

Krystle J. McLaughlin

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Chemistry Department
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Education

- 2011 Ph.D. University of Rochester, Biophysics
George V. Metzger Award for most outstanding biophysics PhD thesis, 2012
Elon Huntington Hooker Graduate Fellowship, University of Rochester, 2010
Etter Student Lecturer Award, American Crystallographic Association, 2010
William F. Neuman Award for most outstanding biophysics student, 2009
- 2008 M.S. University of Rochester, Biophysics
- 2006 B.A. with honors, Colgate University, Physics
Physics and Astronomy Department Founders Award 2006
Society of Physics Students National Leadership Award 2006

Employment

Academic Appointments

- 2017- present Assistant Professor, Chemistry, Vassar College
2014-2017 Professor of Practice, Biological Sciences, Lehigh University
2011-2014 SPIRE Postdoctoral Fellow, University of North Carolina at Chapel Hill

Visiting Academic Appointments

- 2013 Adjunct Lecturer, Biology, University of North Carolina at Pembroke

Grants, Fellowships, Honors, Awards

External Grants

- 2025-2028 National Science Foundation (NSF) Major Research Instrumentation (MRI) Track 1
(Pending) *“Acquisition of a CPAD X-ray Diffractometer for Chemical and Biochemical Research”*. PI: Joseph Tanski, Co-PI: Myles Drance, Co-PI: Krystle J. McLaughlin.
Requested: \$449,931 (*Submitted 11/24*)
- 2022-2025 Cottrell Scholar Award, Research Corporation for Science Advancement. *“Structural Basis for the Conjugative Spread of Antibiotic Resistance.”* Award ID No: 28277.
(Funded) \$100,000.

Data Collection Proposals

- 2024 National Center for CryoEM Access and Training (NCCAT) Award. *“Structural Investigation of Conjugative Protein Complexes.”* Award: Onsite 3-day Training, Grid Preparation and Screening (GPS) for 2 students and PI. Award ID: GUP3-KM240624.
- 2024-2026 Beamtime Award, Advanced Light Source at Lawrence Berkeley National Lab. *“Structural Investigation of Conjugative Protein Complexes”*. Award: Shift Allocations for 2 years, 2024-2026. Award ID: ALS-12994
- 2022-2024 Beamtime Award, Advanced Light Source at Lawrence Berkeley National Lab. *“Co-crystal Structures of Conjugative Proteins from Salmonella Typhimurium.”* Award: Shift Allocations for 2 years, 2022-2024. Award ID: ALS-12034

Internal Grants

2024	Asprey Center for Collaborative Approaches to Science- Keeping Current, Vassar College. Award to visit NCCAT for cryo-EM Training and Data Collection. \$501
2023	Asprey Center for Collaborative Approaches to Science- Keeping Current, Vassar College. Award to visit Brookhaven National Lab for cryo-EM Training. \$480
2018	Frances D. Fergusson Faculty Technology Exploration Fund, Vassar College. Award to integrate virtual reality software into biochemistry lab. \$2650
2018	Henry Grillo Science Fund, Vassar College. Award to integrate 3D printed protein model into class and to support student outreach projects. \$715
2018	Asprey Center for Collaborative Approaches to Science- Keeping Current, Vassar College. Award to attend Molecular Art & Animations Workshop. \$914
2017	Asprey Center for Collaborative Approaches to Science- Science Inquiry Module, Vassar College. Award to redesign biochemistry lab curriculum. \$5000
2017	Faculty Conversation Grant, Vassar College. Organized accountability writing group for Vassar first year and other pre-tenure faculty. \$600
2016	Summer Mountaintop Experience Research Grant, Lehigh University (Co-PI: Dr. Julie Miwa) "Exploring the Genetics of Behavioral Adaptation". \$31,500
2015	Equipment & Supplies Research Grant, Department of Biological Sciences, Lehigh University. \$12,000

Fellowships and Awards

2011-2014	Seeding Postdoctoral Innovators in Research and Education (SPIRE) Postdoctoral Fellowship (NIGMS K12-GM000678), University of North Carolina at Chapel Hill
2015	NeXXt Scholars Program Mentoring Fellow, New York Academy of Sciences
2013	Postdoctoral Leadership Award, University of North Carolina at Chapel Hill

