

CURRICULUM VITAE

Neha P. Kamat

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RESEARCH OBJECTIVES

The research objective of my laboratory is to design membrane-based biomaterials to understand how the biophysical properties of the cellular membrane bilayer influence cellular processes and for biomedical applications. Using emerging engineering methods in material science and synthetic biology, we utilize a unique skill set to construct *in vitro* models of the cellular membrane (or artificial cells), yielding new cellular mimetic biomaterials capable of complex sensing, signaling, and responsive behaviors. The design of these biomimetic interfaces is used to investigate the physical mechanisms by which membrane lipids influence cellular physiology, as well as in technological applications as bioreactors, biosensors, and therapeutics.

EDUCATION

B.S., Bioengineering (Magna Cum Laude) (2008) Rice University, Houston, TX

Ph.D., Bioengineering (2012) University of Pennsylvania, Philadelphia, PA

Postdoctoral Fellow (2016) Harvard University and Massachusetts General Hospital, Boston, MA

PROFESSIONAL EXPERIENCE

Assistant Professor, Department of Biomedical Engineering, Northwestern University (2017 – present)

Affiliations at Northwestern:

Member, Center of Synthetic Biology (2018 – present)

Member, Chemistry of Life Processes Institute (2017 – present)

Preceptor, Interdisciplinary Biological Sciences Graduate Program (2017- present)

Preceptor, Molecular Biophysics Training Program (2017- present)

Postdoctoral Fellow, Molecular Biology, Harvard Univ. and Massachusetts General Hospital, (2012- 2016)

HONORS AND AWARDS

2021	NSF CAREER Award
2021	2021 Young Innovators of Cellular and Molecular Bioengineering Award
2021	BMES Cellular and Molecular Bioengineering Rising Star Award
2019	Rice Outstanding Young Engineering Alum Award
2018	Cornew Innovation Award, Chemistry of Life Processes, Northwestern University
2018	Air Force Young Investigator Research Program Recipient
2018	Selection for the National Academy of Engineering Frontiers of Engineering Symposium
2016	Rice Bioengineering Outstanding Undergraduate Alumna Award
2014-2016	NASA Postdoctoral Research Fellowship, Harvard University
2013	Solomon R. Pollack Award; thesis award in Bioengineering, University of Pennsylvania
2011	Nano/Bio Interface Center Graduate Research Award; best graduate research on Nanotechnology applied to Biology at the University of Pennsylvania
2009-2012	NSF Graduate Research Fellowship, University of Pennsylvania
2008-2009	GAANN Fellowship, University of Pennsylvania
2008	Student Association Outstanding Senior Award, Rice University
2008/2009	Outstanding Bioengineering Junior/Senior Award, Rice University
2005-2007	Beckman Scholars Award, Arnold and Mabel Beckman Foundation
2004-2008	Rice University Trustee Distinguished Scholarship, Louis J. Walsh Engineering Scholarship
2004-2006	Rice University Century Scholars Program
2004	Intel Science Talent Search Semifinalist

PUBLICATIONS

* = corresponding author; underline = member of Kamat group; # = equal contribution; † = highlighted

