



DEPARTMENT OF
**Biochemistry &
Molecular Biology**

BMB WEEKLY

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NOVEMBER 13–17

COLLEGE OF NATURAL SCIENCE | BMB.MSU.EDU

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

Seminar Calendar

MONDAY, NOVEMBER 13

[PRL Seminar](#)

No Seminar

4:10 PM, Room 1200 MPS

TUESDAY, NOVEMBER 14

[MMG Seminar](#)

Karen Ottemann, UC Santa Cruz

"Helicobacter pylori chemotaxis in the stomach: Signaling diversity and niche colonization"

11:00 AM, Room 1425 BPS

WEDNESDAY, NOVEMBER 15

[3M Seminar](#)

Clarisse Finders, Michigan State University

"The Joke's on Us: Mechanistic Studies of Enzymatically Produced Laughing Gas"

4:00 PM, Room 1455-ABPS (iCER)

[Pharm Tox Seminar](#)

No Seminar

12:00 PM, B448 Life Science Building

THURSDAY, NOVEMBER 16

[BMB Colloquium](#)

Greg Vanlerberghe, University of Toronto

"A role for the alternative oxidase in photosynthesis-respiration interactions and growth"

11:00 AM, Room 101 Biochemistry

[EEBB Seminar](#)

Ariana Strandburg-Peshkin, Max Planck Institute for Ornithology

"Collective movement in animal societies"

3:30 PM, Room 1420 BPS

FRIDAY, NOVEMBER 17

[SATE Seminar](#)

Jeff Gore, Massachusetts Institute of Technology

"A Bottom-up Approach to Microbial Community Assembly"

11:30 AM, Room 1400 BPS

Noteworthy News



Jon Stoltzfus, director of the Biological Sciences Program at MSU, will lead a three-year \$598,925 National Science Foundation collaborative research initiative to investigate how core ideas and mechanistic explanations are used within and across three introductory science courses: chemistry, cell and molecular biology, and organismal biology. [NatSciNews](#).

SPARTANS WILL.

Announcements

[Opportunities and Events for Graduate Students and Postdocs](#)

Checkout the Grad/Postdoc News page on the BMB website for the latest events and opportunities.

[Writing Winning Grant Proposals](#)

This full-day seminar is designed for **faculty members, graduate students, and administrative staff** who want tips and strategies for presenting their research case to reviewers. Deadline to register is December 1.

[gradSERU Survey](#)

PhD students: With an investment of 30 minutes of your time, you will have the opportunity to help shape graduate education at MSU. Please take the gradSERU survey!

Job Postings

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

[Two Faculty Positions in Cryo-Electron Microscopy, Michigan State University](#)

The Department of Biochemistry and Molecular Biology at Michigan State University seeks outstanding applicants for two tenure-track positions at the Assistant/Associate level with expertise in cryo-electron microscopy (Cryo-EM) and the ability to develop a vigorous, externally funded research program that will complement existing strengths in the areas of structural, membrane protein, computational, microbial, and plant biochemistry.

[Faculty Position in Biological Mass Spectrometry at Michigan State University](#)

Michigan State University invites application for an academic year tenure stream faculty position, targeting the Assistant Professor level, in the Department of Biochemistry and Molecular Biology for individuals who use mass spectrometry to investigate important biological questions at the molecular level. Review of applications will begin November 1 and continue until suitable candidates are identified.

[Faculty Position in the Plant Resilience Institute at Michigan State University](#)

The Department of Biochemistry and Molecular Biology invites applications for a position at the Assistant or Associate Professor level from individuals addressing fundamental aspects of plant response and adaptation to global environmental change. Applications should be submitted by November 15, 2017.

[Assistant/Associate Professor of Plant-Microbe Biology, Cornell University](#)

The School of Integrative Plant Science at Cornell University invites applications for a tenure track position at the Assistant or Associate Professor level in Plant-Microbe Biology. Initial screening of applications will begin on January 5, 2018 and continue until the position is filled.

[Assistant Professor Position in Plant Biochemistry, UC Davis](#)

The Department of Plant Biology, College of Biological Sciences, at the University of California, Davis, invites applications for a tenure-track Assistant Professor position in the field of Plant Biochemistry. Applications should be received no later than December 1, 2017.

Recent Publications

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

Müller TA, Struble SL, Meek K, Hausinger RP. “Characterization of human AlkB homolog 1 produced in mammalian cells and demonstration of mitochondrial dysfunction in ALKBH1-deficient cells.” *Biochem Biophys Res Commun.* (2017) Oct 30. doi: [10.1016/j.bbrc.2017.10.158](https://doi.org/10.1016/j.bbrc.2017.10.158)

The postdocs Magdalena M. Felczak and Sundari Chodavarapu with Jon Kaguni have recently published an article entitled “DnaC, the indispensable companion of DnaB helicase, controls the accessibility of DnaB helicase by primase” in the JBC (www.jbc.org/content/early/2017/10/25/jbc.M117.807644.abstract). The objective of the work is to understand the dynamics and mechanism of the interaction of *E. coli* DnaB helicase with primase, the enzyme that must bind to DnaB to form primers for DNA replication. On the basis of experimental evidence presented in this article, they propose a model in which DnaC bound to the C-terminal domain of DnaB causes a conformational change in the N-terminal domain of DnaB that leads to the occlusion of primase with DnaB.