

Justin J. Wilson, PhD

Professor

Chemistry & Biochemistry

University of California Santa Barbara

URL: <http://wilson.chem.cornell.edu/>

Phone: 805-893-5586

Email: justinjwilson@ucsb.edu

Santa Barbara, CA 93106

I. EDUCATION AND TRAININGUniversity of California, Berkeley, CA
Research Advisor: Prof. Jeffrey R. Long

Chemistry B.S. 2008

Massachusetts Institute of Technology, Cambridge, MA
Research Advisor: Prof. Stephen J. Lippard

Inorganic Chemistry Ph.D. 2013

II. RESEARCH AND PROFESSIONAL EXPERIENCE

Professor, Chemistry & Biochemistry

Associate Professor, Chemistry and Chemical Biology

Associate Professor of Chemistry in Radiology

Field Faculty Member, Chemical and Biomolecular Engineering

Assistant Professor, Chemistry and Chemical Biology

UC Santa Barbara (2024–present)

Cornell University (2021–2024)

Weill Cornell Medical College (2022–2024)

Cornell University (2021–2024)

Cornell University (2015–2021)

Seaborg Institute Postdoctoral Fellow
Research Advisor: Dr. Eva R. Birnbaum

Los Alamos National Laboratory (2013–2015)

III. HONORS AND AWARDS**At Cornell:**

- 2022 *Journal of the American Chemical Society* selected for Early Career Investigator Virtual Issue
- 2022 ACS National Award Harry Gray Award for Creative Work in Inorganic Chemistry by a Young Investigator
- 2020 Stiefel Lecture Award, Metals in Biology Gordon Research Conference
- 2019 Plenary Lecturer at 9th International Symposium on Bioorganometallic Chemistry
- 2019 NIH NIBIB R21 Trailblazer Award
- 2019 ACS Jonathan L. Sessler Award for Emerging Leaders in Bioinorganic and Medicinal Inorganic Chemistry
- 2019 Cottrell Scholar Award
- 2018 National Science Foundation CAREER Award
- 2018 43rd International Conference on Coordination Chemistry Rising Star

Prior to Cornell:

- 2013 Seaborg Institute Postdoctoral Fellowship (LANL)
- 2013 Annual Davison Prize for Best Inorganic Thesis (MIT)

- 2012 David H. Koch Graduate Fellowship (MIT)
- 2012 Morse Travel Grant (MIT)
- 2011 Society of Biological Inorganic Chemistry Student Travel Grant (MIT)
- 2011 International Precious Metals Institute Metalor Technologies Graduate Student Award (MIT)
- 2009 Honorable Mention NSF Graduate Fellowship (MIT)
- 2008 Howard Hughes Medical Institute Teaching Assistant Fellow (MIT)
- 2008 Chemistry Departmental Citation (UC Berkeley)
- 2008 Graduation with Highest Honors (UC Berkeley)

IV. PEER-REVIEWED PUBLICATIONS

(* = corresponding author)

Independent Publications as a Principal Investigator:

73. Peng Xu, Sarpras Swain, Robyn J. Novorolsky, Esperanza Garcia, Zhouyang Huang, Terrance P. Snutch, **Justin J. Wilson**, George S. Robertson, Robert B. Renden*. "The mitochondrial calcium uniporter inhibitor Ru265 increases neuronal excitability and reduces neurotransmission via off-target effects." *Br. J. Pharmacol.* **2024**, doi: 10.1111/bph.16425
72. Thines Kanagasundaram, Olivia Murphy, Maha N. Haji, **Justin J. Wilson***. "The recovery and separation of lithium by using solvent extraction methods." *Coord. Chem. Rev.* **2024**, 509, 215727.
71. Aohan Hu, Kirsten E Martin, Dariusz Śmiłowicz, Eduardo Aluicio-Sarduy, Shelbie J Cingoranelli, Suzanne E Lapi, Jonathan W Engle, Eszter Boros*, **Justin J Wilson***. "Construction of the Bioconjugate Py-Macrodipa-PSMA and Its In Vivo Investigations with Large $^{132/135}\text{La}^{3+}$ and Small $^{47}\text{Sc}^{3+}$ Radiometal Ions." *Eur. J. Inorg. Chem.* **2023**, e202300457
 - Invited contribution to special issue, "Chemistry and Applications of the f-Block Elements"
70. Robyn J. Novorolsky, Gracious D. S. Kasheke, Antoine Hakim, Marianna Foldvari, Gabriel G. Dorighello, Israel Sekler, Vidyasagar Vuligonda, Martin E. Sanders, Robert B. Renden, **Justin J. Wilson** and George S. Robertson*. "Preserving and enhancing mitochondrial function after stroke to protect and repair the neurovascular unit: novel opportunities for nanoparticle-based drug delivery." *Front. Cell. Neurosci.* **2023**, 17, 1226630.
69. Nicholas P. Bigham and **Justin J. Wilson***. "Metal Coordination Complexes as Therapeutic Agents for Ischemia-Reperfusion Injury." *J. Am. Chem. Soc.* **2023**, 145, 9389–9409.
68. Zhouyang Huang and **Justin J. Wilson***. "Structure-Activity Relationships of Metal-Based Inhibitors of the Mitochondrial Calcium Uniporter." *ChemMedChem* **2023**, 18, e202300106.
 - Invited Concept Article

-
67. Travis R. Madaris, Manigandan Venkatesan, Soumya Maity, Miriam C. Stein, Neelanjan Vishnu, Mridula K. Venkateswaran, James G. Davis, Karthik Ramachandran, Sukanthathulase Uthayabalan, Cristel Allen, Ayodeji Osidele, Kristen Stanley, Nicholas P. Bigham, Terry M. Bakewell, Melanie Narkunan, Amy Le, Varsha Karanam, Kang Li, Aum Mhapankar, Luke Norton, Jean Ross, M. Imran Aslam, W. Brian Reeves, Brij B. Singh, Jeffrey Caplan, **Justin J. Wilson**, Peter B. Stathopoulos, Joseph A. Baur,* Muniswamy Madesh*. “Limiting Mrs2-dependent mitochondrial Mg²⁺ uptake induces metabolic programming in prolonged dietary stress.” *Cell Rep.* **2023**, *42*, 112155.
66. Nicholas P. Bigham and **Justin J. Wilson***. “Investigation of Cobalt(III) Cage Complexes as Inhibitors of the Mitochondrial Calcium Uniporter.” *Eur. J. Inorg. Chem.* **2023**, e202200735.
○ Invited contribution to special collection “Evolving with Inorganic Chemistry for 25 Years”
65. Zhouyang Huang, Samantha N. MacMillan, and **Justin J. Wilson***. “A Fluorogenic Inhibitor of the Mitochondrial Calcium Uniporter.” *Angew. Chem., Int. Ed.* **2023**, *62*, e202214920.
64. Zhouyang Huang, Jesse A. Spivey, Samantha N. MacMillan, and **Justin J. Wilson***. “A ferrocene-containing analogue of the MCU inhibitor Ru265 with increased cell permeability.” *Inorg. Chem. Front.* **2023**, *10*, 591–599.
○ Invited contribution to themed collection “Frontiers Emerging Investigators Series”
63. A. Paden King, Nicholas T. Gutsche, Natarajan Raju, Stanley Fayn, Kwamena E. Baidoo, Meghan M. Bell, Colleen S. Olkowski, Rolf E. Swenson, Frank I. Lin, Samira M. Sadowski, Stephen S. Adler, Nikki A. Thiele, **Justin J. Wilson**, Peter L. Choyke, and Freddy E. Escorcia*. “²²⁵Ac-Macropatate: A Novel Alpha Particle Peptide Receptor Radionuclide Therapy for Neuroendocrine Tumors.” *J. Nucl. Med.* **2023**, *64*, 549–554.
62. Joshua J. Woods, Robyn J. Novorolsky, Nicholas P. Bigham, George S. Robertson*, and **Justin J. Wilson***. “Dinuclear nitrido-bridged osmium complexes inhibit the mitochondrial calcium uniporter and protect cortical neurons against lethal oxygen–glucose deprivation.” *RSC Chem. Biol.*, **2023**, *4*, 84–93.
○ Invited contribution to themed collection “Chemical Biology of Metals”
61. Nicholas P. Bigham, Zhouyang Huang, Jesse Spivey, Joshua J. Woods, Samantha N. MacMillan, and **Justin J. Wilson***. “Carboxylate-Capped Analogues of Ru265 Are MCU Inhibitor Prodrugs.” *Inorg. Chem.* **2022**, *61*, 17299–17312.
60. Angelo Frei*, Alysha G. Elliott, Alex Kan, Hue Dinh, Stefan Bräse, Alice E. Bruce, Mitchell R. Bruce, Feng Chen, Dhingam Humaidy, Nicole Jung, A. Paden King, Peter G. Lye, Hanna K. Maliszewska, Ahmed M. Mansour, Dimitris Matiadis, María Paz Muñoz, Tsung-Yu Pai, Shyam Pokhrel, Peter J. Sadler, Marina Sagnou, Michelle Taylor, **Justin J. Wilson**, Dean Woods, Johannes Zuegg, Wieland Meyer, Amy K. Cain, Matthew A. Cooper, Mark A. T. Blaskovich*. “Metal Complexes as Antifungals? From a Crowd-Sourced Compound Library to the First *In Vivo* Experiments.” *JACS Au*, **2022**, *2*, 2277–2294.
○ ACS Editors’ Choice

