

Jessica C. Hsu

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CURRENT POSITION:

2026 – Present Assistant Professor, School of Health Sciences, Purdue University

EDUCATION:

2021 Ph.D. in Bioengineering, University of Pennsylvania
2013 B.S. in Nuclear Engineering, University of Illinois at Urbana-Champaign, *Highest Honors*

PROFESSIONAL EXPERIENCES:

2022 – 2025 Postdoctoral Fellow, Department of Radiology, University of Wisconsin-Madison
2021 – 2022 Postdoctoral Fellow, Department of Radiology, University of Pennsylvania
2015 – 2021 Graduate Researcher, Department of Bioengineering, University of Pennsylvania
2013 – 2015 Associate Design Engineer, Nuclear Fuels Department, Exelon Generation, Warrenville, IL
2011 – 2013 Undergraduate Researcher, College of Engineering, University of Illinois at Urbana-Champaign

FUNDING AWARDED:

2022 – 2024 UW-Madison Radiological Sciences Training Program (Grant No. NCI-T32CA009206)
Role: Postdoctoral Researcher (\$60,000 per year)
2021 – 2022 Brody Family Medical Trust Fund Postdoctoral Fellowship (Grant No. 20211722)
Role: Principal Investigator (\$82,000 per year)
2017 – 2020 National Science Foundation Graduate Research Fellowship (Grant No. DGE-1321851)
Role: Principal Investigator (\$46,000 per year)
2015 – 2017 National Science Foundation IGERT in Complex Scene Perception (Grant No. DGE-0966142)
Role: Graduate Researcher (\$30,000 per year)

TEACHING EXPERIENCES:

2017 – 2020 Graduate Teaching Assistant, BE 583: Molecular Imaging,
Department of Bioengineering, University of Pennsylvania
2010 – 2013 Undergraduate Teaching Assistant, CS 101: Intro to Computing
Department of Computer Science, University of Illinois at Urbana-Champaign

PUBLICATIONS:

Original research articles (*denotes co-first authors)

1. Huang W, Chao F, Li R, Yang Y, **Hsu JC**, DeLuca MC, Engle JW, Han X, Kang L, Cai W. Noninvasive evaluation of Trop2 expression using ⁶⁴Cu-NOTA-Trodelvy-F(ab')₂ in gastric and pancreatic cancer. *Mol Pharm*. 2025. doi: 10.1021/acs.molpharmaceut.5c01223.
2. Su W, Wang H, Zhao S, Wang T, **Hsu JC**, Ji X, Li S, Zuo C, Cai W, Ni D. Cerenkov radiation modulates the extracellular matrix for improved pancreatic cancer chemotherapy. *Cell Biomater*. 2025, 100221. doi: 10.1016/j.celbio.2025.100221.
3. Li X, Zhao Y, **Hsu JC**, Sarduy EA, Barnhart TE, Engle JW, Wei W, Hu S, Cai W. [⁴⁴Sc]Sc-CHX-A''-DTPA-RCCB6: a PET tracer for imaging CD70 expression across latency types of Burkitt lymphoma. *J Nucl Med*. 2025, 66(10):1589-1596. doi: 10.2967/jnumed.125.269991.

