SCOTT E. SCHAUS

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PROFESSIONAL EXPERIENCE

2017 – present	Professor of Chemistry, Boston University
2017 – present	Chief Executive Officer, Lamerigen Inc., Boston, Massachusetts
2007 – 2017	Associate Professor of Chemistry, Boston University
2014 – 2015	Chief Scientific Officer, ORIG3N Inc., Boston, Massachusetts
2001 – 2007	Assistant Professor of Chemistry, Boston University
1999 – 2001	Postdoctoral Fellow, Harvard University, Professor Andrew G. Myers Advisor

EDUCATION

1999	Ph.D. in Organic Chemistry: Harvard University, Cambridge, Massachusetts
1995	B.A. in Chemistry, Summa Cum Laude with Distinction: Boston University, Boston, Massachusetts

CONSULTING

2015 – 2017	Chair, Scientific Advisory Board, ORIG3N Inc., Boston, Massachusetts
2007 – 2010	Chair, Scientific Advisory Board, Artuslabs Inc., Research Triangle Park, North Carolina

AWARDS

2004 – 2009	NSF CAREER Award
2002 – 2004	Research Innovation Award, Research Corporation
1999 – 2001	National Institutes of Health Ruth L. Kirschstein Postdoctoral Fellow
1996 – 1999	Ford Foundation Predoctoral Fellowship

PUBLICATIONS

INDEPENDENT CAREER

76. Enantioselective Synthesis of Allenes by Catalytic Traceless Petasis Reactions. Jiang, Y.; Diagne, A. B.; Thomson, R. J.; Schaus, S. E. *J. Am. Chem. Soc.* **2017**, 1998-2005.

75. Asymmetric Petasis Borono-Mannich Allylation Reactions Catalyzed by Chiral Biphenols. Jiang, Y.; Schaus, S. E. *Angew. Chem. Int. Ed.* **2017**, *56*, 1544-1548.

74. Transcription factor LSF-DNMT1 complex dissociation by FQI1 leads to aberrant DNA methylation and gene expression. Chin, H. G.; Ponnaluri, V. K.; Zhang, G.; Estéve, P.-O.; Schaus, S. E.; Hansen, U.; Pradhan, S. *Oncotarget* **2016**, *7*, 83627-83640.

73. Morita—Baylis—Hillman, Vinylogous Morita—Baylis—Hillman, and Rauhut—Currier Reactions by A. M. Wensley, N. T. McDougal, & S. E. Schaus in Lewis Base Catalysis in Organic Synthesis, Volume 2. Edited by Edwin Vedejs and Scott E. Denmark. 2016, Wiley-VCH: Weinheim, Germany. pp. 655 - 713.

72. Perturbation Detection Through Modeling of Gene Expression on a Latent Biological Pathway Network: A Bayesian hierarchical approach. Pham, L.; Carvalho, L. E.; Schaus, S. E.; Kolaczyk, E. D. *J. Am. Stat. Assoc.* **2016**, *111*, 73-92.

71. Enantioselective Multicomponent Condensation Reactions of Phenols, Aldehydes, and Boronates Catalyzed by Chiral Biphenols. Barbato, K.S.; Luan, Y.; Ramella, D.; Panek, J. S.; Schaus, S. E. *Org. Lett.* **2015**, *17*, 5812-5815.

70. Small molecule inhibitors of Late SV40 Factor (LSF) abrogate hepatocellular carcinoma (HCC): Evaluation using an endogenous HCC model. Rajasekaran, D.; Siddiq, A.; Willoughby, J. L. S.; Biagi, J. M.; Christadore, L. M.; Yunes, S. A.; Gredler, R.; Jariwala, N.; Rabertson, C. L.; Akiel, M. A.; Shen, X.-N.; Subler, M. A.; Windle, J. J.; Schaus, S. E.; Fisher, P. B.; Hansen, U.; Sarkar, D. *Oncotarget* **2015**, 6, 26266-26277.

