

# PETER J. ALAIMO, Ph.D.

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

Seattle University | Bannan 611 | 901 12<sup>th</sup> Avenue, Seattle, WA 98122, USA

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## EDUCATION

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

## APPOINTMENTS

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SEATTLE UNIVERSITY | Chemistry Department | Seattle, WA

<b>Department Chair</b>	2020–present
<b>Professor</b>	2015–present
<b>Associate Professor</b>	2010–2015
<b>Assistant Professor</b>	2004–10
<ul style="list-style-type: none"><li>• Research: Asymmetric catalysis, green &amp; environmental chemistry, bioorganic chemistry</li></ul>	

ETH – SWISS FEDERAL INSTITUTE OF TECHNOLOGY | Zürich, Switzerland

<b>Visiting Professor</b>   Institute of Biogeochemistry and Pollutant Dynamics	2011–12
<ul style="list-style-type: none"><li>• Prof. Kris P. McNeill research group, Environmental Chemistry</li><li>• Research: Kinetics of photodegradation of cysteine, cystine, and cysteine-containing peptides</li></ul>	

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

<b>Postdoctoral Associate</b>   Cellular and Molecular Pharmacology, School of Medicine	1999–04
<ul style="list-style-type: none"><li>• Prof. Kevan M. Shokat research group</li><li>• Research: Using chemical genetics to decode the roles of phosphatidylinositol 3-kinases in cellular signaling</li></ul>	

RAYCHEM CORPORATION | Menlo Park, CA

<b>Summer Research Intern</b>	1994
<ul style="list-style-type: none"><li>• Research: Synthesis and evaluation of carbon black-doped polymer blends</li></ul>	

## PUBLICATIONS

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

(H-index = 17; 8/24/2020)

20. 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](https://doi.org/10.1021/acs.est.6b05904) Structural transformation of MnO<sub>2</sub> during the oxidation of bisphenol A.
19. 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](https://doi.org/10.1021/acs.est.6b01291) Photochemical and non-photochemical transformations of cysteine with dissolved organic matter.
18. 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](https://doi.org/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. DOI: [10.1021/ed400510b](https://doi.org/10.1021/ed400510b) Aligning the undergraduate organic laboratory experience with professional work: The centrality of reliable and meaningful data.
  - News & Highlights:
    - *Science* **2014**, 346 (6212), 961. | editor's selection highlight
16. Meyer, A.H.; Dybala-Defratyka, A.; **Alaimo, P.J.**; Geronimo, I.; Sanchez, A.; Cramer, C.J.; Elsner, M. *Dalton Trans.* **2014**, 43, 12175-12186. DOI: [10.1039/C4DT00891J](https://doi.org/10.1039/C4DT00891J) Cytochrome P450-catalyzed dealkylation of atrazine by *Rhodococcus* sp. strain NI86/21 involves hydrogen atom transfer rather than single electron transfer.
  - Cover article
15. 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](https://doi.org/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](https://doi.org/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
    - *Journal of Chemical Education* **2010**, 87, 764-765 | editorial highlight
13. **Alaimo, P.J.**; Marshall, A.-L.; Andrews, D.M.; Langenhan, J.M. *Org. Synth.* **2010**, 87, 192-200. DOI: [10.1002/0471264229.os087.21](https://doi.org/10.1002/0471264229.os087.21) 1,3,5-Triacetylbenzene.
12. Marshall, A.-L.; **Alaimo, P.J.** *Chem. Eur. J.* **2010**, 16, 4970-4980. DOI: [10.1002/chem.200903028](https://doi.org/10.1002/chem.200903028). Useful products from complex starting materials: Common chemicals from biomass feedstocks.
  - News & Highlights:
    - [Top 20 most cited Reviews](#) of the past 20 years in *Chemistry—A European Journal*
    - *Hottest Articles in Green and Sustainable Chemistry* [selection](#) (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
10. **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](https://doi.org/10.1021/ol801911f) Sustainable synthetic methods: Domino construction of dihydropyridin-4-ones and  $\beta$ -amino esters in aqueous ethanol.
9. **Alaimo P.J.**; Knight, Z.A.; Shokat, K.M. *Bioorg. Med. Chem.* **2005**, 13, 2825-2836. DOI: [10.1016/j.bmc.2005.02.021](https://doi.org/10.1016/j.bmc.2005.02.021) Targeting the gatekeeper residue in phosphoinositide 3-kinases.
  - News & Highlights:
    - *Top 25 Hottest Articles* [selection](#) (Apr.–June 2005)

