

College of Natural Science | BMB Weekly | Vol. 55, No. 29

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Seminar Calendar

Preliminary Exam: Diego Granados-Villanueva

The journey of Get3 with its proteic cargo in the cytosolic stage of *Saccharomyces cerevisiae's* GET pathway

August 15, 2022 — 12 p.m. 1400 BPS

Doctoral Dissertation Defense: Alan Mcclain

The regulation surrounding the triose phosphate utilization limitation of photosynthesis

August 15, 2022 — 1 p.m. 208 BMB If you would like to Zoom in, click <u>here</u>. Passcode: 753951

Coming Soon: Fall Colloquium Series

The Fall BMB 978 Colloquium Seminar series will begin Thursday September 1, 2022 and run through December 8, 2022. The complete schedule will be available on the BMB Fall Seminar Series <u>website</u> by August 15.

Many speakers are planning to visit in-person which is terrific! A zoom option will continue to be offered for all seminars as well.

Time change: With more courses returning to in-person learning and increased enrollment, the seminar start/end times need to follow classroom scheduling time blocks this semester. *The seminars will start promptly at 11:30 a.m. and end by 12:20 p.m.*



SPARTANS WILL

Mark Your Calendar

Pizza Talk Series

August 16, 2022 — 12 p.m. Garden outside Biochemistry Building

Ron Cook and Rees Rillema in the Benning and Ducat labs will talk about their research, plans for future research, and/or journal article of interest, with plenty of time for questions and answers. Pizza lunch provided. Contact David Arnosti arnosti@msu.edu for information.

WorkLife Office: Newcomer Sessions

August 16, 2022 — 1:30–2:30 p.m.

This webinar is geared toward newcomers at MSU. MSU is a large place and the MSU WorkLife Office is here to help you navigate it! This webinar will serve as an introduction to the WorkLife Office, and will include information about things to do at MSU, and in the greater community. Register <u>here</u> for this virtual event.

If you are new or returning to Michigan State University, the Greater Lansing area, Michigan or the United States, the WorkLife Office can help connect you to campus and community resources. Even if you aren't new to the area, the Office has plenty of ways to help you locate the resources you need and become connected to your colleagues and your community. Welcome to MSU - please reach out to the MSU WorkLife Office if there is anything we can do to help you during your transition (worklife@msu.edu | 517-353-1635). Click <u>here</u> to read more about how the WorkLife Office is working continually to welcome newcomers.

International GTA Orientation

August 17, 2022 — 9 a.m.–1 p.m.

Audience: All

Audience: Graduate students

All new International Graduate Teaching Assistants (GTAs) starting in the Fall 2022 or Spring 2023 semesters, please plan on attending the International GTA Orientation on August 17, 2022. Topics include life & teaching in the U.S., international GTA panel, GTA resources, community building, and employee and academic support. Learn more <u>here</u>.

New GTA Institute

Audience: Graduate Teaching Assistants

Audience: Graduate Teaching Assistants

August 18, 2022 — 10 a.m.-5 p.m.

All new Graduate Teaching Assistants, both domestic and international, who are starting in the Fall 2022 or Spring 2023 semesters, please plan on attending the New GTA Institute on August 18, 2022. Topics include policies and teaching, difficult communication, identities, and case studies. Learn more <u>here</u>.

GTA Pedagogy Workshops

August 19, 2022 — 8 a.m.–5 p.m.

All Graduate Teaching Assistants, both new and returning, please plan on attending the Pedagogy Workshops on August 19, 2022. Topics include technology and pedagogy, getting started with teaching, and classroom management. Learn more <u>here</u>.

Graduate School Welcome & Resource Fair

Audience: New and Returning Graduate Students

August 27, 2022— 10 a.m.–12 p.m. MSU Union

All **new** and **returning** Graduate Students are invited to attend the annual welcome program for graduate students of MSU. Dean Pero Dagbovie will welcome students to Michigan State University and introduce the activities of the Graduate School. Resource Fair will include student organizations, campus groups and community businesses – all ready to provide you with valuable information! A welcome celebration, sponsored by the Council of Graduate Students, will be held afterwards in between Chittenden Hall and Student Services.

Google PhD Fellowship

August 31, 2022 — Pre-screening form due by 8 a.m.

MSU may nominate up to 4 students for the Google PhD Fellowship. The Google PhD Fellowship Program was created to recognize outstanding graduate students doing exceptional and innovative research in areas relevant to computer science and related fields. Fellowships support promising PhD candidates of all backgrounds who seek to influence the future of technology. Google's mission is to foster inclusive research communities and encourages people of diverse backgrounds to apply. Learn more and apply <u>here</u>.

