

# DEPARTMENT OF Biochemistry & Molecular Biology

### BMB WEEKLY Vol. 54, No. 4 January 25 – 29

#### COLLEGE OF NATURAL SCIENCE | BMB.MSU.EDU

Please send submissions to Jeff Mason, masonje6@msu.edu

# Seminar Calendar

### MONDAY, JANUARY 25

#### Microbiology & Molecular Genetics Work in Progress Seminars

Kayla Conner (Hardy lab) "Biodiversity of the Listeria monocytogenes protein InIP, and implications for placental colonization" Noon

Zoom link. Email Rob (abramov5@msu.edu) for the password

#### **Molecular Plant Science Seminars**

Dianne Pater, Vassar College "Growing under stress - plant biology research at a PUI" 4:00 PM <u>Zoom link</u> (Passcode: 941910)

#### **TUESDAY, JANUARY 26**

**The Exchange** – (Science discussion for BMB graduate students) 8:00 AM Email David (arnosti@msu.edu) for the Zoom link and password

#### PRL Tuesday Noon Seminars

Amit Singh (Ducat lab) "Dynamic regulation of the cyanobacterial carbon concentrating mechanism in response to sink demand in *Synechococcus elongatus* PCC 7942" Noon Zoom link (passcode 941910)

#### Microbiology & Molecular Genetics Seminars

Otto Cordero, MIT "The assembly of polysaccharide-degrading microbial communities in the ocean" 3:10 PM Zoom link. Email Ashley (shadeash@msu.edu) or Gemma (reguera@msu.edu) for the password

### THURSDAY, JANUARY 28

#### **BMB Seminar Series**

Nichole Reisdorph, U Colorado Anschutz "Nutrimetabolomics reveals small molecule-associated changes following DASH- and Mediterranean- dietary interventions" 11:00 AM Email Ashley (clarkas@msu.edu) for the Zoom link

# Noteworthy News





Please join me in welcoming Josh Vermaas and Shannon Walsh to the department.

Josh is an assistant professor in the PRL and will be working on atomic simulation tools to create accurate molecular-scale models for biological phenomena at the nanoscale. He did his PhD at the University of Illinois at Urbana-Champaign and a postdoc at the National Renewable Energy Laboratory.

Shannon is a fixed term assistant professor in BMB. She did her PhD at the University of Illinois at Urbana-Champaign and a postdoc at the University of Colorado School of Medicine.

# SPARTANS WILL.

#### **EEB Seminar Series**

Matt Farr, MSU "Data integration in population and community ecology" 3:30 PM Email Barbara (eeb@msu.edu) for the Zoom link

#### FRIDAY, JANUARY 29

<u>Plant Biology Seminar Series</u> Andrea Sweigart, University of Georgia 3:30 PM Email Chasidy (perezch2@msu.edu) for the Zoom link

### Announcements

Nominations for Graduate, Postdoctoral and Staff Awards are due Friday January 29<sup>th</sup> at 5pm for various award opportunities offered through the Biochemistry and Molecular Biology Department. Five faculty-nominated graduate level awards are offered this year, in addition, to three awards for staff and postdoctoral scholars. Contact Kristin (<u>kparent@msu.edu</u>) or Jessica (jesslaw@msu.edu</u>) with any questions. Click <u>here</u> for specific details.

Neil Bowlby (bowlby@msu.edu) is now offering repair services in room 15A BCH. Some of the services include repair/refurbish most lab equipment, brush replacement on RC5 centrifuges, custom fabrication of lab apparatus, refill/recharge black HP printer toner, pipet calibration/repair. Also, he has several items of refurbished lab equipment for sale, including microcentrifuges, benchtop shaking platforms, and spectrophotometers, with more to come. Look for more information about these services coming soon on the BMB web page.

Registration is open for the 23<sup>rd</sup> Annual University Undergraduate Research and Arts Forum (UURAF). UURAF is an opportunity for students to showcase their research and creative scholarship to the university and local community. Registration and other detailed information can be found <u>here</u>.

"How to Effectively Communicate Your Research to Program Officers" Webinar - Thursday, January 28 - 3-4.30 pm. Join a <u>panel of experts</u> to learn about the best practices to communicate with program officers. Register <u>here</u> to attend.

<u>Educator Development Opportunities</u>. This playlist includes information about various educator development opportunities across the university. This includes tools and technology workshops from IT Services, workshops from MSU Libraries, and pedagogical design workshops from the Hub for Innovation in Learning and Technology.

Application for the 2021 Summer REU Undergraduate Internship Program at the Donald Danforth Plant Science Center in St. Louis MO is now available. The program this summer will be run virtually and projects will be largely centered on computational biology. Although basic skills will be helpful, previous experience is not required and training will be provided throughout the program via workshops and direct guidance from mentors. Click <u>here</u> for more information and to apply.

Tufts University is looking for a postdoc with a recent PhD in Biochemistry or a related discipline to work on one of the following funded projects: 1) Discovering novel stress-induced ubiquitin and autophagy enzyme interactions in response to glycative stress, 2) Regulatory mechanisms of eye lens differentiation, 3) Elucidate interactions between dietary glycemia, metabolomics, microbiome, AMD, cataract, aging in animal studies and/or human populations, including planning randomized intervention studies. Contact Allen Taylor (<u>allen.taylor@tufts.edu</u>) with questions.

Two postdoc positions are available in the lab of Rick Vierstra, Department of Biology, Washington University in St. Louis to study autophagy and its roles in growth and development, nutrient recycling, and maintenance of protein homeostasis. A Ph.D in biochemistry, genetics, molecular biology, or related areas is required. Experiences with mass spectrometry and a broad background in biochemistry and genetics are helpful. Email Richard (rdvierstra@wustl.edu) with questions.

## **Recent Publications**

Mias G, Singh VV, Rogers L, Xue S, Zheng M, Domanskyi S, Kanada M, Piermarocchi C, He J. "Longitudinal saliva omics responses to immune perturbation: a case study." *Scientific Reports*. Volume 11. January 2021.

Strubbe-Rivera JO, Schrad JR, Pavlov EV, Conway JF, Parent KN, Bazil JN. "The mitochondrial permeability transition phenomenon elucidated by cryo-EM reveals the genuine impact of calcium overload on mitochondrial structure and function." *Scientific Reports*. Volume 11. January 2021.

Yuan Z, Klinger GE, Nikafshar S, Cui Y, Fang Z, ..., Hegg EL. "Effective Biomass Fractionation through Oxygen-Enhanced Alkaline–Oxidative Pretreatment." *ACS Sustainable Chem. Eng.* Volume 9. January 2021.

Uhl JD, Sripathi KN, Saldanha JN, Moscarella RA, Merrill J, Urban-Lurain M, Haudek KC. "Introductory biology undergraduate students' mixed ideas about genetic information flow." *Biochem Mol Biol Educ*. December 2020.