

Martin D. Burke – *Curriculum Vitae*

Early Career Scientist
Howard Hughes Medical Institute
Assistant Professor of Chemistry
University of Illinois at Urbana-Champaign
454 Roger Adams Laboratory
600 South Mathews Ave.
Urbana, IL 61801

phone: (217) 244-8726
fax: (217)244-8024
email: burke@scs.uiuc.edu
web site: <http://www.scs.uiuc.edu/burke/>

Born: Feb. 5, 1976, Westminster, MD

Education

- 1998-2005 National Institutes of Health Fellow in the Medical Scientist Training Program
Harvard Medical School/Massachusetts Institute of Technology
Division of Health Sciences and Technology: Boston, Massachusetts
Degree awarded: M.D.
- 1999-2003 Howard Hughes Medical Institutes Predoctoral Fellow
Harvard University, Department of Chemistry and Chemical Biology
Cambridge, Massachusetts, Degree Awarded: Ph.D.
Thesis advisor: Professor Stuart L. Schreiber
Thesis title: A Synthesis Strategy for Generating Diverse Skeletons of Small Molecules
Combinatorially.
- 1994-1998 Johns Hopkins University, Baltimore, Maryland
Degree Awarded: B.A. Chemistry
Research advisors: Professors Henry Brem and Gary H. Posner
Undergraduate Research: Development of 1,25 D₃ Analog-loaded Biodegradable
Polymer Wafers for Treatment of Systemic Tumors Metastatic to the Brain.

Appointments

- August 2005 Assistant Professor, Department of Chemistry
University of Illinois at Urbana-Champaign, Urbana, Illinois.
- October 2009 Howard Hughes Medical Institute, Early Career Scientist

Awards and honors

- 2010 Novartis Lectureship at The University of California Berkeley
2010 Frontiers in Chemistry Lectureship at The Scripps Research Institute
2009 Howard Hughes Medical Institute Early Career Scientist
2009 Bristol-Myers Squibb Unrestricted Grant in Synthetic Organic Chemistry Award
2009 Eli Lilly Grantee Award
2009 AstraZeneca Excellence in Chemistry Award

2009	Amgen Young Investigator Award
2009	Alfred P. Sloan Foundation Research Fellowship
2009	Bristol-Myers Squibb Lectureship at Princeton University
2009	Thieme Chemistry Journals Award
2008	Teacher Ranked as Excellent, UIUC Center for Teaching Excellence
2008	Arnold and Mabel Beckman Foundation Young Investigator Award
2008	“World’s 35 Top Innovators Under 35” <i>Technology Review</i> Magazine
2008	National Science Foundation CAREER Award
2008	“Scientist to Watch” <i>The Scientist</i> Magazine
2007	Teacher Ranked as Excellent, UIUC Center for Teaching Excellence
2006	Teacher Ranked as Excellent, UIUC Center for Teaching Excellence
2005	ACS Petroleum Research Foundation Type G Award
2005	Camille and Henry Dreyfus New Faculty Award
2005	Henry Asbury Christian Award, Harvard Medical School
2003	National Institutes of Health Medical Scientist Training Program Fellowship
2000	Howard Hughes Medical Institute Predoctoral Fellowship
1998	Hunterian Research Award - Johns Hopkins Department of Neurosurgery
1997	Phi Beta Kappa - Junior Year, Johns Hopkins University
1997	Howard Hughes Undergraduate Research Fellowship - Johns Hopkins University
1997	Provost’s Undergraduate Research Award - Johns Hopkins University
1994-1998	Dean’s List - Johns Hopkins University
1994-1998	Beneficial Hodson Scholar - Johns Hopkins University
1994-1998	Maryland Distinguished Scholar

Publications
(as a Principle Investigator)

