

## Symposium Schedule

**10:00 AM:** Opening Remarks

10:10 AM:

Dr. Folarin Erogbogbo Assistant Professor, SJSU

11:10 AM:

Dr. Nicholas Geisse Chief Science Officer, NanoSurface Medical

> 12:10 PM: Lunch Break

> > 1:10 PM:

Dr. Derfogail Delcassian Marie Curie Fellow, MIT

2:10 PM:

Dr. Jessica Koehne Scientist, NASA Ames Resarch Center

3:10 PM:

**Biotech Trainee Poster Competition** 

# About the NIH Protein Biotechnology Program

In 1989 the National Institutes of Health initiated a new and innovative funding program that would award graduate Training Grants in Biotechnology to public universities in the United States of America. The crux of the program was a need to establish a cadre of scientists and engineers trained to meet the nation's biotechnological needs. One of the first nine grants awarded was responsible for establishing the NIH Biotechnology Training Program at Washington State University, which has been continuously funded by the NIH for 30 years to date.

### Our Mission

The faculty members of the NIH Biotechnology Training Program at WSU, funded by a grant from the National Institutes of Health, make it their mission to train the next generation of scientists and workers with expertise in biotechnology. They execute this mission by providing interdisciplinary academic and industrial training in cutting edge biotechnology research at the graduate level. Twenty five individual faculty from six departments in four colleges constitute our core group of faculty that provides both depth and breadth of biotechnological training. Our rigorous program emphasizes the fundamentals and complexities of protein chemistry and draws heavily on the past and current research accomplishments of our training faculty. Here at WSU, members of the Program benefit from a wide array of resources, facile cooperation between laboratories and programs, strong institutional support and a culture that promotes and values diversity.

Learn more at: nihbiotech.wsu.edu

# WASHINGTON STATE UNIVERSITY NIH PROTEIN BIOTECHNOLOGY PROGRAM PRESENTS:

## NANOBIOTECHNOLOGY AND NANOMEDICINE

FRIDAY, APRIL 5, 2019
10 AM - 4 PM
CUB BALLROOM





### Dr. Derfogail Delcassian Marie Curie Fellow, MIT

Dr. Derfogail Delcassian is currently a Marie Curie Fellow based jointly between the University of Nottingham. Harvard Medical School and MIT, and the founder of BiohackCancer. Her research interests are in immunoengineering, combining her expertise in chemistry, materials science, immunology and nanomedicine. Dr. Delcassian designs biomaterials to direct and control immune cells inside and outside of the body. She is developing cell therapy products with controlled activation to treat cancer, and nucleic acid vaccines to prevent transplant organ rejection by the immune system. To do this. Dr. Delcassian engineers biomimetic interfaces, artificial cells/lymph nodes, and targeted drug and gene delivery approaches to train and instruct immune cells. Dr. Delcassian has attracted significant independent peer-reviewed funding and has been awarded many national and international awards to support her research. Alongside her research, Dr. Delcassian is passionate about the translation of healthcare research from the bench to patients. She is the founder of BiohackCancer; an organization which supports cancer patients and oncologists gaining early access to cancer therapies. She also works with entrepreneurs, government agents and researchers to advocate for safe and accelerated translational research. In her spare time, she is usually found adventuring outdoors on expeditions around the world.



#### Dr. Nicholas Geisse Chief Science Officer, NanoSurface Biomedical

Nick Geisse is the Chief Science Officer at NanoSurface Biomedical, a spin-out company from the University of Washington Bioengineering department in Seattle. He completed his graduate studies (Ph.D.) in Pharmacology at Cambridge University in England under Dr. RM Henderson, followed by a postdoctoral fellowship in cardiac cell and tissue engineering at the Harvard University School of Engineering and Applied Sciences under Prof. Kevin Kit Parker. After his postdoc, Nick went into industry and worked for Asylum Research (a manufacturer of Atomic Force Microscopes) as a scientist and project manager. After Asylum was acquired by Oxford Instruments, he became a product line manager where he was responsible for sales and marketing, production, profitability, and new product introduction and development. At NanoSurface, Nick is part of the executive management team and is specifically tasked with guiding the overall scientific strategy of the company in addition to developing and bringing to market NanoSurface's next-generation of innovative products aimed at increasing the predictive power of in vitro cell based assays.



Dr. Jessica E. Koehne is a research scientist at the NASA Ames Center for Nanotechnology where she leads the Nano-Biosensors Group. Her research interests include the interface between nanoscale materials, electronics, and biological systems with an emphasis on biosensing. Dr. Koehne has developed carbon nanotube and nanofiber based sensor platforms for the detection of DNA, rRNA, proteins and neurotransmitters with applications ranging from point-of-care to homeland security. Dr. Koehne has published over 40 peer reviewed articles in the field of nanotechnology and has received numerous awards for technical achievement including the 2011 Presidential Early Career Award for Scientists and Engineers.



Dr. Folarin Erogbogbo Assistant Professor, SJSU

Dr. Erogbogbo completed his graduate degree in Chemical and Biological Engineering as a National Science Foundation IGERT Fellow at the University at Buffalo (SUNY) with Professor Mark Swihart. Dr. Erogbogbo then moved to the Institute for Lasers Photonics and Biophotonics where he served as a NIH Funded, Ford Fellow with Professor Paras N. Prasad, Dr. Erogbogbo has published multiple high impact peer reviewed articles on nanoplatforms for biomedical applications and won numerous awards for his research and mentoring work. He joined the SJSU faculty in the summer of 2013 as an Assistant Professor in the Biomedical, Chemical and Materials Engineering Department. Dr. Erogbogbo's research focuses on scalable synthesis of biocompatible nanomaterials for biomedical applications.