



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

## Seminar Calendar

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### MONDAY, SEPTEMBER 30

#### [MPS Seminar](#)

Rebecca Bart, Donald Danforth Plant Science Center  
"Mechanisms used by hosts and pathogens to recognize and respond to one another"  
4:10 PM, Room 1200 MPS

### TUESDAY, OCTOBER 1

#### [The Exchange](#)

Journal Club – Jie Xiao, Johns Hopkins University  
8:00 AM, Room 208 Biochemistry

#### [Special Seminar hosted by Pam Fraker](#)

Jacqueline Stephens, Louisiana State University  
"New insights into Growth Hormone and STAT5 dependent regulation of adipose tissue mass and metabolic health"  
3:00 PM, Room 1415 BPS

### THURSDAY, OCTOBER 3

#### [BMB Colloquium](#)

Elizabeth Maher, UT Southwestern  
"Early metabolic reprogramming in glioma and breast cancer: Insights and potential new targets"  
11:00 AM, Room 101 Biochemistry

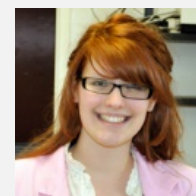
#### [EEBB Seminar](#)

Brad Shaffer, UCLA Lakretz Center Director  
"Why endangered species conservation needs genomics"  
3:30 PM, 1420 BPS

#### [Physiology Seminar](#)

Ren Xu, University of Kentucky College of Medicine  
"Targeting the ECM Network for Breast Cancer Treatment"  
4:00 PM, Room 1425 BPS

## Noteworthy News



BMB and Chemistry graduate student Graciellou Klinger (Hegg Lab) recently publish an [article](#) in ChemSusChem about her research into breaking down plant lignin, an important source of biofuels. Traditionally, lignin has been oxidized to obtain biofuel, but energy density is decreased in the process. Graciellou is following the chemistry that bacteria use to break down lignin by using the reducing power of thiols, which preserves the energy density contained in lignin. You can read more about Graciellou's research at the Great Lakes Bioenergy Research Center [here](#).

**SPARTANS WILL.**

## Announcements

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### [Molecular Biophysics Symposium in Honor of the Grand Opening of the MSU Cryo-EM Core Facility](#)

Friday October 4th and Saturday October 5th, 2019.

To inaugurate the new Cryo-EM facility at Michigan State, we are hosting a symposium to highlight cutting edge research in molecular biophysics. We will feature invited talks, student posters and a tour of the new cryo-EM facility. Registration is free but required.

### [Nomination for the 2019 Outstanding Undergraduate Student Award](#)

A nomination should include a nominating letter from a faculty member, CV (resume), and any supporting documents such as reprints, manuscript in press, supporting letters, etc., deemed pertinent to the Committee's decision process. All nomination packet files should be combined into a *single PDF* and submitted electronically to Mary Villarreal ([villar30@msu.edu](mailto:villar30@msu.edu)) by Monday, October 7.

### [Undergraduate Awards Application Form](#)

Undergraduate Students are encouraged to apply for the following departmental awards:

- Pamela J Fraker Undergraduate Scholarship
- Professor Richard L Anderson Endowed Undergraduate Research Prize
- Dr. James K. Billman, Jr. Undergraduate Research Award
- BMB Undergraduate Research Fellowship
- NEW: Moore-Billman Scholarship in Biochemistry and Molecular Biology

The deadline to apply is Monday, October 7, 2019.

### [Preclinical R&D, Development Scientist / Manager, Millendo Therapeutics](#)

This position will be part of the Preclinical Research and Development (PR&D) organization and lead operational aspects of the group including CRO management and timeline/activity management. Millendo Therapeutics is located in Ann Arbor, Michigan. The hiring manager is Andy Spencer, a BMB alum from Bill Smith's group.

### [Chair for the Department of Chemistry and Biochemistry University of Texas at El Paso](#)

The University of Texas at El Paso (UTEP) is seeking an innovative leader to serve as Chair of the Department of Chemistry and Biochemistry. Research activities in the Department encompass all major areas of chemistry and biochemistry, and faculty receive extramural funding from federal and state programs, private foundations and industry. The successful candidate is expected to be an active leader and researcher with a strong vision for developing and strengthening educational and research initiatives. Review of applications will begin October 21, 2019, and will continue until the position is filled.

### [Tenure-track Faculty Positions in Genetics, University of Wisconsin-Madison](#)

The Department of Genetics in the College of Agricultural and Life Sciences at the University of Wisconsin - Madison invites applications for two tenure track positions at the rank of Assistant Professor in Genetics. One position is in the area of plant genetics, and the other is open more broadly to model-organism genetics. The Department seeks scientists who study the genetic and molecular basis of fundamental aspects of inheritance or its phenotypic manifestations at the molecular, cellular and/or organismal levels. Applications must be submitted by October 15, 2019 to ensure consideration.

### [Assistant Professor, Wesleyan University](#)

The Department of Molecular Biology and Biochemistry at Wesleyan University seeks a tenure-track assistant professor beginning July 1, 2020. The candidate will develop an independent research program supported by extramural funding that integrates current biochemical, informatics, or biophysical approaches to address fundamental problems in molecular biology. We seek an individual who can contribute to both our undergraduate and graduate course curriculum, including fundamental and advanced biochemistry courses. The new hire will participate in our Ph.D. training program and cross-disciplinary initiatives in the life sciences. Review of applications will begin October 1, 2019.

## Recent Publications

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

Felczak MM, Jacobson TB, Ong WK, Amador-Noguez D, TerAvest MA. "Expression of Phosphofructokinase Is Not Sufficient to Enable Embden-Meyerhof-Parnas Glycolysis in *Zymomonas mobilis* ZM4." *Front Microbiol.* (2019) Sep 27;10:2270. doi: [10.3389/fmicb.2019.02270](https://doi.org/10.3389/fmicb.2019.02270)

Scharlau M, Geren L, Zhen EY, Ma L, Rajagukguk R, Ferguson-Miller S, Durham B, Millett F. "Definition of the Interaction Domain and Electron Transfer Route between Cytochrome c and Cytochrome Oxidase." *Biochemistry.* (2019) Sep 26. doi: [10.1021/acs.biochem.9b00646](https://doi.org/10.1021/acs.biochem.9b00646)

Doore SM, Schrad JR, Perrett HR, Schrad KP, Dean WF, Parent KN. "A cornucopia of Shigella phages from the Cornhusker State" *Virology* (2019) Sep 16;538:45-52. doi: [10.1016/j.virol.2019.09.007](https://doi.org/10.1016/j.virol.2019.09.007)