17. D.M. Knapp, E.P. Gillis, M.D. Burke. “A General Solution for Unstable Boronic Acids: Slow-Release Cross-Coupling from Air-Stable MIDA Boronates” **2009**, *J. Am. Chem. Soc.* **131**, 6961-6963.
 - Highlighted in *Chemical and Engineering News, News of the Week*: “New way to protect unstable boron reagents: masked boronates make 2-pyridyl coupling possible.” **2009**, **87**, 8.
 - One of the top 10 “Most Read” articles in JACS, May-June, 2009.
 - Highlighted in *Angew. Chem. Int. Ed.* “Controlled Iterative Cross-Coupling: On the Way to the Automation of Organic Synthesis” **2009**, **48**, 5240-5244.
16. E.P. Gillis, M.D. Burke. “Iterative Cross-Coupling with MIDA Boronates: Towards a General Strategy for Small Molecule Synthesis,” *Aldrichimica Acta*, **2009**, **42**, 17-27.
15. I. Dailey, M.D. Burke. “N-(carboxymethyl)-N-methyl-glycine” *EROS*, **2009**, *In Press*.
14. M.D. Burke. “Flexible Tetracycline Synthesis Yields Promising Antibiotics” *Nature Chemical Biology, News and Views* **2009**, **5**, 77-79.

13. B.E. Uno, E.P. Gillis, M.D. Burke. "Vinyl MIDA Boronate, A Readily-Accessible and Highly Versatile Building Block for Small Molecule Synthesis." *Invited Contribution to Tetrahedron: Special Issue in Honor of Professor Justin Dubois' Tetrahedron Young Investigator Award 2009*, 65, 3130-3138.
12. S.G. Ballmer, E.P. Gillis, M.D. Burke. "B-Protected Haloboronic Acids for Iterative Cross-Coupling" *Org. Syn.* **2009**, 86, 344-359.
11. E.P. Gillis, M.D. Burke. "Multistep Synthesis of Complex Boronic Acids from Simple MIDA Boronates" *J. Am. Chem. Soc.* **2008**, 130, 14084-14085.
 - Highlighted in *Chemistry World*: "Organic synthesis set for auto-pilot" November **2008**. Also highlighted in *Chemtracts*, **2008**, 21, 457-465.
 - Highlighted in *Angew. Chem. Int. Ed.* "Devising boron reagents for orthogonal functionalization through Suzuki-Miyaura cross-coupling" **2009**, 48, 3565-3568.
 - Highlighted by Steven Ley in *Chemtracts* "Methyliminodiacetic Acid (MIDA) Boronates: A New Strategy for Organic Synthesis" **2009**, 21, 457-465.
10. S.J. Lee, K.C. Gray, J.S. Paek, M.D. Burke. "Simple, Efficient, and Modular Syntheses of Polyene Natural Products via Iterative Cross-Coupling" *J. Am. Chem. Soc.* **2008**, 130, 466-468.
 - Highlighted in *Chemistry World*: "Off-the-peg organic synthesis goes commercial" February **2008** p. 27.
 - Highlighted in *Chemistry and Industry*: "Off-the-shelf small molecules on the way" January 14, **2008** p. 7.
 - Highlighted in *Synform* **2008**, 5, 58-59.
 - Highlighted in *Angew. Chem. Int. Ed.* "Devising boron reagents for orthogonal functionalization through Suzuki-Miyaura cross-coupling" **2009**, 48, 3565-3568.
 - Highlighted in *Angew. Chem. Int. Ed.* "Controlled Iterative Cross-Coupling: On the Way to the Automation of Organic Synthesis" **2009**, 48, 5240-5244.
 - Reviewed in *Acc. Chem. Res.* **2008**, 41, 1461-1473.
 - Included in a new textbook on organometallic chemistry authored by John Wolfe.
9. D.S. Palacios, T.M. Anderson, M.D. Burke. "A Post-PKS Oxidation of the Amphotericin B Skeleton Predicted to be Critical for Channel Formation is Not Required for Potent Antifungal Activity" *J. Am. Chem. Soc.* **2007**, 129, 13804-13805.
 - Highlighted in *Nature Chemical Biology*: "Chemical 'Knockout' Challenges the Amphotericin B Channel Model" **2008**, 4, 19-20.
 - Highlighted in *Natural Products Reports* **2008**, 25, p. 11.
 - Highlighted in *The Scientist*: "The Smart Synthesizer" **2008**, 22, p. 63.
8. E.P. Gillis and M.D. Burke. "A Simple and Modular Strategy for Small Molecule Synthesis: Iterative Suzuki-Miyaura Coupling of B-Protected Haloboronic Acid Building Blocks." *J. Am. Chem. Soc.* **2007**, 129, 6716-6717.
 - Highlighted in *Chemical and Engineering News*: "Masks unveil new synthetic routes" **2007**, 85, 63-64,
 - Highlighted in *SynFacts* **2007**, 10, 1007