Other Professional Activity

2022-present	Scientific Advisory Board for the National Institutes of Allergy and Infectious Disease Centers for Research on Structural Biology of Infectious Diseases
2022-present	RCSB PDB Training, Outreach, & Education Working Group
2022-present	Biochemistry Authentic Scientific Inquiry Lab (BASIL) Leadership Team
2023-2024	Chair, BioMacromolecules SIG- American Crystallographic Association
2022-2023	Chair-elect, BioMacromolecules SIG- American Crystallographic Association
2021-2023	Member, US National Committee for Crystallography (USNC/Cr)
2021-2022	Chair, Communications Committee- American Crystallographic Association
2019-2021	ACA Representative, Societies Consortium on Sexual Harassment in STEM
2017-2021	Chair, American Institute of Physics Committee on Under-Represented Minorities
2017-2020	Member, Communications Committee- American Crystallographic Association
2016-2017	Director, Pennsylvania DNA Day
2015-2017	Chair, Society of Physics Students Awards Committee 1
2015-2018	Secretary, BioMacromolecules SIG- American Crystallographic Association
2015-2020	Member, Steering Committee for the African Synchrotron Light Source
2014-2018	Session Chair, American Crystallographic Association Meeting
2014-2020	Review Editor, Frontiers in Molecular Biosciences- Structural Biology
2012-2014	Chair, UNC Chapel Hill Chemistry Department Postdoctoral Association
2012-2014	Chair, UNC Chapel Hill Minority Postdoc Alliance

Publications

Articles (peer reviewed) * Denotes Vassar student co-author; † Indicates equal contribution

15. Nguyen C.L.*, Tramell A.R.*, Norman J.O.*, Abendroth J., Barrett K.F., Craig J.K., Edwards T.E., Lorimer D.D., Van Voorhis W.C., McLaughlin K.J. “Structural Characterization of dUTPase from *L. pneumophila*”. *Acta Crystallogr F Struct Biol Commun.* 2025 Apr 1;81(Pt 4):155-162. PubMed PMID: 40091853; PubMed Central PMCID: PMC11970128.

14. Nguyen C.L.*, Fan W.* †, Fisher S.* †, Matthews K.* †, Norman J.O.*, Abendroth J., Barrett K.F., Craig J.K., Edwards T.E., Lorimer D.D., McLaughlin K.J. “Structures of *L. pneumophila* serogroup 1 peptide deformylase bound to Ni(II) and actinonin”. *Acta Crystallogr F Struct Biol Commun.* 2025 Apr 1;81(Pt 4):163-170. PubMed PMID: 40091854; PubMed Central PMCID: PMC11970127.

13. Schwartz L.A.*, Norman J.O.*, Hasan S.*, Adamek O.E.*, Dzuong E.*, Lowenstein J.C.*, Yost O.G.*, Sankaran B., McLaughlin K.J. “Carbohydrate Deacetylase Unique to Gut Microbe *Bacteroides* Reveals Atypical Structure”. *Biochemistry.* 2025 Jan 7;64(1):180-191. Pubmed PMID: 39663570

12. Anderson K.R., Cao W., Lee H.S., Crenshaw M.A., Palumbo T.B., Fisher-Perez E., DeGraaf A., Rogu P., Beatty M.A., Gracias G.M., Pisapati A.V., Hoffman K., McLaughlin K.J., Hupbach A., Im W., Zhang X.F., Miwa J.M. “A novel anxiety-associated SNP identified in LYNX2 (LYPD1) is associated with decreased protein binding to nicotinic acetylcholine receptors”. *Frontiers in Behavioral Neuroscience.* 2024 Dec 23;18:1347543. Pubmed PMID: 3976361

11. Ran X.* †, Parikh P.* †, Abendroth J., Arakaki T.L., Clifton M.C., Edwards T.E., Lorimer D.D., Mayclin S., Staker B.L., Myler P., McLaughlin K.J. “Structural and functional characterization of FabG4 from *Mycobacterium smegmatis*”. *Acta Crystallogr F Struct Biol Commun.* 2024;80(Pt 4):82-91. PubMed PMID: 38656226

10. Sarosh A., Kwong S.M., Jensen S.O., Northern F.*, Walton W.G., Eakes T.C., Redinbo M.R., Firth N., McLaughlin K.J. “pSK41/pGO1-family conjugative plasmids of *Staphylococcus aureus* encode a cryptic repressor of replication”. *Plasmid.* 2023;128:102708. PubMed PMID: 37967733.