-
59. Benjamin Neuditschko, A. Paden King, Zhouyang Huang, Lukas Janker, Andrea Bileck, Yasmin Borutzki, Sierra C. Marker, Christopher Gerner, **Justin J. Wilson***, Samuel M. Meier-Menches*. “An Anticancer Rhenium Tricarbonyl Targets Fe-S Cluster Biogenesis in Ovarian Cancer Cells.” *Angew. Chem. Int. Ed.* **2022**, *61*, e202209136.
○ Editor and reviewer recommended “Very Important Paper (VIP)”
58. Aohan Hu, Megan E. Simms, Vilmos Kertesz, **Justin J. Wilson***, Nikki A. Thiele*. “Chelating Rare-Earth Metals (Ln^{3+}) and $^{225}\text{Ac}^{3+}$ with the Dual-Size-Selective Macrocyclic Ligand Py₂-Macrodipa.” *Inorg. Chem.* **2022**, *61*, 12847–12855.
57. Brooke L. McNeil, Karthika J. Kadassery, Anthony W. McDonagh, Wen Zhou, Paul Schaffer, **Justin J. Wilson**, Caterina F. Ramogida*. “Evaluation of the Effect of Macrocyclic Ring Size on [^{203}Pb]Pb(II) Complex Stability in Pyridyl-Containing Chelators” *Inorg. Chem.* **2022**, *61*, 9638–9649.
56. Karthika J. Kadassery, A. Paden King, Stanley Fayn, Kwamena E. Baidoo, Samantha N. MacMillan, Freddy E. Escorcia*, **Justin J. Wilson***. “H₂BZmacropa-NCS: A Bifunctional Chelator for Actinium-225 Targeted Alpha Therapy” *Bioconjugate Chem.* **2022**, *33*, 1222–1231.
○ Highlighted in *EJNMMI Radiopharmacy & Chemistry*, **2023**, *8*, 6, “Highlight selection of radiochemistry and radiopharmacy developments by editorial board”
55. Po-Ting Shen, Steven H. Huang, Zhouyang Huang, **Justin J. Wilson**, Gennady Shvets*. “Probing the Drug Dynamics of Chemotherapeutics Using Metasurface-Enhanced Infrared Reflection Spectroscopy of Live Cells” *Cells* **2022**, *11*, 1600.
○ Invited contribution to Special Issue: “Cellular and Subcellular Analysis Using Vibrational Spectroscopy”
54. Aohan Hu, **Justin J. Wilson***. “Advancing Chelation Strategies for Large Metal Ions for Nuclear Medicine Applications” *Acc. Chem. Res.* **2022**, *55*, 904-915.
53. Joshua J. Woods, Ryan Unnerstall, Abbie Hasson, Diane S. Abou, Valery Radchenko, Daniel L. J. Thorek, **Justin J. Wilson***. “Stable Chelation of the Uranyl Ion by Acyclic Hexadentate Ligands: Potential Applications for ^{230}U Targeted α -Therapy” *Inorg. Chem.* **2022**, *61*, 3337–3350.
52. Joshua J. Woods, Jesse A. Spivey, **Justin J. Wilson***. A [^1H , ^{15}N] Heteronuclear Single Quantum Coherence NMR Study of the Solution Reactivity of the Ruthenium-Based Mitochondrial Calcium Uniporter Inhibitor Ru265.” *Eur. J. Inorg. Chem.* **2022**, e202100995.
○ Contribution to Special Collection: “Board Members”
○ Invited contribution to Special Collection: “EurJIC Talents”
51. Aohan Hu, Victoria Brown, Samantha N. MacMillan, Valery Radchenko, Hua Yang, Luke Wharton, Caterina F. Ramogida, **Justin J. Wilson***. “Chelating the Alpha Therapy Radionuclides $^{225}\text{Ac}^{3+}$ and $^{213}\text{Bi}^{3+}$ with 18-Membered Macrocyclic Ligands Macrodipa and Py-Macrodipa.” *Inorg. Chem.* **2022**, *61*, 801–806.

50. Hua Yang*, **Justin J. Wilson**, Chris Orvig, Yawen Li, D. Scott Wilbur, Caterina F. Ramogida, Valery Radchenko, Paul Schaffer. “Harnessing alpha-emitting radionuclides for therapy: radiolabeling method review.” *J. Nucl. Med.* **2022**, *63*, 5–13.
49. James M. Kelly, Alejandro Amor-Coarasa, Elizabeth Sweeney, **Justin J. Wilson**, Patrick W. Causey, John W. Babich*. “A suitable time point for quantifying the radiochemical purity of ^{225}Ac -labeled radiopharmaceuticals.” *EJNMMI Radiopharm. Chem.* **2021**, *6*, Article number: 38.
48. Chilaluck C. Konkankit, Sierra C. Marker, Nicholas P. Bigham, Darren S. Dale, Daniel Lorey II, **Justin J. Wilson***. “Development and Implementation of Nuclear Chemistry Experiments at the Undergraduate Level.” *J. Chem. Ed.* **2021**, *98*, 3831–3840.
47. Zhouyang Huang, A. Paden King, James Lovett, Barry Lai, Hugh H. Harris, **Justin J. Wilson***. “Photochemistry and *in vitro* anticancer activity of Pt(IV)Re(I) conjugates.” *Chem. Commun.* **2021**, *57*, 11189–11192.
○ Invited contribution to special issue: “2021 Emerging Investigators”
46. Aohan Hu, Eduardo Aluicio-Sarduy, Victoria Brown, Samantha N. MacMillan, Kaelyn V. Becker, Todd E. Barnhart, Valery Radchenko, Caterina F. Ramogida, Jonathan W. Engle, **Justin J. Wilson***. “Py-Macrodipa: A Janus Chelator Capable of Binding Medicinally Relevant Rare-Earth Radiometals of Disparate Sizes” *J. Am. Chem. Soc.* **2021**, *143*, 10429–10440.
45. Alexia G. Cosby, Joshua J. Woods, Patrick Nawrocki, Thomas J. Sørensen, **Justin J. Wilson**, Eszter Boros*. “Accessing lanthanide-based, *in situ* illuminated optical turn-on probes by modulation of the antenna triplet state energy” *Chem. Sci.* **2021**, *12*, 9442–9451.
44. David J. Fiszbein, Victoria Brown, Nikki A. Thiele, Joshua J. Woods, Luke Wharton, Samantha N. MacMillan, Valery Radchenko, Caterina F. Ramogida, **Justin J. Wilson***. “Tuning the Kinetic Inertness of Bi^{3+} Complexes: The Impact of Donor Atoms on Diaza-18-Crown-6 Ligands as Chelators for ^{213}Bi Targeted Alpha Therapy” *Inorg. Chem.* **2021**, *60*, 9199–9211.
○ First author (D. J. Fiszbein) is an undergraduate researcher.
43. Joshua J. Woods, Madison X. Rodriguez, Chen-Wei Tsai, Ming-Feng Tsai, **Justin J. Wilson***. “Cobalt amine complexes and Ru265 interact with the DIME region of the mitochondrial calcium uniporter” *Chem. Commun.* **2021**, *57*, 6161–6164.
42. Faith E. Chen, Ruth M. Mandel, Joshua J. Woods, Jung-Hoon Lee, Jaehwan Kim, Jesse H. Hsu, José J. Fuentes-Rivera, **Justin J. Wilson**, Phillip J. Milner*. “Biocompatible metal–organic frameworks for the storage and therapeutic delivery of hydrogen sulfide” *Chem. Sci.* **2021**, *12*, 7848–7857.
41. Zhouyang Huang, **Justin J. Wilson***. “Therapeutic and Diagnostic Applications of Multimetallic Rhenium(I) Tricarbonyl Complexes.” *Eur. J. Inorg. Chem.* **2021**, 1312–1324.
○ Invited Mini-Review to Special Issue “Metals in Medicine”
40. Diane S. Abou, Nikki A. Thiele, Nicholas T. Gutsche, Alexandria Villmer, Hanwen Zhang, Joshua J. Woods, Kwamena E. Baidoo, Freddy E. Escorcía, **Justin J. Wilson***, Daniel L. J. Thorek*. “Towards

- the Stable Chelation of Radium for Biomedical Applications with an 18-Membered Macrocyclic Ligand.” *Chem. Sci.* **2021**, *12*, 3733–3742.
- Part of the editor-curated special themed collection, “Most popular 2021 main group, inorganic and organometallic chemistry articles, 2021”
39. Angelo Frei, A. Paden King, Gabrielle J. Lowe, Amy K. Cain, Francesca L. Short, Hue Dinh, Alysha G. Elliott, Johannes Zuegg, **Justin J. Wilson**, Mark A. T. Blaskovich*. “Nontoxic Cobalt(III) Schiff Base Complexes with Broad-Spectrum Antifungal Activity.” *Chem. Eur. J.* **2021**, *27*, 2021–2029.
38. Joshua J. Woods, **Justin J. Wilson***. “A Dinuclear Persulfide-Bridged Ruthenium Compound is a Hypoxia-Selective Hydrogen Sulfide (H₂S) Donor.” *Angew. Chem. Int. Ed.* **2021**, *60*, 1588–1592.
- Editor and reviewer recommended “Very Important Paper (VIP)”
37. Marietjie Schutte-Smith, Sierra C. Marker, **Justin J. Wilson**, Hendrik G. Visser*. “Aqueation and Anation Kinetics of Rhenium(I) Dicarbonyl Complexes: Relation to Cell Toxicity and Bioavailability.” *Inorg. Chem.* **2020**, *59*, 15888–15897.
36. Nikki A. Thiele, David J. Fiszbein, Joshua J. Woods, **Justin J. Wilson***. “Tuning the Separation of Light Lanthanides Using a Reverse-Size Selective Aqueous Complexant.” *Inorg. Chem.* **2020**, *59*, 16522–16530.
35. Aohan Hu, Samantha N. MacMillan, **Justin J. Wilson***. “Macrocyclic Ligands with an Unprecedented Size-Selectivity Pattern for the Lanthanide Ions.” *J. Am. Chem. Soc.* **2020**, *142*, 13500–13506.
- Featured in *JACS* Early Career Investigator Virtual Issue as selected by an associate editor
34. Sierra C. Marker, A. Paden King, Samantha Granja, Brett Vaughn, Joshua J. Woods, Eszter Boros, **Justin J. Wilson***. “Exploring the In Vivo and In Vitro Anticancer Activity of Rhenium Isonitrile Complexes.” *Inorg. Chem.* **2020**, *59*, 10285–10303.
33. A. Paden King, **Justin J. Wilson***. “Endoplasmic reticulum stress: an arising target for metal-based anticancer agents.” *Chem. Soc. Rev.* **2020**, *49*, 8113–8136.
- Invited review to special issue: “2020 Emerging Investigator Issue”
32. Chilaluck C. Konkankit, Brett A. Vaughn, Zhouyang Huang, Eszter Boros, **Justin J. Wilson***. “Systematically altering the lipophilicity of rhenium(I) tricarbonyl anticancer agents to tune the rate at which they induce cell death.” *Dalton Trans.* **2020**, *49*, 16062–16066.
- Invited contribution to special issue: “New Talent: Americas”
31. Sierra C. Marker, A. Paden King, Robert V. Swanda, Brett Vaughn, Eszter Boros, Shu-Bing Qian, **Justin J. Wilson***. “Exploring Ovarian Cancer Cell Resistance to Rhenium Anticancer Complexes.” *Angew. Chem., Int. Ed.* **2020**, *59*, 13391–13400.
30. Chilaluck C. Konkankit, James Lovett, Hugh H. Harris, **Justin J. Wilson***. “X-Ray fluorescence microscopy reveals that rhenium(I) tricarbonyl isonitrile complexes remain intact in vitro.” *Chem. Commun.* **2020**, *56*, 6515–6518.
- Editor-designated “HOT Article”

