

Tim Cernak

Assistant Professor

Department of Medicinal Chemistry, College of Pharmacy

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Education & Experience

Assistant Professor of Medicinal Chemistry, University of Michigan, Ann Arbor, MI.	2018–Present
Co-Founder and Chief Scientific Officer, Iambic Therapeutics, La Jolla, CA.	2021–2022
Merck Research Labs, Rahway, NJ & Boston, MA.	2009–2018
Post-Doctoral Fellow, with Tristan Lambert, Columbia University, New York, NY.	2007–2009
Doctor of Philosophy, with Jim Gleason, McGill University, Montréal, QC.	2002–2007
Bachelor of Science (Chemistry) University of British Columbia Okanagan, Kelowna, BC.	1998–2002

Scientific Advisory Roles

Editorial Advisory Board, <i>Organic Letters</i> , Washington, DC.	2023–Present
Chemistry Advisory Board, Scorpion Therapeutics, Boston, MA.	2020–2021
Advisory Board, Open Reaction Database Initiative by Google, Menlo Park, CA.	2020–Present
Scientific Advisory Committee, Drug Discovery Unit, Dundee, UK.	2020–Present
Scientific Advisory Board, NSF Center in Selective C-H Functionalization (CCHF), Atlanta, GA.	2012–2018

Awards

- 2023 Alfred P. Sloan Fellow
- 2022 Schmidt Futures Innovation Fellow
- 2022 National Science Foundation CAREER Award
- 2021 ACS Petroleum Research Foundation Outstanding Reviewer Award
- 2019 National Institute of Health NCATS ASPIRE Design Challenge Award
- 2017 Merck Excellence Award
- 2016 Merck Green Chemistry Award
- 2014 Merck Rahway Innovation Award
- 2014 Merck Process Chemistry – Scientific Risk-Taking Award
- 2013 Merck K15 Building Design Award
- 2013 Merck Medicinal Chemistry – Green Chemistry Award
- 2012 Terry D. Wilson Lectureship, University of Idaho
- 2010 Merck Excellence Award
- 2008-2009 FQRNT Postdoctoral Fellowship (Columbia University)
- 2007 McGill Interdisciplinary Graduate Student Research Symposium Presentation Award
- 2006-2007 McGill Graduate Studies Fellowship
- 2006-2007 FQRNT Predoctoral Fellowship (McGill University)
- 2006 Ocean Nutrition Canada Prize
- 2006 Robert Zamboni Award
- 2005 McGill Alma Mater Travel Grant
- 2004 McGill Alma Mater Travel Grant

- 2002 Okanagan University College Undergraduate Research Award
- 2001 Okanagan University College Dean's List
- 2001 NSERC Undergraduate Student Research Award

Publications & Preprints

(citations: 4,089, *h*-index: 19)

Preprints

1. A. McGrath, H. Huang, J.-F. Brazeau, Z. Zhang, N. A. Vellore, L. Zhu, Z. Shi, J. D. Venable, C. Gelin*, **T. Cernak***. "Diverse Amine-Acid Coupling Reactions Modulate the Potency of BRD4 PROTACs", *ChemRxiv*, **2023**.