4. Huang W*, Chao F*, **Hsu JC***, Sun X, Barnhart TE, Engle JW, Han X, Kang L, Cai W. Noninvasive immunoPET imaging of PD-L1 expression in non-small cell lung cancer and bladder cancer using [⁸⁹Zr]Zr-DFO-Durvalumab. *Colloids Surf A: Physicochem Eng Asp.* 2025, 723:137332. doi: 10.1016/j.colsurfa.2025.137332.
5. Liu P, Zhou M, Luo Z, Hao L, **Hsu JC**, Cai W, Zhou W, Hu S. A ¹⁷⁷Lu-nucleotide coordination polymer-incorporated thermosensitive hydrogel with anti-inflammatory and chondroprotective capabilities for osteoarthritis treatment. *Biomaterials.* 2025, 317:123098. doi: 10.1016/j.biomaterials.2025.123098.
6. Huang W, Liu Y, Li R, Yang Y, **Hsu JC**, DeLuca MC, Engle JW, Wei Y, Kang L, Li L, Cai W. [⁶⁴Cu]Cu-NOTA-Ivonescimab: a novel PET tracer for imaging VEGF expression in colorectal carcinoma. *Biophys Rep.* 2025. doi: 10.52601/bpr.2025.250031.
7. Liu P, Hao L, **Hsu JC**, Zhou M, Luo Z, Peng Y, Cai W, Hu S. Biomineralized nanocomposite-integrated microneedle patch for combined brachytherapy and photothermal therapy in postoperative melanoma recurrence and infectious wound healing. *Adv Sci.* 2025, e2414468. doi: 10.1002/advs.202414468.
8. Huang W, Li L, Chao F, Yang Q, Mixdorf JC, Engle JW, **Hsu JC**, Kang L, Cai W. [⁶⁴Cu]Cu-NOTA-EV-F(ab')₂ enables same-day immuno-pet imaging of Nectin-4 in triple-negative breast and urothelial bladder cancers. *J Nucl Med.* 2025, 66(9):1365-1371. doi: 10.2967/jnumed.125.270132.
9. Mossburg KJ, Shepherd SJ, Barragan D, O NH, Berkow EK, Maidment PSN, Rosario Berrios DN, **Hsu JC**, Siedlik MJ, Yadavali S, Mitchell MJ, Issadore D, Cormode DP. Towards the clinical translation of a silver sulfide nanoparticle contrast agent: large scale production with a highly parallelized microfluidic chip. *Eur J Nucl Med Mol Imaging.* 2025, 52(3):1177-1188. doi: 10.1007/s00259-024-06967-5.
10. Huang W, Li L, Zhou Y, Yang Q, Mixdorf JC, Barnhart TE, **Hsu JC**, Saladin RJ, Liu C, Rosenkrans ZT, Engle JW, Gao J, Kang L, Cai W. Preclinical evaluation of zirconium-89 labeled anti-Trop2 antibody-drug conjugate (Trodelvy) for imaging in gastric cancer and triple-negative breast cancer. *Eur J Nucl Med Mol Imaging.* 2025. doi: 10.1007/s00259-025-07106-4.
