6173  
Fax: 217 244 8024  
email: [white@scs.uiuc.edu](mailto:white@scs.uiuc.edu)

Web site <http://www.scs.uiuc.edu/white>

## Appointments

Assistant Professor  
Dept. of Chemistry  
University of Illinois, Urbana-Champaign  
July 2005 to 2008

Assistant Professor  
Dept. of Chemistry & Chemical Biology  
Harvard University, Cambridge  
2002-2005

Associate Professor  
Dept. of Chemistry  
University of Illinois, Urbana-Champaign  
August 2009

## Education

NIH Postdoctoral Fellow  
Dept. of Chemistry and Chemical Biology  
Harvard University  
**Advisor:** Professor Eric N. Jacobsen  
January 1999-2002

Dept. of Biology  
Johns Hopkins University  
**Advisor:** Christian B. Anfinsen  
August 1992-December 1993

Ph.D. in Organic Chemistry  
ACS Predoctoral Fellow  
Dept. of Chemistry  
Johns Hopkins University  
**Advisor:** Professor Gary H. Posner  
January 1994-December 1998

B.A. with highest honors in Biochemistry  
Smith College  
**Advisor:** Professor Stuart Rosenfeld  
August 1988-1992

## Awards

- Cope Scholar Award (2009)
- Roche Excellence in Chemistry Award (2009)
- Abbott Young Investigator Award (2008)
- AstraZeneca Excellence in Chemistry Award (2008)
- Camille Dreyfus Teacher-Scholar Award (2008)
- Boehringer Ingelheim Pharmaceuticals New Investigator Award (2008)
- Amgen Young Investigator Award (2008)
- Sanofi Aventis "Visions in Chemistry" (2008)
- Pfizer Award for Creativity in Organic Chemistry (2008-2009)

- BMS Unrestricted “Freedom to Discover” Grant (2008-2009)
- Eli Lilly Grantee Award (2007-2009)
- Alfred P. Sloan Research Fellow (2008-2010)
- Fellow, UIUC Center for Advanced Study (2006)
- NSF CAREER Award (2006-2010)
- Camille and Henry Dreyfus New Faculty Award (2002-2007)
- National Institutes of Health Postdoctoral Fellowship (1999-2002)
- American Chemical Society, Division of Medicinal Chemistry Predoctoral Fellowship (1997-1998)
- Sarah and Adolph Roseman Award for Outstanding Achievement in Chemistry, JHU (1997)
- Sigma Xi, Smith College (1992)
- First Group Scholar, Smith College (1992)
- Ford Foundation Summer Research Grant, Smith College (1991)
- Dean’s List, Smith College (1988-1992)

