# PETER J. ALAIMO, Ph.D.

Professor of Chemistry & Department Chair | College of Science and Engineering

Seattle University | Bannan 611 | 901 12<sup>th</sup> Avenue, Seattle, WA 98122, USA T: (206) 296-5944 | E: <u>alaimop@seattleu.edu</u>

EDUCATION
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University of California, Berkeley	Ph.D. in Chemistry 1999	
	Dissertation advisor: Prof. Robert G. Bergman	
	Dissertation title: Synthetic and mechanistic studies hydrogen bond activation by iridium(III) complexes and de of a transition metal catalyzed alkene aziridination reaction	evelopment
University of Michigan, Ann Arbor	Honors B.S. in Chemistry, Philosophy	1994
	Thesis advisor: Prof. Brian P. Coppola	
	Thesis title: Regiodirecting effects in 1,3-dipolar cy reactions to münchnones and imidazolium oxides	ycloaddition

#### APPOINTMENTS

partment   Seattle,	WA
ſ	partment   Seattle,

Department Chair	2020–present
Professor	2015–present
Associate Professor	2010–2015
Assistant Professor	2004–10

• Research: Asymmetric catalysis, green & environmental chemistry, bioorganic chemistry

ETH – SWISS FEDERAL INSTITUTE OF TECHNOLOGY	Zürich, Switzerland
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Visiting Professor	Institute of Biogeochemistry and Pollutant Dynamics	2011–12

- Prof. Kris P. McNeill research group, Environmental Chemistry
- Research: Kinetics of photodegradation of cysteine, cystine, and cysteine-containing peptides

#### UNIVERSITY OF CALIFORNIA, SAN FRANCISCO (UCSF) San Francisco, CA

**Postdoctoral Associate** | Cellular and Molecular Pharmacology, School of Medicine 1999–04

- Prof. Kevan M. Shokat research group
- Research: Using chemical genetics to decode the roles of phosphatidylinositol 3-kinases in cellular signaling

## RAYCHEM CORPORATION | Menlo Park, CA

#### Summer Research Intern

• Research: Synthesis and evaluation of carbon black-doped polymer blends

## PUBLICATIONS

#### Peer-Reviewed Journal Articles (undergraduate co-authors)

(H-index = 17; 6/21/2022)