69. Enantioselective Synthesis of 1,2-Dihydronaphthalene-1-carbaldehydes by Addition of Boronates to Isochromene Acetals Catalyzed by Tartaric Acid. Luan, Y.; Barbato, K. S.; Moquist, P. N.; Kodama, T.; Schaus, S. E. *J. Am. Chem. Soc.* **2015**, *137*, 3233-3236.

68. Brønsted Acid/Lewis Acid Cooperatively Catalyzed Addition of Diazoesters to 2H-Chromene Acetals. Luan, Y.; Qi, Y.; Gao, H. Y.; Ma, Q. Q.; Schaus, S. E. *Eur. J. Org. Chem.* **2014**, 6868-6872.

67. Diastereoselective Three-Component Synthesis of β-Amino Carbonyl Compounds Using Diazo Compounds, Boranes, and Acyl Imines under Catalyst-Free Conditions. Luan, Y.; Yu, J.; Zhang, X. W.; Schaus, S. E.; Wang, G. *J. Org. Chem.* **2014**, *79*, 4694-4698.

66. The development of a novel HAuCl4@MOF catalyst and its catalytic application in the formation of dihydrochalcones. Luan, Y.; Qi, Y.; Yu, J.; Gao, H. Y.; Schaus, S. E. *RSC Advances* **2014**, *4*, 34199-34203.

65. An In Vitro Comparison of Shear Bond Strength of Zirconia to Enamel Using Different Surface Treatments. Zandparsa, R.; Talua, N. A.; Finkelman, M. D.; Schaus, S. E. *J. Prosthodont.* **2014**, *23*, 117-123.

64. Improvement of experimental testing and network training conditions with genome-wide microarrays for more accurate predictions of drug gene targets. Christadore, L. M.; Pham, L.; Kolaczyk, E. D.; Schaus, S. E. *BMC Systems Biology* **2014**, 8:7.

63. Non-Covalent Activations - Brønsted Bases. Ting, A.; Schaus, S. E. *Comprehensive Enantioselective Organocatalysis*, Ed. Peter I. Dalko **2013**, Part 2, 185-190.

62. Metal-Catalyzed Cascade Rearrangements of 3-Alkynyl Flavone Ethers. Xiong, Y.; Schaus, S. E.; Porco, J. A., Jr. *Org. Lett.* **2013**, *15*, 1962-1965.

61. The transcription factor LSF: a novel oncogene for hepatocellular carcinoma. Santhekadur, P. K.; Rajasekaran, D.; Siddiq, A.; Gredler, R.; Chen, D.; Schaus, S. E.; Hansen, U.; Fisher, P. B.; Sarkar, D. *Am. J. Cancer Res.* **2012**, *2*, 269-285.

60. Resveratrol attenuates L-DOPA-induced hydrogen peroxide toxicity in neuronal cells. Peritore, C. S.; Ho, A.; Yamamoto, B. K.; Schaus, S. E. *NeuroReport* **2012**, *23*, 989-994.

59. An intramolecular inverse electron demand Diels-Alder approach to annulated α-carbolines. Ma, Z.; Ni, F.; Woo, G. H. C.; Lo, S.-M.; Roveto, P. M.; Schaus, S. E.; Snyder, J. K. *Beilstein J. Org. Chem.* **2012**, *8*, 829-840.

58. Enantioselective Addition of Boronates to o-Quinone Methides Catalyzed by Chiral Biphenols. Luan, Y.; Schaus, S. E. *J. Am. Chem. Soc.* **2012**, *134*, 19965-19968.

57. Antiproliferative small-molecule inhibitors of transcription factor LSF reveal oncogene addiction to LSF in hepatocellular carcinoma. Grant, T. J.; Bishop, J. A.; Christadore, L. M.; Barot, G.; Chin, H. G.; Woodson, S.; Kavouris, J.; Siddiq, A.; Gredler, R.; Shen, X. N.; Sherman, J.; Meehan, T.; Fitzgerald, K.; Pradhan, S.; Briggs, L. A.; Andrews, W. H.; Sarkar, D.; Schaus, S. E.; Hansen, U. *Proc. Natl. Acad. Sci. USA* **2012**, *109*, 4503-4508.

