

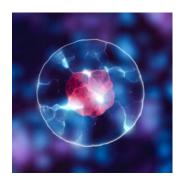
FALL 2019



Introducing the 2019 MolE PhD Cohort

We are thrilled to welcome our newest cohort of 13 molecular engineering Ph.D. students to UW. <u>Learn more about their research interests</u> and come meet them in person at our <u>Welcome Back Social</u> on October 2.

RESEARCH HIGHLIGHTS



A New Clue to How Life Originated

New research from the lab of chemistry professor <u>Sarah</u> <u>Keller</u> suggests that the first cells on ancient Earth may have emerged because the building blocks of proteins stabilized membranes. Featured in <u>The Atlantic</u>.

<u>Proceedings of the National Academies of Science</u>



Deep Learning Model Predicts Protein Expression from Leader RNA

The model, built in <u>Georg Seelig's lab</u>, enabled researchers to optimize protein expression by engineering new leader RNA sequences. This work was done in collaboration with <u>Moderna</u>, a biotech company developing mRNA based therapeutics.

Nature Biotechnology



Logic-Based Delivery of Modified Proteins

Researchers in <u>Cole Deforest's lab</u> have developed a new method to sequentially and independently trigger the release of bioactive proteins from hydrogel biomaterials using Boolean YES/OR/AND logic.

Advanced Materials

CONGRATULATIONS



Developing nanoscale therapeutics

Elizabeth Nance receives a

Presidential Early Career

Award for Scientists and

Engineers for her research

on nanotechnologybased treatments for brain

diseases and injuries.



Animals and computers learn, can cells?

A research team led by
James Carothers receives an
NSF award to <u>develop</u>
'smart' synthetic cell
systems.



Advancing Energy Storage

Young Faculty Award from the U.S. Defense Advanced Research Projects Agency to advance her research on new battery electrode architectures and packaging integration.

FALL SEMINAR SERIES

Tuesdays 1:00 - 2:00 PM in Nano Engineering and Sciences (NANOES) 181

10/01 | Maria Huffman - Director, Washington Nanofabrication Facility, UW

10/03 | MolES Biomanufacturing Seminar

Euan Ramsey - Chief Commercial Officer & Co-Founder, Precision Nanosystems

10/15 | Matthew Tirrell - Dean, Pritzker School of Molecular Engineering, University of Chicago

10/22 | Mo Khalil - Associate Professor, Biomedical Engineering, Boston University

10/29 | Sidney Cohen - Staff Scientist, Weizmann Institute of Science

11/05 | Angelica Gonzalez - Associate Professor, Biomedical Engineering, Yale University

11/12 | Evan Scott - Assistant Professor, Biomedical Engineering, Northwestern University

11/19 | Distinguished Molecular Engineering Seminar

Mano Manoharan - Senior Vice President of Drug Delivery, Alnylam Pharmaceuticals

11/26 | Tina Ng - Associate Professor, Electrical and Computer Engineering, UCSD

12/03 | Lacramioara Bintu - Assistant Professor, Bioengineering, Stanford University