- Highlighted in *Synform* **2008**, 5, 58-59.
- Highlighted in *Chemistry World* February **2008**, p. 27.
- Reviewed in *Accounts of Chemical Research* **2008**, 41, 1461-1473.
- Highlighted in *Angew. Chem. Int. Ed.* "Devising Boron Reagents for Orthogonal Functionalization through Suzuki-Miyaura Cross-Coupling" **2009**, 48, 3565-3568.
- Highlighted in *Angew. Chem. Int. Ed.* "Controlled Iterative Cross-Coupling: On the Way to the Automation of Organic Synthesis" **2009**, 48, 5240-5244.
- Highlighted by Steven Ley in *Chemtracts* "Methyliminodiacetic Acid (MIDA) Boronates: A New Strategy for Organic Synthesis" **2009**, 21, 457-465.

(as a Graduate or Undergraduate Student)

7. M.D. Burke, E.M. Berger, and S.L. Schreiber. "A Synthesis Strategy Yielding Skeletally Diverse Small Molecules Combinatorially." *J. Am. Chem. Soc.* **2004**, 126, 14095-14104.
6. M.D. Burke and S.L. Schreiber. "A Planning Strategy for Diversity-Oriented Synthesis." *Angew. Chem. Int. Ed.* **2004**, 43, 46-58.
 - Recognized by Thomson-ISI as "one of the most cited recent papers in the field of chemistry." *ISI Essential Science Indicators* (> 350 citations).
5. M.D. Burke, E.M. Berger, and S.L. Schreiber. "Generating Diverse Skeletons of Small Molecules Combinatorially." *Science* **2003**, 302, 613-618.
 - Selected as one of the top *Chemistry Highlights 2003* "for making natural-product-like libraries of unprecedented diversity." *Chem. & Eng. News* **2003**, 81:51, 48.
 - Highlighted in *Chem. & Eng. News* **2003**, 81:43, 40.
 - Highlighted in *Nature Rev. Drug Discovery* **2003**, 2:12, 948.
 - Highlighted in *Chem. & Eng. News* **2004**, 82:40, 32.
 - Reviewed in *Nature*, **2004**, 432, 846-854.
4. R.M. Kohli, M.D. Burke, X.L. Tao, and C.T. Walsh. "Chemoenzymatic Route to Macrocyclic Hybrid Peptide/Polyketide-like Molecules." *J. Am. Chem. Soc.* **2003**, 125, 7160-7161.
2. M.C. White, M.D. Burke, S. Peleg, P. Dolan, T. Kensler, H. Brem, and G.H. Posner. "Conformationally Restricted Hybrid Analogs of 1,25-Dihydroxyvitamin D₃, Design, Synthesis, and Preliminary Biological Evaluation." *Bioorg. & Med. Chem.* **2001**, 9, 1691-1699.
1. G.H. Posner, J.K. Lee, Q. Wang, S. Peleg, M.D. Burke, H. Brem, P. Dolan, and T. Kensler. "Non-Calcemic, Antiproliferative, Transcriptionally-Active, 24-Fluorinated Hybrid Analogs of the Hormone 1 α ,25-Dihydroxyvitamin D₃. Synthesis and Preliminary Biological Evaluation." *J. Med. Chem.* **1998**, 41, 3008-3014.

Dissertation

M.D. Burke. "A Synthesis Strategy for Generating Diverse Skeletons of Small Molecules Combinatorially." Department of Chemistry and Chemical Biology, Harvard University, **2003**.