1. Boyd, M. A.; Davis, A. M.; Chambers, N. R.; Tran, P.; Prindle, A.; **Kamat, N. P.*** Vesicle-based sensors for extracellular potassium detection. *Cellular and Molecular Bioengineering* **2021**, *14*, 459-469
2. Boyd, M. A.; **Kamat, N. P.*** Designing artificial cells towards a new generation of biosensors. *Trends in Biotechnology* **2021**, *39*, 927-939
3. Jacobs, M. L.; Faizi, H. A.; Peruzzi, J. A.; Vlahovska, P. M.; **Kamat, N. P.*** EPA and DHA differentially modulate membrane elasticity in the presence of cholesterol. *Biophysical Journal* **2021**, *120*, 2317-2329
4. Warfel, K. Hershewe; J. M.; Ilyer, S; Peruzzi J. A.; Roth, E.; **Kamat, N. P.**; Jewett, M. Improving cell-free glycoprotein synthesis by characterizing and enriching native membrane vesicles. *Nature Communications* **2021**, *12*, 1-12
5. Manzer, Z. A.; Ghosh, S.; Jacobs, M. J.; Krishnan, S.; Zipfel, W.R.; Piñeros, M.; **Kamat, N. P.*** ; Daniel, S.* Cell-Free Synthesis of a Transmembrane Mechanosensitive Channel Protein into a Hybrid-Supported Lipid Bilayer. *ACS Applied Bio Materials* **2021**, *4*, 3101-3112
6. Webber, M. J.; Kamat, N. P.; Messersmith, P. B.; Lecommandoux, S. Bioinspired Macromolecular Materials. *Biomacromolecules* **2021**, *22*, 1-3
7. Steinkühler, J.; **Kamat, N. P.*** Energy Dissipation at Interfaces drives multicompartment remodeling. *Chem* **2020**, *6*, 1051-1052
8. Peruzzi, J. A.; Jacobs, M. L.; Wang, K. S.; **Kamat, N. P.*** Barcoding Biological Reactions with DNA-Functionalized Vesicles. *Angewandte Chemie International Edition* **2019**, *131*, 18856-18863
† Highlighted in [Northwestern Engineering News](#)
9. Hilburger, C. E.; Jacobs, M. L.; Lewis, K. R.; Peruzzi, J. A.; **Kamat, N. P.*** Controlling secretion in artificial cells with a membrane AND gate. *ACS Synthetic Biology* **2019**, *8*, 1224-1230
10. Jacobs, M. J.; Boyd, M. A.; **Kamat, N. P.***; Diblock copolymers enhance folding of a mechanosensitive membrane protein during cell-free expression. *Proceedings of the National Academy of Sciences of the United States of America* **2019**, *10*, 4031-4036 † Highlighted in [Northwestern Engineering News](#)
11. Boyd, M. A. and **Kamat, N. P.*** Visualizing tension and growth in model membranes using optical dyes. *Biophys J.* **2018**, *115*, 1307-1315
12. O'Flaherty, D. K.#; **Kamat, N.P.**#*; Mirza, F. M.; Li, L.; Prywes, N.; Szostak, J. W.* Copying of mixed sequence RNA templates inside model protocells. *Journal of the American Chemical Society* **2018**, *140*, 5171-5178 # authors contributed equally; * co-corresponding authors

PUBLICATIONS - prior to Northwestern

1. Jin, L.#; **Kamat, N. P.**#; Jena, S.; Szostak, J. W. Fatty Acid/Phospholipid Blended Membranes: A Potential Intermediate State in Protocellular Evolution. *Small* **2017**, 1704077. # authors contributed equally
2. Izgu, E. C.; Bjorkbom, A.; **Kamat, N. P.**; Lelyveld, V. S.; Zhang, W.; Jia, T. Z.; Szostak, J. W. NCarboxyanhydride-Mediated Fatty Acylation of Amino Acids and Peptides for Functionalization of Protocell Membranes. *Journal of the American Chemical Society* **2016**, *138*, 16669-16676.
3. **Kamat, N. P.**; Tobe, S.; Hill, I. T.; Szostak, J. W. Electrostatic Localization of RNA to Protocell Membranes by Cationic Hydrophobic Peptides. *Angewandte Chemie* **2015**. † Highlighted in [The Science Times](#) and designated as a "Hot Paper" by journal
4. Adamala, K.; Engelhart, A. E.; **Kamat, N. P.**; Jin, L.; Szostak, J. W. Construction of a Liposome Dialyzer for the Preparation of High-Value, Small-Volume Liposome Formulations. *Nature Protocols* **2015**, *10*, 927-38.
5. Percec, V.; Leowanawat, P.; Sun, H.-J.; Kulikov, O.; Nusbaum, C. D.; Tran, T. M.; Bertin, A.; Wilson, D. A.; Peterca, M.; Zhang, S.; **Kamat, N. P.**; Vargo, K.; Mook, D.; Johnston, E. D.; Hammer, D. A.; Pochan, D. J.; Chen, Y.; Chabre, Y. M.; Shiao, T. C.; Bergeron-Brlek, M.; Andre, S.; Roy, R.; Gabius, H.-J.; Heiney, P. A. Modular Synthesis of Amphiphilic Janus Glycodendrimers and

