



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

Seminar Calendar

MONDAY, JANUARY 22

PRL Seminar

No Seminar

TUESDAY, JANUARY 23

MMG Seminar

David Beck, University of Washington

"Rapid genetic variation across prokaryotic taxa is facilitated by mosaic plasmids"

11:00 AM, Room 101 Biochemistry

WEDNESDAY, JANUARY 24

BMB-PRI Faculty Candidate Seminar

Kathleen Greenham, Dartmouth College

"Internal time-keeping provides temporal coordination of plant performance"

9:00 AM, Room 247 Plant Biology Bldg.

3M Seminar

Sandy Olenic, CMB Graduate Program

"Inhibition of Intramembrane Protease Activity"

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

THURSDAY, JANUARY 25

BMB Colloquium

Elizabeth Jonas, Yale University

"Mitochondrial Regulation of Neurodevelopment and Plasticity"

11:00 AM, Room 101 Biochemistry

EEBB Seminar

Clifford Kraft, Cornell University

"Pathogenicity and ecosystem disruption from ecological competition for B vitamins"

3:30 PM, Room 1420 BPS

FRIDAY, JANUARY 26

SATE Seminar

Brian Gulbransen, Michigan State University

"Intercellular Communication as a Basis for Understanding Complex Organ Functions"

11:30 AM, Room 1400 BPS

Noteworthy News



A collaborative study led by BMB researchers has documented a metabolic pathway event that happened during the past 3 million years, leading to the production of a new set of defensive acyl sugars (a class of compounds that play a critical role in allowing wild tomatoes to fend off bugs) in the hair-like protrusions of tomatoes known as trichomes. The research was published in [*Nature Communications*](#) and featured in [*NatSci News*](#).

SPARTANS WILL.

Announcements

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

[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.

[Spring 2018 Mid-Career Conversation](#)

The Academic Advancement Network and Academic Human Resources will host a conversation with administrators on mid-career post-tenure faculty, focused on issues and challenges faced during this time and how MSU administrators can provide support to overcome them. This event will be held on March 28th from 9:00 am to 10:30 am at the MSU Main Library. Register by March 19th.

[STEM Teaching Essentials Spring 2018 Lunchtime Workshops](#)

These workshops are focused on helping new MSU STEM faculty get a running start for classroom instruction. Spring 2018 workshops will introduce participants to a variety of instructional approaches designed to help students achieve learning outcomes.

[Invitation to the 9th Annual Midwest Graduate Research Symposium at The University of Toledo](#)

The University of Toledo Graduate Student Association (GSA) cordially invites students from Michigan State University to the 9th Annual Midwest Graduate Research Symposium (MGRS). Each year we are excited to provide this opportunity to talented graduate students across the country and are looking forward to April 7th, 2018. Free Registration deadline is March 10.

[2018 NIDA Summer Research Internship Program](#)

The National Institute on Drug Abuse (NIDA) invites undergraduate students interested in pursuing a career in substance abuse research to submit an application for the 2018 NIDA Summer Research Internship Program. Application deadline is February 12, 2018.

Job Postings

See the BMB website for a full listing of [employment opportunities](#).

[Research Associate Positions, Brandizzi Lab, Plant Research Laboratory at MSU](#)

The positions focus on the study of the biology of endomembranes in plants. The project will employ molecular and biological approaches to define the function of newly identified membrane proteins in the shaping of the endoplasmic reticulum and in the traffic of cargo in relation to the cytoskeleton in *Arabidopsis thaliana*.

[Assistant/Associate Professor in Molecular and Cellular Biology, University of Alberta](#)

Candidates with a demonstrated publication record and research expertise in prokaryotic and/or eukaryotic systems and a strong interest in undergraduate education are encouraged to apply. We are interested in applications from excellent candidates who study any aspect of molecular and cellular biology using diverse experimental approaches. Closing date is February 28, 2018.

Plant Biology/Biochemistry Postdoctoral Research Associate Positions, Cornell University

Two postdoctoral positions are available in Jocelyn Rose's lab in the Plant Biology Section, School of Integrative Plant Science at Cornell University, studying tomato fruit biology using genomic and/or biochemical approaches, with particular focus on cuticles, cell walls, and ripening related processes.

Postdoctoral Position in the Leslie Lab at Emory University

The Leslie lab in the Department of Human Genetics at Emory University School of Medicine, in Atlanta, Georgia, is looking for a postdoctoral fellow to join our team. Our lab is focused on understanding the etiology of craniofacial anomalies.

Postdoctoral Position in Epigenetics and siRNA Function, Wayne State University

Postdoctoral positions to explore X chromosome recognition during *Drosophila* dosage compensation are available at Wayne State University in Detroit, MI.

Recent Publications

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

Hunter CT, Saunders JW, Magallanes-Lundback M, Christensen SA, Willett D, Stinard PS, Li QB, Lee K, DellaPenna D, Koch KE. "Maize w3 disrupts homogentisate solanesyl transferase (ZmHst) and reveals a plastoquinone-9 independent path for phytoene desaturation and tocopherol accumulation in kernels." *Plant J.* (2018) Jan 8. doi: [10.1111/tpj.13821](https://doi.org/10.1111/tpj.13821)

Heskes AM, Sundram TCM, Boughton BA, Bjerg Jensen N, Hansen NL, Crocoll C, Cozzi F, Rasmussen S, Hamberger B, Hamberger B, Staerk D, Møller BL, Pateraki I. "Biosynthesis of bioactive diterpenoids in the medicinal plant *Vitex agnus-castus*." *Plant J.* (2018) Jan 8. doi: [10.1111/tpj.13822](https://doi.org/10.1111/tpj.13822)

Cang Z, Mu L, Wei GW. "Representability of algebraic topology for biomolecules in machine learning based scoring and virtual screening." *PLoS Comput Biol.* (2018) Jan 8;14(1):e1005929. doi: [10.1371/journal.pcbi.1005929](https://doi.org/10.1371/journal.pcbi.1005929)

Zhang Q, Wijk RV, Shahbaz M, Roels W, Schooten BV, Vermeer JEM, Zarza X, Guardia A, Scuffi D, García-Mata C, Laha D, Williams P, Willems LAJ, Ligterink W, Hoffmann-Benning S, Gillaspay G, Schaaf G, Haring MA, Laxalt AM, Munnik T. "Arabidopsis Phospholipase C3 is Involved in Lateral Root Initiation and ABA Responses in Seed Germination and Stomatal Closure." *Plant Cell Physiol.* (2017) Dec 22. doi: [10.1093/pcp/pcx194](https://doi.org/10.1093/pcp/pcx194)