

# Sarah E. Reisman

Division of Chemistry and Chemical Engineering • California Institute of Technology  
Mail Code 101-20, 1200 E. California Blvd, Pasadena, CA 91125  
(626) 395-6044 • reisman@caltech.edu  
<http://reismangroup.caltech.edu>

## POSITION

- 9/2020 to present **Bren Professor Chemistry**  
*Division of Chemistry & Chemical Engineering  
California Institute of Technology, Pasadena, CA*
- 7/2015 to present **Executive Officer for Chemistry**  
*Division of Chemistry & Chemical Engineering  
California Institute of Technology, Pasadena, CA*
- 7/2015 to present **Investigator, Heritage Medical Research Institute**  
*California Institute of Technology, Pasadena, CA*
- 6/2014 to 8/2020 **Professor of Chemistry**  
*Division of Chemistry & Chemical Engineering  
California Institute of Technology, Pasadena, CA*
- 6/2008 to  
6/2014 **Assistant Professor of Chemistry**  
*Division of Chemistry & Chemical Engineering  
California Institute of Technology, Pasadena, CA*

## EDUCATION & TRAINING

- 2006-2008 **Harvard University, Cambridge, MA**  
National Institutes of Health Postdoctoral Fellow with Professor Eric N. Jacobsen
- 2001 - 2006 **Yale University, New Haven, CT**  
Ph.D. in Organic Chemistry with Professor John L. Wood
- 1997 - 2001 **Connecticut College, New London, CT**  
B.A. in Chemistry, *Cum Laude*  
Undergraduate research with Professor Timo V. Ovaska

## AWARDS & HONORS

- American Chemical Society Elias J. Corey Award (2020)
- Research Corporation for Science Advancement FRED Award (2019)
- The Margaret Faul Women in Chemistry Award (2019)
- The OMCOS Award (2019)
- Dr. James King, Jr. Award for Supporting Student Diversity, Caltech (2018)
- Heritage Medical Research Institute Investigator (2015-2018, 2018-2021)
- The Society of Synthetic Organic Chemistry, Japan Lectureship Award (2015)
- 2015 Bright Young Minds, recognized by *Science News* (2015)
- Bristol-Myers Squibb Unrestricted Grant in Synthetic Organic Chemistry (2014-2015)
- Tetrahedron Young Investigator Award (2014)
- Academy of Achievement, Delegate (2014)
- Arthur C. Cope Scholar Award (2013)
- American Cancer Society Research Scholar Award (2013-2016)
- Eli Lilly Grantee (2012-13)
- Novartis Early Career Award (2012-14)
- DuPont Young Professor Grant (2012-14)
- Amgen Young Investigator Award (2012)
- Camille Dreyfus Teacher-Scholar Award (2012)
- Cottrell Scholar Award (2012)
- Alfred P. Sloan Research Fellowship (2012)
- ACS WCC Rising Star Award (2012)

- Boehringer Ingelheim New Faculty Grant (2011)
- NSF CAREER Award (2011-2015)
- ACS PRF Doctoral New Investigator Award (2011-2013)
- Thieme Chemistry Journal Award (2011)
- Baxter Foundation New Faculty Award (2008)
- NIH NRSA Postdoctoral Fellowship (2006-2008)
- Certificate of Distinction in Teaching (Harvard College) (2006)
- Wolfgang Prize for Best Thesis (Yale University) (2006)
- Bristol-Myers Squibb Graduate Research Fellowship (2004-2005)
- Roche Pharmaceuticals Excellence in Chemistry Award (2004)
- Arthur J. and Helen Hill Endowed Fellowship (Yale University) (2004)
- Yale University Chemistry Department Teaching Award (Yale University) (2003)
- Jean V. Johnston Award in Chemistry (Connecticut College) (2001)
- Pfizer Summer Undergraduate Research Fellowship (2000)
- Award for Achievement in Organic Chemistry (Connecticut College) (1999)
- Lawrence Scholar Award (Connecticut College) (1997)

