



Please send submissions to Steve Lundback, lundback@msu.edu, 212 Biochemistry (Mailbox on 2nd Floor)

Seminar Calendar

MONDAY, MARCH 26

[PRL Seminar](#)

Alison Smith, University of Cambridge, UK

"Exploiting vitamin metabolism for algal biotechnology"

4:10 PM, Room 101 Biochemistry

TUESDAY, MARCH 27

[Cryo-EM Faculty Candidate](#)

Andrey Feklistov, Rockefeller University

"Conformational dynamics of transcription in bacterial stress response"

1:00 PM, Room 1425 BPS

WEDNESDAY, MARCH 28

[Pharm-Tox Seminar](#)

Amy Brewster, Purdue University

"Microglial Phagocytic Dysfunction in Epilepsy"

12:00 PM, Room 448, Life Science Bldg.

THURSDAY, MARCH 29

[BMB Colloquium](#)

CANCELLED

[EEBB Seminar](#)

Michael E. Kaspari, University of Oklahoma

"The biogeochemical theatre and the ecological play"

3:30 PM, Room 1420 BPS

FRIDAY, MARCH 30

[SATE Seminar](#)

Sara Roccabianca, Michigan State University

11:30 AM, Room 1400 BPS

Noteworthy News



George Mias's book, *"Mathematica for Bioinformatics"* covers bioinformatics analyses enabled by the Wolfram Language, Mathematica, to address omics problems. His MSU lab has used this approach to build a framework of analysis modules called MathIOmica (published in Scientific Reports) to enable addressing cutting-edge problems in personalized medicine, including how genetic, proteomic and metabolic pathways change as human diseases, such as asthma, progress.

SPARTANS WILL.



SAVE THE DATE

BIOCHEMISTRY & MOLECULAR BIOLOGY
2018 ANNUAL BANQUET

Thursday, April 12th

5:30 - 8:30 p.m.

The University Club
Michigan State University

Announcements

Checkout the [Grad/Postdoc News](#) page on the BMB website for the latest events and opportunities.

[International Studies & Programs Scholarships](#)

There is still time for students to apply for this year's International Studies & Programs scholarships and grant opportunities. The deadline for application has been extended to March 30th, 2018.

[University Graduate Certification in College Teaching Institute](#)

A two-day course leading to a certification is being offered to doctoral students and postdocs. The course will be held May 10 – 11 at the MSU Union Ballroom. Registration is required.

[Science Debate Topic: STEM Education](#)

A discussion led by Dr. Tammy Long about STEM education will take place on March 27th from 5:30 – 7:30 PM in room 2245, BPS. Food provided.

[J-1 Scholar Poster Fair, Blog, and Scholar of the Semester Events](#)

The Office for International Students and Scholars is hosting events to showcase the work of J-1 scholars, professors, and student interns conducted while at MSU. A poster fair is scheduled for April 20, 2018.

[2018 Graduate School Mentoring Awards Nominations](#)

The award categories are *Outstanding Graduate Program Community Award*, *Outstanding Faculty Mentor Award*, and *Outstanding Doctoral Student Mentor Award*. Deadline for nominations is April 2, 2018.

[Volunteers Needed - Fascination of Plants Day](#)

The second edition of Fascination of Plants Day will be held on Saturday, May 19th, 2018. Contact Aparajita Banerjee (banerj12@msu.edu) to volunteer.

[American Cancer Society Funding Opportunities](#)

Funding opportunities for cancer research, training, and career development are available through the American Cancer Society. Grand deadlines are April 1st, and October 15th.

[North American Mass Spectrometry Summer School](#)

August 6-9 2018, Madison, Wisconsin. In this four-day course, students will experience an engaging and inspiring program covering the latest in the application of mass spectrometry to omic analyses in plants and animals. Tutorial lectures range from experimental design, sample preparation, and quantification to the basics of high performance mass analyzers and data analysis. Also planned are several hands-on workshops. Limited space available. Apply now through April 1, 2018.

[Inaugural Cryo-EM at VARI Workshop for Graduate Students](#)

A 3-day workshop for graduate students taught by internationally recognized Cryo-EM experts will be offered at the Van Andel Research Institute from August 13 to August 15. Application period is from March 1 - May 1, 2018.

Recent Publications

For most publications from BMB labs during the past year, see [Recent Publications](#) on the BMB website.

Kaguni JM. “The Macromolecular Machines that Duplicate the Escherichia coli Chromosome as Targets for Drug Discovery.” *Antibiotics (Basel)*. (2018) Mar 14;7:(1). doi: [10.3390/antibiotics7010023](https://doi.org/10.3390/antibiotics7010023)

Howe GA, Major IT, Koo AJ. “Modularity in Jasmonate Signaling for Multistress Resilience.” *Annu Rev Plant Biol*. (2018) Mar 14. doi: [10.1146/annurev-arplant-042817-040047](https://doi.org/10.1146/annurev-arplant-042817-040047)

Yang Y, Guo R, Gaffney K, Kim M, Muhammednazaar S, Tian W, Wang B, Liang J, Hong H. “Folding-Degradation Relationship of a Membrane Protein Mediated by the Universally Conserved ATP-dependent Protease FtsH.” *J Am Chem Soc*. (2018) Mar 12. doi: [10.1021/jacs.8b00832](https://doi.org/10.1021/jacs.8b00832)

Xue S, Jones AD, Sousa L, Piotrowski J, Jin M, Sarks C, Dale BE, Balan V. “Water-soluble phenolic compounds produced from extractive ammonia pretreatment exerted binary inhibitory effects on yeast fermentation using synthetic hydrolysate.” *PLoS One*. (2018) 13(3):e0194012. doi: [10.1371/journal.pone.0194012](https://doi.org/10.1371/journal.pone.0194012)

Ligaba-Osena A, Jones J, Donkor E, Chandrayan S, Pole F, Wu CH, Vieille C, Adams MWW, Hankoua BB. “Novel Bioengineered Cassava Expressing an Archaeal Starch Degradation System and a Bacterial ADP-Glucose Pyrophosphorylase for Starch Self-Digestibility and Yield Increase.” *Front Plant Sci*. (2018) 9:192. doi: [10.3389/fpls.2018.00192](https://doi.org/10.3389/fpls.2018.00192)

Yildirim A, Feig M. “High-resolution 3D models of *Caulobacter crescentus* chromosome reveal genome structural variability and organization.” *Nucleic Acids Res*. (2018) Feb 26. doi: [10.1093/nar/gky141](https://doi.org/10.1093/nar/gky141)