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CURRICULUM VITAE
MATTHEW S. SIGMAN

EDUCATION

1992	**B.S.**, Chemistry, Sonoma State University, California
1996	**Ph.D.**, Organometallic Chemistry, Washington State University **Thesis Advisor:** Professor Bruce E. Eaton **Title:** "Catalytic iron mediated [4 + 1] cycloadditions of allenyl substrates with carbon monoxide. Mechanism and scope of catalytic cobalt mediated cyclotrimerization of alkynes in aqueous media."

PROFESSIONAL EXPERIENCE

2019 – present	Chair, Department of Chemistry, University of Utah
2016 – present	Distinguished Professor of Chemistry, University of Utah
2012 – present	Peter J. Christine S. Stang Presidential Endowed Chair of Chemistry
2009 – 2010	Visiting Professor, Huntsman Cancer Institute, University of Utah
2008 – 2016	Professor of Chemistry, University of Utah
2004 – 2008	Associate Professor of Chemistry, University of Utah
1999 – 2004	Assistant Professor of Chemistry, University of Utah
1996 – 1999	NIH Postdoctoral Researcher, Harvard University **Mentor:** Professor Eric N. Jacobsen
1994 – 1995	NeXstar Predoctoral Fellow, NeXstar Pharmaceuticals, Boulder, CO
1992 – 1996	Graduate Student, Washington State University
1991	Undergraduate Research Fellow, Utah State University **Mentor**: Professor Michael E. Wright

HONORS AND AWARDS

2023	Patai-Rappoport Lecture Award
2022	University of Utah Distinguished Teaching Award
2019 – present	Editorial Advisory Board, *Accounts for Chemical Research*
2018	Alexander von Humboldt Foundation Research Award
2017	Celebrate U "Top Researcher Honoree", University of Utah
2017	ACS Award for Creative Work in Synthetic Organic Chemistry
2016	Distinguished Professor of Chemistry, University of Utah
2016	Sigma Chi Outstanding Professor Award (student awarded)
2014-15	Novartis Chemistry Lectureship
2013	Schulich Visiting Professor Lectureship, Technion, Israel
2012 – present	Peter J. Christine S. Stang Presidential Endowed Chair of Chemistry
2012	Elected Fellow of the American Association for the Advancement of Science
2011	University of Utah Distinguished Scholarly and Creative Research Award
2011 – 2019	Associate Editor, *Journal of the American Chemical Society*
2010 – 2012	Editorial Advisory Board, *ACS Catalysis*
2010	Arthur C. Cope Scholar Award
2009	Robert W. Parry Teaching Award, University of Utah
2009 – present	Editorial Advisory Board, *Journal of Organic Chemistry*
2008	University of Utah Distinguished Honors Professor (Teaching Award)
2004	Pfizer Award for Creativity in Organic Chemistry
2004	Camille and Henry Dreyfus Teacher Scholar Award
2002	National Science Foundation CAREER Award
2000	Research Innovation Award (Research Corporation)

1997 – 1999 National Institutes of Health Postdoctoral Fellowship

PUBLICATIONS (**indicates corresponding author, §undergraduate coworker*)

Google Scholar link

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262. Pancoast, A. R.; McCormack, S. L.; Galinat, S.§; Walser-Kuntz, R.; Jett, B. M.; Sanford, M. S.; Sigman, M. S.* "Data Science Enabled Discovery of a Highly Soluble 2,2′-Bipyrimidine Anolyte for Application in a Flow Battery," *Chem. Sci.* ***2023,*** *accepted in principle*.
261. Read, J. A.; Ball, T. E.§; Miller, B.; Jacobsen, E. N.*; Sigman, M. S.* "Computational Library Enables Pattern Recognition ('Fingerprinting') of Noncovalent Interactions and Application as a Modern Linear Free Energy Relationship," *in revision*.
260. van Dijk, L.; Haas, B. C.; Lim, N.-K.*; Clagg, K.; Dotson, J. J.; Treacy, S. M.; Piechowicz, K. A.; Roytman, V. A.; Zhang, H.; Toste, F. D.*, Miller, S. J.; Gosselin, F.; Sigman, M. S.* "Data Science-Enabled Palladium-Catalyzed Enantioselective Aryl-Carbonylation of Sulfonimidamides," *J. Am. Chem. Soc.* **2023***,145, ASAP*.
259. Jett, B.; Flynn, A.; Sigman, M. S.*; Sanford, M. S.* "Identifying Structure-Function Relationships to Modulate Crossover in Nonaqueous Redox Flow Batteries," *J. Mater. Chem. A*. **2023**, *accepted*.
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254 Clements, H. D.; Flynn, A. R.; Nicholls, B. T.; Grosheva, D.; Hyster, T. K.*; Sigman, M. S.* "Workflow for Biocatalytic Reaction Performance Prediction and Analysis," *J. Am. Chem. Soc. 2023, 145, accepted*.
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225. Griffin, J. D.; Vogt, D. B.; Du Bois, J.*; Sigman, M. S.* "Mechanistic Guidance Leads to Enhanced Site-Selectivity in C–H Oxidation Reactions Catalyzed by Ruthenium bis(Bipyridine) Complexes," *ACS Catalysis* **2021**, *11*, 10479-10486.
224. Yichao Yan, Y.; Robinson, S. G.; Vaid, T. P.; Sigman, M. S.; Sanford, M.S.* "Simultaneously Enhancing the Redox Potential and Stability of Multi-Redox Organic Catholytes by Incorporating Cyclopropenium Substituents," *J. Am. Chem. Soc.* **2021**, *143*, 13450–13459.
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220. Kulik, H. J.*; Sigman, M. S.* "Advancing Discovery in Chemistry with Artificial Intelligence: From Reaction Outcomes to New Materials and Catalysts," (editorial) *Acc. Chem. Res.* **2021**, *54*, 2335-2336.
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INVITED RESEARCH and NAMED LECTURES

