Curriculum Vitae

Anita Elaine Mattson

Worcester Polytechnic Institute
Department of Chemistry and Biochemistry
60 Prescott St., 3003
Worcester, MA 01605

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Education:

2002-2007 Ph.D. in Organic Chemistry, *Northwestern University*, Evanston, IL. Graduate Research with Professor Karl A. Scheidt. Developed new thaizolium-based strategies for acyl anion addition reactions.

1998-2002 B.S. in Chemistry, *Northern Michigan University*, Marquette, MI. Undergraduate Research with Professor Frankie Ann McCormick. Studied polarity reversal catalysis in the context of radical reactions to replace trialkyltin hydrides.

Employment:

2017-present *Worcester Polytechnic Institute:* Associate Department Head and Graduate Program Coordinator

2016-present *Worcester Polytechnic Institute:* Associate Professor of Chemistry with Tenure

2015-2016 *The Ohio State University*: Associate Professor of Chemistry with Tenure

2009-2015 *The Ohio State University*: Assistant Professor of Chemistry

2007-2009 *University of North Carolina at Chapel Hill.* NIH Postdoctoral Fellow with Professor Michael T. Crimmins. Investigated a convergent approach toward hemibrevetoxin B.

Financial Support:

Current:

8/15/2017-8/14/2022 National Institutes of Health (1R35GM124804-01) "Silanediol Enabled Drug Discovery". $1,676,185. Principal Investigator.

7/1/2014-6/30/2018 National Science Foundation Chemical Catalysis "SusChem: Chiral Silanediols in Anion-Binding Catalysis" $390,000. Principal Investigator.

Completed:

5/18/2016 American Chemical Society Organic Division to Support Session on "Catalysis in Natural Product Synthesis" at the 47th Central Regional Meeting in Cincinnati, Ohio. $2000, Symposium Chair.

7/1/2015-6/30/2016 National Science Foundation Chemical Catalysis "SusChem: Chiral Silanediols in Anion-Binding Catalysis" Supplemental Funding $23,000 for International Collaboration with Prof. Kondo at Yamagata University in Japan. Co-Principal Investigator.

10/1/2013-9/30/2014 OSU/Sao Paulo Research Foundation (FAPESP) "Organocatalytic Insertion Reactions for Drug Discovery" $10,000. Co-Principal Investigator.

7/1/2012-8/31/2014 Petroleum Research Foundation (ACS) "Sustainable Catalysts for Feedstock Chemical Functionalization" $100,000. Principal Investigator.

2/1/2011-8/31/2012 American Cancer Society Institutional Seed Grant. "Drug Discovery through Enhanced Hydrogen Bond Donor Catalysis" $24,000. Principal Investigator.

6/1/2007-5/31/2009 Ruth L. Kirschstein National Research Service Award. "Total synthesis of the Anticancer Natural Product Pachyclavulariaenone G" $92,000. Principal Investigator.

Independent Career Publications:

1. Visco, M.; Attard, J.; Guan, Y.; Mattson, A. E. "Anion-Binding Catalyst Designs for Complex Molecule Synthesis" *Tetrahedron Lett.* **2017**, *58*, 2623-2628. *Invited Contribution.*

2. Hardman-Baldwin, A. M.; Mattson, A. E. Product Subclass 47: Silanols. In *Science of Synthesis Knowledge Updates*; Oestreich, M., Ed. Thieme Chemistry: Stuttgart, **2017**, *1*, 213-245.

3. Sieber, J. D.; Angeles-Dunham, V. V.; Chennamadhavuni, D.; Fandrick, D. R.; Haddad, N.; Grinberg, N.; Kurouski, D.; Lee, H.; Song, J. J.; Yee, N. K.; Mattson, A. E.; Senanayake, C. H. "Rhodium-Catalyzed Asymmetric Allenylation of Sulfonylimines and Application to the Stereospecific Allylic Allenylation" *Adv. Syn. Cat.* **2016**, *358,* 3062-3068

4. Hardman-Baldwin, A. M.; Visco, M. D.; Wieting, J. M.; Stern, C.; Kondo, S.; Mattson, A. E. "Silanediol Catalyzed Chromenone Functionalization" *Org. Lett.* **2016**, *18*, 3766-3769.