### Publications (As a Principal Investigator)

- Chen, M.S.; White, M.C. “Combined Effects on Selectivity in Fe-Catalyzed Methylene Oxidation.” *Science* **2010**, *327*, 566.
- Stang, E.M.; White, M.C. “Total Synthesis and Study of 6-deoxyerythronolide B via Late-stage C—H Oxidation”. *Nature Chemistry*, **2009**, *1*, 547.
  - For a highlight see: News of the Week, Stu Borman: “New Approach to a Classic Structure.” *Chem. & Eng. News* **2009**, *87*(36), 12.
  - Phillip Broadwith: “C—H Oxidation Proves its Worth.” *Chemistry World*, August 30, 2009.
  - Huw Davies: “Expanding the Art of Synthesis.” *Nature Chemistry* **2009**, *1*, 519.
- Rice, G.T.; White, M.C. “Allylic C—H Amination for the Preparation of 1,3-Amino Alcohol Motifs.” *J. Am. Chem. Soc.* **2009**, *131*, 11707.
- Reed, S.A.; Mazzotti, A.R.; White, M.C. “A Catalytic, Bronsted Base Strategy for Intermolecular Allylic C—H Amination.” *J. Am. Chem. Soc.* **2009**, *131*, 11701.
- Vermeulen, N.V.; Chen, M.S.; White, M.C. “The Fe(PDP)-Catalyzed Aliphatic C—H Oxidation: A Slow Addition Protocol. *Tetrahedron: Symposium In Print Special Issue for Justin Du Bois*, **2009**, *65*, 3078.
- Young, A.Y.; White, M.C. “Catalytic Intermolecular Allylic C—H Alkylation.” *J. Am. Chem. Soc.* **2008**, *130*, 14090.
  - For a highlight see: Science and Technology Concentrate “Direct Allylic C—H Alkylation Solved.” *Chem. & Eng. News* **2008**, *86*(41), 29.
- Delcamp, J.H.; Brucks, A.P.; White, M.C. “A General and Highly Selective Chelate-Controlled Intermolecular Oxidative Heck Reaction.” *J. Am. Chem. Soc.* **2008**, *130*, 11270.
- Covell, D.C.; White, M.C. “A Chiral Lewis Acid Strategy for Enantioselective Allylic C—H Oxidation.” *Angew. Chem., Int. Ed. Engl.* **2008**, *47*, 6448.
  - For a highlight see: Lautens, M.; Aureggi, V. “Asymmetric Allylic C—H Oxidation of Terminal Olefins”. *Synfacts*, **2008**, 1059.
- Reed, S.A.; White, M.C. “Catalytic Intermolecular Linear Allylic C—H Amination via Heterobimetallic Catalysis.” *J. Am. Chem. Soc.*, **2008**, *130*, 3316.
  - For commentary see: Science and Technology Concentrate “Revised Amination Skips Olefin Tether.” *Chem. & Eng. News* **2008**, *86*(11), 42.
  - For a highlight see: Yamamoto, H.; Naodovic, N. “Heterobimetallic Catalyst for Intermolecular C—H Amination”. *Synfacts*, **2008**, 603.