## PROFESSIONAL ACTIVITIES

Associate Editor, <i>Organic Letters</i>	11/2018 to present
Member, Board of Editors, <i>Organic Syntheses</i>	8/2016-7/2023
Member, NIH Study Section, Synthetic and Biological Chemistry, A	6/1/2016-5/31/2022
Advisory Board, Open Reaction Database	5/1/2020 to present
Board Member, Medicinal and Biological Chemistry Foundation	7/2019 to present
Member, Board of Reviewing Editors, <i>Science</i>	10/2016 to 11/2018
Member, NSF CHE Committee of Visitors	5/2016
Member, Scialog Advisory Council, Research Corporation	4/10/2017
Editorial Advisory Board Member, <i>ACS Central Science</i>	11/2018 to present
Editorial Advisory Board Member, <i>Organic Letters</i>	3/2015 to 11/2018
Editorial Advisory Board Member, <i>Chem</i>	12/2015 to present
Editorial Advisory Board Member, <i>Tetrahedron/Tetrahedron Letters</i>	12/2015 to present
Member, American Chemical Society	2002 to present

Reviewer: *Journal of the American Chemical Society*, *Organic Letters*, *Journal of Organic Chemistry*, *ACS Catalysis*, *Angewandte Chemie International Edition*, *Science*, *Nature*, *Nature Chemistry*, *Chemical Science*, *Chem*, *Tetrahedron Letters*

## PUBLICATIONS

### **Contributions from Independent Career:**

- Blom, A. E. M.; Su, J. Y.; Repka, L. M.; Reisman, S. E.; Dougherty, D. A. "Synthesis and Biological Evaluation of a Series of Pyrroloindolines as Positive Allosteric Modulators of the  $\alpha_1\beta_2\gamma_2$  GABA<sub>A</sub> Receptor." **2020**, *ACS Med. Chem. Lett.* DOI: [10.1021/acsmchemlett.0c00340](https://doi.org/10.1021/acsmchemlett.0c00340)
- Ryou, S.; Maser, M. R.; Cui, A. Y.; DeLano, T. J.; Yue, Y.; Reisman, S. E. "Graph Neural Networks for the Prediction of Substrate-Specific Organic Reaction Conditions." ICML 2020 Workshop on Graph Representation Learning and Beyond. *Accepted*.
- Wittmann, B. J.; Knight, A. M.; Hofstra, J. L.; Reisman, S. E.; Kan, J.; Arnold, F. H. "Diversity-Oriented Enzymatic Synthesis of Cyclopropane Building Blocks." *ACS Catal.* **2020**, *10*, 7112.
- Dibrell, S. E.; Poremba, K. E.; Reisman, S. E. "Nickel-Catalyzed Enantioselective Reductive Cross-Coupling Reactions." *ACS Catal.* **2020**, 8237.
- Dibrell, S.E.; Maser, M.; Reisman, S.E. "SeO<sub>2</sub>-Mediated Oxidative Transposition of Pauson–Khand Products." *J. Am. Chem. Soc.* **2020**, *142*, 6483.
- Han, A.; Tao, Y.; Reisman, S.E. "A 16-step synthesis of the isoryanodane diterpene (+)-perseanol." *Nature* **2019**, *573*, 563.

