

DEPARTMENT OF

Biochemistry & Molecular Biology

BMB WEEKLY Vol. 54, No. 14 April 5 – April 9

COLLEGE OF NATURAL SCIENCE | BMB.MSU.EDU

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

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Seminar Calendar

MONDAY, APRIL 5

Microbiology & Molecular Genetics Work in Progress Seminars

Sergio Hernandez-Ortiz (Crosson lab) "Cell Cycle and Motility in Caulobacter"

Alicia Layer (Montgomery Lab) "Investigating the role of the phycobilisome abundance regulator PsoR in *Fremyella diplosiphon* Noon Zoom link. Email Rob (abramov5@msu.edu) for password

Molecular Plant Science Seminars

Jianxin Ma, Purdue University

"Soybean translational genomics: from basic findings to applications" 4:00 PM **Zoom link** (Passcode: 941910)

TUESDAY, APRIL 6

The Exchange – (Science discussion for BMB graduate students) "Samuel Saldivar, Stories Scientists Tell" 8:00 AM Email David (arnosti@msu.edu) for the Zoom link

PRL Tuesday Noon Seminars

Martin Kulke and Saad Raza, MSU (Vermaas Lab) – "Highlighting molecular dynamics methods to tackle research questions in plant sciences"

Noon Zoom link (passcode 941910)

Microbiology & Molecular Genetics Seminars

Orianna Bretschger, Aquacycl LLC

"An Unexpected Journey: Commercializing BioElectrochemical Systems for Industrial Wastewater Treatment" 3:10 PM Zoom link Email Ashley (shadeash@msu.edu) for password

THURSDAY, APRIL 8

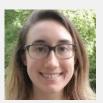
BMB Seminar Series

Sheila David, UC Davis

"When you're strange: Unusual features of the MUTYH DNA repair glycosylase and implications in cancer" 11:00 AM Email Ashley (clarkas@msu.edu) for the Zoom link

Noteworthy News





Two NSF Graduate Fellowships were awarded to BMB students Summer Blanco and Krystina Hird. The fellowships will provide tuition and stipends to each student for three years. Both students participated in a peer mentoring group for fellowship applications facilitated by Dr. Michaela TerAvest.

Summer is a post-bac student in the Grotewold lab and proposed to examine the geographic distribution patterns of pollen color morphs in wild geranium, and to evaluate the functional role of pollen color polymorphism. She is excited to work with community scientists, create educational opportunities for youth in underserved communities, and support equity, diversity, and inclusion efforts in graduate school.

Krystina is a second-year graduate student in the Hegg lab studying the enzyme complex cytochrome c nitrite reductase from the soil bacteria, *Geobacter lovleyi*, in order to elucidate the mechanism of ammonium production. After graduation she plans on focusing her career on science advocacy through policy and communication work.

SPARTANS WILL.

FRIDAY, APRIL 9

Plant Biology Seminar Series

Rachel Toczydolowski, MSU

"Identifying patterns and potential drivers of gene flow and local adaptation across scales" 3:30 PM Email Chasidy (perezch2@msu.edu) for the Zoom link

Announcements

Correction: Joel Ranking won the Outstanding Graduate Research Award, not the Outstanding Graduate Student Award.

2 important BMB building announcements-

- 1. There will be a 12-hour complete building electrical shutdown starting at 6am on May 12th. No one will be allowed in the building until the following morning. Each -80 freezer will be turned off by the switch or unplugged by Ron or Nichole just before the shutdown and then will be properly turned back on after. Prior to the shutdown, freezers should be full as they run less and are more efficient. If you need frozen water jugs and or ice packs please contact Nichole Daly.
- 2. The cooling tower will be shut-down for 2-3 weeks starting May 17th. This will affect walk-in cold rooms, growth chambers, Lieberts, A/C units and anything else that requires cooling tower water.

Inari, located in Cambridge, MA, is looking for a dedicated Genomic Data Analyst to join their Bioinformatics Team to support genome editing. The successful candidate will analyze RNAseq, amplicon seq, long read, and genetic marker data to guide their editing experiments. This is a great opportunity for students who will soon be completing their undergraduate or master's degrees. Previous experience with plant data is NOT required. Applications can be submitted here, or email Karl (kkremling@inari.com) with questions.

Professor Jaime Willbur (willbur1@msu.edu) is hiring undergraduate assistants to work in the Potato and Sugar Beet Pathology program (https://www.canr.msu.edu/psbp/). Position to begin in the spring with possible extension into the summer, fall, and future years. Individuals should be prepared to assist with diverse research projects and also be prepared learn about and work with plants, diseases, and pathogens.

Oak Ridge Institute for Science and Education (ORISE) has several research, fellowship and postdoctoral employment opportunities with the U.S. Department of Defense that may be of interest to grad students in BMB at either the MS or PhD level and can be viewed here.

"Applying Theories of Motivation in the Classroom" workshop Wednesday, April 14 from 12:00pm to 1:00pm. This session will discuss how instructors can apply theories of motivation in their teaching to increase student engagement and enthusiasm about learning. Register here.

Learn more about pandemic burnout and strategies you can use to manage it here.

BMB's Beronda Montgomery was a guest on the podcast, "Getting Curious with Jonathan Van Ness" in a segment called, "Are Plants Literal Geniuses?" Watch a clip or Listen to the entire show.

Spartans interested in learning more about COVID vaccinations are encouraged to visit MSU's COVID website. Also, leaders from MSU, Ingham County Health Department and Sparrow Hospital answered employee questions on local vaccine distribution efforts in a virtual town hall that you can re-watch here.

MSU's Women in STEM is a new student organization focused on meeting and empowering other undergraduate women in all areas of STEM. Joining their club is a great way to network with other undergraduates as well as with professional women in STEM. For more information check out their website here or contact Valerie (khaykinv@msu.edu) with questions.

Recent Publications

Liu R, Krishnan A. "PecanPy: a fast, efficient, and parallelized Python implementation of node2vec." *Bioinformatics*. March 2021.

Tanemura KA, Das S, Merz KM. "AutoGraph: Autonomous Graph-Based Clustering of Small-Molecule Conformations." *J Chem Inf Model*. Mar 2021.

Mondisa JL, Packard BWL, Montgomery BL. "Understanding what STEM mentoring ecosystems need to thrive: A STEM-ME framework." *Mentoring & Tutoring: Partnership in Learning.* Volume 28. March 2021.

Cook R, Lupette J, Benning C. "The Role of Chloroplast Membrane Lipid Metabolism in Plant Environmental Responses." *Cells.* March 2021.