- For a highlight see: “Allylic Amination by C—H Activation.” *Nachrichten aus der Chemie*, **2008**, *5*, 508.
16. Chen, M.S.; White, M.C. “A Predictably Selective Aliphatic C—H Oxidation Reaction for Complex Molecule Synthesis.” *Science*, **2007**, *318*, 783-787.
    - This paper has been included among advances in Streamlined Organic Synthesis (“Doing More with Less”) in *Science’s* “Breakthrough of the Year” Special Issue, **2007**, *318*, 1848.
    - This paper has been included among “Highlights of 2007” in *Chem. & Eng. News Highlights* **2007**, *85*(52), 17-18 and “Cutting-Edge Chemistry 2007” in *Chemistry World Highlights* Special Issues, **2008**, *5*(1), 24-37.
    - For perspectives on this work see: R.H. Crabtree, “No Protection Required.” *Science*, **2007**, *21*, 7; M. Christmann, “Selective Oxidation of Aliphatic C—H Bonds in the Synthesis of Complex Molecules.” *Angew. Chem. Int. Ed.* **2008**, *47*, 2740; Stephen K. Ritter, “Iron’s Star Rising.” *Chem. & Eng. News* **2008**, *86*(30), 53.
    - For highlights see: Jyllian Kemsley, “Catalyst Oxidizes Selectively.” *Chem. Eng. News* **2007**, *85*(45), 8.; “Green Cleaver.” *Nature* **2007**, *450* (8), 139.; Patrick Walter, “Green Catalyst Could Clean Up in Drug Production.” *Chemistry & Industry* **2007**, *21*, 7.; Richard Van Noorden, “Step Change for Organic Synthesis.” *Chemistry World*, **2007**, *4*(12), 25.; Kevin Bullis, “Drugs That are Easier on the Environment.” *Technology Review*, **2008**, January/February issue, 85.
  15. Fraunhofer, K.J.; White, M.C. “syn-1,2-Amino Alcohols via Diastereoselective Allylic C—H Amination.” *J. Am. Chem. Soc.* **2007**, *129*, 7274-7276.
    - For a highlight see: News of the Week, Stu Borman, “Amination Advance: New Reaction is First to Catalytically Convert Allylic C-H to C-N.” *Chem. Eng. News*, **2007**, *85*(23), 7.
    - This paper has been included among “Highlights of 2007” in *Chem. & Eng. News* **2007**, *85*(52), 17-18.
    - This article is the most-accessed web article in *J. Am. Chem. Soc.* in April-June **2007**.
  14. Delcamp, J.H.; White, M.C. “Sequential Hydrocarbon Functionalization: Allylic C—H Oxidation/Vinylic C—H Arylation.” *J. Am. Chem. Soc.* **2006**, *128*, 15076-15077.
    - For perspectives on this work see: *Annu. Rep. Prog. Chem., Sect. B*, **2007**, *103*, 35-46.
  13. Covell, D.J.; Vermeulen, N.A.; Labenz, N.A.; White, M.C. “Polyol Synthesis via Hydrocarbon Oxidation: De Novo Synthesis of *L*-Galactose.” *Angew. Chem., Int. Ed. Engl.* **2006**, *45*, 8217-8220.
  12. Fraunhofer, K.J.; Prabakaran, N.; Sirios, L.E.; White, M.C. “Macrolactonization via Hydrocarbon Oxidation.” *J. Am. Chem. Soc.* **2006**, *128*, 9032-9033.
  11. Chen, M.S.; Prabakaran, N.; Labenz, N.; White, M.C. “Serial Ligand Catalysis: A Highly Selective Allylic C-H Oxidation.” *J. Am. Chem. Soc.* **2005**, *127*, 6970-6971.
    - For a highlight see: Science and Technology Concentrate “Catalysis with Serial Ligands.” *Chem. & Eng. News* **2005**, *83* (18), 31.
  10. Fraunhofer, K. J.; Bachovchin, D.A.; White, M.C. “Hydrocarbon Oxidation vs. C-C Bond Forming Approaches for Efficient Syntheses of Oxygenated Molecules.” *Org. Lett.* **2005**, *7*, 223-226.
    - This article was selected by the *Organic Letters* Editorial Board as One of the 9 best *Organic Letters* articles in 2004.
    - For perspectives on this work see: R.H. Hoffmann, “Protecting-Group-Free Synthesis.” *Synthesis* **2006**, 3531.
  9. Chen, M.S.; White, M.C. “A Sulfoxide-Promoted, Catalytic Method for the Regioselective Synthesis of Allylic Acetates from Monosubstituted Olefins via C-H Oxidation.” *J. Am. Chem. Soc.* **2004**, *126*, 1346-1347.