Patents

5. M.D. Burke, D.M. Knapp, E.P. Gillis, "Slow-Release of Unstable Boronic Acids from Air-Stable MIDA Boronates" Filed 08/2008 with UIUC Office of Technology Management.
 - Licensed to Sigma-Aldrich (Milwaukee, WI).
4. M.D. Burke, E.P. Gillis, S.J. Lee, D.M. Knapp, K.C. Gray, "System for Controlling the Reactivity of Boronic Acids" PCT International Application Filed 10/2007.
 - Licensed to Sigma-Aldrich (Milwaukee, WI). Worldwide commercial launch of 50 new MIDA boronate building blocks on October 7, 2008. This launch was highlighted by *CNN*, *Forbes*, *Tech.com*, *Chemical and Engineering News*, *Chemistry World*, *Genetic Engineering and Biotechnology News*, *Bio-Medicine*, *Pharmasia*, and *Merck Medicus*. A complete list of MIDA boronates now commercially available can be found at www.sigmaaldrich.com/mida. See also: <http://www.sigmaaldrich.com/chemistry/chemical-synthesis/learning-center/chemfiles.html>.
3. M.D. Burke, E.M. Berger, O. Kwon, S.B. Park, and S.L. Schreiber. "Generation of Skeletal Diversity Within a Combinatorial Library." Harvard University. Patent Application Pending: U.S.S.N. 10/640834, Filed August 14, 2003.
2. C.T. Walsh, M. Burkart, R.M. Kohli, and M.D. Burke. "Method for the Preparation of Macrocyclic Molecules, Macrocyclic Molecules Prepared Thereby, and Substrates and Solid Supports for Use Therein." Harvard Medical School, Pending Patent Application: U.S.S.N. 10/289157 Filed October 6, 2002.
1. M.D. Burke, M.C. White, J.K. Lee, M. Watts, B. Tyler, G.H. Posner, and H. Brem. "Vitamin D3 Analog-Loaded Polymer Formulations for Cancer and Neurodegenerative Disorders." Johns Hopkins School of Medicine, Pending Patent Application: U.S.S.N. 10/223685, Filed August 20, 2002.

Other reviews and book chapters

3. M.D. Burke and G. Lalic. "Teaching Target-Oriented and Diversity-Oriented Organic Synthesis at Harvard University." *Chemistry and Biology* **2002**, *9*, 535-541.
2. M.D. Burke, H. Brem, and R. Langer. "Central Nervous System, Drug Delivery to Treat." In *The Encyclopedia of Controlled Drug Delivery*. Mathiowitz, E., Ed.; John Wiley and Sons., Vol. 1, **1999**, 184-212.
1. J. Hanes and M.D. Burke. "Polymer-Controlled Drug Delivery: An Overview for the Clinician." *Hospital Pharmacist Report*. December **1997**, 2-11.

Published abstracts

18. M.D. Burke, "The Prospect of Molecular Prosthetics: Small Molecules with Protein-Like Functions" 239th ACS National Meeting, *Frontiers in Chemical Biology Symposium*, San Francisco, CA.

