

Jonathan A. Ellman

Eugene Higgins Professor of Chemistry , Yale University	2010-present
Professor of Pharmacology , Yale University	2010-present
Professor of Cellular and Molecular Pharmacology , UC San Francisco	1999-2010
Professor of Chemistry , UC Berkeley	1999-2010
Associate Professor of Chemistry , UC Berkeley	1997-1998
Assistant Professor of Chemistry , UC Berkeley	1992-1997

Education

National Science Foundation Postdoctoral Fellow University of California, Berkeley; Research mentor, Professor Peter G. Schultz	1989-1992
Ph.D. Organic Chemistry Harvard University; Thesis Advisor, Professor David A. Evans	1984-1989
B.S. Chemistry Massachusetts Institute of Technology	1980-1984

Awards

Yale Ventures Faculty Innovation Award	2023
Allan R. Day Award from the Philadelphia Organic Chemists Club	2023
American Chemical Society Award for Creative Work in Synthetic Organic Chemistry	2021
Yale Dylan Hixon '88 Prize for Teaching Excellence in the Natural Sciences (one prize/yr)	2016
Member, American Academy of Arts and Sciences	2015
American Chemical Society Herbert C. Brown Award for Creative Research in Synthetic Methods	2012
Royal Society of Chemistry Pedler Award	2010
GlaxoSmithKline Chemistry Scholars Award	2010
Student selected Member, Golden Key International Honour Society (3-4 Berkeley faculty/year)	2007
Fellow of the American Association for the Advancement of Science	2006
2006 Tetrahedron Young Investigator Award in Bioorganic and Medicinal Chemistry	2006
2003 Scheele Award selected by the Swedish Academy of Pharmaceutical Sciences	2003
2003 Society of Biomolecular Screening Achievement Award	2003
American Chemical Society Arthur C. Cope Scholar Award	2000
University of California at Berkeley 1998 Department of Chemistry Teaching Award	1998
Burroughs Wellcome Fund New Initiatives in Malaria Research Award	1997
Joel H. Hildebrand Associate Professor Chair in Chemistry	1996-1998
Thomson Reuters ISI Top Five Hot Authors in Chemistry/Material Science	1994-1996
Alfred P. Sloan Fellowship	1994-1996
Eli Lilly Grantee Award	1994-1996
Cyanamid Faculty Award	1994
Procter and Gamble Young Investigator	1994-1996
Burroughs Wellcome Fund 1993 Hitchings Award for Drug Design and Discovery	1993-1997
Arnold and Mabel Beckman Foundation Young Investigator Award	1993-1995
National Science Foundation Young Investigator Award	1993-1998
Office of Naval Research Young Investigator Award	1994-1997
National Science Foundation Postdoctoral Fellowship	1989-1991
National Science Foundation Predoctoral Fellowship	1984-1987
James Bryant Conant Scholarship Prize	1984
Texaco Philanthropist Scholarship for excellence in chemistry	1984
DuPont Resident Research Program (awarded by MIT Department of Chemistry)	1984

Activities/Service

Yearly or more frequent service as Ad-Hoc Study Section Member for the NSF or NIH	2007-present
Editorial Advisory Board for <i>Advanced Synthesis and Catalysis</i>	2014-present
Director of Graduate Studies, Yale Chemistry Department	2018-2022
Member, Scientific Advisory Board and/or Consultant, Ardelyx Pharmaceuticals	2009-2022
Consultant, Ono Pharmaceuticals	2002-2021
Editorial Advisory Board for <i>ACS Combinatorial Science</i>	2010-2020
Member of International Advisory Board <i>Organic & Biomolecular Chemistry</i>	2002-2019
Guest Editor, <i>Journal of Organic Chemistry</i> C-H Bond Functionalization special issue	2019
International Advisory Board for <i>European Journal of Organic Chemistry</i>	2010-2019
Chaired and raised funds for Connecticut Organic Chemistry Symposium (New Haven)	2016, 2018
Member, Scientific Advisory Board, Lycera Pharmaceuticals	2009-2018
Committee of Visitors, Triennial Review of NSF Chemistry	2016
Chaired and raised funds for Symposium at fall ACS National Meeting (Boston)	August 19, 2015
Mentor for NIH Workshop for New Faculty in Organic and Biological Chemistry	2013, 2015
Area Chair, Physical Sciences and Engineering at Yale	2014-2015
Director, Division of the Physical Sciences and Engineering at Yale	2012-2014
Member of the Editorial Board <i>Chemical Biology & Drug Design</i>	2005-2012
Member of the NIH Chemical Genomics Center Board of Advisors	2005-2010
Member of the Editorial Board <i>Chemistry & Biology</i>	2004-2015
Member, NIH Medicinal Chemistry then MedChem/SBCB Study Section	2003-2007
Board of Editors <i>Organic Syntheses, Inc.</i>	2003-2011
Consultant, Abbott Laboratories	2002-2015
Instructor for annual ACS Frontiers in Organic Chemistry	2001-2008
Co-Section Head for Chemistry Core of the Faculty of 1000, Web based literature review	2001-2018
Editorial Advisory Board, <i>Journal of Combinatorial Chemistry</i>	2006-2008
Consulting Editor, <i>Journal of Combinatorial Chemistry</i>	2003-2006
Associate Editor, <i>Journal of Combinatorial Chemistry</i>	1998-2003
Cofounder and Chair of Scientific Advisory Board, Sunesis Pharmaceuticals	1998-2005
Guest Editor, <i>Current Opinion in Chemical Biology</i> Special Issue: Combinatorial Chemistry	1998
Member, Board of Directors, Lake Tahoe Symposia	1997-2000
Co-organizer, National Academy of Sciences Symposium on Combinatorial Chemistry	1997
Member, Long Range Planning Committee, Am. Chem. Soc., Medicinal Chemistry Division	1996-1998
Guest Editor, <i>Accounts of Chemical Research</i> Special Issue: Combinatorial Chemistry	1996
Member, Scientific Advisory Board, Symyx Technologies	1996-1999
Member, Scientific Advisory Board, Versicor Pharmaceuticals	1995-1997
Member, Scientific Advisory Board, Argonaut Technologies	1995-2002

>340 Publications, H-Index >100 (Web of Science)

1. Greenwood, N. S.; Cerny, N. P.; Deziel, A. P.; Ellman, J. A. "Synthesis of N-Acylsulfenamides from (Hetero)Aryl Iodides and Boronic Acids by One-Pot Sulfur-Arylation and Dealkylation" *Angew. Chem. Int. Ed.* **63**, e202315701 (2024).
2. Vargas-Rivera, M. A.; Ellman, J. A. "Visible-Light-Mediated, Diastereoselective Epimerization of Exocyclic Amines" *Org. Lett.* **25**, 9197–9201 (2023).
3. Greenwood, N. S.; Ellman, J. A. "Sulfur-Arylation of Sulfenamides via Ullmann-Type Coupling with (Hetero)aryl Iodides" *Org. Lett.* **25**, 4759–4764 (2023).

