# **Bioscience PhD Programs** THE UNIVERSITY OF UTAH

What career path do "U"

want your PhD to take?



# Bioscience Career Day 2018

# Come Learn About:

 The variety of careers open to PhDs
 Receive career advice from leaders in Academic, Industry, Communication, and other fields

Date: Friday, June 15th

Time: 9:00 - 4:00 PM

Location: HSEB 2100, Alumni Hall

Please Register at: https://redcap01.brisc.utah.edu /ccts/redcap/surveys/? s=9YWMEHL873



Questions? Contact the Program Office: > 801.581.5207 bioscience@genetics.utah.edu

#### WHO WE ARE

The University of Utah graduate programs in Molecular Biology and Biological Chemistry designed the Bioscience Career Symposium to provide an open forum in which graduate students and postdoctoral fellows can explore the wide range of career options available to Ph.D. life scientists. We appreciate the willingness of the invited professionals to share their perspectives and look forward to an enjoyable and educational Career Day.

#### **CONTACT US**

#### **Bioscience PhD Programs**

Molecular Biology and Biological Chemistry 26 South 2000 East Building 575, Rm 3650 HSEB Salt Lake City UT 84112

801-581-5207



# BIOSCIENCE CAREER DAY JUNE 15<sup>TH</sup>, 2018

Presented by,





Programs bioscience@genetics.utah.edu

### TABLE OF CONTENTS

 Program Schedule
 1

 Speakers Biographies
 2

 Speakers Biographies
 3

 Speakers Biographies
 4

 Speakers Biographies
 5

 Spotlight Resources & Acknowledgements
 6

 Notes Page
 7

NOTES:

#### **Spotlight Resources**

#### 10:40-11:00

**Kristen Steiner**, *National Research Mentoring Network* Experience mentorship and professional development programs designed to hone your practices and deepen your connection to the diverse nationwide scientific community though the online NRMN network.

#### 12:00-12:20

Abby Ivory, Senior Associate at Sorenson Impact Center

The Impact Fellows program provides students with the options to work on projects within four different tracks: impact investing, data science, policy innovation, and graphic design + communications. Impact Fellows gain experience working with firms, funds, governments, entrepreneurs, and nonprofits from different sectors and regions around the world.

#### 2:00-2:20

**Francine Mahak**, *U of U Career & Professional Development Center* Learn about the resources available for resume writing, networking, and job hunting through U of U Career development center.

#### 3:20-3:40

**Kyrsten Woolstenhulme**, *Technology & Venture Commercialization* Part-time semester-long positions in intellectual property and business development to assist in the analysis and commercialization of university technologies.

#### Acknowledgements

Thanks to our Career Day Committee for coordinating this event:

Glenna Wallis, *Chair* Anindita Roy Erin Larragoite Peng Wei Shuangyu (Elena) Ma Wenjia Gu Autumn McKnite



### **Full Schedule**

9:30 - 9:45 AM	Registration Opens/ Welcome
9:45 - 10:40 AM	Panel #1 Academic
10:40 - 11:00 AM	Coffee Break & Networking
11:00 AM - 12:00 PM	Panel #2 Communication
12:00 - 12:50 PM	Lunch (Registered Guests Only)
1:00 - 2:00 PM	Panel #3 Government/Not-for-Profit
2:00 - 2:20 PM	Coffee Break & Networking
2:20 - 3:20 PM	Panel #4 Industry
3:20 - 4:20 PM	Coffee Break & Goodbyes

Make sure to check out the spotlighted resources in the lobby during coffee breaks!

