

Molecular Matters

Department of Biochemistry

November 2023
Department News



CONGRATULATIONS TO...



Dr. Joe Ogas was appointed as head of the Department of Biochemistry after serving as interim department head for over a year. Bernie Engel, Purdue University's Glenn W. Sample Dean of the College of Agriculture, stated, "In addition to his academic achievements, Dr. Ogas has an impressive record of leadership and service within Purdue and the wider academic community."

I'm excited to have someone with his dedication and expertise as our permanent department head and look forward to the positive impact he will continue to make." Read the article [here](#).

Dr. Mark Hall will oversee the Biochemistry Undergrad Program, a vital leadership role. Mark has a stellar record of contributing to our education mission and was recently inducted into the Book of Great Teachers. In addition to playing a critical role in our departmental curricular efforts, Mark was responsible for the successful development and implementation of the first new curriculum for the Summer Science Program <https://summerscience.org/> in >50 years, which has paved the way for the subsequent dramatic expansion of this uniquely impactful program.

Matthew R. Martin, Puthiyaveetil lab for receiving the best graduate student poster award at the 49th Midwest-Southeast Photosynthesis meeting for his poster titled "Phenotyping the Arabidopsis Chloroplast Sensor Kinase". This award included a \$100 cash award, a certificate, and a 3D-printed cytochrome *b₆f* complex.

Dr. Subhadeep Das, Postdoc, Tran Lab, was awarded a Supplemental Travel Grant to attend and present a poster at the IASLC 2023 North America Conference on Lung Cancer (NACLC) held in Chicago, IL December 1-3.

BIOCHEMISTRY IN THE NEWS...

Check out the new video featuring the Biochemistry Department on YouTube! **Biochemistry: Explore the Possibilities in Purdue Agriculture** <https://youtu.be/lv8-GypnA1w>

Update from October MM: A team consisting of **Dr. Seema Mattoo**, **Dr. Vikki Weake**, Dr. Bryon Drown, Dr. Fang Huang, Dr. Christina Ferriera, Dr. Jonathan Schleich, Dr. Ramaswamy Subramanian, Dr. Alex Chortos, and Dr. Eugenio Culurciello, was awarded seed funding at the Purdue Life Sciences Summit for their project "Unlocking a Blueprint for Health: The Endoplasmic Reticulum (ER) as a Disease Safeguard". Read the article [here](#).

GOING THE EXTRA MILE...



Dr. Sujith Puthiyaveetil co-chaired the 49th Midwest-Southeast Photosynthesis meeting held at Turkey Run State Park October 27-29.

Steven D. McKenzie, Puthiyaveetil lab, gave an oral and poster presentation titled "Phosphorylation and oxidative damage mediate photosystem II disassembly in *Arabidopsis thaliana*".

Matthew R. Martin, Puthiyaveetil lab presented a poster titled "Phenotyping the *Arabidopsis* Chloroplast Sensor Kinase".

RECENT PUBLICATIONS...

Gregor JB, Gutierrez-Schultz VA, Hoda S, Baker KM, Saha D, Burghaze MG, Vazquez C, Burgei KE, Briggs SD. An expanded toolkit of drug resistance cassettes for *Candida glabrata*, *Candida auris*, and *Candida albicans* leads to new insights into the ergosterol pathway. *mSphere*, e00311-23.
<https://journals.asm.org/doi/10.1128/msphere.00311-23>.

Puthiyaveetil S, McKenzie SD. Plant photosystem II assembly: TROL2 to the rescue. *Mol Plant*. 2023 Sep 23:S1674-2052(23)00285-X.

Agarwal T, Wang X, Mildenhall F, Ibrahim IM, **Puthiyaveetil S**, Varala K. Chilling stress drives organ-specific transcriptional cascades and dampens diurnal oscillation in tomato. *Hortic Res*. 2023 Jul 11;10(8):uhad137.

Svoboda V, Oung HMO, Koochak H, Yarbrough R, **Mckenzie SD, Puthiyaveetil S**, Kirchhoff H. Quantification of energy-converting protein complexes in plant thylakoid membranes. *Biochim Biophys Acta Bioenerg*. 2023 Apr 1;1864(2):148945.

*Lee ZC, **Hadisurya M**, **Luo Z**, Li L, **Tao WA**. Hands-Free Proteomic Profiling of Urinary Extracellular Vesicles with a High-Throughput Automated Workflow. J Am Soc Mass Spectrom. 2023 Nov 1;34(11):2585-2593. doi: 10.1021/jasms.3c00329. Epub 2023 Oct 23. PMID: 37870912.

**The first author of this paper is a West Lafayette high school student who represented the US and State of Indiana at this year's Regeneron International Science and Engineering Fair in Dallas, Texas. He received 4th place in the Translational Medical Science category.*

Liu Y, **Luo Z**, Iliuk A, **Tao WA**. 2023. Chemical Affinity-Based Isolation of Extracellular Vesicles from Biofluids for Proteomics and Phosphoproteomics Analysis. J Vis Exp 1–13.

Eastman KE, **Pendleton AL**, Shaikh MA, Suttiyut T, **Ogas R**, **Tomko P**, **Gavelis G**, Widhalm JR, **Wisecaver JH**. A reference genome for the long-term kleptoplast-retaining sea slug *Elysia crispata* morphotype clarki. G3 (Bethesda). 2023 Oct 10:jkad234. doi: 10.1093/g3journal/jkad234. Epub ahead of print. PMID: 37816307. <https://pubmed.ncbi.nlm.nih.gov/37816307/>

IMPORTANT DATES...

Please join us for the Department of Biochemistry Seminar Series. All seminars will begin at 3:30 p.m., in WSLR 116, unless otherwise noted.

DEC 5 Dr. Tina Baumgartner, AbbVie - Director & Senior Principal Research Scientist

DEC 12 Biochemistry Holiday Staff / Service Recognition Lunch 11:30 am

Happy Holidays! Spring seminars will begin on January 16, 2024

JAN 16 Dr. Sergej Djuranovic, Washington University School of Medicine, St. Louis, Cell Biology & Physiology

JAN 23 Dr. Jennifer Spangle, Emory University School of Medicine, Radiation Oncology

ATTENTION BCHM ALUMS...

We would love to hear from you! If you have any alumni news to share or had a change of address, please let us know! Updates can be sent to bchm-alumni-friends@purdue.edu.