329. Merck, December 2023
328. International Kyoto Conference on New Aspects of Organic Chemistry, Kyoto Japan, November 2023
327. 24th National Organic Chemistry Symposium, Argentina, November 2023
326. Biogen (virtual), October 2023
325. University of Alcalá, Spain, "Developing Data Science Tools for Organic Reaction Development," October 2023
324. Universidad de Huelva, "Developing Data Science Tools for Organic Reaction Development," Spain, October 2023
323. University of Sevilla, "Developing Data Science Tools for Organic Reaction Development," Spain, October 2023
322. University of Zaragoza, "Developing Data Science Tools for Organic Reaction Development," Spain, October 2023
321. University of Valladolid, "Developing Data Science Tools for Organic Reaction Development," Spain, October 2023
320. Syngenta (virtual), "Developing Data Science Tools for Organic Reaction Development," September 2023
319. "New Frontiers in Organic Chemistry", "Developing Data Science Tools for Organic Reaction Development," Crete, Greece, September 2023
318. Merck symposium, University of Michigan, "Developing Data Science Tools for Organic Reaction Development," August 2023
317. Frontiers in Synthetic and Medicinal Chemistry Virtual Lecture Series Sponsored by Pharmaron, "Developing Data Science Tools for Organic Reaction Development," August 2023 (virtual)
316. 22nd European Symposium on Organic Chemistry (ESOC 2023), "Data Science Meets Reaction Optimization," July 2023, Ghent, Belgium
315. University of Denver, "Data Science Meets Reaction Optimization," May 2023
314. Stille Symposium, Colorado State University, "Data Science Meets Reaction Optimization," May 2023, Fort Colins, Colorado.
313. Samuel M. McElvain Seminar (student invited lecture), University of Wisconsin, "Data Science Meets Reaction Optimization," May 2023, Madison, Wisconsin.
312. University of Texas, San Antonio (student invited lecture), "Data Science Meets Reaction Optimization," April 2023, San Antonio, Texas.
311. Solvay Workshop: New ways to do chemistry - Emerging technologies for synthetic methodology, "Data Science Meets Reaction Optimization," April 2023, Brussels, Belgium.
310. Genentech Seminar Series, "Data Science Meets Organo- and Bio-catalytic Asymmetric Catalyst Development," April 2023, San Francisco, CA.
309. Heck Lectureship in honor of the Heck Award, University of Delaware, "Data Science Meets Organic Chemistry," March 2023.
308. CaRLa Winter School 2023, February 20, 2023, "A Primer to Becoming a Data Chemist," Heidelberg, Germany
307. CaRLa Winter School 2023, February 20, 2023, "Data Science Tools for Prediction Objectives in Organic Chemistry," Heidelberg, Germany
306. Merck & Co, Inc., November 17, 2022, "Data Science Tools for Prediction Objectives in Organic Chemistry," Rahway, New Jersey
305. Dartmouth College, November 2, 2022, "Data Science Tools for Prediction Objectives in Organic Chemistry," Hanover, New Hampshire

304. Batsheva de Rothschild seminar on Strong Bond Activation, October 25, 2022, "Data Science Tools for Prediction Objectives in Organic Chemistry," Dead Sea, Israel
303. European Winter-School on Physical Organic Chemistry, September 28, 2022, "Data Science Meets Physical Organic Chemistry and Reaction Development," Ischia, Italy
302. AbbVie 2022 Platform Chemistry Technology Seminar Series, October 12, 2022, "Developing Data Science Tools for Prediction Objectives in Organic Chemistry" (virtual)
301. Achieving Scientific Excellence through Interdisciplinary and Collaborative Research Symposium @ACS meeting, August 23rd, 2022, "Applying Data Science Tools to Organic Chemistry: a Case Study in Collaborative Research," Chicago ACS meetings
300. CCHF Sunset Symposium @ACS meeting, August 21, 2022, "Developing data science tools for applications in C-H functionalization reactions," Chicago ACS meetings
299. Gilead Sciences, August 18, 2022, "Data Science Tools for Reaction Optimization" (virtual)
298. IBM Group Meeting (Zurich), April 19th, 2022, "Using Data Science to Explore and Exploit Monodentate Phosphines in Catalysis" (virtual)
297. Organometallic Gordan Research Conference, July 14, 2022, "Data Science Tools for Organometallic Catalysis," Newport, RI
296. International School on Organometallic Chemistry "Marcial Moreno Mañas", June 17, 2022, "Data Science Tools for Reaction Development," Santiago, Spain
295. ACS 26th Annual Green Chemistry & Engineering Conference, June 2022: "Development of Data Science Tools for Catalyst Development" (virtual)
294. Victor J. Chambers Lecture, University of Rochester, April 2022: "Enantioselective Formation of Remote Tertiary and Quaternary Chiral Centers," Rochester, NY
293. Victor J. Chambers Lecture, University of Rochester, April 2022: "Applying Data Science Tools to Develop Predictive Models in Organic Chemistry," Rochester, NY
292. Victor J. Chambers Lecture, University of Rochester, April 2022: "Using Data Science to Explore and Exploit Monodentate Phosphines in Catalysis," Rochester, NY
291. CHEM-Reaxys Symposia, October 22nd, 2021, "Using Data Science to Explore and Exploit Monodentate Phosphines in Catalysis," (Virtual)
290. Bayer Process Chemistry Conference, October 6th, 2021, "Using Data Science to Explore and Exploit Monodentate Phosphines in Catalysis," (Virtual)
289. Dow Seminar Series, 09/30, 2021, "Using Data Science to Explore and Exploit Monodentate Phosphines in Catalysis," (Virtual)
288. Award Symposium for Shannon Stahl, Fall ACS Meeting, 08/23/2021, "Using Data Science to Explore and Exploit Monodentate Phosphines in Catalysis," (Virtual)
287. Virtual Integration of Synthesis with Theory and AI, July 13, 2021, Data Science Meets Physical Organic Chemistry," (Virtual)
286. 2021 Scientific Advancement Seminar Program, Boehringer-Ingelheim, March 25th, 2021, "Data Science Meets Physical Organic Chemistry," (Virtual)
285. Center for Molecular Electrocatalysis Seminar, November 4th, 2020, "Data Science Meets Physical Organic Chemistry," (Virtual)
284. NSF-AI Institute Workshop, October 14, 2020, "Data Science Meets Physical Organic Chemistry," (Virtual)
283. ENJ @60, Harvard University, Feb. 2020
282. "Student Invite", Philadelphia Organic Chemists' Club, November 21, 2019, "Integrating Data Science Tools into Reaction Development"
281. Workshop on Electrochemistry, National Academy of Sciences, Nov. 2019, "Integrating Data Science Tools into Molecular Design in Electrocatalysis and Energy Applications"
280. "AbbVie Lecture", University of Chicago, Nov. 2019, "Integrating Data Science Tools into Reaction Development"
279. ACS Princeton Fall Organic Symposium, Princeton, NJ, Nov. 2019, "Data Science in Reaction Development using Physical Organic Chemistry"
278. Advancing of Molecular Sciences by Machine Learning and Quantum Chemistry, Emory University, Oct. 2019, "Developing Modern Data Analysis Tools for Synthesis & Catalysis"