49. DeLano, T.J.; Reisman, S.E. "Enantioselective Electroreductive Coupling of Alkenyl and Benzyl Halides via Nickel Catalysis." *ACS Catal.* **2019**, *9*, 6751.
48. Hofstra, J. L.; Poremba, K. E.; Shimozone, A. M.; Reisman, S. E. "A Simple Procedure for the Conversion of Enol Triflates to Alkenyl Halides." *Angew. Chem. Int. Ed.* **2019**, *58*, 14901.
47. Beck, J. C.; Lacker, C. R.; Chapman, L. M. "A Modular Approach to Prepare Enantioenriched Cyclobutanes: Synthesis of (+)-Rumphellaone A." *Chem. Sci.* **2019**, *10*, 2315.
46. Su, J. Y.; Grünenfelder, D. C.; Takeuchi, K. "A Radical Deoxychlorination of Cesium Oxalates." *Org. Lett.* **2018**, *20*, 4912.
45. Xu, C.; Han, A.; Reisman, S. E. "An Oxidative dearomatization Approach to Prepare the Pentacyclic Core of Ryanodol." *Org. Lett.* **2018**, *20*, 3793.
44. Chapman, L. M.; Beck, J. C.; Lacker, C. R.; Wu, L. Reisman, S. E. "Evolution of a Strategy for the Enantioselective Total Synthesis of (+)-Psiguadial B." *J. Org. Chem.* **2018**, *83*, 6066–6085.
43. Farney, E. P.; Feng, S.; Schäfers, F.; Reisman, S. E. "Total Synthesis of (+)-Pleuromutilin." *J. Am. Chem. Soc.* **2018**, *140*, 1267.
42. Hofstra, J. L.; Cherney, A. H.; Ordner, C. M.; Reisman, S. E. "Synthesis of Enantioenriched Allylic Silanes via Ni-Catalyzed Reductive Cross-Coupling." *J. Am. Chem. Soc.* **2018**, *140*, 139.
41. Poremba, K. E.; Kadunce, N. T.; Suzuki, N.; Cherney, A. H.; Reisman, S. E. "Nickel-Catalyzed Asymmetric Reductive Cross-Coupling to Access 1,1-Diarylalkanes." *J. Am. Chem. Soc.* **2017**, *139*, 5684.
40. Wang, H.; Regan, C. J.; Codelli, J. A.; Romanato, P.; Puchlopeck-Dermenci, A. L. A.; Reisman, S. E. "Enantioselective Synthesis of (–)-Acetylpoaranotin." *Org. Lett.* **2017**, *19*, 1698.
39. Suzuki, N.; Hofstra, J. L.; Poremba, K. E.; Reisman, S. E. "Nickel-Catalyzed Enantioselective Cross-Coupling of *N*-Hydroxyphthalimide Esters with Vinyl Bromides." *Org. Lett.* **2017**, *19*, 2150.
38. Xu, C.; Han, A.; Virgil, S. J.; Reisman, S. E. "Chemical Synthesis of (+)-Ryanodine and (+)-20-Deoxyspiganthine." *ACS Cent. Sci.* **2017**, *3*, 278.
37. Chapman, L. M.; Beck, J. C.; Wu, L.; Reisman, S. E. "Enantioselective Total Synthesis of (+)-Psiguadial B." *J. Am. Chem. Soc.* **2016**, *138*, 9803.
36. Chuang, K. V.; Xu, C.; Reisman, S. E. "15-Step Synthesis of Ryanodol." *Science*, **2016**, *353*, 912.
35. Chuang, K. V.; Kieffer, M. E.; Reisman, S. E. "A Mild and General Larock Indolization Protocol for the Synthesis of Unnatural Tryptophans." *Org. Lett.* **2016**, *18*, 4750.
34. Daniels, B. D.; Ni, J.; Reisman, S. E. "Synthesis of Enantioenriched Indolines by a Conjugate Addition/Asymmetric Protonation/Aza-Prins Cascade Reaction." *Angew. Chem. Int. Ed.* **2016**, *55*, 3398.
33. Jang, K.-S.; Nani, R. R.; Kalli, A.; Levin, S.; Müller, A.; Hess, S.; Reisman, S. E.; Clemons, W. M. Jr. "A Cationic Cysteine-Hydrazide as an Enrichment Tool for the Mass Spectrometric Characterization of Bacterial Free Oligosaccharides." *Anal. Bioanal. Chem.* **2015**, *407*, 6181.
32. Kadunce, N. T.; Reisman, S. E. "Nickel-Catalyzed Asymmetric Reductive Cross-Coupling between Heteroaryl Iodides and  $\alpha$ -Chloronitriles." *J. Am. Chem. Soc.* **2015**, *137*, 10480.
31. Cherney, A. H.; Kadunce, N. T.; Reisman, S. E. "Enantioselective and Enantiospecific Transition Metal-Catalyzed Cross-Coupling Reactions of Organometallic Reagents to Form C–C Bonds." *Chem. Rev.* **2015**, *115*, 9587.
30. Cherney, A. H.; Reisman, S. E. "Nickel-Catalyzed Asymmetric Reductive Cross-Coupling Between Vinyl and Benzyl Electrophiles." *J. Am. Chem. Soc.* **2014**, *136*, 14365.
29. Yeoman, J. T. S.; Cha, J. Y.; Mak, V. W.; Reisman, S. E. "A Unified Strategy for the Synthesis of (–)-Maoecrystal Z, (–)-Trichorabdol A, and (–)-Longikaurin E." *Tetrahedron*, **2014**, *70*, 4070.