- Balgooyen, S, Alaimo, P.J.; Remucal, C.K.; Ginder-Vogel, M. Environ. Sci. Technol. 2017, 51(11), 6053-6062. DOI: 10.1021/acs.est.6b05904 Structural transformation of MnO<sub>2</sub> during the oxidation of bisphenol A.
- Chu, C.; Erickson, P.R.; Lundeen, R.A.; Stamatelatos, D.; Alaimo, P.J.; Latch, D.E.; McNeill, K.\* Environ. Sci. Technol. 2016, 50, 6363-6373. DOI: 10.1021/acs.est.6b01291 Photochemical and nonphotochemical transformations of cysteine with dissolved organic matter.
- Langenhan, J.M.; McLaughlin, R.P.; Loskot, S.A.; Rozal, L.M.; Clay, M.S.; Alaimo, P.J. J. Carbo. Chem. 2016, 35, 106-117. DOI: 10.1080/07328303.2016.1139111 Using density functional theory to calculate the anomeric effect in hydroxylamine and hydrazine derivatives of tetrahydropyran.
- 17. Alaimo, P.J.; Langenhan, J.M.; Suydam, I.T. *J. Chem. Educ.* **2014**, *91*, 2093-2098. <u>DOI: 10.1021/ed400510b</u> Aligning the undergraduate organic laboratory experience with professional work: The centrality of reliable and meaningful data.
  - News & Highlights:
    - o Science 2014, 346 (6212), 961. | editor's selection highlight
- Meyer, A.H.; Dybala-Defratyka, A.; Alaimo, P.J.; Geronimo, I.; <u>Sanchez, A.</u>; Cramer, C.J.; Elsner, M. Dalton Trans. 2014, 43, 12175-12186. <u>DOI: 10.1039/C4DT00891J</u> Cytochrome P450-catalyzed dealkylation of atrazine by Rhodococcus sp. strain NI86/21 involves hydrogen atom transfer rather than single electron transfer.
  - Cover article
- Bonvin, F.; Omlin, J.V.; Rutler, R.; Schweizer, W.B.; Alaimo, P.J.; Strathmann, T.; McNeill, K.; Kohn, T. Environ. Sci. Technol. 2013, 47, 6746-6755. DOI: 10.1021/es303777k Direct photolysis of human metabolites of the antibiotic sulfamethoxazole: Evidence for abiotic back-transformation.
- 14. Alaimo, P.J.; Langenhan, J.M.; Tanner, M.; Ferrenberg, S.M. J. Chem. Educ. **2010**, *87*, 856-861. DOI: 10.1021/ed100207d Safety teams: An approach to engage students in laboratory safety.
  - News & Highlights:
    - Chemical & Engineering News | article | 4/13/2016
    - Chemical & Engineering News | blog feature | 7/7/2010
    - o Journal of Chemical Education 2010, 87, 764-765 | editorial highlight
- 13. Alaimo, P.J.; <u>Marshall, A.-L.; Andrews, D.M.;</u> Langenhan, J.M. Org. Synth. **2010**, 87, 192-200. DOI: 10.1002/0471264229.os087.21 1,3,5-Triacetylbenzene.
- 12. <u>Marshall, A.-L.; Alaimo, P.J. Chem. Eur. J. 2010</u>, 16, 4970-4980. <u>DOI: 10.1002/chem.200903028</u>. Useful products from complex starting materials: Common chemicals from biomass feedstocks.
  - News & Highlights:
    - o Top 20 most cited Reviews of the past 20 years in Chemistry—A European Journal
    - Hottest Articles in Green and Sustainable Chemistry <u>selection</u> (2010)
- 11. Alaimo, P.J.; Bean, J.C.; Langenhan, J.M.; Nichols, L. Writing Across the Curriculum Journal 2009, 20, 17-32. DOI Eliminating lab reports: A rhetorical approach for teaching the scientific paper in sophomore organic chemistry.
  - News & Highlights:
    - Science | podcast highlight | 5/20/2011
- Alaimo, P.J.; O'Brien III, R.; Johnson, A.W.; Slauson, S.R.; O'Brien, J.M.; Tyson, E.L.; Marshall, A.-L.; Ottinger, C.E.; Chacon, J.G.; Wallace, L.; Paulino, C.Y.; Connell, S. Org. Lett. 2008, 10, 5111-5114. DOI: 10.1021/ol801911f Sustainable synthetic methods: Domino construction of dihydropyridin-4-ones and β-amino esters in aqueous ethanol.
- 9. Alaimo P.J.; Knight, Z.A.; Shokat, K.M. Bioorg. Med. Chem. 2005, 13, 2825-2836. DOI: <u>10.1016/j.bmc.2005.02.021</u> Targeting the gatekeeper residue in phosphoinositide 3-kinases.
  - News & Highlights:
    - Top 25 Hottest Articles <u>selection</u> (Apr.–June 2005)
- Knight, Z.A.; Chiang, G.G.; Alaimo, P.J.; Kenski, D.M.; Ho, C.B.; Coan, K.; Abraham, R.T.; Shokat, K.M. Bioorg. Med. Chem. 2004, 12, 4749-4759. DOI: 10.1016/j.bmc.2004.06.022 Isoform-specific phosphoinositide 3-kinase inhibitors from an aryImorpholine scaffold.

- News & Highlights:
  - Top 25 Hottest Articles <u>selection</u> (July–Sept. 2004)
  - Top 25 Hottest Articles <u>selection</u> (Oct.–Dec. 2004)
- Wang, H.; Shimizu, E.; Tang, Y.-P.; Cho, M.; Kyin, M.; Zuo, W.; Robinson, D.A.; Alaimo, P.J.; Zhang, C.; Morimoto, H.; Zhou, M.; Feng, R.; Shokat, K.M.; Tsien, J.Z. Proc. Natl. Acad. Sci., USA 2003, 100, 4287-4292. DOI: 10.1073/pnas.0636870100 Inducible protein knockout reveals temporal requirement of CaMKII reactivation for memory consolidation in the brain.
- Shogren-Knaak, M.A.; Alaimo, P.J.; Shokat, K.M. Annu. Rev. Cell Develop. Biol. 2001, 17, 405-433. DOI: 10.1146/annurev.cellbio.17.1.405 Biological systems.
- 5. Alaimo, P.J.; Shogren-Knaak, M.A.; Shokat, K.M. *Curr. Opin. Chem. Biol.* **2001**, *5*, 360-367. <u>DOI:</u> <u>10.1016/S1367-5931(00)00215-5</u> Chemical genetic approaches for the elucidation of signaling pathways.
- 4. Alaimo, P.J.; Peters, D.W.; Arnold, J.; Bergman, R.G. J. Chem. Educ. 2001, 78, 64. DOI: <u>10.1021/ed078p64</u> Suggested modifications to a distillation-free solvent purification system.
- Alaimo, P.J.; Arndtsen, B.A.; Bergman, R.G. Organometallics 2000, 19, 2130-2143. DOI: <u>10.1021/om9910064</u> Alkylation of iridium via tandem carbon-hydrogen bond activation/decarbonylation of aldehydes: Access to complexes with tertiary and highly hindered metalcarbon bonds.
- 2. Alaimo, P.J.; Bergman, R.G. Organometallics **1999**, *18*, 2707-2717. <u>DOI: 10.1021/om990255p</u> Modeling the proposed intermediate in alkane carbon-hydrogen bond activation by Cp\*(PMe<sub>3</sub>)Ir(Me)OTf: Synthesis and stability of novel organometallic Ir(V) complexes.
- Alaimo, P.J.; Arndtsen, B.A.; Bergman, R.G. J. Am. Chem. Soc. 1997, 119, 5269-5270. DOI: 10.1021/ja970245k Synthesis of tertiary and other sterically demanding alkyl- and aryl-complexes of iridium by aldehyde C–H bond activation.