-
29. Aohan Hu, Ivan Keresztes, Samantha N. MacMillan, Yang Yang, Erdong Ding, Warren R. Zipfel, Robert A. DiStasio, Jr., John W. Babich, **Justin J. Wilson***. “Oxyaapa: A Picolinate-Based Ligand with Five Oxygen Donors that Strongly Chelates Lanthanides.” *Inorg. Chem.* **2020**, *59*, 5116–5132.
28. Robyn J. Novorolsky, Matthew Nichols, Jong S. Kim, Evgeny V. Pavlov, Joshua J. Woods, **Justin J. Wilson**, George S. Robertson*. “The cell-permeable mitochondrial calcium uniporter inhibitor Ru265 preserves cortical neuron respiration after lethal oxygen glucose deprivation and reduces hypoxic/ischemic brain injury.” *J. Cereb. Blood Flow Metab.* **2020**, *40*, 1172–1181.
27. Angelo Frei, Johannes Zuegg, Alysha G Elliott, Murray V Baker, Stefan Braese, Christopher Brown, Feng Chen, Christopher G. Dowson, Gilles Dujardin, Nicole Jung, A. Paden King, Ahmed Moustafa Mansour, Massimiliano Massi, John Moat, Heba A. Mohamed, Anna Renfrew, Peter Rutledge, Peter J. Sadler, Matthew H. Todd, Charlotte E. Willans, **Justin J. Wilson**, Matthew A. Cooper, Mark Blaskovich*. “Metal Complexes as a Promising Source for New Antibiotics.” *Chem. Sci.* **2020**, *11*, 2627–2639.
26. Joshua J. Woods, James Lovett, Barry Lai, Hugh H. Harris, **Justin J. Wilson***. “Redox Stability Controls the Cellular Uptake and Activity of Ruthenium-Based Inhibitors of the Mitochondrial Calcium Uniporter (MCU).” *Angew. Chem. Int. Ed.* **2020**, *59*, 6482–6491.
25. Joshua J. Woods, **Justin J. Wilson***. “Inhibitors of the Mitochondrial Calcium Uniporter for the Treatment of Disease.” *Curr. Opin. Chem. Biol.* **2020**, *55*, 9–18.
- Invited contribution to special issue, “Bioinorganic Chemistry.”
24. Brendan L. Murphy, Sierra C. Marker, Valencia J. Lambert, Joshua J. Woods, Samantha N. MacMillan, **Justin J. Wilson***. “Synthesis, Characterization, and Biological Properties of Rhenium(I) Tricarbonyl Complexes Bearing Nitrogen-Donor Ligands.” *J. Organomet. Chem.* **2020**, *907*, 121064.
- Invited contribution to special issue, “International Symposium on Bioorganometallic Chemistry”
 - First author (B. L. Murphy) is an undergraduate researcher
23. Eduardo Aluicio-Sarduy, Nikki A. Thiele, Kirsten. E. Martin, Brett. A. Vaughn, Justin Devaraj, Aeli P. Olson, Todd E. Barnhart, **Justin J. Wilson***, Eszter Boros,* Jonathan W. Engle.* “Establishing Radiolanthanum Chemistry for Targeted Nuclear Medicine Applications.” *Chem. Eur. J.* **2020**, *26*, 1238–1242.
22. Nikki A. Thiele, Joshua J. Woods, **Justin J. Wilson***. “Implementing f-Block Metal Ions in Medicine: Tuning the Size Selectivity of Expanded Macrocycles.” *Inorg. Chem.* **2019**, *58*, 10483–10500.
- Invited Forum Article: Celebrating the Year of the Periodic Table: Emerging Investigators in Inorganic Chemistry
21. Sierra C. Marker, Chilaluck C. Konkankit, Mark C. Walsh, Daniel Lorey II, **Justin J. Wilson***. “Radioactive World: An Outreach Activity for Nuclear Chemistry.” *J. Chem. Ed.* **2019**, *96*, 2238–2246.
20. A. Paden King, Sierra C. Marker, Robert V. Swanda, Joshua J. Woods, Shu-Bing Qian, **Justin J. Wilson***. “A Rhenium Isonitrile Complex Induces Unfolded Protein Response-Mediated Apoptosis in Cancer Cells” *Chem.–Eur. J.* **2019**, *25*, 9206–9210.

19. Chilaluck C. Konkankit, A. Paden King, Kevin M. Knopf, Teresa L. Southard, **Justin J. Wilson***. “In Vivo Anticancer Activity of a Rhenium(I) Tricarbonyl Complex” *ACS Med. Chem. Lett.* **2019**, *10*, 822–827.
18. Chilaluck C. Konkankit, Brett Vaughn, Samantha N. MacMillan, Eszter Boros, **Justin J. Wilson***. “Combinatorial Synthesis to Identify a Potent, Necrosis-Inducing Rhenium Anticancer Agent.” *Inorg. Chem.* **2019**, *58*, 3895–3909.
17. A. Paden King, Hendryck A. Gellineau, Samantha N. MacMillan, **Justin J. Wilson***. “Physical Properties, Ligand Substitution Reactions, and Biological Activity of Co(III)-Schiff Base Complexes.” *Dalton Trans.* **2019**, *48*, 5987–6002.
 - Invited contribution to special issue, “Bioinspired reactivity and coordination chemistry.”
16. Joshua J. Woods, Neeharika Nemani, Santhanam Shanmughapriya, Akshay Kumar, MengQi Zhang, Sarah R. Nathan, Manfred Thomas, Edmund Carvalho, Karthik Ramachandran, Subramanya Srikantan, Peter B. Stathopoulos, **Justin J. Wilson***, and Muniswamy Madesh*. “A Selective and Cell-Permeable Mitochondrial Calcium Uniporter (MCU) Inhibitor Preserves Mitochondrial Bioenergetics after Hypoxia/Reoxygenation Injury.” *ACS Cent. Sci.* **2019**, *5*, 153–166.
15. James M. Kelly, Alejandro Amor-Coarasa, Shashikanth Ponnala, Anastasia Nikolopoulou, Clarence Williams, Jr., Nikki A. Thiele, David Schlyer, **Justin J. Wilson**, Stephen G. DiMagno, John W. Babich*. “A Single Dose of ²²⁵Ac-RPS-074 Induces a Complete Tumor Response in a LNCaP Xenograft Model.” *J. Nucl. Med.* **2019**, *60*, 649–655.
14. Pierre Lidon, Sierra C. Marker, **Justin J. Wilson**, Rebecca M. Williams, Warren R. Zipfel, Abraham D. Stroock*. “Enhanced Oxygen Solubility in Metastable Water under Tension” *Langmuir* **2018**, *34*, 12017–12024.
13. Nikki A. Thiele, Samantha N. MacMillan, **Justin J. Wilson***. “Rapid Dissolution of BaSO₄ by Macropa, an 18-Membered Macrocyclic with High Affinity for Ba²⁺” *J. Am. Chem. Soc.* **2018**, *140*, 17071–17078.
 - Highlighted in “ChemistryViews”
https://www.chemistryviews.org/details/news/11116648/Macrocyclic_Ligand_Dissolves_Barium_Sulfate_in_Pipelines.html
12. Joshua J. Woods, Jian Cao, Alexander R. Lippert, **Justin J. Wilson***. “Characterization and Biological Activity of a Hydrogen Sulfide-Releasing Red Light-Activated Ruthenium(II) Complex.” *J. Am. Chem. Soc.* **2018**, *140*, 12383–12387
 - Faculty of 1000 recommended article
11. Nikki A. Thiele, **Justin J. Wilson***. “Actinium-225 for Targeted Alpha Therapy: Coordination Chemistry and Current Chelation Approaches.” *Cancer Biother. Radiopharm.* **2018**, *33*, 336–348
 - Invited contribution for special issue, “Hunter College Radiometals Symposium Invited Speakers”
 - 3rd most read article from May 2017–May 2018
10. Chilaluck C. Konkankit, Sierra C. Marker, Kevin M. Knopf, **Justin J. Wilson***. “Anticancer Activity of Complexes of the Third Row Transition Metals, Rhenium, Osmium, and Iridium.” *Dalton Trans.* **2018**, *47*, 9934–9974.