## Publications (From Postdoc and Ph.D.)

8. White, M.C.; Doyle, A.G.; Jacobsen, E.N. "A Synthetically Useful, Self-Assembling MMO Mimic System for Catalytic Alkene Epoxidation with Aqueous H<sub>2</sub>O<sub>2</sub>." *J. Am. Chem. Soc.* **2001**, *123*, 7194-7195.
  - For a highlight see: "News of the Week" *Chem. & Eng. News*, **2001**, *79*, 9.
  - This paper has been included among "Highlights of 2001" in *Chem. & Eng. News Highlights* **2001**, *79*, 51.
7. White, M.C.; Burke, M.D.; Peleg, S.; Brem, H.; Posner, G.H. "Conformationally Restricted Hybrid Analogues of the Hormone 1  $\alpha$ ,25-Dihydroxyvitamin D<sub>3</sub>: Design, Synthesis, and Biological Evaluation." *Bioorg. Med. Chem.* **2001**, *9*, 1691-1699.
6. Posner, G.H.; Lee, J.K.; White, M.C., Hutchings, R.H.; Dai, H., Dolan, P.; Kensler, T.W. "Antiproliferative Hybrid Analogs of the Hormone 1  $\alpha$ ,25-Dihydroxyvitamin D<sub>3</sub>: Design, Synthesis, and Preliminary Biological Evaluation." *J. Org. Chem.* **1997**, *62*, 3299-3314.
5. Boyan, B.D.; Posner, G.H.; Greising, D.M.; White, M.C.; Sylvia, V.L.; Dean, D.D.; Schwartz, Z. "Structural Analogues of 1,25-(OH)<sub>2</sub>D<sub>3</sub> Regulate Chondrocyte Proliferation and Proteoglycan Production as well as Protein Kinase C through a Nongenomic Pathway." *J. of Cellular Biochemistry* **1997**, *66*, 1-14.
4. Peleg, S.; Lui, Y.-Y.; Reddy, S.; Horst, R.L.; White, M.C.; Posner, G.H. "A 20-Epi Side Chain Restores Growth-regulatory and Transcriptional Activities of an A Ring-Modified Hybrid Analog of 1 $\alpha$ ,25-dihydroxyvitamin D<sub>3</sub> Without Increasing its Affinity to the Vitamin D Receptor." *J. of Cellular Biochemistry*, **1996**, *63*, 149.
3. Posner, G.H.; Li, Z.; White, M.C., Vinader, V.; Takeuchi, K.; Guggino, S.E.; Dolan, P.; Kensler, T.W. "1  $\alpha$ ,25-Dihydroxyvitamin D<sub>3</sub> Analogs Featuring Aromatic and Heteroaromatic Rings: Design, Synthesis, and Preliminary Biological Testing." *J. Med. Chem.* **1995**, *38*, 4529-4537.
2. Posner, G.H.; White, M.C.; Dolan, P.; Kensler, T.W.; Yukihiro, S.; Guggino, S.E. "1  $\alpha$ ,25-Dihydroxyvitamin D<sub>3</sub> Hybrid Analogs with Structural Changes at Both the A-Ring and the C,D-Ring Side-chain." *Bioorg. Med. Chem. Lett.* **1994**, *4*, 2919-2924.
  - For a Highlight see: ACS Meeting Brief in *Chem. & Eng. News* **2001**, *78*, 29.
1. White, M.C.; Anfinson, C.B. "Biodegradation of Mustard Gas Hydrolysis Product, Thiodiglycol, By Cells and their Sonocates of the Hyperthermophilic Bacterium *Pyrococcus Furiosus*." *Proceedings of the 1992 ERDEC Scientific Conference on Chemical Defense Research*, **1993**, 455.

## U.S. Patents (\*As Principal Investigator)

- 2\* White, M.C.; Chen, M.S. "Selective Aliphatic C—H Oxidation." U.S. Patent Application 12/245,086 filed October 3, **2008**, UIUC Office of Technology Management.
1. Posner, G.H.; White, M.C. "Vitamin D<sub>3</sub> Analogues." *U.S. Patent. No. 849-716*, **1995**, 24 pp.

## Reviews (\*As Principal Investigator)

6. \*White, M.C. "C—H Oxidation in Complex Molecule Synthesis." *Chemical Reviews*, invited submission, **2009**.
5. \*White, M.C. "Streamlining Synthesis via C—H Oxidation." *Angew. Chem. Int. Ed.*, invited submission, **2009**.
4. \*White, M.C. "Allylic C—H Aminations for Complex Molecule Synthesis." *Topics in Current Chemistry*, Volume: C—H Activation, invited submission, **2008**.

3. \*White, M.C. "Skip the Oxygen: Allylic Esterifications and Aminations Directly from Allylic C—H Bonds." *Aldrichimica Acta*, invited submission, **2008**.
2. White, M.C.; Posner, G.H. "A Highly Stereoselective Optical Switching Process Based on Donor-Acceptor Substituted Dissymmetric Alkenes." Jager, W.F.; de Jong, J.C.; de Lange, B.; Huck, N.P.M., Meetsma, A.; Feringa, B.L. *condensation and commentary* *Chemtracts-Organic Chemistry*, **1995**, 295-299.
1. White, M.C.; Posner, G.H. "Thermally-Induced One-Step Construction of the Tetracyclic Steroidal Skeleton from Acyclic Enynes-Allenenes." Andemichael, Y.W.; Huang, Y.; Wang, K.K. *condensation and commentary*; *Chemtracts-Organic Chemistry*, **1993**, 296-299.