11. Huang W, Sun X, Li X, **Hsu JC**, Qiu Y, DeLuca MC, Engle JW, Li L, Lu J, Wang T, Kang L, Cai W. Rapid and specific immunoPET imaging of Nectin-4 in gastric cancer and non-small cell lung cancer using [⁶⁴Cu]Cu-NOTA-EV-F(ab')₂. *Eur J Nucl Med Mol Imaging.* 2025. doi: 10.1007/s00259-025-07402-z.
12. Zhou J, Ji X, Wang H, **Hsu JC**, Hua C, Yang X, Liu Z, Guo H, Huang Y, Li Y, Cai W, Lin X, Ni D. Design of ultrasound-driven charge interference therapy for wound infection. *Nano Lett.* 2024, 24(26):7868-7878. doi: 10.1021/acs.nanolett.4c00930.
13. **Hsu JC***, Lau KC*, Barragan D, Mossburg KJ, Cormode DP, Maidment ADA. Influence of acquisition parameters on silver sulfide nanoparticle contrast in photon-counting digital mammography: a phantom study. *ACS Appl Nano Mater.* 2024, 7(5): 4805-4813. doi: 10.1021/acsanm.3c05431.
14. Tang Z, Yu F, **Hsu JC**, Shi J, Cai W. Soybean oil-derived lipids for efficient mRNA delivery. *Adv Mater.* 2024, 36(13):e2302901. doi: 10.1002/adma.202302901.
15. **Hsu JC**, Barragan D, Tward AE, Hajfathalian M, Amirshaghagh A, Mossburg KJ, Rosario-Berríos DN, Bouché M, Andrianov AK, Delikatny EJ, Cormode DP. A biodegradable "one-for-all" nanoparticle for multimodality imaging and enhanced photothermal treatment of breast cancer. *Adv Healthc Mater.* 2024, 13(8):e2303018. doi: 10.1002/adhm.202303018.
16. Yan J, Tang Z, Li Y, Wang H, **Hsu JC**, Shi M, Fu Z, Ji X, Cai W, Ni D, Qu J. Molybdenum nanodots for acute lung injury therapy. *ACS Nano.* 2023, 17(23):23872-23888. doi: 10.1021/acsnano.3c08147.
17. Dong YC, Nieves LM, **Hsu JC**, Kumar A, Bouché M, Krishnan U, Mossburg KJ, Saxena D, Uman S, Kambayashi T, Burdick JA, Kim MM, Dorsey JF, Cormode DP. Novel combination treatment for melanoma: FLASH radiotherapy and immunotherapy delivered by a radiopaque and radiation responsive hydrogel. *Chem Mater.* 2023, 35(22):9542-9551. doi: 10.1021/acs.chemmater.3c01390.
18. Hajfathalian M, de Vries CR, **Hsu JC**, Amirshaghagh A, Dong YC, Ren Z, Liu Y, Huang Y, Li Y, Knight SA, Jonnalagadda P, Zlitni A, Grice EA, Bollyky PL, Koo H, Cormode DP. Theranostic gold-in-gold cage nanoparticles enable photothermal ablation and photoacoustic imaging in biofilm-associated infection models. *J Clin Invest.* 2023, 133(21):e168485. doi: 10.1172/JCI168485.