-
- Invited “Perspective” article.
9. Sierra C. Marker, Samantha N. MacMillan, Warren R. Zipfel, Zhi Li, Peter C. Ford, **Justin J. Wilson***. “Photoactivated in Vitro Anticancer Activity of Rhenium(I) Tricarbonyl Complexes Bearing Water-Soluble Phosphines.” *Inorg. Chem.* **2018**, *57*, 1311-1331.
 8. Nikki A. Thiele, Victoria Brown, James M. Kelly, Alejandro Amor-Coarasa, Una Jermilova, Samantha N. MacMillan, Anastasia Nikolopoulou, Shashikanth Ponnala, Caterina F. Ramogida, Andrew K. H. Robertson, Cristina Rodríguez-Rodríguez, Paul Schaffer, Clarence Williams Jr., John W. Babich, Valery Radchenko*, **Justin J. Wilson***. “An Eighteen-Membered Macrocyclic Ligand for Actinium-225 Targeted Alpha Therapy.” *Angew. Chem. Int. Ed.* **2017**, *56*, 14712–14717.
 - Editor-designated “Hot Paper”
 - Featured in the *Cornell Chronicle*, November 14, 2017:
<https://news.cornell.edu/stories/2017/11/binding-molecule-could-improve-injected-radiation-therapy>
 - Faculty of 1000 recommended article.
 7. Julie Urgiles, Sarah R. Nathan, Samantha N. MacMillan, **Justin J. Wilson***. “Dinuclear Nitrido-Bridged Ruthenium Complexes Bearing Diimine Ligands.” *Dalton Trans.* **2017**, *46*, 14256-14263.
 - First author (J.U.) is an undergraduate researcher.
 6. Sarah R. Nathan, **Justin J. Wilson***. “Synthesis and Evaluation of a Ruthenium-based Mitochondrial Calcium Uptake Inhibitor.” *J. Vis. Exp.* **2017**, *128*, e56527.
 5. Kevin M. Knopf, Brendan L. Murphy, Samantha N. MacMillan, Jeremy M. Baskin, Martin P. Barr, Eszter Boros, **Justin J. Wilson***. “In Vitro Anticancer Activity and in Vivo Biodistribution of Rhenium(I) Tricarbonyl Aqua Complexes.” *J. Am. Chem. Soc.* **2017**, *139*, 14302-14314.
 4. Casey J. Adams, **Justin J. Wilson**, Eszter Boros*. “Multifunctional Desferrichrome Analogues as Versatile ⁸⁹Zr(IV) Chelators for ImmunoPET Probe Development.” *Mol. Pharmaceutics* **2017**, *14*, 2831-2842.
 3. Katia G. Samper, Sierra C. Marker, Pau Bayón, Samantha N. MacMillan, Ivan Keresztes, Óscar Palacios, **Justin J. Wilson***. “Anticancer Activity of Hydroxy- and Sulfonamide-Azobenzene Platinum(II) Complexes in Cisplatin-Resistant Ovarian Cancer Cells” *J. Inorg. Biochem.* **2017**, *174*, 102–110.
 - Invited contribution for a special issue, “8th Asian Biological Inorganic Chemistry Invited Speakers”
 2. A. Paden King, Hendryck A. Gellineau, Jung-Eun Ahn, Samantha N. MacMillan, **Justin J. Wilson***. “Bis(thiosemicarbazone) Complexes of Cobalt(III). Synthesis, Characterization, and Anticancer Potential” *Inorg. Chem.* **2017**, *56*, 6609–6623.
 1. Sarah R. Nathan, Nicholas W. Pino, Daniela M. Arduino, Fabiana Perocchi, Samantha N. MacMillan, **Justin J. Wilson***. “Synthetic Methods for the Preparation of a Functional Analogue of Ru360, a Potent Inhibitor of Mitochondrial Calcium Uptake” *Inorg. Chem.*, **2017**, *56(6)*, 3123–3126.

Publications from Postdoctoral and Graduate Studies:

24. Grégory Thiabaud, Valery Radchenko, **Justin J. Wilson**, Kevin D. John, Eva R. Birnbaum*, Jonathan L. Sessler*. “Rapid insertion of bismuth radioactive isotopes into texaphyrin in aqueous media.” *J. Porphyrins Phthalocyanines* **2017**, *21*, 882-886.
23. Valery Radchenko, Tara Mastren, Catherine A.L. Meyer, Alexander S. Ivanov, Vyacheslav S. Bryantsev, Roy Copping, David Denton, Jonathan W. Engle, Justin R. Griswold, Karen Murphy, **Justin J. Wilson**, Allison Owens, Lance Wyant, Eva R. Birnbaum, Jonathan Fitzsimmons, Dmitri Medvedev, Cathy S. Cutler, Leonard F. Mausner, Meiring F. Nortier, Kevin D. John, Saed Mirzadeh, Michael E. Fassbender*. “Radiometric Evaluation of Diglycolamide Resins for the Chromatographic Separation of Actinium from Fission Product Lanthanides.” *Talanta* **2017**, *175*, 318-324.
22. Maryline G. Ferrier, Enrique R. Batista, John M. Berg, Eva R. Birnbaum, Justin N. Cross, Jonathan W. Engle, Henry S. La Pierre, Stosh A. Kozimor*, Juan S. Lezama Pacheco, Benjamin W. Stein, S. Chantal E. Stieber, **Justin J. Wilson**. “Probing Actinium Coordination Chemistry Using Ac L₃-Edge XAFS and Molecular Dynamics-DFT” *Nature Commun.* **2016**, *7*, 12312.
○ Highlighted on *Nature* “New and Views”: *Nature*, **2016**, *536*, 404–405.
21. Valery Radchenko, Jonathan W. Engle, **Justin J. Wilson**, Joel R. Maassen, F. Meiring Nortier, Eva R. Birnbaum, Kevin D. John, Michael E. Fassbender*. “Formation Cross-Sections and Chromatographic Separation of Protactinium Isotopes Formed in Proton-Irradiated Thorium Metal” *Radiochimica Acta*, **2016**, *104(5)*, 291–304.
20. Valery Radchenko, Jonathan W. Engle, **Justin J. Wilson**, Joel R. Maassen, F. Meiring Nortier, Wayne A. Taylor, Eva R. Birnbaum, Lisa A. Hudston, Kevin D. John, Michael E. Fassbender*. “Application of Ion Exchange and Extraction Chromatography to the Separation of Actinium from Proton-Irradiated Thorium Metal for Analytical Purposes” *J. Chromatogr. A* **2015**, *1380*, 55-63.
19. **Justin J. Wilson***, Maryline Ferrier, Valery Radchenko, Joel R. Maassen, Jonathan W. Engle, Enrique R. Batista, Richard L. Martin, Francois M. Nortier, Michael E. Fassbender, Kevin D. John, Eva R. Birnbaum*. “Evaluation of Nitrogen-Rich Macrocyclic Ligands for the Chelation of Therapeutic Bismuth Radioisotopes” *Nucl. Med. Biol.* **2015**, *42(5)*, 428-438.
18. **Justin J. Wilson***, Eva R. Birnbaum*, Enrique R. Batista, Richard L. Martin, Kevin D. John. “Synthesis and Characterization of Nitrogen-Rich Macrocyclic Ligands and an Investigation of their Coordination Chemistry with Lanthanum(III)” *Inorg. Chem.* **2015**, *54(1)*, 97-109.
17. Timothy C. Johnstone, Sarah M. Alexander, **Justin J. Wilson**, Stephen J. Lippard*. “Oxidative Halogenation of Cisplatin and Carboplatin: Synthesis, Spectroscopy, and Crystal and Molecular Structures of Pt(IV) Prodrugs” *Dalton Trans.* **2014**, *44*, 119-129.
16. **Justin J. Wilson**, Stephen J. Lippard*. “Synthetic Methods for the Preparation of Platinum Anticancer Complexes” *Chem. Rev.* **2014**, *114(8)*, 4470-4495.
○ Invited article for special issue, “Bioinorganic Enzymology II”
15. Kogularamanan Suntharalingam, **Justin J. Wilson**, Wei Lin, Stephen J. Lippard*. “A Dual-Targeting, p53-Independent, Apoptosis-Inducing Platinum(II) Anticancer Complex, [Pt(BDI^{QQ})]Cl” *Metallomics*, **2014**, *6(3)*, 437-443.

-
- Referee-recommended “Hot Article”
14. Simon P. Wisnovsky, **Justin J. Wilson**, Robert J. Radford, Mark P. Pereira, Maria R. Chan, Rebecca R. Laposa, Stephen J. Lippard*, Shana O. Kelley*. “Targeting Mitochondrial DNA with a Platinum-Based Anticancer Agent” *Chem. Biol.* **2013**, *20(11)*, 1323-1328.
 - Joint first authorship.
 - Featured in *Chemical & Engineering News*, **2013**, *91(46)*, 26
 - Featured in *MIT News*, October 31, 2013.
 - Co-authored with mentored undergraduate student, Maria R. Chan.
 13. Timothy C. Johnstone, **Justin J. Wilson**, Stephen J. Lippard*. ”Monofunctional and Higher-Valent Platinum Anticancer Agents” *Inorg. Chem.* **2013**, *52(21)*, 12234-12249.
 - Contribution to *Inorganic Chemistry* Forum on “Metals in Medicine and Health”
 12. **Justin J. Wilson**, Stephen J. Lippard*. “Oxidative Reactivity and Cytotoxic Properties of a Platinum(II) Complex Prepared by Outer-Sphere Amide Bond Coupling” *Polyhedron* **2013**, *58*, 71-78.
 - Invited article for a special issue in memory of Prof. Michelle Millar
 11. Yang Li, Chan Myae So, **Justin J. Wilson**, Suan Tuang, Ulf-Peter Apfel, Stephen J. Lippard*. "Triptycene-Based, Carboxylate-Bridged Biomimetic Diiron(II) Complexes " *Eur. J. Inorg. Chem.* **2013**, *2013(12)*, 2011-2019.
 10. Ulf-Peter Apfel, Daniela Buccella, **Justin J. Wilson**, Stephen J. Lippard*. “Detection of Nitric Oxide and Nitroxyl with Benzoresorufin-Based Fluorescent Sensors” *Inorg. Chem.* **2013**, *52(6)*, 3285-3294.
 9. Jennifer M. Hope, **Justin J. Wilson**, Stephen J. Lippard*. “Photoluminescent DNA-Binding Properties and Cytotoxic Activity of a Platinum(II) Complex Bearing a Tetradentate β -Diketiminato Ligand” *Dalton Trans.* **2013**, *42(9)*, 3176-3180.
 - Referee-recommended “Hot article”
 - Invited article for special issue, “Bioinorganic chemistry”
 - Co-authored with mentored undergraduate student, Jennifer M. Hope
 8. Maksim Royzen, **Justin J. Wilson**, Stephen J. Lippard*. “Physical and Structural Properties of [Cu(BOT1)Cl]Cl, a Fluorescent Imaging Probe for HNO” *J. Inorg. Biochem.* **2013**, *118*, 162-170.
 - Invited article for special issue, “Bioinorganic Chemistry of HNO”
 7. **Justin J. Wilson**, Stephen J. Lippard*. “Acetate-Bridged Platinum(III) Complexes Derived from Cisplatin” *Inorg. Chem.* **2012**, *51(18)*, 9852-9864.
 6. Ga Young Park, **Justin J. Wilson**, Ying Song, Stephen J. Lippard*. "Phenanthriplatin, a Monofunctional DNA-Binding Platinum Anticancer Drug Candidate with Unusual Potency and Cellular Activity Profile” *Proc. Natl. Acad. Sci. USA* **2012**, *109(30)*, 11987-11992.
 - Featured in *MIT News*, July 11, 2012
 5. Yang Li, **Justin J. Wilson**, Loi H. Do, Ulf-Peter Apfel, Stephen J. Lippard*. “A C₂-Symmetric, Basic Fe(III) Carboxylate Complex Derived from a Novel Triptycene-Based Chelating Carboxylate Ligand” *Dalton Trans.* **2012**, *41(31)*, 9272-9275.