Publications

2. R. Zhang, B. Mahjour, A. Outlaw, A. McGrath, T. Hopper, B. Kelley, P. Walters, **T. Cernak***. "Exploring the Combinatorial Explosion of Amine–Acid Reaction Space via Graph Editing", *Communications Chemistry*, **2024**, Accepted.
3. B. Mahjour, A. McGrath, A. Outlaw, R. Zhao, C. Zhang, **T. Cernak***. "Interactive Python Notebook Modules for Chemoinformatics in Medicinal Chemistry." *Journal of Chemical Education*, **2023**, 100(12), 4895.
4. B. Mahjour, J. Hoffstadt, **T. Cernak***. "Designing Chemical Reaction Arrays Using phactor and ChatGPT." *Organic Process Research & Development*, **2023**, 27, 1510–1516.
5. B. Mahjour, R. Zhang, Y. Shen, A. McGrath, R. Zhao, O. G. Mohamed, Y. Lin, Z. Zhang, J. L. Douthwaite, A. Tripathi, **T. Cernak***. "Rapid Planning and Analysis of High-Throughput Experiment Arrays for Reaction Discovery." *Nature Communications*, **2023**, 14, 3924.
6. N. Gesmundo, K. Dykstra, J. Douthwaite, B. Mahjour, R. Ferguson, S. Dreher, B. Sauvagnat, J. Sauri, **T. Cernak***. "Miniaturization of Popular Reactions from the Medicinal Chemists' Toolbox for Ultrahigh-Throughput Experimentation". *Nature Synthesis*, **2023**, 2, 1082.
7. J. L. Douthwaite, R. Zhao, E. Shim, B. Mahjour, P. Zimmerman, **T. Cernak***. "The Formal Cross-Coupling of Amines and Carboxylic Acids to Form sp³–sp² Carbon–Carbon Bonds." *The Journal of the American Chemical Society*, **2023**, 145(20), 10930.
8. Y. Lin, R. Zhang, D. Wang, **T. Cernak***. Computer-Aided Key Step Generation in Alkaloid Total Synthesis. *Science*, **2023**, 379, 453.
9. B. Mahjour, J. Bench, R. Zhang, J. Frazier, **T. Cernak***. "Molecular Sonification for Molecule to Music Information Transfer", *Digital Discovery*. **2023**, 2, 520. *The ChemRxiv preprint of this work (10.26434/chemrxiv-2022-g7xkl) is currently the most downloaded preprint on ChemRxiv in Organic Chemistry and in Chemical Education.*
10. A. McGrath, R. Zhang, K. Shafiq, **T. Cernak***. "Repurposing Amine and Carboxylic Acid Building Blocks with an Automatable Esterification Reaction", *Chem. Commun.*, **2023**, 59, 1026.
11. Y. Shen, B. Mahjour, **T. Cernak***. Development of Copper-Catalyzed Deaminative Esterification Using High-Throughput Experimentation. *Communications Chemistry*, **2022**, 5, 83.
12. E. Shim, J. A. Kammeraad, Z. Xu, A. Tewari, **T. Cernak***, P. M Zimmerman*. Predicting Reaction Conditions from Limited Data Through Active Transfer Learning. *Chemical Science*, **2022**, 13, 6655.
13. Y. Lin, Z. Zhang, B. Mahjour, D. Wang, R. Zhang, E. Shim, A. McGrath, Y. Shen, N. Brugger, R. Turnbull, S. Jasty, S. Trice, **T. Cernak***. "Reinforcing the Supply Chain of COVID-19 Therapeutics with Expert-Coded Retrosynthetic Software." *Nature Communications*, **2021**, 12, 7327.
14. Z. Zhang, **T. Cernak***. "The Formal Cross-Coupling of Amines and Carboxylic Acids to Form sp³–sp³ Carbon–Carbon Bonds." *Angewandte Chemie International Edition*, **2021**, 60(52), 27293.
15. B. Mahjour, Y. Shen, **T. Cernak***. "Ultrahigh-Throughput Experimentation for Information-Rich Chemical Synthesis." *Accounts of Chemical Research*, **2021**, 54(10), 2337–2346.
16. Y. Shen, J. E. Borowski, M. A. Hardy, R. Sarpong*, A. G. Doyle*, **T. Cernak***. "Automation and computer-assisted planning for chemical synthesis." *Nature Reviews Methods Primers* **2021**, 1, <https://doi.org/10.1038/s43586-021-00022-5>.
17. B. Mahjour, Y. Shen, W. Liu, **T. Cernak***. "A Map of the Amine–Acid Coupling System", *Nature*, **2020**, 580, 71–75.
18. H. Wong and **T. Cernak***. "Reaction Miniaturization in Eco-Friendly Solvents", *Current Opinion in Green & Sustainable Chemistry*, **2018**, 11, 91–98.