5. Visco, M. D.; Wieting, J. M.; Mattson, A. E. "Carbon-Silicon Bond Formation in the Synthesis of Benzylic Silanes" *Org. Lett.* **2016**, *18*, 2883-2885.

6. Wieting, J. M.; Hardman-Baldwin, A. M.; Visco, M. D.; Mattson, A. E. "Silanediol Recognition in Catalysis, Sensing, and Drug Discovery" *Aldrichimica Acta* **2016**, *49*, 15-20.

7. Bernardim, B.; Couch, E. D.; Hardman-Baldwin, A. M.; Burtoloso, A. C. B.; Mattson, A. E. "Divergent Roles of Urea and Phosphoric Acid Derived Catalysts in Reactions of Diazo compounds" *Synthesis* **2016**, 677-686. *Invited Contribution*.

8. Reeves, T. J.; Visco, M. D.; Marsini, M. A.; Grinberg, N.; Busacca, C. A.; Mattson, A. E.; Senanayake, C. H. "A General Method for Imine Formation Using $B(OCH_2CF_3)_3$" *Org. Lett.* **2015**, *17*, 2442-2445.

9. Wieting, J. M.; Fisher, T. J.; Schafer, A. G.; Visco, M. D.; Galluci, J. C.; Mattson, A. E. "Preparation and Catalytic Activity of BINOL-Derived Silanediols" *Eur. J. Org. Chem.* **2015**, 525-533.

10. Angeles-Dunham, V. V.; Nickerson, D. M.; Ray, D.; Mattson, A. E. "Nitrimines in Metal-Free $C(sp^2)$-$C(sp^2)$ Cross Couplings" *Angew. Chem. Int. Ed.* **2014**, *53*, 14538-14541.

11. Fisher, T. J.; Mattson, A. E. "Synthesis of α-Peroxyesters via Organocatalyzed O–H Insertion of Hydroperoxides and Aryl Diazoesters" *Org. Lett.* **2014**, *16*, 5316-5319.

12. Hardman, A. M.; Mattson, A. E. "Silanediol-Catalyzed Carbon Dioxide Fixation" *ChemSusChem* **2014**, *7*, 3275-3278.

13. So, S. S.; Oottikkal, S.; Badjic, J.; Hadad, C. M.; Mattson, A. E. "Urea-Catalyzed N–H Insertion-Arylation Reactions of Nitrodiazoester" *J. Org. Chem.* **2014**, *79*, 4832-4842.

14. Couch, E. D.; Auvil, T. J.; Mattson, A. E. "Urea-Induced Acid Amplification: A New Approach for Metal-Free Insertion Chemistry" *Chem. Eur. J.* **2014**, *20*, 8283-8287.

15. Auvil, T. J.; Schafer, A. G.; Mattson, A. E. "Design Strategies for Enhanced Hydrogen Bond Donor Catalysts" *Eur. J. Org. Chem.* **2014**, 2633-2646.

16. So, S. S.; Mattson, A. E. "Enantioselective N–H Insertion/Arylation Reactions of Nitrodiazoesters" *Asian J. Org. Chem.* **2014**, *3*, 425-428. *Invited Contribution.*

17. Nickerson, D. M.; Angeles, V. V.; Mattson, A. E. "Urea Activation of Nitrimines: A Mild, Metal-Free Approach to Sterically Hindered Enamines" *Org. Lett.* **2013**, *15*, 5000-5003.

18. Schafer, A. G.; Wieting, J. M.; Fisher, T. J.; Mattson, A. E. "Chiral Silanediols in Anion Binding Catalysis" *Angew. Chem. Int. Ed.* **2013**, *52*, 11321-11324.
    ·Highlighted in SynFacts: List, B.; Wang, Q. *Synfacts* **2013**, *9*, 1237.

19. Auvil, T. J.; So, S. S.; Mattson, A. E. "Double Arylation of Nitrodiazoesters via a Transient N–H Insertion Organocascade" *Angew. Chem. Int. Ed.* **2013**, *52*, 11317-11320.
    ·Highlighted in SynFacts: List, B.; Kim, J. *Synfacts* **2013**, *9*, 1239.

20. Hardman, A. M.; So, S. S.; Mattson, A. E. "Urea-Catalyzed Construction of Oxazinanes" *Org. Biomol. Chem.,* **2013**, *11*, 5793-5797.