56. Identification of a pyridopyrimidinone inhibitor of orthopoxviruses from a diversity-oriented synthesis library. Dower, K.; Filone, C. M.; Hodges, E. N.; Bjornson, Z. B.; Rubins, K. H.; Brown, L. E.; Schaus, S.; Hensley, L. E.; Connor, J. H. *J. Virol.* **2012**, *86*, 2632-2640.

55. Iron-catalyzed rearrangements and cycloaddition reactions of 2H-chromenes. Luan, Y.; Sun, H.; Schaus, S. E. *Org. Lett.* **2011**, *13*, 6480-6483.

54. Enantioselctive boronate additions to N-Acyl quinoliniums catalyzed by tartaric acid. Kodama, T.; Moquist, P. N.; Schaus, S. E. *Org. Lett.* **2011**, *13*, 6316-6319.

53. Gold catalyzed cyclization of alkyne-tethered dihydropyrimidones. Brown, L. E.; Dai, P.; Porco, J. A., Jr.; Schaus, S. E. *Org. Lett.* **2011**, *13*, 4012-4015.

52. Network-based prediction for sources of transcriptional dysregulation using latent pathway identification analysis. Pham, L.; Christadore, L.; Schaus, S. E.; Kolaczyk, E. D. *Proc. Natl. Acad. Sci. USA* **2011**, *108*, 13347-13352.

51. Asymmetric Propargylation of Ketones Using Allenylboronates Catalyzed by Chiral Biphenols. Barnett, D. S.; Schaus, S. E. *Org. Lett.* **2011**, *13*, 4020-4023.

50. A cycloisomerization/Friedel-Crafts alkylation strategy for the synthesis of pyrano[3,4-b]indoles. Medeiros, M. R.; Schaus, S. E.; Porco, J. A., Jr. *Org. Lett.* **2011**, *13*, 4012-4015.

49. Catalytic Diastereoselective Petasis Reactions. Muncipinto, G.; Moquist, P. N.; Schreiber, S. L.; Schaus, S. E. *Angew. Chem. Int. Ed.* **2011**, *50*, 8172-8175.

48. Multicomponent Mannich Reactions with Boron Enolates Derived from Diazo Esters and 9-BBN. Luan, Y.; Schaus, S. E. *Org. Lett.* **2011**, *13*, 2510-2513.

47. Organic Synthesis Toward Small-Molecule Probes and Drugs Special Feature: Discovery of new antimalarial chemotypes through chemical methodology and library development. Brown, L. E.; Chih-Chien Cheng, K.; Wei, W.-G.; Yuan, P.; Dai, P.; Trilles, R.; Ni, F.; Yuan, J.; MacArthur, R.; Guha, R.; Johnson, R. L.; Su, X.; Dominguez, M. D.; Snyder, J. K.; Beeler, A. B.; Schaus, S. E.; Inglese, J.; Porco, J. A., Jr. *Proc. Natl.*

Acad. Sci. USA **2011**, *108*, 6775-6780.

46. Skeletal Diversity via Cationic Rearrangements of Substituted Dihydropyrans. Medeiros, M. R.; Narayan, R. S.; McDougal, N. T.; Schaus, S. E.; Porco, J. A., Jr. *Org. Lett.* **2010**, *12*, 3222-3225.

45. Two naturally occurring mutations in the type 1 melanin-concentrating hormone receptor abolish agonist-induced signaling. Goldstein, C.; Schroeder Jonathan, C.; Fortin, J.-P.; Goss Jennifer, M.; Schaus Scott, E.; Beinborn, M.; Kopin Alan, S. *J. Pharmacol. Exp. Ther.* **2010**, *335*, 799-806.

44. Enantioselective Addition of Boronates to Chromene Acetals Catalyzed by a Chiral Bronsted Acid/Lewis Acid System. Moquist, P. N.; Kodama, T.; Schaus, S. E. *Angew. Chem. Int. Ed.* **2010**, *49*, 7096-7100.

