

**DEPARTMENT OF** 

# Biochemistry & Molecular Biology

BMB WEEKLY Vol. 54, No. 7 February 15 – 19

COLLEGE OF NATURAL SCIENCE | BMB.MSU.EDU

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

# Seminar Calendar

# MONDAY, FEBRUARY 15

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

Paige Kies (Hammerlab) "Mechanisms of inorganic sulfur acquisition and assimilation in *Staphylococcus aureus*"

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

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

Benjamin Engel, Helmholtz Zentrum München

"Exploring molecular landscapes inside photosynthetic organisms with cryo-electron tomography"

4:00 PM **Zoom link** (Passcode: 941910)

# TUESDAY, FEBRUARY 16

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

#### **PRL Tuesday Noon Seminars**

Kaila Smith, MSU (Walker Lab) Noon Zoom link (passcode 941910)

#### Microbiology & Molecular Genetics Seminars

Sheril Kirshenbaum, MSU "Science Policy and Communication in a Changing World"

3:10 PM Zoom link. Email Ashley (shadeash@msu.edu) or Gemma (reguera@msu.edu) for the password

### WEDNESDAY, FEBRUARY 17

### Metabolism, Membranes and Metalloenzymology Interest Group

Paige Kies (Hammer lab)

"Mechanisms of inorganic sulfur acquisition and assimilation in Staphylococcus aureus" 4:00 PM Email Teri (compeaut@msu.edu) for the Zoom link

### THURSDAY, FEBRUARY 18

#### **BMB Seminar Series**

Tom Metz, PNNL

"Shifting the metabolomics paradigm: exploiting computationally predicted metabolite reference data for comprehensive metabolomics"

11:00 AM Email Ashley (clarkas@msu.edu) for the Zoom link

# **Noteworthy News**



Congratulations to Dr. Elise Rivett, from Eric Hegg's laboratory, who successfully defended her thesis work on the "biosynthesis of heme a; a critical cofactor in heme-copper oxidases".

Before coming to MSU, she earned a B.S. in chemistry from Olivet Nazarene University. Her research goals focus on characterizing the mechanism and structure of heme a synthase, an enzyme that produces an essential cofactor for cytochrome c oxidase. Elise also enjoys long rambling walks, Costa Rican coffee, and funky socks.

SPARTANS WILL.

#### **EEB Seminar Series**

Allison Young, MSU

"Investigations into the exploratory behavior of foraging honey bees"

3:30 PM Email Barbara (eeb@msu.edu) for the Zoom link

#### Announcements

The University of Florida is hiring an Associate Professor of SynBio in the Horticulture Sciences department. The candidate must have a strong interest in plant SynBio but need not necessarily have prior experience with plant systems. The posting can be found <a href="here">here</a>.

The Department of Biomedical Engineering invites you to attend a virtual seminar: "Tracking down the origins of rare therapy resistant cells" Wednesday, February 17 @ 11 AM EST Join via Zoom: 957-5713-3265 Password: BME/IQ.

If you worked remotely this year and live outside of East Lansing, you may be eligible for a partial refund of the City of East Lansing income tax. Read more <u>here</u>.

Everyone's mental health continues to be affected by the pandemic. There are many resources available to assist employees, including upcoming virtual courses and meet-ups hosted by MSU Health4U. Read more

If you are looking for socially distanced events like trail hiking or virtual performances, click <u>here</u> to view campus events that will help keep you and your family entertained during the winter.

STEM graduate student of color looking for an opportunity to share experiences and receive support from fellow BIPOC graduate students should meet up by Zoom on Friday, Feb. 19th at 7 pm. The discussion may include academic and social pressure, personal growth and change, discrimination, mental health, and other topics relevant to the group. Register <a href="here">here</a>.

The U.S. Department of Energy's Office of Science is now accepting applications for the Office of Science Graduate Student Research (SCGSR) program 2021 Solicitation 1. Eligible graduate students include those currently pursuing Ph.D. degrees in areas of physics, chemistry, material sciences, biology (non-medical), mathematics, engineering, computer or computational sciences, or specific areas of environmental sciences that are aligned with the mission of the Office of Science. Details about the program, research areas, and online application can be found here.

Graduate students who are interested in "Nailing the Online Interview" should attend a workshop Wednesday, March 24, 2021 - 1:00pm to 3:00pm and learn the ins and outs of online interviewing. Read more and register here.

The American Society for Cell Biology (ASCB) is announcing the 2021-2022 Public Engagement Grants, offering up to \$35K for scientists with bold ideas to engage their communities in the process of science. <u>Click here</u> to find out more and apply

MSU-DOE PRL Postdocs will have an industry job application discussion/seminar on February 26th, at 1:00pm. Dr. Eric Moellering from Synthetic Genomics Inc. will answer questions about the industry hiring process etc. Zoom link <a href="here">here</a> (Passcode: HotPollen).

Starting in May, there will be several BMB building electrical shutdowns as work is performed on the "2021 Electrical Sub Station Project". These are being done to improve reliability/safety of the old, outdated equipment in the substation room and to keep our system reliable and trouble free.

This Saturday, February 13, 2021 will mark the 17th consecutive offering of Darwin Discovery Day (DDD), MSU's annual observance of Charles Darwin's birthday and a community-wide celebration of the contributions of natural science collections-based research to understanding life on Earth. Online registration for our 2021 event can be found on the MSU Museum website.

## **Recent Publications**

Lawson HD, Walton SP, Christina Chan C. "Metal–Organic Frameworks for Drug Delivery: A Design Perspective." *ACS Appl. Mater. Interfaces.* February 2021.

Christov CZ, Chaturvedi SS, Ramanan R, Hu J, Hausinger RP. "Atomic and electronic structure determinants distinguish between ethylene formation and L-arginine hydroxylation reaction mechanisms in the ethylene-forming enzyme." *ACS Catalysis*. February 2021.

Osei-Bonsu I, McClain AM, Walker BJ, Sharkey TD, Kramer DM. "The roles of photorespiration and alternative electron acceptors in the responses of photosynthesis to elevated temperatures in cowpea." *Plant Cell Environ*. Feb 8. 2021. Online ahead of print.

Sengupta A, Li Z, Song LF, Li P, Merz KM. "Parameterization of Monovalent Ions for the OPC3, OPC, TIP3P-FB, and TIP4P-FB Water Models." *J Chem Inf Model*. Feb 2021.

Ely KS,...Sharkey TD,...Yang, D. "A reporting format for leaf-level gas exchange data and metadata." *Ecological Informatics*. Volume 61, March 2021.