

APRIL 2022
BIOCHEMISTRY NEWS



CONGRATULATIONS TO...

Dr. Orla Hart, Dr. Jen Wisecaver, Dr. Sujith Puthiyaveetil, and Dr. Majid Kazemian who were recently promoted to Associate Professors!



Majid Kazemian was awarded “Most Distinguished Faculty for Research” by Purdue University Residences Favorite Faculty.

Bingyu Yan (Kazemian Lab) was awarded the PULSe Outstanding Research Award.

Clayton Hicks was awarded the Cordova Leadership Award. This award, presented annually, recognizes undergraduate and/or graduate students who have demonstrated outstanding leadership abilities. This year’s nominees must be eligible to receive their degree at the May, August, or December 2022 commencement ceremonies. Nominees must have exhibited exceptional leadership during their Purdue career, as demonstrated by successfully holding significant leadership roles and by working in partnership with faculty and /or staff to move the university forward.

The award is given to one female and one male recipient across the university.

Clayton was also awarded the College of Agriculture Outstanding Senior Award. Clayton is studying biochemistry with a concentration in pre-medicine and a minor in history, He will graduate with certificates in medical humanities and a Leadership in Development Certificate.



OPPERMAN COMMONS...

On Monday, April 11th we were finally able to dedicate the new Opperman Commons. Thank you to Mr. & Mrs. Opperman and family for joining us to dedicate the Biochemistry Opperman Commons. A space made possible by them for students to gather, collaborate, learn and have fun!



BIOCHEMISTRY IN THE NEWS...

Our own **Dr. Vikki Weake** explains how circadian rhythms in fruit flies have a large impact on retinal health. She was recently interviewed by Vance Durbin at WYPL FM 89.3 for a show for the blind and visually impaired. Check it out at: <http://eyeonvision.blogspot.com>
Vikki's interview starts about 10 min 40 seconds after you click on the link.

GOING THE EXTRA MILE...

Jupa Jauregui, Sarah Stanhope, and Sarah McGovern attended the 63rd Annual Drosophila Research Conference in San Diego Ca, April 6th-11th. Jupa presented a short talk titled “Tissue-specific chromatin profiling reveals a key role for Clock-dependent transcription in regulation of Drosophila photoreceptor homeostasis”, and Sarah Stanhope presented a poster titled “Developing a quantitative analysis of cysteine availability via iodo TMT-multiplex method using Drosophila S2 cells and **w1118** eyes”.

Sherlene Brown and Dr. Seema Matto attended the Indiana Branch of the American Society for Microbiology (IBASM) conference on April 1-2, held at Purdue. Sherlene was selected to give a talk and presented a poster titled "Discovery and Characterization of a *Bordetella* Fic Protein with Guanylyltransferase Activity”.

Stephanie Diaz (Liu Lab) presented a poster "Profiling the ubiquitinated proteome in human cells" at the Experimental Biology 2022 in Philadelphia, Pennsylvania conference held April 2-5, 2022.

Srishti Chakravorty, Bingyu Yan, and Majid Kazemian are traveling to the AAI (American Association of Immunologists May 2022 conference where Bingyu and Srishti will present their work. Majid will chair a session.

Jennifer Wisecaver attended and presented at the 31st Fungal Genetics Conference, on March 18th in Pacific Grove, CA. Her presentation was titled: “Honor by association, leveraging global gene co-expression networks for specialized metabolic pathway discovery”.

UNDERGRAD NEWS...

The Department of Biochemistry had 9 students present posters and 2 students presented oral presentations at The Purdue Undergraduate Research Conference on April 12th. The Purdue Undergraduate Research Conference is the largest showcase of undergraduate research. This judged event highlights the scholarly work and creative endeavors undergraduate students have been engaged in through oral or poster presentations.

