Todd R. Gingrich

Dow Chemical Company Associate Professor · Department of Chemistry

Northwestern University, 2145 Sheridan Road, Evanston, IL 60208-3113

+1 510-457-8600 | todd.gingrich@northwestern.edu | gingrich.chem.northwestern.edu

Professional Appointments

2026–present	**Associate Professor of Engineering Sciences & Applied Mathematics by courtesy**, Northwestern University
2025–present	**Dow Chemical Company Associate Professor of Chemistry**, Northwestern University
2018–2025	**Assistant Professor of Chemistry**, Northwestern University
2015–2018	**Physics of Living Systems Fellow**, Massachusetts Institute of Technology

Education

University of California, Berkeley — *Berkeley, CA*

Ph.D. in Chemistry — *2010–2015*

- Advisor: Prof. Phillip L. Geissler

University College, Oxford University — *Oxford, UK*

M.Sc. (By Research) in Physical and Theoretical Chemistry — *2008–2010*

- Advisor: Prof. Mark Wilson

California Institute of Technology — *Pasadena, CA*

B.S. with Honors in Chemistry — *2004–2008*

- Advisor: Prof. Nathan S. Lewis

Major Research Interests

Statistical mechanics, stochastic thermodynamics, chemical kinetics, molecular motors, tensor networks, and molecular simulations.

Awards and Honors

DOE Early Career Award, U.S. Department of Energy	2025
New Horizons Solvay Lecture in Chemistry, International Solvay Institutes	2025
Camille Dreyfus Teacher-Scholar Award, Camille and Henry Dreyfus Foundation	2024
Weinberg College of Arts & Sciences Distinguished Teaching Award, Northwestern University	2023
NSF Faculty Career Development (CAREER) Award, National Science Foundation	2023
Sloan Research Fellow, Sloan Foundation	2023
Searle Fellows Program, Searle Center for Advancing Learning and Teaching	2019-2020
APS Oppenheim Award, American Physical Society	2019
Physics of Living Systems Fellowship, Massachusetts Institute of Technology	2015
Outstanding Graduate Student Instructor, University of California, Berkeley	2013
Dan Lucas Book Prize, College of Chemistry, University of California, Berkeley	2011
Richard P. Schuster Chemistry Prize, California Institute of Technology	2008
Fannie and John Hertz Foundation Graduate Fellowship, Fannie and John Hertz Foundation	2008
National Science Foundation Graduate Research Fellowship, National Science Foundation	2008
Rhodes Scholarship, Rhodes Trust	2008
Robert L. Noland Leadership Award, California Institute of Technology	2007
Amgen Scholars Summer Research Fellowship, Amgen Foundation	2007
Upper Class Merit Award, California Institute of Technology	2005-2008
Robert C. Byrd Honors Scholarship, U.S. Department of Education	2004-2008

Publications

(**TRG** as corresponding author in bold; Gingrich group members underlined)

Preprints

Strahan, J.; **Gingrich, T.R.** "Sensitivity Analysis in the Face of Rare Events." arXiv:2605.09148, 2026.

Murphy, C.; Nicholson, S.B.; Freitas, N.; Penocchio, E.; **Gingrich, T.R.** "Dissipation-Reliability Tradeoff for Stochastic CMOS Bits in Series." arXiv:2603.04658, 2026.

Gu, G.; Alvarez, D.; Strahan, J.; Albaugh, A.; Penocchio, E.; **Gingrich, T.R.** "It Takes Two to Make a Thing Go Right: Boosting Current in Coupled Motors." arXiv:2601.09907, 2026.

Tan, T.H.; Watson, G.A.; Chao, Y.-C.; Li, J.; Gingrich, T.R.; Horowitz, J.M.; Fakhri, N. "Scale-dependent irreversibility in living matter." arXiv:2107.05701, 2021.