- Champlin, A. T.; Ellman, J. A. "Preparation of Sulfilimines by Sulfur-Alkylation of *N*-Acyl Sulfenamides with Alkyl Halides" *J. Org. Chem.* **88**, 7607–7614 (2023).
- Chu, D.; Ellman, J. A. "Stereospecific Synthesis of Unprotected, α,β -Disubstituted Tryptamines and Phenethylamines from 1,2-Disubstituted Alkenes via a One-Pot Reaction Sequence" *Org. Lett.* **25**, 3654–3658 (2023).
- Greenwood, N. S.; Ellman, J. A. "Sulfur-Arylation of Sulfenamides via Chan–Lam Coupling with Boronic Acids: Access to High Oxidation State Sulfur Pharmacophores" *Org. Lett.* **25**, 2830–2834 (2023).
- Liu, J. T.; Brandes, D. S.; Greenwood, N. S.; Ellman, J. A. "Synthesis of *N*-Acylsulfenamides from Amides and *N*-Thiosuccinimides" *Synthesis* **55**, 2353–2360 (2023) [Special Issue dedicated to Prof. David A. Evans].
- Zoll, A. J.; Molas, J. C.; Mercado, B. Q.; Ellman, J. A. "Imine Directed Cp*Rh(III)-Catalyzed N–H Functionalization and Annulation with Amino Amides, Aldehydes, and Diazo Compounds" *Angew. Chem. Int. Ed.* **62**, e202210822 (2023).
- Tassone, J. P.; Yeo, J. Ellman, J. A. "Three-Component Carboformylation: α -Quaternary Aldehyde Synthesis via Co(III)-Catalysed Sequential C–H Bond Addition to Dienes and Acetic Formic Anhydride" *Chem. Sci.* **13**, 14320–14326 (2022).
- Kaplan, A. L.; Confair, D. N.; Kim, K.; Barros-Alvarez, X.; Rodriguez, R. M.; Yang, Y.; Kweon, O. S.; Che, T.; McCorvy, J. Kamber, D. N.; Phelan, J. P.; Martins, L. C.; Pogorelov, V. M.; DiBerto, J. F.; Slocum, S. T.; Huang, X.-P.; Kumar, J. M.p; Robertson, M. J.; Panova, O.; Seven, A. B.; Wetsel, W. C.; Irwin, J. J.; Skiniotis, G.; Shoichet, B. K.; Roth, B. L.; Ellman, J. A. "Docking a Bespoke Ultra-Large Tetrahydropyridine Library Identifies 5-HT_{2A} Receptor Agonists Conferring New Biology" *Nature* **610**, 582–591 (2022).
- Shen, Z.; Vargas-Rivera, M.; Rigby, E. L.; Chen, S.; Ellman, J. A. "Visible Light-Mediated, Highly Stereoselective Epimerization of Morpholines and Piperazines to the More Stable Isomers" *ACS Catal.* **12**, 12860–12868 (2022).
- Greenwood, N. S.; Champlin, A. T.; Ellman, J. A. "Catalytic Enantioselective Sulfur Alkylation of Sulfenamides for the Asymmetric Synthesis of Sulfoximines" *J. Am. Chem. Soc.* **144**, 17808–17814 (2022).
- Gannam, Z. T. K.; Jamali, H.; Kweon, O. S.; Herrington, J.; Shillingford, S. R.; Papini, C.; Gentzel, E.; Lolis, E.; Bennett, A. M.; Ellman, J. A.; Anderson, K. S. "Defining the Structure-Activity Relationship for a Novel Class of Allosteric MKP5 Inhibitors" *Eur. J. Med. Chem.* **243**, 114712 (2022).
- Brandes, D. S.; Elman, J. A. "C–H Bond Activation and Sequential Addition to Two Different Coupling Partners: A Versatile Approach to Molecular Complexity" *Chem. Soc. Rev.* **51**, 6738–6756 (2022).

15. Kazerouni, A. M.; Brandes, D. S.; Davies, C. C.; Cotter, L. F.; Mayer, J. M.; Chen, S.; Ellman, J. A. “Visible Light-Mediated, Highly Diastereoselective Epimerization of Lactams from the Most Accessible to the More Stable Stereoisomer” *ACS Catal.* **12**, 7798–7803 (2022).
16. Xu, C.; Tassone, J. P.; Mercado, B. Q.; Ellman, J. A. “Stereoselective Synthesis of Allenyl Alcohols by Cobalt(III)-Catalyzed Sequential C–H Bond Addition to 1,3-Enynes and Aldehydes” *Angew. Chem. Int. Ed.* **61**, e202202364 (2022) [Hot Paper].
17. Chu, D.; Ellman, J. A. “Three-Component Friedel–Crafts Transformations: Synthesis of Alkyl and Alkenyl Trifluoromethyl Sulfides and Alkenyl Iodides” *Org. Lett.* **24**, 2921–2925 (2022).
18. Brandes, D. S.; Muma, A. S.; Elman, J. A. “Synthesis of α -Branched Amines by Three- and Four-Component C–H Functionalization Employing a Readily Diversifiable Hydrazone Directing Group” *Org. Lett.* **23**, 9597-9601 (2021).
19. Chen, S.; Chandra Tjin, C.; Gao, X.; Xue, Y.; Jiao, H.; Zhang, R.; Wu, M.; He, Z.; Ellman, J. A.; Ha, Y. Pharmacological Inhibition of PI5P4K α/β Disrupts Cell Energy Metabolism and Selectively Kills p53-Null Tumor Cells. *Proc. Natl. Acad. Sci. USA* **118**, e2002486118 (2021).
20. Brandes, D. S.; Sirvent, A.; Mercado, B. Q.; Ellman, J. A. “Three-Component 1,2-Carboamidation of Bridged Bicyclic Alkenes via Rh(III)-Catalyzed Addition of C–H Bonds and Amidating Reagents” *Org. Lett.* **23**, 2836–2840 (2021).
21. Dongbang, S.; Confair, D. N.; Ellman, J. A. “Rhodium-Catalyzed C–H Alkenylation/Electrocyclization Cascade Provides Dihydropyridines That Serve as Versatile Intermediates to Diverse Nitrogen Heterocycles” *Acc. Chem. Res.* **54**, 1766-1778 (2021).
22. Shen, Z.; Walker, M. M.; Chen, S.; Parada, G. A.; Chu, D. M.; Dongbang, S.; Mayer, J. M.; Houk, K. N.; Ellman, J. A. “General Light-Mediated, Highly Diastereoselective Piperidine Epimerization: From Most Accessible to Most Stable Stereoisomer” *J. Am. Chem. Soc.* **143**, 126-131 (2021).
23. Dongbang, S.; Ellman, Jonathan A. “Synthesis of Nitrile Bearing Acyclic Quaternary Centers via Co(III)-Catalyzed Sequential C–H Bond Addition to Dienes and N-Cyanosuccinimide” *Angew. Chem. Int. Ed.* **60**, 2135-2139 (2021).
24. Confair, D. N.; Greenwood, N. S.; Mercado, B. Q.; Ellman, J. A. “Rh(III)-Catalyzed Imidoyl C–H Carbamylation and Cyclization to Bicyclic [1,3,5]Triazinones” *Org. Lett.* **22**, 8993–8997 (2020).
25. Gannam, Z. T. K.; Min, K.; Shillingford, S. R.; Zhang, L.; Herrington, J.; Abriola, L.; Gareiss, P. C.; Pantouris, G.; Tzouvelekis, A.; Kaminski, N.; Zhang, X.; Yu, J.; Jamali, H.; Ellman, J. A.; Lolis, E.; Anderson, K. S.; Bennett, A. M. “An allosteric site on MKP5 reveals a strategy for small molecule inhibition” *Science Signaling* **13**, eaba3043 (2020).
26. Walker, M. M.; Koronkiewicz, B.; Chen, S.; Houk, K. N.; Mayer, J. M.; Ellman, J. A. “Highly Diastereoselective Functionalization of Piperidines by Photoredox Catalyzed C–H Arylation and Epimerization” *J. Am. Chem. Soc.* **142**, 8194-8202 (2020). [ChemRxiv, 2019: doi.org/10.26434/chemrxiv.11336642.v1].