21. Nickerson, D. M.; Angeles, V. V.; Auvil, T. J.; So, S. S.; Mattson, A. E. "Internal Lewis Acid Assisted Ureas: Tunable Hydrogen Bond Donor Catalysts" *Chem. Comm.* **2013**, *49*, 4289-4291. Invited contribution to a special issue for emerging investigators.

22. So, S. S.; Mattson, A. E. "Urea Activation of α-Nitrodiazoesters: An Organocatalytic Approach to N–H Insertion Reactions" *J. Am. Chem. Soc.* **2012**, *147*, 8798-8801.
    ·Highlighted in SynFacts: List, B.; Kim, J. *Synfacts* **2012**, *8*, 903.

23. Nickerson, D. M.; Mattson, A. E. "Transition Metal and Hydrogen Bond Donor Hybrids: Catalysts for the Activation of Alkylidene Malonates" *Chem. Eur. J.* **2012**, *18*, 8310-8314.

24. So, S. S.; Auvil, T. J.; Garza, V. G.*;* Mattson, A. E. "Boronate Urea Activation of Nitrocyclopropane Carboxylates" *Org. Lett.* **2012**, *14*, 444-447.

25. Auvil, T. J.; Mattson, A. E. "Internal Lewis Acid Assisted Benzoic Acid Catalysis" *Synthesis* **2012**, 44. Invited contribution to special topics issue on Lewis Acids.

26. Schafer, A. G.; Wieting, J. M.; Mattson, A. E. "Silanediols: A New Class of Hydrogen Bond Donor Catalysts" *Org. Lett.* **2011**, *13*, 5228-5232.
    ·Featured in *Chemical and Engineering News* **2011**, *89*, 34 and *Chemical and Engineering News* **2012**, *90*, 40.

27. So, S. S.; Burkett, J. A.; Mattson, A. E. "Internal Lewis Acid Assisted Hydrogen Bond Donor Catalysis" *Org. Lett.* **2011**, *13*, 716-719.

·Highlighted in SynFacts: List, B.; Ratjen, L. *Synfacts* **2011**, *7*, 439.

Publications during Supervised Career:

28. Crimmins, M. T.; Shamszad, M.; Mattson, A. E. "A Highly Convergent Approach toward (–)-Brevenal" *Org. Lett.* **2010**, *12*, 2614-2617.

29. Mathies, A. K.; Mattson, A. E.; Scheidt, K. A. "Intermolecular Crossed-Acyloin Reactions by Fluoride-Promoted Additions of *O*-Silyl Thiazolium Carbinols," *Synthesis,* Invited Contribution to Special Edition For Journal Awardees. **2009**, 377-383.

30. Mattson, A.E.; Scheidt, K. A. "5-(1,1-Dimethylethyl)-5,6-dihydro-2-phenyl-(5S)-oxazolo[2,3-c]-1,2,4-triazolium tetrafluoroborate" *Encyclopedia of Reagents for Organic Synthesis* **2007**.

31. Mattson, A. E.; Scheidt, K. A. "Nucleophilic Acylation of Quinone Methides: An Umpolung Strategy for the Synthesis of α-Aryl Ketones and Benzofurans" *J. Am. Chem. Soc.* **2007**, *129*, 4508-4509.

32. Mattson, A. E.; Bharadwaj, A. R.; Zuhl, A.; Scheidt, K. A. "Thiazolium-Catalyzed Reactions of Acylsilanes: New Strategies for Acyl Anion Addition Reactions" *J. Org. Chem.* **2006***, 71*, 5715-5724.

33. Mattson, A. E.; Zuhl, A. M.; Scheidt, K. A. "Direct Nucleophilic Acylation of Nitroalkenes Promoted by a Fluoride Anion/Thiourea Combination" *J. Am. Chem. Soc.* **2006**, *128*, 4932-4933.

34. Mattson, A. E.; Scheidt, K. A. "Catalytic Addition of Acylsilanes to Phosphorylimines: An Acyl Anion Approach to α-Amino Ketones," *Org. Lett.* **2004**, *6*, 4363-4366.

35. Mattson, A. E.; Bharadwaj, A. R.; Scheidt, K. A. "The Thiazolium-Catalyzed Sila-Stetter Reaction: Conjugate Addition of Acylsilanes to Unsaturated Esters and Ketones," *J. Am. Chem. Soc.* **2004**, *126*, 2314-2315. This publication featured in *Lett. Org. Chem.* **2004**, *1*, 290-291.