## Abstracts

12. White, M.C. "Streamlining Synthesis via Predictably Selective C—H Oxidation." 237<sup>th</sup> ACS National Meeting. Salt Lake City, UT. March 22-26, 2009.
11. Vermeulen, N.A.; White, M.C. "Hydrocarbon Oxidation vs. C—C Bond Forming Approaches for Efficient Synthesis of Oxygenated Molecules: Part II." 237<sup>th</sup> ACS National Meeting. Salt Lake City, UT. March 22-26, 2009.
10. Covell, D.J.; White, M.C. "Enantioselective C—H Oxidation Through a Chiral Lewis Acid Co-Catalyst Strategy." 237<sup>th</sup> ACS National Meeting. Salt Lake City, UT. March 22-26, 2009.
9. Young, A.J.; White, M.C. "Catalytic Allylic C—H Alkylation." 237<sup>th</sup> ACS National Meeting. Salt Lake City, UT. March 22-26, 2009.
8. Chen, M.S.; White, M.C. "Predictable and Selective Fe-Catalyzed Aliphatic C—H Oxidations for Complex Molecule Synthesis." 236<sup>th</sup> ACS National Meeting. Philadelphia, PA. August 17-21, 2008.
7. Reed, S.A.; White, M.C. "Skip the oxygen. Part 2: A direct, intermolecular C—H amination route to linear allylic amines." 236<sup>th</sup> ACS National Meeting. Philadelphia, PA. August 17-21, 2008.
6. Fraunhofer, K.J.; White, M.C. "Skip the oxygen. Part 1: A direct, intramolecular C—H amination route to 1,2-amino alcohols." 236<sup>th</sup> ACS National Meeting. Philadelphia, PA. August 17-21, 2008.
5. Fraunhofer, K.F.; Prabakaran, N.; Sirois, L.E.; White, M.C. "Hydrocarbons to macrolactones." 233<sup>rd</sup> ACS National Meeting. Chicago, IL, March 25-29, 2007.
4. Covell, D.J.; Vermeulen, N.A.; White, M.C. "Hydrocarbons to sugars." 233<sup>rd</sup> ACS National Meeting. Chicago, IL, March 25-29, 2007.
3. White, M.C. "A toolbox of hydrocarbon oxidation methods for synthesis." 233<sup>rd</sup> ACS National Meeting. Chicago, IL, March 25-29, 2007.
2. Delcamp, J.H.; White, M.C. "Acidic, oxidative cross-coupling: Hydrocarbons, carboxylic acids and organoboronic acids towards complex molecules. 233<sup>rd</sup> ACS National Meeting. Chicago, IL, March 25-29, 2007.
1. White, M.C. "Hydrocarbon Oxidation Methods for Synthesis." 37<sup>th</sup> Middle Atlantic Regional Meeting of the American Chemical Society. New Brunswick, NJ. May 22-25, 2005.

## Services and Activities

- Ad hoc member, NIH study section Synthetic and Biological Chemistry A (SBCA), 2007.
- Ad hoc member, NSF CAREER review panel, 2008.
- University of Illinois Department of Chemistry Fuson Travel Award Committee, 2007.
- University of Illinois Department of Chemistry Faculty Search Committee, 2006.
- University of Illinois Department of Chemistry Admissions Committee, 2005-present.
- University of Illinois Department of Chemistry Recruiting Committee, 2005-present.

## Invited Lectures

**2004**

- ExxonMobil, Annandale, NJ, "Selective Oxidations" Meeting, February 16, 2004.