27. Streit, A. D.; Zoll, A. J.; Hoang, G. L.; Ellman, J. A. "Annulation of Hydrazones and Alkynes via Rhodium(III)-Catalyzed Dual C–H Activation: Synthesis of Pyrrolopyridazines and Azolopyridazines" *Org. Lett.* **22**, 1217-1222 (2020).
28. Scamp, R. J.; deRamon, E.; Paulson, E. K.; Miller, S. J.; Ellman, J. A. "Co(III)-Catalyzed C-H Amidation of Dehydroalanine for the Site-Selective Structural Diversification of Thiostrepton" *Angew. Chem. Int. Ed.* **59**, 890-895 (2020).
29. Shen, Z.; Li, C.; Mercado, B. Q.; Ellman, J. A. "Cobalt(III)-Catalyzed Diastereoselective Three-Component C–H Bond Addition to Butadiene and Activated Ketones" *Synthesis* **51**, 1239-1246 (2020) [Domino C–H functionalization reaction/cascade catalysis in honor of Prof. Mark Lautens].
30. Ellman, J. A.; Ackermann, L.; Shi, B.-F. "The Breadth and Depth of C–H Functionalization" *J. Org. Chem.* **84**, 12701-12704 (2019).
31. Maity, S.; Potter, T. J.; Ellman, J. A. "α-Branched Amines by Catalytic 1,1-Addition of C–H Bonds and Aminating Agents to Terminal Alkenes" *Nat. Catal.* **2**, 756–762 (2019).
32. Dongbang, S.; Shen, Z.; Ellman, J. A. "Synthesis of Homoallylic Alcohols with Acyclic Quaternary Centers via Co(III)-Catalyzed Three-Component C–H Bond Addition to Internally Substituted Dienes and Carbonyls" *Angew. Chem. Int. Ed.* **58**, 12590–12594 (2019).
33. Hoang, G. L.; Zoll, A. J.; Ellman, J. A. "Three-Component Coupling of Aldehydes, 2-Aminopyridines, and Diazo Esters via Rhodium(III)-Catalyzed Imidoyl C–H Activation: Synthesis of Pyrido[1,2-a]pyrimidin-4-ones" *Org. Lett.* **21**, 3886-3890 (2019).
34. Chen, S.; Chan, A. Y.; Walker, M. M.; Ellman, J. A.; Houk, K. N. "π-Facial Selectivities in Hydride Reductions of Hindered Endocyclic Iminium Ions" *J. Org. Chem.* **84**, 273–281 (2019).
35. Dongbang, S.; Pedersen, B.; Ellman, J. A. "Asymmetric Synthesis of (–)-Naltrexone" *Chem. Sci.* **10**, 535–541 (2019).
36. Hoang, G. L.; Streit, A. D.; Ellman, J. A. "Three-Component Coupling of Aldehydes, Aminopyrazoles, and Sulfoxonium Ylides via Rhodium(III)-Catalyzed Imidoyl C–H Activation: Synthesis of Pyrazolo[1,5-a]pyrimidines" *J. Org. Chem.* **83**, 15347–15360 (2018).
37. Boerth, J. A.; Maity, S.; Williams, S. K.; Mercado, B. Q.; Ellman, J. A. "Selective and Synergistic Cobalt(III)-Catalysed Three-Component C–H Bond Addition to Dienes and Aldehydes" *Nat. Catal.* **1**, 673–679 (2018).
38. Chandra Tjin, C.; Wissner, R.; Jamali, H.; Schepartz, A.; Ellman, J. A. "Synthesis and Biological Evaluation of an Indazole-Based Selective Protein Arginine Deiminase 4 (PAD4) Inhibitor" *ACS Med. Chem. Lett.* **9**, 1013–1018 (2018).
39. Hoang, G. L.; Halskov, K. M.; Ellman, J. A. "Synthesis of Azolo[1,3,5]triazines via Rhodium(III)-Catalyzed Annulation of N-Azolo Imines and Dioxazolones" *J. Org. Chem.* **83**, 9522–9529 (2018).

40. Potter, T. J.; Li, Y.; Ward, M. D.; Ellman, J. A. "Rh(III)-Catalyzed Synthesis of Isoquinolones and 2-Pyridones via Annulation of *N*-Methoxyamides and Nitroalkenes" *Eur. J. Org. Chem.* 4381–4388 (2018) [International Advisory Board 20th Anniversary Issue].
41. Walker, M. M.; Chen, S.; Houk, K.; Ellman, J. A. "Formation of Aminocyclopentadienes from Silyldihydropyridines: Ring Contractions Driven by Anion Stabilization" *Angew. Chem. Int. Ed.* **57**, 6605–6609 (2018).
42. Halskov, K. M.; Witten, M. R.; Hoang, G. L.; Mercado, B. Q.; Ellman, J. A. "Rhodium(III)-Catalyzed Imidoyl C–H Activation for Annulations to Azolopyrimidines" *Org. Lett.* **20**, 2464–2467 (2018).
43. Xu, J.; Hartley, B. J.; Kurup, P.; Phillips, A.; Topol, A.; Xu, M.; Ononenyi, C.; Foscue, E.; Ho, S.-M.; Baguley, T. D.; Carty, N.; Barros, C. S.; Muller, U.; Gupta, S.; Gochman, P.; Rapoport, J.; Ellman, J. A.; Pittenger, C.; Aronow, B.; Nairn, A. C.; Nestor, M. W.; Lombroso, P. J.; Brennand, K. J. "Inhibition of STEP61 ameliorates deficits in mouse and hiPSC-based schizophrenia models" *Mol. Psychiatry* **23**, 271–281 (2018).
44. Hoang, G. L.; Ellman, J. A. "Rhodium(III)-Catalyzed C–H Functionalization of C-Alkenyl Azoles with Sulfoxonium Ylides for the Synthesis of Bridgehead N-Fused [5,6]-bicyclic Heterocycles" *Tetrahedron* **74**, 3318–3324 (2018) [Herzon Tetrahedron Award Issue].
45. Tjin, C. C.; Otley, K. D.; Baguley, T. D.; Kurup, P.; Xu, J.; Nairn, A. C.; Lombroso, P. J.; Ellman, J. A. "Glutathione-Responsive Selenosulfide Prodrugs as a Platform Strategy for Potent and Selective Mechanism-Based Inhibition of Protein Tyrosine Phosphatases" *ACS Cent. Sci.* **3**, 1322–1328 (2017).
46. Witten, M. R.; Wissler, L.; Snow, M.; Geschwindner, S.; Read, J.; Brandon, M. J.; Nairn, A. C.; Lombroso, P. J.; Käck, H.; Ellman, J. A. "X-Ray Characterization and Structure-Based Optimization of Striatal-Enriched Protein Tyrosine Phosphatase Inhibitors" *J. Med. Chem.* **60**, 9299–9319 (2017).
47. Tran, G.; Confair, D.; Hesp, K. D.; Mascitti, V.; Ellman, J. A. "C2-Selective Branched Alkylation of Benzimidazoles by Rhodium(I)-Catalyzed C–H Activation" *J. Org. Chem.* **82**, 9243–9252 (2017).
48. Boerth, J. A.; Ellman, J. A. "A Convergent Synthesis of Functionalized Alkenyl Halides via Co(III)-Catalyzed Three-Component C-H Bond Addition" *Angew. Chem. Int. Ed.* **56**, 9976–9980 (2017).
49. Hummel, J. R.; Ellman, J. A. "Convergent Synthesis of α -Branched Amines by Transition-Metal-Catalyzed C–H Bond Additions to Imines" *Isr. J. Chem.* **57**, 916–931 (2017) [honoring Prof Robert Bergman's Wolf Prize].
50. Halskov, K. M.; Roth, H.; Ellman, J. A. "Synthesis of [5,6]-Bicyclic Heterocycles with a Ring-Junction Nitrogen via Rh(III)-Catalyzed C-H Functionalization of Alkenyl Azoles" *Angew. Chem. Int. Ed.* **56**, 9183–9187 (2017).

51. Potter, T. J.; Ellman, J. A. "Total Synthesis of (+)-Pancratistatin by the Rh(III)-Catalyzed Addition of a Densely Functionalized Benzamide to a Sugar-Derived Nitroalkene" *Org. Lett.* **19**, 2985–2988 (2017).
52. Tran, G.; Hesp, K. D.; Mascitti, V.; Ellman, J. A. "Base-Controlled Completely Selective Linear or Branched Rhodium(I)-Catalyzed C–H ortho-Alkylation of Azines without Preactivation" *Angew. Chem. Int. Ed.* **56**, 5899–5903 (2017).
53. Hummel, J. R.; Boerth, J. A.; Ellman, J. A. "Transition-Metal-Catalyzed C–H Bond Addition to Carbonyls, Imines, and Related Polarized π Bonds" *Chem. Rev.* **117**, 9163–9227 (2017).
54. Potter, T. J.; Kamber, D. N.; Mercado, B. Q.; Ellman, J. A. "Rh(III)-Catalyzed Aryl and Alkenyl C–H Bond Addition to Diverse Nitroalkenes" *ACS Catal.* **7**, 150–153 (2017).
55. Chen, S.; Bacauanu, V.; Knecht, T.; Mercado, B. Q.; Bergman, R. G.; Ellman, J. A. "New Regio- and Stereoselective Cascades via Unstabilized Azomethine Ylide Cycloadditions for the Synthesis of Highly Substituted Tropane and Indolizidine Frameworks" *J. Am. Chem. Soc.* **138**, 12664–12670 (2016).
56. Wangweerawong, A.; Kolmar, S.; Ellman, J. A. "Preparation of (S)-Nonafluorobutanesulfinamide" *Org. Synth.* **93**, 319–330 (2016).
57. Potter, T. J.; Ellman, J. A. "Rh(III)-Catalyzed C–H Bond Addition/Amine-Mediated Cyclization of Bis-Michael Acceptors" *Org. Lett.* **18**, 3838–3841 (2016).
58. Jamali, H.; Khan, H. A.; Tjin, C. C.; Ellman, J. A. "Cellular Activity of New Small Molecule Protein Arginine Deiminase 3 (PAD3) Inhibitors" *ACS Med. Chem. Lett.* **7**, 7847–851 (2016).
59. Weinstein, A. B.; Ellman, J. A. "Convergent Synthesis of Diverse Nitrogen Heterocycles via Rh(III)-Catalyzed C–H Conjugate Addition/Cyclization Reactions" *Org. Lett.* **18**, 3294–3297 (2016).
60. Boerth, J. A.; Hummel, J. R.; Ellman, J. A. "Highly Stereoselective Cobalt(III)-Catalyzed Three-Component C–H Bond Addition Cascade" *Angew. Chem. Int. Ed.* **55**, 12650–12654 (2016).
61. Phelan, J. P.; Ellman, J. A. "Conjugate Addition–Enantioselective Protonation Reactions" *Beilstein J. Org. Chem.* **12**, 1203–1228 (2016).
62. Phelan, J. P.; Ellman, J. A. "Catalytic Enantioselective Addition of Pyrazol-5-ones to Trisubstituted Nitroalkenes with an N-Sulfinylurea Organocatalyst" *Adv. Synth. Catal.* **358**, 1713–1718 (2016).
63. Wangweerawong, A.; Hummel, J. R.; Bergman, R. G.; Ellman, J. A. "Preparation of Enantiomerically Pure Perfluorobutanesulfinamide and Its Application to the Asymmetric Synthesis of α -Amino Acids" *J. Org. Chem.* **81**, 1547–1557 (2016).
64. Mesganaw, T.; Ellman, J. A. "4-(Diethylphosphino)-N,N-dimethylaniline" *e-EROS Encyclopedia of Reagents for Organic Synthesis* (2016).

