



Please send submissions to Steve Lundback, [lundback@msu.edu](mailto:lundback@msu.edu), 212 Biochemistry (Mailbox on 2<sup>nd</sup> Floor)

## Seminar Calendar

### MONDAY, MARCH 19

#### PRL Seminar

Richard Dixon, University of North Texas

*"Understanding and engineering plant metabolism for forage improvement"*

4:10 PM, Room 101 Biochemistry

### TUESDAY, MARCH 20

#### MMG Seminar

David A. Stahl, University of Washington

*"The microbiology of the nitrogen economy - Physiology, ecology & management"*

11:00 AM, Room 101 Biochemistry

### WEDNESDAY, MARCH 21

#### 3M Interest Group

Bryan Ferlez, Kerfeld lab

*"Engineering Modular Protein Membranes for Electron Transport and Enzyme Scaffolding"*

4:00 PM, Room 1455-A BPS (iCER)

### THURSDAY, MARCH 22

#### Nathan Edward Tolbert Endowed Lectureship

Kent Chapman, University of North Texas

*"Lipid Droplet Biogenesis in Plants"*

11:00 AM, Room 101 Biochemistry

#### EEBB Seminar

Mike Shapiro, University of Utah

*"Fancy feet and a checkered past: genetics of diversity in the rock pigeon"*

3:30 PM, Room 1420 BPS

### FRIDAY, MARCH 23

#### SATE Seminar

Jef Boeke, New York University

*"Designing a Eukaryotic Genome from the Bottom Up"*

11:30 AM, Room 1400 BPS

## Noteworthy News



We are pleased to share that Dr. Sebastian Raschka (dual-major Ph.D. in BMB and Quantitative Biology, Dec. 2017, and alumnus of our exchange program with Universität Düsseldorf) has just accepted a position as tenure-track Assistant Professor in the Department of Statistics at University of Wisconsin-Madison, starting this fall. Way to go, Sebastian!

**SPARTANS WILL.**



**SAVE THE DATE**



BIOCHEMISTRY & MOLECULAR BIOLOGY  
2018 ANNUAL BANQUET

*Thursday, April 12<sup>th</sup>*

*5:30 - 8:30 p.m.*

*The University Club*

*Michigan State University*

## Announcements

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

### **MSU iGEM Pitch Event**

The 2018 MSU International Genetically Engineered Machine (iGEM) team will present 3 ideas for their project and invite questions and discussion to help choose a final topic. This event will also include tours, a reception, and an informal dinner. Thursday, March 22<sup>nd</sup>, 4:00 PM – 5:30 PM, 775 Woodlot Drive (IQ building atrium).

### **Plant Science Graduate Student Research Symposium**

The 16th annual Plant Science Graduate Student Research Symposium will be held on Friday, March 30, 2018. This is a great opportunity to exchange research ideas, polish presentation techniques, and make and renew friendships as well as receive valuable feedback from respected and expert faculty. The deadline for abstract submission is 5:00 p.m. on Friday, March 23, 2018.

### **A Day with Science Moms**

Science Moms are a group of women who publicly advocate for making parenting decisions rooted in science. They will be holding events all day on Tuesday, March 20<sup>th</sup>, in Chittenden Hall.

### **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 19<sup>th</sup>, 2018. Contact Aparajita Banerjee ([banerj12@msu.edu](mailto: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 1<sup>st</sup>, and October 15<sup>th</sup>.

### **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.

## [Faculty Team Positions at the Boyce Thompson Institute](#)

BTI invites applications for teams of 2-3 individuals seeking to conduct an interdisciplinary project(s). Appointments will be made at the Assistant Professor level initially for three years, with a second 3-year appointment possible. Applications should include a single proposal for collaborative research project(s). Review of applications will begin April 23, 2018.

## Recent Publications

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

Poliner E, Takeuchi T, Du ZY, Benning C, Farré EM. “Nontransgenic Marker-Free Gene Disruption by an Episomal CRISPR System in the Oleaginous Microalga, *Nannochloropsis oceanica* CCMP1779.” *ACS Synth Biol.* (2018) Mar 14. doi: [10.1021/acssynbio.7b00362](https://doi.org/10.1021/acssynbio.7b00362)

Scott KM, Williams J, Porter CMB, Russel S, Harmer TL, Paul JH, Antonen KM, Bridges MK, Camper GJ, Campla CK, Casella LG, Chase E, Conrad JW, Cruz MC, Dunlap DS, Duran L, Fahsbender EM, Goldsmith DB, Keeley RF, Kondoff MR, Kussy BI, Lane MK, Lawler S, Leigh BA, Lewis C, Lostal LM, Marking D, Mancera PA, McClenthan EC, McIntyre EA, Mine JA, Modi S, Moore BD, Morgan WA, Nelson KM, Nguyen KN, Ogburn N, Parrino DG, Pedapudi AD, Pelham RP, Preece AM, Rampersad EA, Richardson JC, Rodgers CM, Schaffer BL, Sheridan NE, Solone MR, Staley ZR, Tabuchi M, Waide RJ, Wanjugi PW, Young S, Clum A, Daum C, Huntemann M, Ivanova N, Kyrpides N, Mikhailova N, Palaniappan K, Pillay M, Reddy TBK, Shapiro N, Stamatis D, Varghese N, Woyke T, Boden R, Freyermuth SK, Kerfeld CA. “Genomes of ubiquitous marine and hypersaline *Hydrogenovibrio*, *Thiomicrobacterium*, and *Thiomicrospira* spp. encode a diversity of mechanisms to sustain chemolithoautotrophy in heterogeneous environments.” *Environ Microbiol.* (2018) Mar 9. doi: [10.1111/1462-2920.14090](https://doi.org/10.1111/1462-2920.14090)

Poliner E, Farré EM, Benning C. “Advanced genetic tools enable synthetic biology in the oleaginous microalgae *Nannochloropsis* sp.” *Plant Cell Rep.* (2018) Mar 6. doi: [10.1007/s00299-018-2270-0](https://doi.org/10.1007/s00299-018-2270-0)

Kerfeld CA, Aussignargues C, Zarzycki J, Cai F, Sutter M. “Bacterial microcompartments.” *Nat Rev Microbiol.* (2018) Mar 5. doi: [10.1038/nrmicro.2018.10](https://doi.org/10.1038/nrmicro.2018.10)