Students presenting posters were:

Hannah Blum

Anna Donnelly

Audrey Ellis

Jack Schwartz

Alicia Trujillo

Emily Johnson

Makayla Marlin

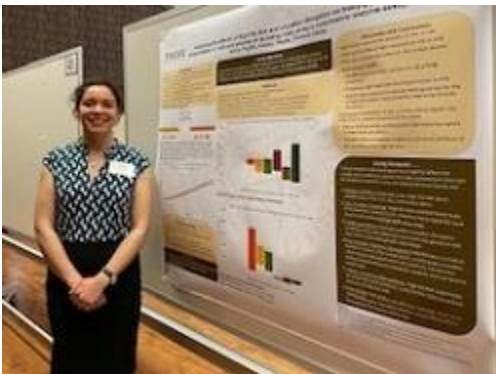
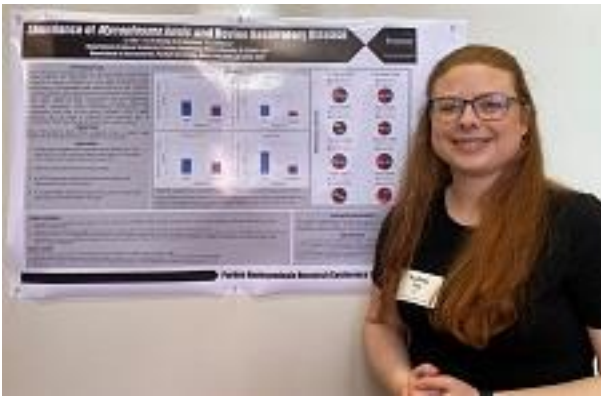
Avery Hurst

Noelle Naughton

Abigail Sipes

Sharon Kulali

Pictured: Audrey Ellis and Alicia Trujillo



ON A PERSONAL NOTE...

Michelle Rodkey (Karyn Rodkey's daughter) signed a National Letter of intent to play softball at Tiffin University in OH. She will dual major in Forensic Science and Criminalistics.



SAFETY CORNER...

Mandatory Safety Training-Lab Personnel

Please have your students/employees go to the REM website and perform the training

required for your lab/space.

<https://www.purdue.edu/ehps/rem/training/index.html>

(1) All Lab personnel MUST complete “Chemical Hygiene Plan – Initial or Refresher” **OR** Lab Safety Fundamentals (LSF)

(2) New Lab personnel MUST complete “Lockout Tagout” awareness training upon initial work in any lab

(3) PPE training performed and certified by each PI for their space. PPE based on Hazard Assessment in lab.

Non-lab personnel

(1) Must complete "Hazard Communication-Awareness" training

GRANTS...

Hana Hall received \$375,488 from Phs-Nih National Institute on Aging for her proposal “M6A RNA modification as a regulator of R-loop homeostasis and gene expression in aging and neurodegeneration”.

Ann Kirchmaier received \$110,244 from the Department of Defense Kidney Cancer Research Program for her proposal “Replication Defects in Kidney Cancer”.

Ann Kirchmaier received \$15,000 from PCCR for her proposal “Fumarase & Genome Integrity”.

Amanda Pendleton (post-doc, Wisecaver lab) in collaboration with Dr. Maria Sepulveda (PI) received \$48,853 AgSeed grant for their proposal “Establishing Northern leopard frogs as a model for toxicology and the global research community through reference genome assembly and annotation”.

RECENT PUBLICATIONS...

Smith, R. A., F. Lu, F. Muro-Villanueva, J. C. Cusumano, **C. Chapple**, J. Ralph. 2022. Manipulation of Lignin Monomer Composition Combined with the Introduction of Monolignol Conjugate Biosynthesis Leads to Synergistic Changes in Lignin Structure. *Plant Cell Physiology*. Online ahead of print.

Sahu, R. K., S. Xavier, D. Chauss, L. Wang, C. Chew, R. P. Taylor, W. B. Stallcup, J. Z. Ma, **Majid Kazemian**, B. Afzali, J. Köhl, D. Portilla. 2022. Folic acid-mediated fibrosis is driven by C5a receptor 1-mediated activation of kidney myeloid cells. *American Journal of Physiology, Renal Physiology*. Online ahead of print.

Nawimanage, R., Z. Yuan, M. Casares, R. Joshi, **J. R. Lohman**, **F. S. Gimble**. 2022. Structure-function studies of two yeast homing endonucleases that evolved to cleave identical targets with dissimilar rates and specificities. *Journal of Molecular Biology*. Online ahead of print.

Diaz, S. K. Wang, B. Sjögren, **X. Liu**. 2022. Roles of Cullin-RING Ubiquitin Ligases in Cardiovascular Diseases. *Biomolecules* **12**(3):416.

Wang, K., **X. Liu**. 2022. Determining the Effects of Neddylation on Cullin-RING Ligase-Dependent Protein Ubiquitination. *Current Protocols*. **2**(3):e401.

IMPORTANT DATES...

May 7 Semester ends

May 13 Commencement Weekend

May 30 Memorial Day—no classes