43. Enantioselective Preparation of Dihydropyrimidones. Goss, J. M.; Dai, P.; Lou, S.; Schaus, S. E. *Organic Syntheses* **2010**, *86*, 236-251.

42. Enantioselective synthesis of 3,4-chromanediones via asymmetric rearrangement of 3-allyloxyflavones. Marie, J.-C.; Xiong, Y.; Min, G. K.; Yeager, A. R.; Taniguchi, T.; Berova, N.; Schaus, S. E.; Porco, J. A., Jr. *J. Org. Chem.* **2010**, *75*, 4584-4590.

41. Brønsted Base Catalysis. Ting, A.; Goss, J. M.; McDougal, N. T.; Schaus, S. E. *Asymmetric Organocatalysis* **2010**, *291*, 145-200.

40. The Mechanism and an Improved Asymmetric Allylboration of Ketones Catalyzed by Chiral Biphenols. Barnett, D. S.; Moquist, P. N.; Schaus, S. E. *Angew. Chem. Int. Ed.* **2009**, *48*, 8679-8682.

39. Enantioselective Addition of Boronates to Acyl Imines Catalyzed by Chiral Biphenols. Bishop, J. A.; Lou, S.; Schaus, S. E. *Angew. Chem. Int. Ed.* **2009**, *48*, 4337-4340.

38. Enantioselective Synthesis of SNAP-7941: Chiral Dihydropyrimidone Inhibitor of MCH1-R. Goss, J. M.; Schaus, S. E. *J. Org. Chem.* **2008**, *73*, 7651-7656.

37. Asymmetric Petasis Reactions Catalyzed by Chiral Biphenols. Lou, S.; Schaus, S. E. *J. Am. Chem. Soc.* **2008**, *130*, 6922-6923.

36. Asymmetric Mannich Reaction of Dicarbonyl Compounds with α-Amido Sulfones Catalyzed by Cinchona Alkaloids and Synthesis of Chiral Dihydropyrimidones. Dai, P.; Lou, S.; Schaus, S. E. *J. Org. Chem.* **2007**, *72*, 9998-10008.

35. Asymmetric Allylboration of Acyl Imines. Lou, S.; Moquist, P. N.; Schaus, S. E. *J. Am. Chem. Soc.* **2007**, *129*, 15398-15404.

34. Organocatalytic Asymmetric Mannich Reactions: New Methodology Developments, Catalyst Design, and Synthetic Applications. Ting, A.; Schaus, S. E. *Chem. Eur. J.* **2007**, 5797-5815.

33. Immobilized Hydrogels for Screening of Molecular Interactions. Dominguez, M. M.; Wathier, M.; Grinstaff, M. W.; Schaus, S. E. *Anal. Chem.* **2007**, *79*, 1064-1066.

32. 2,2-Diheteroatom-Substituted Alkanoic Acid Esters. Westbrook, J. A.; Schaus, S. E. *Science of Synthesis* **2006**, *20b*, 1115-1130.

31. 2-Oxo- and 2-Imino-Substituted Alkanoic Acid Esters, and Related Compounds. Westbrook, J. A.; Schaus, S. E. *Science of Synthesis* **2006**, *20b*, 1091-1114.

30. 2,2-Diheteroatom-Substituted Alkanoic Acids. Westbrook, J. A.; Schaus, S. E. *Science of Synthesis* **2006**, *20a*, 371-382.

29. 2-Oxo- and 2-Imino-Substituted Alkanoic Acids. Westbrook, J. A.; Schaus, S. E. *Science of Synthesis* **2006**, *20a*, 355-370.

28. Asymmetric Allylboration of Ketones Catalyzed by Chiral Diols. Lou, S.; Moquist, P. N.; Schaus, S. E. *J. Am. Chem. Soc.* **2006**, *128*, 12660-12661.