9. Moorefield J.*, Konuk Y.*, Norman J.O.*, Abendroth J., Edwards T.E., Lorimer D.D., Mayclin S.J., Staker B.L., Craig J.K., Barrett K.F., Barrett L.K., Van Voorhis W.C., Myler P.J., McLaughlin K.J. “Characterization of a family I inorganic pyrophosphatase from *Legionella pneumophila* Philadelphia 1”. *Acta Crystallogr F Struct Biol Commun.* 2023; 79(Pt 10):257-266. PubMed PMID: 37728609.

8. Rodarte J.V.*, Abendroth J., Edwards T.E., Lorimer D.D., Staker B.L., Zhang S., Myler P.J., McLaughlin K.J. “Crystal structure of acetoacetyl-CoA reductase from *Rickettsia felis*.” *Acta Crystallogr F Struct Biol Commun.* 2021; 77(Pt 2):54-60. PubMed PMID: 33620038

7. McLaughlin K.J. “Developing a macromolecular crystallography driven CURE.” *Struct Dyn.*, 2021; 8(2):020406. PubMed PMID: 33834085

6. McLaughlin K.J. “Understanding Structure: A Computer Based Macromolecular Biochemistry Laboratory.” *J. Chem. Educ.*, 2017, 94 (7), pp 903–906

5. Agrawal A., McLaughlin K.J., Jenkins J.L., Kielkopf C.L. “A Structure-Guided U2AF65 Variant Improves Recognition and Splicing of a Defective pre-mRNA.” *Proc Natl Acad Sci U S A.*, 2014, 111(49):17420-5. PubMed PMID: 25422459

4. McLaughlin K.J., Nash R.P., Redinbo M.R. “Unique Helicase Determinants in the essential conjugative factor Tral from *Salmonella typhimurium* plasmid pCU1.” *J Bacteriol.*, 2014, 196(17):3082-90. PubMed PMID: 24936053

3. McLaughlin K.J., Jenkins J.L., Kielkopf C.L. "Large Favorable Enthalpy Changes Drive Specific RNA Recognition by RNA Recognition Motif Proteins." *Biochemistry*, 2011, 50(9):1429-31. PubMed PMID: 21261285

2. McLaughlin K.J., Strain-Damerell, C.M., Xie, K., Brekasis, D., Soares, A.S., Paget, M.S. and Kielkopf, C.L. "Structural Basis for NADH/NAD⁺ Redox Sensing by a Rex-Family Repressor." *Molecular Cell*, 2010, 38(4):563-75. PubMed PMID: 20513431

1. Buboltz JT, Bwalya C, Williams K, Schutzer M. "High-resolution mapping of phase behavior in a ternary lipid mixture: do lipid-raft phase boundaries depend on the sample preparation procedure?" *Langmuir*, 2007, 23: 1968-71. PubMed PMID: 17949025

Articles Under Review

Other Publications

McLaughlin K.J. "Education Corner: Lysozyme, Models and the PDB: Helping Students Explore Structure." RCSB PDB Newsletter, Issue 70, July 2016.

Williams K. "Commentary: Putting a new face on physics." *Symmetry* 2008, 5(1), 3.

Conference Papers, Lectures, Panels

Lectures (Invited Talks)

2023	"Investigating an Essential Complex in Conjugative Plasmid Transfer", MIT
2023	"Structural Insights Into Conjugative Antibiotic Resistance Transfer", Haverford College
2023	"Structural Basis of Conjugative Antibiotic Resistance Transfer", Lewis and Clark College
2022	"Structural Insights Into Conjugative Antibiotic Resistance Transfer", Fordham University
2022	"Studying Conjugative Antibiotic Transfer through Structure", Seattle University
2022	"Exploring the Structural Basis of Conjugative Antibiotic Transfer", Bowdoin College
2022	"Investigating an Essential Complex In CPT", University of Michigan
2021	"Investigating a Key Complex in AR Propagation", The College of New Jersey
2021	"Biochemical Insights into Antibiotic Resistance Transfer", Gettysburg College
2020	"Biochemical Insights into Antibiotic Resistance Transfer", Trinity College
2018	"The Microbiome", Biological Sciences Seminar Series, Lehigh University
2018	"Structural Insights into Microbial Pathogenesis.", Colgate University
2015	"Active learning in the undergraduate classroom." Lehigh University
2014	"Stopping the Relaxosome Complex: Aiding and Abetting the Transmission of Antibiotic Resistant Genes." University of Central Arkansas