28. Wang, H.; Reisman, S. E. "Enantioselective Total Synthesis of (–)-Lansai B and (+)-Nocardioazines A and B." *Angew. Chem. Int. Ed.* **2014**, *53*, 6206.
27. Hsiao, E. Y.; McBride, S. W.; Hsien, S.; Sharon, G.; Hyde, E. R.; McCue, T.; Codelli, J. A.; Chow, J.; Reisman, S. E.; Petrosino, J. F.; Patterson, P. H.; Mazmanian, S. K. "Microbiota Modulate Behavioral and Physiological Abnormalities Associated with Neurodevelopmental Disorders." *Cell* **2013**, *155*, 1451.
26. Repka, L. M.; Reisman, S. E. "Recent Developments in the Catalytic, Asymmetric Construction of Pyrroloindolines Bearing All-Carbon Quaternary Stereocenters." *J. Org. Chem.* **2013**, *78*, 12314.
25. Cherney, A. H.; Reisman, S. E. "Pd-Catalyzed Fukuyama Cross-Coupling of Secondary Organozinc Reagents for the Direct Synthesis of Unsymmetrical Ketones." *Tetrahedron* **2013**, *70*, 3259. DOI: 10.1016/j.tet.2013.11.104.
24. Yeoman, J. T. S.; Mak, V. W.; Reisman, S. E. "A Unified Strategy to *ent*-Kauranoid Natural Products: Total Syntheses of (–)-Trichorabdal A and (–)-Longikaurin E." *J. Am. Chem. Soc.* **2013**, *135*, 11764.
23. Cherney, A. H.; Kadunce, N. T.; Reisman, S. E. "Catalytic Asymmetric Reductive Acyl Cross-Coupling: Synthesis of Enantioenriched Acyclic  $\alpha,\alpha$ -Disubstituted Ketones." *J. Am. Chem. Soc.* **2013**, *135*, 7442.
22. Kieffer, M. E.; Chuang, K. V.; Reisman, S. E. "Copper-Catalyzed Diastereoselective Arylation of Tryptophan Derivatives: Total Synthesis of (+)-Nasesezines A and B." *J. Am. Chem. Soc.* **2013**, *135*, 5557.
21. Ni, J.; Wang, H.; Reisman, S. E. "Direct, Enantioselective Synthesis of Pyrroloindolines and Indolines From Simple Indole Derivatives." *Tetrahedron*, **2013**, 5622.
20. Nani, R. R.; Reisman, S. E. " $\alpha$ -Diazo- $\beta$ -Ketonitriles: Uniquely Reactive Substrates for Arene and Alkene Cyclopropanation." *J. Am. Chem. Soc.* **2013**, *135*, 7304.
19. Lim, A. D.; Codelli, J. A.; Reisman, S. E. "Catalytic Asymmetric Synthesis of Highly Substituted Pyrrolizidines." *Chem. Sci.* **2012**, *4*, 650.
18. Kieffer, M. E.; Chuang, K. V.; Reisman, S. E. "A Copper-Catalyzed Arylation of Tryptamines for the Direct Synthesis of Aryl Pyrroloindolines." *Chem. Sci.* **2012**, *3*, 3170.
17. Navarro, R. N.; Reisman, S. E. "Rapid Construction of the Aza-Propellane Core of Acutumine via a Photochemical [2+2] Cycloaddition Reaction." *Org. Lett.* **2012**, *14*, 4354.
16. Kieffer, M. E.; Repka, L. M.; Reisman, S. E. "Enantioselective Synthesis of Tryptophan Derivatives by a Tandem Friedel-Crafts Conjugate Addition/Asymmetric Protonation Reaction." *J. Am. Chem. Soc.* **2012**, *134*, 5131.
15. Codelli, J. A.; Puchlopek, A. L. A.; Reisman, S. E. "Enantioselective Total Synthesis of (–)-Acetylaranotin, A Dihydrooxepine Epidithiodiketopiperazine." *J. Am. Chem. Soc.* **2012**, *134*, 1930.
14. Cha, J. Y.; Yeoman, J. T. S.; Reisman, S. E. "A Concise Total Synthesis of (–)-Maoecrysal Z." *J. Am. Chem. Soc.* **2011**, *133*, 14964.
13. Chuang, K. V.; Navarro, R. N., Reisman, S. E. "Short, Enantioselective Total Syntheses of (–)-8-Demethoxyrunanine and (–)-Cepharatines A, C and D." *Angew. Chem., Int. Ed.* **2011**, *50*, 9447.
12. Reisman, S. E.; Nani, R. R.; Levin, S. "Buchner and Beyond: Arene Cyclopropanation in the Service of Natural Product Total Synthesis." *Synlett*, **2011**, 2437.
11. Chuang, K. V.; Navarro, R. N., Reisman, S. E. "Benzoquinone-Derived Sulfinyl Imines as Versatile Intermediates for Alkaloid Synthesis: Total Synthesis of (–)-3-Demethoxyerythratidinone." *Chem. Sci.* **2011**, *2*, 1086.
10. Levin, S.; Nani, R. N.; Reisman, S. E. "Enantioselective Total Synthesis of (+)-Salvileucalin B." *J. Am. Chem. Soc.* **2011**, *133*, 774.
9. Repka, L. M.; Ni, J.; Reisman, S. E. "Catalytic Asymmetric Synthesis of Pyrroloindolines by a Formal [3+2] Cycloaddition Reaction." *J. Am. Chem. Soc.* **2010**, *132*, 14418.
8. Levin, S.; Nani, R.N.; Reisman, S.E. "Rapid Assembly of the Salvileucalin B Norcaradiene Core." *Org. Lett.* **2010**, *12*, 780.