Before Michigan

19. K. Liu, R. Kurukulasuriya, K. Dykstra, L. DiMichelle, J. Liu, P. Vachal, A. Ogawa, R. J. DeVita, D.-M. Shen, Q. Tan, Y. Chen, D. Gauthier, A. Verras, A. Crespo, B. Zamlynny, J. Madwed, M. Hoek, T. Bateman, Y.-F. Yang, K. N. Houk, S. Krska, **T. Cernak***. "Development of Indazole Mineralocorticoid Receptor Antagonists and Investigation into Their Selective Late-Stage Functionalization", *Bioorganic & Medicinal Chemistry Letters*, **2019**, 29(14), 1854–1858.
20. Y. Yu*, Z. Wu, Z.-C. Shi, S. He, Z. Lai, **T. A. Cernak**, P. Vachal, M. Liu, J. Liu, Q. Hong, T. Jian, D. Guiadeen, A. Krikorian, D. M. Sperbeck, A. Verras, L. M. Sonatore, B. A. Murphy, J. Wiltsie, C. C. Chung, J. N. Gorski, J. Liu, J. Xiao, M. Wolff, S. X. Tong, M. Madeira, B. V. Karanam, D.-M. Shen, J. M. Balkovec, R. J. DeVita, S. Pinto, R. P. Nargund. "Accelerating the Discovery of DGAT1 Inhibitors Through the Application of Parallel Medicinal Chemistry (PMC)", *Bioorganic & Medicinal Chemistry Letters*, **2019**, 29(11), 1380–1385.
21. S. He*, Z. Lai, Q. Hong, J. Shang, M. Reibarkh, J. T. Kuethe, J. Liu, D. Guiadeen, A. D. Krikorian, **T. A. Cernak**, K. D. Dykstra, D. M. Sperbeck, Z. Wu, Y. Yu, G. X. Yang, T. Jian, A. Verras, L. M. Sonatore, J. Wiltsie, C. C. Chung, B. A. Murphy, J. N. Gorski, J. Liu, J. Xiao, M. Wolff, S. X. Tong, M. Madeira, B. V. Karanam, D.-M. Shen, J. M. Balkovec, S. Pinto, R. P. Nargund, R. J. DeVita. "Benzimidazole-based DGAT1 Inhibitors with a [3.1.0] Bicyclohexane Carboxylic Acid Moiety", *Bioorganic & Medicinal Chemistry Letters*, **2019**, 29(10), 1182–1186.
22. M. R. Uehling, R. P. King, S. W. Krska, **T. Cernak***, S. L. Buchwald*. "Pharmaceutical Diversification via Oxidative Addition Complexes", *Science*, **2019**, 363, 405–408.
23. S. Lin, S. Dikler, R. D. Ferguson, R. P. Sheridan, Z. Peng, D. V. Conway, K. Zawatzky, H. Wang, **T. Cernak**, I. W. Davies, D. A. DiRocco, H. Sheng*, C. J. Welch*, S. D. Dreher*, "Mapping the Dark Space of Chemical Reactions with Extended Nanomole Synthesis and MALDI-TOF MS", *Science*, **2018**, 361(6402), eaar6236.
24. N. J. Gesmundo, B. Sauvagnat, P. Curran, M. P. Richards, C. L. Andrews, P. J. Dandliker, **T. Cernak***. "Nanoscale Synthesis and Affinity Ranking", *Nature*, **2018**, 557, 228–232.
25. **T. Cernak***. "A Machine with Chemical Intuition", *Chem*, **2018**, 4(3), 401–403.
26. **T. Cernak***, N. Gesmundo, K. D. Dykstra, Y. Yu, Z. Wu, Z.-C. Shi, P. Vachal, D. Sperbeck, S. He, B. Murphy, L. Sonatore, S. Williams, M. Madeira, A. Verras, M. Reiter, C. Lee, J. Cuff, E. Sherer, J. Kuethe, S. Goble, N. Perotto, S. Pinto, D.-M. Shen, R. Nargund, J. Balkovec, R. DeVita, S. Dreher. "Microscale High-Throughput Experimentation as an Enabling Technology in Drug Discovery: Application in the Discovery of (Piperidinyl)pyridinyl-1H-benzimidazole Diacylglycerol Acyltransferase 1 Inhibitors", *The Journal of Medicinal Chemistry*, **2017**, 60(9), 3594–3605. *Featured Article*.