4. **Justin J. Wilson**, Stephen J. Lippard*. “In Vitro Anticancer Activity of *cis*-Diammineplatinum(II) Complexes with β -Diketonate Leaving Group Ligands” *J. Med. Chem.* **2012**, *55(11)*, 5326–5336.
3. **Justin J. Wilson**, Stephen J. Lippard*. “Modulation of Ligand Fluorescence by the Pt(II)/(IV) Redox Couple” *Inorg. Chim. Acta* **2012**, *389*, 77-84.
 - Invited article for special issue dedicated to Prof. Jon Zubieta
2. **Justin J. Wilson**, Stephen J. Lippard*. “Synthesis, Characterization, and Cytotoxicity of Platinum(IV) Carbamate Complexes” *Inorg. Chem.* **2011**, *50(7)*, 3103-3115.
1. **Justin J. Wilson**, Juliana Fedoce Lopes, Stephen J. Lippard*. “Synthesis and characterization of three Pt(II) complexes bearing fluorescent analogues of the di(2-pyridyl)methane ligand” *Inorg. Chem.* **2010**, *49(11)*, 5303-5315.

V. INVITED COMMENTARIES AND EDITORIALS

4. Michelle T. Ma*, Eszter Boros*, **Justin J. Wilson***. “The Inorganic Chemistry of Radiopharmaceuticals.” *Inorg. Chem.* **2023**, *62*, 20537–20538.
 - Introduction to the Forum Issue: “The Inorganic Chemistry of Radiopharmaceuticals,” co-edited with Profs. Michelle Ma and Eszter Boros.
3. **Justin J. Wilson*** and James M. Hodges*. “Periodic TableTalks: A Continuing Resource for Communicating Inorganic Chemistry in the Post-Pandemic Era.” *Inorg. Chem.* **2023**, *62*, 14135–14141.
 - Introduction to the Virtual Issue: “2022–2023 Periodic TableTalk Speakers”
2. **Justin J. Wilson*** and Timothy C. Johnstone*. “The role of metals in the next generation of anticancer therapeutics.” *Curr. Opin. Chem. Biol.* **2023**, *76*, 102363.
 - Introduction to Special Issue: “Next Generation Therapeutics 2023,” co-edited with Prof. Tim Johnstone.
1. Neelanjan Vishnu, **Justin J. Wilson***, Muniswamy Madesh*. “Emergence of repurposed drugs as modulators of MCU channel for clinical therapeutics.” *Cell Calcium*, **2021**, *99*, 102456.
 - Invited commentary on *Cell Rep.* **2021**, *35*, 109275.

VI. BOOK CHAPTERS AND SECTIONS

3. Aohan Hu, **Justin J. Wilson***. The Radiopharmaceutical Chemistry of Metallic Radionuclides. In *Radiopharmaceutical Therapy*; Bodei, L, Lewis, J. S, Zeglis, B. M., Eds.; Springer Nature: Cham, Switzerland, 2023, pp. 123–144. doi: 10.1007/978-3-031-39005-0_6
2. **Justin J. Wilson***. Leveraging the photophysical properties of rhenium(I) tricarbonyl complexes for biomedical applications. In *Advances in Inorganic Chemistry*; Ford, P. C., van Eldik, R., Eds.; Academic Press: 2022, Vol. 80, pp.1–33. doi: 10.1016/bs.adioch.2022.04.005

1. Joshua J. Woods, **Justin J. Wilson***. Bioinorganic Chemistry of Hydrogen Sulfide: Detection, Delivery, and Interactions with Metalloproteins. In *Encyclopedia of Inorganic and Bioinorganic Chemistry*; Scott, R. A., Ed.; John Wiley & Sons, Ltd: Chichester, U. K., 2021: doi: 10.1002/9781119951438.eibc2764

VII. PATENTS AND PATENT APPLICATIONS

At Cornell:

Provisional

1. Phillip J. Milner, Justin J. Wilson, Ruth J. Mandel, Joshua J. Woods, Faith E. Chen. "Metal-Organic Frameworks for the Storage and Delivery of Hydrogen Sulfide, Methods of Making and Uses of Same." *U. S. Provisional Patent Application No. 63/325,289*, Filing Date March 30, 2022.

Filed

1. Daniel Thorek, Diane Abou, Justin Wilson, Nikki Thiele. "Compositions and Methods for Radiotherapy using Chelated Radiotherapeutic Agents and Non-Target Tissue Blockade." *U.S. Patent Application Publication No. US 2022/0152228 A1*, Publication Date May 19, 2022.
2. Justin J. Wilson, Aohan Hu, Nikki Thiele. "Macrocycles and Complexes with Radionuclides useful in Targeted Radiotherapy of Cancer." *International Patent Application No. PCT/US22/31196*, Filing Date May 26, 2022.
3. Justin J. Wilson, Joshua J. Woods. "Complexes with Acyclic Chelators and their Use in Targeted Radiotherapy of Cancer." *International Patent Application No. PCT/US22/31157*, Filing Date May 26, 2022.
4. Karthika J. Kadassery, Justin J. Wilson. "Rigidified Macrocycles, Complexes with Radionuclides, and Use in Targeted Radiotherapy of Cancer." *International Patent Application No. PCT/US2022/31132*, Filing Date May 26, 2022.

Under Prosecution

1. A. Paden King, Sierra Marker, Shu-Bing Qian, Robert Swanda, Justin Wilson. "Rhenium Complexes and Methods of Use for Treating Cancer." *U.S. Patent Application Publication No. US 2021/0317151 A1*, Publication Date October 14, 2021.
2. Nikki Thiele, Justin Wilson. "Metal-Chelating Compositions and their Use in Methods of Removing or Inhibiting Barium Scale." *U.S. Patent Application Publication No. US 2021/0221715 A1*, Publication Date July 22, 2021.

Granted Patents

4. John W. Babich, Justin Wilson, Nikki Thiele, James Kelly, Shashikanth Ponnala. "Macrocyclic complexes of alpha-emitting radionuclides and their use in targeted radiotherapy of cancer." *Patent No US 11,279,698 B2*, Granted March 22, 2022.

3. Justin J. Wilson, Muniswamy Madesh, Sarah R. Nathan. "Ruthenium μ -nitrido Complexes and their Use Calcium Uptake Inhibitors." *Patent No. US 11,154,569 B2*, Granted October 26, 2021.
2. Justin J. Wilson, Kevin M. Knopf, Sierra Marker. "Rhenium complexes and methods of use for treating cancer." *Patent No. US 10,973,849 A1*, Granted April 13, 2021.
1. Kathleen M. Giacomini, Swati More, Sook Wah Yee, Ethan Geier, Justin J. Wilson. "Platinum Anticancer Agents." *Patent No. US 10,392,412 B2*, Granted August 27, 2019.

Prior to Cornell:

3. Justin J. Wilson, Eva R. Birnbaum, Kevin D. John, F. Meiring Nortier, Michael E. Fassbender, Valery Radchenko, Jonathan W. Engle. "Nitrogen-Rich Macrocyclic Ligands, Chelation Complexes Thereof, and Process for Selective Chelation of Radioactive Bismuth Ions with the Ligands." *U.S. Patent No. US10450336B2*, Granted October 22, 2019.
2. Stephen J. Lippard, Justin J. Wilson, Robert J. Radford, Maria R. Chan, Daniel Y. Zhang. "Compositions, Methods, and Kits Comprising Platinum Compounds Associated With a Ligand Comprising a Targeting Moiety." *U.S. Patent No. US9593139B2*, Granted March 14, 2017.
1. Stephen J. Lippard, Justin J. Wilson. "Platinum Compounds as Treatment for Cancers, and Related Methods, Kits, and Compositions." *U.S. Patent No US8729286B2*, Granted May 20, 2014.