8. 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](https://doi.org/10.1016/j.bmc.2004.06.022) *Isoform-specific phosphoinositide 3-kinase inhibitors from an arylmorpholine scaffold.*
  - News & Highlights:
    - *Top 25 Hottest Articles selection* (July–Sept. 2004)
    - *Top 25 Hottest Articles selection* (Oct.–Dec. 2004)
7. 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](https://doi.org/10.1073/pnas.0636870100) *Inducible protein knockout reveals temporal requirement of CaMKII reactivation for memory consolidation in the brain.*
6. 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](https://doi.org/10.1146/annurev.cellbio.17.1.405) *Recent advances in chemical approaches to the study of biological systems.*
5. **Alaimo, P.J.**; Shogren-Knaak, M.A.; Shokat, K.M. *Curr. Opin. Chem. Biol.* **2001**, *5*, 360-367. DOI: [10.1016/S1367-5931\(00\)00215-5](https://doi.org/10.1016/S1367-5931(00)00215-5) *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: [10.1021/ed078p64](https://doi.org/10.1021/ed078p64) *Suggested modifications to a distillation-free solvent purification system.*
3. **Alaimo, P.J.**; Arndtsen, B.A.; Bergman, R.G. *Organometallics* **2000**, *19*, 2130-2143. DOI: [10.1021/om9910064](https://doi.org/10.1021/om9910064) *Alkylation of iridium via tandem carbon-hydrogen bond activation/decarbonylation of aldehydes: Access to complexes with tertiary and highly hindered metal-carbon bonds.*
2. **Alaimo, P.J.**; Bergman, R.G. *Organometallics* **1999**, *18*, 2707-2717. DOI: [10.1021/om990255p](https://doi.org/10.1021/om990255p) *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.*
1. **Alaimo, P.J.**; Arndtsen, B.A.; Bergman, R.G. *J. Am. Chem. Soc.* **1997**, *119*, 5269-5270. DOI: [10.1021/ja970245k](https://doi.org/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

2. 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) DOI: [10.1021/bk-2012-1121.ch002](https://doi.org/10.1021/bk-2012-1121.ch002)
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

(total at Seattle University = \$1,200,067)

8. 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.*
6. 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 Institutional grant   Author of \$150,000 portion for LC-QQQ	\$497,230
4.	Research Corporation   Cottrell College Science Award   2005–07 <i>Development of tandem indium(0)- / indium(III)-mediated heterocycle syntheses.</i>	\$41,218
3.	American Cancer Society   Postdoctoral Fellowship   2001–03 <i>Decoding phosphatidylinositol 3-kinase-mediated cellular signaling cascades.</i>	\$118,000
2.	National Institutes of Health NRSA   Postdoctoral Fellowship   2000 (declined) <i>Decoding phosphatidylinositol 3-kinase signaling pathways.</i>	\$109,164
1.	Susan G. Komen Breast Cancer Foundation   Postdoctoral Fellowship   2000 <i>Decoding phosphatidylinositol 3-kinase-mediated cellular signaling cascades.</i>	\$35,000

**Intramural Research Grants Funded**

(total = \$183,388)