27. **T. Cernak***. "Synthesis in the Chemical Space Age", *Chem*, **2016**, 1(1), 6–9.
28. P. S. Kutchukian, J. F. Dropinski, K. D. Dykstra, B. Li, D. A. DiRocco, E. C. Streckfuss, L.-C. Campeau, **T. Cernak**, P. Vachal, I. W. Davies, S. W. Krska* and S. D. Dreher*. "Chemistry Informer Libraries: A Chemoinformatics Enabled Approach to Evaluate and Advance Synthetic Methods", *Chemical Science*, **2016**, 7, 2604–2613.
29. **T. Cernak***, K. D. Dykstra, S. Tyagarajan, P. Vachal and S. W. Krska. "The Medicinal Chemist's Toolbox for Late Stage Functionalization of Drug-Like Molecules", *Chemical Society Reviews*, **2016**, 45(3), 546–576.
30. A. Buitrago Santanilla, E. L. Regalado, T. Pereira, K. Bateman, L.-C. Campeau, S. Berritt, Y. Liu, M. Shevlin, Z.-C. Shi, J. Schneeweis, C. J. Welch, R. Helmy, P. Vachal, I. Davies, **T. Cernak*** and S. Dreher*. "Nanomolar-Scale High-Throughput Chemistry for the Synthesis of Complex Molecules", *Science*, **2015**, 347(6217), 49–53.
31. S. He,* Q. Hong, Z. Lai, D. X. Yang, P. C. Ting, J. T. Kuethe, **T. A. Cernak**, K. D. Dykstra, D. M. Sperbeck, Z. Wu, Y. Yu, G. X. Yang, T. Jian, J. Liu, D. Guiadeen, A. D. Krikorian, L. M. Sonatore, J. Wiltsie, J. Liu, J. N. Gorski, C. C. Chung, J. T. Gibson, J. Lisnock, J. Xiao, M. Wolff, S. X. Tong, M. Madeira, B. V. Karanam, D.-M. Shen, J. M. Balkovec, S. Pinto, R. P. Nargund, and R. J. DeVita. "Discovery of a Potent and Selective DGAT1 Inhibitor with a Piperidinyl-oxy-cyclohexanecarboxylic Acid Moiety", *ACS Medicinal Chemistry Letters*, **2014**, 5(10), 1082–1087.
32. H. Schönherr and **T. Cernak***. "Profound Methyl Effects in Drug Discovery and a Call for New C-H Methylation Reactions", *Angewandte Chemie International Edition*, **2013**, 52(47), 12256–12267.
33. **T. Cernak***, K. Dykstra, D. Levorse, A. Verras, J. Balkovec, R. Nargund and R. DeVita. "Synthesis of Oxaspiropiperidines as a Strategy for Lowering logD", *Tetrahedron Letters*, **2011**, 52(48), 6457–6459.
34. L. A. Ambrosini, **T. A. Cernak** and T. H. Lambert. "Total Synthesis of the Tylophora Alkaloids Rusplinone, 13 α -Secoantofine, and Antofine using a Multicatalytic Oxidative Aminochlorocarbonylation / Friedel-Crafts Reaction", *Tetrahedron*, **2010**, 66(26), 4882–4887.
35. L. A. Ambrosini, **T. A. Cernak** and T. H. Lambert. "Development of Oxidative Formylation and Ketonylation Reactions", *Synthesis*, **2010**, 41(28), 870–881.
36. **T. A. Cernak** and T. H. Lambert. "Multicatalytic Synthesis of α -Pyrrolidinyl Ketones via a Tandem Palladium(II)/Indium(III)-Catalyzed Aminochlorocarbonylation/Friedel-Crafts Acylation Reaction", *The Journal of the American Chemical Society*, **2009**, 131(9), 3124–3125.