65. Boerth, J. A.; Ellman, J. A. "Rh(III)-Catalyzed Diastereoselective C–H Bond Addition/Cyclization Cascade of Enone Tethered Aldehydes" *Chem. Sci.* **7**, 1474-1479 (2016).
66. Xu, J.; Kurup, P. K.; Azkona, G. M.; Baguley, T. D.; Saavedra, A. C.; Nairn, A. C.; Ellman, J. A.; Perez-Navarro, E.; Lombroso, P. A. "Down-Regulation of BDNF in Cell and Animal Models Increases Striatal-Enriched Protein Tyrosine Phosphatase STEP₆₁ Levels" *J. Neurochem.* **136**, 285–294 (2016).
67. Xu, J.; Kurup, P.; Baguley, T. D.; Foscue, E.; Ellman, J. A.; Nairn, A. C.; Lombroso, P. J. "Inhibition of the Tyrosine Phosphatase STEP61 Restores BDNF Expression and Reverses Motor and Cognitive Deficits in Phencyclidine-Treated Mice" *Cell. Mol. Life Sci.* **73**, 1503-1514 (2016).
68. Azkona, G.; Saavedra, A.; Aira, Z.; Aluja, D.; Xifró, X.; Baguley, T.; Alberch, J.; Ellman, J. A.; Lombroso, P.J.; Azkue, J.J.; Pérez-Navarro, E. "STEP Modulates Nociception: Evidences from Genetic Deletion and Pharmacological Inhibition" *Pain* **157**, 377-86 (2016).
69. Phillips, E. M.; Mesganaw, T.; Patel, A. Duttwyler, S.; Mercado, B. Q.; Houk, K. N.; Ellman, J. A. "Synthesis of ent-Ketorfanol via a C–H Alkenylation/ Torquoselective 6 π -Electrocyclization Cascade" *Angew. Chem. Int. Ed.* **54**, 12044–12048 (2015).
70. Neitz, R. J.; Bryant, C.; Chen, S.; Gut, J.; Caselli, E. H.; Ponce, S.; Chowdhury, S.; Xu, H.; Arkin, M. R.; Ellman, J. A.; Renslo, A. R. "Tetrafluorophenoxymethyl Ketone Cruzain Inhibitors with Improved Pharmacokinetic Properties as Therapeutic Leads for Chagas' Disease" *Bioorg. Med. Chem. Lett.* **25**, 4834–4837 (2015) [Symposium-in-Print entitled 'Recent Advances in Medicinal Chemistry and Chemical Biology' in celebration of the 25th anniversary of BMCL].
71. Chen, S.; Mercado, B. Q.; Bergman, R. G.; Ellman, J. A. "Regio- and Diastereoselective Synthesis of Highly Substituted, Oxygenated Piperidines from Tetrahydropyridines" *J. Org. Chem.* **80**, 6660–6668 (2015).
72. Chen, S.; Bergman, R. G.; Ellman, J. A. "Facile Rh(III)-Catalyzed Synthesis of Fluorinated Pyridines" *Org. Lett.* 2567–2569 (2015).
73. Hummel, J. R.; Ellman, J. A. "Cobalt(III)-Catalyzed C–H Bond Amidation with Isocyanates" *Org. Lett.* **17**, 2400–2403 (2015).
74. Oresic Bender, K.; Ofori, L.; van der Linden, W. A.; Mock, E. D.; Datta, G.; Chowdhury, S.; Li, H.; Segal, E.; Lopez, M. S.; Ellman, J. A.; Figdor, C. G.; Bogyo, M.; Verdoes, M. "Design of a Highly Selective Quenched Activity-Based Probe and Its Application in Dual Color Imaging Studies of Cathepsin S Activity Localization" *J. Am. Chem. Soc.* **137**, 4771–4777 (2015).
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Patent Applications

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Presentations (>450)

I. Universities/Research Institutions

1. University of Rhode Island, October 23, 2023
2. University of California at Riverside, CA, April 26, 2023
3. Indiana University, Bloomington, IN, April 10, 2023
4. Silvestri Lecture, Villanova University, Villanova, PA, March 17, 2023
5. Northwestern (virtual presentation), April 29, 2020
6. Kyoto University, June 28, 2019 [International Organization of Organic Chemistry (IOFC) Lectureship]
7. Osaka University, July 1, 2019 [International Organization of Organic Chemistry (IOFC) Lectureship]
8. University of California at Berkeley, October 16, 2018
9. New York University (McNelis Lecture – General Audience), April 6, 2018
10. New York University (chemical biology), April 5, 2018
11. New York University (organic chemistry), April 4, 2018
12. Emory University, February 21, 2018
13. Northeastern University, January 31, 2018
14. Memorial Sloan Kettering, January 26, 2018
15. Yale Pharmacology Retreat, September 8, 2017
16. ETH Zurich (Switzerland), May 19, 2017
17. University of Basel (Switzerland), May 18, 2017
18. École Polytechnique Fédérale de Lausanne (Switzerland), May 17, 2017
19. University of Fribourg (Switzerland), May 16, 2017
20. University of Geneva (Switzerland), May 15, 2017
21. UCSF, May 9, 2017
22. Rochester University, Victor J. Chambers Lectureship (three lectures), March 22, 2017
23. Rochester University, Victor J. Chambers Lectureship (three lectures), March 21, 2017
24. Rochester University, Victor J. Chambers Lectureship (three lectures), March 20, 2017
25. Keynote lecture Yale Undergraduate Research Conference, New Haven, February 12, 2017
26. Vanderbilt University, January 18, 2017
27. Sheffield University, UK: 49th Annual Meeting "Modern Aspects of Stereochemistry", January 12, 2016
28. Shanghai Institute of Organic Chemistry (Shanghai, China), June 5, 2015
29. University of California at Los Angeles, May 21, 2015
30. Virginia Tech. March 19, 2015
31. Washington University School of Medicine (St. Louis, MO), March 17, 2015

