



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

**Thank you BMB!!**

We were able to provide all of the items on the kids' wish list for Child and Family Charities!

Your generosity is amazing!

*Giving Tree*



## **Announcements**

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

### **East Lansing Income Tax Update**

MSU is required to withhold income tax effective Jan. 1, 2019 for employees who live and/or work in the City of East Lansing. You will need to review and certify your W-4 Local Tax form information for your residence and work tax locations through the EBS Portal starting Dec. 17.

### **BMB Network Outage Schedule**

Partial Ethernet outages due to switch upgrades will occur as follows (wireless should be available):

**2nd Floor** - Wednesday, December 26th

**4th Floor** - Friday, December 28th

### **Seeking Presenters and Volunteers for Girls Math & Science Day 2019**

The MSU Graduate Women In Science are seeking presenters and volunteers for Middle School Girls Math and Science Day held on March 2nd, 2019 from 1-5pm. The event is an opportunity for middle school girls to participate in science demonstrations while working with enthusiastic graduate students and researchers. The day is composed of four 30 minute sessions where girls participate in hands-on workshops on a range of topics in science. The deadline for signing up to present an activity is Friday, December 28th.

### **11th Annual Graduate Academic Conference**

This year, the conference explores how research impacts everyday lives. The keynote and workshops will engage graduate students in rich discussions on how to apply theoretical knowledge to practical problems in a creative way. Abstract Submission Deadline: January 11, 2019. Conference Date: February 16, 2019.

### **Annual Series of "Thriving at Michigan State University" Workshops**

This year, the Academic Advancement Network in collaboration with Academic Human Resources will host their annual series of "Thriving at Michigan State University" workshops to provide faculty and academic specialists with important information and strategies on how to be successful in their careers at our institution. Content will be tailored for each appointment type's specific needs. Workshops will be held in January and February of 2019.

### **BMB960 Sec 002: Chromatin Dynamics and Gene Expression in Development**

This course will examine modern literature, focusing on a wide variety of systems and approaches to look at the integration of chromatin dynamics and gene expression in development and disease.

### **CMSE 801, Introduction to Computational Modeling**

We will explore the tools required to design, build and utilize computational models that are applied to many problems from a wide range of scientific disciplines. The main goal is to learn the skills necessary to apply computational techniques to a dataset of interest. Creating models to describe and understand systems (in the physical, life, or social sciences, or in engineering) is the driving principle of this course.

### **Assistant Professor in Biochemistry, University of Nebraska at Omaha**

The Department of Chemistry at the University of Nebraska at Omaha invites applications for the position of Assistant Professor in Biochemistry. This is a 9-month, tenure-track position beginning August 19, 2019. The position requires a commitment to excellence in teaching and to the establishment of a research program that involves working with undergraduate students. Review of applications will begin in January 2019.

### **Assistant Professor - Department of Biology, West Virginia University**

As part of an expansion in molecular genetics research, West Virginia University invites applications for a tenure-track position at the Assistant Professor level in the Department of Biology to begin August 2019. Review of completed applications will begin on January 21, 2019 and will continue until the position is filled.

### **Phytochemical Society of North America 58th Annual Meeting**

Symposiums include natural product metabolism and enzymology, chemical ecology, and natural products in agriculture and medicine. July 20-24, 2019, Johnson City, Tennessee.

## Recent Publications

---

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

Brocke S, Degen A, MacKerell AD, Dutagaci B, Feig M. "Prediction of Membrane Permeation of Drug Molecules by Combining an Implicit Membrane Model with Machine Learning." *J Chem Inf Model.* (2018) Dec 12. doi: [10.1021/acs.jcim.8b00648](https://doi.org/10.1021/acs.jcim.8b00648)

Bedewitz MA, Jones AD, D'Auria JC, Barry CS. "Tropinone synthesis via an atypical polyketide synthase and P450-mediated cyclization." *Nat Commun.* (2018) Dec 11;9(1):5281. doi: [10.1038/s41467-018-07671-3](https://doi.org/10.1038/s41467-018-07671-3)

Heo L, Feig M. "Experimental accuracy in protein structure refinement via molecular dynamics simulations." *Proc Natl Acad Sci U S A.* (2018) Dec 10. doi: [10.1073/pnas.1811364115](https://doi.org/10.1073/pnas.1811364115)

Yildirim A, Brenner N, Sutherland R, Feig M. "Role of protein interactions in stabilizing canonical DNA features in simulations of DNA in crowded environments." *BMC Biophys.* (2018) Dec 7;11:8. doi: [10.1186/s13628-018-0048-y](https://doi.org/10.1186/s13628-018-0048-y)

Lay KS, Takahashi H. "Nutrient-Responsive Small Signaling Peptides and Their Influence on the Root System Architecture." *Int J Mol Sci.* (2018) Dec 7;19:(12). doi: [10.3390/ijms19123927](https://doi.org/10.3390/ijms19123927)