Invited Seminars during Independent Career:

1. "Enantioselective C–C Bond Construction with Non-Covalent Catalysis" University of New Hampshire, Durham, NH. November 21, 2017.

2. "Enantioselective C–C Bond Construction with Non-Covalent Catalysis" Northeastern University, Boston, MA. September 13, 2017.

3. "Unique Reactivity Patterns Catalyzed by Boronate Ureas and Silanediols" Gordon Research Conference on Physical Organic Chemistry, Holderness, NH. June 28, 2017

4. "Enantioselective C–C Bond Construction with Non Covalent Catalysis" Gordon Research Seminar Physical Organic Chemistry, Holderness, NH. June 24, 2017

5. "Silanediol Catalysis" Central Massachusetts Local ACS Meeting, Fitchburg, MA. March 29, 2017

6. "Enantioselective C–C Bond Construction with Non-Covalent Catalysis" University of Southern Mississippi, Hattiesburg, MS. March 9, 2017.

7. "Enantioselective C–C Bond Construction with Non-Covalent Catalysis" University of Rhode Island, Kingston, RI. November 28, 2016.

8. "Enantioselective C–C Bond Construction with Non-Covalent Catalysis" State University of New York Albany, Albany, NY. September 15, 2016.

9. "Metal-Free Strategies for C–C Bond Construction" Worcester Polytechnic Institute, Worcester, MA. February 15, 2016.

10. "Metal-Free Strategies for C–C Bond Construction in Natural Product Synthesis" *Pacifichem 2015*, Honolulu, Hawaii. December 18, 2015.

11. "Metal-Free Strategies for C–C Bond Construction" University of Louisville, Louisville, KY. December 3, 2015.

12. "Metal-Free Strategies for C–C Bond Construction" University of Illinois at Chicago, Chicago, IL. November 12, 2015.

13. "Metal-Free Strategies for C–C Bond Construction" Texas A&M University, College Station, TX. November 4, 2015.

14. "Metal-Free Strategies for C–C Bond Construction" Chicago Organic Symposium, Chicago, IL. July 11, 2015.

15. "Metal-Free Strategies for C–C and C–heteroatom Bond Construction" Dow Agro Sciences, Indianapolis, IN. May 17, 2015.

16. "Design + Build: Enhanced Hydrogen Bond Donor Catalysis" Kent State University, Kent, OH. September 11, 2014.

17. "Design + Build: Enhanced Hydrogen Bond Donor Catalysis" Bristol-Myers Squibb, New Brunswick, NJ. July 24, 2014.

18. "Urea Activation of Nitrodiazoesters" *Organic Processes and Procedures Gordon Research Conference*, Bryant University, RI. July 2014.

19. "Catalysis with Chiral Silanediols" *Heterocycles Gordon Research Conference*, Salve Regina University, Newport, RI. June 2014.

20. "New Directions in Hydrogen Bond Donor Catalysis" Dow-Corning, Midland, MI. March 20, 2014.

21. "New Directions in Hydrogen Bond Donor Catalysis" *FloHet-2014 15th Florida Heterocyclic and Synthetic Conference*, Gainesville, FL. March 2014.

22. "New Directions in Hydrogen Bond Donor Catalysis" University of Sao Paulo – Sao Carlos, Sao Carlos, SP, Brazil. February 2014.

23. "New Directions in Hydrogen Bond Donor Catalysis" Boehringer-Ingelheim Laboratories, Ridgefield, CT. February 7, 2014.

24. "New Directions in Hydrogen Bond Donor Catalysis" University of California – Santa Barbara, Santa Barbara, CA. January 30, 2014.

25. "New Directions in Hydrogen Bond Donor Catalysis" University of California – Los Angeles, Los Angeles, CA. January 29, 2014.

26. "New Directions in Hydrogen Bond Donor Catalysis" University of North Carolina at Chapel Hill, Chapel Hill, NC. January 17, 2014.

27. "New Directions in Hydrogen Bond Donor Catalysis" *2013 Discovery Chemistry Seminar Series* Abbvie Laboratories, Chicago, IL. September 2013.