19. Ji X, Zhu L, **Hsu JC**, Wang H, Zhou J, Wang Q, Li Y, Cai W, Ni D, Wu Z. Tungsten-based nanoparticles as contrast agents for liver tumor detection using dual-energy computed tomography. *Biomater Sci*. 2023, 11(24):7817-7825. doi: 10.1039/d3bm01068f.
20. Huang Y, Liu Y, Pandey NK, Shah S, Simon-Soro A, **Hsu JC**, Ren Z, Xiang Z, Kim D, Ito T, Oh MJ, Buckley C, Alawi F, Li Y, Smeets PJM, Boyer S, Zhao X, Joester D, Zero DT, Cormode DP, Koo H. Iron oxide nanozymes stabilize stannous fluoride for targeted biofilm killing and synergistic oral disease prevention. *Nat Commun*. 2023, 14(1):6087. doi: 10.1038/s41467-023-41687-8.
21. Rosenkrans ZT*, **Hsu JC***, Aluicio-Sarduy E, Barnhart TE, Engle JW, Cai W. Amplification of Cerenkov luminescence using semiconducting polymers for cancer theranostics. *Adv Funct Mater*. 2023, 33(33):2302777. doi: 10.1002/adfm.202302777.
22. Dong YC, Kumar A, Rosario-Berrios DN, Si-Mohamed S, **Hsu JC**, Nieves LM, Douek P, Noël PB, Cormode DP. Ytterbium nanoparticle contrast agents for conventional and spectral photon-counting CT and their applications for hydrogel imaging. *ACS Appl Mater Interfaces*. 2022, 14(34):39274-39284. doi: 10.1021/acsami.2c12354.
23. Nieves LM, Dong YC, Rosario-Berrios DN, Mossburg K, **Hsu JC**, Cramer GM, Busch TM, Maidment ADA, Cormode DP. Renally excretable silver telluride nanoparticles as contrast agents for X-ray imaging. *ACS Appl Mater Interfaces*. 2022, 14(30):34354-34364. doi: 10.1021/acsami.2c06190.
24. Kim J, Hong G, Mazaleuskaya L, **Hsu JC**, Rosario-Berrios DN, Grosser T, Cho-Park PF, Cormode DP. Ultrasmall antioxidant cerium oxide nanoparticles for regulation of acute inflammation. *ACS Appl Mater Interfaces*. 2021, 13(51):60852-60864. doi: 10.1021/acsami.1c16126.
25. **Hsu JC**, Du Y, Sengupta A, Dong YC, Mossburg KJ, Bouché M, Maidment ADA, Weljie AM, Cormode DP. Effect of nanoparticle synthetic conditions on ligand coating integrity and subsequent nano-biointeractions. *ACS Appl Mater Interfaces*. 2021, 13(49):58401-58410. doi: 10.1021/acsami.1c18941.
26. Bouché M, Dong YC, Sheikh S, Taing K, Saxena D, **Hsu JC**, Chen MH, Salinas RD, Song H, Burdick JA, Dorsey J, Cormode DP. Novel treatment for glioblastoma delivered by a radiation responsive and radiopaque hydrogel. *ACS Biomater Sci Eng*. 2021, 7(7):3209-3220. doi: 10.1021/acsbmaterials.1c00385.
27. Si-Mohamed SA, Sigovan M, **Hsu JC**, Tatard-Leitman V, Chalabreysse L, Naha PC, Garrivier T, Dessouky R, Carnaru M, Boussel L, Cormode DP, Douek PC. In vivo molecular K-edge imaging of atherosclerotic plaque using photon-counting CT. *Radiology*. 2021, 300(1):98-107. doi: 10.1148/radiol.2021203968.
28. Nieves LM, **Hsu JC**, Lau KC, Maidment ADA, Cormode DP. Silver telluride nanoparticles as biocompatible and enhanced contrast agents for X-ray imaging: an in vivo breast cancer screening study. *Nanoscale*. 2021, 13(1):163-174. doi: 10.1039/d0nr05489e.
29. Huang Y, Liu Y, Shah S, Kim D, Simon-Soro A, Ito T, Hajfathalian M, Li Y, **Hsu JC**, Nieves LM, Alawi F, Naha PC, Cormode DP, Koo H. Precision targeting of bacterial pathogen via bi-functional nanozyme activated by biofilm microenvironment. *Biomaterials*. 2021, 268:120581. doi: 10.1016/j.biomaterials.2020.120581.
30. Naha PC, **Hsu JC**, Kim J, Shah S, Bouché M, Si-Mohamed S, Rosario-Berrios DN, Douek P, Hajfathalian M, Yasini P, Singh S, Rosen MA, Morgan MA, Cormode DP. Dextran-coated cerium oxide nanoparticles: a computed tomography contrast agent for imaging the gastrointestinal tract and inflammatory bowel disease. *ACS Nano*. 2020, 14(8):10187-10197. doi: 10.1021/acsnano.0c03457.
31. Kim J, Silva AB, **Hsu JC**, Maidment PSN, Shapira N, Noël PB, Cormode DP. Radioprotective garment-inspired biodegradable polymetal nanoparticles for enhanced CT contrast production. *Chem Mater*. 2020, 32(1):381-391. doi: 10.1021/acs.chemmater.9b03931.
32. Dong YC, Hajfathalian M, Maidment PSN, **Hsu JC**, Naha PC, Si-Mohamed S, Breuilly M, Kim J, Chhour P, Douek P, Litt HI, Cormode DP. Effect of gold nanoparticle size on their properties as contrast agents for computed tomography. *Sci Rep*. 2019, 9(1):14912. doi: 10.1038/s41598-019-50332-8.
33. **Hsu JC**, Cruz ED, Lau KC, Bouché M, Kim J, Maidment ADA, Cormode DP. Renally excretable and size-tunable silver sulfide nanoparticles for dual-energy mammography or computed tomography. *Chem Mater*. 2019, 31(19):7845-7854. doi: 10.1021/acs.chemmater.9b01750.
34. Hajfathalian M, Amirshaghghi A, Naha PC, Chhour P, **Hsu JC**, Douglas K, Dong Y, Sehgal CM, Tsourkas A, Neretina