277. ORGANIC CHEMISTRY DAY @PAVIA, Pavia, Italy, September 30, 2019 "Developing Modern Data Analysis Tools for Synthesis & Catalysis"
276. ICCOS, Moscow, Russia, September 2019, "Developing Modern Data Analysis Tools for Synthesis & Catalysis"
275. Summer School on Dispersion, Paderborn, Germany, July 2019, "Developing Modern Data Analysis Tools for Synthesis & Catalysis"
274. Canadian Chemistry Conference, "Emerging Tools Symposium", Quebec City, Canada, June 2019, "Developing Modern Data Analysis Tools for Synthesis & Catalysis"
273. "Grad Program Distinguished Lecturer Series" The Scripps Research Institute, June 2019, "Developing Modern Data Analysis Tools for Synthesis & Catalysis"
272. "Lectures in Modern Chemistry", University of British Columbia, April 2019, "Developing Modern Data Analysis Tools for Synthesis & Catalysis"
271. ACS Meeting, James Flack Norris Symposium Honoring Eric Anslyn, April 2019, "Developing Modern Data Analysis Tools for Synthesis & Catalysis"
270. Indiana Organic Seminar Symposium, February 2019, "Data Intensive Physical Organic Chemistry"
269. "Novartis Lecture," California Institute of Technology, February 2019, "Data Intensive Physical Organic Chemistry"
268. The Hong Kong University of Science and Technology, "Enantioselective Formation of Remote Tertiary and Quaternary Chiral Centers," December 20th, 2018
267. 10th Singapore International Chemistry Conference, Singapore, "Developing modern physical organic analysis tools for synthesis, catalysis, and energy," Dec. 16, 2018
266. Merck, West Point, PA "Developing modern physical organic analysis tools for synthesis, catalysis, and energy," November 28, 2018
265. GlaxoSmithKline, Collegeville, PA "Developing modern physical organic analysis tools for synthesis, catalysis, and energy," November 27, 2018
264. Pfizer, Groton, CN "Short Course: Developing Modern Physical Organic Analysis Tools for Optimization, Analysis, and Molecular Design," November 16, 2018
263. Department Chemie Ludwig-Maximilians-Universität München, Developing modern physical organic analysis tools for synthesis, catalysis, and energy," November 6, 2018
262. Lehrstuhl für Organische Chemie, Technische Universitaet München, "Developing modern physical organic analysis tools for synthesis, catalysis, and energy," Germany, November 8, 2018
261. Frontiers in Chemistry: ArmChemFront, "Developing modern physical organic analysis tools for synthesis, catalysis, and energy," Yerevan, Armenia October 2018
260. 2018 Frontiers Symposium at the University of Illinois at Urbana-Champaign, "Enantioselective Formation of Remote Tertiary and Quaternary Chiral Centers," October 2018
259. Latin-American congress of Chemistry, Havana, Cuba, "Enantioselective Formation of Remote Tertiary and Quaternary Chiral Centers," October 9-12, 2018
258. University of Minnesota, Student Invited Seminar Series, "Developing modern physical organic analysis tools for synthesis, catalysis, and energy," September 2018
257. Stereochemistry Gordon Research Conference, Salve Regina, RI, "Data Driven Methods to Identify and Exploit Non-Covalent Interactions in Asymmetric Catalysis," July 2018
256. Institut fuer Organische und Biomolekulare Chemie, Georg-August-Universitaet Goettingen, Germany, "Developing Modern Physical Organic Analysis Tools," July 2018
255. Bayer AG Research & Development, Pharmaceuticals, Wuppertal, Germany, "Developing Modern Physical Organic Analysis Tools," July 2018
254. RWTH Aachen University, Germany, "Enantioselective Formation of Remote Tertiary and Quaternary Chiral Centers," July 2018
253. Technische Universität Berlin, Germany, "Enantioselective Formation of Remote Tertiary and Quaternary Chiral Centers," July 2018
252. Novartis, Basel, Switzerland, "Developing Modern Physical Organic Analysis Tools," June 2018
251. Genentech, South San Francisco, CA, "Short Course on Multivariate Analysis in Catalysis," May 2018

250. City College of New York, Salzberg Chemistry Seminar, "Developing Modern Physical Organic Analysis Tools," May 2018
249. Organic Reactions Catalysis Society, San Diego, CA, "Enantioselective Formation of Remote Tertiary and Quaternary Chiral Centers," April 2018
248. University of Maryland, "Developing Modern Physical Organic Analysis Tools," April 2018
247. Spring ACS Meeting, New Orleans: James Flack Norris Award in Physical Organic Chemistry Honoring Cindy Burrows "Developing and Applying Modern Physical Organic Analysis Tools to Synthesis, Catalysis, and Energy," March 2018
246. Florida Heterocycles Conference, Gainesville Florida "Enantioselective formation of remote chiral centers through Pd-catalyzed alkene functionalization," March 2018
245. MilliporeSigma, Milwaukee, WI "Bringing Modern Data Analysis Tools to Prediction and Understanding in Organic Chemistry," February 2018
244. "2018 Schleyer Lecture" University of Georgia "Bringing Modern Data Analysis Tools to Prediction and Understanding in Organic Chemistry," February 2018
243. "Schulich Faculty Colloquium" Technion – Israel Institute of Technology Schulich Colloquium, Haifa, Israel, "Enantioselective formation of remote chiral centers through Pd-catalyzed alkene functionalization," December 2017
242. Modern Trends in Inorganic Chemistry, Pune, India, "Enantioselective formation of remote chiral centers through Pd-catalyzed alkene functionalization," December 2017
241. Indo-US Workshop on Organometallics, Lonavla, India, "Bringing Modern Data Analysis Tools to Prediction and Understanding in Organic Chemistry," December 2017
240. IIT Satellite Conference on Organometallic Chemistry, IIT Bombay, Mumbai, India "Enantioselective formation of remote chiral centers through Pd-catalyzed alkene functionalization," December 2017
239. Meeting of the Minds sponsored by Millipore, Cambridge, MA, "Bringing Modern Data Analysis Tools to Prediction and Understanding in Organic Chemistry," November 2017
238. SACNAS, "Bringing Modern Data Analysis Tools to Prediction and Understanding in Organic Chemistry," October 2017
237. Novartis, Cambridge, MA, "Bringing Modern Data Analysis Tools to Prediction and Understanding in Organic Chemistry," October 2017
236. "Summer School", ICIQ, Tarragona, Spain, "Bringing Modern Data Analysis Tools to Prediction and Understanding in Organic Chemistry", September 2017
235. "Summer School", ICIQ, Tarragona, Spain, "Enantioselective formation of remote chiral centers through Pd-catalyzed alkene functionalization," September 2017
234. International Symposium - Catalysis for Sustainable Chemical Synthesis, Freiburg, Germany "Bringing Modern Data Analysis Tools to Prediction and Understanding in Organic Chemistry", September 25, 2017
233. ICSN, Gif-sur-Yvette, France, "Enantioselective formation of remote chiral centers through Pd-catalyzed alkene functionalization," September 2017
232. ACS DC, Symposium on Computational Approaches to Catalysis, "Bringing Modern Data Analysis Tools to Prediction and Understanding in Organic Chemistry", August 2017
231. AbbVie, Chicago, Illinois "Enantioselective formation of remote chiral centers through Pd-catalyzed alkene functionalization," August 2017
230. IUPAC Conference, Sao Paolo, Brazil, "Enantioselective formation of remote chiral centers through Pd-catalyzed alkene functionalization," July 2017
229. CCHF Virtual Symposium "Bringing Modern Data Analysis Tools to Prediction and Understanding in Organic Chemistry", July 2017
228. Seoul National University, "Enantioselective formation of remote chiral centers through Pd-catalyzed alkene functionalization," May 2017
227. KAIST, South Korea, "Enantioselective formation of remote chiral centers through Pd-catalyzed alkene functionalization," May 2017
226. KAIST, South Korea, "Bringing Modern Data Analysis Tools to Prediction and Understanding in Organic Chemistry", May 2017