Abstracts & Conference Activity

Conference Talks

#	Year	
10	2024	"Investigating an Essential Complex In Conjugative Plasmid Transfer" (Invited) Bioorganic Chemistry Gordon Research Conference (GRC). Andover NH. June 2024
9	2023	"Increasing STEM Persistence Through CUREs and Community." (Invited) American Crystallographic Association (ACA) Meeting. Baltimore MD. July 2023
8	2021	"Protein Crystallography & PUIs" (Selected) American Crystallographic Association (ACA) Meeting. Virtual. August 2021

7	2020	“Macromolecular X-ray Crystallography in the Undergraduate Curriculum” (<i>Invited Transactions Symposium</i>). American Crystallographic Association (ACA) Meeting. Virtual August 2020
6	2018	“Establishing a New Protein X-ray Crystallography Research Group at a PUI.” (<i>Selected</i>) American Crystallographic Association (ACA) Meeting. Toronto, Canada. July 2018
5	2018	“Taking a Community Centered Approach to Diversity.” <i>Keynote Address</i> . (<i>Invited</i>) Biology with X-ray Free Electron Lasers (BioXFEL) Conference. New Orleans, LA. February 2018
4	2017	“Protein Structures: Producing, Using, and Teaching about Life’s Building Blocks.” (<i>Selected</i>) Annual Biomedical Research Conference for Minority Students (ABRCMS). Phoenix, NM. November 2017
3	2017	“Cooperative Approaches in Introducing Undergraduates to Protein Crystallography.” (<i>Selected</i>) American Crystallographic Association (ACA) Meeting. New Orleans, LA. May 2017
2	2015	“Towards Structural Characterization of Novel Bacteriophage Proteins.” (<i>Invited</i>) First African Light Source Conference and Workshop. Grenoble, France. November 2015
1	2010	“Mechanism of NADH/NAD ⁺ Sensing by the Redox Sensing Repressor, Rex.” (<i>Selected</i>) American Crystallographic Association (ACA) Meeting. Chicago, IL. July 2010

Student Undergraduate Research Summer Institute (URSI) Symposium Talks

** Denotes Vassar student co-author; #Presenter*

#	Year	
2	2021	“Structural Investigation of the Conjugative Protein TraK.” (Podium) Lilith Schwartz^{*#} and Jordan Norman^{*#} . Undergraduate Research Summer Institute (URSI) Symposium. Vassar College. September 2021
1	2018	“Structural and Functional Analysis of a Novel Chitin Deacetylase from <i>B. ovatus</i> ” (Podium) Sharika Hasan^{*#} . Undergraduate Research Summer Institute (URSI) Symposium. Vassar College. September 2018

Posters

** Denotes Vassar student co-author; #Poster presenter*

#	Year	
30	2024	“Structural and functional investigation of microbial proteins from <i>Salmonella</i> Typhimurium and <i>Bacteroides ovatus</i> .” Elisa Dzuong^{*#} , Jasmine Lowenstein^{*#} , Krystle McLaughlin. Undergraduate Research Summer Institute (URSI) Symposium. Vassar College. September 2024
29	2024	Purification of <i>Salmonella</i> Typhimurium pCU1 Tral Constructs and Structural Analyses of <i>Bacteroides ovatus</i> PDA. Olivia Yost^{*#} , Olive Adamek^{*#} and Krystle McLaughlin. Undergraduate Research Summer Institute (URSI) Symposium. Vassar College. Sep 2024