#### **Books & Book Chapters**

- Latch, D.E.; Whitlow, W.L.; Alaimo, P.J. "Incorporating an environmental research project across three simultaneous STEM courses: A collaboration between ecology, organic chemistry, and instrumental analysis students." in *Science Education and Civic Engagement: The Next Level. ACS Symposium Series*, Vol. 1121; Sheardy, R.D.; Burns, W.D., Eds.; American Chemical Society: Washington, DC, 2012; pp 17-30. (peer-reviewed) <u>DOI: 10.1021/bk-2012-1121.ch002</u>
- 1. Alaimo, P.J.; Daniels, D.S.; Pallin, D.J.; Johnson, A.; Volpe, C. "MCAT Organic Chemistry Review" The Princeton Review, 1997. (not peer-reviewed)

# **RESEARCH GRANTS AND FUNDING**

#### **Extramural Research Grants Funded**

- W.M. Keck Foundation | Undergraduate Education Program, Phase II | 2011–13 \$250,000 Launching Science and Civic Engagement Western Network (SCEWestNet): A multi-institutional collaborative effort to promote, support, and sustain college-level science education reform in the western region of the United States. | Co-PI with: W.D. Burns, D. Kraus, A. Shachter, R. Sheardy, L. Duffy, D. Latch, W.L. Whitlow, G. Booth, G. Smith, R. Franco, S. Carroll, M. Ganus, J. Bucki, A. Moodie (multi-university grant; \$19,000 to SU)
- 7. Research Corporation | Cottrell College Science Award | 2008–10 \$43,218 Enhancing diversity and improving stereoselectivity in the three-component synthesis of dihydropyridin-4-ones.
- NSF | Major Research Instrumentation (MRI) Grant | 2006–09 \$368,401 Acquisition of a 400 MHz NMR spectrometer for research and research training at Seattle University. Co-PIs: J. Langenhan, R. McLaughlin, J. Meany, D. Smith, K. Kuder
- 5. Sherman Fairchild Foundation | Scientific Equipment Program | 2005–08 \$497,230 Institutional grant | Author of \$150,000 portion for LC-QQQ