### **Undergraduate, Graduate and Postdoctoral Research Contributions:**

- Freeman, D. B.; Holubec, A. A.; Weiss, M. W.; Dixon, J. A.; Kakefuda, A.; Ohtsuka, M.; Inoue, M.; Vaswani, R. G.; Ohki, H.; Doan, B. D.; Reisman, S. E.; Stoltz, B. M.; Day, J. J.; Tao, R. N.; Dieterich, N. A.; Wood, J. L. "Welwitindolinone C Synthetic Studies. Construction of the Welwitindolinone Carbon Skeleton Via a Transannular Nitrene Cycloaddition." *Tetrahedron*, **2010**, *66*, 6647.
- Reisman, S. E.; Doyle, A. G.; Jacobsen, E. N. "Enantioselective Thiourea-Catalyzed Additions to Oxocarbenium Ions." *J. Am. Chem. Soc.* **2008**, *130*, 7198.
- Reisman, S. E.; Ready, J. M.; Weiss, M. M.; Hasuoka, A.; Tamaki, K.; Ovaska, T. V.; Wood, J. L. "Evolution of a Synthetic Strategy: Total Synthesis of ( $\pm$ )-Welwitindolinone A Isonitrile." *J. Am. Chem. Soc.* **2008**, *130*, 2087.
- Reisman, S. E.; Ready, J. M.; Hasuoka, A.; Smith, C. J.; Wood, J. L. "Total Synthesis of ( $\pm$ )-Welwitindolinone A Isonitrile." *J. Am. Chem. Soc.* **2006**, *128*, 1448.
- Ready, J. M.; Reisman, S. E.; Hirata, M.; Weiss, M. M.; Tamaki, K.; Ovaska, T. V.; Wood, J. L. "A Mild and Efficient Synthesis of Oxindoles: Progress toward the Synthesis of Welwitindolinone A Isonitrile." *Angew. Chem., Int. Ed.* **2004**, *43*, 1270.
- Kumar, J. S. R.; O'Sullivan, M. F.; Reisman, S. E.; Hulford, C. A.; Ovaska, T. V. "Facile Approach to the Bicyclo[5.3.0]Decane Ring System; Efficient Synthesis of ( $\pm$ )-7-epi- $\beta$ -Bulnesene." *Tetrahedron Lett.* **2002**, *43*, 1939.
- Ovaska, T. V.; Reisman, S. E.; Flynn, M. A. *Org. Lett.* **2001**, *3*, 1, 115. "Facile Entry to the Tetracyclic 5-7-6-3 Tiglane Ring System."

