

Mary Pavan Watson

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PROFESSIONAL EXPERIENCE

- 2016–present **Associate Professor of Chemistry.**
Department of Chemistry and Biochemistry, University of Delaware, Newark, DE.
- 2009–2016 **Assistant Professor of Chemistry.**
Department of Chemistry and Biochemistry, University of Delaware, Newark, DE.
- 2006–2009 **NIH NRSA Postdoctoral Fellow.** Advisor: Eric N. Jacobsen.
Department of Chemistry and Chemical Biology, Harvard University, Cambridge, MA.

EDUCATION

- 2001–2006 **Ph.D., Chemistry.** *University of California, Irvine, CA 92697.*
Dissertation Advisor: Larry E. Overman. Dissertation Thesis: Investigation of the Asymmetric Allylic Imidate Rearrangement Catalyzed by Palladium(II) Compounds with Planar Chiral Ligands.
- 1996–2000 **B.A., Chemistry,** Magna cum Laude. *Harvard College, Cambridge, MA 02138.*

HONORS AND AWARDS

- 2015 Participant, EuCheMS Organic Division Young Investigators Workshop
- 2013 Rising Star Award, American Chemical Society Women Chemists' Committee
- 2012 Thieme Chemistry Journal Award
- 2012 NSF Early Faculty Career Award
- 2007 Ruth L. Kirschstein National Research Service Award
- 2003 Contribution to Teaching Award, Department of Chemistry, University of California, Irvine
- 2000 Magna Cum Laude, Harvard University
- 1996–2000 Harvard College Scholarship
- 1996 National Merit Scholar

PROFESSIONAL AFFILIATIONS

American Chemical Society, Member, 2006–present
Philadelphia Organic Chemistry Club, Member, 2011–present
Biology Chemistry Interface Program at the University of Delaware, Faculty Trainer, 2009–present
Center for Catalytic Science and Technology at the University of Delaware, Member, 2014–present

PUBLICATIONS

As is the convention in the field, the corresponding author is marked with an asterisk.

Publications from Delaware

- 1) Srimoyee Dasgupta, Jixin Liu, Clarissa A. Shoffler, Glenn P. A. Yap, Mary P. Watson* “Enantioselective, Copper-Catalyzed Alkynylation of Ketimines to Deliver Isoquinolines with α -Diaryl Tetrasubstituted Stereocenters” *Org. Lett.* **2016**, *18*, 6006–6009.
- 2) Qi Zhou, Kelsey M. Cobb, Tianyu Tan, Mary P. Watson* “Stereospecific Cross Couplings to Set Benzylic, All-Carbon Quaternary Stereocenters in High Enantiopurity” *J. Am. Chem. Soc.* **2016**, *138*, 12057–12060.

Highlighted in Synfacts (Synfacts 2016, 12, 1175)

- 3) Qi Zhou, Harathi D. Srinivas, Songnan Zhang, Mary P. Watson* “Accessing Both Retention and Inversion Pathways in Stereospecific, Nickel-Catalyzed Miyaura Borylations of Allylic Pivalates” *J. Am. Chem. Soc.* **2016**, *138*, 11989–11995.

Highlighted in Synfacts (Synfacts 2016, 12, 1152)

- 4) Corey H. Basch, Kelsey M. Cobb, Mary P. Watson* “Nickel-Catalyzed Borylation of Benzylic Ammonium Salts: Stereospecific Synthesis of Enantioenriched Benzylic Boronates” *Org. Lett.* **2016**, *18*, 136–139.

Highlighted in Synfacts (Synfacts 2016, 12, 0375)

- 5) Jixin Liu, Srimoyee Dasgupta, Mary P. Watson* “Enantioselective Additions of Copper Acetylides to Cyclic Iminium and Oxocarbenium Ions” *Beilstein J. Org. Chem.* **2015**, *11*, 2696–2706.

Invited Contribution for Special Issue on Copper Catalysis

- 6) Srimoyee Dasgupta, Thomas Rivas, Mary P. Watson* “Enantioselective, Copper(I)-Catalyzed Alkynylation of Oxocarbenium Ions to Set Diaryl Tetrasubstituted Stereocenters” *Angew. Chem., Int. Ed.* **2015**, *54*, 14154–14158.