4.	Research Corporation   Cottrell College Science Award   2005–07 Development of tandem indium(0)- / indium(III)-mediated heterocycle syntheses.	\$41,218
3.	American Cancer Society   Postdoctoral Fellowship   2001–03 Decoding phosphatidylinositol 3-kinase-mediated cellular signaling cascades.	\$118,000
2.	National Institutes of Health NRSA   Postdoctoral Fellowship   2000 (declined) Decoding phosphatidylinositol 3-kinase signaling pathways.	\$109,164
1.	Susan G. Komen Breast Cancer Foundation   Postdoctoral Fellowship   2000 Decoding phosphatidylinositol 3-kinase-mediated cellular signaling cascades.	\$35,000
Intr	ramural Research Grants Funded	
	Undergraduate Student Research Award   Bannan Scholars Research Endowment   2021 Enantioselective synthesis of dihydropyridinones for testing as anti-cancer agents	\$13,259
14.	Undergraduate Student Research Award   Hoba Foundation   2019 Enantioselective synthesis of dihydropyridinones for testing as anti-cancer agents	\$13,094
13.	Undergraduate Student Research Award   Hoba Foundation   2018 Enantioselective synthesis of dihydropyridinones for testing as anti-cancer agents	\$19,599
12.	Summer Faculty Fellowship Program   ORSSP & Provost's Office   2017 Initiating a New Line of Research in Food Chemistry: New Edible Fermentations in Collab Chefs at Lark Restaurant and Applying to Fulbright for Sabbatical Funding	\$7,100 oration with
11.	Summer Faculty Fellowship Program   ORSSP & Provost's Office   2013 Photochemical oxidation of amino acid-based biomolecules in surface waters: Writing a rese	\$7,100 earch article
10.	and a research proposal on environmental chemistry. Murdock College Science Research Program   2011	\$12,860
9.	Identifying the products of the microbial degradation of atrazine. Assessment Grant   Provost's Office   2010 Identifying, Assessing, and Strengthening Conceptual Threads in the Chemistry Departme.	\$5,000 nt.   Co-
	Pls: J. Langenhan, J. Loertscher, D. Latch, V. Minderhout	<i>n.</i>   CO-
8.	Dean's Seed Funding   College of Science & Engineering   2010 Monitoring pyrethroids in the Duwamish River.   Co-PIs: L. Whitlow, D. Latch	\$8,000
7.	Supplemental Matching Funds   Provost's Office   2009 Acquisition of an Agilent LC-QQQ.   Co-PI: D. Latch	\$60,000
6.	Assessment Grant   Provost's Office   2009 Assessing the effectiveness of a novel pedagogical approach for teaching professional-sty writing to undergraduates.   Co-PIs: J. Langenhan, J. Loertscher, D. Latch	\$5,000 le scientific
5.	Assessment Grant   Provost's Office   2008 Assessing the effectiveness of a novel pedagogical approach for teaching professional-sty	\$5,700 le scientific
4.	writing to undergraduates.   Co-PIs: J. Langenhan, J. Loertscher, J. Bean, L. Nichols Summer Faculty Fellowship   College of Science & Engineering Dean's Office   2008 An environmentally benign method for synthesizing N-heterocycles.	\$7,014
3.	Summer Faculty Fellowship   College of Science & Engineering Dean's Office   2007 Synthesis of biologically important heterocycles using sustainable methods.	\$6,633
2.	Bannan Foundation Equipment Award   2006 Acquisition of an organic solvent purification system.   Co-PI: J. Langenhan	\$26,819
1.	Summer Faculty Fellowship   College of Science & Engineering Dean's Office   2005 An environmentally benign method for synthesizing N-heterocycles	\$6,265

#### PRESENTATIONS (undergraduates are underlined)

#### **Invited Seminars**

30. 29.	<u>Location</u> UC Berkeley 245 <sup>th</sup> ACS National Meeting	<u>Venue</u> Chemistry Department, SLAM Seminar Series Undergraduate Research Award Symposium	<u>Seminar Date</u> Sept. 14, 2015 Apr. 7, 2013
	ETH-Zürich, Switzerland	Environmental Chemistry, McNeill Group	July 31, 2012
27.		Environmental Chemistry, McNeill Group	Mar. 6, 2012
26.	ETH-Zürich, Switzerland	Environmental Chemistry, McNeill Group	Oct. 11, 2011
25.	Trinity University	Chemistry Department	Feb. 24, 2011
24.	Sonoma State University	Chemistry Department	Nov. 19, 2007
23.	Willamette University	Chemistry Department	July 20, 2007
22.	Seattle University	Chemistry Department	Jan. 15, 2004
21.	UC Santa Barbara	Chemistry & Biochemistry Department	Jan. 8, 2004
20.	Williams College	Chemistry Department	Jan. 5, 2004
19.	Barnard College	Chemistry Department	Dec. 9, 2003
18.	Oberlin College	Chemistry Department	Nov. 12, 2003
17.	Grinnell College	Chemistry Department	Mar. 6, 2003
16.	Vassar College	Chemistry Department	Jan. 31, 2003
15.	Skidmore College	Chemistry Department	Dec. 16, 2002
14.	College of Wooster	Chemistry Department	Dec. 6, 2002
13.	Harvey Mudd College	Chemistry Department	Dec. 3, 2002
12.	Washington & Jefferson College	Chemistry Department	Nov. 26, 2002
11.	Mount Holyoke College	Chemistry Department	Nov. 19, 2002
10.	Carleton College	Chemistry Department	Nov. 15, 2002
9.	Randolph-Macon College	Chemistry Department	Nov. 12, 2002
8.	Goucher College	Chemistry Department	Oct. 30, 2002
7.	Grinnell College	Chemistry Department	July 14, 2000
6.	UC San Francisco	Pharmaceutical Chemistry, Scanlan Group	May 1999
5.	Stanford University	Biochemistry, Khosla and Hershlag Groups	May 1999
4.	Princeton University	Chemistry, Shokat Group	Apr. 1999
3.	Columbia University	Biochemistry and Molecular Biophysics, Pyle Group	
2.	Rockefeller University	Biochemistry, O'Donnell Group	Mar. 1999
1.	MIT	Biology Department, Baker Group	Mar. 1999