#### Darrell Davis, Chair, Medicinal Chemistry Department

Growing up in Washington State, Darrell was always interested in science, and was fortunate to have very committed teachers of biology and chemistry beginning in high school. He earned a B.S. in Chemistry at the Univ. of Puget Sound in 1982, and then worked two days a week in an oil refinery testing laboratory. This was an important experience to him as he realized the importance of obtaining an advanced degree to avoid a career as a refinery products tester. He obtained a Ph.D. in organic chemistry at the U of U, 1982-1988 in the laboratory of Dr. C. Dale Poulter. While in Dale's laboratory, he worked on a "side project" using NMR spectroscopy to investigate the structure of tRNAs. After being an NIH postdoc at the Univ. of Washington chemistry dept., Darrell came back to SLC in the Dept. of Medicinal Chemistry in 1990.

#### Ofer Rog, Assistant Professor, Biology

Dr. Ofer Rog received his B.S. and M.S. in Molecular Microbiology and at Tel-Aviv Univ. from 1999-2004, during which he also worked as a part-time computer programmer. After graduation, Ofer went to Univ. College London and obtained his Ph.D. in Biology in Dr. Julia P. Cooper's lab, working in Cancer Research UK (currently The Crick). From 2009-2016, Ofer did a post-doctoral fellowship in Prof. Abby Dernburg's lab, in the Univ. of California, Berkley. Ofer's lab uses yeast and worms to study how chromosomes interact with one another.

#### Mark Karver, Director, Northwestern University Peptide Synthesis Core

Mark has been in this position for almost 5 years and his facility provides consultation, instrumentation, and services related to custom peptide synthesis, purification and characterization. He earned a BS in both Biology and Chemistry from Butler Univ. Mark then went on to the Chemistry PhD program at USC where he joined the laboratory of Prof. Amy M. Barrios. He followed Prof. Barrios when she accepted a position in the U of U's Medicinal Chemistry Dept. where he finished up his degree. Next, Mark did a postdoctoral fellowship in the Center for Systems Biology at Massachusetts General Hospital/Harvard Medical School and he worked for the Sigma-Aldrich Corp. as a Chemical Biology Product Manager, prior to joining Northwestern.

## **James Gagnon**, Assistant Professor in the Department of Biology at the University of Utah

James Gagnon got his B.S. in Biology at Worcester Polytechnic Institute. He studied mechanisms of RNA transport during his Ph.D. at Brown Univ. As an American Cancer Society postdoc at Harvard Univ., James developed genome engineering tools for use in the zebrafish. He also dissected the role of pluripotency factors during early embryogenesis. He started his own lab in January 2018. His lab uses CRISPR-Cas9 for genetic recording of events during development. James advocates for open science and contributes to Prelights, a preprint highlight service. In his spare time, he enjoys exploring Utah by foot, by bike or by ski.

#### John McIntosh, Senior Scientist in Biocatalysis, Merck

John McIntosh obtained his PhD in Medicinal Chemistry from Prof. Eric Schmidt's laboratory at the U of U in 2012. After completing his degree, he worked as a postdoctoral scholar Prof. Frances H. Arnold's group at the California Institute of Technology, studying the development of non-natural cytochrome P450-catalyzed reactions. In 2015, he started his industry career at Merck & Co. Inc. where he has continued to focus on developing novel enzyme catalyzed reactions.

**Deborah Neklason**, Research Associate Professor in Division of Genetic Epidemiology in Internal Medicine, Investigator in Huntsman Cancer Institute's Cancer Control and Population Sciences Program, and Program Director of Utah Genome Project.

Deborah Neklason obtained her B.S. in Microbiology from Univ. of Washington, followed by 3 years at Immunex Corporation in biotech, and 3 years with Francis Collins at Univ. of Michigan in Human Genetics. She earned her PhD is in Human Genetics in 1999 at U of U. After graduation, she was a Manager at the then start-up company Echelon Biosciences, before becoming an Instructor in Oncological Sciences and Huntsman Cancer Institute. Her work is focused on translation between basic and clinical science, and she's been called a "connector" by bringing clinical, basic, and computational scientists together. Her projects involve identification new genes that are important in cancer development, improving ways to identify individuals at risk of developing gastrointestinal cancers, and clinical trials to prevent cancer. Over this time, she had forays into helping start the SLCC biotech technician program, developing clinical trials, a collaboration with Janssen pharmaceuticals for cancer interception, and raising two kids with her magnificent husband of 26 years.