27. Exploring Skeletal Diversity via Ring Contraction of Glycal-Derived Scaffolds. Yeager, A. R.; Min, G. K.; Porco, J. A., Jr.; Schaus, S. E. *Org. Lett.* **2006**, *8*, 5065-5068.

26. A general organic catalyst for asymmetric addition of stabilized nucleophiles to acyl imines. Bode, C. M.; Ting, A.; Schaus, S. E. *Tetrahedron* **2006**, *62*, 11499-11505.

25. Efficient Construction of the Clerodane Decalin Core by an Asymmetric Morita–Baylis–Hillman Reaction / Lewis Acid-promoted Annulation Strategy. Rodgen, S. A.; Schaus, S. E. *Angew. Chem. Int. Ed.* **2006**, *45*, 4929-4932.

24. JEDA: Joint Entropy Diversity Analysis. An information-theoretic method for choosing diverse and representative subsets from combinatorial libraries. Landon, M. R.; Schaus, S. E. *Molecular Diversity* **2006**, *10*, 333-339.

23. Highly Diastereoselective Asymmetric Mannich Reactions of 1,3-Dicarbonyls with Acyl Imines. Ting, A.; Lou, S.; Schaus, S. E. *Org. Lett.* **2006**, *8*, 2003-2006.

22. Highly Diastereoselective Synthesis of Bicyclo[3.2.1]octenones through Phosphine-Mediated Condensations of 1,4-Dien-3-ones. McDougal, N. T.; Schaus, S. E. *Angew. Chem. Int. Ed.* **2006**, *45*, 3117-3119.

21. Asymmetric Mannich Reactions of β-Keto Esters with Acyl Imines Catalyzed by Cinchona Alkaloids. Lou, S.; Taoka, B. M.; Ting, A.; Schaus, S. E. *J. Am. Chem. Soc.* **2005**, *127*, 11256-11257.

20. Chemical Library Synthesis Using Convergent Approaches. Beeler, A. B.; Schaus, S. E.; Porco, J. A., Jr. *Curr. Opin. Chem. Bio.* **2005**, *9*, 277-284.

19. Convergent Synthesis of a Complex Oxime Library Using Chemical Domain Shuffling. Su, S.; Acquilano, D. E.; Arumugasamy, J.; Beeler, A. B.; Eastwood, E. L.; Giguere, J. R.; Lan, P.; Lei, X.; Min, G. K.; Yeager, A. R.; Zhou, Y.; Panek, J. S.; Snyder, J. K.; Schaus, S. E.; Porco, J. A., Jr. *Org. Lett.* **2005**, *7*, 2751-2754.

18. Chemogenomic profiling on a genome-wide scale using reverse-engineered gene networks. di Bernado, D.; Thompson, M. J.; Gardner, T. S.; Chobot, S. E.; Eastwood, E. L.; Wojtovich, A. P.; Elliott, S. J.; Schaus, S. E.; Collins, J. J. *Nat. Biotechnol.* **2005**, *23*, 377-383.

17. The Development of the Asymmetric Morita–Baylis–Hillman Reaction Catalyzed by Chiral Brønsted Acids. McDougal, N. T.; Trevellini, W. L.; Rodgen, S. A.; Kliman, L. T.; Schaus, S. E. *Adv. Synth. Cat.* **2004**, *346*, 1231-1240.

16. Decarboxylative Aldol Reactions of Allyl β-Keto Esters via Heterobimetallic Catalysis. Lou, S.; Westbrook, J. A.; Schaus, S. E. *J. Am. Chem. Soc.* **2004**, *126*, 11440-11441.

15. Synthesis of Complex Alkoxyamines Using a Polymer-Supported N-Hydroxyphthalimide. Su, S.; Giguere, J. R.; Schaus, S. E.; Porco, J. A., Jr. *Tetrahedron* **2004**, *60*, 8645-8647.

14. Borrelidin Induces the Transcription of Amino Acid Biosynthetic Enzymes via a GCN4 Dependent Pathway. Eastwood, E. L.; Schaus, S. E. *Bioorg. Med. Chem. Lett.* **2003**, *13*, 2235-2237.