**Conference Presentations** (32 undergraduate co-authors)

- P.J. Alaimo, <u>A. Sanchez</u>, <u>A.L. Sidor</u>, <u>M. Marcotte</u>. *Enantioselective aza-Diels-Alder reactions between* Danishefsky's diene and imine dienophiles. Poster | 18<sup>th</sup> European Symposium on Organic Chemistry | Marseille, France | July 2013
- 17. P.J. Alaimo, J.M. Langenhan, I.T. Suydam. Integrating Professional Training with Organic Chemistry Teaching Labs. Invited seminar ORGN 7 | 245<sup>th</sup> ACS National Meeting | New Orleans, LA | Apr. 2013
- 16. P.J. Alaimo, A.D. Sanchez, M. Marcotte, A.-L. Marshall, C.E. Ottinger, A.L. Sidor, C.E. Southworth. Efforts toward enantioselective aza-Diels-Alder reactions. Poster ORGN 694 and SciMix | 242<sup>nd</sup> ACS National Meeting | Denver, CO | Aug. 2011
- 15. P.J. Alaimo, J.M. Langenhan, I.T. Suydam. *Thinking like a scientist in the organic chemistry teaching lab: Designing experiments to generate data for analysis and discussion*. Poster CHED 91 and SciMix | 242<sup>nd</sup> ACS National Meeting | Denver, CO | Aug. 2011
- 14. P.J. Alaimo, D.E. Latch, W.L. Whitlow, <u>A. Frost</u>, <u>L. Youngquist</u>. Incorporating an environmental research project across three simultaneous STEM courses: Collaboration between ecology, organic chemistry, and instrumental analysis. Invited poster | Resources, Energy and Sustainability: A STEM Teaching and Research Symposium | Honolulu, HI | Oct. 2010
- 13. P.J. Alaimo, D.E. Latch, W.L. Whitlow, <u>J. Berude</u>, <u>A. Frost</u>, <u>L. Youngquist</u>. Chemistry and ecology of emerging contaminants: measuring concentrations and non-lethal effects of pyrethroid pesticides in an

*urban estuary.* Invited poster | Resources, Energy and Sustainability: A STEM Teaching and Research Symposium | Honolulu, HI | Oct. 2010

- P.J. Alaimo, <u>A.L. Marshall</u>, <u>C.E. Ottinger</u>. *Efforts toward enantioselective aza-Diels-Alder reactions*. Contributed poster | 16<sup>th</sup> European Symposium on Organic Chemistry | Prague, Czech Republic | July 2009
- 11. P.J. Alaimo, J.M. Langenhan. Professional development for undergraduate science students: Teaching and assessing professional scientific writing. Contributed seminar | 2008 National CASTL (Carnegie Academy for the Scholarship of Teaching and Learning) Institute: Developing scholars of teaching and learning | Omaha, NE | June 2008
- 10. **P.J. Alaimo**, J.M. Langenhan. *Teaching professional writing in an organic chemistry laboratory by abolishing the lab report*. Contributed seminar | 9<sup>th</sup> Biennial International Writing Across the Curriculum Conference | Austin, TX | May 2008
- 9. P.J. Alaimo, R.V. O'Brien, A. Johnson, S. Slauson, J. O'Brien, E. Tyson, J. Chacon, L. Wallace, S. Connell. Development of sustainable synthetic methods: Construction of 4-dihydropyridinones and β-amino esters by domino reactions in aqueous ethanol. Poster ORGN 532 | 234<sup>th</sup> ACS National Meeting | Boston, MA | Aug. 2007
- 8. J.M. Langenhan, **P.J. Alaimo**, M. Tanner. *Chemical safety teams: an approach for teaching laboratory safety.* Poster CHED 98 | 234<sup>th</sup> ACS National Meeting | Boston, MA | Aug. 2007
- 7. **P.J. Alaimo**, J.M. Langenhan, J. Loertscher. *Teaching students professional writing in organic chemistry lab courses.* Poster CHED 89 | 234<sup>th</sup> ACS National Meeting | Boston, MA | Aug. 2007
- P.J. Alaimo, <u>R.V. O'Brien III, A. Johnson, S. Slauson, J. O'Brien, E. Tyson, J. Chacon, L. Wallace, S. Connell</u>. Sustainable synthetic methods: Construction of 4-dihydropyridinones by domino reactions in aqueous ethanol. Poster | Gordon Research Conference on Heterocyclic Compounds | Newport, RI | June 2007
- 5. **P.J. Alaimo**, Z.A. Knight, K.M. Shokat. *Progress toward the development of allele-specific inhibitors of phosphatidylinositol 3-kinase.* Poster | 226<sup>th</sup> ACS National Meeting | New York, NY | Sept. 2003
- 4. P.J. Alaimo, Z.A. Knight, K.M. Shokat. Using chemical genetics to obtain allele-specific inhibitors of phosphatidylinositol 3-kinase. Poster | American Society for Cell Biology National Meeting | San Francisco, CA | Dec. 2002
- P.J. Alaimo, Z.A. Knight, K.M. Shokat. Using chemical genetics to obtain allele-specific inhibitors of phosphatidylinositol 3-kinase. Poster | 18<sup>th</sup> Union of the International Cancer Congress, Cell Biology Division | Oslo, Norway | July 2002
- 2. **P.J. Alaimo**, R.G. Bergman. *Synthesis of cationic iridium(V) complexes: Putative intermediates on the C-H activation pathway.* Poster INOR 121 | 216<sup>th</sup> ACS National Meeting | Boston, MA | Aug. 1998
- 1. **P.J. Alaimo**, B.A. Arndtsen, R.G. Bergman. *Using carbon-hydrogen bond activation for the synthesis of tertiary-alkyl iridium complexes.* Contributed seminar INOR 777 | 213<sup>th</sup> ACS National Meeting | San Francisco, CA | Apr. 1997