#### Rebecca Frederick, Principal, Boston Consulting Group

(Technology Media & Telecom) and Technology Advantage practices. She specializes in software product strategy and opening new digital channels for her clients. Becky received a B.S. in Biological Sciences from Carnegie Mellon Univ. followed by a Ph.D. in Biochemistry from the U of U as a NSF Graduate Research Fellow. She completed post-doctoral training as an ACS fellow in Allan Spradling's lab at the Carnegie Institution for Science in Baltimore. Before consulting, Becky spent a year as a AAAS Science Policy Fellow at the NIH National Institutes of Neurological Disorders and Stroke, where she focused on the traumatic brain injury portfolio.

## **Paulmichael Maxfield**, Public Programs Coordinator, Natural History Museum of Utah

Paulmichael Maxfield manages the Gallery Programs dept., which specializes in developing programs and hands-on activities, coordinating special events, and building relationships with partners in the community. As the public programs coordinator, he is responsible for developing new and memorable educational experiences to complement exhibits and special events for Museum visitors. Maxfield brings over 15 years of professional content development experience to his position. Maxfield developed and manages the museum's Science Communication Fellows Program, in which local scientists improve their science communication skills through a series of formal workshops and public programs like Science Cafe (scientists share their research in a TED-esque Talk) and Scientist in the Spotlight (scientists share their research with the general public in a conversational, materials-rich open house environment).

#### Julie Kiefer, Manager, Science Communications, University of Utah Health

My passion for science has brought me many places, all of which I've adored. Currently, I manage communications on basic science and clinical research for U of U Health where I oversee and produce multimedia content that explains our research and why it matters. I also spend time strategizing, consulting, editing, interfacing with media, podcasting and tweeting. Previously, I managed web communications for the Brain Institute, co-founded an independent local science news website called Explore Utah Science, was a science writer for the journal Developmental Dynamics, and a freelance science writer. I received my Ph.D. in biochemistry from the Univ. of Washington and was a postdoc in a developmental biology lab at the Huntsman Cancer Institute.

**Cara C. Burns**, Deputy Branch Chief of the Polio and Picornavirus Laboratory Branch and Team Lead of the Molecular Epidemiology and Surveillance Laboratory, at the Centers for Disease Control and Prevention (CDC)

Cara obtained her Ph.D. at the U of U in the laboratory of Ellie Ehrenfeld, Ph.D., in the Cellular, Viral and Molecular Biology Dept., studying poliovirus RNA replication before completing a postdoctoral fellowship at the Univ. of Washington. Cara has worked at CDC as a Microbiologist since 1998, doing poliovirus molecular epidemiology and using poliovirus as a model for rational vaccine design. She and her team provide support to >50 World Health Organization (WHO) Global Polio Laboratory Network laboratories, performing high resolution sequencing and tracking of wild and vaccine-derived polioviruses. She is a co-inventor on federal government patents in more than 20 countries for vaccine technology and is a founding member of the New OPV Consortium, which has brought two new OPV2 vaccine candidates to clinical trials.

#### Shenshen Cai, Regulatory Affairs Manager, Pfizer

Shenshen Cai currently is focused on the CMC (Chemistry, Manufacturing and Control) strategies for brand drug lifecycle managements. He leads the post-approval product CMC variation registrations for global markets. He earned his BS in Life Sciences from Peking Univ. in China and PhD in Medicinal Chemistry from U of U. He started his industry career as a formulation scientist after his postdoctoral research in Univ. of Pennsylvania. After several years of working on drug development for various dosage forms, he moved into the Regulatory Affairs at Teva Pharmaceuticals, USA, managing registrations of generic medicines through FDA, before he recently changed his job to work at Pfizer. He enjoys his work in regulatory affairs as it presents abundant steering opportunities through the medicine development, registration, and lifecycle management processes. The research experience from both school and industry also provides valuable help with development of the critical analytical skills in regulatory affairs careers.