17. D.S. Palacios, I. Dailey, D.M. Siebert, B.C. Wilcock, and M.D. Burke, “ Synthesis Enabled Studies of the Mechanism of Action of Amphotericin B” 239th ACS National Meeting, San Francisco, CA, *submitted*
16. S.J. Lee and M.D. Burke, A General Platform for Polyene Synthesis Via Iterative Cross-Coupling” 239th ACS National Meeting & Exposition - March 21-25, 2010, San Francisco, CA, *submitted*
15. E.P. Gillis, D.M. Knapp, G. Dick, S.G. Ballmer, M.D. Burke “Iterative Cross-Coupling with MIDA Boronates: An Enabling Platform for Small Molecule Synthesis” 239th ACS National Meeting, *Frontiers in Chemical Biology* Symposium, San Francisco, CA, *submitted*.
14. I. Dailey and M.D. Burke, “Synthesis of a Universal Polyene Macrolide Building Block via a Novel Diastereotopic Group-Selective Lactonization.” 239th ACS National Meeting, *Frontiers in Chemical Biology* Symposium, San Francisco, CA, *submitted*.
13. S.J. Lee and M.D. Burke, “A General Platform for Polyene Synthesis Via Iterative Cross-Coupling” ACS Midwest Regional Meeting, Iowa City, IA, October 23, 2009.
12. M.D. Burke, “Synthesis and Study of Small Molecules with Protein-Like Functions” 238th ACS National Meeting, Washington DC, United States, August 16-20, 2009.
11. D.M. Knapp, E.P. Gillis, M.D. Burke, “In Situ Release of Boronic Acids from Air Stable MIDA Boronates” 238th ACS National Meeting, Washington DC, United States, August 16-20, 2009.
10. M.D. Burke, “Probing the Amphotericin B Ion Channel via Iterative Cross-Coupling with MIDA Boronates” 237th ACS National Meeting, Salt Lake City, UT, United States, March 22-28, 2009.
9. E.P. Gillis, M.D. Burke “Multistep Synthesis of Complex Boronic Acids from Simple MIDA Boronates” 237th ACS National Meeting, Salt Lake City, UT, United States, March 22-28, 2009.
8. E.P. Gillis, M.D. Burke “Iterative Cross-Coupling: A Simple Strategy for Complex Small Molecule Synthesis” 236th ACS National Meeting, Philadelphia, PA, United States, August 17-21, 2008.
7. D.S. Palacios, T.M. Anderson, M.D. Burke “Oxidation at C(41) is Not Necessary for Potent Antifungal Activity in Amphotericin B” 236th ACS National Meeting, Philadelphia, PA, United States, August 17-21, 2008.
6. S.J. Lee, K.C. Gray, J.S. Paek, M.D. Burke. “Simple, Efficient, and Modular Syntheses of Polyene Natural Products via Iterative Cross-Coupling” 236th ACS National Meeting, Philadelphia, PA, United States, August 17-21, 2008.

5. M.D. Burke. "Molecular Prosthetics: Replicating the Functions of the Molecules of Life" *Enhancing Chemistry Conference*. University of Illinois at Urbana-Champaign, Urbana, Illinois, March 17, 2006.
4. M.D. Burke and S.L. Schreiber. "The Generation of Structural Diversity in Split-Pool Synthesis." Harvard-MIT Division of Health Sciences and Technology Forum. Book of Abstracts. Cambridge, Massachusetts: March 9, 2000, p 5.
3. M.D. Burke, M.C. White, M. Watts, J. Lee, B. Tyler, G.H. Posner, and H. Brem. "Hybrid Analogs of 1,25-Dihydroxyvitamin D₃ Having Potent Antiproliferative Effects Against Murine Tumor Cell Lines Metastatic to the Brain." In *Vitamin D₃: Chemistry, Biology, and Clinical Applications of the Steroid Hormone; Proceedings of the Tenth Workshop on Vitamin D*; A.W. Norman, R. Bouillon, and M. Thommasser, Eds.; University of California Press, 1997, p 487.
2. M.D. Burke, M.C. White, J. Lee, M. Watts, B. Tyler, G.H. Posner, and H. Brem. "Biodegradable Polymer Wafers Impregnated with Hybrid Analogs of 1,25-Dihydroxyvitamin D₃ for the Treatment of Intracranial Metastases." Fifth Annual Brown University Symposium on Vitamin D. Providence, Rhode Island, September 7-9, 1997.
1. M. Watts, M. Lesniak, M.D. Burke, A. Samdani, B. Tyler, and H. Brem. "Efficacy of Adriamycin in the Treatment of Malignant Glioma." Conference of the American Association of Neurological Surgeons. Denver, Colorado, April 12-17, 1997.