#### **Co-authored Conference Presentations Presented by Other Faculty Members**

- 8. S. Balgooyen, **P.J. Alaimo**, M. Ginder-Vogel, C. Remucal. Oxidative transformation of bisphenol A in the presence of synthetic manganese oxides. Contributed Poster | Gordon Research Conference on Environmental Sciences: Water | Holderness, NH | June 2016
- D.E. Latch, W.L. Whitlow, P.J. Alaimo. Analytical chemistry at Seattle University: Academic servicelearning, interdisciplinary collaborations, and analysis of environmental contaminants. Invited Seminar 1610-7 | Pittcon Analytical Chemistry Meeting | Orlando, FL | Mar. 2012
- D.E. Latch, W.L. Whitlow, P.J. Alaimo. Incorporating an environmental research project across three STEM courses: A collaboration between ecology, organic chemistry, and instrumental analysis. Seminar CHED 361 | 242<sup>nd</sup> ACS National Meeting | Denver, CO | Aug. 2011
- W.L. Whitlow, D. Latch, P.J. Alaimo, <u>A. Frost</u>, <u>J. Berude</u>. Urban chemistry & ecology: Comparing pyrethroid concentrations, aquatic conditions, & benthic invertebrates across a Superfund site. Seminar | Society of Environmental Toxicology and Chemistry | Portland, OR | Nov. 2010
- W.L. Whitlow, <u>L. Youngquist</u>, <u>A. Frost</u>, D. Latch, **P.J. Alaimo**. Urban aquatic contaminants & benthic ecology: Comparing invertebrates, chemical concentrations, and water quality across a Superfund site. Seminar COS 98-4 | 95<sup>th</sup> Ecological Society of America Annual Meeting | Pittsburgh, PA | Aug. 2010

- J.A. Loertscher, P.J. Alaimo, J.M. Langenhan. Novel pedagogical approach for teaching professionalstyle scientific writing to undergraduates. Seminar | 21<sup>st</sup> Biennial Conference on Chemical Education | Bloomington, IN | July 2008
- P.J. Alaimo, M.A. Shogren-Knaak, K.M. Shokat. Chemical genetic analysis of protein kinase cascades. Seminar in "Advances in Gene Technology: The Genome and Beyond – Structural Biology for Medicine" | Nature Biotechnology Winter Symposium | Miami, FL | Dec. 2002
- P. Burger, B.A. Arndtsen, P.J. Alaimo, H.F. Luecke, R.G. Bergman. Effect of counterions on the C-H activation reactivity of Ir(III) cations. Seminar INOR-267 | 215<sup>th</sup> ACS National Meeting | Dallas, TX | Apr. 1998

#### **Student-Delivered Research Presentations, External**

Twenty-six oral and poster research presentations by students (61 undergraduate co-authors) at external conferences including the following: ACS National meetings, Puget Sound ACS meetings, NCUR, Murdock, and AAAS.

#### **Student-Delivered Research Presentations, Internal**

Twenty-six oral and poster research presentations by students at Seattle University events (48 undergraduate co-authors).