13. Asymmetric Morita–Baylis–Hillman Reactions Catalyzed by Chiral Brønsted Acids. McDougal, N. T.; Schaus, S. E. *J. Am. Chem. Soc.* **2003**, *125*, 12094-12095.

POSTDOCTORAL RESEARCH

12. Transcriptional Response Pathways in a Yeast Strain Sensitive to Saframycin A and a More Potent Analog: Evidence for a Common Basis of Activity. Plowright, A. T.; Schaus, S. E.; Myers, A. G. *Chem. Biol.* **2002**, *9*, 607-618.

11. Development of an Enantioselective Synthetic Route to Neocarzinostatin Chromophore and its use for Multiple Radioisotopic Incorporation. Myers, A. G.; Glatthar, R.; Hammond, M.; Harrington, P. M.; Kuo, E. Y.; Liang, J.; Schaus, S. E.; Wu, Y.; Xiang, J. –N. *J. Am. Chem. Soc.* **2002**, *124*, 5380-5401.

10. Gene Transcription Analysis of *S. cerevisiae* Exposed to Neocarzinostatin Protein-Chromophore Complex Reveals Evidence of DNA Damage, a Potential Mechanism of Resistance, and Consequences of Prolonged Exposure. Schaus, S. E.; Cavalieri, D.; Myers, A. G. *Proc. Natl. Acad. Sci. USA* **2001**, *98*, 11075-11080.

GRADUATE RESEARCH

9. Production of Enantiomerically Enriched 1,2-Terminal Epoxides and 1,2-Diols by the Hydrolytic Kinetic Resolution of Terminal Epoxides. Schaus, S. E.; Brandes, B. D.; Larrow, J. F.; Tokunagu, M.; Hansen, K. B.; Jacobsen, E. N. *J. Am. Chem. Soc.* **2002**, *124*, 1307-1315.

8. Asymmetric Ring Opening of Meso Epoxides with TMSCN Catalyzed by (pybox)Lanthanide Complexes. Schaus, S. E.; Jacobsen, E. N. *Org. Lett.* **2000**, *2*, 1001-1004.

7. Carbenoid Insertions into the Silicon-Hydrogen Bond Catalyzed by Chiral Copper(I) Schiff Base Complexes. Dakin, L. A.; Schaus S. E.; Jacobsen, E. N.; Panek, J. S. *Tetrahedron Lett.* **1998**, *39*, 8947-8950.

6. Practical Access to Highly Enantioenriched C-3 Building Blocks via Hydrolytic Kinetic Resolution. Furrow M. E; Schaus S. E; Jacobsen E. N. *J. Org. Chem.* **1998**, *63*, 6776-6777.

5. Total Synthesis of Muconin by Efficient Assembly of Chiral Building Blocks. Schaus, S. E.; Brånalt, J.; Jacobsen, E. N. *J. Org. Chem.* **1998**, *63*, 4876-4877.

4. Asymmetric Hetero–Diels–Alder Reactions Catalyzed by Chiral (Salen)Chromium(III) Complexes. Schaus, S. E.; Brånalt, J.; Jacobsen, E. N. *J. Org. Chem.* **1998**, *63*, 403-405.

3. Practical Synthesis of Enantiopure Cyclic 1,2-Amino Alcohols via Catalytic Asymmetric Ring Opening of Meso Epoxides. Schaus, S. E.; Larrow, J. F.; Jacobsen, E. N. *J. Org. Chem.* **1997**, *62*, 4197-4199.

2. Dynamic Kinetic Resolution of Epichlorohydrin via Enantioselective Catalytic Ring Opening with $TMSN_3$. Practical Synthesis of Aryl Oxazolidinone Antibacterial Agents. Schaus, S. E.; Jacobsen, E. N. *Tetrahedron Lett.* **1996**, *37*, 7937-7940.