Published

Northwestern Faculty Career

34. Zima, J.P.; Nicholson, S.B.; **Gingrich, T.R.** "Chemical master equation parameter exploration using DMRG.", *J. Chem. Phys.*, 2025, *163*, 054118. [DOI:10.1063/5.0276591]

33. Penocchio, E.; Gu, G.; Albaugh, A.; **Gingrich, T.R.** "Power strokes in molecular motors: predictive, irrelevant, or somewhere in between?", *J. Am. Chem. Soc.*, 2025, *147(1)*, 1063-1073. [DOI:10.1021/jacs.4c14481]

32. Strand, N.E.; Nicholson, S.B.; Vroylandt, H.; **Gingrich, T.R.** "From high-dimensional committors to reactive insight." *J. Chem. Phys.*, 2024, *161*, 224109. [DOI:10.1063/5.0232705]

31. Albaugh, A.; Fu, R.-S.; Gu, G.; **Gingrich, T.R.** "Limits on the Precision of Catenane Motors: Insights from Thermodynamics and Molecular Dynamics Simulations." *J. Chem. Theory Comput.*, 2024, *20*, 1-6. [DOI:10.1021/acs.jctc.3c01201]

30. Nicholson, S.B.; **Gingrich, T.R.** "Quantifying Rare Events in Stochastic Reaction-Diffusion Dynamics Using Tensor Networks." *Phys. Rev. X*, 2023, *13*, 041006. [DOI:10.1103/PhysRevX.13.041006]

29. Albaugh, A.; Gu, G.; **Gingrich, T.R.** "Sterically driven current reversal in a molecular motor model." *Proc. Natl. Acad. Sci. USA*, 2023, *120(33)*, e2210500120. [DOI:10.1073/pnas.2210500120]

28. Binks, L.; Borsley, S.; Gingrich, T.R.; Leigh, D.A.; Penocchio, E.; Roberts, B.W. "The role of kinetic asymmetry and power strokes in an information ratchet." *Chem*, 2023, *9*, 1-16. [DOI:10.1016/j.chempr.2023.05.035]

27. Fu, R.-S.; **Gingrich, T.R.** "Thermodynamic uncertainty relation for Langevin dynamics by scaling time." *Phys. Rev. E*, 2022, *106*, 024128. [DOI:10.1103/PhysRevE.106.024128]

26. Strand, N.E.; Vroylandt, H.; **Gingrich, T.R.** "Computing time-periodic steady-state currents via the time evolution of tensor network states." *J. Chem. Phys.*, 2022, *157*, 054104. [DOI:10.1063/5.0099741]

25. **Gingrich, T.R.** "Measuring how effectively light drives a molecular pump." *Nat. Nanotechnol.*, 2022, *17*, 675. [DOI:10.1038/s41565-022-01152-x] **(News & Views)**

24. Strand, N.E.; Vroylandt, H.; **Gingrich, T.R.** "Using tensor network states for multi-particle Brownian ratchets." *J. Chem. Phys.*, 2022, *156*, 221103. [DOI:10.1063/5.0097332] **(Editor's Pick)**

23. Albaugh, A.; **Gingrich, T.R.** "Simulating a Chemically Fueled Molecular Motor with Nonequilibrium Molecular Dynamics." *Nat. Comm.*, 2022, *13*, 2204. [DOI:10.1038/s41467-022-29393-3]

22. Albaugh, A.; **Gingrich, T.R.** "Estimating Reciprocal Partition Functions to Enable Design Space Sampling." *J. Chem. Phys.*, 2020, *153*, 204102. [DOI:10.1063/5.0025358]

21. Strand, N.E.; Fu, R.-S.; **Gingrich, T.R.** "Current inversion in a periodically driven two-dimensional Brownian ratchet." *Phys. Rev. E*, 2020, *102*, 012141. [DOI:10.1103/PhysRevE.102.012141] **(Editor's Suggestion)**

20. Owen, J.A.; Gingrich, T.R.; Horowitz, J.M. “Universal thermodynamic bounds on nonequilibrium response with biochemical applications.” *Phys. Rev. X*, 2020, *10*, 011066. [DOI:10.1103/PhysRevX.10.011066]

19. Vroylandt, H.; Proesmans, K.; **Gingrich, T.R.** “Isometric Uncertainty Relations.” *J. Stat. Phys.*, 2020, *178*, 1039-1053. [DOI:10.1007/s10955-020-02484-5]

18. Horowitz, J.M.; **Gingrich, T.R.** “Thermodynamic uncertainty relations constrain nonequilibrium fluctuations.” *Nat. Phys.*, 2020, *15*, 1. [DOI:10.1038/s41567-019-0702-6]

17. Li, J.; Horowitz, J.M.; **Gingrich, T.R.**; Fakhri, N. “Quantifying dissipation using fluctuating currents.” *Nat. Comm.*, 2019, *10*, 1666. [DOI:10.1038/s41467-019-09631-x]