### **Essays and Commentaries:**

Codelli, J. A., Reisman, S. E. "Pactamycin Made Easy." *Science*, **2013**, *340*, 152.

Yeoman, J. T. S., Reisman, S. E. "Organic Chemistry: Single Molecules Put a Ring on It." *Nature*, **2012**, *490*, 179.

Reisman, S. E. "Medicinal Chemistry: New Lead For Pain Treatment." *Nature*, **2011**, *473*, 458.

### **PRESENTATIONS**

A selection of named lectures, special symposia and conferences are listed below:

- Cross Lecturer, University of Chicago, Chicago, IL. 2/24/19
- Keynote Speaker, 2020 Visions in Chemistry Torkil Holm Symposium. Copenhagen, Denmark. 2/31/20
- Plenary Lecture, Winter Alpine Conference on Medicinal and Biological Chemistry. St. Anton am Arlberg, Austria. 1/19/20
- Swiss Chemical Society Lecture Award. Lectures at University of Zurich, University of Fribourg, EPFL, University of Bonn, University of Basel. Week of 9/9/19
- Award Lecture, 2019 Organometallics in Organic Synthesis (OMCOS) Symposium Award. Heidelberg, Germany. 7/22/19
- Award Lecture, Margaret Faul Women in Chemistry Award. European Symposium on Organic Chemistry. Vienna, Austria. 7/16/19
- Plenary Lecture, Pacific Symposium on Radical Chemistry. Monterey, CA. 6/17/2019
- Plenary Lecture, RSC Heterocyclic and Synthetic Chemistry Symposium. Grasmere, UK. 5/11/2019
- Keynote Speaker, HC Brown Symposium, Purdue University, West Lafayette, IN. 4/17/19
- Benn Lecture, University of Calgary, Calgary, Canada. 2/22/19
- McRae Lecture, Queens University, Kingston, Canada. 1/25/2019
- Alphora Lecture, University of Toronto, Toronto, Canada. 1/23/2019
- Plenary Lecture, 2019 RACI Organic Symposium, Perth, Australia. 12/03/2020.
- Lucy Pickett Lecture. Mt. Holyoke College, South Hadley, MA. 11/15/2018.
- Schneller Legacy Lecturer. University of South Florida, Tampa, FL. 10/25/2018.