#### Karlee Adams, Health Program Manager, Utah Department of Health

Karlee Adams is a Health Program Manager at the Utah Dept. of Health working in tobacco prevention, cessation, and control initiatives. Karlee did a B.S. in Community Health Education at Utah State University while also working as a medical assistant, and she received a Master of Public Administration from BYU.

#### Lisa Peterson, Medical Director in Immunology, ARUP Laboratories

Lisa Peterson is an assistant professor of pathology at the U of U School of Medicine. She received her PhD in experimental pathology from the U of U and completed a postdoctoral fellowship in the Dept. of Immunology at National Jewish Health and the University of Colorado School of Medicine in Denver. Dr. Peterson continued her training with a clinical immunology fellowship at the University of Utah. Her research interests include cellular immunology and autoimmune immunology, with a focus on autoimmune neurology. Dr. Peterson is a member of the Association of Medical Laboratory Immunologists, the Clinical Immunology Society, the American Association for Clinical Chemistry, and the American Society for Microbiology.

#### Lucinda Bateman, Founder and Medical Director of the Bateman Horne Center

After a decade of practice as a general internist, Dr. Bateman was intimately aware of the need for advances in diagnosis and treatment guidelines for the generally misunderstood illness spectrum of myalgic encephalomyeltitis/chronic fatigue syndrome (MECFS) and fibromyalgia (FM). In 2000, she changed her clinical practice to the Bateman Horne Center of Excellence to learn more about diagnosis and management of such illnesses. Since then she has devoted her medical career exclusively to the diagnosis, management, research and education regarding ME/CFS and FM. Dr. Bateman is principle investigator, clinical collaborator and medical advisor for more than 30 clinical trials, including collaborations with basic and clinical researchers from the U of U, The Jackson Laboratory, Columbia Univ., Nova Southeastern Univ., Harvard, Stanford and the CDC.

#### Cheryl Baird, Associate Director, BioFire Diagnostics

Cheryl Baird leads a group focused on sample preparation development for new clinical diagnostic panels at BioFire. She earned her PhD in Biochemistry from the U of U in 2000 in the laboratory of Janet Lindsley. She has worked in a variety of environments over the course of her career from a small biotech startup in Massachusetts developing a new technology for high throughput screening, to running a research lab and leading a Research Division at large National Laboratory in Washington State. In 2014, she decided to come back to SLC and joined BioFire.

#### Yolanda Chong, VP-Biology, Recursion

Yolanda obtained her PhD in Plant Molecular Biology from the Univ. of Toronto. After completing her PhD in 2007, she joined the Saccharomyces cerevisiae omics team at the Donnelly Centre for Cellular and Biomolecular Research, headed by Brenda Andrews and Charlie Boone. In 2011, Yolanda was recruited to Janssen Pharmaceuticals with J&J to apply high-dimensional imaging approaches to their small molecule discovery pipeline and in 2017, she transitioned to Recursion to further advance this approach for small molecule therapeutics.

#### Felix Karim, Executive Vice President, Business Development, Blade Therapeutics Inc.

Felix Karim received his BA in Biochemistry from UC Berkeley and did his PhD in Carl Thummel's lab in U of U, and returned to UC Berkeley where he did post-doctoral training with Gerry Rubin. Felix has worked in the biopharmaceutical industry for 19 years and has held leadership roles in business development and R&D management in both public and private biopharmaceutical companies. Felix has led multidisciplinary teams across a variety of therapeutic programs that have attracted major pharmaceutical partnerships. While at KAI, he also served as VP of Business Development. Currently Felix is Executive VP of Business Development, strategy and competitive intelligence.