225. University of Norte Dame, "Enantioselective formation of remote chiral centers through Pd-catalyzed alkene functionalization," April 2017
224. University of Missouri Organic Chemistry Day, "Enantioselective formation of remote chiral centers through Pd-catalyzed alkene functionalization," April 2017
223. University of Missouri, "Bringing Modern Data Analysis Tools to Prediction and Understanding in Organic Chemistry", April 2017
222. ACS Symposium for ACS award for ACS Award for Creative Work in Synthetic Organic Chemistry, April 2017
221. West Virginia University, March 2017
221. 1st International Editor's symposium on chemistry (IESC), Seoul, Korea, December 2016
220. Southwestern Medical School, Dallas, Texas, December 2016
219. Symposium for Eric Jacobsen (2016 Award for Creativity in Molecular Design and Synthesis), New Jersey, December 2016
218. University of Münster, Germany, Nov. 2016
217. University of Münster, Germany, Nov. 2016
216. Max Plank Institute, Muelhiem, Germany, Nov. 2016
215. Boehringer Ingelheim, November 2016
214. New York University, October 2016
213. Merck (Rahway), October 2016
212. Bristol-Myers-Squibb (Process, New Brunswick) October 2016
211. Bristol-Myers-Squibb (Drug Discovery, New Brunswick), October 2016
210. *Liebig College Lectureship (Short Course)*, Giessen, Germany, August 2016
209. Keio University, Tokyo, Japan, July 2016
208. International symposium on homogeneous catalysis, Kyoto, Japan, July 2016
207. Elemento-Organic Chemistry Symposium, Nankai, China, July 2016
206. University of North Carolina, Wilmington, May 2016
205. North Carolina State, May 2016
204. University of Zurich, Switzerland, May 2016
203. *Semmelhack Lectureship*, Princeton University, May 2016
202. *Organic Reactions Lecture*, University of Michigan, May 2016
201. *Distinguished Colloquium*, University of Utah, April 2015
200. *Frontiers in Chemistry*, Lecture, Wayne State University, March 2016
199. *AbbVie Lecture*, Boston College, March 2016
198. Symposium honoring Scott Miller, San Diego ACS meeting, March 2016
197. *Aldrich Lectureship*, University of Nevada, Reno, Dec. 2015
196. Novartis (Singapore), Dec. 2015
195. Jiaotong University, Shanghai, China, Dec. 2015
194. Novartis (Shanghai) Dec. 2015
193. Shanghai institute of Organic Chemistry, Dec. 2015
192. *Queens University CREATE lectureship*, Canada, Nov. 2015
191. Pfizer (Groton), Nov. 2015
190. Banff Symposium on Organic Chemistry, Oct. 2015
189. Novartis, Basal, Switzerland, October 2015
188. *Molecular Science Forum Lecture*, Institute of Chemistry, Chinese Academy of Sciences, Beijing, China
187. 11th National Conference on Physical Organic Chemistry, Beijing Municipal Tsinghua University
186. Symposium honoring Melanie Sanford, Boston ACS meeting, August 2015
185. Summer Symposium in Green Chemistry and Catalysis, UT Austin, July 2015
184. Millennium Pharmaceuticals, Cambridge, July 2015
183. ACS Division of Organic Chemistry Symposium (Austin, Texas), July 2015
182. Gordon Research Conference on Organometallic Chemistry (Rhode Island), July 2015
181. Division of Organic Chemistry Research Symposium, July 2015
180. *Bristol Myers Squib Lecturer*, Columbia University, June 2015

179. *Student Invited Symposium*, Stanford University, May 2015
178. Janssen Sciences (Brussels, Belgium), May 2015
177. Harvard University, May 2015
176. Purdue University, April 2015
175. University of Indiana, April 2015
174. University of York, England, April 2015,
173. University of Bristol, England, April 2015
172. Bristol Synthesis Meeting, Bristol, England, April 2015
171. Denver ACS, Award Symposium for Abigail Doyle, March 2015
170. *2015 BMS-UCLA Lecturer*, University of California, Los Angeles, "Palladium-Catalyzed Alkene Functionalization Reactions for Synthesis," February 2015
169. *Centre in Green Chemistry and Catalysis Lecturer*, Sherbrooke University, Canada, "Palladium-Catalyzed Alkene Functionalization Reactions for Synthesis," December 2014
168. University of Montreal, Canada, "Palladium-Catalyzed Alkene Functionalization Reactions for Synthesis," December 2014
167. McGill University, Canada, "Palladium-Catalyzed Alkene Functionalization Reactions for Synthesis," December 2014
166. Abbvie Pharmaceuticals, "Palladium-Catalyzed Alkene Functionalization Reactions for Synthesis," Chicago, December 2014
165. Novartis (Boston), "Palladium-Catalyzed Alkene Functionalization Reactions for Synthesis," November 2014
164. *Brown and Williamson Lecturer* University of Louisville, "Palladium-Catalyzed Alkene Functionalization Reactions for Synthesis," November 2014
163. Nagoya University, Japan, "Controlling and Analyzing Selectivity in Asymmetric Catalysis," October 2014
162. 2nd International Conference on Organometallics and Catalysis, "Palladium-Catalyzed Alkene Functionalization Reactions for Synthesis," Nara, Japan, October 2014
161. Gilead Pharmaceuticals (San Francisco), "Controlling and Analyzing Selectivity in Asymmetric Catalysis," October 2014.
160. 18th National Symposium on Organometallic Chemistry, "Palladium-Catalyzed Alkene Functionalization Reactions for Synthesis," Lanzhou, China, August 2014
159. Gordon Research Conference on Reactions and Processes, July 2014
158. "The Future of Asymmetric Catalysis" Telluride Science Research conference, "Controlling and Analyzing Selectivity in Asymmetric Catalysis," June 2014.
157. School of Organic Chemistry "Corbella", Italy, "Controlling and Analyzing Selectivity in Asymmetric Catalysis," June 2014.
156. University California at Davis, "Controlling and Analyzing Selectivity in Asymmetric Catalysis," May 2014.
155. University of Geneva, Switzerland, "Enantioselective Intermolecular Heck Reactions," May 2014
154. Burgenstock conference on stereochemistry, "Controlling and Analyzing Selectivity in Asymmetric Catalysis," Switzerland, May 2014
153. *Aldrich Lecture*, SUNY Buffalo, "Controlling and Analyzing Selectivity in Asymmetric Catalysis," April 2014
152. Netherlands' Catalysis and Chemistry Conference, "Enantioselective Intermolecular Heck Reactions," Noordwijkerhout, Netherlands, March 2014
151. University of California, Irvine, "Controlling and Analyzing Selectivity in Asymmetric Catalysis," December 2013
150. Cornell University, "Controlling and Analyzing Selectivity in Asymmetric Catalysis," November 2013
149. Janssen Pharmaceuticals, "Controlling and Analyzing Selectivity in Asymmetric Catalysis," November 2013
148. Scripps Research Institute La Jolla, "Controlling and Analyzing Selectivity in Asymmetric Catalysis," November 2013