Teaching at UIUC

Fall 2006 - Fall 2008	Chem 534: "Fundamentals of Complex Molecule Synthesis"
Spring 2007	Chemistry 237: "Structure and Synthesis"
Spring 2006 Spring 2008	Chem 536: "Introduction to Organic Chemistry Research"
Spring 2009	Chem 437: Advanced Organic Lab

Service

University of Illinois

2005 – present	Department of Chemistry Graduate Admissions Committee
2005 – present	Department of Chemistry Graduate Recruiting Committee
2005 – present	Medical Scholars Program, ad hoc member of Admissions Committee
2005 – present	Medical Scholars Program, ad hoc member of Recruiting Committee
March, 2006	Keynote speaker, <i>Enhancing Chemistry: A Conference for Chemistry Teachers</i>
Fall, 2006	Pines Travel Award Selection Committee
2005 – 2006	Coordinator of Organic Registration Exam
Spring, 2007	Department of Pharmacology New Faculty Search Committee
September, 2007	Host of the Marvel Lecture Series

2008 – 2009 Department of Chemistry New Faculty Search Committee
2008 – present *Lab Partners* High School Chemistry Outreach Program

Service outside of University of Illinois

June, 2007 Ad hoc member of the National Institutes of Health Synthetic and Biological Chemistry B Study Section, Washington, D.C.
February, 2008 Panel member for the National Science Foundation Graduate Research Fellowships Chemistry II Division, Arlington, VA.
October, 2008 Panel member for the National Science Foundation CAREER Awards, Washington, D.C.
January, 2009 UIUC *Lab Partners* High School Outreach Program
July, 2009 Ad hoc member of the National Institutes of Health Roadmap Initiative Grants Study Section, Washington D.C.

Consulting

Bristol-Myers Squibb, New Jersey and Connecticut, USA
11/08 – present

Rigel Pharmaceuticals, San Francisco, California, USA
12/07 – present

Invited Presentations

March, 2006 *Enhancing Chemistry Conference*. UIUC, Urbana, IL
“Molecular Prosthetics: Replicating the Functions of the Molecules of Life”
May, 2006 – NIH Mentoring Conference, Greenbelt, MD
July, 2007 – Natural Products Gordon Conference, Tilton, NH
“Towards the Total Synthesis of the Channel-Forming Natural Product Amphotericin B”
July, 2007 – Sigma-Aldrich Company, Milwaukee, WI
“Iterative Cross-Coupling: A Simple and Modular Strategy for Small Molecule Synthesis”
October, 2007 – Rigel Pharmaceuticals, San Francisco, CA
October, 2007 – ACS Regional Conference, Milwaukee, WI
“The Channel-Forming Natural Product Amphotericin B”
November, 2007 – Illinois Wesleyan University, Bloomington, IL
January, 2008 – Abbott Pharmaceuticals, Abbott Park, IL
February, 2008 – Bristol-Myers Squibb, Process Research and Development, New Brunswick, NJ
February, 2008 – Bristol-Myers Squibb, Drug Discovery, Hopewell, NJ
March, 2008 – Novartis Pharmaceuticals, San Francisco, CA
March, 2008 – Roche Pharmaceuticals, Palo Alto, CA
March, 2008 – Indiana University at Bloomington, Bloomington, IN
April, 2008 – Pfizer Medicinal Chemistry, St. Louis, MI
March, 2008 – Theravance Pharmaceuticals, San Francisco, CA
May, 2008 – Merck Research Laboratories, Rahway, NJ
June, 2008 – Bioorganic Gordon Conference, Andover, NH
“Synthesis-Enabled Studies of the Amphotericin B Ion Channel”