28	2024	“Investigating a Novel Carbohydrate Deacetylase Involved in Bacteroides Capsular Polysaccharide Biosynthesis.” Krystle J. McLaughlin[#] , Lilith A. Schwartz[*] , Sharika Hasan[*] , Banumathi Sankaran. American Society for Biochemistry and Molecular Biology (ASBMB) Meeting. San Antonio TX. March 2024
27	2024	“Characterization of Conjugative Proteins from <i>Salmonella</i> Typhimurium pCU1” . Jordan O. Norman^{*#} and Krystle J. McLaughlin. American Society for Biochemistry and Molecular Biology (ASBMB) Meeting. San Antonio TX. March 2024
26	2024	“Investigation of Conjugative Protein Orf90 from <i>S. aureus</i> pSK41” Maedot Abate^{*#} and Krystle J. McLaughlin. American Society for Biochemistry and Molecular Biology (ASBMB) Meeting. San Antonio TX. March 2024
25	2023	“Structural investigation of Orf62 from <i>Staphylococcus aureus</i> .” Jasmeen Kaur^{*#} , Vidya Iyengar^{*#} , Krystle McLaughlin. Undergraduate Research Summer Institute (URSI) Symposium. Vassar College. Sep 2023
24	2023	“Structural Characterization of Conjugative Proteins from pCU1 and pSK41.” Jordan Norman^{*#} , Krystle McLaughlin. Undergraduate Research Summer Institute (URSI) Symposium. Vassar College. Sep 2023
23	2023	“Structural Investigation of the Conjugative Protein TraK.” Jordan O. Norman^{*#} and Krystle J. McLaughlin. Mid-Hudson ACS Undergraduate Research Symposium (URS). Annadale-On-Hudson, NY. April 2023
22	2023	“Characterization Of 3-Oxoacyl-Acyl-Carrier Protein Reductase FabG4 From <i>Mycolicibacterium smegmatis</i> .” Xinping Ran^{*#} and Krystle J. McLaughlin. Mid-Hudson ACS Undergraduate Research Symposium (URS). Annadale-On-Hudson, NY. April 2023
21	2023	“Characterizing a Putative Short-Chain Dehydrogenase from <i>Mycolicibacterium smegmatis</i> .” Maedot Abate^{*#} and Krystle J. McLaughlin. Mid-Hudson ACS Undergraduate Research Symposium (URS). Annadale-On-Hudson, NY. April 2023
20	2022	“Investigation of a Putative Esterase from a Gut Microbe <i>B. ovatus</i> .” Krystle J. McLaughlin[#] , Lilith A. Schwartz[*] , Sharika Hasan[*] , Banumathi Sankaran. American Crystallographic Association (ACA) Meeting. Portland OR. Aug 2022
19	2022	“Characterization Of The pCU1 Relaxosome Accessory Protein TraK.” Lilith Schwartz^{*#} , Jordan Norman^{*#} and Krystle J. McLaughlin. Mid-Hudson ACS Undergraduate Research Symposium (URS). Newburgh, NY. April 2022.
18	2022	“Characterization of Putative Transcriptional Regulator Orf90.” Kathryn Enquist^{*#} , Vanessa Madrigal^{*#} , Krystle J. McLaughlin. Mid-Hudson ACS Undergraduate Research Symposium (URS). Newburgh, NY. April 2022.
17	2022	“Characterization of Putative Transcriptional Regulator Orf90”. Kathryn Enquist^{*#} , Vanessa Madrigal^{*#} , Krystle J. McLaughlin. American Society for Biochemistry and Molecular Biology (ASBMB). Philadelphia PA. April 2022
16	2021	“Structural Investigation of the Conjugative Protein TraK”. Lilith Schwartz^{*#} , Jordan Norman^{*#} and Krystle J. McLaughlin. Undergraduate Research Summer Institute (URSI) Symposium. Vassar College. Sep 2021
15	2021	“Characterization of Putative Transcriptional Regulator Orf90”. Kathryn Enquist^{*#} , Vanessa Madrigal^{*#} , Krystle J. McLaughlin. Undergraduate Research Summer Institute (URSI) Symposium. Vassar College. Sep 2021