1. Kinetic Resolution of Terminal Epoxides via Highly Regioselective and Enantioselective Ring Opening with $TMSN_3$. An Efficient, Catalytic Route to 1,2-Aminoalcohols. Larrow, J. F.; Schaus, S. E.; Jacobsen, E. N. *J. Am. Chem. Soc.* **1996**, *116*, 7420-7421.

PATENTS

10. Schaus, S. E.; Hansen, U.; Bishop, J. [1,3]Dioxolo[4,5-g]quinoline-6(5H)thione and [1,3]dioxolo[4,5-g][1,2,4]triazolo[1,5-a]quinoline derivatives as inhibitors of Late SV40 Factor useful for treating hepatocellular carcinoma or other cancer types. U.S. Patent 9,175,001 B2, Nov. 3, 2015.

9. Schaus, S. E.; Brown, L.; Connor, J.; Dower, K. W. Pyridopyrimidinone inhibitors of viruses. PCT/US2012/065245, Nov. 15, 2012.

8. Hansen, U.; Schaus, S.; Grant, T.; Bishop, J.; Kavouris, J.; Christadore, L. M. Inhibitors of Late SV40 factor (LSF) as cancer chemotherapeutics. PCT/US2011/054305, Sept. 30, 2011.

7. Sherr, D. H.; Pollastri, M.; Schlezinger, J.; Haigh, M. S.; Schaus, S.; Giguere, J. R. Aryl hydrocarbon receptor (ahr) modifiers as novel cancer therapeutics. PCT/US2011/045526, July 27, 2011.

6. Cottarel, G.; Gardner, T. S.; Lei, X.; Porco, J.; Schaus, S. E.; Wierzbowski, J.; Pal, K. Compositions and methods for potentiating antibiotic activity using an ATP receptor antagonist, coumarin, flavone, or terpene. PCT/US2007/075093, Aug. 2, 2007.

5. Schaus, S. E.; Lou, S.; Ting, A.; Bode, C.; Taoka, B. M.; Dai, P. Chiral amine-catalyzed asymmetric addition of carbon-centered nucleophiles to imines. PCT/US2006/027778, July 19, 2006.

4. Schaus, S. E.; Eastwood, E. L. Thioredoxin and thioredoxin reductase inhibitors. PCT/US2007/005530, Mar. 2, 2007.

3. Jacobsen, E. N.; Schaus, S. E.; Dossetter, A. G.; Jamison, T. F. Asymmetric cycloaddition reactions. U.S. Patent 6,369,223 B2, Apr. 9, 2002.

2. Jacobsen, E. N.; Schaus, S. E.; Dossetter, A. G.; Jamison, T. F. Asymmetric cycloaddition reactions. U.S. Patent 6,211,370 B1, Apr. 3, 2001.

1. Jacobsen, E. N.; Schaus, S. E. Asymmetric cycloaddition reactions. U.S. Patent 6,130,340 A, Oct. 10, 2000.

PROFESSIONAL SERVICE

2016 – present	NIH Chemistry Fellowship and Training Award (F04) Review Panel
2015	NIH NIGMS Maximizing Investigator's Research Award (MIRA) Review Panel
2015	NIH Pathway to Independence Award (Parent K99/R00) Review Panel
2007 – 2013	NIH Synthetic and Biological Chemistry B Study Section Review Panel

UNIVERSITY SERVICE

2016 – present	Boston University Graduate Academic Affairs Committee
2015 – 2016	Boston University Task Force on University Collaboration with Industry
2015 – 2016	Undergraduate Research Opportunities Program Faculty Advisory Committee
2009 – 2011	Boston University Board for Responsible Conduct in Research
2007 – 2011	Boston University Conflict of Interest Committee
2009 – 2010	College of Arts & Sciences Task Force on Undergraduate Advising
2004 – 2007	Boston University Premedical Advisory Board
2003 – 2006	Undergraduate Research Opportunities Program Faculty Advisory Committee