- Their Self-Assembly into Glycodendrimersomes and Other Complex Architectures with Bioactivity to Biomedically Relevant Lectins. *Journal of the American Chemical Society* **2013**, *135*, 9055-9077.
6. **Kamat, N. P.**; Henry, S. J.; Lee, D.; Hammer, D. A. Single-Vesicle Patterning of Uniform, Giant Polymersomes into Microarrays. *Small* **2013**, *9*, 2272-2276.
 7. Lee, M. H.; Hribar, K. C.; Brugarolas, T.; **Kamat, N. P.**; Burdick, J. A.; Lee, D. Harnessing Interfacial Phenomena to Program the Release Properties of Hollow Microcapsules. *Advanced Functional Materials* **2012**, *22*, 131-138. † [Featured on the cover](#)
 8. Katz, J. S.; Eisenbrown, K. A.; Johnston, E. D.; **Kamat, N. P.**; Rawson, J.; Therien, M. J.; Burdick, J. A.; Hammer, D. A. Soft Biodegradable Polymersomes from Caprolactone-Derived Polymers. *Soft Matter* **2012**, *8*, 10853-10862.
 9. Hammer, D. A.; **Kamat, N. P.** Towards an Artificial Cell. *Febs Letters* **2012**, *586*, 3766-3766.
 10. **Kamat, N. P.**; Liao, Z.; Moses, L. E.; Rawson, J.; Therien, M. J.; Dmochowski, I. J.; Hammer, D. A. Sensing Membrane Stress with near Ir-Emissive Porphyrins. *Proceedings of the National Academy of Sciences of the United States of America* **2011**, *108*, 13984-13989. † [Highlighted in Penn Today, World of Chemicals, and NSF News from the Field](#)
 11. **Kamat, N. P.**; Lee, M. H.; Lee, D.; Hammer, D. A. Micropipette Aspiration of Double Emulsion-Templated Polymersomes. *Soft Matter* **2011**, *7*, 9863-9866.
 12. **Kamat, N. P.**; Katz, J. S.; Hammer, D. A. Engineering Polymersome Protocells. *Journal of Physical Chemistry Letters* **2011**, *2*, 1612-1623. † [Featured on the cover](#)
 13. Cheng, Z.; Elias, D. R.; **Kamat, N. P.**; Johnston, E. D.; Poloukhina, A.; Popik, V.; Hammer, D. A.; Tsourkas, A. Improved Tumor Targeting of Polymer-Based Nanovesicles Using Polymer-Lipid Blends. *Bioconjugate Chemistry* **2011**, *22*, 2021-2029.
 14. **Kamat, N. P.**; Robbins, G. P.; Rawson, J.; Therien, M. J.; Dmochowski, I. J.; Hammer, D. A. A Generalized System for Photoresponsive Membrane Rupture in Polymersomes. *Advanced Functional Materials* **2010**, *20*, 2588-2596.

PATENTS

1. Daniel A Hammer, Ivan Julian Dmochowski, Gregory Patrick Robbins, Masaya S Jimbo, Michael J Therien, and Neha P Kamat. Polymer Vesicles for Selective Electromagnetic Energy-Induced Delivery. US Patent App. 12/548, 801.

INVITED PRESENTATIONS

Accepted/ Upcoming:

Washington University, Department of Bioengineering, Seminar Series, Seattle, WA, Winter 2022
Penn State, Department of Chemistry, Seminar Series, State College, PA, Winter 2022
Gordon Research Conference, 2022 Bioanalytical Sensors, Newport, RI, June 2022
Gordon Research Conference, 2022 Bioinspired Materials, Les Diablerets, Switzerland, June 2022
Gordon Research Conference, 2023 Membrane Protein Folding, Castelldefels, Spain, June 2023
Pacifichem 2020 Congress, Self-Organization and Dynamics of Model Biomembrane Systems, Honolulu, HI, December 2020 (delayed)
Pacifichem 2020 Congress, Bioinspired Materials and Architectures for Cell, Tissue, and Regenerative Engineering, Honolulu, HI, December 2020 (delayed)

Completed:

University of Washington, Department of Chemical Engineering, Fall 2021
Biomedical Engineering Society Young Innovator Award Session, Fall 2021
University of Guelph, Department of Chemistry, Seminar Series, Fall 2021
Tethered Membrane Conference (TETHMEM), Bad Honnef, Germany, August 2021
Amarin Advisory Board Meeting, Virtual, Fall 2021
Build a Cell Seminar Series, Virtual, Summer 2021