Highlighted in Synfacts (Synfacts 2016, 12, 0169)

- 7) Andrew R. Ehle, Melissa G. Morris, Brian K. Klebon, Glenn P. A. Yap, Mary P. Watson* “Stereoselective Synthesis of Trisubstituted Vinyl Bromides via Addition of Alkynes to Oxocarbenium Ions” *Synlett* **2015**, *26(19)*, 2702–2706.

Invited Article for Special Issue Dedicated to Participants in EuCheMS Organic Division Young Investigators Workshop

- 8) Tatsiana Haidzinskaya, Hilary A. Kerchner, Jixin Liu, Mary P. Watson* “Diastereoselective, Zinc-Catalyzed Alkynylation of α -Bromo Oxocarbenium Ions” *Org. Lett.* **2015**, *17(15)*, 3857–3859.

- 9) Harathi D. Srinivas, Prantik Maity, Glenn P. A. Yap, Mary P. Watson* "Enantioselective Copper-Catalyzed Alkynylation of Benzopyrynyl Oxocarbenium Ions" *J. Org. Chem.* **2015**, *80*(8), 4003–4016.
- 10) Harathi D. Srinivas, Qi Zhou, Mary P. Watson* "Enantiospecific, Nickel-Catalyzed Cross-Couplings of Allylic Pivalates and Arylboroxines" *Org. Lett.* **2014**, *16*(13), 3596–3599.
- 11) Danielle M. Shacklady-McAtee, Kelsey M. Roberts, Corey H. Basch, Ye-Geun Song, Mary P. Watson* "A General, Simple Catalyst for Enantiospecific Cross Couplings of Benzylic Ammonium Triflates and Boronic Acids: No Phosphine Ligand Required" *Tetrahedron* **2014**, *70*(27–28), 4257–4263.

Invited Article for Symposium-in-Print in Honor of Sarah E. Reisman

Highlighted in Synfacts (Synfacts 2014, 10, 1060)

- 12) Qi Zhou, Harathi D. Srinivas, Srimoyee Dasgupta, Mary P. Watson* "Nickel-Catalyzed Cross Couplings of Benzylic Pivalates with Arylboroxines: Stereospecific Formation of Diarylalkanes and Triarylmethanes" *J. Am. Chem. Soc.* **2013**, *135*(9), 3307–3310.

Highlighted in Synfacts (Synfacts 2013, 9, 646)

- 13) Prantik Maity, Danielle M. Shacklady-McAtee, Glenn P. A. Yap, Eric R. Sirianni, Mary P. Watson* "Nickel-Catalyzed Cross Couplings of Benzylic Ammonium Salts and Boronic Acids: Stereospecific Formation of Diarylethanes via C–N Bond Activation" *J. Am. Chem. Soc.* **2013**, *135*(1), 280–285.

- 14) Mary P. Watson,* Prantik Maity "Controlling Enantioselectivity in Additions to Cyclic Oxocarbenium Ions via Transition Metal Catalysis" *Synlett*, **2012**, *23*(12), 1705–1708.

Invited Synfacts Article

- 15) Andrew R. Ehle, Qi Zhou, Mary P. Watson* "Nickel(0)-Catalyzed Heck Cross Coupling via Activation of Aryl C–OPiv Bonds" *Org. Lett.* **2012**, *14*, 1202–1205.

One of the top 10 most read articles in Organic Letters from Jan–Mar 2012

- 16) Prantik Maity, Harathi D. Srinivas, Mary P. Watson* "Copper-Catalyzed Enantioselective Additions to Oxocarbenium Ions: Alkynylation of Isochroman Acetals" *J. Am. Chem. Soc.* **2011**, *133*, 17142–17145.

Highlighted in Synfacts (Synfacts 2012, 8, 78) and as a SynStory (Dec 2011)

- 17) Danielle M. Shacklady-McAtee, Srimoyee Dasgupta, Mary P. Watson* "Nickel(0)-Catalyzed Cyclization of *N*-Benzoylaminals for Isoindolinone Synthesis" *Org. Lett.* **2011**, *13*, 3490–3493.