**2005 (5 lectures)**

- May, 2005 Brandeis University, Waltham, MA.
  - April, 2005 Merck Pharmaceuticals, Rahway, NJ.
  - May, 2005 Cope Scholar Symposium for Professor Gary Posner, ACS Middle Atlantic Regional Meeting, Rutgers University, Piscataway, NJ.
  - July, 2005 Gordon Conference, Organometallic Chemistry, Salve Regina University, Newport, RI.
- 2006 (5 lectures)**
- July, 2006 Gordon Conference, Organic Reactions & Processes, Bryant University, Smithfield, RI.
  - August, 2006 Transatlantic Frontiers of Chemistry Symposium, Durham, NH.
  - August, 2006 Eli Lilly Pharmaceuticals, Indianapolis, IN
  - October, 2006 Bristol-Myers Squibb Company, New Brunswick, NJ
  - November, 2006 University of Delaware, Newark, DE
- 2007 (21 lectures)**
- January, 2007 Bristol-Myers Squibb Company, Lawrenceville and Hopewell, NJ
  - March, 2007 Merck Pharmaceuticals, West Point, PA
  - March, 2007 National Fresenius Award Symposium for Professor Phil Baran, 233<sup>rd</sup> ACS National Meeting, Chicago, IL
  - April, 2007 University of Cambridge, Cambridge, UK
  - April, 2007 Merck Pharmaceuticals, Hoddesdon, UK
  - April, 2007 FAST 2007: Catalysis and Chiral Technologies Conference, Cambridge, UK
  - April, 2007 University of Pennsylvania, Philadelphia, PA
  - May, 2007 Abbott Laboratories, Abbott Park, IL
  - May, 2007 Metal-Catalyzed Organic Synthesis Symposia, 90<sup>th</sup> Canadian Chemistry Conference, Winnipeg, MB, CA
  - July, 2007 Gordon Conference, Organic Reactions & Processes, Bryant University, Smithfield, RI.
  - September, 2007 Bristol-Myers Squibb Company, Wallingford, CT
  - September, 2007 German Research Foundation Meeting (DFG), Munster, Germany
  - October, 2007 University of Aachen, Aachen, Germany
  - October, 2007 University of Cologne, Cologne, Germany
  - October, 2007 University of Basel, Basel, Switzerland
  - October, 2007 University of Utah, UT
  - October, 2007 Pfizer, Groton, CT
  - October, 2007 Rosenfeld Symposium, Smith College, Northampton, MA
  - November, 2007 University of Montreal, Montreal, Quebec
  - December, 2007 Novartis Pharmaceuticals, Boston, MA
  - December, 2007 Merck Pharmaceuticals, Boston, MA
- 2008 (39 accepted invitations to date)**
- February, 2008 Scripps Research Institute, Frontiers Lecture, La Jolla, CA
  - March, 2008 California Institute of Technology, Pasadena, CA
  - March, 2008 Harvey Mudd College, Claremont, CA
  - March, 2008 Amgen, San Francisco, CA
  - March, 2008 Gilead Sciences, San Francisco, CA
  - March, 2008 Shasun Process Chemistry Symposium, Amelia Island, FL
  - April, 2008 Boston College, Schering-Plough Lecturer, Boston, MA
  - April, 2008 Science at the Frontier Symposium, Lilly, Madrid, Spain
  - May, 2008 Sanofi-Aventis "Vision of Chemistry" Symposium, Bridgewater, NJ
  - May, 2008 Schering-Plough Research Institute, Kenilworth, NJ
  - May, 2008 Northwestern University, Lilly Speaker, Evanston, IL
  - May, 2008 Stanford University, Palo Alto, CA
  - June, 2008 Pfizer, St. Louis, MO
  - June, 2008 Gordon Conference, Heterocycles, Newport, RI
  - June, 2008 Abbott Laboratories, Abbott Park, IL