S, Cormode DP. Wulff in a cage gold nanoparticles as contrast agents for computed tomography and photoacoustic imaging. *Nanoscale*. 2018, 10(39):18749-18757. doi: 10.1039/c8nr05203d.

35. **Hsu JC**, Naha PC, Lau KC, Chhour P, Hastings R, Moon BF, Stein JM, Witschey WRT, McDonald ES, Maidment ADA, Cormode DP. An all-in-one nanoparticle (AION) contrast agent for breast cancer screening with DEM-CT-MRI-NIRF imaging. *Nanoscale*. 2018, 10(36):17236-17248. doi: 10.1039/c8nr03741h.
36. Morgan JIW, Vergilio GK, **Hsu JC**, Dubra A, Cooper RF. The reliability of cone density measurements in the presence of rods. *Transl Vis Sci Technol*. 2018, 7(3):21. doi: 10.1167/tvst.7.3.21.
37. Naha PC, Lau KC, **Hsu JC**, Hajfathalian M, Mian S, Chhour P, Uppuluri L, McDonald ES, Maidment AD, Cormode DP. Gold silver alloy nanoparticles (GSAN): an imaging probe for breast cancer screening with dual-energy mammography or computed tomography. *Nanoscale*. 2016, 8(28):13740-54. doi: 10.1039/c6nr02618d.
38. Cheheltani R, Ezzibdeh RM, Chhour P, Pulaparathi K, Kim J, Jurcova M, **Hsu JC**, Blundell C, Litt HI, Ferrari VA, Allcock HR, Sehgal CM, Cormode DP. Tunable, biodegradable gold nanoparticles as contrast agents for computed tomography and photoacoustic imaging. *Biomaterials*. 2016, 102:87-97. doi: 10.1016/j.biomaterials.2016.06.015.

Reviews (*denotes co-first authors)

1. Huang W*, **Hsu JC***, Li R*, Lan K, Wei Y, Cai W, Li H. PSMA PET-directed radiotherapy for prostate cancer: From precision planning to future innovations. *View*. 2025, 20250143. doi: 10.1002/VIW.20250143.
2. Liu Y*, Huang W*, **Hsu JC***, Sun Z, Cai W, Kang L. Targeting Claudin18.2 for cancer theranostics: from molecular imaging to precision therapy. *iScience*. 2025, 113491. doi: 10.1016/j.isci.2025.113491.
3. Huang W*, **Hsu JC***, Zhou J*, Kwon GS, Kang L, Hua C, Cai W. Stimuli-responsive nanomaterials for targeted drug delivery in inflammatory bowel disease: advances and emerging directions. *Matter*. 2025, 8(9):102249. doi: 10.1016/j.matt.2025.102249.
4. Huang W, Zhou J, Liu Y, Yang Y, Saladin RJ, **Hsu JC**, Cai W, Kang L. Advances in immunoPET/SPECT imaging: the role of Fab and F(ab')₂ fragments in theranostics. *Acta Pharm Sin B*. 2025, 15(8):3888-3924. doi: 10.1016/j.apsb.2025.05.030.
5. Liu P, Zhao Y, Peng Y, **Hsu JC**, Zhou M, Zhou W, Hu S, Cai W. Harnessing the power of nanoagents in acute kidney injury: a versatile platform for imaging and treatment. *Coord Chem Rev*. 2025, 533:216570. doi: 10.1016/j.ccr.2025.216570.
6. Liu Y, Huang W, Saladin RJ, **Hsu JC**, Cai W, Kang L. Trop2-targeted molecular imaging in solid tumors: current advances and future outlook. *Mol Pharm*. 2024, 21(12):5909-5928. doi: 10.1021/acs.molpharmaceut.4c00848.
7. Wang H*, **Hsu JC***, Song W*, Lan X, Cai W, Ni D. Nanorepair medicine for treatment of organ injury. *Natl Sci Rev*. 2024, 11(9):nwae280. doi: 10.1093/nsr/nwae280.
8. **Hsu JC***, Liu P*, Song Y*, Song W, Saladin RJ, Peng Y, Hu S, Lan X, Cai W. Lymphoid organ-targeted nanomaterials for immunomodulation of cancer, inflammation, and beyond. *Chem Soc Rev*. 2024, 53(15):7657-7680. doi: 10.1039/d4cs00421c.
9. Hu Q*, Zuo H*, **Hsu JC***, Zeng C, Tian Z, Sun Z, Cai W, Tang Z, Chen W. The emerging landscape for combating resistance associated with energy-based therapies via nanomedicine. *Adv Mater*. 2024, 36(5):e2308286. doi: 10.1002/adma.202308286.
10. Ghosh S, Lee SJ, **Hsu JC**, Chakraborty S, Chakravarty R, Cai W. Cancer brachytherapy at the nanoscale: an emerging paradigm. *Chem Biomed Imaging*. 2023, 2(1):4-26. doi: 10.1021/cbmi.3c00092.
11. Xu Y*, **Hsu JC***, Xu L, Chen W, Cai W, Wang K. Nanomedicine-based adjuvant therapy: a promising solution for lung cancer. *J Nanobiotechnology*. 2023, 21(1):211. doi: 10.1186/s12951-023-01958-4.
12. Yang Q, Huang W, **Hsu JC**, Song L, Sun X, Li C, Cai W, Kang L. CD146-targeted nuclear medicine imaging in cancer: state of the art. *View*. 2023, 4(5):20220085. doi: 10.1002/VIW.20220085.
13. Zhu T*, **Hsu JC***, Guo J, Chen W, Cai W, Wang K. Radionuclide-based theranostics – a promising strategy for lung cancer. *Eur J Nucl Med Mol Imaging*. 2023, 50(8):2353-2374. doi: 10.1007/s00259-023-06174-8.