Publications from Supervised Career

- 18) Mary P. Watson, Eric N. Jacobsen* "Asymmetric Intramolecular Arylcyanation of Unactivated Olefins via C–CN Bond Activation." *J. Am. Chem. Soc.* **2008**, *130*(38), 12594–12595.
- 19) Mary P. Watson, Larry E. Overman,* Robert G. Bergman* "Kinetic and Computational Analysis of the Palladium(II)-Catalyzed Asymmetric Allylic Trichloroacetimidate Rearrangement: Development of a Model for Enantioselectivity." *J. Am. Chem. Soc.* **2007**, *129*(16), 5031–5044.
- 20) Carolyn E. Anderson, Steffan F. Kirsch, Larry E. Overman,* Christopher J. Richards, Mary P. Watson "Preparation of the COP Catalysts: [(*S*)-COP-OAc]₂, [(*S*)-COP-Cl]₂, and (*S*)-COP-hfacac." *Org. Synth.* **2007**, *84*, 148–155.

- 21) Carolyn E. Anderson, Larry E. Overman,* Christopher J. Richards, Mary P. Watson, Nicole White "Preparation of (η^5 -(S)-2-(4-methylethyl)oxazolinylcyclopentadienyl)-(η^4 -tetraphenylcyclobutadiene)cobalt. (cobalt, [1,1',1",1''-(η^4 1,3-cyclobutadiene-1,2,3,4-tetrayl)tetrakis[benzene]][(1,2,3,4,5- η)-1-[(4S)-4,5-dihydro-4-(1-methylethyl)-2-oxazolyl]-2,4-cyclopentadien-1-yl]-)." *Org. Synth.* **2007**, *84*, 139–147.
- 22) Carolyn E. Anderson, Larry E. Overman,* Mary P. Watson "Asymmetric Rearrangement of Allylic Trichloroacetimidates: Preparation of (S)-2,2,2-Trichloro-N-(1-propylallyl)acetamide." *Org. Synth.* **2005**, *82*, 134–139.
- 23) Steffan F. Kirsch, Larry E. Overman,* Mary P. Watson "Monomeric Cobalt Oxazoline Palladacycles (COP). Useful Catalysts for Catalytic Asymmetric Rearrangement of Allylic Trichloroacetimidates." *J. Org. Chem.* **2004**, *69*(23), 8101–8104.
- 24) Larry E. Overman,* Carolyn E. Owen, Mary M. Pavan, Christopher J. Richards, "Catalytic Asymmetric Rearrangement of Allylic N-Aryl Trifluoroacetimidates. A Useful Method for Transforming Prochiral Allylic Alcohols to Chiral Allylic Amines." *Org. Lett.* **2003**, *5*(11), 1809–1812. (Maiden name: Mary M. Pavan)

PRESENTATIONS

Invited Seminars

- 1) Lebanon Valley ACS Meeting at Albright College, Oct. 20, 2016.
- 2) Gordon Research Conference on Heterocyclic Compounds, June 19–24, 2016.
- 3) University of Illinois, Chicago, Feb. 24, 2016.
- 4) Northwestern University, Feb. 23, 2016.
- 5) AbbVie, Chicago, IL, Feb. 22, 2016.
- 6) Texas A&M University, Dec. 7, 2015.
- 7) University of Minnesota, Nov. 17, 2015.
- 8) 1st Annual Telluride Meeting on Enabling Technologies for Reactions and Processes, Telluride, CO, July 27–31, 2015.
- 9) 7th Annual Young Investigators Workshop, European Association for Chemical and Molecular Sciences, Aveiro, Portugal, July 9–11, 2015.
- 10) University of Pittsburgh, May 7, 2015.
- 11) University at Buffalo (SUNY), April 7, 2015.
- 12) University of Rochester, April 6, 2015.
- 13) University of Texas, Austin, April 3, 2015.
- 14) University of Texas, San Antonio, April 2, 2015.
- 15) University of Houston, March 31, 2015.
- 16) Colorado State University, March 30, 2015.
- 17) University of Utah, March 26, 2015.
- 18) University of Pennsylvania, March 9, 2015.
- 19) Florida Heterocycles and Synthesis Conference, March 1–4, 2015.
- 20) The Scripps Research Institute, La Jolla, CA, Feb. 19, 2015.
- 21) University of California, Irvine, Feb. 18, 2015.
- 22) California Institute of Technology, Feb. 17, 2015.
- 23) University of California, Santa Barbara, Feb. 13, 2015.
- 24) University of North Carolina, Chapel Hill, NC, Feb 5, 2015.
- 25) Duke University, Feb. 3, 2015.
- 26) Bryn Mawr College, Jan. 30, 2015.
- 27) University of California, Los Angeles, Jan. 22, 2015.
- 28) University of Florida, Jan. 15, 2015.
- 29) Indiana University, Dec. 8, 2014.
- 30) Université de Montréal, Dec. 3, 2014.