- July, 2008 Gordon Conference, Natural Products Chemistry, Tilton, NH
  - July, 2008 University of Tokyo, Tokyo, Japan
  - July, 2008 Tokyo Institute of Technology, Tokyo, Japan
  - July, 2008 Ono Pharmaceuticals, Fukui, Japan
  - July, 2008 First International Symposium on Process Chemistry, Kyoto, Japan
  - July, 2008 Gordon Conference, Stereochemistry, Newport, RI
  - August, 2008 Dupont, "Discovery Lecture", Wilmington, DE
  - September, 2008 ORGCHEM 2008 Weimar, Germany
  - September, 2008 Sanofi-Aventis, Frankfurt, Germany
  - September, 2008 Cornell University, Ithaca, NY
  - September, 2008 Amgen Young Investigator Symposium, CA
  - September, 2008 University of California, Santa Barbara, CA
  - September, 2008 Yale University, New Haven, CT
  - October, 2008 University of Wisconsin, Madison, WI
  - October, 2008 University of Minnesota, Minneapolis, MN
  - October, 2008 FAST 2008: Catalysis and Chiral Technologies Conference, Philadelphia, PA
  - October, 2008 AstraZeneca Excellence in Chemistry, Wilmington, DE
  - October, 2008 Sepracor, Boston, MA
  - October, 2008 Hoffmann La Roche, Nutley, NJ
  - October, 2008 Roche, Palo Alto, CA
  - November, 2008 QOMSSOC Meeting, Quebec, CA
  - December, 2008 Harvard University, Boehringer Ingelheim Lecture, Cambridge, MA
  - December, 2008 Memorial Sloan-Kettering, New York, NY
  - December, 2008 Wyeth, Pearl River, NY
- 2009 (35 accepted invitations to date)**
- January, 2009 Michigan State, Lansing, MI
  - January, 2009 Hope College, Holland, MI
  - January, 2009 Columbia University, Padwa Lecture, New York, NY
  - February, 2009 University California, Berkeley, CA
  - February, 2009 Genentech, San Francisco, CA
  - February, 2009 University of California, Los Angeles, CA
  - March, 2009 Schulich Symposium, Technion-Israel Institute of Technology, Isreal
  - March, 2009 Philadelphia Organic Chemist's Club (POCC), Philadelphia, PA
  - March, 2009 E.J. Corey Award Symposium for Professor Brian Stoltz, ACS National Meeting, Salt Lake City, UT
  - April, 2009 C-H Functionalization Symposium, Emory University, Atlanta, GA
  - April, 2009 Massachusetts Institute of Technology, Cambridge, MA
  - April, 2009 Merck & Co., Inc., Rahway, NJ
  - April, 2009 Bristol-Myers Squibb "Freedom to Discover" Symposium, Hopewell, NJ
  - May, 2009 Texas A&M University, College Station, TX
  - May, 2009 Modern Synthetic Methods & Chiral USA Conference, Chicago, IL
  - May, 2009 Ohio State University, Paquette Symposium, Columbus, OH
  - May, 2009 44<sup>th</sup> EUCHEM Conference on Stereochemistry Burgenstock, Brunnen, Switzerland
  - May, 2009 Bristol-Myers Squibb Mini-Symposium in Organic Synthesis, Princeton University, Princeton, NJ
  - June, 2009 Roche Excellence in Chemistry Symposium, Nutley, NJ
  - June, 2009 Gordon Conference, Combinatorial Chemistry, New London, NH
  - June, 2009 "Rising Organic Chemists in Catalysis Symposium", Munster, Germany
  - June, 2009 Philipps-University Marburg, Marburg, Germany
  - July, 2009 Vertex Pharmaceuticals, Oxford, UK
  - July, 2009 Synthesis in Organic Chemistry Symposium, Oxford, UK

- July, 2009 ICIQ Summer School, Tarragona, Spain
- August, 2009 ORGN, ACS Meeting, Washington, D.C.
- August, 2009 EFMC/CBC “Advances in Synthetic and Medicinal Chemistry”  
Symposium, Kiev, Ukraine
- September, 2009 ISHHC XIV, Stockholm, Sweden
- September, 2009 University of Heidelberg, Heidelberg, Germany
- September, 2009 BI Pharmaceuticals, Ridgefield, CT
- September, 2009 University of Pittsburgh, Pittsburgh, PA
- October, 2009 19<sup>th</sup> Symposium on Optically Active Compounds, Tokyo, Japan
- October, 2009 Welch Conference, “Advances in Synthetic Chemistry”, Houston, TX
- October, 2009 University of Notre Dame, Notre Dame, IN
- November, 2009 Lexicon Pharmaceuticals, Princeton, NJ
- November, 2009 New York University Chemistry Colloquium, New York, NY