14	2021	"Biochemical Analysis of the Orf86 Protein in <i>Staphylococcus aureus</i> ." Alison E. Bond^{*#} , Faith D. Northern^{*#} , Coy Eakes, Matthew R. Redinbo, William Walton and Krystle J. McLaughlin. Protein Data Bank 50 (PDB50) Symposium. Virtual. May 2021.
13	2021	"Biochemical Analysis of a Putative Chitin Deacetylase from <i>Bacteroides ovatus</i> ." Lilith A. Schwartz^{*#} and Krystle J. McLaughlin. Protein Data Bank 50 (PDB50) Symposium. Virtual. May 2021
12	2021	"Enzymatic and Structural Analysis of MsFabG4." Prashit Parikh^{*#} and Krystle J. McLaughlin. Protein Data Bank 50 (PDB50) Symposium. Virtual. May 2021
11	2021	"Structural Analysis of Thioredoxin Reductase from <i>Mycobacterium smegmatis</i> ." Eden O'Connell^{*#} and Krystle J. McLaughlin. Protein Data Bank 50 (PDB50) Symposium. Virtual. May 2021
10	2021	"Characterization of a Putative Short Chain Dehydrogenase from <i>M. smegmatis</i> ." Joseph Harrington^{*#} and Krystle J. McLaughlin. Protein Data Bank 50 (PDB50) Symposium. Virtual. May 2021
9	2019	"Expression and Crystallization of orpham protein Gp57 from the Bacteriophage Butters." Ashley Latibeaudiere^{*#} and Krystle J. McLaughlin. Mid-Hudson ACS Undergraduate Research Symposium (URS). Poughkeepsie, NY. April 2019.
8	2019	"The role of TraK in the spread of antibiotic resistance genes through conjugative plasmid transfer." Isabel Sakarin^{*#} and Krystle J. McLaughlin. Mid-Hudson ACS Undergraduate Research Symposium (URS). Poughkeepsie, NY. April 2019
7	2019	"Structural and Functional Analysis of a Novel Chitin Deacetylase From <i>B. ovatus</i> ." Sharika Hasan^{*#} and Krystle J. McLaughlin. Mid-Hudson ACS Undergraduate Research Symposium (URS). Poughkeepsie, NY. April 2019
6	2019	"Characterization of an Unknown TPR Protein From <i>B. ovatus</i> ." Justas V. Rodarte^{*#} , Gabrielle James[*] , and Krystle J. McLaughlin. Mid-Hudson ACS Undergraduate Research Symposium (URS). Poughkeepsie, NY. April 2019
5	2019	"Investigating the Role of Specific Amino Acids in the Extreme C-Terminus Helicase Domain of Tral from <i>Salmonella typhimurium</i> Plasmid pCU1." Mary McKenny^{*#} and Krystle J. McLaughlin. Mid-Hudson ACS Undergraduate Research Symposium (URS). Poughkeepsie, NY. April 2019
4	2018	"Characterization of an Unknown TPR Protein From <i>B. ovatus</i> ." Justas V. Rodarte^{*#} , Gabrielle James[*] , and Krystle J. McLaughlin. Undergraduate Research Summer Institute (URSI) Symposium. Vassar College. Sep 2018
3	2018	"The role of TraK in the spread of antibiotic resistance genes through conjugative plasmid transfer." Isabel Sakarin^{*#} and Krystle J. McLaughlin. Undergraduate Research Summer Institute (URSI) Symposium. Vassar College. Sep 2018
2	2016	"Characterization of a Putative Carbohydrate Esterase from <i>B. ovatus</i> ." Steven Imburgio and Krystle J. McLaughlin[#] . Biophysical Society Pennsylvania Network Meeting. Bethlehem, PA. October 2016
1	2014	"Unique Helicase Determinants in the essential conjugative factor Tral from <i>Salmonella typhimurium</i> plasmid pCU1." Krystle J. McLaughlin[#] , Rebecca Nash, Matthew R Redinbo. American Crystallographic Association (ACA) Meeting. Albuquerque, NM. July 2014

Panels

2024	Alumni Panel, Institutional Research and Academic Career Development Award (IRACDA) Conference, University of North Carolina at Chapel Hill.
2023	Career Odysseys Panel, American Crystallographic Association (ACA) Meeting, Baltimore MD.
2023	STEM Faculty Panel for Black History Month, Vassar College.
2022	SophoMORE Connections Science Research Panel, Colgate University.
2022	Faculty Panel, Multiracial/Biracial Students' Alliance (MBSA), Vassar College.
2021	Faculty Panel, Transitions Wisdom Dinner, Vassar College.
2021	Black Hope, Black Joy, and Black Future, Colgate University.
2020	Work-Life Balance Panel, New Faculty Orientation, Vassar College.
2020	Colgate in Focus: Life After The Liberal Arts, Colgate University.
2019	Careers in STEM: From the Perspective of Women (as Moderator) (Sponsored by Career Development Office), Vassar College.
2019	Faculty Panel, Multiracial/Biracial Students' Alliance (MBSA), Vassar College.
2019	SophoMORE Connections Science Research Panel, Colgate University.
2018	Talking About Teaching Panel, Vassar College.
2018	Faculty Panel, Multiracial/Biracial Students' Alliance (MBSA), Vassar College.
2018	SophoMORE Connections Science Research Panel, Colgate University.
2015	SophoMORE Connections Science Research Panel, Colgate University.
2014	SophoMORE Connections Science Research Panel, Colgate University.
2012	Diversity in the Sciences Panel, Colgate University.