- 31) McGill University, Dec. 2, 2014.
- 32) New York University, Nov. 18, 2014.
- 33) Wayne State University, Oct. 22, 2014.
- 34) University of Michigan, Oct. 21, 2014.
- 35) Pennsylvania State University, Oct. 6, 2014.
- 36) University of Maryland, Oct. 2, 2014.
- 37) Princeton University, Sept. 30, 2014.
- 38) University of Washington, Sept. 24, 2014.
- 39) Pacific Lutheran University, Sept. 23, 2014.
- 40) 22nd IUPAC International Conference on Physical Organic Chemistry, August 11, 2014.
- 41) Young Academic Investigators Award Symposium, 248th ACS National Meeting, San Francisco, CA, August 10, 2014.
- 42) Lehigh University, April 16, 2014.
- 43) Johns Hopkins University, April 8, 2014.
- 44) Olah Symposium in Honor of Prof. Robert G. Bergman, 247th ACS National Meeting, March 17, 2014.
- 45) Swarthmore College, Feb. 6, 2014.
- 46) Larry E. Overman 70th Birthday Symposium, Sept. 12, 2013.
- 47) Gordon Research Conference, Organic Reactions & Processes, July 18, 2013.
- 48) DuPont Crop Protection Seminar Series, Nov. 8, 2012.
- 49) Robert G. Bergman 70th Birthday Symposium, June 16, 2012.
- 50) ACS Mid-Atlantic Regional Meeting Younger Organic Chemists Symposium, June 1, 2012.
- 51) Salisbury University, March 15, 2012.
- 52) University of Vermont, March 1, 2012.
- 53) Tulane University, April 11, 2011.
- 54) East Tennessee State University, February 5, 2010.
- 55) Chemistry Biology Interface Program Seminar, University of Delaware, October 7, 2009.

Recruiting and Other Seminars

- 1) 244th ACS National Meeting, Philadelphia, PA, August 21, 2012.
- 2) 244th ACS National Meeting, Philadelphia, PA, August 19, 2012.
- 3) 243rd ACS National Meeting, San Diego, CA, March 25, 2012.
- 4) Middlebury College, March 2, 2012.

Poster Presentations

- 1) 243rd ACS National Meeting, San Diego, CA, March 27, 2012.
- 2) Gordon Research Conference: Natural Products, July 27, 2011.
- 3) Gordon Research Conference: Organic Reactions and Processes, July 20, 2011.
- 4) Gordon Research Conference: Organic Reactions and Processes, July 21, 2010.
- 5) Gordon Research Conference: Organic Reactions and Processes, July 2008.
- 6) Gordon Research Conference: Organic Reactions and Processes, July 2007.

FELLOWSHIPS AND GRANTS

Current Research Support

- NIH COBRE, National Institutes of Health
Grant Number: P20GM104316; J. Fox (PI)
Title: "Discovery of Chemical Probes and Therapeutic Leads"
Dates: 09/01/2014 – 05/31/2019
Role: Subproject Co-investigator; D. Watson Subproject Investigator
Amount: \$1,839,990, subproject budget (total).

Goal: The goal of this Center of Biomedical Research Excellence is to discover new molecules to study human disease. Watson's role is to employ methods developed by her group to create diverse libraries of small molecules, which will be tested for a range of bioactivities by collaborators.