#### EXTERNAL PROFESSIONAL SERVICE

Associate Editor   Internatio	nal Journal of Drug Discovery		2010–2016
Councilor for Chemistry Division   Council on Undergraduate Research 2012–201			2012–2015
Area B West Nodal Leader	SENCER / SCEWestNet (with	n D. Latch and L. Whitlow)	2011–2014
Session Chair   43 <sup>rd</sup> National	l Organic Chemistry Symposiu	m, ACS	June 2013
<b>External Scientific Consulta</b>	nt		
University of Puget Sound	l, Department of Chemistry		2013–14
Grant Proposal Reviewer			
Murdock Trust   Murdock	College Research Program for	r Natural Sciences	Mar. 2018
American Chemical Socie	ty   Petroleum Research Fund	I	Feb. 2017
	ty $\mid$ Petroleum Research Fund		Feb. 2016
Murdock Trust   Murdock	College Research Program for	r Natural Sciences	Oct. 2014
-	Society Sir Henry Dale Fellow	ship Program │ London, UK	Mar. 2014
Research Corporation CCSA Program Aug. 2			Aug. 2013
Research Corporation CCSA Program June 2			June 2013
Technology Foundation STW Partnership Program Utrecht, The Netherlands Dec. 2			Dec. 2012
NSF   MRI Program   Wa	ashington, D.C.		May 2008
NSF   Phase I CCLI Prog	ram Washington, D.C.		July 2008
NSF   Phase I CCLI Program   Washington, D.C. July 20			July 2007
NSF   Phase I CCLI Program   Washington, D.C. July		July 2006	
Research Corporation CCSA Program Dec.			Dec. 2006
<b>Journal Manuscript Reviewe</b>	∋r		2005-present
ACS Chemical Biology		Chemistry – A European Journ	nal
ACS Symposium Series		ChemSusChem	
Angewandte Chemie		European Journal of Inorganic	-
Bioorganic and Medicinal	Chemistry	European Journal of Organic (	•
Chemical Reviews		International Journal of Drug D	Discovery

Journal of the American Chemical Society Journal of Chemical Education Journal of Organic Chemistry Letters in Organic Chemistry

Molecular and Cellular Proteomics **Organic Letters** Organometallics Synthetic Communications

# TEACHING AND MENTORING EXPERIENCE

#### **Seattle University Courses**

Introductory Organic Chemistry Courses			
Chemistry 2500:	Organic Chemistry I	Fall 2004–present	
Chemistry 2501:	Organic Chemistry I Lab	Fall 2004–present	
Chemistry 2510:	Organic Chemistry II	Winter 2005–present	
Chemistry 2511:	Organic Chemistry II Lab	Winter 2005–present	
Chemistry 2520:	Organic Chemistry III	Spring 2005–2014	
Chemistry 2521:	Organic Chemistry III Lab	Spring 2005–2014	
Advanced Elective Course	es (textbook author)		
Chemistry 4800:	Molecular Pharmacology and Cancer	Fall 2010	
Chemistry 4802	Organometallics & Organic Spectroscopy	Fall 2017, 19, Spring 2020, 21	
Chemistry 4802:	Physical Organic Chemistry (Dougherty)	Spring 2005, Fall 07	
Chemistry 4960:	Organotransition Metal Chemistry (Hartwig)	Spring 2015	
Senior Capstone / Senior Synthesis Courses			
Chemistry 4985:	Senior Synthesis Seminar I	Fall 2005, 2012–16	
Chemistry 4990:	Senior Synthesis II: Independent Research	2004–present	
University Core			
UCOR 1810:	Chemistry of Food and Cooking	Spring 2015-19; Summer 2019	

#### **Non-Seattle University Courses**

Case Studies in Environment and Health   ETH-Zürich   co-lecturer	Spring 2012
Introduction to Environmental Organic Chemistry   ETH-Zürich   co-lecturer	Fall 2011
The Chemistry of Metalloenzymes   SF State University   guest lecturer	Fall 2003
Mechanistic Organic Chemistry UCSF CCB Graduate Program guest lecturer	Fall 2001, 02, 03
Biochemistry, Pharmacology & Cell Biology UCSF Medical School discussion leader	Fall 2002
MCAT Preparation: Organic Chemistry   Princeton Review   instructor	1995–96
Inorganic Chemistry I UC Berkeley graduate student instructor	Spring 1996
Organic Chemistry II UC Berkeley head graduate student instructor	Spring 1995
Organic Chemistry I UC Berkeley graduate student instructor	Fall 1994
Organic Chemistry 21 <sup>st</sup> Century Program Univ. Michigan discussion leader	1992–94
General Chemistry   21 <sup>st</sup> Century Program   Univ. Michigan   discussion leader	1991–92