Climate Change Research Support Program

Attention Current Graduate Students

Attention Doctoral Students

Deadline: September 9, 2022

MSU graduate students are eligible to submit proposals for the Climate Change Research Support Program. This program is an important initial funding mechanism to support promising new initiatives in key areas of research, scholarship, and multidisciplinary collaboration in response to the global climate crisis. Learn more <u>here</u>.

International Symposium on "Technologies in Brain Cancer"

Audience: All

September 30, 2022 — October 1, 2022

The University of Michigan BioInnovations in Brain Cancer is now accepting abstract submissions and registrations. The symposium will bring together scientists to bridge the gap between brain cancer biology research and novel technological developments in order to advance the diagnosis and treatment of glioma. The symposium will include talks from key opinion leaders from the basic sciences to translation covering a wide range of topics in pharmaceutical sciences, engineering, clinical care, and biomedical innovations. There will be a poster session, exhibitions and networking events in order to share knowledge and build a community of diverse expertise. Learn more <u>here</u>.

Announcements

COVID-19 Guidance for International Travel

Attention Staff, Faculty, Research Associates, and Graduate Students

To help field questions, Global Safety has developed a guide with recommended steps and resources. This is available as a PDF and on the Global Safety website at <u>www.globalsafety.msu.edu/positive-COVID-19</u>. The first step is to call <u>ISOS</u> for guidance.

Office of Admissions Raising Cutoff Score for Duolingo

Attention Graduate Program Directors, Graduate Academic Program Coordinators, and Students

The Office of Admissions is raising the cutoff score for Duolingo from 105 to 110 for both undergraduate and graduate applicants, with a provisional admission score range of 95 to 105. This change will apply to Fall 2023 applicants and beyond. Learn more <u>here</u>.

WRA 495: Working with Multilingual Writers

Audience: Current Graduate Students

This course aims to raise awareness of how people develop written and digital literacy skills in an additional language and how to apply this knowledge when providing feedback on writing with multilingual writers in

university contexts. Learn more <u>here</u>.

MSU Graduate Career Advising Dropbox

MSU graduate students can now have their professional documents (resumes, cover letters, etc.) reviewed by a Graduate Career Advisor through the Office of Graduate Career Development electronically and without needing to make an appointment. A response with feedback on your document(s) will be emailed with one week. Simply complete this <u>form</u>. You must be signed into Google via your MSU email address to access the form.

Jobs

Tenure Track Assistant Professor of Biology (Plant Biology)

Kenyon College invites applications for a tenure-track position in the Department of Biology starting in July 2022. We seek a broadly trained biologist with expertise in plant biology at the organismal level. To complement current faculty expertise, we seek candidates whose research focuses on plants, including structure, physiology, systematics, biochemistry, plant disease, environmental biology, and related fields. Applicants should demonstrate a commitment to excellent teaching, and we seek candidates who will provide inclusive course experiences, effective mentoring, and strong academic support for our diverse student population. Teaching expectations are 5 courses per year, including introductory biology as well as existing (e.g. Plant Biology or Plant Physiology) and/or new courses at the upper level. Opportunities exist for interdisciplinary teaching and scholarship within and outside the sciences. We expect a vigorous research program that involves undergraduate students, leads to publications, and has potential to attract extramural funding. Applicants should hold a Ph.D degree; post-doctoral experience is preferred. We encourage applications from all groups historically underrepresented in the sciences. A full overview of the position can be found on the <u>application page</u>.

All application materials must be submitted electronically through Kenyon's employment website: <u>http://careers.kenyon.edu</u>. Review of applications will begin on September 12, 2022. Please direct questions to Wade Powell, Search Committee Chair (powellw@kenyon.edu).

Lead Scientist I — Discovery (Program Lead)

Kalsec in Kalamazoo, Michigan, seeks a Lead Scientist to lead research efforts for their Novel Natural Compound Discovery platform. The ideal candidate would have experience in natural products chemistry/Pharmacognosy. A bit about Kalsec: "Kalsec provides natural Taste & Sensory Solutions, Colors, Food Protection and Advanced Hop Products to the food and beverage industries. We capture the best nature has to offer and utilize over 60 years of experience and industry leading innovation to make food and beverage products look better, taste better and last longer. Family owned and headquartered in Kalamazoo, Michigan since 1958, Kalsec has regional offices, laboratories and sales teams locations in North America, Europe and Asia. As a certified B Corp, Kalsec makes ethical and sustainable decisions that serve our customers, employees, communities and the environment. We are proud to be using our business as a force for good. This position is within Global R&D on the Discovery & Open Innovation team, which leads our long-term innovation efforts." See the job posting and apply here.