June, 2008 – National Science Foundation Annual Workshop on Organic Synthesis and Natural Products Chemistry, Minary Center, New Hampshire.
August, 2008 – Arnold and Mabel Beckman Foundation Symposium for the Beckman Young Investigator Award, National Academies of Science and Engineering, Irvine, CA
October, 2008 – Bristol-Myers Squibb, Drug Discovery, Hopewell, NJ
October, 2008 – Bristol-Myers Squibb, Drug Discovery, Wallingford, CT
October, 2008 – University of California at Los Angeles, Los Angeles, CA
October, 2008 – Gothenburg University, Gothenburg, Sweden
October, 2008 – Astra Zeneca, Gothenburg, Sweden
October, 2008 – Leo Pharmaceuticals, Copenhagen, Denmark
October, 2008 – Astra Zeneca, Stockholm, Sweden
October, 2008 – Royal Institute of Technology, Stockholm, Sweden
October, 2008 – Rikshospitalet, Oslo, Norway
October, 2008 – FAST Conference sponsored by Johnson Mathey, The National Constitution Center, Philadelphia, PA “Probing the Amphotericin B Ion Channel with Synthetic Knockouts”
November, 2008 – Novartis Institute for Biomedical Research, Cambridge, MA
January, 2009 – Wayne State University, Detroit, MI
January, 2009 – Hope College, Holland, MI
March, 2009 – Institute for Genomic Biology, University of Illinois, IL
March, 2009 – 237th ACS National Meeting, Special Symposium, “Boronate Chemistry in the 21st Century” Sponsored by Frontier Scientific, Salt Lake City, UT
March, 2009 – University of Pennsylvania, Philadelphia, PA
April, 2009 – UIUC College of Medicine Seminar Series, Carle Hospital and Clinic, IL
May, 2009 – Abbott Pharmaceuticals, Abbott Park, IL
May, 2009 – Chicago University, Chicago, IL
May, 2009 – CalTech Institute, Pasadena, CA
May, 2009 – Princeton University, Bristol-Myers Squibb Lectureship, Princeton, NJ
June, 2009 – Rising Organic Chemists in Catalysis Meeting, Münster, Germany
June, 2009 – Novartis Pharma, Basel, Switzerland
July, 2009 – Merck Research Laboratories, Rahway, NJ
July, 2009 – Schering-Plough, Kenilworth, NJ
July, 2009 – Hoffman-LaRoche, Nutley, NJ
July, 2009 – Lexicon Pharmaceuticals, Princeton, NJ
July, 2009 – Sanofi-Aventis, Bridgewater, NJ
August 2009 – Eli Lilly, Indianapolis, IN
August, 2009 – 238th ACS National Meeting, “Young Investigator’s Symposium”, Washington D.C.
August, 2009 – Beckman Young Investigator’s Symposium, Irvine, CA
September, 2009 – UTSW Medical Center, Dallas, TX
September, 2009 – Michigan State University, MI
October, 2009 – Amgen Young Investigator’s Award Symposium, Amgen, Thousand Oaks, CA, “The Prospect of Molecular Prosthetics: Small Molecules with Protein-Like Functions”
October, 2009 – University of California Santa Barbara, Santa Barbara, CA
October, 2009 – AstraZeneca *Excellence in Chemistry* Award, Wilmington, DE, “The Prospect of Molecular Prosthetics: Small Molecules with Protein-Like Functions”
October, 2009 – Bristol-Myers Squibb, “New Pharma” Symposium
November, 2009 – Howard Hughes Medical Institute Early Career Scientists Meeting, Chevy Chase

February, 2010 – Frontiers in Chemistry Symposium, Scripps Research Institute, La Jolla, CA
March, 2010 – 239th ACS National Meeting, “Frontiers in Chemical Biology” Symposium, San Francisco, CA, “Prospect of Molecular Prosthetics: Small Molecules with Protein-Like Functions”
March, 2010 – University of Wisconsin-Madison, WI
March, 2010 – Cornell University, NY
March, 2010 – Texas A&M University, College Station, TX
March, 2010 – Boston College, Boston, MA
April, 2010 – University of California at Berkeley, Novartis Lectureship, Berkeley, CA
May, 2010 – Hoffman-LaRoche, Nutley, NJ
June, 2010 – High Throughput Chemistry and Chemical Biology Gordon Research Conference, Les Diablerets, Switzerland
June, 2010 – Balticum Organicum Syntheticum (BOS 10), Riga, Latvia
July, 2010 – Natural Products Gordon Research Conference, Tilton, NH
Spring, 2011 – Bristol-Myers Squibb Grantee Symposium
Spring 2012 – Eli Lilly Grantee Symposium