14.	Undergraduate Student Research Award   Hoba Foundation   2019 <i>Enantioselective synthesis of dihydropyridinones for testing as anti-cancer agents</i>	\$13,094
13.	Undergraduate Student Research Award   Hoba Foundation   2018 <i>Enantioselective synthesis of dihydropyridinones for testing as anti-cancer agents</i>	\$19,599
12.	Summer Faculty Fellowship Program   ORSSP & Provost's Office   2017 <i>Initiating a New Line of Research in Food Chemistry: New Edible Fermentations in Collaboration with Chefs at Lark Restaurant and Applying to Fulbright for Sabbatical Funding</i>	\$7,100
11.	Summer Faculty Fellowship Program   ORSSP & Provost's Office   2013 <i>Photochemical oxidation of amino acid-based biomolecules in surface waters: Writing a research article and a research proposal on environmental chemistry.</i>	\$7,100
10.	Murdock College Science Research Program   2011 <i>Identifying the products of the microbial degradation of atrazine.</i>	\$12,860
9.	Assessment Grant   Provost's Office   2010 <i>Identifying, Assessing, and Strengthening Conceptual Threads in the Chemistry Department.</i>   Co-PIs: J. Langenhan, J. Loertscher, D. Latch, V. Minderhout	\$5,000
8.	Dean's Seed Funding   College of Science & Engineering   2010 <i>Monitoring pyrethroids in the Duwamish River.</i>   Co-PIs: L. Whitlow, D. Latch	\$8,000
7.	Supplemental Matching Funds   Provost's Office   2009 <i>Acquisition of an Agilent LC-QQQ.</i>   Co-PI: D. Latch	\$60,000
6.	Assessment Grant   Provost's Office   2009 <i>Assessing the effectiveness of a novel pedagogical approach for teaching professional-style scientific writing to undergraduates.</i>   Co-PIs: J. Langenhan, J. Loertscher, D. Latch	\$5,000
5.	Assessment Grant   Provost's Office   2008 <i>Assessing the effectiveness of a novel pedagogical approach for teaching professional-style scientific writing to undergraduates.</i>   Co-PIs: J. Langenhan, J. Loertscher, J. Bean, L. Nichols	\$5,700
4.	Summer Faculty Fellowship   College of Science & Engineering Dean's Office   2008 <i>An environmentally benign method for synthesizing N-heterocycles.</i>	\$7,014
3.	Summer Faculty Fellowship   College of Science & Engineering Dean's Office   2007 <i>Synthesis of biologically important heterocycles using sustainable methods.</i>	\$6,633
2.	Bannan Foundation Equipment Award   2006 <i>Acquisition of an organic solvent purification system.</i>   Co-PI: J. Langenhan	\$26,819
1.	Summer Faculty Fellowship   College of Science & Engineering Dean's Office   2005 <i>An environmentally benign method for synthesizing N-heterocycles</i>	\$6,265

## PRESENTATIONS (undergraduates are underlined&gt;

## Invited Seminars

	<u>Location</u>	<u>Venue</u>	<u>Seminar Date</u>
30.	UC Berkeley	Chemistry Department, SLAM Seminar Series	Sept. 14, 2015
29.	245 <sup>th</sup> ACS National Meeting	Undergraduate Research Award Symposium	Apr. 7, 2013
28.	ETH-Zürich, Switzerland	Environmental Chemistry, McNeill Group	July 31, 2012
27.	ETH-Zürich, Switzerland	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	Apr. 1999
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**, A. Sanchez, A.L. Sidor, M. Marcotte. *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
- 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
- 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
- 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
- P.J. Alaimo**, D.E. Latch, W.L. Whitlow, A. Frost, L. Youngquist. *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
- P.J. Alaimo**, D.E. Latch, W.L. Whitlow, J. Berude, A. Frost, L. Youngquist. *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
12. **P.J. Alaimo**, A.L. Marshall, C.E. Ottinger. *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  $\beta$ -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
  6. **P.J. Alaimo**, R.V. O'Brien III, A. Johnson, S. Slauson, J. O'Brien, E. Tyson, J. Chacon, L. Wallace, S. Connell. *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
  3. **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
7. D.E. Latch, W.L. Whitlow, **P.J. Alaimo**. *Analytical chemistry at Seattle University: Academic service-learning, interdisciplinary collaborations, and analysis of environmental contaminants*. Invited Seminar 1610-7 | Pittcon Analytical Chemistry Meeting | Orlando, FL | Mar. 2012
6. 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
5. W.L. Whitlow, D. Latch, **P.J. Alaimo**, A. Frost, J. Berude. *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
4. W.L. Whitlow, L. Youngquist, A. Frost, 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