Independent Postdoctoral Fellowship

16. **Gingrich, T.R.**; Horowitz, J.M. “Fundamental Bounds on First Passage Time Fluctuations for Currents.” *Phys. Rev. Lett.*, 2017, *119*, 170601. [DOI:10.1103/PhysRevLett.119.170601]

15. Bisker, G.; Polettini, M.; Gingrich, T.R.; Horowitz, J.M.; “Hierarchical Bounds on Entropy Production Inferred from Partial Information.” *J. Stat. Mech.: Theory Exp.*, 2017, 093210. [DOI:10.1088/1742-5468/aa8c0d]

14. Horowitz, J.M.; **Gingrich, T.R.** “Proof of the Finite-Time Thermodynamic Uncertainty Relation for Steady-State Currents.” *Phys. Rev. E*, 2017, *96*, 020103(R). [DOI:10.1103/PhysRevE.96.020103] **(Editor’s Suggestion)**

13. Zakine, R.; Solon, A.; Gingrich, T.R.; van Wijland, F. “Stochastic Stirling engine operating in contact with active baths.” *Entropy*, 2017, *19(5)*, 193. [DOI:10.3390/e19050193]

12. **Gingrich, T.R.**; Rotskoff, G.M.; Horowitz, J.M. “Inferring dissipation from current fluctuations.” *J. Phys. A*, 2017, *50*, 184004. [DOI:10.1088/1751-8121/aa672f]

11. **Gingrich, T.R.**; Horowitz, J.M.; Perunov, N.; England, J.L. “Dissipation bounds all steady-state current fluctuations.” *Phys. Rev. Lett.*, 2016, *116*, 120601. [DOI:10.1103/PhysRevLett.116.120601]

Mentored Research

10. **Gingrich, T.R.**; Rotskoff, G.M; Crooks, G.E.; Geissler, P.L. “Near-optimal protocols in complex nonequilibrium transformations.” *Proc. Natl. Acad. Sci. USA*, 2016, *113(37)*, 10263.[DOI:10.1073/pnas.1606273113]

9. Gingrich, T.R.; Geissler, P.L. “Preserving correlations between trajectories for efficient path sampling.” *J. Chem. Phys.*, 2015, *142(23)*, 234104. [DOI:10.1063/1.4922343] **(Editor’s Choice)**

8. Gingrich, T.R.; Rotskoff, G.M.; Vaikuntanathan, S.; Geissler, P.L. “Efficiency and large deviations in time-asymmetric stochastic heat engines.” *New J. Phys.*, 2014, *16(10)*, 102003. [DOI:10.1088/1367-2630/16/10/102003] **(Fast Track Communication)**

7. Gingrich, T.R.; Vaikuntanathan, S.; Geissler, P.L. “Heterogeniety-induced large deviations in activity and (in some cases) entropy production.” *Phys. Rev. E*, 2014, *90*, 042123. [DOI:10.1103/PhysRevE.90.042123]

6. Vaikuntanathan, S.; Gingrich, T.R.; Geissler, P.L. “Dynamic phase transitions in simple driven kinetic networks.” *Phys. Rev. E*, 2014, *89*, 062108. [DOI:10.1103/PhysRevE.89.062108]

5. Gingrich, T.R.; Wilson, M. “The control of inorganic nanotube morphology using an applied potential.” *J. Phys. Condens. Matter*, 2011, *23(13)*, 135306. [DOI:10.1088/0953-8984/23/13/135306]

4. Gingrich, T.R.; Wilson, M. “On the Ewald summation of Gaussian charges for the simulation of metallic surfaces.” *Chem. Phys. Lett.*, 2010, *500(1)*, 178. [DOI:10.1016/j.cplett.2010.10.010]

3. Katz, J.E.; Gingrich, T.R.; Santori, E.A.; Lewis, N.S. “Combinatorial synthesis and high-throughput photopotential and photocurrent screening of mixed-metal oxides for photoelectrochemical water splitting.” *Energy Environ. Sci.*, 2009, *2(1)*, 103. [DOI:10.1039/B812177J]

2. Thallapally, P.K.; Dobrzanska, L.; Gingrich, T.R.; Wirsig, T.B.; Barbour, L.J.; Atwood, J.L. "Acetylene absorption and binding in a nonporous crystal lattice." *Agnew. Chem.*, 2006, *45(39)*, 6506. [DOI:10.1002/anie.200601391]

1. Gingrich, T.R.; Smith, G.P. "Hydroxyapatite chromatography of phage-display virions." *BioTechniques*, 2005, *39(6)*, 879. [DOI:10.2144/000112032]

Patents

N.S. Lewis, J.E. Katz, T.R. Gingrich. "High-throughput screening and device for photocatalysts." Issued 9/8/2015, US Patent No. 9,126,175.