- NIH R01, National Institutes of Health
Grant Number: GM111820-01
Title: "Cross Couplings of Amine and Alcohol Derivatives to Give Enantioenriched Products"
Dates: 08/15/2014 – 07/31/2019
Role: PI
Amount: \$1,473,488 (total)
Goal: The major goal of this project is to develop enantiospecific and enantioselective, nickel-catalyzed cross couplings of amine- and alcohol-derived starting materials to provide efficient access to a range of highly enantioenriched products.
- NIH R01 Supplement, National Institutes of Health
Grant Number: GM111820-01S1
Title: "Cross Couplings of Amine and Alcohol Derivatives to Give Enantioenriched Products"
Dates: 08/15/2014 – 07/31/2019
Role: PI
Amount: \$106,005 (total)
Goal: This equipment supplement will be used to purchase a 2D-HPLC instrument capable of simultaneous determination of both yields and ee's. This instrument will support our method development efforts by largely automating and greatly accelerating our pace of analysis.
- NSF CAREER
Grant Number: CHE 1151364
Title: "CAREER: A Metal-Catalyzed Strategy for Enantioselective Additions to Oxocarbenium Ions"
Dates: 02/15/2012 – 01/31/2017
Role: PI
Amount: \$550,000
Goal: The goal of this project is to develop metal-catalyzed methods for the enantioselective addition of carbon nucleophiles, particularly terminal alkynes, to prochiral, cyclic oxocarbenium ions. These methods will enable efficient conversion of readily available, racemic acetal precursors to enantioenriched substituted oxygen heterocycles, which are found in a number of biologically active compounds.

Completed Research Support

- University of Delaware Research Foundation – Strategic Initiatives
Title: "Targeting Nuclear Receptors with Synthetic Diarylalkane Derivatives: Method Development, Synthesis, and Biological Assay"
Dates: 12/1/2013 – 12/31/2015
Role: PI
Amount: \$45,000 direct
Goal: The goals of this project are to develop methodology for the synthesis of a broad range of diarylalkanes and assay the biological activity of the diarylalkane products against nuclear receptors.
- NIH COBRE, National Institutes of Health
Grant Number: P20RR017716; T. Beebe (PI)

Title: "COBRE Junior Faculty Grant: Efficient Preparation of Glycopeptides via Glycosylation of Alkynyl Residues"

Dates: 08/01/2012 – 07/31/2014

Role: Junior Faculty

Amount: \$153,000 (total, this subproject)

Goal: The goal of this grant is to continue our efforts to develop metal-catalyzed alkynylations of sugars to enable formation of C-linked glycopeptides.

- American Chemical Society, Petroleum Research Fund
 Grant Number: 50330-DNI1
 Title: "Arylalkoxylation of Alkynes and Olefins via Transition Metal-Catalyzed C–O Activation"
 Dates: 09/01/2010 – 08/31/2012
 Role: PI
 Amount: \$100,000
 Goal: The major goals of this project were to develop new stereoselective methods to efficiently prepare ether products via nickel(0)-catalyzed insertion of alkynes and olefins into C–O bonds.
- NIH COBRE, National Institutes of Health
 Grant Number: P20RR017716; T. Beebe (PI)
 Title: "COBRE Seed Grant: Efficient Preparation of Glycopeptides via Glycosylation of Alkynyl Residues"
 Dates: 08/01/2011 – 07/31/2012
 Role: Seed Grant Investigator
 Amount: \$76,500 (total, this seed project)
 Goal: The goal of this grant was to develop efficient methods for the metal-catalyzed alkynylation of sugars to enable formation of C-linked glycopeptides.
- University of Delaware Research Foundation (UDRF)
 Title: "Brønsted Acid-Catalyzed Reactions of Unactivated Olefins"
 Dates: 06/01/2010 – 07/31/2012
 Role: PI
 Amount: \$35,000 direct
 Goal: The major goal of this project was to develop new chiral Brønsted acid catalysts for additions to olefin substrates.

RESEARCH ASSOCIATES (* indicates one or more co-authored publications)

Current Associates

- Postdoctoral Associates (2)

Devendar Anunmandla	Jan. 2016 – present
Sarah Pound	Sept. 2016 – present
- Graduate Students (10)

Corey Basch*	Nov. 2012 – present
Kelsey Roberts*	Nov. 2012 – present
Jennie Liao	Nov. 2014 – present
Javon Rabb-Lynch	Nov. 2014 – present
Tianyu Tan*	Nov. 2014 – present
Weiyue Guan	Dec. 2015 – present

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| Megan Hoerrner | Dec. 2015 – present |
| Jianyu Xu | Dec. 2015 – present |
| Clarissa Shoffler | Dec. 2016 – present |
| Kristen Baker | Dec. 2016 – present |
- Undergraduate Students (4)