- *Merck Lecture, University of Cambridge, Cambridge, UK. 11/13/2018.*
- *Plenary Lecture, 2018 ORCHEM Symposium. Berlin, GE. 9/9/2018.*
- *Keynote Speaker, 2018 Merck Symposium at University of Michigan. Ann Arbor, MI. 8/10/2018.*
- *Plenary Lecture, 2018 Belgium Organic Synthesis Symposium. Brussels, Belgium. 7/9/2018.*
- *Invited Speaker, Heterocyclic Compounds Gordon Research Conference. Newport, RI. 6/18/2018.*
- *James D. White Honorary Lecturer, Oregon State University. Corvallis, OR. 5/21/2018.*
- *Invited Speaker, 2018 Connecticut Organic Symposium. Yale University, New Haven, CT. 4/11/2018*
- *Plenary Lecture, The 18<sup>th</sup> Bristol Synthesis Meeting. Bristol, UK. 4/10/2018.*
- *Invited Speaker, Award Symposium in Honor of Brian Stoltz. 255<sup>th</sup> National Meeting of the American Chemical Society, New Orleans, LA. 3/21/2018.*
- *Plenary Lecture, Adama-BGU Symposium in Organic Chemistry. Beer-Sheva, Israel. 12/18/17.*
- *Speaker and Participant, 2017 US-INDO Bilateral Workshop on Organometallic Chemistry. Lonavala, India. 12/7/2017.*
- *Student Invited Speaker, University of Illinois at Urbana-Champaign Chemical Biology Training Program Colloquia. Urbana, IL. 11/27/2017.*
- *Invited Speaker, 2017 NESACS Process Chemistry Symposium. Boston, MA. 10/12/2017.*
- *Plenary Lecture, 7<sup>th</sup> Pharmaron Symposium. Beijing, China. 9/15/2017.*
- *Plenary Lecture, 26<sup>th</sup> International Society of Heterocyclic Chemistry Congress. Regensburg, Germany. 9/6/2017.*
- *Invited Speaker, Woodward Centennial Birthday Symposium, 254<sup>th</sup> National Meeting of the American Chemical Society, Washington DC. 8/21/2017.*
- *Invited Speaker, Natural Products Gordon Research Conference, Andover, New Hampshire. 8/1/2017.*
- *Novartis Lecturer, Northwestern University, Chicago, IL. 4/12/2017.*
- *Invited Speaker, Ernest Guenther Award Symposium in Honor of Steven Martin. 253<sup>rd</sup> National Meeting of the American Chemical Society, San Francisco, CA. 4/2/2017.*
- *Plenary Lecture, CHAINS 2016 Conference. Veldhoven, the Netherlands. 12/6/2016.*
- *Invited Speaker, Award for Creativity in Molecular Design in Honor of Eric Jacobsen. Somerset, NJ. 12/1/2016.*
- *Schneller Lecturer. Auburn University, Auburn, AL. 11/4/2016.*
- *Invited Speaker, 5<sup>th</sup> Lilly Chemistry Symposium. Madrid, Spain. 10/26/16.*
- *Invited Speaker, 38<sup>th</sup> Princeton ACS Organic Chemistry Symposium. Monroe Township, NJ. 10/21/2016.*
- *Student Invited Speaker, 2016 David J. Hart Symposium. The Ohio State University, Columbus, OH. 8/20/2016.*
- *Invited Speaker, Journal of Organic Chemistry Award Symposium in Honor of Jeff Johnson. 252<sup>nd</sup> National Meeting of the American Chemical Society, Philadelphia, PA. 8/21/2016.*
- *Invited Lecture, 11<sup>th</sup> International Symposium on Carbanion Chemistry. Rouen, France. 7/20/2016.*
- *Invited Lecture, Balticum Organicum Syntheticum. Riga, Latvia. 7/5/2016.*
- *Plenary Lecture, Kemiportalen Sweden. Umeå, Sweden. 6/17/2016.*
- *Rosenfeld Lecturer, Smith College. Northampton, MA. 4/22/2016.*
- *Novartis Lecturer, University of Pennsylvania. Philadelphia, PA. 4/11/2016.*
- *Student Invited Speaker, Notre Dame. West Bend, IN. 3/23/2016.*
- *Award Lecture, 2015 Eli Grantee Symposium. Indiannapolis, IN. 3/7/2016.*
- *Student Invited Speaker, Rice University. Houston, TX. 11/16/2015.*
- *Padwa Lecturer, Emory University. Atlanta, Georgia. 10/20/2015.*
- *Lectureship Award Speaker, The Society of Synthetic Organic Chemistry. Japan Symposium, Yugawara, Japan. 9/16/2015.*
- *Student Invited Speaker, Tri-Institutional PhD Program in Chemical Biology Annual Symposium. New York, NY. 8/26/2015.*

