

NOVEMBER 2021

BIOCHEMISTRY NEWS



Congratulations To...

Bingyu Yan received an AAI Young Investigator Award at the 2021 Autumn Immunology Conference in Chicago. This award is awarded to the first author of the top abstract in each workshop category.

GOING THE EXTRA MILE...

Srishti Chakravorty gave an oral and poster presentation titled “Single cell transcriptomics reveals determinant of Epstein-Barr virus (EBV) lytic cycle in lymphoblastoid cells at the Autumn Immunology Conference (AIC) in Chicago November 19th-22nd.”

Natalia Dudareva gave a plenary lecture virtually at the 5th International Symposium on Functional Food and Plant Metabolism, Shanghai, China October 30-31, titled “Plant Volatiles: From Emission to Perception”.

Juan Pablo Jauregui attended the “Impacts of Sleep and Circadian Biology on Alzheimer’s Disease and Aging” workshop at the Jackson Laboratory in Bar Harbor ME from Oct. 25-28th. He also presented a poster called “Integration of ATAC-seq and RNA-seq in aging photoreceptors reveals a role for Clock: cycle in regulation of phototransduction gene expression and retinal degeneration”.

Ann Kirchmaier gave a talk for the Department of Chemistry at Purdue University-Fort Wayne on Oct. 29, 2021. Her talk title was “The Replication-Coupled Chromatin Assembly Network: Impact on Epigenetics States and Genome Integrity”.

Bingyu Yan gave an oral presentation titled “SARS-CoV-2 drives JAK1/2-dependent complement hyperactivation” at the Autumn Immunology Conference (AIC) in Chicago, November 19th-22nd.

SAFETY CORNER...

Ergonomic Injuries - disorders of the soft tissue, specifically of the muscles, nerves, tendons, ligaments, joints, cartilage, blood vessels and spinal discs

CAUSES OF INJURY	PREVENTION STEPS
Excessive lifting, lowering, pushing, pulling, reaching or stretching	Plan a lift before you begin, keep your back straight and lift with your legs
Repetitive motion	Limit the amount of time you spend doing the same motion over and over
Working in awkward positions	Take frequent breaks from any sustained position every 20-30 minutes
Sitting or standing for prolonged period of time	If you work at a desk, move frequently used items close to you, use a footrest and adjust the height of your computer
Using excessive force	Report pain, swelling, numbness, tingling, tenderness, clicking or loss of strength to your doctor before it becomes a full-blown injury
Vibration, resting on sharp corners or edges	
Temperature extremes	

<https://www.osha-slc.gov/health/safety/ergonomics-101>

Addition Resources:

<https://www.mayoclinic.org/healthy-lifestyle/adult-health/in-depth/office-ergonomics/art-20046169>

<https://www.purdue.edu/ehps/rem/laboratory/Personal/ergo.html#homeergo>

Desk Stretches:

<https://www.mayoclinic.org/healthy-lifestyle/adult-health/in-depth/office-stretches/art-20046041>

GRANTS...

Grace Estep (Wisecaver lab) received \$500 from the Faculty Research Support for Undergraduates Grant through the Office of Academic programs in the College of Agriculture.

Barb Golden received \$89,896 from the University of Missouri-Columbia for her proposal titled "Bringing RNA to Life-Emergence of Biological Catalysis".

Olivia Riedling (Wisecaver lab) received \$500 from the Faculty Research Support for Undergraduates Grant through the Office of Academic programs in the College of Agriculture.

RECENT PUBLICATIONS...

Xu, L., P. Murria, A. Talpade, H. Sheng, R. Meilan, **C. Chapple**, R. Agrawal, W. N. Delgass, F. H. Ribeiro, H. I. Kenttamaa. 2021. Fast Determination of the Lignin Monomer Compositions of Genetic Variants of Poplar via Fast Pyrolysis/Atmospheric Pressure Chemical Ionization Mass Spectrometry. Journal of the American society for Mass Spectrometry. 32(10): 2546-2551.

Yoo, H., S. Shrivastava, J. H. Lynch, X. Q. Huang, J. R. Widhalm, L. Guo, B. C. Carter, Y. Qian, H. A.

Maeda, **J. P. Ogas**, J. A. Morgan, A. Marshall-Colón, **N. Dudareva**. 2021. Overexpression of Arogenate Dehydratase Reveals and Upstream Point of Metabolic Control in Phenylalanine Biosynthesis. *The Plant Journal*. 108 (3):737-751.

Chauss, D., T. Freiwald, R. McGregor, B. Yan, L. Wang, E. Nova-Lamperti, D. Kumar, Z. Zhang, H. Teague, E. E. West, K.M. Vannella, M. J. Rmaos-Benitez, J. Bibby, A. Kelly, A. Malik, A.F. Freeman, D. M. Schwartz, D. Portilla, D. S. Chertow, S. John, P. Lavender, C. Kemper, G. Lombardi, N. N. Mehta, N. Cooper, M.S. Lionakis, A. Laurence, **M. Kazemian**, B. Afzali. 2021. Autocrine vitamin D signaling switches off pro-inflammatory programs of T_H1 cells. *Nature Immunology*. Online ahead of print.

IMPORTANT DATES...

Please join us for the Department of Biochemistry Seminar Series - All seminars will begin at 3:30 pm, in WSLR 116, unless noted virtual. In-person and virtual seminars will be available via zoom.

Join Zoom Meeting

<https://purdue-edu.zoom.us/j/94957989438>

Nov. 30 Carolyn Rasmussen, (virtual) University of California, Riverside, Department of Botany and Plant Sciences

Dec. 7 David Rogers, St. Jude Children's Research Hospital, Department of Pharmacy and Pharmaceutical Sciences