28. "Urea Activation of Nitrodiazoesters" *2012 Organic Letters/Journal of Organic Chemistry Best Paper* Supporting Lecture. 246th Meeting of the American Chemical Society, Indianapolis, IN. September 2013.

29. "Urea Activation of Nitrodiazoesters" (Short Talk) *Heterocycles Gordon Research Conference*, Salve Regina University, Newport, RI. June 2013.

30. "Urea Activation of Nitrodiazoesters" *2nd U.S. Spain Workshop on Asymmetric Chemical Synthesis and Catalysis*, Chicago, IL. April 2013.

31. "New Directions in Hydrogen Bond Donor Catalysis" Northwest Central Ohio Local American Chemical Society Section. Ada, OH. March 20, 2013.

32. "New Directions in Hydrogen Bond Donor Catalysis" University of Michigan, Ann Arbor, MI. March 14, 2013.

33. "New Directions in Hydrogen Bond Donor Catalysis" Michigan State University, East Lansing, MI. March 13, 2013.

34. "New Directions in Hydrogen Bond Donor Catalysis" University of Utah, Salt Lake City, UT. February 21, 2013.

35. "New Directions in Hydrogen Bond Donor Catalysis" Indiana State University, Terre Haute, IN. January 22, 2013.

36. "Urea Activation of Nitrodiazoesters" *1st Japan-US Organocatalytic Symposium,* Honolulu, HI. December 2012.

37. "New Directions for Hydrogen Bond Donor Catalysis" Otterbein College, Westerville, OH. October 31, 2012.

38. "New Directions for Hydrogen Bond Donor Catalysis" Berry College, Mount Berry, GA. October 25, 2012.

39. "New Directions for Hydrogen Bond Donor Catalysis" Case Western Reserve University, Cleveland, OH. September 6, 2012.

40. "New Strategies for Hydrogen Bond Donor Catalysis" Denison University, Granville, OH. October 14, 2011.

41. "New Strategies for Hydrogen Bond Donor Catalysis" Wright State University, Dayton, OH. September 30, 2011.

42. New Strategies for Hydrogen Bond Donor Catalysis" University of Hawaii at Manoa, Honolulu, HI. April 2011.

43. "New Strategies for Hydrogen Bond Donor Catalysis" *1st U.S. Spain Workshop on Asymmetric Chemical Synthesis and Catalysis*, Benicassim, Spain. September 2010.

Presentations during Independent Career:

1. Mattson, A. E. "Urea Activation of Nitrodiazoesters" *Heterocycles Gordon Research Conference Stereochemistry*, Salve Regina University, Newport, RI, June 2013.

2. Mattson, A. E. "An Organocatalytic Approach toward N–H Insertion Reactions" *19th Gordon Research Conference Stereochemistry*, Salve Regina University, Newport, RI, July 2012.

3. Mattson, A. E. "Enhanced Hydrogen Bond Donor Catalysis" *243rd National Meeting American Chemical Society*, San Diego, CA. March 2012.

4. Mattson, A. E. "New Strategies for Hydrogen Bond Donor Catalysis" *242nd National Meeting American Chemical Society*, Denver, CO. August 2011.

5. Mattson, A. E. "New Strategies for Hydrogen Bond Donor Catalysis" *Heterocycles Gordon Research Conference*, Newport, RI. June 2011.

6. Mattson, A. E. "Enhanced Hydrogen Bond Donor Catalysis" *240th National Meeting American Chemical Society*, Boston, MA. August 2010.

7. Mattson, A. E. "Enhanced Hydrogen Bond Donor Catalysis" *18th Gordon Research Conference Stereochemistry*, Salve Regina University, Newport, RI, July 2010.

Presentations during Supervised Career:

8. Mattson, A. E; Crimmins, M.T. "A Highly Convergent and Asymmetric Approach toward Hemibrevetoxin B" *236th National Meeting American Chemical Society*, Philadelphia, PA. August 2008.

9. Mattson, A. E; Crimmins, M.T. "A Highly Convergent and Asymmetric Approach toward Hemibrevetoxin B" *17th Gordon Research Conference Stereochemistry*, Salve Regina University, Newport, RI, July 2008.

10. Mattson, A. E; Scheidt K. A. "New Thiazolium-Based Strategies for Acyl Anion Addition Reactions" *40th National Organic Symposium,* Duke University, June 2007.