147. Amgen, San Francisco, "Catalytic Alkene Functionalization Reactions for Synthesis," October 2013
146. Nanjing University, China, "Catalytic Alkene Functionalization Reactions for Synthesis," October 2013
145. Shanghai Institute of Organic Chemistry, "Catalytic Alkene Functionalization Reactions for Synthesis," October 2013
144. Fujian Institute, CAS, China, "Catalytic Alkene Functionalization Reactions for Synthesis," October 2013
143. New Frontiers in Organic Chemistry, Beijing, China, "Catalytic Alkene Functionalization Reactions for Synthesis," October 2013
142. Georgia State University, "New Approaches to Asymmetric Catalyst Design and Optimization," September 2013
141. University of Wisconsin (department of pharmaceuticals), "Catalytic Alkene Functionalization Reactions for Synthesis," September 2013
140. *Aldrich Lecture in Synthesis and Catalysis*, "New Approaches to Asymmetric Catalyst Design and Optimization," University of Wisconsin, September 2013
139. ACS meeting symposium on aerobic oxidation, "Understanding and Exploiting Pd-alkyl Intermediates for New Reaction Development," Indianapolis, September 2013
138 Merck, Rahway, "Catalytic Alkene Functionalization Reactions for Synthesis," August 2013
137. Merck, Rahway, "New Approaches to Asymmetric Catalyst Design and Optimization," August 2013
136. OMCOS, Fort Collins, "Understanding and Exploiting Pd-alkyl Intermediates for New Reaction Development," July 2013
135. Symposium honoring Jin-Quan Yu, NORM, Corvallis, Oregon, "Understanding and Exploiting Pd-alkyl Intermediates for New Reaction Development," July 2013
134. Weizmann Institute, Israel, "New Approaches to Asymmetric Catalyst Design and Optimization," May 2013
133. Technion, Israel, "New Approaches to Asymmetric Catalyst Design and Optimization," May 2013
132. University of Tel Aviv, Israel, "New Approaches to Asymmetric Catalyst Design and Optimization," May 2013
131. *Organic Synthesis Lectureship*, Massachusetts Institute of Technology, "New Approaches to Asymmetric Catalyst Design and Optimization," April 2013
130. ACS New Orleans Symposium on Asymmetric Catalysis, "New Approaches to Asymmetric Catalyst Design and Optimization," April 2013
129. ACS New Orleans Symposium on C-H functionalization, "Understanding and Exploiting Pd-alkyl Intermediates," April 2013
128. Calvin College, "New Approaches to Asymmetric Catalyst Design and Optimization," March 2013
127. Hope College, "New Approaches to Asymmetric Catalyst Design and Optimization," March 2013
126. Student Invite Seminar Series: "New Approaches to Asymmetric Catalyst Design and Optimization," University of California at Berkeley, February 2013.
125. *Aldrich Lecture*, "New Approaches to Asymmetric Catalyst Design and Optimization," University of North Carolina, January 2013
124. NTU, Singapore, "New Approaches to Asymmetric Catalyst Design and Optimization," December 2012
123. National University of Singapore, "Understanding and Exploiting Pd-alkyl Intermediates," December 2012
122. National University of Singapore, "New Approaches to Asymmetric Catalyst Design and Optimization," December 2012
121. University of Iowa, "New Approaches to Asymmetric Catalyst Design and Optimization," September 2012
120. ADHOC "Understanding and Exploiting Pd-alkyl Intermediates," Jerusalem, Israel, September 2012
119. "Summer School" Tarragona, Spain, "Understanding and Exploiting Pd-alkyl Intermediates," July 2012.

118. "Summer School" Tarragona, Spain, "New Approaches to Asymmetric Catalyst Design and Optimization," July 2012.
117. Sunovion Pharmaceuticals, Marlborough MA, "New Approaches to Asymmetric Catalyst Design and Optimization," June 2012.
116. University of Stockholm, Sweden, "New Approaches to Asymmetric Catalyst Design and Optimization," May 2012.
115. Orsay (ICMMO), Paris, France, "New Approaches to Asymmetric Catalyst Design and Optimization," May 2012.
114. ICSN, Paris, France, "New Approaches to Asymmetric Catalyst Design and Optimization," May 2012.
113. Princeton University, *Abbott Symposium*, "New Approaches to Asymmetric Catalyst Design and Optimization," March 2012.
112. Western Washington University, "New Approaches to Asymmetric Catalyst Design and Optimization," February 2012.
111. 8th CRC International Symposium in Organometallic Chemistry, Toronto, February 2012
110. University of Illinois, *Eli Lilly Lectureship*, "New Approaches to Asymmetric Catalyst Design and Optimization," December 2011.
109. University of Delaware, "New Approaches to Asymmetric Catalyst Design and Optimization," October 2011
108. EPFL SB ISIC LCSO, Lausanne, Switzerland, "New Approaches to Asymmetric Catalyst Design and Optimization," October 2011.
107. ETH, Zurich Switzerland, "New Approaches to Asymmetric Catalyst Design and Optimization," October 2011.
106. New Frontiers in Organic Chemistry, Beijing, China "New Approaches to Asymmetric Catalyst Design and Optimization," September 2011.
105. Natural Products Gordon Conference, Rhode Island, "New Approaches to Asymmetric Catalyst Design and Optimization," July 2011.
104. Amgen, Boston, "Metal-Catalyzed Alkene Functionalization Reactions for Organic Synthesis," May 2011.
103. Boston University, "Metal-Catalyzed Alkene Functionalization Reactions for Organic Synthesis," May 2011.
102. Harvard University, *R.B. Woodward Lectureship*, "Metal-Catalyzed Alkene Functionalization Reactions for Organic Synthesis," May 2011.
101. Frontier Scientific "Metal-Catalyzed Alkene Functionalization Reactions for Organic Synthesis," April 2011.
100. Anaheim ACS, Award Symposium for Melanie Sanford, "Metal-Catalyzed Alkene Functionalization Reactions for Organic Synthesis," March 2011.
99. Technion, Haifa, Israel, "Metal-Catalyzed Alkene Functionalization Reactions for Organic Synthesis," March 2011.
98. Weizmann Institute, Israel, "Metal-Catalyzed Alkene Functionalization Reactions for Organic Synthesis," March 2011.
97. Tel Aviv University, Israel, "Metal-Catalyzed Alkene Functionalization Reactions for Organic Synthesis," March 2011.
96. *BASF Lectureship*, Scripps Research Institute, La Jolla, CA. "Metal-Catalyzed Alkene Functionalization Reactions for Organic Synthesis," February 2011.
95. University of South Carolina, "Metal-Catalyzed Alkene Functionalization Reactions for Organic Synthesis," February 2011
94. Stockholm University, Sweden "Metal-Catalyzed Alkene Functionalization Reactions for Organic Synthesis," October 2010.
93. University of Uppsala, Sweden "Metal-Catalyzed Alkene Functionalization Reactions for Organic Synthesis," October 2010.
92. Boston ACS, Cope Scholar Presentation, "Metal-Catalyzed Oxidations for Organic Synthesis," August 2010.

