BioMolecular Science Weekly
October 28-November 1, 2019

Calendar:

**Monday, October 28th**

**MMG WiPS; 12:00PM; 1425 BPS**
Kyle Card; Lenski Lab; “The relationship between relaxed selection and the genetic targets of resistance mutations”

Nhu Nguyen; Dufour Lab; “Bacterial motility in mucus”

**BMS Research Forum; 12:00PM-1:00PM; 162 Food Safety Building**
Osama Alian MMG; Schrenk Lab; “The Edge of Habitability: Understanding the Energy Dynamics of the Deep Sea Lost City Hydrothermal Vents”

**Tuesday, October 29th**

**MMG Seminar; 4:10PM; 1415 BPS**
Dr. John Schiller, National Cancer Institute; “HPV VLP’s: Nature’s Nanoparticles for Prevention and Treatment of Cancer”

**Genomics Core Seminar; 10:00 AM; 162C Food Safety and Toxicology Building**
Ryan Corbett, Graduate Student, Department of Animal Science; “Using whole-genome bisulfite sequencing to assess developmental and allele-specific methylation patterns in pig fetal liver”

**Wednesday, October 30th**

**CMB/GGS Research Forum; 12:00PM-1:00PM; 1425 BPS**
Julie Rojewski; IDP Workshop

**Pharm Tox Seminar; 12:00PM; B448 LSB**
Dr. Lyle Burgoon - 2019 Kenneth E. Moore Distinguished Alumnus Award

**Thursday, October 31th**

**BMB Colloquium Series; 11:00AM; 101 Biochemistry**
George Mias, MSU; “Longitudinal Systems Medicine”

**Ecology, Evolutionary Biology, and Behavior Seminar; 3:30PM; 1420 BPS**
Laura Twardochleb; “Climate effects on freshwater ecological communities: from local species interactions to continental biodiversity patterns”

**Friday, November 1st**

**Pharm Tox Seminar; 9:00AM; B448 LSB**
DD Seminar - Jared Silverman

**BEACON Friday Seminars; 3:30PM; BEACON Conference Room**
Eric Bruger; UI and Clinton Elg; UI

**Science at the Edge; 11:30AM; 1400 BPS**
Yuri Lyubchenko, Department of Pharmaceutical Sciences, University of Nebraska Medical Center; “Molecular Mechanisms of Proteins Self-Assembly in Aggregates by the On Surface Catalysis Pathway”

**Friday, November 22nd**

“Targeting Host Immune Cells In Lethal Prostate Cancer”; 4:00PM-5:00PM; Chittenden Hall, Room 110
The keynote presenter will be MSU AGEP alum, Dr. Jelani Zarif, Assistant Professor at Johns Hopkins University. This event is free for the public, sign up online.
Announcements:
Events at the Grad School, register at https://grad.msu.edu/events

ESPP Fall Student Research Symposium
Monday, October 28, 2019; Lincoln Room Kellogg Hotel and Convention Center
“The ESPP Fall Student Research Symposium has been a major success drawing 300 attendees from at least six different colleges within MSU along with a significant number of participants from other universities, government, private sector, and general public. Our vision for the event is to bring together multiple communities on campus that are working on different aspects of the urban environment to share their experiences and identify collaborative opportunities. Students from throughout MSU and surrounding schools are welcome to submit an abstract to make an oral or poster presentation on their environmental science and policy research. Best presenters will win cash prizes.” To submit an abstract for consideration please fill out the form: events/abstract-form

Optimizing Mentoring Relationships by Aligning Expectations: A Workshop for Faculty, Postdocs and Graduate Students
Friday, November 8, 2019; 10:00AM-2:00PM; MSU Union Ballroom
“The goal of this workshop is to provide a structured forum for important discussions about the role that both faculty and graduate students/Postdocs play in optimizing mentoring relationships in the research context. The workshop will be divided into both plenary and breakout sessions, allowing faculty and graduate students/Postdocs to have conversations about opportunities and challenges together, as well as separate venues (as cohorts). In this workshop, faculty and graduate students/Postdocs will be introduced to a framework for aligning expectations in mentoring relationships. After this introduction, faculty and graduate students/Postdocs will engage in cohort-specific conversations and be exposed to tools that can be utilized to prompt proactive productive conversations about expectations over the course of a mentoring relationship. All participants will be brought together for cross-cohort conversation about shared and differing perspectives, opportunities and challenges.” For more information and to register go to https://grad.msu.edu/events/optimizing-mentoring-relationships-aligning-expectations-workshop-faculty-postdocs-and

Building Capacity for Emotional Wellness (4-part series); Chittenden Hall (Rm. 110)
This 4-part series will help you understand the importance of emotional wellness, help you see the connection between emotional health and optimal performance, and provide you with the basic emotional wellness tools to help you be more resilient and effective in all the important areas of your life. Read more and register here. Tuesday, October 29, 2019 - 6:00pm to 8:00pm

CIRTL’s Fall 2019 Massive Open Online Course: An Introduction to Evidence-Based Undergraduate STEM Teaching
(Weekly asynchronous modules from 9/30 through 11/25)
Developed by CIRTL Network faculty, CIRTL MOOCs take place on the EdX platform and teach participants about different aspects of evidence-based STEM teaching over the course of 8 weeks. Registration is required; there is no cost to participate and no enrollment cap and you can learn at your own pace. Read more the CIRTL MOOC website.