University of New Mexico and Max Planck Institute for Medical Research, International Conference on Engineering Synthetic Cells and Organelles, Spring 2021
New York University, Department of Biomedical Engineering, Seminar Series, Spring 2021
University of Virginia, Department of Biomedical Engineering, Seminar Series, Spring 2021
Rice University, Bioengineering Department, Seminar Series, Winter 2021
Cellular and Molecular Bioengineering Rising Star Award Talk, CMBE Annual Meeting, Winter 2021
Society for Developmental Biology, 79th Annual Meeting, Chicago, IL, July 2020
Kyoto University, Inst. for Integrated Cell-Material Sciences (iCeMS) Retreat, Kyoto, Japan, July 2019
Washington University in St. Louis, T32 Mechanobiology Retreat (keynote), Spring 2019
University of Illinois at Chicago, Department of Chemistry, Seminar Series, Spring 2019
Northwestern University Department of Pharmacology Retreat, Spring 2019
Northwestern University, Biotechnology Training Program, Seminar Series, Spring 2019
2019 ACS Great Lakes Regional Meeting (GLRM), Spring 2019
Northwestern University, Center of Synthetic Biology, Fall 2017
University of Nebraska-Lincoln, Big 10 BME Speaker Exchange, Spring 2017
Northwestern University, Department of Chemical Engineering, Faculty Lunch Series, Fall 2017
Northwestern University Interdisciplinary Biosciences Retreat, Fall 2017

INVITED PRESENTATIONS - prior to Northwestern

Northwestern University, Department of Biomedical Engineering, Seminar Series, Spring 2016
Columbia University, Department of Biomedical Engineering, Seminar Series, Spring 2016
Stanford University, Department of Chemical Engineering, Seminar Series, Spring 2016
Boston University, Department of Biomedical Engineering, Seminar Series, Spring 2016
Columbia University, Department of Chemical Engineering, Seminar Series, Spring 2016
Duke University, Department of Biomedical Engineering, Seminar Series, Fall 2015
Northeastern University, College of Engineering, Seminar Series, 2014.
Earth-Life Science Institute Origins of Life Chemistry Workshop, Tokyo, Japan, 2014.

INVITED WORKSHOPS

DoD and EBRC, Synthetic Biology for Military Environments Roadmap, Winter 2019
NSF, Square-Table Workshop: Programmable Interfaces: Exploring the Intersection of Synthetic Biology, Biomaterials, and Soft Matter, Fall 2019 (declined due to maternity leave)
NSF, Understanding the Rules of Life: Building a Synthetic Cell Ideas Lab, Winter 2019
NSF, 2018 NSF EFRI Workshop: Convergence and Interdisciplinarity in Advancing Larger Scale Research, Summer 2018

SELECT CONTRIBUTED PRESENTATIONS AND POSTERS underline = presenting author

1. Vu, T.Q.; Peruzzi, J. A; Sridhar, S.; Mrksich, M.; Kamat, N. P. *Using vesicle lipid domains to enhance liposomal TRAIL*, Society for Biomaterials Annual Meeting in Drug Delivery, Virtual 2021 (oral)
2. Sant'Anna, L. E.; Vu, T.Q & Kamat, N.P. *Lipid Composition Affects Non-Specific Binding Avidity of Ni-NTA Vesicles*, Northwestern Undergraduate Research Exposition, 2021. (oral)
3. Jacobs, M.L.; Kamat, N.P. *Quantifying the effect of fatty acids on the elasticity of model membranes*, Biophysical Society Annual Meeting, San Diego, CA 2020 (oral)
4. Hilburger, C.E.; Kamat, N.P. *Using a Membrane AND Gate to Control Secretion in Phospholipid Vesicles*, Biomedical Engineering Society Annual Meeting, Philadelphia, PA, 2019 (oral)
5. Kamat, N.P.; *Uncovering the role of membrane mechanical properties on membrane protein folding with biomimetic membranes*, Gordon Research Conference on Biomaterials and Tissue Engineering, Castelldefels, Spain, 2019 (poster)
6. Peruzzi, J.A.; Jacobs, M.L.; Vu, T.Q.; Kamat, N.P. *Barcoding biological reactions with DNA-functionalized vesicles*, Synthetic Biology, Engineering, Evolution & Design (SEED) 2019, New York, NY, 2019 (poster)