Research Support

Present

Computer Simulation of Molecular Motors Far from Equilibrium — December 1, 2021-February 1, 2027
Gordon and Betty Moore Foundation, PI, $1,963,820

CAREER: Reaction-Diffusion Kinetics with Tensor Networks — September 1, 2023–August 31, 2028
NSF CHE, PI, $650,000

Self-Propellant Nanoparticle@MOF Catalysts for Chemical Warfare Agent Detoxification — March 2024-March 2029
DTRA, co-PI, $2,500,000 ($750,000 for TRG)

Computational Tools for Stochastic, Far-From-Equilibrium Chemical Kinetics — June 2024-June 2029
Camille Dreyfus Teacher-Scholar Award, $100,000

Designing Dynamic Function for Nonequilibrium Dissipative Chemistry — August 1, 2025-July 31, 2030
DOE Office of Science Early Career Research Program, PI, $875,000

Developing Tensor Networks to Investigate Stochastic Phenotypes of Somite Segmentation — August 2025-August 2026
NSF-Simons National Institute for Theory and Mathematics in Biology (NITMB), co-PI (with Ertuğrul Özbudak, Northwestern)

Completed

Sloan Research Fellowship — September 15, 2023–September 14, 2025
Sloan Foundation, $75,000

From Microscopic Motors to Macroscopic Work — September 15, 2023–September 14, 2024
Northwestern IIN Seed Grant, Seed Investigator, $100,000

EAGER: ADAPT: Optimizing chemical reaction networks with AI — September 1, 2021–August 31, 2023
NSF CHE, PI,$ 300,000

Steering the dynamics of nanomachines — February 1, 2021–July 31, 2022
Northwestern IIN Seed Grant, Seed Investigator, $100,000

Invited Lectures

Scheduled

International Workshop on New Advances in Theoretical and Computational Molecular Sciences for Complex and Quantum Processes (TMCQ 2026), Korea Institute for Advanced Study (KIAS), Seoul, Korea — June 2026