College Activity

Teaching

Chem- Chemistry, Bioc- Biochemistry, Biol- Biology, CLCS- Community-Engaged Learning

<i>Semester</i>	<i>Classes Taught</i>	<i>Research Intensives</i>
2024 Fall	Chem/Biol 272: Biochemistry Bioc 326: Biophysical Chemistry	Bioc 399 (co-advised thesis) Chem/Bioc 298
2024 Spring	<i>Pre-tenure sabbatical</i>	Bioc 399 Bioc 300 (1 thesis student) Chem 300 (co-advised thesis)
2023 Fall	Bioc 326: Biophysical Chemistry Chem/Bioc 295: Protein Crystallography	Bioc 399 (2 students, 1 thesis) Chem 399 (co-advised thesis) CLCS 290
2023 Spring	Bioc 326: Biophysical Chemistry Chem/Bioc 295: Protein Crystallography	Bioc 300 Bioc 290 (2 students) Chem/Bioc 298 (3 students)
2022 Fall	Chem/Biol 272: Biochemistry Chem/Biol 272: Biochemistry (Lab)	Bioc 399 (1 thesis student) Chem/Bioc 298 (3 students) Bioc 290
2022 Spring	Bioc 356: Biochemistry Senior Seminar	Chem 300 (2 thesis students) Chem/Bioc 298 (3 students)
2021 Fall	Bioc 326: Biophysical Chemistry Chem/Biol 272: Biochemistry	Bioc 399 (2 students) Chem 399 (1 thesis student) Chem/Bioc 298 (4 students)

2021 Spring	Chem/Biol 272: Biochemistry (2 sections)	Bioc 300 Chem/Bioc 298 (6 students)
2020 Fall	Bioc 326: Biophysical Chemistry Bioc 356: Biochemistry Senior Seminar	Bioc 377 (2 thesis students) Chem 298 (4 students)
2020 Spring	<i>Pre-tenure sabbatical, lost to pandemic</i>	
2019 Fall	Chem 323: Protein Chemistry (Course reduction due to parental leave)	
2019 Spring	Chem/Biol 272: Biochemistry Chem/Biol 272: Biochemistry (Lab)	Bioc 300 (4 thesis students) Chem 298
2018 Fall	Chem 108: General Chemistry (Lecture) Chem 108: General Chemistry (Lab) Chem 323: Protein Chemistry	Bioc 399 (4 thesis students) Chem 298 (2 students)
2018 Spring	Chem/Biol 272: Biochemistry Chem/Biol 272: Biochemistry (Lab)	Chem 198 Chem 298 (3 students)
2017 Fall	Chem 323: Protein Chemistry Chem 108: General Chemistry (Lab)	Chem 298

Totals:

- Students Mentored in Intensives – 30
- Student Theses – 13 (2 co-advised)

Departmental Service

2018-present	Alliance for Diversity in Science and Engineering (ADSE) Chapter Advisor
2023	Helped craft chemistry major guidelines
2020, 2022, 2023	Member, Tenure Track Assistant Professor Search Committee
2021, 2024	Member, Lecturer Search Committee
2018, 2022	Member, Visiting Assistant Professor Search Committee
2022-2023	Senior Thesis Writing Workshop Facilitator
2017-2021	Secretary, Chemistry Department
2018-2021	Chemistry Major Advisor- Class of 2021

College Service

2024-present	Committee on Campus Master Planning
2023	Vassar Science Scholars Program
2022-present	Africana Studies Steering Committee
2022-2024	HHMI Grand Challenges Inclusive Excellence Core Team
2022-2024	Committee on Admission and Financial Aid
2022	Summer Immersions Course
2021	Search Committee for Director of the Jeh Vincent Johnson ALANA Center
2020	Vassar Classroom Revisited Lecture
2018	Summer Bridge Program Concept Development Interim Advisory Committee