37. J. Hudon, **T. A. Cernak**, J. A. Ashenhurst and J. L. Gleason. "Stable 5-Substituted Cyclopentadienes for the Diels-Alder Cycloaddition and Their Application to Palau'amine Synthesis", *Angewandte Chemie International Edition*, **2008**, 47, 8885–8888.
38. **T. A. Cernak** and J. L. Gleason. "DFT Guided Design of Exo-Selective Dehydroalanine Dienophiles for Application Towards Palau'amine", *Journal of Organic Chemistry*, **2008**, 73(1), 102–110.
39. **T. A. Cernak** and J. L. Gleason. "Synthesis of 5-Chloromethylene Hydantoins and Thiohydantoins", *Heterocycles*, **2007**, 71(1), 117–134.
40. N. Eggers, J. D. Greenough, and **T. Cernak**. Classification of Okanagan Chardonnay Wines by origin using volatile components. R. W. Macqueen, and L. D. Meinert (editors); Fine Wine and Terroir, The Geoscience Perspective; Geoscience Canada Reprint Series 9, **2006**, pp. 183–192.

Patents

1. R. Zhang, D. Wang, **T. Cernak**. "Efficient synthesis through graph edit distance", *PCT International Application*, **2023**, Provisional.
2. **T. Cernak**, B. Mahjour, D. Wang, Z. Zhang, Y. Lin. "Synthetic routes to antiviral and related therapeutics", *PCT International Application*, **2020**, Provisional.
3. **T. Cernak**, B. Mahjour, Y. Shen, A. McGrath, R. Zhang. "Property modulation with chemical transformations", *PCT International Application*, **2020**, WO2020236314A1.
4. K. Liu, A. Achab, P. Biju, **T. A. Cernak**, Y. Deng, X. Fradera, L. Guo, Y. Han, S. He, J. Kozlowski, D. Li, G. Li, Q. Pu, Z.-C. Shi, W. Yu, H. Zhang. "Novel substituted N'-hydroxycarbamimidoyl-1,2,5-oxadiazole compounds as indoleamine 2,3-dioxygenase (IDO) inhibitors", *PCT International Application*, **2018**, WO2018044663A1.
5. D.-M. Shen, M. Egbertson, R. Berger, X. Qian, Y. Qian, B. Harper, M. Yang, Z. Zhi Q. Guo, V. L. Rada, D. Wang, **T. A. Cernak**, C. J. Sinz, M. Wang, J. E. Wilson, S. Xu. "Pyrimidonecarboxamide compounds as PDE2 inhibitors and their preparation", *PCT International Application*, **2015**, WO2015096651.
6. X. Han, A. Whitehead, S. Raghavan, **T. A. Cernak**, S. Dreher, J. Groeber, L. Guo, Y. Zhang. "Pyrrolopyrimidinone derivatives as soluble guanylate cyclase activators and their preparation", *PCT International Application*, **2015**, WO2015088886.
7. **T. A. Cernak**, K. D. Dykstra, D.-M. Shen, K. Liu, A. Stamford, J. Q. Tan. "Preparation of indazole derivatives as mineralocorticoid receptor antagonists for the treatment of aldosterone-mediated diseases", *PCT International Application*, **2014**, WO2014014794.
8. R. J. DeVita, S. He, J. Liu, **T. A. Cernak**, A. D. Krikorian, G. Xuqiang Yang, Z. Wu; Y. Yu, D.-M. Shen, Z. Lai, Q. Hong, R. P. Nargund. "Preparation of triazolylpyridine derivatives and analogs for use as DGAT-1 inhibitors", *PCT International Application*, **2013**, WO201306093.
9. **T. A. Cernak**, R. J. DeVita, Y. Yu, Z. Wu, K. D. Dykstra, A. Verras, J. M. Balkovec, A. Whitehead. "Preparation of bicyclo[2.2.2]octane-1-carboxylic acid derivatives as DGAT1 inhibitors for treatment of diabetes and obesity", *PCT International Application*, **2013**, WO2013068328.
10. J. Liu, J. M. Balkovec, A. D. Krikorian, D. Guiadeen, G. Yang, T. Jian, Z. Wu, Y. Yu, R. P. Nargund, P. Vachal, R. J. DeVita, S. He, Z. Lai, R. M. Blevis-Bal, **T. A. Cernak**, D. M. Sperbeck, Q. Hong. "Preparation of imidazopyridinylphenylpyridinylpiperidinylacetic acid derivatives and analogs for use as DGAT1 inhibitors", *PCT International Application*, **2012**, WO2012096813.
11. **T. A. Cernak**, J. M. Balkovec, R. P. Nargund, M. Reiter, D. M. Sperbeck, K. D. Dykstra, Y. Yu, S. Dreher, K. M. Maloney, Z. Wu, R. J. DeVita, A. Verras. "Spirocyclic Compounds for Treatment of Obesity and Diabetes", *PCT International Application*, **2012**, WO2012009217.