Jake Piane	June 2015 – present
Jingchen Yang	Jan. 2016 – present
Winnie Cheung	Jan. 2016 – present
Earl Bampo	Jan. 2016 – present
- Previous Research Associates
- Postdoctoral Associates (1)

Prantik Maity, PhD*	Oct. 2009 – Dec 2012
Bibaswan Biswas, PhD	Aug. 2015 – June 2016
 - Graduate Students (5)

Jixin Liu*	Nov. 2011 – Oct. 2016, PhD Chemistry
Songnan Zhang*	Nov. 2012 – Aug. 2016, MS Chemistry
Srimoyee Dasgupta*	June 2010 – Oct. 2015, PhD Chemistry
Qi Zhou*	Nov. 2010 – Oct. 2015, PhD Chemistry
Andrew Ehle*	Nov. 2009 – Nov. 2014, PhD Chemistry
Harathi D. Srinivas*	July 2009 – Nov. 2014, PhD Chemistry
Danielle Shacklady-McAtee*	Nov. 2009 – May 2014, PhD Chemistry
Ye-Geun Song*	Nov. 2011 – May 2014, MS Chemistry
Tatsiana Haidzinskaya*	Nov. 2010 – May 2012, MS Chemistry
 - Undergraduate Students

Alex Manders	Jan. 2015 – Aug. 2016
Clarissa Shoffler*	June – Aug. 2014, REU Student
Melissa Morris*	May 2011 – Jan. 2014
Tom Rivas*	Jan. – Dec. 2013 (PhD student, University of Colorado, Boulder)
Hilary Kerchner*	Jan. 2011 – May 2013 (PhD student, University of Michigan)
Matthew Werth	Jan. 2012 – May 2012
Tatsiana Haidzinskaya	July 2009 – Aug. 2010
Marco Lombardo	Feb. – May 2010
Alyssa Hellreich	June 2010 – May 2011
 - Postbaccalaureate Scholars (1)

Sudipta Ghosh	Jan. 2011 – May 2012
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TEACHING

CHEM 633 Physical Organic Chemistry (graduate level). 2009F, 2010F, 2011F, 2012F, 2013F, 2016F

This graduate-level course focuses on physical organic chemistry, including organic reaction mechanisms and the tools available to study them. In addition to first-year graduate students in the organic division, the enrollment for this course typically includes graduate students from the

inorganic and biochemical divisions, as well as several advanced undergraduates. The course is taught in a lecture format with regular discussion sections.

CHEM 634 Synthetic Organic Chemistry (graduate level). 2014F, 2015F

This graduate-level course surveys modern methods for the synthesis of organic molecules, including both classical and modern reactions. In addition to learning reaction conditions and basic synthetic strategy, a strong emphasis is placed on reaction mechanisms. The course is taught in a lecture format mixed with problem-solving sessions.

CHEM 322 Organic Chemistry II. 2011S, 2014S

This undergraduate course focuses on second-semester organic chemistry, including reactions, mechanism, and NMR spectroscopy. The enrollment for this course largely consists of life sciences majors, and is taught in a lecture format with regular discussion and laboratory sections.

CHEM 332 Organic Chemistry II, 2015S, 2016S, 2017S

This undergraduate course focuses on second-semester organic chemistry, including reactions and mechanism. The enrollment is mainly comprised of chemistry, biochemistry and chemical engineering majors. The course is taught in a lecture format with a mandatory discussion section.

SERVICE

Institutional Committees and Service

- Faculty Advisor, Organic Student-Invited Colloquium, Department of Chemistry and Biochemistry, University of Delaware, Spring 2012 – present
- Organizing Committee, Heck Award and Lectureship, Department of Chemistry and Biochemistry, University of Delaware, Fall 2011 – present
- Coordinator of Organic Seminar Series, Fall 2010, Fall 2011, Fall 2012, 2014/2015, 2015/2016, 2016/2017
- Committee Member for >40 graduate and undergraduate student thesis committees
- Panelist for 6th Annual University of Delaware Graduate Research Forum Lunch Panel, April 28, 2016 (sponsored by UD Office of Graduate and Professional Education & the UD Graduate Student Government)
- Search Committee Member for Mass Spec Facility Staff Scientist, Fall 2016
- Search Committee Member for Organic Chemistry Instructional Continuing Track Faculty Member, Fall 2016 – present
- Search Committee Member for Inorganic Chemist, 2015–2016
- Panelist for “Managing a Career in Science: The Academic Life,” part of UD’s HHMI Undergraduate Science Education Summer Enrichment Program, June 24, 2015
- Speaker at Science Coalition Champion of Science Award Ceremony for Senator Chris Coons, Oct. 8, 2014
- Panelist for “Managing a Career in Science, the Academic Life. Carer Biographies of People with Undergraduate Degrees in Science,” part of UD’s HHMI Undergraduate Science Education Summer Enrichment Program, July 9, 2014