Developing an Actionable Career Plan
Friday, November 1, 2019 - 9:00am to 11:00am Chittenden Hall, Room 110
This workshop is specifically designed for postdocs. This interactive workshop provides a collaborative environment where participants will explore a range of career planning tools relevant to their needs, identify and map goals onto a timeline, and identify milestones important to reaching those goals. Read more and register here.

Navigating the PhD: Managing Time and Academic Relationships
Friday, November 1, 2019 - 9:00am to 12:00pm The Writing Center
This interactive writing workshop is designed to help you develop an individualized plan for graduate writing, especially comprehensive exams, dissertation proposals, and dissertations. Session 1 is designed for students in the early years of their PhD study. In this 3-hour workshop, plans for time management and working with others will be the main focus. Read more and register here.

Navigating the PhD: Writing Processes & Strategies for Academic Writing
Friday, November 1, 2019 - 1:00pm to 4:00pm The Writing Center
This interactive writing workshop is designed to help you develop an individualized plan for graduate writing, especially comprehensive exams, dissertation proposals, and dissertations. Session 2 is designed for students in the latter years of their PhD study. In this 3-hour workshop, the focus will be on writing processes and practices. Read more and register here.

Call for Papers for the Elusive Conversations Symposium, Deadline Jan. 1st 2020
The ECS is an interdisciplinary symposium dedicated to improving environmental governance practices. Alongside keynote addresses by Deborah McGregor, Christopher Preston, and Andrew Light, they are seeking presentations about current barriers and promising futures in environmental governance. For more information or questions, please e-mail elusiveconversations@gmail.com or contact the committee members directly.
Postdoctoral Position at University of South Florida

A postdoctoral research fellow position is available in the laboratory of Dr. Prahathees Eswara in the Department of Cell Biology, Microbiology, and Molecular Biology at the University of South Florida (USF) in Tampa, FL. The major goal of the Eswara lab (www.eswaralab.com) is to understand cell division regulation in Bacillus subtilis and Staphylococcus aureus, and initiation of asymmetric cell division (at the onset of sporulation) in B. subtilis. Another research focus in the lab is to identify factors and pathways that contribute to the development of antibiotic resistance. The research programs of the Eswara lab are funded by the National Institutes of Health (NIH; R35GM133617) and the salary for the postdoc position will be based on NIH pay scales.

To apply for the position, email (eswaralab@usf.edu) a single pdf document composed of a cover letter, statement of research experience and interests, and CV with the contact information of three references. Review of applications will begin immediately and continue until the position is filled. Start date is negotiable.

Postdoc Position at the University of Michigan

"Dr. Jacob Kitzman at the University of Michigan (Departments: Bioinformatics & Computational Medicine, and Human Genetics) has an R01-funded project and is looking for a postdoc with both wet lab and informatics skills. The R01-funded project is directed at predicting variant functional impact by combining experimental functional genomic approaches (multiplex genome editing & mutagenesis) with statistical modeling. He’s looking for a candidate with strong informatics skills who is also willing to perform and/or supervise the experimental side of this project. The specific aim is to map the functional impacts of many mutations in parallel by experimentally modeling them in a highly multiplexed fashion with a deep sequencing readout. In short, they would generate a look-up table of functional impact (like a numeric score) for every possible mutation to a gene or a regulatory element of interest. Their primary goal is to provide better clinical interpretation of rare variants (ie is a given variant pathogenic vs benign), as well as to support basic functional studies of clinically relevant genes (eg to highlight important residues or domains). Here a review which discusses this family of approaches in general terms (https://www.ncbi.nlm.nih.gov/pubmed/28886340), as well as a paper Jacob’s group published describing one of the lab techniques they rely on (https://www.ncbi.nlm.nih.gov/pubmed/25559584)." For more information or to apply please contact Dr. Kitzman at kitzmanj@umich.edu

University of Illinois Job Opportunity

The University of Illinois at Urbana-Champaign has recently launched a new Microbial Systems Initiative. As part of this initiative University is looking to hire more than 5 new faculty in this area across the campus including the Department of Microbiology. Here are links to the University wide hiring initiative and the two positions in the Department of Microbiology: https://go.illinois.edu/MSIHires; https://go.illinois.edu/MCBStatAsstProf; https://go.illinois.edu/MicroAsstProf. While the advertisements emphasize microbial systems and microbiome, we will be taking a very broad view that encompasses host microbe interactions, including pathogenic interactions, at all levels and in all systems.