VIII. PRESENTATIONS**Invited Talks:**

77. Gordon Research Conference on Metals in Medicine, Andover, NH, June 2024
76. Gordon Research Conference on Inorganic Chemistry, Newport, RI, June 2024
75. Chemical Biology Interface Training Program Seminar, Wayne State University, Detroit, MI, April 2024.
74. Molecular Biosciences Welch Emerging Leaders in Chemistry Seminar Series, UT Austin, Austin, TX, April 2024
73. Inorganic Chemistry Frontiers 10th Anniversary Symposium, Dalian, Liaoning, People's Republic of China, April 2024
72. Spring 2024 National ACS Meeting, Symposium on Rare Earth Element: Occurrences, Extraction Method Development, and Application, New Orleans, LA, March 2024
71. Chemistry Seminar Series, Michigan State University, East Lansing, MI, February 2024
70. 6th Symposium on Advanced Biological Inorganic Chemistry (SABIC), Kolkata, India, January 2024

-
69. Department of Chemistry Seminar Series, University of New Hampshire, Durham, NH, September 2023
 68. The Future of Radiation Physics in Medicine, Weill Cornell Medicine-Qatar Continuing Professional Development Webinar, Education City, Qatar, September 2023 (virtual).
 67. Fall 2023 National ACS Meeting, Symposium on Merging chemo- and biocatalytic reaction manifolds for green and sustainable chemistry, San Francisco, CA, August 2023
 66. 20th International Conference of Biological Inorganic Chemistry, Adelaide, Australia, August, 2023
 - Keynote Lecture
 65. Nuclear and Radiochemistry Summer School, Brookhaven National Laboratory, Brookhaven, NY, June 2023
 64. La Frontera 2023: Mitochondria in Health and Disease, UT Health San Antonio, San Antonio, TX, June 2023
 63. 8th Georgian Bay Conference on Bioinorganic Chemistry (CanBIC), Parry Sound, Ontario, May 2023
 62. Spring 2023 ACS National Meeting, Symposium in Honor of Justin Wilson, Recipient of the 2022 ACS National Harry Gray Award for Creative Work in Inorganic Chemistry by a Young Investigator, Indianapolis, IN, March 2023
 61. Society for Nuclear Medicine and Molecular Imaging Therapeutics Conferences, Washington, DC, November 2022
 60. Chemistry Seminar Series, Colgate University, Hamilton, NY, November 2022
 59. 2nd Metal Complexes for Biomedical Applications, Virtual Symposium Sponsored by Chemistry Europe, October 2022 (virtual).
 58. Soft Matter Discussions, Cornell University, Ithaca, NY, October 2022
 57. The 2nd International Forum on Medicinal Chemistry of Natural Active Ligand Metal Based Drugs, in Guangxi Normal University, Guilin, China, August 2022 (virtual)
 - Plenary Lecture
 56. Institute of Chemistry Seminar, Hebrew University of Jerusalem, Jerusalem, Israel, May 2022
 55. Chemistry Department Seminar, Technion Israel Institute of Technology, Haifa, Israel, May 2022
 54. Chemistry Department Seminar, University of Kentucky, Lexington, KY, April 2022
 53. Spring 2022 National ACS Meeting National Award Symposium, San Diego, CA, March, 2022
 52. 4th International Symposium on Photofunctional Chemistry of Complex Systems, Kona, HI, December 2021.

-
51. Inorganic Chemistry Seminar, University of Delaware, Newark, DE, September 2021 (virtual).
 50. Chemistry Departmental Seminar, Stony Brook University, Stony Brook, NY, September 2021.
 49. Fall 2021 Online Swiss Chemical Society Meeting, Virtual Presentation, September 2021 (virtual).
 48. Chemistry Seminar Series, Creighton University, Omaha, NE, September 2021.
 47. Jeonbuk National University International Online Symposium: Bioinorganic Frontiers for Catalysis and Medicine, Virtual Presentation, August 2021 (virtual).
 46. 104th Canadian Chemistry Conference and Exhibition, Virtual Presentation, August 2021 (virtual).
 45. Electronic Biological Inorganic Chemistry (eBIC) Meeting, Virtual Seminar, July 2021 (virtual).
 44. Chemistry Seminar Series, Washington University in St. Louis, St. Louis, MO, July 2021.
 43. Inorganic Seminar Series, UC Irvine, Irvine, CA, May 2021 (virtual).
 42. Chemistry Seminar Series, Colorado School of Mines, Golden, CO, April 2021 (virtual).
 41. Spring 2021 ACS National Meeting, The Jonathan L. Sessler Fellowship for Emerging Leaders in Bioinorganic and Medicinal Inorganic Chemistry: Symposium Honoring Justin J. Wilson and Eszter Boros, Virtual Seminar, April 2021 (virtual).
 40. Spring 2021 ACS National Meeting, Radiotherapeutics: From Isotope Production to Targeted Radiotherapy, Virtual Seminar, April 2021 (virtual).
 39. Chemistry Seminar Series, EPFL, Lausanne, Switzerland, December 2020 (virtual).
 38. Angular Momentum Virtual f-Element Seminar Series, November 2020 (virtual).
 37. Chemistry Seminar Series, University of Buffalo, Buffalo, NY, October 2020 (virtual).
 36. Chemistry Colloquia Series, Harvard University, Cambridge, MA, October 2020 (virtual).
 35. Inorganic-Electrochemistry Seminar, CalTech, Pasadena, CA, October 2020 (virtual).
 34. Inorganic Chemistry Seminar Series, UC San Diego, La Jolla, CA, October 2020 (virtual).
 33. Targeted Therapies Workshop, Oak Ridge National Laboratory, Oak Ridge, TN, September 2020 (virtual).
 32. Chemistry Seminar Series, Washington University in St. Louis, St. Louis, MO, February 2020.
 31. Chemistry Seminar Series, Clemson University, Clemson, SC, February 2020.

-
30. Inorganic Chemistry Seminar Series, University of Pennsylvania, Philadelphia, PA, February 2020.
 29. Chemistry Seminar Series, UC Davis, Davis, CA, January 2020.
 28. Metals in Biology Gordon Research Conference, Ventura, CA, January 2020.
 - Stiefel Lecture Award
 27. Chemistry Inorganic Seminar Series, University of Rochester, Rochester, NY, January 2020.
 26. Inorganic Seminar Series, Florida State University, Tallahassee, FL, December 2019.
 25. Chemistry Seminar Series, University of Florida, Gainesville, FL, December 2019.
 24. Chemistry and Biochemistry Colloquium, University of Arizona, Tucson, AZ, December, 2019.
 23. Inorganic Chemistry Seminar Series, Ohio State University, Columbus, OH, November 2019.
 22. Inorganic Chemistry Seminar Series, Purdue University, West Lafayette, IN, November 2019.
 21. Chemistry and Biochemistry Seminar Series, UC Santa Barbara, Santa Barbara, CA, November 2019.
 20. Inorganic/Materials Chemistry Seminar Series, UIUC, Urbana-Champaign, IL, November 2019.
 19. Chemistry of Life Processes Seminar Series, Northwestern University, Evanston, IL, November 2019.
 18. Inorganic Chemistry Seminar Series, UC Berkeley, Berkeley, CA, October 2019
 17. Department of Chemistry Seminar Series, New York University, New York, NY, October 2019.
 16. 2nd Annual Cornell Cancer Research Symposium, Ithaca, NY, October 2019.
 15. 9th International Symposium on Bioorganometallic Chemistry, York, United Kingdom, August 2019.
 - Plenary Lecture
 14. 25th Annual Cottrell Scholar Conference, Tucson, AZ, July 2019.
 13. Meeting on Nanoparticle Delivery Systems for Ruthenium-Based Therapeutics, Halifax, Nova Scotia, June 2019.
 12. Department of Chemistry and Biochemistry, University of California at Los Angeles, Los Angeles, CA, May 2019.
 11. 7th Georgian Bay Conference on Bioinorganic Chemistry (CanBIC), Parry Sound, Ontario, May 2019.
 10. 257th ACS National Meeting, Seaborg Award Symposium in Honor of Prof. Thomas Albrecht-Schmitt, Orlando, FL, March, 2019.
 9. Department of Chemistry, University of California at Santa Cruz, Santa Cruz, CA, January 2019

8. 43rd International Conference on Coordination Chemistry, Rising Star Symposium, Sendai, Japan, August 2018
7. Gordon Research Conference on Metals in Medicine, Andover, NH, June 2018
6. NCI Molecular Imaging Program, National Institutes of Health, Bethesda, MD, April 2018
5. Hunter College Symposium on Radiometals, New York, NY, November 2017
4. Department of Chemistry, SUNY Potsdam, Potsdam, NY, October 2017
3. 28th Rare Earth Research Conference, Ames, IA, June 2017
2. 6th Georgian Bay Conference on Bioinorganic Chemistry (CanBIC), Parry Sound, Ontario, May 2017
1. 8th Asian Biological Inorganic Chemistry Conference (AsBIC), Auckland, New Zealand, December 2016

Contributed Presentations:

11. 257th ACS National Meeting, Orlando, FL, March, 2019 (two talks)
10. 256th ACS National Meeting, Boston, MA, August 2018 (three talks)
9. Gordon Research Conference on Metals in Biology, Ventura, CA, January 2018 (poster)
8. 18th International Conference on Biological Inorganic Chemistry, Florianopolis, Brazil, August 2017 (talk)
7. Gordon Research Conference on Metals in Biology, Ventura, CA, January 2017 (poster)
6. Gordon Research Conference on Metals in Medicine, Andover, NH, June 2016 (poster)

Before Cornell:

5. 21st Annual Symposium on Radiopharmaceutical Sciences, Columbia, MO, May 2015 (poster)
4. Gordon Research Conference on Metals in Medicine, Andover, NH, June 2014 (poster)
3. 244th National ACS Meeting, Philadelphia, PA, August 2012 (talk)
2. 15th International Conference on Biological Inorganic Chemistry, Vancouver, British Columbia, August 2011 (talk)
1. 240th National ACS Meeting, Boston, MA, August 2010 (talk)