91. Stereochemistry Gordon Conference "New approaches to de novo Asymmetric Catalyst Design," August 2010
90. Amgen Pharmaceuticals, "Metal-Catalyzed Oxidations for Organic Synthesis," April 20th, 2010.
89. University of Illinois at Chicago, "Metal-Catalyzed Oxidations for Organic Synthesis," Chicago, April 13th, 2010.
88. Gonzaga University, "Metal-Catalyzed Oxidations for Organic Synthesis," November 13th, 2009.
87. Sonoma State University, "Metal-Catalyzed Oxidations for Organic Synthesis," November 9th, 2009
86. Queens University, "Metal-Catalyzed Oxidations for Organic Synthesis," October 30th, 2009.
85. University of Pennsylvania, "Metal-Catalyzed Oxidations for Organic Synthesis," October 12th, 2009.
84. Matteson Symposium, "Metal-Catalyzed Oxidations for Organic Synthesis," Washington State University, October 3rd, 2009.
83. Pfizer Global Process Symposium, Groton, CN, "Metal-Catalyzed Oxidations for Organic Synthesis," June 17th, 2009.
82. University of Rochester, "Metal-Catalyzed Oxidations for Organic Synthesis," May 8th, 2009.
81. California State University at Fullerton, "Metal-Catalyzed Oxidations for Organic Synthesis," November 13th, 2008.
80. Pfizer, St. Louis, "Metal-Catalyzed Oxidations for Organic Synthesis," November 3rd, 2008.
79. Yale University, "Metal-Catalyzed Oxidations for Organic Synthesis," October 29th, 2008.
78. BASF Symposium, Germany, "Metal-Catalyzed Oxidations for Organic Synthesis," Oct 4th-8th, 2008.
77. Symposium on C-C bond forming reactions in green chemistry, Austin, TX, July 11-12, 2008.
76. California Institute of Technology, "Metal-Catalyzed Oxidations for Organic Synthesis," March 2008
75. University of California at Irvine, "Metal-Catalyzed Oxidations for Organic Synthesis," March 2007
74. University of Pennsylvania (Student Seminar Series), "Metal-Catalyzed Oxidations for Organic Synthesis," February 2008
73. Indiana University, "Mechanistic Approaches to Catalyst Development," January 2008
72. Vanderbilt University, "Metal-Catalyzed Oxidations for Organic Synthesis," December 2007
71. Indiana University, "Metal-Catalyzed Oxidations for Organic Synthesis," November 2007
70. Symposium on Oxidation Catalysis Using Oxygen, "Metal-Catalyzed Oxidations for Organic Synthesis," Stuttgart, Germany, October 2007
69. Montana State University, "Metal-Catalyzed Oxidations for Organic Synthesis," September 2007
68. Emory University, "Metal-Catalyzed Oxidations for Organic Synthesis," May 2007
67. UC. San Diego, "Metal-Catalyzed Oxidations for Organic Synthesis," May 2007
66. University of Montana, "Metal-Catalyzed Oxidations for Organic Synthesis," April 2007
65. Willamette College, "Metal-Catalyzed Oxidations for Organic Synthesis," March 2007
64. Scripps Research Institute, "Metal-Catalyzed Oxidations for Organic Synthesis," January 2007
63. Gilead Pharmaceuticals, San Francisco, "Metal-Catalyzed Oxidations for Organic Synthesis," September 2006.
62. University of Houston, "Metal-Catalyzed Oxidations for Organic Synthesis," September 2006
61. Transatlantic Trends in Chemistry, New Hampshire, "Metal-Catalyzed Oxidations for Organic Synthesis," August 2006.
60. Aldrich Organic Synthesis Symposium, Milwaukee, WI "Metal-Catalyzed Oxidations for Organic Synthesis," June 2006.
59. University of Kansas, Lawrence, "Metal-Catalyzed Oxidations for Organic Synthesis," May 2006.
58. University of Michigan, Ann Arbor, "Metal-Catalyzed Oxidations for Organic Synthesis," April 2006.
57. University of Wisconsin, Madison, "Metal-Catalyzed Oxidations for Organic Synthesis," April 2006
56. Merck Inc., "Metal-Catalyzed Oxidations for Organic Synthesis," January 2006.
55. University of Oregon, "Metal-Catalyzed Oxidations for Organic Synthesis," December 2005.
54. Oregon State University, "Metal-Catalyzed Oxidations for Organic Synthesis," December 2005.
53. Trinity University, "Metal-Catalyzed Oxidations for Organic Synthesis," October 2005.

52. University of Toronto, "Metal-Catalyzed Oxidations for Organic Synthesis," November 2005.
51. University of California at Santa Barbara, "Metal-Catalyzed Oxidations for Organic Synthesis," August 2005.
50. Amgen Pharmaceuticals, "Metal-Catalyzed Oxidations for Organic Synthesis," August 2005.
49. International Symposium Activation of Dioxygen and Homogeneous Catalytic Oxidation, University of Cologne, Germany, July 25-29, 2005.
48. 39th National Organic Chemistry Symposium, "Metal-Catalyzed Oxidations for Organic Synthesis," Salt Lake City, UT. June 2005.
47. Stanford University, "Metal-Catalyzed Oxidation Reactions For Organic Synthesis," May 2005.
46. Santa Clara University, "Metal-Catalyzed Aerobic Oxidations in Organic Synthesis," May 2005.
45. University of New Orleans, "Palladium-Catalyzed Oxidations for Organic Chemistry," April 2005.
44. Inorganic Reaction Mechanisms Gordon Conference, "Mechanistic Considerations in Palladium-Catalyzed Aerobic Alcohol Oxidation Reactions," February 2005.
43. University of Illinois, "Metal-Catalyzed Aerobic Oxidations in Organic Synthesis," January 2005.
42. Columbia University, "Metal-Catalyzed Aerobic Oxidations in Organic Synthesis," October 2004.
41. University of California at Berkeley, "Metal-Catalyzed Aerobic Oxidations in Organic Synthesis," September 2004.
40. Cornell University, "Metal-Catalyzed Aerobic Oxidations in Organic Synthesis," September 2004.
39. Abbott Pharmaceuticals, "Metal-Catalyzed Aerobic Oxidations in Organic Synthesis," September 2004.
38. American Chemical Society Meeting, Philadelphia 2004, Symposium on the Use of N-Heterocyclic Carbene Ligands in Catalysis (Steven Nolan, Organizer).
37. 11th Symposium on the Latest Trends in Organic Synthesis, "Metal-Catalyzed Aerobic Oxidations in Organic Synthesis," Ontario, Canada, August 11-14, 2004 (Tomas Hudlicky, Organizer).
36. Heterocyclic Chemistry Gordon Research Conference, "Metal-Catalyzed Aerobic Oxidations in Organic Synthesis," July 2004 (Duane Burnett, Organizer).
35. The University of Texas Southwestern Medical Center at Dallas, "Metal-Catalyzed Aerobic Oxidations in Organic Synthesis," May 18, 2004.
34. University of Washington, Seattle, Washington, "Metal-Catalyzed Aerobic Oxidations in Organic Synthesis," May 11, 2004.
33. American Chemical Society Meeting, Anaheim, CA James Flack Norris award symposium honoring Professor Dale Poulter (Robert Coates, Organizer) "Physical Organic Chemistry as a Tool Catalyst Design and Development," March 2004.
32. American Chemical Society Meeting, Anaheim, CA, Symposium on Mechanistic Studies of Asymmetric Catalytic Reactions (Patrick Walsh, Organizer) "Enantioselective Aerobic Oxidations," March 2004.
31. Pfizer Pharmaceuticals, Groton, CN, "Aerobic Oxidations in Organic Synthesis," December 4, 2003.
30. Brigham Young University, Provo, Utah, "Aerobic Oxidations in Organic Synthesis," December 1, 2003.
29. University of Chicago, Chicago, Illinois, "Aerobic Oxidations in Organic Synthesis," November 14, 2003.
28. Northwestern University, Chicago, Illinois, "Aerobic Oxidations in Organic Synthesis," November 13, 2003.
27. University of Norte Dame, South Bend, Indiana, "Aerobic Oxidations in Organic Synthesis," November 12, 2003.
26. Colorado State University, Fort Collins, Colorado, "Aerobic Oxidations in Organic Synthesis," November 4, 2003.
25. University of Colorado, Boulder, Colorado, "Aerobic Oxidations in Organic Synthesis," November 3, 2003.
24. Princeton University, "Aerobic Oxidations in Organic Synthesis," October 30, 2003.
23. University of Delaware, "Aerobic Oxidations in Organic Synthesis," October 29, 2003.
22. University of Texas at Austin, "Aerobic Oxidations of Alcohols in Organic Synthesis," October 24, 2003.

