April 2021 Department News



CONGRATULATIONS TO...

Drs. Mark Hall, Joe Ogas and Stefan Paula for receiving the College of Agriculture PK-12 Outreach and Engagement Award for Sustained Faculty Impact. This group worked together to create the Summer Science Program (SSP) in Biochemistry, which was first offered at Purdue in 2016, and later at Indiana University, Bloomington. The Summer Science Program is one of the oldest pre-college science programs in the US. The original program, first offered in 1959, is in Astrophysics. The SSP in Biochemistry attracts high school students from across the country to the Purdue campus for a 6-week hands-on laboratory experience (online in 2020 and 2021).

BIOCHEMISTRY IN THE NEWS...

Dr. Majid Kazemian is in the news for his role on an international team of researchers who made an unexpected discovery regarding COVID-19. Read full story here.

GRADUATE STUDENT NEWS...

Isaiah Menseh (Gowher lab) has been appointed a Global Ambassador for the Graduate School. Global Ambassadors represent The Graduate School by sharing their experiences and stories as Purdue graduate students. Read Isaiah's story here.

The Biochemistry Graduate Student Organization (GSO) has created a 5-week K-12 outreach program that started April 15. Each week, three graduate students video call a fourth grade class to give mini-lessons on plants, bacteria, DNA, and host live Q&A sessions. The class receives protocols and materials to perform experiments that include growing plants, bacteria agar plate assays, and DNA extraction from strawberries. This is the first year of the program's inception and we hope it will continue to grow and scale to include many more classrooms. Pictured below are students planting Arabidopsis seeds for their first experiment.



GOING THE EXTRA MILE...

Andy Tao presented "Chemistry in the omics era: tools to find a needle in a haystack" at Texas A&M University-Kingsville, Fred M. Garland Lecture series.



Thank You to everyone who donated online or dropped off non-perishable food items for the College of Ag Food Drive. Every donation helps!

PUBLICATIONS...

Kim, J. I., C. Hidalgo-Shrestha, N. D. Bonawitz, R. B. Franke, **C. Chapple** 2021. Spatio-temporal control of phenylpropanoid biosynthesis by inducible complementation of a cinnamate 4- hydroxylase mutant. *Journal of Experimental Botany*. 72(8): 3061-3073.

Yan, B., T. Freiwald, D. Chauss, L. Wang, E. West, C. Mirabelli, C. J. Zhang, E.M. Nichols, N. Malik, R. Gregory, M. Bantscheff, S. Ghidell-Disse, M. Kolev, T. Frum, J.R. Spence, J. Z. Sexton, K. D. Alysandratos, D. N. Kotton, S. Pittaluga, J. Bibby, N. Niyonzima, M. R. Olson, S. Kordasti, D. Portilla, C. E. Wobus, A. Laurence, M. S. Lionakis, C. Kemper, B. Afzali, **M. Kazemian** 2021. SARS-CoV-2 drives JAK1/2-dependent local complement hyperactivation. *Science Immunology* 6(58):

Muh, F., B. Van Oort, **S. Puthiyaveetil,** H. Kirchhoff 2021. Reply to: Is the debate over grana stacking formation finally solved? *Nature Plants* 7(3): 279-28.

Geng, Y., C. Cai, S. A. M. McAdam, J. A. Banks, **J. H. Wisecaver**, Y. Zhou 2021. A De Novo Transcriptome Assembly of Ceratopteris richardii Provides Insights into the Evolutionary Dynamics of Complex Gene Families in Land Plants. *Genome Biology and Evolution* 13 (3)

Geng, Y. L. Guo, H. Han, X. Liu, J.A. Banks, **J. H. Wisecaver**, Y. Zhou 2021. Conservation and diversification of HAIRY MERISTEM gene family in land plants. *The Plant Journal* epub.

Smith P.M., E. Gough, A. Younts, B. Werts, T.J. Hacker, N. Neumeister, **J. Wisecaver**. The "Geddes" Composable Platform - An Evolution of Community Clusters for a Composable World. 2020 IEEE/ACM International Workshop on Interoperability of Supercomputing and Cloud Technologies (SuperCompCloud), Atlanta, GA, USA, 2020, pp. 33-38.

IMPORTANT DATES...

- April 27 Biochemistry Awards Ceremony
- May 1 Classes End
- May 3 Finals Week
- May 11 Grades Due
- May 14 Commencement Ceremonies begin

ATTENTION BCHM ALUMS...

We would love to hear from you! If you have had changes in your personal and/or professional life, had a change of address, etc., please let us know! Updates can be sent to bchm-alumni-friends@purdue.edu.