Delivered

129th Statistical Mechanics Meeting, Rutgers University — December 2025

Engineering Sciences and Applied Mathematics (ESAM) Department Seminar, Northwestern University	October 2025
Marcus Center for Theoretical Chemistry Meeting, Caltech	July 2025
CompQu Seminar Series (Zoom), National Center for Theoretical Sciences, National Tawain University	May 2025
New Horizons Solvay Lecture in Chemistry, University of Ghent	April 2025
New Horizons Solvay Lecture in Chemistry, KU Leuven	April 2025
New Horizons Solvay Lecture in Chemistry, Université libre de Bruxelles	April 2025
New Horizons Solvay Lecture in Chemistry, University of Luxembourg	March 2025
Statistical Mechanics in Physical Chemistry: Theories and Simulations Session, ACS Global Virtual Symposium	March 2025
Machine Learning in Molecular and Multiscale Dynamics, Mesilla, NM	March 2025
Chinese-American Kavli Frontiers of Science Symposium [**Invited Poster**], Jointly hosted by the National Academy of Sciences and the Chinese Academy of Sciences in Beijing, China	November 2024
Simon Fraser University, Department of Biophysics, Burnaby, BC, Canada	September 2024
Emergence of Information in Molecular Systems Workshop, Munich, Germany	July 2024
Midwest Undergraduate Computational Chemistry Consortium, Evanston, Illinois	July 2024
Telluride Workshop on Condensed Phase Dynamics, Telluride, CO	July 2024
Dissipative Processes in Molecular Systems Workshop, Padova, Italy	June 2024
Nonequilibrium Dynamics, Information Processing, and Aging of Living Cells Workshop, ITS @ The Graduate Center, CUNY, New York, NY	May 2024
University of Michigan Chemistry, Ann Arbor, MI	April 2024
University of Michigan Complex Systems, Ann Arbor, MI	April 2024
University of Chicago, Department of Chemistry, Chicago, IL	March 2024
Stanford University, Department of Chemistry, Palo Alto, CA	March 2024
New York University, Department of Chemistry, New York, NY	March 2024
Rice University Center for Theoretical Biophysics, Houston, TX	February 2024
Rutgers University, Department of Chemistry, New Brunswick, NJ	December 2023
Northwestern/Muenster Symposium on Smart Materials, International Institute of Nanotechnology, Evanston, IL	August 2023
MIT, Physics of Living Systems, Cambridge, MA	June 2023
University of North Carolina, Department of Chemistry, Chapel Hill, NC	April 2023
Informal Statistical Physics Seminar, University of Maryland, College Park, MD	April 2023
Rare Events: Analysis, Numerics, and Applications, Brin Mathematics Research Center, University of Maryland, College Park, MD	February 2023
Northwestern University, Department of Physics, Evanston, IL	January 2023
Berkeley Statistical Mechanics Meeting, Berkeley, CA	January 2023
Telluride Workshop on Condensed Phase Dynamics, Telluride, CO	July 2022
Midwest Theoretical Chemistry Conference, Columbus, OH	June 2022
Workshop on Stochastic Thermodynamics II, Sante Fe Institute, Sante Fe, NM (Virtual)	May 2021
University of Colorado at Boulder, Department of Chemistry, Boulder, CO (Virtual)	March 2021
Oxford University, Theoretical Chemistry Group, Oxford, England (Virtual)	February 2021
Telluride Workshop on Condensed Phase Dynamics, Virtual	July 2020
Illinois State University, Department of Physics, Normal, IL	February 2020
Oppenheim Prize Talk, APS March Meeting, Boston, MA	March 2019
Lawrence Berkeley National Lab/UC Berkeley Soft Matter Seminar, Berkeley, CA	January 2019
Why Measure Entropy Production?, Princeton Center for Theoretical Science, Princeton, NJ	November 2018
Stochastic Thermodynamics: Experiment and Theory, Max Planck Institute for the Physics of Complex Systems, Dresden, Germany	September 2018
Telluride Workshop on Condensed Phase Dynamics, Telluride, CO	July 2018
CCI Solar Fuels Workshop, Ventura, CA	July 2018

Large deviation theory in statistical physics: Recent advances and future challenges, Indian Center for Theoretical Sciences (ICTS), Bangalore, India — September 2017
Igert Summer Institute, Brandeis University, Waltham, MA — June 2017
Berkeley Statistical Mechanics/Machine Learning Meeting, Berkeley, CA — January 2017
New York University, Department of Chemistry, New York, NY — December 2016
Stanford University, Department of Chemistry, Palo Alto, CA — December 2016
Columbia University, Department of Chemistry, New York, NY — November 2016
University of California at Santa Barbara, Department of Chemistry, Santa Barbara, CA — November 2016
Northwestern University, Department of Chemistry, Evanston, IL — October 2016
Boston University, Condensed Matter Theory/Biophysics, Boston, MA — March 2016
JCP Editor's Choice Session, APS March Meeting, Baltimore, MD — March 2016
Modeling and Inference from Single Molecules to Cells, MBI Workshop, Columbus, OH — February 2016
Large Deviation Theory in Principle and in Practice, Princeton Center for Theoretical Science, Princeton, NJ — November 2015
Chemistry & Physics of Liquids Gordon Research Conference, Poster Prize Short Talk, Holderness, NH — August 2015
Workshop on Statistical Mechanics and Computation of Large Deviation Rate Functions, Ecole Normale Superieure, Lyon, France — June 2015
Princeton University, Princeton Biophysics Symposium, Princeton, NJ — December 2014
Workshop on Large Deviations in Statistical Physics, National Institute for Theoretical Physics (NITheP), Stellenbosch, South Africa — July 2014

Teaching Experience

CHEM 171: Advanced General Inorganic Chemistry (New Curriculum Development)
- Course Rating: 5.16/6.00; Instructor Rating: 5.64/6.00; 172 Students — Fall 2025
- Course Rating: 5.13/6.00; Instructor Rating: 5.74/6.00; 184 Students — Fall 2024
- Course Rating: 5.09/6.00; Instructor Rating: 5.66/6.00; 186 Students — Fall 2023
- Course Rating: 4.64/6.00; Instructor Rating: 5.26/6.00; 175 Students — Fall 2022