IX. CURRENT AND PAST RESEARCH SUPPORT**Current Support:**

- 1. DOE BES (DE-SC0021662, Renewal)** Period: 09/01/23–08/31/26 Award Amount: \$620,000
Title: Leveraging macrocyclic chelators for rare earth element separations
Role: Principal Investigator
- 2. NIH R01 (EB029259-01)** Period: 03/05/20–11/30/24 Award Amount: \$1,392,474
Title: Chelation strategies for s-, p-, and f-block radionuclides for targeted alpha therapy
Role: Principal Investigator
- 3. Arts & Sciences New Frontier Grant** Period: 07/01/22 – 06/30/24 Award Amount: \$190,312
Title: Lithium Seawater Extraction with Hybrid Molecular Receptor-Material Adsorbents
Role: Principal Investigator
- 4. NSF Continuing Grant (CHE-2203369)** Period: 07/01/22 – 06/30/24 Award Amount: \$450,000
Title: Ruthenium Coordination Complexes as Tools for Studying Biological Hydrogen Sulfide
Role: Principal Investigator
- 5. NSF SBIR Phase I (2304412)** Period: 08/01/23 – 07/31/24 Award Amount: \$78,000
Title: A clean, biological solution to sustainable energy's rare earth problem
Role: Subcontract collaborator

Completed Support:

- 1. DOD OCRP Pilot Award (W81XWH-17-1-0097)** Period: 03/20/17–03/19/20 Award Amount: \$391,856
Title: Multimodal Theranostic Anticancer Complexes of Rhenium to Circumvent Platinum Resistance in Relapsed Ovarian Cancer
Role: Principal Investigator
- 2. Cornell Technology Acceleration and Maturation Fund** Period: 01/01/19–12/31/19 Award Amount: \$50,000
Title: Exploring the In Vivo Therapeutic Activity of a Potent ER Stress-Inducing Rhenium Anticancer Agent
Role: Principal Investigator
- 3. WCMC CTSC Pilot Award** Period: 06/01/16–05/31/18 Award Amount: \$75,000
Title: Targeting Metastatic Prostate Cancer with Actinium-225
Role: Principal Investigator
Note: Funding provided by WCMC CTSC funded by NIH/NCATS UL1TR00457, PI: Imperato-McGinley
- 4. Cornell Intercampus Seed Grant** Period: 09/25/19–09/24/20 Award Amount: \$75,000
Title: Harnessing Coordination Chemistry for the Diagnosis and Treatment of Prostate Cancer
Role: Co-Principal Investigator with Prof John Babich at Weill Cornell Medicine; award split equally between labs.
- 5. Cottrell Scholar Award** Period: 07/01/19–12/31/22 Award Amount: \$100,000
Title: Capturing the Heavy Alkaline Earth Elements: Ligand Design to Sequester Radioactive Strontium, Barium, and Radium
Role: Principal Investigator
- 6. NIH R21 Trailblazer (EB027282-01A1)** Period: 07/01/19–12/31/22 Award Amount: \$619,180
Title: Expanding the Therapeutic Potential of the Alpha Emitter Radium-223
Role: Principal Investigator

- 7. NIH R01 (R01 NS117686-01)** Period: 08/01/20–05/31/23 Award Amount: \$23,056
Title: Activity-dependent energy homeostasis at the presynaptic terminal
Role: Sub-contract Co-Investigator
- 8. NSF CAREER (CHE-1750295)** Period: 07/01/18–06/30/23 Award Amount: \$565,384
Title: CAREER: A Toolkit to Modulate the Mitochondrial Calcium Uptake Machinery
Role: Principal Investigator
- 9. DOE BES (DE-SC0021662)** Period: 07/01/21–09/30/23 Award Amount: \$340,000
Title: Tuning the Ion Size Selectivity of Macrocyclic Aqueous Complexants for Use in Rare Earth Element Separations
Role: Principal Investigator

X. SERVICE

A. Service to the University

Institutional Service at Cornell University

- 2023–present College of Arts and Sciences, Nominating Committee
 2021–present College of Arts and Sciences, Educational Policy Committee
 2021 Learning Strategies Center Chemistry Lecturer Search Committee
 2019–present University, Radiation Safety Committee
 2019–2022 BRC Flow Cytometry Facility Faculty Advisory Board
 2019–present Chemical Biology Interface Executive Committee Member
 2019 Learning Strategies Center Chemistry Lecturer Search Committee

Departmental Service at Cornell University

- 2022–present Curriculum Committee
 2022 Department Chair Search Committee
 2020–present Safety Committee, Chair
 2016–2022 Student Awards Committee, Chair
 2016–present Computing Committee
 2016–2019 Graduate Student Admission Committee
 2019–present TATP Committee, Chair

B. Service to the Broader and Scientific Community

Journal Referee Duties

- 2021 *Inorganic Chemistry*, exceptional peer reviewer (doi: 10.1021/acs.inorgchem.1c02810)
 2020 *Inorganic Chemistry Frontiers* Outstanding Reviewer
 2020 *Inorganic Chemistry* Outstanding Reviewer (doi: 10.1021/acs.inorgchem.0c02699)
 2019 *Inorganic Chemistry Frontiers* Outstanding Reviewer
 2019 *Chemical Science* Exceptional Peer Reviewer
 2015–present Reviewed over 200 articles submitted to *J. Am. Chem. Soc.*, *Chem. Sci.*, *Inorg. Chem.*, *Chem. Commun.*, *Biochemistry*, *Dalton Trans*, *J. Inorg. Biochem.* and others.

Journal Editorial Duties

- 2023 Guest Editor, *Eur. J. Inorg. Chem.* Special Issue: “Chemistry and Applications of the f-Block Elements”
- 2023 Guest Editor, *Inorganic Chemistry* Forum issue on Inorganic Chemistry of Radiopharmaceuticals
- 2023–present Associate Editor, *Inorg. Chem Front.*
- 2023–present Member, Editorial Board, *Inorg. Chem.*
- 2022–present Member, Early Career Advisory Board, *Eur. J. Inorg. Chem.*
- 2022 Guest Editor, *Curr. Opin. Chem. Biol.*, Special Issue: “Next Generation Therapeutics”
- 2022 Guest Editor with Prof. Eszter Boros, *Analysis & Sensing*, Special Issue: “Metal-Based Sensing”

Proposal and Award Selection Referee Duties

- 2024 German Research Foundation Grant, mail-in reviewer
- 2024 European Research Council Consolidator Grant, mail-in reviewer
- 2024 ACS/DOE Nuclear Chemistry Summer School, reviewer
- 2024 US Department of Energy, mail-in reviewer
- 2024 NSERC Discovery Grant, mail-in reviewer
- 2023 Swiss National Science Foundation Grant, mail-in reviewer
- 2023 US Department of Energy, mail-in reviewer
- 2023 US National Science Foundation, panelist
- 2022 Novo Nordisk Foundation Synergy Project Grant Application of Denmark, reviewer
- 2022 New Frontiers in Research Fund Exploration Competition of Canada, reviewer
- 2022 New Frontiers in Research Fund Transformation Competition of Canada, reviewer
- 2022 Stanford Synchrotron Radiation Lightsource Beamtime Proposal, mail-in reviewer
- 2022 American Chemical Society National Award Selection Committee, chair
- 2022 US Department of Energy, mail-in reviewer
- 2022 ACS Petroleum Research Fund, mail-in reviewer
- 2022 US National Science Foundation, panelist
- 2021 Initiative Review Committee (IRC) Member, Accelerating Radiotherapeutics through Advanced Molecular Constructs for UT-Battelle’s Laboratory Directed Research and Development (LDRD) Proposal at Oak Ridge National Laboratory
- 2021 American Chemical Society National Award Selection Committee
- 2021 Agence Nationale de la Recherche of France, mail-in reviewer
- 2021 National Science Centre of Poland, mail-in reviewer
- 2021 US National Science Foundation, panelist
- 2021 US National Institutes of Health, *ad hoc* member of SBCA study section (February)
- 2020 National Fund for Scientific and Technological Research of Chile, mail-in reviewer
- 2020 Cornell Multi-Investigator Seed Grant Review Panel
- 2020 ACS Division of Inorganic Chemistry, Award Selection Committee
- 2020 American Chemical Society National Award Selection Committee
- 2020 US Department of Energy, mail-in reviewer
- 2020 US National Science Foundation, panelist
- 2019 Stanford Synchrotron Radiation Lightsource Beamtime Proposal, mail-in reviewer
- 2019 Research Corporation for Science Advancement, mail-in reviewer
- 2019 US Department of Energy, mail-in reviewer
- 2019 National Fund for Scientific & Technological Development of Chile, mail-in reviewer
- 2018 US Department of Energy, mail-in reviewer
- 2018 Cancer Research Trust of New Zealand, mail-in reviewer
- 2017 Innovation Technology Funding of Hong Kong, mail-in reviewer

-
- 2017 US Department of Energy, mail-in reviewer
 2017 US National Science Foundation, panelist

External Thesis Examiner Duties

- 2022 PhD Examiner, Indian Institute of Science, India, Subhadeep Paul, PI: Prof. Akhil Chakravarty
 2021 PhD Examiner, University of KwaZulu-Natal, South Africa, Reinner Omandi, PI: Prof. Ojwach
 2020 PhD Examiner, Simon Fraser University, Canada, Jessica Miller, PI: Prof. Timothy Storr
 2018 MSc Examiner, University of Capetown, South Africa, Dylan Giffard, PI: Prof. Greg Smith

Conference, Seminar, and Symposium Organization Including Upcoming

- March 2025 Co-Organizer Symposium on “Supramolecular Inorganic Chemistry: From Form to Function,”
 Spring 2025 National ACS Meeting, San Diego, CA, March 2025
 June 2024 Co-Organizer Symposium on “Coordination Chemistry in Biomedical Imaging and Therapy,”
 International Conference on Coordination Chemistry, Fort Collins, CO, July 2024.
 June 2023 Discussion Leader, Radionuclide Theranostics for the Management of Cancer Gordon Research
 Conference, July 2024, Newry, ME
 June 2022 Discussion Leader, Metals in Medicine Gordon Research Conference, June 2022, Andover, NH
 March 2022 Symposium Organizer, “Advances in Metallodrugs and Metallodiagnosics,” Spring 2022
 National ACS Meeting, San Diego, CA
 Dec. 2021 Symposium Organizer, “Innovative Uses of Metals in Medicine,” Pacificchem 2021, Virtual
 October 2019 Cornell Department of Chemistry and Chemical Biology Baker Symposium, Ithaca, NY
 June 2019 4th Western New York Inorganic Symposium, Rochester, NY
 June 2018 3rd Western New York Inorganic Symposium, Ithaca, NY
 June 2017 2nd Western New York Inorganic Symposium, Ithaca, NY
 April 2015 Cornell-Rochester Inorganic Meeting, Rochester, NY