- *Invited Speaker, RSC International Symposium on Synthesis in Organic Chemistry.* Cambridge, United Kingdom. 7/20/2015.
- *Invited Speaker, Organometallic Chemistry directed toward Organic Synthesis Symposium.* Sitges, Spain. 6/30/2015.
- *Invited Speaker, 2015 Brazilian Chemical Society National Meeting.* Aguas de Lindoa, Brazil. 5/26/2015.
- *Invited Speaker, 50<sup>th</sup> EUCHEM Conference on Stereochemistry – “Bürgenstock Conference”.* Brunnen, Switzerland. 4/29/2015.
- *Award Lecture, 2015 Bristol-Myers Squibb Chemistry Award Symposium.* Princeton, NJ. 4/16/2015.
- *Invited Speaker, Award Symposium in Honor of Gary Molander.* 249<sup>th</sup> National Meeting of the American Chemical Society, Denver, Colorado. 3/23/2015.
- *Cubist Pharmaceuticals Lecture,* Boston College. Chestnut Hill, MA. 3/12/2015.
- *Student Invited Speaker,* University of Southern California. Los Angeles, CA. 12/10/2014.
- *Student Invited Speaker,* University of Delaware. Newark, DE. 11/14/2014.
- *Silver Science Lecturer,* Barnard College, NY, NY. 11/13/2014.
- *Invited Speaker, Stereochemistry Gordon Research Conference.* Newport, RI. 7/30/2014.
- *Invited Speaker, French American Chemical Society 15<sup>th</sup> Meeting.* Avignon, France. 6/3/2014.
- *Award Lecture, Tetrahedron Symposium.* London, England. 6/25/2014.
- *Keith Fagnou Memorial Lecture,* University of Ottawa. Ottawa, Canada. 5/1/2014.
- *Paul Dowd Lectureship,* University of Pittsburgh. Pittsburgh, PA. 4/9/2014, 4/10/2014.
- *Novartis Early Career Award Symposium, Novartis.* Cambridge, MA. 11/4/2013.
- *Cope Scholar Symposium in Honor of Sarah Reisman,* 44<sup>th</sup> Western Regional Meeting of the American Chemical Society. Santa Clara, CA. 10/4/2013.
- *Aldrich Student Invited Lecture,* Massachusetts Institute of Technology. Cambridge, MA. 10/3/2013.
- *Plenary Speaker, Reaxys Inspiring Chemistry Conference.* Grindelwald, Switzerland. 9/24/2013.
- *Cope Scholar Award Symposium,* 246<sup>th</sup> National Meeting of the American Chemical Society. Indianapolis, IN. 9/10/2013.
- *Invited Speaker, Organic Reactions and Processes Gordon Research Conference.* Smithfield, Rhode Island. 7/16/2013.
- *High Throughput Chemistry and Chemical Biology Gordon Research Conference.* New London, NH. 6/3/2013.
- *Invited Speaker, Boehringer Ingelheim Symposium,* Harvard University. Cambridge, MA. 5/20/2013.
- *DuPont Young Professor Award Lecture,* DuPont. Newark, DE. 5/8/2013.
- *Invited Speaker, Award Symposium in Honor of Erick Carreira.* 245<sup>th</sup> National Meeting of the American Chemical Society, New Orleans, LA. 4/9/2013.
- *AbbVie Symposium Invited Speaker,* University of Michigan. Ann Arbor, MI. 4/4/2013.
- *Student Invited Speaker,* Shenzhen Graduate School of Peking University. Shenzhen, China. 3/17/2013.
- *Organic Syntheses Distinguished Speaker,* Colorado State University. Ft. Collins, CO. 3/9/2013.
- *Bristol-Myers Squibb Lecturer,* University of California. Berkeley, Berkeley, CA. 1/29/2013.
- *Vertex Day Invited Speaker,* University of California. Irvine, CA. 12/6/2012.
- *Amgen Young Investigator's Symposium,* Amgen. Thousand Oaks, CA. 10/17/2012.
- *Plenary Speaker, International Symposia for Advancing the Chemical Sciences.* Edinburgh, Scotland. 6/9/2012.
- *Student Invited Lecture, Philadelphia Organic Chemist's Club.* University of Pennsylvania, Philadelphia, PA. 5/24/2012.
- *Invited Speaker, Award Symposium in Honor of Gregory Fu.* 243<sup>rd</sup> National Meeting of the American Chemical Society, San Diego, CA. 3/27/2012.
- *Keynote Speaker, Banff Symposium on Organic Chemistry.* Banff, Canada. 11/12/2011.
- *Boston University Women In Chemistry Invited Speaker,* Boston University. Boston, MA. 10/31/2011.

- *Invited Speaker, Natural Products Gordon Research Conference.* Smithfield, RI. 7/28/2011.
- *Women In Science at Columbia Invited Speaker,* Columbia University. New York, NY. 4/6/2011.
- *Invited Speaker, Heterocyclic Compounds Gordon Research Conference.* Newport, RI. 6/21/2010.

1.