14. **Hsu JC**, Tang Z, Eremina OE, Sofias AM, Lammers T, Lovell JF, Zavaleta C, Cai W, Cormode DP. Nanomaterial-based contrast agents. *Nat Rev Methods Primers*. 2023, 3:30. doi: 10.1038/s43586-023-00211-4.
15. Huang Y, **Hsu JC**, Koo H, Cormode DP. Repurposing ferumoxytol: Diagnostic and therapeutic applications of an FDA-approved nanoparticle. *Theranostics*. 2022, 12(2):796-816. doi: 10.7150/thno.67375.
16. Nieves LM, Mossburg K, **Hsu JC**, Maidment ADA, Cormode DP. Silver chalcogenide nanoparticles: a review of their biomedical applications. *Nanoscale*. 2021, 13(46):19306-19323. doi: 10.1039/d0nr03872e.
17. **Hsu JC**, Nieves LM, Betzer O, Sadan T, Noël PB, Popovtzer R, Cormode DP. Nanoparticle contrast agents for X-ray imaging applications. *Wiley Interdiscip Rev Nanomed Nanobiotechnol*. 2020, 12(6):e1642. doi: 10.1002/wnan.1642. (Featured on Advanced Science News)
18. Bouché M, **Hsu JC**, Dong YC, Kim J, Taing K, Cormode DP. Recent advances in molecular imaging with gold nanoparticles. *Bioconjug Chem*. 2020, 31(2):303-314. doi: 10.1021/acs.bioconjchem.9b00669.
19. Kim J, Chhour P, **Hsu JC**, Litt HI, Ferrari VA, Popovtzer R, Cormode DP. Use of nanoparticle contrast agents for cell tracking with computed tomography. *Bioconjug Chem*. 2017, 28(6):1581-1597. doi: 10.1021/acs.bioconjchem.7b00194.

Editorials

1. **Hsu JC**, Zhou J, Cai W. Metabolic reprogramming with ultrasound-responsive nanovesicles. *Nat Biomed Eng*. 2025, 1-3. doi: 10.1038/s41551-025-01460-2.
2. Zhao Y, **Hsu JC**, Hu S, Cai W. PET imaging of PD-L1 with a small molecule radiotracer. *Eur J Nucl Med Mol Imaging*. 2024, 51(6):1578-1581. doi: 10.1007/s00259-024-06663-4.
3. Song W, **Hsu JC**, Lan X, Cai W. Optical image-guided therapy of pancreatic cancer with an ultra-small bispecific protein. *Eur J Nucl Med Mol Imaging*. 2023, 50(6):1560-1563. doi: 10.1007/s00259-023-06186-4.
4. Li X, **Hsu JC**, Son MH, Ha LN, Cai W. Cancer photodynamic therapy with chlorin e6-loaded, goat milk-derived extracellular vesicles: [¹⁸F]FDG lights up the way. *Eur J Nucl Med Mol Imaging*. 2023, 50(2):247-250. doi: 10.1007/s00259-022-06031-0.