DEPARTMENT SERVICE

2016 – present	Director of Graduate Studies
2015 – present	Graduate Program Committee
2015 – present	Department Chair Advisory Committee II
2015 – present	Department Chair Advisory Committee I
2010 – 2012	Co-Chair, Faculty Search Committee, Medicinal Chemistry
2009 – 2010	Chair, Postdoctoral Faculty Fellows Committee
2008 – 2009	Chair, Faculty Search Committee, Organic Materials

2004 – 2009 Director of Graduate Studies

2002 – 2007 Graduate Admissions Committee

GRANTS & SUPPORT

2017 – 2022 Targeting the Genus of Leishmania with Small Molecules. NIH – NIAID. Role PI: with Lauren Brown, Jair Lage De Siqueira Neto (UCSD) and James McKerrow, MD, PhD (UCSD). Submitted, Review February 2017.

2017 – 2022 Novel LSF-targeted small molecules for hepatocellular carcinoma chemotherapeutics. NIH – NCI. Role PI: MPI grant with Prof Ulla Hansen, Boston University Department of Biology. Pending

2016 – 2018 Enantioselective Catalytic Boronate Reactions. NIH – NIGMS: 2R01 GM078240. Role: PI. Total Costs $1,152,645.

2015 – 2018 Center for Molecular Discovery (CMD): A Small Molecule Resource for Biomedical Research. NIH – NIGMS: R24 GM111625. Role: co-PI with John A. Porco Jr. (PI), Aaron Beeler, and Lauren Brown. Total Costs $937,799.

2015 – 2018 Enantioselective Catalytic Boronate Reactions. NIH – NIGMS: 2R01 GM078240. Role: PI. Total Costs $1,152,645.

2014 – 2017 New Compounds for the Treatment of Leishmaniasis. GlaxoSmithKline Discovery Partnerships with Academia Award. Role: PI with Lauren Brown. Total Costs $120,700.

2008 – 2014 Complex Chemotypes: Discovery, Methodology, and Library Expansion. NIH – NIGMS: 2P50 GM067041. Role: co-PI with John A. Porco Jr. (PI), James S. Panek, John K. Snyder. Total Costs $11,654,849.

2008 – 2011 Structurally and Stereochemically Diverse Heterocycles for the SMR. NIH – NIGMS: P41 GM086180. Role: PI with John A. Porco Jr., James S. Panek, John K. Snyder. Total Costs $1,040,867.

2007 – 2012 Design and Implementation of Asymmetric Organocatalytic Methods in Synthesis. NIH – NIGMS: R01 GM078240. Role: PI. Total Costs $1,501,475.

2006 – 2011 Predicting Drug Mechanism via Chemogenomic Profiling. NIH – NIGMS: R01 GM078987. Role: co-PI with Eric D. Kolaczyk (PI) and James J. Collins. Total Costs $1,595,841.

2006 – 2008 Chemical Domain Shuffling Using Convergent Bond Constructions. AstraZeneca Sponsored Research Agreement. Role: PI with John A. Porco Jr. Total Costs $141,483.

2005 – 2006 Unrestricted Research Support. Amgen Inc. Role: PI. Total Costs $50,000.

2005 – 2008 Generation of Stereochemically and Structurally Complex Chemical Libraries for Biological Screening. NIH – NIGMS: P41 GM076263. Role: co-PI with John A. Porco Jr. (PI), James S. Panek, John K. Snyder. Total Costs $1,194,030.

2004 – 2009 Interdisciplinary Research in Organic Synthesis and Biology. NSF CAREER: CHE-0349206. Role: PI. Total Costs $640,000.

2002 – 2008 Expanding Diversity Using Stereocontrolled Synthesis. NIH – NIGMS: P50 GM067041. Role: co-PI with John A. Porco Jr. (PI), James S. Panek, John K. Snyder. Total Costs $10,665,726.

2004 – 2009 The Development of Novel Bifunctional Catalyst Systems for Carbon-Carbon Bond Forming Reactions. Research Corporation Research Innovation Award – RI1049. Role: PI. Total Costs $35,000.