Postdoctoral Research Associate Position

Rob Quinn in BMB seeks a Research Associate to work on an NIH funded project to understand the role of the lung microbiome in Cystic Fibrosis. Patients with this disease battle complex lung infections throughout their lifetime and our laboratory is studying how microbial metabolism and dynamics may be responsible for the progression CF disease. This project involves a multi-faceted approach including microbial culture models of the lung environment, big data multi-omics analysis, and mathematical modelling. Skills in microbiology and multi-omics data generation, including mass spectrometry and high-throughput nucleic acid sequencing, are highly desirable. The research associate will work tightly with clinicians and other scientists in the laboratory to develop a comprehensive approach to understanding these important clinical events of CF disease. This position will involve generation and analysis of metabolomics and microbiome sequencing data. There will also be a large culture-based approach involving multi-species biofilm communities and perturbations of the lung microbiome in a mucus-plugged bronchiole microcosm. This position will require an understanding of multi-variate statistics and methods for integration of multi-omics datasets. Experience with computer coding languages for data analysis such as Python and R are highly desirable. The Research Associate will also gain experience in mentoring undergraduates and graduate students in scientific studies related to the project. Apply at MSU Careers posting <u>799757</u>.

Postdoctoral Research Associate Position

The lab of Tommy Vo, BMB, is seeking to hire a postdoc available to study the regulation of epigenetic histone modifications during development and stress response. Available projects in the lab will employ genetic, genomic, molecular, and biochemical approaches to understand the mechanistic role of transcription machinery in specifying and modulating histone modifications in the fission yeast, *Schizosaccharomyces pombe*. The position is in a young lab in which the research associate will uniquely benefit from experiencing, first-hand, a new lab environment. Contact Tommy Vo for information votommyv@msu.edu. See job posting and apply at this link.

Postdoctoral Research Associate Position

The Jin He lab in Biochemistry and Molecular Biology is seeking a Research Associate to use mouse models to study the epigenetic mechanisms in brain development and neurodevelopmental diseases such as autism spectrum disorder, intellectual disability, and attention deficits/hyperactivity disorder. A PhD is required in Neuroscience, Genetics, Molecular Biology. Please contact Jin He directly hejin1@msu.edu. See the job posting and apply at this link.

Paid Research Opportunity for Undergraduate and Graduate Students

The Guys/Girls Opt for Activities for Life (GOAL) trial research team is in immediate need of students to assist with this large-scale NIH-funded study. We are starting in 4 urban schools with approximately 63 adolescent-parent dyads per school in the fall of 2022 and will continue into the spring of 2023. We are recruiting for Data Collectors, Physical Activity and Nutrition Intervention Coaches (1-2 days/week for 13 weeks), Intervention Leads (1-2 days/week for 13 weeks), Dietary Recall Specialists, as well as Process Evaluators. The positions that require transportation to schools will have transportation provided.

These research assistant positions offer \$12.00-15.00/hour, in addition to gaining invaluable research experience to strengthen a

resume.

Students can contact the Project Manager Aisha Hilliard of the GOAL trial at hillia51@msu.edu if interested in discussing these outstanding opportunities.

Student Position: BMB Kaguni Lab

Seeking a student employee for general lab duties, dishwashing, etc. Contact Dr. Jon Kaguni kaguni@msu.edu.

Recent Publications

- Bird, K.A., Jacobs, M. *et. al.* "Parental origins of the cultivated tetraploid sour cherry (*Prunus cerasus* L.)." *Plants People Planet.* (2022).
- Bibik, J.D., Weraduwage, S.M., Banerjee, A., Robertson, K., Espinoza-Corral, R., Sharkey, T.D., Lundquist, P.K., Hamberger, B.R. "Pathway engineering, re-targeting, and synthetic scaffolding improve the production of squalene in plants." ACS Synthetic Biology Vol. 11, Iss. 6 (2022).
- Tinney, K.R., Dover, J.A., Doore, S.M., and Parent, K. "Shigella viruses Sf22 and KRT47 require outer membrane protein C for infection." Biochimica et Biophysica Acta (BBA) Biomembranes Vol. 1864, Iss. 7 (2022).
- Rossi, M., Altea-Manzano, P., Demicco, M. *et. al.* "PHGDH heterogeneity potentiates cancer cell dissemination and metastasis." *Nature* 605, 747–753 (2022). https://doi.org/10.1038/s41586-022-04758-2

See story on Sophia Lunt's collaborative research on molecular workings of a certain form of metastatic Breast cancer in <u>MSU</u> <u>Today</u>.