3. J.A. Loertscher, **P.J. Alaimo**, J.M. Langenhan. *Novel pedagogical approach for teaching professional-style scientific writing to undergraduates*. Seminar | 21<sup>st</sup> Biennial Conference on Chemical Education | Bloomington, IN | July 2008
2. **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
1. 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

<b>Associate Editor</b>   <i>International Journal of Drug Discovery</i>	2010–2016
<b>Councilor for Chemistry Division</b>   <i>Council on Undergraduate Research</i>	2012–2015
<b>Area B West Nodal Leader</b>   <i>SENCER / SCEWestNet</i> (with D. Latch and L. Whitlow)	2011–2014
<b>Session Chair</b>   <i>43<sup>rd</sup> National Organic Chemistry Symposium, ACS</i>	June 2013
<b>External Scientific Consultant</b>	
University of Puget Sound, Department of Chemistry	2013–14
<b>Grant Proposal Reviewer</b>	
Murdock Trust   Murdock College Research Program for Natural Sciences	Mar. 2018
American Chemical Society   Petroleum Research Fund	Feb. 2017
American Chemical Society   Petroleum Research Fund	Feb. 2016
Murdock Trust   Murdock College Research Program for Natural Sciences	Oct. 2014
Wellcome Trust & Royal Society   Sir Henry Dale Fellowship Program   London, UK	Mar. 2014
Research Corporation   CCSA Program	Aug. 2013
Research Corporation   CCSA Program	June 2013
Technology Foundation STW   Partnership Program   Utrecht, The Netherlands	Dec. 2012
NSF   MRI Program   Washington, D.C.	May 2008
NSF   Phase I CCLI Program   Washington, D.C.	July 2008
NSF   Phase I CCLI Program   Washington, D.C.	July 2007
NSF   Phase I CCLI Program   Washington, D.C.	July 2006
Research Corporation   CCSA Program	Dec. 2006
<b>Journal Manuscript Reviewer</b>	2005–present
<i>ACS Chemical Biology</i>	<i>ChemSusChem</i>
<i>Angewandte Chemie</i>	<i>European Journal of Inorganic Chemistry</i>
<i>Bioorganic and Medicinal Chemistry</i>	<i>European Journal of Organic Chemistry</i>
<i>Chemical Reviews</i>	<i>International Journal of Drug Discovery</i>
<i>Chemistry – A European Journal</i>	<i>Journal of the American Chemical Society</i>

*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*  
 Chemistry 2501: *Organic Chemistry I Lab*  
 Chemistry 2510: *Organic Chemistry II*  
 Chemistry 2511: *Organic Chemistry II Lab*  
 Chemistry 2520: *Organic Chemistry III*  
 Chemistry 2521: *Organic Chemistry III Lab*

#### Advanced Elective Courses (textbook author)

Chemistry 4800: *Molecular Pharmacology and Cancer*  
 Chemistry 4802: *Organometallics & Organic Spectroscopy*  
 Chemistry 4802: *Physical Organic Chemistry* (Dougherty)  
 Chemistry 4960: *Organotransition Metal Chemistry* (Hartwig)

#### Senior Capstone / Senior Synthesis Courses

Chemistry 4985: *Senior Synthesis Seminar I*  
 Chemistry 4990: *Senior Synthesis II: Independent Research*

#### University Core

UCOR 1810: *Chemistry of Food and Cooking*

### 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

<u>Student Name</u>	<u>Dates in Lab</u>	<u>Degree Expected</u>
1. Abby Spray	1/21 – present	June 2022

### Former Undergraduate Lab Research Students

<u>Student Name</u>	<u>Dates in Lab</u>	<u>Current Position</u>
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
34. Olga Musinina	1/18-6/19	unknown