- UD Chemistry & Biochemistry Undergraduate Curriculum Committee (2009–2012, 2014–2015)
- Organizer, graduate student recruiting for the Department of Chemistry and Biochemistry at the ACS Graduate School Recruiting Events at the 244th ACS National Meeting in Philadelphia, PA, August 19–20, 2012
- Demonstrator, Bring Your Child to Work Day, University of Delaware, April 27, 2012
- Co-author of NIH proposal to bring Orbitrap Mass Spectrometer to Mass Spectrometry Lab, Department of Chemistry and Biochemistry, University of Delaware, March 2012
- Search Committee Member for Environmental Chemist, 2011–2012
- Search Committee Member for Computing Support Specialist I, 2012
- Seminar Presenter and Demonstrator for UD ACS Student Affiliates Meeting, Sept. 2011
- Science Advisor for Education Outreach Project about Nobel Laureate Richard Heck, *Discovery and Achievement, Richard Heck's Contribution to Science and the World*. See http://www.udel.edu/chem/mpwatson/mpwatson/Heck_Video.html
- Presenter on Richard F. Heck's Nobel Prize, College of Arts & Sciences Nobel Symposium, University of Delaware, Oct. 29, 2010
- Presenter for New Student Orientation, Department of Chemistry and Biochemistry, University of Delaware, Aug. 31, 2015; Aug. 25, 2014; Aug. 30, 2010; Aug. 31, 2009
- Panelist for UD ACS Student Affiliates Research Panel, Feb. 16, 2010
- Panelist for "What Is It Like to Be a Woman in Science?" part of UD's HHMI Undergraduate Science Education Summer Enrichment Program, July 7, 2009

Professional Service

- Ad hoc member of NIH Advisory Council, May 19–20, 2016
- Proposal Reviewer for the National Science Foundation, 2010 – present
- Organized Delaware ACS Industry/Academia Poster Session, May 3, 2016, in ISE lobby
- Regular Reviewer for The Journal of the American Chemical Society, The Journal of Organic Chemistry, Organic Letters, Chemical Communications, Tetrahedron, and Tetrahedron Letters, 2010 – present (27 manuscripts reviewed in 2016)
- Proposal Reviewer for the ACS Petroleum Research Fund, 2012 – present
- Ad hoc Reviewer for NIH Synthetic and Biological Chemistry (SBCA) Review Panel, Oct. 15–16, 2015
- Grant Reviewer for City College of New York, 2014
- Discussion Leader, Reaction Mechanisms Conference, June 22–25, 2014, UC-Davis
- Moderator, Alfred Bader Symposium in honor of Prof. Laura Kiessling, 247th ACS National Meeting, March 19, 2014
- Liaison to Women Chemists' Committee for Delaware ACS Section, 2012
- Early Career Reviewer for NIH Synthetic and Biological Chemistry (SBCB) Review Panel, Oct. 4–5, 2012

- Session Chair, 244th ACS National Meeting in Philadelphia, PA, August 2012, and 243rd ACS National Meeting in San Diego, CA, April 2012
- STEM Role Model and CBC Departmental Organizer for American Association of University Women Award Luncheon for Excellence in Science and Mathematics, April 15, 2012
- Session Chair at Gordon Research Conference: Natural Products, July 2011
- Session Chair at Gordon Research Conference: Organic Reactions and Processes, July 2011
- Panelist, Careers in Chemistry Workshop at Rutgers University, Oct. 2010
- Session Moderator, 3rd Annual Frontiers at the Chemistry Biology Interface Symposium, Johns Hopkins University, May 1, 2010