CHEM 348: Physical Chemistry for ISP (New Curriculum Development)
- Course Rating: 5.40/6.00; Instructor Rating: 6.00/6.00; 11 Students — Spring 2022
- Course Rating: 5.30/6.00; Instructor Rating: 5.90/6.00; 12 Students — Spring 2021
- Course Rating: 5.43/6.00; Instructor Rating: 6.00/6.00; 11 Students — Spring 2020
- Course Rating: 5.63/6.00; Instructor Rating: 5.88/6.00; 8 Students — Spring 2020

CHEM 444: Elementary Statistical Mechanics (New Curriculum Development)
- Course Rating: 5.50/6.00; Instructor Rating: 5.61/6.00; 32 Students — Fall 2025
- Course Rating: 5.24/6.00; Instructor Rating: 5.65/6.00; 22 Students — Fall 2023
- Course Rating: 5.27/6.00; Instructor Rating: 5.57/6.00; 20 Students — Fall 2022
- Course Rating: 5.67/6.00; Instructor Rating: 5.67/6.00; 9 Students — Fall 2020
- Course Rating: 5.67/6.00; Instructor Rating: 6.00/6.00; 14 Students — Fall 2019
- Course Rating: 5.50/6.00; Instructor Rating: 5.58/6.00; 13 Students — Fall 2018

Advising/Supervision

Graduate Students

Wei-Shan Huynh, PhD Student — 2026-
Rittik Mandal, PhD Student — 2025-
John Zima, PhD Student — 2024-
Cathryn (Kate) Murphy, PhD Student — 2023-
Jonah Greenberg, PhD — 2019-2025
Geyao Gu, PhD — 2019-2025

Nils Strand, PhD, Now a Postdoc at UChicago with Aaron Dinner and Yuehaw Koon 2018-2023
Rueih-Sheng (Ray) Fu, PhD 2018-2023

Postdoctoral Scholars

Jay-Hak Lee, Postdoctoral Scholar 2025-
Geyao Gu, Postdoctoral Scholar, Now Process Engineer at Lam Research 2025-2026
John Strahan, Postdoctoral Scholar 2024-
Kathleen Krist, Postdoctoral Scholar, Now Assistant Professor of Chemistry, Tusculum University 2023-2025
Emanuele Penocchio, Postdoctoral Scholar, Now Marie Curie Fellow, Strasbourg University 2022-2026
Schuyler (Sky) Nicholson, Postdoctoral Scholar and Research Associate, Now Postdoctoral Fellow, Sante Fe Institute 2020-2024
Alex Albaugh, Postdoctoral Scholar, Now Assistant Professor of Chemical Engineering & Materials Science, Wayne State University 2018-2023
Hadrien Vroylandt, Postdoctoral Scholar, Now Junior Professor at GREYC (University of Caen Normandy, France) 2018-2020

Undergraduate Research Students

Tate Darin, Undergraduate Researcher 2025-
Jamie Obala, Undergraduate Researcher 2025-
Drew Alvarez, WCAS Summer Undergraduate Research Award and McCormick Summer Undergraduate Research Award 2023-
Isabelle Goodrow, Cornell University Summer Experience Grant Summer 2023
Ashini Shah, Undergraduate Researcher 2022-2024
Niles Babin, International Institue of Nanotechnology REU Summer 2022
Akhil Kalghatgi, ISP 398 student 2021

High School Students

Conor Scheidt, High School Researcher Summer 2024, 2025

Service

External

Editorial Board Member, *Physical Review E* 2022-
Workshop Co-organizer, Nonequilibrium Systems Under Control, Lorentz Center, Leiden, Netherlands 2025
Co-organizer and Statistical Mechanics Instructor, Telluride School on Theoretical Chemistry, Telluride Science Research Center 2021, 2023
Selection Committee Member, ACS Junior/Senior Theory Award 2022
Selection Committee Member, APS Oppenheim Award 2020
Selection Committee Member, Rhodes Scholarship, District 15 (USA) 2013-15

University Service

Associate Director, Integrated Science Program (ISP), Northwestern University 2023-
Residential College Fellow, Slivka Residential College, Northwestern University 2023-
Committee Member, Integrated Science Program (ISP) Committee, Northwestern University 2022-

Department Service

Committee Member, Graduate Curriculum Committee 2023-
Chair, Assistant Professor of Instruction Search Committee, Successful Double Hire 2022-2023
Committee Member, General Chemistry Committee 2021-
Committee Member, Graduate Admissions Committee 2018-