7. Kamat, N. P. *A membrane logic gate to control secretion from vesicles*, Society of Biomaterials, Seattle, WA, 2019 (oral)
8. Peruzzi, J.A.; Kamat, N.P. *Tuning Membrane Composition to Enhance DNA-Mediated Vesicle Fusion*, Annual Meeting of the Biophysical Society, Baltimore, MD, 2018 (poster)
9. Hilburger, C.E.; Lewis, K.R.; Jacobs, M.L.; Kamat, N.P. *A Fatty Acid Induces the Functional Assembly of a Channel Protein into Phospholipid Vesicles*, Annual Meeting of the Biophysical Society, Baltimore, MD, 2018 (poster)
10. Boyd, M.A.; Kamat, N.P.; *Visualizing tension and growth in model membranes using optical dyes*, Annual Meeting of the Biophysical Society, Baltimore, MD, 2018 (poster)
11. Jacobs, M. L.; Kamat, N. P. *Investigating how Membrane Elasticity Impacts Membrane Protein Folding*, Annual Meeting of the Biophysical Society, Baltimore, MD, 2018 (oral)
12. Boyd, M. A.; Kamat, N. P. *An Optical Approach to Monitor Membrane Dynamics in Response to Tension*, Biomedical Engineering Society Annual Meeting, Atlanta, GA, 2018 (oral)
13. Kamat, N.P.; O'Flaherty, D.; Szostak, J. W. *Gating Protocell Permeability to RNA*, AIChE, Minneapolis, MN, 2017 (oral)

POSTDOCTORAL SCHOLARS SUPERVISED

Jan Steinkühler, Ph.D. Max Planck Institute of Colloids and Interfaces, Potsdam, Germany (March 2020 – present)

PHD DISSERTATIONS SUPERVISED

1. **Citlayi Villaseñor**, Ph.D. Molecular Biosciences (2021-present)
2. **Vivian Hu**, Ph.D. Biomedical Engineering (2020-present)
3. **Taylor Gunnels**, Ph.D. Biomedical Engineering (2019-present) (Co-Advised with Prof. Joshua Leonard)
4. **Timothy Vu**, Ph.D. Biomedical Engineering (2018-present)
5. **Justin Peruzzi**, Ph.D. Chemical Engineering (2017-present)
6. **Margrethe Boyd**, Ph.D. Biomedical Engineering (2017-present)
7. **Miranda Jacobs**, Ph.D. Molecular Biosciences (2017-present)

UNDERGRADUATE RESEARCH MENTORING * = publication in Kamat Lab

1. Andre Gu (2021- present)
2. Ugochinyere Ndukwe (Summer 2021, REU)
3. Nina Galvez (2020- present)
4. Lucas Sant'Anna (2020-present)
5. *Anna Davis (2019-2021)
6. Summer Duffy (2019-2020)
7. Jacob Brandner (Summer 2019, REU)
8. *Nora Chambers (2019-2021)
9. *Kenneth Wang (2019-2021)
10. Kayla Purdy (Summer 2018, REU)
11. *Claire Hilburger (2017-present)
12. *Kamryn Lewis (2017-2018)
13. David Alexander Fong (2017-2019)

ACHIEVEMENTS BY GROUP MEMBERS

Grants/Fellowships:

NDSEG Graduate Fellowships: 2019 (Boyd)

NSF Graduate Fellowships: 2018 (Peruzzi), 2019 (Boyd- *declined*), 2020 (Hilburger), 2021 (Gunnels)

American Heart Association Predoctoral Fellowship: 2019 (Jacobs)
Molecular Biophysics Training Program NIH: 2017-18 (Jacobs), 2018 (Boyd), 2021 (Villaseñor)
Synthesizing Biology Across Scales (SynBAS) National Research Traineeship NSF: 2021-2022 (Hu)
Biotechnology Training Program NIH: 2019 (Vu)
Northwestern Graduate School Conference Travel Grant: 2019 (Jacobs)
Northwestern Interdisciplinary Biological Sciences Program Travel Award: 2019 (Jacobs)
Northwestern Undergraduate Research Assistant Program Grant: 2017 (Hilburger)
Northwestern Undergraduate Research Grant: 2017 (Fong), 2018 (Hilburger), 2019 (Wang, Chambers), 2020 (Davis, Chambers, Sant'Anna)
Northwestern McCormick Grant: 2018 (Fong), 2019 (Duffy)
Northwestern BME Research Grant: 2017 (Fong, Lewis), 2019 (Chambers), 2021 (Galvez)
Northwestern Jaharis Undergraduate Research Fellowship: 2021 (Sant'Anna)

Awards/Recognition:

STAR Award Society for Biomaterials Meeting: 2021 (Vu)
Ryan Graduate Fellowship, Northwestern University: 2020 (Peruzzi)
Biomedical Engineering Research Award, Northwestern University: 2019 (Boyd)
Northwestern BME Undergraduate Award for Research: 2019 (Hilburger), 2021 (Davis)
BMES Student Design and Research Award: 2019 (Hilburger)