32. University of Houston, March 12, 2015
33. Oklahoma State University Phi Lambda Upsilon 2015 Research Seminar, March 10, 2015
34. Oklahoma State University Phi Lambda Upsilon 2015 Banquet Presentation, March 10, 2015
35. Scripps Research Institute, June 10, 2014
36. University of Southern California, April 9, 2014
37. University of Kansas, March 13, 2014
38. Yale Cancer Center Grand Rounds, March 5, 2014
39. University of California at Irvine, February 10, 2014
40. Albert Einstein College of Medicine, May 28, 2013
41. Purdue University, H. C. Brown Symposium, April 27, 2013
42. MIT, April 25, 2013
43. University of Washington, March 20, 2013
44. Caltech, January 9, 2013
45. Yale Chemical Biology Symposium, May 11, 2012
46. The Ohio State University, March 8th, 2012
47. Yale University, Chemical Biology Retreat, December 16, 2011
48. University of Chicago, Stieglitz Lecture, November 21, 2011
49. Yale University, Chemical Biology Retreat, May 13, 2011
50. Yale University, "Yale Talks About Opportunities in Drug Discovery Symposium, April 2, 2011
51. University of Leeds, UK, March 31, 2011
52. University of Loughborough, UK, March 30, 2011
53. University of Bristol, UK, March 28, 2011
54. Columbia University, December 2, 2010
55. University of Wisconsin at Madison, November 9, 2010
56. University of New Hampshire, November 2, 2010
57. University of Connecticut, October 27, 2010
58. Boston College, October 12, 2010
59. Purdue University (H. C. Brown Symposium), April 24, 2010
60. University of California at San Francisco, April 15, 2010
61. UT Southwestern Medical Center, April 1, 2010
62. University of Colorado (Roche Lecture), March 1, 2010
63. Rutgers, University, February 5, 2010
64. Yale University, January 22, 2010
65. Genomics Institute of the Novartis Research Foundation, La Jolla, CA, October 23, 2009
66. Scripps Research Institute, Jupiter, FL site, April 22, 2009
67. Scripps Research Institute, La Jolla, CA site, April 7, 2009
68. Northwestern University, March 30, 2009
69. Wayne State University, February 23, 2009
70. Oregon State University, August 11, 2008
71. Cambridge University, UK, July 11, 2008
72. University of Guelph-Waterloo Pfizer Lectureship, May 15, 2008
73. National Institutes of Health, Bethesda, MD, April 25, 2008
74. University of Pittsburgh, Pittsburgh, PA, March 19, 2005
75. University of Pennsylvania, Philadelphia, PA, December 13, 2008
76. University of California at Berkeley, Structural and Quantitative Biology Seminar, October 1, 2008
77. Keio University, Yokohama, Japan, May 11, 2007
78. Santa Clara University, Santa Clara, CA, April 13, 2007
79. University of Illinois (BMS Symposium Lecturer), Urbana, IL, February 12, 2007
80. North Carolina State University, Raliegh, NC, January 19, 2007
81. Northwestern University, Evanston, IL, April 21, 2006
82. Stanford University, Palo Alto, CA, March 23, 2006
83. MIT (George Buchi Lectureship, Seminar #2), Cambridge, MA, February 2, 2006
84. MIT (George Buchi Lectureship, Seminar #1), Cambridge, MA, February 1, 2006

85. Brandeis University, Waltham, MA, January 30, 2006
86. University of California at Berkeley, QB3 Seminar Series, November 10, 2005
87. University of Michigan (Bristol-Myers Squibb Lecturer), September 10, 2005
88. Technical University of Denmark (Lundbeck Lectureship), Copenhagen, Denmark, June 6, 2005
89. University of Toronto, Toronto, Canada, May 4, 2005
90. University of Chicago, Chicago, IL, May 2, 2005
91. Yale University, Hartford, CN, April 28, 2005
92. Organic Chemistry Day Symposium at University of Missouri, Columbia, MO, April 15, 2005
93. Chemical Biology Seminar at University of Missouri, Columbia, MO, April 15, 2005
94. University of Alberta, Edmonton, Canada, April 11, 2005
95. University of Calgary, Calgary, Canada, April 8, 2005
96. University of Kansas, Lawrence KS, March 17, 2005
97. Cherry Emerson Seminar Series at Georgia Tech, Atlanta, GA, March 8, 2005
98. Department of Energy Lawrence Livermore Labs, Livermore, CA, January 10, 2005
99. UC Irvine Chemical Biology Symposium, Irvine, CA, September 17, 2004
100. Michigan State, East Lansing, MI, March 25, 2004
101. Chemistry-Biology Symposium at the University of Michigan, Ann Arbor, MI, December 1, 2003
102. Université Rouen, Rouen, France, November 22, 2003
103. Université Paul Sabatier, Toulouse, France, November 20, 2003
104. Professor Irwin Kuntz Retirement Symposium, University of California at San Francisco, October 18, 2003
105. University of California at San Francisco, Mission Bay Site, May 22, 2003
106. Princeton University, April 10, 2003
107. Ohio State University, February 20, 2003
108. University of Minnesota, January 28, 2003
109. Boston University Combinatorial Chemistry Symposium, June 28, 2002
110. Caltech, May 8, 2002
111. Southwestern Medical Center (Dallas), April 25, 2002
112. Northwestern University, April 23, 2002
113. University of Oregon, May 15, 2002
114. University of Illinois (Champaign-Urbana site), March 13, 2002
115. University of Illinois (Chicago site), February 26, 2002
116. University of Geneva, February 7, 2002
117. Columbia University Pharmacology Department (NY), October 4, 2001
118. Columbia University Chemistry Department (NY), October 5, 2001
119. University of California at Davis, April 24, 2001
120. Chemical Biology Retreat (UCSF), Asilomar, January 4, 2001
121. University of Rochester, NY, April 18, 2000
122. Scripps Research Institute, San Diego, CA, March 17, 2000
123. Florida State University, February 29, 2000
124. 2000 UCSF Cancer Center Meeting, February 22, 2000
125. University of Washington, February 18, 2000
126. University of Sherbrooke, *BioMega/Boehringer Ingelheim Research Inc. Distinguished Lecturer*, Canada, January 19, 2000
127. The Carlsburg Institute, Copenhagen, Denmark, November 2, 1999
128. Boston College, October 7, 1999
129. Tufts University, October 5, 1999
130. The Gallo Center, UCSF, April 28, 1999
131. University of North Carolina, April 17, 1999
132. Purdue University, April 6, 1999
133. University of Michigan, October 1, 1998
134. Colorado University/Syntex-Roche Symposium on Organic Synthesis, May 22, 1998
135. University of Illinois Monsanto Symposium, April 18
136. University of Madison, Wisconsin, March 24, 1998

137. Cal State Sacramento 50th Anniversary Celebration, February 14, 1998
138. Yale University, February 13, 1998
139. University of Montreal, October 3, 1997
140. University of Copenhagen, August 15, 1997
141. Stanford University, May 23, 1997
142. University of Kentucky - NAFF Symposium, April 8, 1997
143. Notre Dame, March 19, 1997
144. Indiana University, March 17, 1997
145. Princeton University, January 30, 1997
146. University of Texas at Austin, December 13, 1996
147. Texas A & M, December 12, 1996
148. Rice University, December 11, 1996
149. Cornell University, November 18, 1996
150. UCLA, June 6, 1996
151. University of Utah, May 16, 1996
152. University of Michigan, April 16, 1996
153. University of Virginia, April 12, 1996
154. Vanderbilt University, *5th Annual Symposium on Drug Development*, March 27, 1996
155. Harvard University, March 18, 1996
156. University of Nottingham, UK, February 28, 1996
157. Oxford University, UK, February 26, 1996
158. Scripps Research Institute, *Seventh Annual Symposium on Frontiers in Chemistry*, February 23, 1996
159. MIT, February 1, 1996
160. Brandeis, January 30, 1996
161. Sloan Kettering Cancer Institute, January 17, 1996
162. Caltech, November 29, 1995
163. Stanford University, November 15, 1995
164. Case Western, November 9, 1995
165. University of Toronto, October 20, 1995
166. University of California, Berkeley, September 26, 1995
167. University of California, Davis, May 30, 1995
168. Colorado State University, April 24, 1995
169. M.D. Anderson Cancer Institute, January 19, 1995
170. University of California, Santa Cruz, January 10, 1995
171. University of California, Irvine, *1994 University of California Irvine Synthesis Symposium*, December 10, 1994
172. University of California, San Francisco, November 5, 1994
173. University of California, Berkeley, September 27, 1994
174. University of Alberta, April 20, 1994
175. University of Texas, Southwest Medical Center, May 19, 1994

II. Plenary Lectures at Conferences and Meetings

1. Organic Reactions and Processes Gordon Research Conference, Smithfield, RI, July 16, 2023
2. Allan R. Day Award from the Philadelphia Organic Chemists Club, Philadelphia, PA, January 26, 2023
3. American Chemical Society National Meeting, Symposium for ACS Award for Creative Work in Synthetic Organic Chemistry (virtual symposium), April 8, 2021.
4. Chemical Sciences for Drug Discovery & Therapy (virtual), VNIT, India July 24, 2020
5. 85th Annual Meeting of the Israel Chemical Society, Jerusalem, Israel, February 18, 2020
6. The Future of C-H Functionalization (TSRC), Telluride, CO, August 1, 2019
7. Naito Conference on C-H Bond Activation and Transformation, Sapporo, Japan, July 5, 2019