11. Mattson, A. E; Scheidt K. A. "Nucleophilic Acylation of Quinone Methides: An Umpolung Strategy for the Synthesis of α-Aryl Ketones" *233th National Meeting American Chemical Society*, Chicago, IL, March 2007.

12. Mattson, A. E.; Bharadwaj, A. R.; Scheidt, K. A. "Thiazolium Catalyzed Reactions of Acylsilanes: New Strategies for Acyl Anion Addition Reactions" *228th National Meeting American Chemical Society*, Philadelphia, PA, August, 2004.

13. Mattson, A. E.; Eilers, C.; McCormick, F. A. "Polarity Reversal Catalysis" *34th Great Lakes Regional Meeting American Chemical Society*, Minneapolis, MN, June 2002.

Honors and Awards:

2017	Keynote Speaker at Physical Organic Chemistry Gordon Research Symposium
2012	Thieme Chemistry Journal Award
2011	American Cancer Society Institutional Research Grantee
2008	Stereochemistry Gordon Research Conference Chair's Award
2007	National Institutes of Health Postdoctoral Fellowship, University of North Carolina
2007	National Organic Symposium Poster Award Sponsored by Scynexis
2005	American Chemical Society Division of Organic Chemistry Fellowship sponsored by Eli Lilly
2004	American Chemical Society Women's Chemist Committee Travel Award supported by Eli Lilly
2002	Outstanding Senior Award for Chemistry, Northern Michigan University
2000	Alchemist Award (Top Organic Chemistry Student Award), Northern Michigan University

Professional Memberships:

1997-present	American Chemical Society
2016-present	Sigma Xi

Student Advising:

PhD Candidate Advising:

Sonia S. So	2009-2014	Assistant Professor Denison University (August 2014)
Andrew G. Schafer	2009-2014	Postdoc Blakey (Aug 2014), Boulder Scientific (Jan 2016)
Tyler J. Auvil	2010-2014	Dow Chemical (August 2014)
David M. Nickerson	2010-2014	Lubrizol (August 2014)
Joshua M. Wieting	2011-2016	Postdoc with Craig Lindsley Vanderbilt (January 2016)
Andrea Hardman	2012-2016	Lecturer at Ohio State University (Aug 2016)
Veronica Angeles	2012-2016	Chemist at Kalexsyn (Aug 2016)
Michael Visco	2013-present	
Jon Attard	2016-present	
Allie Levielle	2017-present	

MS Candidate Advising

Erica Couch	2013-2014	PPG (Aug 2015)

Postdoctoral Fellow Advising

Thomas Fisher, PhD	2013-2015	Goodyear (January 2015)
Daniel Frasco, PhD	2015-2016	ThermoFisher (March 2016)
Yong Guan, PhD	2017-present	

Undergraduate Student Advising:

Julie A. Burkett	2009-2011	Chemist at Akzo-Nobel
Christopher M. Johnson	2010-2011	University of Toledo Medical School
Victoria J. Garza	2010-2012	University of Texas-Austin Chemistry Graduate School
Monika Patel	2012-2014	Undergraduate at OSU in Chemical Engineering
Malcolm Cole	2013-2015	Graduate Student at University of Minnesota

Devin Ray	2013-2015	Cornell University MD/PhD Program 2016
Jalyn Todd	2015-2016	Undergraduate at OSU in Pharmacy
Jessica Hatt	2016-present	
Joe DePaolo-Boisevert	2016-present	