Software & Applications

- SAMPLES (<http://samples.cernaklab.com/>)
- Covid Routes Retrosynthesis Visualizer (<http://covidroutes.cernaklab.com/>)
- Phactor™ (<https://phactor.cernaklab.com/>)
- MedChemQs (<http://3.90.176.177:3000/mc500>)

Seminars

- Heterocycles Gordon Research Conference (Newport, RI, June 2024)
- University of Pennsylvania (Philadelphia, PA, May 2024)
- UCLA (Los Angeles, CA, April 2024)
- Université de Montréal (Montreal, QC, March 2024)
- University of Pittsburgh (Pittsburgh, PA, March 2024)
- Grunenthal (Virtual, Aachen, Germany, December 2023)
- Princeton ACS Fall Organic Chemistry Symposium (Piscataway, NJ, October 2023)
- Emory University (Atlanta, GA, October 2023)
- AstraZeneca (Waltham, MA, August 2023)
- University of Michigan Generative AI Symposium (Ann Arbor, MI, July 2023)
- Computer Assisted Drug Design Gordon Research Conference (Mount Snow, VT, July 2023)
- National Taiwan University (Taipei, Taiwan, May 2023)
- MilliporeSigma (Milwaukee, WI, April 2023)
- Chemical & Biological Defense Gordon Research Conference (Ventura, CA, March 2023)
- University of Ottawa (Ottawa, ON, March 2023) *Gilead Lectureship*
- Enabling Technologies for Organic Chemistry (Virtual, Amsterdam, Netherlands, March 2023)
- UCB Biopharma (Virtual, Cambridge, MA, March 2023)
- Genentech (San Francisco, CA, February 2023)
- Michigan Institute for Data Science, Automated Research Workflows (Ann Arbor, MI, January 2023)
- Molecular Machine Learning Symposium (Virtual, Muenster, Germany, January 2023)
- Max Planck Institute of Colloids and Interfaces (Berlin, Germany, December 2022)
- Technische Universität Berlin (Berlin, Germany, December 2022)
- Bayer (Berlin, Germany, December 2022)
- Colorado State University (Colorado Springs, CO, November 2022)
- Cornell University (Ithaca, NY, October 2022)
- Emerging Technologies and Methodologies in Small Molecule Drug Discovery & Synthesis Symposium (Toledo, Spain, September 2022)
- Seminars of the Canadian Ultrafast Community (Virtual, Varennes, QC, September 2022)
- Biogen (Cambridge, MA, June 2022)
- ACS Central Regional Meeting (Ypsilanti, MI, June 2022)
- University of Michigan Chemical Biology Interface Program (Ann Arbor, MI, May 2022)
- University of Wisconsin Madison WARF Symposium (Madison, WI, April 2022)
- American Chemical Society Spring Meeting (San Diego, CA, March 2022)
- American Chemical Society Fall Meeting: Young Academic Investigators Symposium (Virtual, August 2021)
- Max Planck VISTA Symposium on Artificial-Intelligence and Data-Science Assisted Synthesis (Virtual, Mülheim an der Ruhr, Germany, July 2021)
- Firmenich (Videoconference, Geneva, Switzerland, June 2021)
- NIH Virtual Workshop on Reaction Informatics (Virtual, Bethesda, MD, May 2021)
- Syngenta (Videoconference, Basel, Switzerland, May 2021)
- American Chemical Society Spring Meeting (Virtual, April 2021)
- New York Academy of Sciences (New York, NY, March 2021)
- Corteva (Videoconference, Indianapolis, IN, January 2021)
- AbbVie (Videoconference, North Chicago, IL, November 2020)
- Gilead (Videoconference, Foster City, CA, November 2020)
- Food & Drug Administration (Videoconference, Silver Spring, MD, October 2020)
- Frontier Medicines (Videoconference, South San Francisco, CA, September 2020)
- Chemical & Engineering News Webinar (Global Webinar, Washington, DC, September 2020)
- American Institute of Chemical Engineers (Global Webinar, New York, NY, April 2020)
- National Academy of Sciences (Videoconference, Washington, DC, March 2020)
- PittCon (Chicago, IL, March 2020)
- Alpine Winter Conference on Medicinal and Synthetic Chemistry (St. Anton, Austria, January 2020)