#### **Current Undergraduate Lab Research Students**

Student Name

1. none

Dates in Lab Degree Expected

## Former Undergraduate Lab Research Students

Student Name	Dates in Lab	Current Position
40. Abigail Apray	6/21-9/21	B.S. expected 2022
39. Koryna Boudinot	4/18-6/20	unknown
38. Diana Dimarco	4/18-6/20	USGS
37. Lucy Klein	1/19-1/20	B.S expected 2020
36. Claire Cochran	3/19-8/19	B.S. expected 2021
35. Clara Park	1/18-6/19	unknown

# Former Undergraduate Literature Research Students

6. 5. 4. 3. 2.	<u>ident Name</u> Alfiya Yesuf Dylan Ng, B.S. Chelsea Childs, B.S. Daniel White, B.S. Jillian Stanley	<u>Dates in Lab</u> 1/20-6/20 9/15-present 9/12–6/14 9/12–6/14 9/12–12/12	Current Position unknown unknown Mr. Nice Guy   extraction technician unknown
	Steven Loskot, B.S.	9/12–12/12 9/12–12/12	unknown Caltech   graduate student

# HONORS AND AWARDS

Excellence in Teaching Award $\mid$ College of Science and Engineering $\mid$ SU	2018
Scholarship of Teaching and Learning Writing Retreat Fellow SU	2007, 2011
Cottrell College Science Award Research Corporation	2008
Carnegie Academy for the Scholarship of Teaching & Learning   Institute Scholar	2008
Academic Service Learning Fellow SU	2006

Major Research Instrumentation (MRI) Award NSF Cottrell College Science Award Research Corporation	2006 2005
American Cancer Society Postdoctoral Fellowship	2003-2003
Susan G. Komen Breast Cancer Foundation Postdoctoral Fellowship	2000–2001 2000
National Institutes of Health (F32) Postdoctoral Fellowship (declined) Bruce H. Mahan Teaching Award UC Berkeley	2000 1997
Outstanding Graduate Student Instructor Award UC Berkeley	1997
Outstanding Graduate Student Instructor Award UC Berkeley	1996
Outstanding Graduate Student Instructor Award UC Berkeley	1995
Smeaton Research Fellow   Univ. Michigan	1993
Phi Lambda Upsilon Honorary Chemical Society	1993
Golden Key National Honor Society	1992
Institute for the Humanities Fellow   Univ. Michigan	1992

# NEWS ARTICLES

- 11. *Science* | "Teaching safety skills, not just safety rules" | <u>http://www.sciencemag.org/careers/2016/05/teaching-safety-skills-not-just-safety-rules</u> | 5/23/2016
- 10. Chemical & Engineering News | "How educators are teaching students to assess risk in the lab: Safety experts and professors share their approaches for moving beyond simple lab safety rules to teach students new skills" | <u>http://cen.acs.org/articles/94/i16/educators-teaching-students-assessrisk.html</u> | 3/13/2016
- 9. *Science* | editor's highlight on teaching organic chemistry undergraduate lab courses | <u>http://www.sciencemagazinedigital.org/sciencemagazine/21\_november\_2014?pg=78#pg78</u> | 11/21/2014
- 8. SENCER | "Northwest Node Engages New Faculty in Civic Engagement Efforts" http://serc.carleton.edu/sencer/newsletters/71769.html | 5/2/2013
- 7. Inside Science News Service | "Safe and Scientifically Sound: A lack of data showing the best lab safety practices has researchers searching for answers." | <u>http://www.insidescience.org/current-affairs/safe-and-scientifically-sound</u> | 9/8/2011
- 6. *Science* | podcast highlight on teaching writing in organic chemistry undergraduate lab courses | 5/20/2011 | <u>http://www.sciencemag.org/content/332/6032/919/suppl/DC1</u>
- 5. Chemical & Engineering News | The Safety Zone blog: "Undergrad Lab Safety Teams" | 7/7/2010 | http://cenblog.org/the-safetyzone/2010/07/undergrad-laboratory-safety-teams/
- 4. Journal of Chemical Education 2010, 87, 764-765. Editorial highlight of Safety Teams
- 3. The Scientist 2010, 24, 4, 23-25. | "Over a Barrel"
- 2. The Teaching Professor | "Replacing Lab Reports" | 2/2/2010 | http://www.teachingprofessor.com/articles/improving-teaching/replacing-lab-reports
- 1. Chronicle of Higher Education | 3/27/2003 | "What's your philosophy on teaching, and does it matter?" | <u>http://chronicle.com/article/Whats-Your-Philosophy-on-T/45132/</u>