Outreach

- 2024 Cornell Expanding Your Horizons Workshop Organizer
 2023 Cornell Expanding Your Horizons Workshop Organizer
 2022 Isotope Rummy Teaching with Howard University Public Charter School
 2021 Developed Video Activity for Expanding Your Horizons Workshop
 2020 Cornell Virtual STEM Teacher Professional Development
 2020 Developed Lab Activities Videos with the Cornell Center for Materials Research
 2019 Organized Cornell STEM Teacher Workshop
 2018 Organized Cornell STEM Teacher Workshop
 2017 Organized STEM Careers in K–12 Education Workshop
 2016–present Activity organizer for “Expanding Your Horizons” Workshop
 2016–2019 McNair Scholar Mentor
 2016–present “Radioactive World” Outreach Activity Development (published in *J. Chem. Ed.*)

Consultancies and Industrial Connections

- 2021–present Scientific Advisory Board Member, Ratio Therapeutics
 2018–2021 Scientific Advisory Board Member, Noria Therapeutics

Professional Organization Membership

- 2024–present Chair, Local Cornell ACS Section
 2023–2024 Chair, Bioinorganic Subdivision, ACS Division of Inorganic Chemistry Executive Committee
 2022–2023 Chair Elect, Local Cornell ACS Section

-
- 2022–2023 Chair Elect, Bioinorganic Subdivision, ACS Division of Inorganic Chemistry Executive Committee
- 2020–2022 Alpha Chi Sigma, Professional Chemistry Co-Ed Fraternity, Faculty Advisor
- 2013–present American Chemical Society, Nuclear Chemistry Division
- 2011–present Society of Biological Inorganic Chemistry
- 2009–present American Chemical Society, Inorganic Chemistry Division

XI. TEACHING

Courses Taught:

- **CHEM 2070: General Chemistry I**
Semesters Taught: Fall 2023
Level: Freshman
Typical Enrollment Number: 700–750
- **CHEM 2150: Honors General and Inorganic Chemistry**
Semesters Taught: Fall 2016, Fall 2017, Fall 2018
Level: Freshman
Typical Enrollment Number: 80–100
- **CHEM 4100: Inorganic Chemistry**
Semesters Taught: Spring 2019, Spring 2021
Level: Junior and Senior, Chemistry and Chemical Biology Major Required Course
Typical Enrollment Number: 50–80
- **CHEM 6060: Advanced Inorganic Chemistry II**
Semesters Taught: Spring 2016, Spring 2017, Spring 2018, Spring 2023
Level: Graduate and Senior Undergraduate
Typical Enrollment Number: 6–12
- **CHEM 6050: Advanced Inorganic Chemistry I**
Semesters Taught: Fall 2020, Fall 2021
Level: Graduate and Senior Undergraduate
Typical Enrollment Number: 15–30
- **AS 1102: Freshmen Advising Seminar**
Semesters Taught: Fall 2019, Fall 2023
Level: Freshmen Undergraduate
Typical Enrollment: 8
- Teaching Relief Semesters: Fall 2015 (first year), Fall 2019 (family), Spring 2020 (pre-tenure), Spring 2022 (sabbatical), Fall 2022 (family)

XII. RESEARCH ADVISEES

Current Group Members

Postdoctoral Researchers:

Thines Kanagasundaram	PhD in Inorganic Chemistry, Heidelberg University (Comba Group), appointed June 15, 2022
Yangyang Gao	PhD in Inorganic Chemistry, Xi'an Jiaotong University, appointed October 10, 2023
Grant Stec	PhD in Physical Chemistry, Harvard University (Mason Group), appointed on January 22, 2024

Graduate Students:

Nicholas Bigham	5 th year Metals in Medicine GRC, Poster Prize Award, 2022
Piyusha Lotlikar	3 rd year
Haipei Zou	3 rd year
Kevin Lee	3 rd year
Jacy Lieberum	1 st year
James Clark	1 st year
Yuanfeng (Brian) Zhang	Visiting graduate student from Hong Kong City University

Undergraduate Students:

Ethan Amoh (Summer 2023–present)	B.A. in Chemistry and Chemical Biology expected May 2026 CHAMPS Program
Valerie Chang (Summer 2022–present)	B.A. in Chemistry and Chemical Biology expected May 2025 Nexus Scholar Program
Thora McIsaac (Summer 2022–present)	B.A. in Chemistry and Chemical Biology expected May 2025

Former Group MembersPostdoctoral Researchers:

Todd Poe (2022–2023)	PhD in Inorganic Chemistry, Florida State University (Albrecht-Schönzart Group) <u>Current Position:</u> Postdoc Brookhaven National Lab
Anthony Sementilli (2021–2022)	PhD in Inorganic Chemistry, Emory University (Lynn Group) <u>Current Position:</u> Assistant Professor, Molloy University
Karthika Kadassery (2020 – 2021)	PhD in Inorganic Chemistry, University of Buffalo (Lacy Group)
Nikki Thiele (2016–2019)	PhD in Pharmaceutical Sciences, University of Florida (Sloan Group) 1 st Place Poster Prize, Hunter College Radiometals Symposium (2017) Trainee Scholarly Exchange Program, Cornell-Weill Cornell (2018) <u>Current Position:</u> Research Staff Scientist, Oak Ridge National Lab, TN

Graduate Students:

Sarah Nathan (2015-2017)	Graduated 2017 with PhD in Chemistry and Chemical Biology NSF Graduate Research Fellow (2013–2016) International Precious Metals Institute Student Award (2016) ACS Division of Inorganic Chemistry Travel Grant (2017)
--------------------------	--

	<u>Current Position:</u> Research Scientist II, Ecoelectro, Ithaca, NY
Kevin Knopf (2015–2018)	Received MS in 2017 in Chemistry and Chemical Biology <u>Current Position:</u> Process Chemist, Eurofins Scientific, Groton, CT
William Schumacher (2016–2018)	Received MS in 2018 in Chemistry and Chemical Biology <u>Current Position:</u> Scientist I, Sirigen Inc, La Jolla, CA
Jesse Spivey (2017–2019)	Received MS in 2019 in Chemistry and Chemical Biology <u>Current Position:</u> Graduate student in Collum Group at Cornell
A. Paden King (2015–2020)	Graduated 2020 with PhD in Chemistry and Chemical Biology Chemical Biology Interface Training Grant (2016–2019) Bauer Award (2019) <u>Current Position:</u> Research Associate in Radiology at UPenn
Sierra Marker (2015–2020)	Graduated 2020 with PhD in Chemistry and Chemical Biology ACS Division of Inorganic Chemistry Student Travel Award (2019) <u>Current Position:</u> Assistant Professor at Ursinus College
Chilaluck Konkankit (2017–2020)	Graduated 2020 with PhD in Chemistry and Chemical Biology Covestro Teaching Award (2018) <u>Current Position:</u> Postdoctoral Researcher at Cornell in the groups of Harold Scheraga and Shalom Rackovsky, Ithaca, NY
Joshua J. Wood (2016–2021)	Graduated 2021 with PhD in Chemical Engineering NSF Graduate Research Fellow (2016–2019) American Heart Association Predoctoral Fellow (2019–2021) <u>Current Position:</u> Staff Scientist at Lawrence Berkeley National Lab
Aohan Hu (2017 – 2022)	Graduated 2022 with PhD in Inorganic Chemistry ACS Division of Inorganic Chemistry Travel Grant (2022) Tunis T. Wentink Prize for Best Thesis (2022)
Tracky Huang (2018–2023)	Graduate in 2023 with PhD in Inorganic Chemistry ACS Division of Inorganic Chemistry Travel Grant (2023)
<u>Undergraduate Students:</u>	
Julie Urgiles (2015–2017)	B.A. Chemistry and Chemical Biology 2017 <u>Current Position:</u> Harvard/MIT MD/PhD Program
Jung-Eung (Greg) Ahn (2015–2016)	B.A. Chemistry and Chemical Biology 2016 <u>Current Position:</u> Medical School, University of Virginia
Nicholas Pino (2015 – 2016)	B.A. Chemistry and Chemical Biology 2016 <u>Current Position:</u> Graduate Student at University of Illinois Urbana-Champaign in Jefferson Chan Group

Brendan Murphy (2016–2018)	B.A. Chemistry and Chemical Biology 2018 <u>Current Position:</u> Graduate Student at Texas A&M
Hendryck Gellineau (2015–2019)	B.A. Chemistry and Chemical Biology 2018 <u>Current Position:</u> Northwestern MD/PhD Program
Liang Liang Feng (2015–2016)	B.A. Chemistry and Chemical Biology 2016
Valencia Lambert (2017)	2017 Summer CHAMPS student
Meg Gordon (2017–2019)	B.A. Chemistry and Chemical Biology 2020
William Schulden (2019–2020)	B.A. Chemistry and Chemical Biology 2021
Samantha Granja (2019–2020)	B.A. Chemistry and Chemical Biology 2022
Joshua Ward (2018–2019)	B.A. Chemistry and Chemical Biology 2021
David Fiszbein (2018–2021)	B.A. Chemistry and Chemical Biology 2021 Selected to attend Nuclear Chemistry Summer School, Summer 2019 Caldwell Prize, 2021 <u>Current Position:</u> Graduate Student at UC Berkeley
Kaitlyn Yeh (2020 – 2023)	B.A. Chemistry and Chemical Biology expected May 2023
Alexis Rooney (2021–2023)	B.A. in Chemistry and Chemical Biology expected May 2023