- National Institute of Health – ASPIRE Design Challenge Award Symposium (Bethesda, MD, October 2019)
- MilliporeSigma (Milwaukee, WI, October 2019)
- Vertex (La Jolla, CA, September 2019)
- Pfizer (Groton, CT, July 2019)
- Janssen (San Diego, CA, May 2019)
- Genentech (South San Francisco, CA, February 2019)
- Amgen (Thousand Oaks, CA, December 2018)
- University of Dundee (Dundee, UK, November 2018)
- Cayman Chemical Company (Ann Arbor, MI, July 2018)
- Relay Therapeutics (Cambridge, MA, May 2018)
- National Institutes of Health (Bethesda, MD, October 2017)
- Boston College (Boston, MA, May 2017)
- Boston University (Boston, MA, April 2017)
- University of British Columbia Okanagan (Kelowna, BC, January 2017)
- Emory University (Atlanta, GA, December 2016)
- The Broad Institute High Throughput ADME Conference (Cambridge, MA, July 2016)
- King's College London (London, England, June 2016)
- AstraZeneca (Cambridge, England, June 2016)
- Cambridge Healthcare Institute – Mastering Medicinal Chemistry (Cambridge, MA, June 2016)
- International Symposium on C–H Activation (Montreal, QC, May 2016)
- University of Massachusetts Boston (Boston, MA, February 2016)
- Pacifichem (Honolulu, HI, December 2015)
- Center for Selective C–H Functionalization Satellite Symposium (Atlanta, GA, October 2015)
- High Throughput Experimentation Meeting of the Minds (Cambridge, MA, August 2015)
- Gordon Conference: High Throughput Chemistry & Chemical Biology (New London, NH, June 2015)
- Chemical Biology in the Bay Area at UCSF (San Francisco, CA, June 2015)
- Sigma Aldrich (Global Webinar, Milwaukee, WI, March 2015)
- University of Cambridge (Cambridge, England, March 2015)
- University of Nevada, Reno (Reno, NV, February 2015)
- Massachusetts Institute of Technology (Cambridge, MA, August 2014)
- Institut Català d'Investigació Química (Tarragona, Spain, July 2014)
- American Chemical Society 247th National Meeting (Dallas, TX, March 2014)
- Lehman College (New York, NY, October 2013)
- Seton Hall University (South Orange, NJ, November 2012)
- Columbia University (New York, NY, July 2012)
- Vanderbilt University (Nashville, TN, April 2012)
- University of Idaho (Moscow, ID, March 2012) *Terry D. Wilson Lecture*