21. Texas A&M, College Station, "Aerobic Oxidations of Alcohols in Organic Synthesis," TX, October 23, 2003.
20. Eli Lilly, Indianapolis, "Aerobic Oxidations of Alcohols in Organic Synthesis," IN, August 15, 2003.
19. National Science Foundation Workshop on Natural Product Synthesis, Monterrey, CA, "Aerobic Oxidations of Alcohols in Organic Synthesis," July 10-14, 2003.
18. Pennsylvania State University, State College, PA, "Metal-Catalyzed Aerobic Oxidations in Organic Synthesis," May 2003.
17. University of Pittsburgh, Pittsburgh, PA, "Metal-Catalyzed Aerobic Oxidations in Organic Synthesis," May 2003.
16. Ohio State University, Columbus, OH, "Metal-Catalyzed Aerobic Oxidations in Organic Synthesis," May 2003.
15. Boston College, Boston, MA, "Metal-Catalyzed Aerobic Oxidations in Organic Synthesis," April 2003.
14. University of Pennsylvania, Philadelphia, PA, "Aerobic Oxidations in Organic Synthesis," April 2003.
13. Bristol-Myers Squibb, Princeton site, NJ, "Enantioselective Aerobic Oxidations of Alcohols," March 2003.
12. University of North Carolina, Chapel Hill, NC, "Aerobic Oxidation in Organic Synthesis," February 2003.
11. North Carolina State University, Raleigh, NC, "Aerobic Oxidation in Organic Synthesis," February 2003.
10. Los Alamos National Labs, New Mexico, "Metal-Catalyzed Aerobic Oxidations in Organic Synthesis," December 2002.
9. Bristol-Myers Squibb, Wallingford site, CN, "Enantioselective Aerobic Oxidations of Alcohols," November 2002.
8. Bristol-Myers Squibb, New Brunswick site, NJ, "Enantioselective Aerobic Oxidations of Alcohols," November 2002.
7. University of Alberta, "Enantioselective Aerobic Oxidations of Alcohols," October 2002.
6. Stereochemistry Gordon Research Conference, Rhode Island, "Catalytic Enantioselective Oxidations using Molecular Oxygen," June 2002.
5. Boise State University, ID "Aerobic Oxidations of Alcohols in Organic Synthesis," December 2001.
4. Boston University, Boston, MA, "Aerobic Oxidations of Alcohols in Organic Synthesis," November 2001.
3. ACS Northwest Regional Meeting, Organometallic Colloquium, Seattle, WA, "Palladium-Catalyzed Enantioselective Oxidations of Alcohols Using Molecular Oxygen," June 2001.
2. ASI Applied Systems 4th International Users Meeting, Annapolis, MD, "Catalytic Asymmetric Strecker Reaction," June 1998.
1. NeXstar Pharmaceuticals, Boulder, CO, "Two Approaches to the Discovery and Optimization of Catalysts for the Asymmetric Hydrocyanation of Imines," November 1997.

PATENTS AND PENDING APPLICATIONS

9. Looper, R. E.; Vaden, R. M.; Gibbons, J. B.; Salvant, J. M.; Edwards, A. V.; Sigman, M. S.; Welm, B. E. Compositions and methods comprising 2-(acylamino)imidazoles. WO2015143240A2, 2015.
8. Sigman, M. S.; Michel, B. "Quinoline-Oxazoline Compounds and Their Use in Oxidation Synthesis," filed 9/3/09
7. Sigman, M. S. et. al "Diarylmethines and Use Thereof," Provisional Patent Appl. No. SN 61/143,321.
6. Sigman, M. S.; Gligorich, K. M. "Alkene Hydrofunctionalization Reactions," US Patent No 2009069580.
5. Jacobsen, E. N.; Sigman, M. S. "Parallel Combinatorial Approach to the Discovery and Optimization of Catalysts." U. S. Patent No 6,709,824.
4. Jacobsen, E. N.; Sigman, M. S. "Parallel Combinatorial Approach to the Discovery and Optimization of Catalysts." U. S. Patent No 6,316,616.

3. Jacobsen, E. N.; Sigman, M. S. "Main-Group Metal Based Asymmetric Catalysis and Applications Thereof." U. S. Patent No. 6,521,561.
2. Eaton, B. E.; Sigman, M. S. "Method for the Cyclotrimerization of Alkynes in Aqueous Solutions." U. S. Patent No. 5,659,069.
1. Eaton, B. E.; Sigman, M. S. "Method for the Cyclotrimerization of Alkynes in Aqueous Solutions." U. S. Patent No. 5,760,266

SERVICE

University of Utah Service

2023-2024

Department Chair*
College of Science Executive Committee
Executive Committee Chair
Alumni Relations & Development member
Space & Renovation Committee member
Curie Club Liaison
Teaching lab Renovation Committee, co-chair
Department EDI Committee
Stockroom Committee

2022-2023

Vice President of Research Search Committee
Department Chair*
College of Science Executive Committee
Executive Committee Chair
Alumni Relations & Development member
Space & Renovation Committee member
Curie Club Liaison
Department EDI Committee
Stockroom Committee

2021-2022

Department Chair*
College of Science Executive Committee
Executive Committee Chair
Alumni Relations & Development member
Space & Renovation Committee member
Faculty Search Committee, Department of Chemistry
Curie Club Liaison
Department EDI Committee

2020-2021

University of Utah Presidential Search Committee
Department Chair*
College of Science Executive Committee
Executive Committee Chair
Alumni Relations & Development member
Space & Renovation Committee member
Curie Club Liaison
Department EDI Committee

2019-2020

Director Search Committee, Department of Biology
Department Chair*
College of Science Executive Committee