35. Kaley Dugger	4/18-6/19	UW Stroke Center at Harborview   Research Assistant
32. Tudi Le	1/17-7/18	American Medical Response   EMT
31. Sonja Danon, B.S.	9/16-6/17	FHCRC   research associate
30. Dylan Ng, B.S.	4/16-6/17	unknown
29. Sarina Jenkins, B.S.	2/15-6/17	UCSD Skaggs School of Pharmacy   graduate student
28. Kevalyn Bharadwaj, B.S.	2/15-6/16	unknown
27. Cecilia Johnson, B.S.	1/13-6/16	UW Seattle   graduate student
26. Stephan Leger, B.S.	1/14-6/15	unknown
25. Bayley Larsen, B.S.	2/15-6/15	unknown
24. Ariana Sanchez, B.S.	1/11-6/13	Stanford University   graduate student
23. Allison Sidor, B.S.	1/11-12/12	Rocky Vista University   osteopathic medical student
22. Marissa Marcotte, B.S.	1/11-12/12	Loyola University of Chicago   medical student
21. Paula Zapata, MPH	1/11-6/11	Molina Healthcare   Quality Improvement Specialist
20. Lindsey Youngquist, M.D.	9/09-6/11	Swedish Medical Center   physician
19. Mackenzie Clay, B.S.	6/09-9/11	UCLA chemical engineering   graduate student
18. David Andrews, B.S.	4/09-12/10	UNC Chapel Hill chemistry   graduate student
17. Ann Frost, B.A.	9/09-12/10	applying to graduate programs
16. Cara Southworth, B.S.	6/09-12/10	Anderson Hay and Grain
15. Amanda Marshall, B.S.	4/08-7/09	OUIWB   medical student
14. Colleen Ottinger, B.S.	1/08-12/08	Seattle Cancer Care Alliance   research coordinator
13. Corey Paulino, B.S.	9/06-11/08	Arizona School of Dentistry   dental student
12. MinhTu Banh, B.S.	10/06-6/08	Doctor of Optometry
11. Elizabeth Tyson, Ph.D.	3/06-6/08	UW Seattle   postdoctoral associate
10. Jack Chacon, B.S.	5/06-5/07	Waters Corp. Islands   regional service manager
9. Scott Davis, B.S.	1/07-5/07	US Army Officer   10 <sup>th</sup> Mountain Division
8. Sarah Connell, M.D.	1/06-6/06	Seattle Children's Hospital   pediatrician
7. Adam Johnson, B.S.	10/05-12/06	Webster Law   attorney
6. Lorien Wallace, D.O.	3/05-6/06	Kaiser Permanente   osteopathic physician
5. Bobby O'Brien, Ph.D.	3/05-7/06	Impossible Foods   scientist
4. Jamie Garcia, Ph.D.	10/04-7/06	IBM   polymer chemist
3. Sarah Slauson, B.S.	10/04-7/06	Bluebird Bio   senior associate scientist II
2. Scott Rizzi, B.S.	10/04-8/05	unknown
1. Veronica Large, B.S.	10/04-6/05	Puget Sound Naval Shipyard

### Former Undergraduate Literature Research Students

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

### HONORS AND AWARDS

Excellence in Teaching Award   College of Science and Engineering   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	2006
Cottrell College Science Award   Research Corporation	2005

American Cancer Society Postdoctoral Fellowship	2001–2004
Susan G. Komen Breast Cancer Foundation Postdoctoral Fellowship	2000–2001
National Institutes of Health (F32) Postdoctoral Fellowship (declined)	2000
Bruce H. Mahan Teaching Award   UC Berkeley	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 ABOUT US

11. *Science* | “Teaching safety skills, not just safety rules” | <http://www.sciencemag.org/careers/2016/05/teaching-safety-skills-not-just-safety-rules> | 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” | <http://cen.acs.org/articles/94/i16/educators-teaching-students-assess-risk.html> | 3/13/2016
9. *Science* | editor’s highlight on teaching organic chemistry undergraduate lab courses | [http://www.sciencemagazine.org/sciencemagazine/21\\_november\\_2014?pg=78#pg78](http://www.sciencemagazine.org/sciencemagazine/21_november_2014?pg=78#pg78) | 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.” | <http://www.insidescience.org/current-affairs/safe-and-scientifically-sound> | 9/8/2011
6. *Science* | podcast highlight on teaching writing in organic chemistry undergraduate lab courses | 5/20/2011 | <http://www.sciencemag.org/content/332/6032/919/suppl/DC1>
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?” | <http://chronicle.com/article/Whats-Your-Philosophy-on-T/45132/>