TEACHING ACTIVITIES

BME 250 – Thermodynamics (Winter 2017 – present)
BME 446 - Synthetic Biology in Biomaterials (Spring 2018 – present)
BME 403 – Quantitative Systems Physiology (Spring 2019 – present)

SERVICE- CONFERENCE/ SYMPOSIUM/ COLLOQUIUM ORGANIZATION

- 1. Biomedical Engineering Society Annual Meeting, 2017-present**
 - Co-chair, “Applications of nanopores and Nanoparticles,” October 2017, Phoenix, AZ
 - Co-chair, “Nanotechnologies for Nucleic Acid Detection and Exosome Analysis,” Oct 2018, Atlanta, GA
 - Abstract reviewer, 2017- present
- 2. American Institute of Chemical Engineers, 2017-present**
 - Co-chair, “Biomaterials,” Nov 2017, San Francisco, CA
 - Co-chair, “Biomimetic Materials,” Nov 2019, Orlando, FL
- 3. Central US Synthetic Biology Workshop**
 - Organizing Committee, Sept 2018, Evanston, IL
 - Organizing Committee, Sept 2019, Evanston, IL
- 4. Synthetic Biology: Engineering, Evolution & Design (SEED), 2019-present**
 - Chair: Session 2: The Materials Science/ Synthetic Biology Interface, June 2019, NY, NY
 - Organizing Committee, 2021
- 5. Cell-Free Systems Conference**
 - Organizing Committee, Dec 2019, Boston, MA
- 6. American Chemical Society Annual Symposium**
 - Co-Chair, “Bio-Inspired Macromolecular Materials,” Spring 2020, Philadelphia, PA
- 7. New York Academy of Sciences, Synthetic Biology Conference**
 - Organizing Committee, Fall 2020, NY, NY

SERVICE- PROPOSAL AND MANUSCRIPT REVIEW

- 1. National Science Foundation**
 - MCB Ad Hoc Reviewer, 2020
- 2. National Institute of Health**
 - Gene and Drug Delivery (GDD) Study Section Ad Hoc Reviewer, 2019

3. European Research Council

- Advanced Grants Reviewer, 2017

4. Journal Reviews

- Langmuir, Nature Nanotechnology, ACS Synthetic Biology, ACS Nano, Science Advances, Chem, Nature Chemistry, Biophysical Journal, Soft Matter

SERVICE- PROFESSIONAL

1. **Engineering Biology Research Consortium (EBRC)**, Member, 2019- present
2. **ACS Synthetic Biology Journal**, Editorial Advisory Board Member, 2020- present
3. **Build-A-Cell**, Member, 2018-present

SERVICE- UNIVERSITY

Northwestern BME Diversity, Equity, and Inclusion (DEI) Committee Co-Chair, 2020 – present
Northwestern Interdisciplinary Biological Sciences DEI Committee 2021- present
Northwestern BME Undergraduate Academic Advisor, 2017 - present
Northwestern BME Graduate Recruitment Committee, 2017- present
Northwestern BME Undergraduate Club Faculty Advisor, 2017- present
Northwestern Undergraduate Research Assistant Program (URAP) Committee (2018- present)
Northwestern HHMI Gilliam Fellow Nomination Committee, 2017

MEDIA COVERAGE AND HIGHLIGHTS

Media Coverage

Darlene Tverdohle (2015) [Study Reveals New Insights on Origin of Life](#), The Science Times

Research and Award Highlights

Amanda Morris (2021) [Membranes Unlock Potential to Vastly Increase Cell-Free Vaccine Production](#), Northwestern Engineering News
Alex Gerage (2019) [Barcoding' DNA Vesicles for Selective Biochemical Reactions](#), Northwestern Engineering News
Glenn Jeffers (2019) [Cell Maker](#), Northwestern Research News
Lisa Valee (2019) 2019 [CLP Cornew Awards Kick-Start Three Blue Sky Team Science Projects](#), CLP Frontpage
Emily Ashford (2019) [New Technique Improves Folding of Membrane Proteins](#), Northwestern Engineering News
Alexandra Jacobson (2018) [Northwestern Engineering Faculty Teams Receive NSF Big Ideas for the Future Grants](#), Northwestern Engineering News
Evan Lerner (2011) [Penn Molecular Scientists Develop Color Changing Stress Sensor](#), Penn Today