	Executive Committee Chair Alumni Relations & Development member Space & Renovation Committee member Curie Club Liaison Department EDI Committee
2018-2019	Alumni Relations & Development member Faculty Award Committee member Graduate Recruiting Committee member
2016-2017	Sabbatical
2016-2017	Faculty Search Committee Chair
2015-2016	Faculty Search Committee co-chair (Organic) RPT subcommittee member
2014-2015	Retention, Promotion and Tenure Committee (College of Science, Chair) Faculty Awards Committee member Graduate Admission Recruiting subcommittee member
2013-2014	Retention, Promotion and Tenure Committee (College of Science, Chair) MUSE (my signature U experience) Advisory Board University Research Committee Safety and Sustainability Committee (Department of Chemistry, Chair) Department of Chemistry Awards Committee Faculty Mentor (Jen Heemstra, Mark Ji)
2012-2013	Retention, Promotion and Tenure Committee (Department of Chemistry, Chair) MUSE (my signature U experience) Advisory Board Sciences Area Curriculum Committee University Research Committee College of Science Board (tech transfer liaison) ChemSac Advisor (Department of Chemistry) Department of Chemistry Awards Committee Faculty Mentor (Jen Heemstra, Mark Ji)
2011-2012	MUSE (my signature U experience) Advisory Board Sciences Area Curriculum Committee University Research Committee College of Science Kitchen Cabinet College of Science Board (tech transfer liason) ChemSac Advisor (Department of Chemistry) Department of Chemistry Awards Committee Faculty Mentor (Vale Molinero, Jen Heemstra, Mark Ji)
2010-2011	MUSE Advisory Board College of Science Kitchen Cabinet Department of Chemistry Awards Committee Faculty Mentor (Vale Molinero, Jen Heemstra, Mark Ji)

2009-2010	Retention, Promotion and Tenure Committee (Chair) Faculty Mentor (Vale Molinero) Undergraduate Curriculum Committee Director of Exceptional Student Experience Search Committee
2008-2009	Faculty Search Committee (Chair) University Research Committee (2008-2010) Faculty Mentor (Ilya Zharov, Vale Molinero) NMR Staff Search Committee Undergraduate Curriculum Committee
2007-2008	Faculty Mentor (Ilya Zharov, Vale Molinero) Graduate Admissions Committee (Chair) Chair of Organic Division
2006-2007	Faculty Mentor (Ilya Zharov) Graduate Admissions Committee (Chair) Chair of Organic Division
2005-2006	Faculty Mentor (Ilya Zharov) ChemSAC Advisor Space Coordinator Graduate Admissions Committee (Publicity Chair) College of Science Council (2004-2006) Undergraduate Research Scholar Designation Committee
2004-2005	Graduate Education Committee (Organic and Inorganic liaison) Graduate Admissions Committee (Publicity Chair) Marriot Library Director Search College of Science Council (2004-2006) Undergraduate Research Scholar Designation Committee
2003-2004	Chair Organic Faculty Search Committee Graduate Admissions Committee (Publicity Chair)
2001-2002	Graduate Admissions Committee (Publicity Chair) Technical Support Committee (NMR Liaison) Chemistry New Website Design (with Professor Chuck Wight) Organic Division Seminar Coordinator
2000-2001	Graduate Admissions Committee (Organic Student Admissions) Graduate Recruiting Weekend Organizer Organic Faculty Search Committee Organic Division Seminar Coordinator
1999-2000	Graduate Admissions Committee (Organic Student Admissions) Analytical Faculty Search Committee

Professional Service and Community Outreach

- **2013-2015** Member at large, Division of Organic Chemistry ACS
- **2009** Member, Editorial Board, *Journal of Organic Chemistry*
- **2008** Presenter at ***Science Day at the U*** (November)

- **2008** ***Science Night Live*** (April)
- **2005** Organizer for 2005 39th National Organic Symposium (in Salt Lake City)
- **2005** Academic Employment Initiative Committee (ACS, San Diego, Spring 2005)
- **2003-2007** Adhoc Associate Editor for The *Journal of Organic Chemistry* (Dale Poulter)
- **2004** Presenter at ***Science Day at the U*** (November)

TEACHING

Spring 2023 Chemistry 7160 (Organometallic Chemistry)
Spring 2022 Chemistry 7160 (Organometallic Chemistry)
Spring 2021 Chemistry 7160 (Organometallic Chemistry)
Spring 2020 Chemistry 7160 (Organometallic Chemistry), 16 students
Fall 2019 Chemistry 7240 (Physical Organic Chemistry), 29 students
Spring 2019 Chemistry 2321 (Honors Organic Chemistry II), 21 students
Fall 2018 Chemistry 7240 (Physical Organic Chemistry), 21 students
Spring 2017 Chemistry 2320 (Organic Chemistry II), 111 students
Fall 2016 Chemistry 7240 (Physical Organic Chemistry), 22 students
Spring 2016 Chemistry 2320 (Organic Chemistry II) 178 students
Fall 2015 Chemistry 7240 (Physical Organic Chemistry I), 35 students
Spring 2015 Chemistry 2320 (Organic Chemistry II) 190 students
Fall 2014 Chemistry 7240 (Physical Organic Chemistry I), 21 students
Spring 2014 Chemistry 7160 (Organometallic Chemistry), 18 students
Spring 2014 Chemistry 2320 (Organic Chemistry II) 190 students
Spring 2013 Chemistry 2321 (Honors Organic Chemistry II), 28 students
Fall 2012 Chemistry 7160 (Organometallic Chemistry), 22 students
Spring 2012 Chemistry 2321 (Honors Organic Chemistry II), 28 students
Fall 2011 Chemistry 7160 (Organometallic Chemistry), 18 students
Fall 2010 Chemistry 7160 (Organometallic Chemistry), 27 students
Fall 2010 Chemistry 2320 (Organic Chemistry II) 156 students
Fall 2009 Chemistry 7240 (Physical Organic Chemistry I), 23 students
Spring 2009 Chemistry 2320 (Organic Chemistry II) 224 students
Fall 2008 Chemistry 7240 (Physical Organic Chemistry I), 24 students
Spring 2007 Chemistry 2321 (Honors Organic Chemistry II), 24 students
Fall 2007 Chemistry 7240 (Physical Organic Chemistry I), 27 students
Spring 2007 Chemistry 2321 (Honors Organic Chemistry II), 17 students
Fall 2006 Chemistry 7200 (Synthesis I), 21 students
Spring 2006 Chemistry 2321 (Honors Organic Chemistry II), 24 students
Fall 2005 Chemistry 7200 (Synthesis I), 13 students
Spring 2005 Chemistry 2321 (Honors Organic Chemistry II), 29 students
Fall 2004 Chemistry 7200 (Synthesis I), 25 students
Spring 2003 Chemistry 2321 (Honors Organic Chemistry II), 27 students
Fall 2002 Chemistry 7240 (Physical Organic Chemistry I), 27 students
Fall 2001 Chemistry 7240 (Physical Organic Chemistry I), 31 students
Fall 2001 Chemistry 7200 (Synthesis I), 12 students
Spring 2001 Chemistry 2321 (Honors Organic Chemistry II), 27 students
Fall 2000 Chemistry 6240 (Physical Organic Chemistry I), 40 students
Fall 2000 Chemistry 6200 (Synthesis I), 20 students
Fall 1999 Chemistry 6240 (Physical Organic Chemistry I), 29 students
Fall 1999 Chemistry 6200 (Synthesis I), 18 students

LABORATORY PERSONNEL

Current Group: https://www.sigmanlab.com/current-members
Group Alumni: https://www.sigmanlab.com/former-members