Student Group Advising:
ChemTALKS 2011-2016

Student Committees Served On:
Mathieu Challet, Sep 2009, Candidacy Exam
Subu Dong, Sep 2009, Faculty Representative Final Defense
Ben Wolfe, Oct 2009, Candidacy Exam
Yucheng Peng, Nov 2009, Candidacy Exam
Chad Eichman, May 2010, Final Defense
Carla Counceller, May 2010, Final Defense
Simon Pondaven, Aug 2010, Candidacy Exam
Chris Check, Sep 2010, Candidacy Exam
Matt Lauer, Sep 2010, Candidacy Exam
Yam Timsina, Dec 2010, Candidacy Exam
Aaron Potash, Feb 2011, Undergraduate Senior Thesis Faculty Representative
Ziqing Qian, May 2011, Candidacy Exam
Jordan Jensen, May 2011, Faculty Representative Final Defense
Brenda Wray, May 2011, Final Defense
Sean Butler, May 2011, Final Defense
Yong Chen, Sep 2011, Candidacy Exam
Ting Wang, Sep 2011, Final Defense
Hoi Ling Luk, July 13, 2012, Final Defense
Chris Check, Sep 7, 2012, Final Defense
Zhili Zao, March 21, 2013, Candidacy Exam
Lara McCormick, March 28, 2013, Faculty Representative Final Defense
Zhigao Zhang, March 29, 2013, Final Defense
Daniel Adu-Ampratwum, April 2013, Candidacy Exam
Jeevan Baretto, April 29, 2014, Faculty Representative Final Defense
Amneh Awad, July 2014, Candidacy Exam
Nathan Line, August 2014, Candidacy Exam
Charles Clay, August 2014, Candidacy Exam
Christopher DeSantis, August 2014, Candidacy Exam
Liguang Mao, August 2014, Candidacy Exam
Jonathan Crowe, August 2014, Candidacy Exam
Nicholas Bewick, September 2014, Final Defense
Krishna Duvvuri, October 2014, Candidacy Exam
Kevin Click, June 2015, Candidacy Exam
Krista Cunningham, July 2015, Final Defense

Teaching at WPI:

CH555	Independent Study with Megan Hendrie – Organic Chemistry Laboratory
CH2320	Organic Chemistry II (2017)

Teaching at OSU:

CH251/2510	Organic Chemistry I (2009-2015)
CH832	Advanced Synthetic Chemistry (2009-2012)

CH942 Special Topics: Organic Catalysis (2011)
CH252 Organic Chemistry II (2012)
CH4610 Basic Organic Reaction Mechanisms (2013)

Service at WPI:
Member on the Committee of Academic Operations (2017-present)
Search Committee for Tenure Track Faculty in Environmental Engineering (2017)
Chemistry and Biochemistry Graduate Admissions Committee (2016-present)

Service at OSU:
Organic Division Secretary (2015-2016)
Paquette Legacy Symposium Coordinator (2014-2016)
Organic Student Seminar Series Coordinator (2014-2016)
Synthesis RFG Seminar Coordinator (2012-2015)
Chemistry and Biochemical Engineering Building Planning Committee (2011-2012)
Graduate Student Admissions Committee (2010-2013)
Organic Division 1st Year Oral Examination Committee (2010, 2011, 2013, 2015)
Swenton Teaching Award Committee (2010)
Organic Division Cumulative Exam Administrator (2009, 2012, 2014, 2015)
Graduate Student Service Award Committee (2012)

Community Service and Outreach:
Soap Making Laboratory at Worcester Technical High School (April 2017)
NSF Review Panel (October 2016)
"Catalysis in Natural Product Synthesis" Session Organizer ACSCERM (May 18-21, 2016)
NSF Review Panel (October 2015)
NIH NIGMS Grant Writing Workshop Participant (June 29-July 2, 2013)
NIH SBCA Review Panel (June 11, 2013)
American Chemical Society on Campus Presenter (October 10, 2012)
Truth Values Performance Panelist about Women in Academic STEM Fields (October 4, 2012)
Gordon Research Conference Stereochemistry Discussion Leader (July 30, 2012)
American Cancer Relay for Life Research Presentation (June 15, 2011)
American Chemical Society Career Workshop Presenter (June 9, 2011)
Metro High School-OSU Chemistry Outreach Coordinator (2010-2016)
Denman Undergraduate Poster Judge (2010-2016)
NMS Undergraduate Research Forum Organizing Committee (2010-2016)
American Chemical Society Division of Organic Chemistry Session Presider (2010-2013)
Summer Research Opportunities Program Development Seminar Panelist (Aug 29, 2010)

Peer Reviewer: *Journals:* Journal of the American Chemical Society, Organic Letters, Journal of Organic Chemistry, Chemical Society Reviews, Chemical Science, Chemistry-A European Journal, Chemical Communications, Synthesis, Beilstein Journal of Organic Chemistry, Tetrahedron Letters, Nature Chemistry, Organic and Biomolecular Chemistry, Angewandte Chemie

Grant Applications: American Chemical Society Petroleum Research Foundation, American Cancer Society, Northern Illinois University, National Institutes of Health, National Science Foundation