8. Symposium honoring Ann Weber for North Jersey ACS Section 2018 Award for Creativity in Design and Synthesis, November 29, 2018
9. Connecticut Valley American Chemical Society Symposium on Applied Synthesis, Connecticut College, September 21, 2018
10. The 4th International Symposium on C-H Activation (ISCHA4), Yokohama, Japan, September 1, 2018
11. 19th Tetrahedron Symposium, Lake Garda Italy, June 27, 2018
12. Center for Selective C-H Functionalization Virtual Symposium (international broadcast), March 13, 2018
13. 100th Canadian Society for Chemistry Conference, Toronto, Canada, May 30, 2017
14. Symposium honoring Peter G. Schultz 60th birthday, Scripps Research Institute, CA, July 30, 2016
15. International Conference on "Transition Metal Catalysis for Organic Synthesis," Nankai University, China, July 16, 2016
16. International (Henan) Forum on Drug Discovery and Technology, Zhengzhou China, June 6, 2015
17. American Chemical Society National Meeting, Symposium titled "c-H Functionalization in the Preparation of Biologically Active Compounds" Denver, March 21, 2015
18. Gordon Research Conference on Natural Products, New Hampshire, July 21, 2014
19. American Chemical Society National Meeting, Symposium titled "Advances in C-H Bond Functionalization" Dallas, March 18, 2014
20. 7th Catalysis Research Laboratory Winter School (Heidelberg, Germany), Research Seminar, February 28, 2014
21. 7th Catalysis Research Laboratory Winter School (Heidelberg, Germany), Tutorial on Rh(III)-catalyzed C-H bond functionalization, February 28, 2014
22. Treat B. Johnson Symposium, American Chemical Society North East Regional Meeting, New Haven, CT, October 24, 2013
23. American Chemical Society National Meeting "C-H Activation Symposium" New Orleans, LA, April 10, 2013
24. European Molecular Biology Laboratory Chemical Biology Conference, Heidelberg, Germany, September 28, 2012
25. Gordon Research Conference on Natural Products, New Hampshire, July 9, 2012
26. Royal Society of Chemistry symposium entitled "Challenges in Organic Chemistry and Chemical Biology" Edinburgh, UK, June 15, 2012
27. Herbert C. Brown Award Symposium at the American Chemical Society National Meeting, San Diego, CA, March 26, 2012
28. The 132nd Annual Meeting, Pharmaceutical Society of Japan, Hokkaido, Japan, March 29, 2012
29. Modern Catalysis for Sustainable Chemistry Symposium sponsored by Syngenta, Switzerland, October 28, 2011
30. American Chemical Society National Meeting, E.B. Herschberg Award Symposium, Boulder, CO August 29, 2011
31. American Chemical Society National Meeting, Symposium titled "Catalyst needs for drug discovery, development, and commercialization," Boulder, CO, August 28, 2011
32. Gordon Research Conference on Heterocyclic Chemistry, RI, June 28, 2011
33. Gordon Research Conference on High Throughput Chemistry & Chemical Biology, NH, June 20, 2011
34. New Jersey Biotechnology Chemistry Consortium Symposium, December 8, 2010
35. New Jersey Section of the American Chemical Society Symposium for Molecular Design & Synthesis, November 17, 2010
36. Natural Products Gordon Research Conference, Tilton, New Hampshire, July 28, 2010
37. Stereochemistry Gordon Research Conference, Newport, RI, August 8, 2010
38. National Medicinal Chemistry Symposium, Minneapolis, MN, June 9, 2010
39. 2009 Symposium for the Society of Combinatorial Sciences, Beijing, China, September 20, 2009
40. 3rd International Symposium on Advances in Synthesis and Medicinal Chemistry, Kiev, Ukraine, August 25th, 2009

41. 21st American Peptide Symposium, Bloomington, Indiana, June 9, 2009
42. 19th Lakeland Symposium on Heterocyclic Chemistry, Grasmere, UK, May 15, 2009
43. Sandler Day "Symposium on Drug Discovery to Treat Neglected Diseases" UCSF, April 2, 2009
44. ACS National Meeting Symposium entitled "Organic Chemistry Collaborations" March 22, 2009
45. Gordon Research Conference on Chemical & Biological Terrorism Defense, Galveston, Texas, Canada, January 20, 2009
46. The 2nd International Symposium on Catalysis as the Basis for Innovation of Materials Science, Sapporo, Japan, December 19, 2008
47. Catalysis Joint Workshop (University of Heidelberg, Northwestern, and UC Berkeley) Heidelberg, Germany, September 14, 2008
48. 11th Belgian Organic Synthesis Symposium, Ghent, Belgium, July 16, 2008
49. Pacific Northwest Undergraduate Research Symposium, Portland, OR, August 11, 2008
50. Canadian Society of Chemistry, Alberta, Canada, May 24, 2008
51. Gordon Research Conference on Peptides and Proteins, Ventura, CA, February 20, 2008
52. Zing Small Molecule Drug Discovery Conference, Antigua, January 17, 2008
53. Microwave Assisted Organic Synthesis Conf., South San Francisco, CA, October 3, 2007
54. 5th Johnson & Johnson Symposium on Drug Discovery, San Diego, CA, June 19, 2007
55. Annual Meeting Japanese Society for Chemical Biology, Kyoto, Japan, May 10, 2007
56. American Society for Biochemistry and Molecular Biology (ASBMB) 2007 National Meeting, Washington, D.C., April 28, 2007
57. 2nd Hellenic Symposium on Organic Synthesis, Athens, Greece, April 19, 2007
58. Novartis Symposium (Honoring David Evans), Cambridge, MA, December 5, 2006
59. Peter G. Schultz 50th Birthday Symposium, San Diego, CA, June 2, 2006
60. Tetrahedron Prize Award Lecture at Tetrahedron Symposium, Kyoto, Japan, May 25, 2006
61. American Chemistry Society Perspectives in Organic Reactions, Miami, FL, March 8, 2006
62. Combinatorial Chemistry Gordon Research Conference, NH, August 21, 2005
63. Organic Reactions and Processes Gordon Research Conference, RI, August 1, 2005
64. Eurocombi-3 Conference, Winchester, UK, July 18, 2005
65. Protease Symposium at the American Society for Biochemistry and Molecular Biology National Meeting, San Diego, CA, April 6, 2005
66. Eli Lilly Award Symposium honoring Benjamin Cravatt at the National Meeting of the American Chemical Society, Philadelphia, PA, August 24, 2004
67. Symposium on Microwave Chemistry at the National Meeting of the American Chemical Society, Philadelphia, PA, August 23, 2004
68. 21st International Symposium on the Organic Chemistry of Sulfur, Madrid, Spain, July 9, 2004
69. Proteinase 2004 (sponsored jointly by the Royal Society of Chemistry and the Society of Chemical Industry), London, UK, May 10, 2004
70. 39th EUCHEM Conference on Stereochemistry 2004, Burgenstock, Switzerland, April 19, 2004
71. Symposium For Hirschman Award honoring Richard Houghten at the National Meeting of the American Chemical Society, Anaheim, CA, March 31, 2004
72. NIH Chemical Genomics Symposium, Bethesda, MD, March 15, 2004
73. 5th Florida Heterocycles Conference, Gainesville, FL, March 10, 2004
74. Presentation for acceptance of the "Scheele Award" at the Biotech Forum 2003 Science Conference, Stockholm, Sweden, November 27, 2003
75. Presentation of "Rhodia-Chirex Lectureship Award" at the Société Française de Chimie Division De Chimie Organique 2003 Meeting, November 25, 2003
76. Presentation for acceptance of the "Society of Biomolecular Screening Achievement Award" at the National SBS Meeting, Portland, OR, September 23, 2003
77. ACS Perspectives Conference, "Combinatorial Chemistry: New Methods, New Discoveries", Leesburg, VA, September 21, 2003
78. Medicinal Chemistry Gordon Conference, Newport, RI, August 6, 2003
79. Heterocycles Gordon Conference, New London, NH, July 7, 2003
80. Chaired and presented at the Symposium on Microwave Chemistry, South San Francisco, CA, June 12, 2003