Trends in Microbiology Job Opportunity

"Trends in Microbiology provides a multidisciplinary forum for the discussion of all aspects of microbiology: from cell biology and immunology to genetics and evolution, and ranges across virology, bacteriology, protozoology and mycology. As the Editor of Trends in Microbiology, you will be responsible for acquiring and developing the very best commentary, correspondence and review articles in this fast-moving and fascinating field. By growing and leveraging your network of contacts in academia and industry, and acquiring new knowledge from reading the latest research and attending leading conferences, you will ensure that Trends in Microbiology maintains the leading position it has held in the field for over 25 years. You will guide the direction of the journal by adapting its scope, article types, and communication style to meet the evolving needs of your research community.” For more information please contact Jessica Miles, PhD at jmiles@cell.com This is an opportunity to be at the forefront of scientific communication at a time when the global research community is overwhelmed by the sheer volume of research being published every day. An exciting challenge of your job will be to explore new ways to use articles published in the journal and innovative technology to give the global research community answers to key questions in the across microbiology.

Job Opportunities:

Assistant/Associate Professor position at Cornell

We are currently seeking to fill a tenure-track Assistant/Associate Professor position in molecular microbiology. For details about the position and the application process please direct candidates to https://academicjobsonline.org/ajo/jobs/14753. The Department of Microbiology at Cornell University (https://micro.cornell.edu/) and College of Agriculture and Life Sciences embrace diversity and candidates would be expected to create a climate that attracts students of all races, ethnicities, nationalities and genders. Cornell is located in scenic Ithaca, NY (https://www.visitithaca.com). Please contact John Helmann (jdh9@cornell.edu) directly for any questions about the position.

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Job Opportunities Continued:

Postdoc Position at Johns Hopkins
The Zarif laboratory at the Johns Hopkins University School of Medicine is seeking a Postdoctoral Fellow to investigate the targeting of immune cells as a mechanism to enhance immunotherapy responses in metastatic castration-resistant prostate cancer. This funded position will involve studies of prostate cancer immunology and cancer metabolism with an emphasis on understanding how to improve anti-tumor immunity for metastatic castration-resistant prostate cancer. The position will involve the use of technologies such as multi-panel flow cytometry, in vitro and in vivo models, qRT-PCR, metabolomics, and immunohistochemistry. Candidates should have completed a doctorate level degree and have a strong background in cancer biology and/or immunology preferably related to innate immunity. The successful candidate should also have documented success in research including publications in peer-reviewed journals on relevant topics. Applicants should submit an application package that includes a cover letter, CV, relevant prior publications, and contact information for three references to Dr. Jelani Zarif, at jzarif1@jhmi.edu. Candidates from under-represented groups in science and medicine are encouraged to apply.

Equal Opportunity Employer Note: Job Postings are updated daily and remain online until filled. EEO is the Law

Learn more: [https://www1.eeoc.gov/employers/upload/eeoc_self_print_poster.pdf](https://www1.eeoc.gov/employers/upload/eeoc_self_print_poster.pdf)

Important legal information [http://hrnt.jhu.edu/legal.cfm](http://hrnt.jhu.edu/legal.cfm)

Research Toxicologist II
Samantha Perlroth is recruiting with the Henry M. Jackson Foundation for the Advancement of Military Medicine (HJF), a global nonprofit that supports military medicine by providing scientific, administrative and program management services to researchers and scientists. A position is open for a Research Toxicologist II to support the Naval Medical Research Unit Dayton (NAMRU-D), located at Wright-Patterson Air Force Base in Dayton, OH. They are seeking someone with a strong background in toxicology with experience in a research setting. The ideal candidate will have exposure to inhalation toxicology, however this is not a requirement.

For your reference, here is the link to the Research Toxicologist II job description on our HJF Careers website: [https://careers.hjf.org/jobs/4584083-research-toxicologist-ii-naval-medical-research-unit-dayton](https://careers.hjf.org/jobs/4584083-research-toxicologist-ii-naval-medical-research-unit-dayton)

Scholarships/Fellowships:

Fellowship Opportunities
The Graduate School has several fellowships with applications open. To view more fellowship options please visit [https://grad.msu.edu/msu-graduate-school-fellowships](https://grad.msu.edu/msu-graduate-school-fellowships)

Provost’s Postdoctoral fellowship Program at UPENN
The University of Pennsylvania has established the Provost’s Fellowship program to encourage a broad spectrum of candidates from diverse backgrounds to pursue careers in academia. [https://research.upenn.edu/postdocs-and-students/postdoctoral-fellowships/](https://research.upenn.edu/postdocs-and-students/postdoctoral-fellowships/)

Fellowships are available for postdoctoral training in all areas of study at Penn and the Children’s Hospital of Pennsylvania. Fellowships are available for postdoctoral training in all areas of study at either Penn or CHOP. STEM applications are encouraged. Successful candidates will receive mentored scholarly and research training as well as courses and workshops to enhance their research success skills and prepare them for a faculty position in a major university. Applications are open now for positions starting July 2020. The deadline is November 1, 2019 at 5 pm.