INVITED TALKS:

1. *Multimodal nanomaterials for disease imaging and therapy*. Graduate Seminar Series, Department of Biomedical Engineering, New Jersey Institute of Technology, Newark, May 2026.
2. *Multimodal nanomaterials for cancer imaging and therapy*. Preclinical Imaging Consortium, Department of Radiology, University of Pennsylvania, Philadelphia, April 2026.
3. *Advancing theranostics with nanoengineering approaches*. Graduate Seminar Series, School of Health Sciences, Purdue University, West Lafayette, January 2026.
4. *CT contrast agents: past, present and future*. World Molecular Imaging Congress, Prague, Czech Republic, September 2023.
5. *CT contrast agents: a focus on their physiochemical and biological properties*. American Association of Physicists in Medicine, Houston, July 2023.

HONORS AND AWARDS:

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| 2025 | WIMIN Research Scholar Award, World Molecular Imaging Congress |
| 2025 | Student Travel Award, World Molecular Imaging Congress |
| 2024 | WIMIN Research Scholar Award, World Molecular Imaging Congress |
| 2024 | Student Travel Award, World Molecular Imaging Congress |
| 2024 | Best Oral Presentation Award, Materials Research Society |
| 2023 | Student Travel Award, World Molecular Imaging Congress |
| 2023 | First Place Poster Prize, Society of Nuclear Medicine and Molecular Imaging |
| 2022 | Introduction to Academic Radiology for Scientist Program, Radiological Society of North America |
| 2022 | WIMIN Research Scholar Award, World Molecular Imaging Congress |
| 2022 | Student Travel Award, World Molecular Imaging Congress |

2022	Biomedical Postdoctoral Council Travel Award, University of Pennsylvania
2018	Best in Engineering Award, Women in Chemistry Pop Talks, University of Pennsylvania
2018	Best Poster Award, World Molecular Imaging Congress
2018	ACS Bioconjugate Chemistry Award, World Molecular Imaging Congress
2018	Student Travel Award, World Molecular Imaging Congress
2018	Student Travel Award Recognition, Society For Biomaterials
2018	Honorable Mention for Outstanding Abstract, Society For Biomaterials
2017 – 2019	GAPSA Research Travel Grant Award, University of Pennsylvania
2016	NSF Graduate Research Fellowship Program Honorable Mention
2012	National Academy for Nuclear Training Scholarship
2012	Roy A. Axford Undergraduate Scholarship, University of Illinois at Urbana-Champaign
2012	Alpha Nu Sigma National Honor Society of American Nuclear Society
2011 – 2013	Edmund J. James Scholar, University of Illinois at Urbana-Champaign
2010	Phi Tau Phi Scholastic Honor Society Scholarship
2010	Tau Beta Pi Engineering Honor Society
2009 – 2013	Dean's List, University of Illinois at Urbana-Champaign

PROFESSIONAL/COMMUNITY SERVICES:

Subcategory co-chair of New Chemistry for CT and X-ray, World Molecular Imaging Congress, 2026

Graduate admissions committee, Purdue University Interdisciplinary Life Science (PULSe) Program, 2025

Manuscript/Abstract Reviewer: Acta Biomaterialia, Carbohydrate Polymer, Chemical Society Reviews, Nature Nanotechnology, Nature Biomedical Engineering, European Journal of Nuclear Medicine and Molecular Imaging, Nano-Micro Letters, Nano Today, Bioactive Materials, RSC Advances, Chemical Engineering Journal, Journal of Colloid and Interface Science, Scientific Reports, Journal of Nanobiotechnology, Society of Nuclear Medicine and Molecular Imaging, European Molecular Imaging Meeting, World Molecular Imaging Congress

Guest Editor: Special collection (Translational research with nanomaterials, nanobodies, and protein scaffolds) of the European Journal of Nuclear Medicine and Molecular Imaging, Special issue (Advancements in bioactive nanomaterials for disease management) of Frontiers in Pharmacology

Session Moderator: Theranostic Applications in Oncology (World Molecular Imaging Congress, 2025), Bioresponsive Nanotheranostics (Materials Research Society, 2024), Radiological Sciences Training Program Symposium (UW-Madison, 2024)

PROFESSIONAL MEMBERSHIPS:

2022 – Present	Society of Nuclear Medicine and Molecular Imaging (SNMMI)
2019 – Present	Biomedical Engineering Society (BMES)
2018 – Present	Society for Biomaterials (SFB)
2016 – Present	World Molecular Imaging Society (WMIS)