81. Award Symposium in Industrial Chemistry honoring Bruce Maryanoff at the National Meeting of the American Chemical Society, New Orleans, LA, March 24, 2003
82. LabAutomation2003 (Annual national conference of the Association for Laboratory Automation), Palm Springs, CA, February 3, 2003
83. Chemistry Meets Technology II (sponsored jointly by the Royal Society of Chemistry and the Society of Chemical Industry), London, UK, December 9, 2002
84. "NIGMS 40th Anniversary Symposium" sponsored by the NIH and held during the fall 2003 American Chemical Society National Meeting, Boston, MA, August 20, 2002
85. 14th International Conference on Organic Synthesis (sponsored by IUPAC), Christchurch, New Zealand, July 17, 2002
86. 11th Federation of European Chemical Societies Conference on Heterocycles in Bio-organic Chemistry, Sitges, Spain, June 10, 2002
87. French American Chemical Society IX, Paris, France, June 6, 2002
88. 2nd Conference on Coherent Synthesis, San Diego, CA, May 31, 2002
89. Molecular Foundry Workshop (DOE, Lawrence Berkeley Labs), April 4, 2002
90. ACS Prospectives Conference, "Combinatorial Chemistry: Applying Technology", Zurich, Switzerland, November 4-7, 2001
91. 18th International Congress of Heterocyclic Chemistry, Yokohama, Japan, August 1, 2001
92. Royal Society Conference on "Combinatorial Approaches to Chemistry and Biology III", Cambridge, UK, July 17, 2001
93. David Evans 60th Birthday Symposium, Harvard University, Cambridge, MA, June 16, 2001
94. 84th Annual Canadian Society of Chemistry Conference, Symposia on "Combinatorial Chemistry: Synthesis and Analysis", Montreal, Canada, May 30, 2001
95. International Conference on Fundamental Sciences: Biological and Chemical Sciences, Singapore, May 21, 2001
96. National ACS Meeting, Symposium on "Selectivity in Organic Chemistry and Catalysis", San Diego, CA, April 4, 2001
97. National ACS Meeting, Symposium in honor of Peter Schultz receiving the Alfred Bader Award in Bioinorganic and Bioorganic Chemistry", San Diego, CA, April 2, 2001
98. LabAutomation 2000 sponsored by the Association for Laboratory Automation, Palm Springs, CA, Monday January 27, 2001
99. 11th International Biotechnology Symposium "Biotechnology 2000", Berlin, Germany, September 4, 2000
100. ACS National Meeting, ACS Cope Scholar Award Presentation, Washington D.C., August 22, 2000
101. Fourteenth Symposium of the Protein Society, San Diego, CA, August 8, 2000
102. Pacificchem 2000, Symposium on "Combinatorial and Parallel Synthesis: Applications to Medicinal Chemistry, Honolulu Hawaii, January 18, 2000
103. Combinatorial Approaches to Chemistry and Biology II, The Royal Society, Cambridge, UK, June 30, 1999
104. The 16th American Peptide Symposium, Minneapolis, Minnesota, June 28, 1999
105. The American Society for Biochemistry and Molecular Biology National Meeting, San Francisco, CA, May 17, 1999
106. The 5th Michigan Symposium on Contemporary Challenges in Molecular Medicine Ann Arbor, Michigan, May 7, 1999
107. The 8th Conference on Combinatorial Chemistry, Osaka, Japan, April 27, 1998
108. The East Bay Regional ACS Meeting, Berkeley, CA, March 11, 1999
109. 2nd International Conference on Combinatorial Library Methods for Basic Research and Drug Discovery, Tuscon AZ, January 11, 1999
110. UCSF Proteolysis Symposium, San Francisco, CA, November 6, 1998
111. 8th Brazilian Meeting on Organic Synthesis, Sao Paulo, Brazil, September 8, 1998
112. 34th ACS Western Regional Meeting, San Francisco, CA, October 29, 1998
113. National Institutes of Health, General Medical Sciences, Bethesda, MD, May 17, 1998
114. American Chemical Society Northeastern Regional Seminar Series, Nutley, NJ, May 11, 1998

115. Frontiers in Biomedical Research (Organized by Scripps), Palm Springs, CA, February 3, 1998
116. Tahoe Molecular Diversity Conference, Tahoe, CA, January 24, 1998
117. The Seventh International Kyoto Conference on New Aspects of Organic Chemistry, Kyoto, Japan, November 14, 1997
118. 2nd Canadian Combinatorial Chemistry Conference, October 5, 1997
119. 19th Annual Princeton ACS Fall Symposium, Princeton, NJ, September 26, 1997
120. American Chemical Society National Meeting Las Vegas, Nevada, September 8, 1997
121. Molecular Pharmacology Gordon Conference, Ventura, CA, February 13, 1997
122. Short Course Presentation on Combinatorial Chemistry, Lund, Sweden, August 14, 1997
123. Royal Society Meeting, Combinatorial Approaches to Chemistry and Biology, Cambridge, UK, July 30, 1997
124. National Organic Symposium, Trinity College, Texas, June 22-26, 1997
125. Frontiers in Science Symposium, Munich, Germany, June 19-22, 1997
126. American Association for the Advancement of Science, Seattle, Washington, February 14, 1997
127. Frontiers in Chemistry, National Academy of Sciences, CA, November 7, 1996
128. Organic Reactions and Processes Gordon Conference, New Hampshire, July 17, 1996
129. Bioorganic Chemistry Gordon Conference, New Hampshire, June 24, 1996
130. New Swiss Chemical Society Conference on "Synthesis of Small Molecules on the Solid Phase," Basel, Switzerland, May 9, 1996
131. Society of Chemical Industry (U.K.) conference, London, UK, February 27, 1996
132. CHI conference on combinatorial libraries, Coronado, CA, January 25, 1996
133. 1995 International Chemical Congress of the Pacific Rim Societies, Honolulu, Hawaii, December 19, 1995
134. Arizona Cancer Center Molecular Diversity Conference, Tuscon, AZ, December 2, 1995
135. 1st Canadian Conference on Combinatorial Chemistry, October 21, 1995
136. Heterocycles Gordon Conference, New Hampshire, July 12, 1995
137. The Ninth Symposium of the Protein Society, Boston, MA, July 10, 1995
138. The Natural Products Gordon Conference, New Hampshire, July 5, 1995
139. The Nagoya International Conference of Organic Chemistry (10th Nozaki Conference), Nagoya, Japan, June 16-18, 1995
140. 1995 Worcester Foundation Symposium on Neurodegenerative Disease - Molecular Insights and Emerging Therapies, Worcester, MA, May 6, 1995
141. Symposium on Combinatorial Libraries at the ACS National Meeting, Anaheim, CA, April 2, 1995
142. Rhone Poulenc Third Annual Visions in Chemistry Symposium, PA, April 27, 1995
143. Symposium on Combinatorial Libraries at the ACS National Meeting, Anaheim, CA, April 2, 1995
144. Symposium on Exploiting Molecular Diversity sponsored by Cambridge Healthtech Institute, La Jolla, CA, January 25, 1995
145. "Biomolecular Recognition at ONR" meeting, October 29, 1994
146. Advanced Laboratory Exposition and Conference, San Jose, CA, October 25, 1994
147. Polymer Division Symposia at the ACS National Meeting, Washington D.C., August 24, 1994
148. Beckman Young Investigator Symposium, Irvine, CA, August 16, 1994
149. Symposium on Combinatorial Libraries for Molecular Diversity sponsored by International Business Communications, San Francisco, CA, August 12, 1994
150. National Science Foundation Workshop in Organic Synthesis and Natural Products Chemistry, Flat Rock, North Carolina, July 16, 1994
151. 24th National Medicinal Chemistry Symposium, Salt Lake City, Utah, June 23, 1994
152. Seminar speaker chosen for the annual meeting of the Section on Medicinal Chemistry of the New Swiss Chemical Society, Basel, Switzerland, June 1994
153. Molecular Diversity Symposium at University of North Carolina on June 4, 1994
154. Chemistry and Biology of Peptides Gordon Conference, Ventura, CA, February 14, 1994
155. Exploiting Molecular Diversity sponsored by Cambridge Healthtech Institute, La Jolla, January 14, 1994
156. Drug Discovery Section of the Annual Meeting of the Pharmaceutical Manufacturers Association, Philadelphia, PA, September 20, 1993

157. Science Innovation Conference held by the AAAS, Boston, MA, August, 1993

III. Companies

1. Boehringer Ingelheim (Virtual Presentation), European Research Sites, June 27, 2023
2. Bristol Myers Squibb, New Brunswick, NJ, November 10, 2022
3. Pharmaron, Virtual presentation to multiple sites across world, October 26, 2022
4. Ono Pharmaceuticals, Osaka, JP, June 27, 2019
5. Merck, West Point, PA, June 4, 2019
6. Vertex, Boston Massachusetts, May 16, 2018
7. Eli Lilly, Indianapolis, February 6, 2018
8. Gateway Park BioHub (Astrazeneca, Alkermes, Morphic Therapeutics, Arrakis Therapeutics, Entasis Therapeutics), December 11, 2017
9. Ono Pharmaceuticals, Osaka, Japan, June 13, 2016
10. Vertex, Cambridge, UK, January 14, 2016.
11. Cytec Industries, Stamford, CT, November 10, 2015
12. Yale Chemical Biology Off-Site, October 9, 2015
13. Gilead Pharmaceuticals, Foster City, CA, June 9, 2014
14. Dupont Crop Protection, Wilmington, DE, January 14, 2014
15. Biogen-Idec, Boston, MA, November 5, 2013
16. Pfizer, Groton, CT, October 8, 2013
17. AbbVie Inc, Chicago, IL, May 8, 2013
18. Takeda Pharmaceuticals, Cambridge, MA, March 13, 2013
19. Amgen, Thousand Oaks, California, January 10, 2013
20. Ono Pharmaceuticals, Osaka, Japan, June 7, 2012
21. Bristol Myers Squibb, Wallingford, CT, May 22, 2012
22. Bristol Myers Squibb, Princeton, NJ, May 8, 2012
23. Roche Pharmaceuticals, Nutley, NJ, March 15, 2012
24. Cubist Pharmaceuticals, Lexington, MA, March 6, 2012
25. Janssen Pharmaceuticals (Belgium), June 14, 2011
26. Novartis (East Hanover, NJ site), May 23, 2011
27. Boehringer Ingelheim (Ridgefield, CT), May 9, 2011
28. Merck (Rahway, NJ site), May 4, 2011
29. Sunovion (formerly Sepracor, MA), December 13, 2010
30. Bristol Myers Squibb (Process Research, NJ), November 16, 2010
31. GlaxoSmithKline Chemistry Scholars Symposium, Durham, NC, September 24, 2010
32. Johnson & Johnson Pharmaceutical Research & Development, Ja Jolla, CA, April 12, 2010
33. Amgen, Boston, MA, February 23, 2010
34. Abbott Laboratories, Chicago, IL, July 14, 2009
35. GlaxoSmithKline, Collegeville site, PA, June 10, 2009
36. Ono Pharmaceuticals, Osaka Japan, May 24, 2009
37. Ardelyx, Inc. (Pharma Company), Fremont, CA, February 4, 2009
38. Takeda Pharmaceuticals, La Jolla, CA, August 7, 2008
39. GlaxoSmithKline, Stevenage site, UK, July 10, 2008
40. GlaxoSmithKline, Harlow site, UK, July 9, 2008
41. Takeda Pharmaceuticals, San Diego, CA, August 7, 2008
42. GlaxoSmithKline, Stevenage, UK, July 10, 2008
43. GlaxoSmithKline, Harlow, UK, July 9, 2008
44. Merck, West Point, PA, June 13, 2008
45. Amgen, Thousand Oaks, CA, June 5, 2008
46. Abbott Laboratories, Chicago, IL, July 26, 2008
47. Elan Pharmaceuticals, South San Francisco, CA, May 17, 2007
48. Mitsubishi (Seminar 2. Synthetic Methods), Yokohama, Japan, May 11, 2007
49. Mitsubishi (Seminar 1. Chemical Biology), Yokohama, Japan, May 11, 2007

50. Novacal (now NovaBay), Emeryville, CA, January 5, 2007
51. Merck, Rahway, NJ, December 5, 2006
52. Amgen, South San Francisco, CA, September 28, 2006
53. Ono Pharmaceuticals, Osaka, Japan, May 23, 2006
54. Bristol-Myers Squibb, Wallingford, CT, March 28, 2006
55. Gilead Pharmaceuticals, Foster City, CA, March 16, 2006
56. Wyeth Pharmaceuticals, Cambridge, MA, January 31, 2006
57. Astra-Zeneca, Waltham, MA, November 21, 2005
58. Sunesis Pharmaceuticals, South San Francisco, CA, November 7, 2005
59. Symyx Technologies, Santa Clara, CA, October 7, 2005
60. Genomics Institute of the Novartis Research Foundation, La Jolla, CA, July 8, 2005
61. Lundbeck, Copenhagen, Denmark, June 7, 2005
62. Ono Pharmaceuticals, Osaka, Japan, April 23, 2005
63. Albany Molecular, Albany, NY, February 23, 2005
64. Wyeth, Pearl River, NY, October 15, 2004
65. Elan, South San Francisco, CA, July 20, 2004
66. Boehringer Ingelheim, Ridgefield, CT, May 18, 2004
67. Roche, Palo Alto, CA, February 23, 2004
68. Rhodia-Chirex, Lyon, France, November 24, 2003
69. Johnson & Johnson Pharmaceuticals, Spring House, PA, May 29, 2003
70. 3D Pharmaceuticals (division of Johnson & Johnson Pharmaceuticals), Exton, PA, April 11, 2003
71. GlaxoSmithKline, Collegeville, PA, April 9, 2003
72. Merck, Rahway, NJ, April 8, 2003
73. R.W. Johnson (San Diego site), May 9, 2002
74. Novartis (Vienna, Austria site), February 8, 2002
75. Novartis (Basil, Switzerland), February 6, 2002
76. Abbott Laboratories, Chicago, January 18, 2002
77. Genentech, South San Francisco, CA, July 7, 2001
78. Bristol Myers Squibb, Process Research Site New Jersey, January 18, 2001
79. Hoffman La Roche, Nutley, New Jersey, November 2, 2000
80. Eastman Kodak, Rochester, NY, April 19, 2000
81. Pharmacia International Chemistry Symposium, Orlando, FL, March 1, 2000
82. BioMega (Division of Boehringer Ingelheim), Montreal, Canada, January 20, 2000
83. Glaxo-Wellcome, Brisbane, Australia, December 9, 1999
84. Institut of Recherche Pierre Fabre, Castres, France, October 29, 1999
85. Gilead Pharmaceuticals, San Francisco, CA, September 24, 1999
86. Hoffman LaRoche, Palo Alto, CA, December 15, 1998
87. Zeneca, Richmond, CA, November 8, 1998
88. Zeneca, Jealot Hill, England, July 31, 1998
89. Arris Pharmaceuticals, South San Francisco, CA, July 15, 1998
90. Merck, West Point, PA, June 5, 1998
91. Johnson and Johnson, Springhouse, PA, June 4, 1998
92. Rohm and Haas, Pennsylvania, May 4, 1998
93. Dupont, Newark, DE, April 16, 1998
94. Merck, Rahway, NJ, April 15, 1998
95. Zeneca Pharmaceuticals, Wilmington, Delaware, April 8, 1998
96. Amgen Pharmaceuticals, Thousand Oaks, CA, March 23, 1998
97. Boehringer Ingelheim, Ridgefield, CT, February 12, 1998
98. Bayer Pharmaceuticals, CT, May 16, 1997
99. Bristol Myers-Squibb, CT, May 15, 1997
100. Schering Plough, NJ, May 13, 1997
101. Procter and Gamble, Cincinnati, OH, May 12, 1997
102. Bristol Myers-Squibb, Princeton, NJ, January 31, 1997
103. Abbott Laboratories, IL, April 19, 1996

104. Parke Davis, Ann Arbor, MI, April 17, 1996
105. Eli Lilly Young Investigator Award Symposium, Indianapolis, IN, March 4, 1996
106. Hoffman LaRoche, Nutley, NJ, December 14, 1995
107. Procter and Gamble, Cincinnati, OH, September 18, 1995
108. Molecular Devices, CA, September 6, 1995
109. Ono Pharmaceutical Company at the Mimase Research Institute, Osaka, Japan, June 26, 1995
110. Banyu Pharmaceutical Company, Tsukuba, Japan, June 20, 1995
111. Upjohn Pharmaceuticals, Kalamazoo, MI, April 25, 1995
112. Tularik Pharmaceuticals, South San Francisco, CA, February 23, 1995
113. Dupont Merck Pharmaceuticals, Wilmington, DE, February 9, 1995
114. Berlex Pharmaceuticals, Richmond, CA, January 26, 1995
115. Pfizer, Groton, CT, November 14, 1994
116. Genentech, South San Francisco, CA, November 7, 1994
117. MDL Information Systems, San Leandro, CA, October 17, 1994
118. Chiron Corporation, Emeryville, CA, August, 1994
119. Cadus Pharmaceuticals, New York City, NY, July 28, 1994
120. Eli Lilly, Indianapolis, IN, July 27, 1994
121. Merck, West Point, PA, June 27, 1994
122. Smith Kline and Beecham, King of Prussia, PA, June 26, 1994
123. Agouron, San Diego, CA, April 7, 1994
124. Procter and Gamble, Cincinnati, OH, March 8, 1994
125. Genetics Institute, Cambridge, Massachusetts, August 1993