

Molecular Matters

Department of Biochemistry

MAY 2021 Department News



CONGRATULATIONS TO...

Dr. Andy Mesecar, recipient of the *2021 College of Ag Outstanding Graduate Mentor and Teacher Award*. This university wide competition includes college level Outstanding Graduate Mentors and is designed to recognize faculty who are exemplars of excellence in mentoring and teaching in the area of graduate education. Professor Mesecar's dedication to graduate student mentoring and success is deep-seated and powerful. Preparing the next generation of scientists for a wide range of career options requires understanding, compassion and leadership. These are qualities Dr. Mesecar demonstrates in abundance. As one of his current students, Emma Lendy, states in her supporting letter "Looking back at who I was before I joined Andy's lab, I find myself in awe of how much I have grown as both a person and a scientist. Andy has undoubtedly been an integral part of this development."

Ogechukwu Ezenwa is the recipient of the Charles O. McGaughey Leadership Award for her contributions to Purdue and the College of Agriculture. The award is given to students who have made significant contributions through outstanding leadership. Read her story [here](#).

AWARDS...

Congratulations to our department award recipients! In April, the department gathered

virtually for the annual awards ceremony. Click on the link below to see all the awards and winners.

[Biochemistry Awards 2021](#)

GRADUATE STUDENT NEWS...

The GSO finished its 5-week outreach program on May 13th. A fourth grade classroom was supplied with individually packaged 'experiment kits' that allowed them to grow *Arabidopsis thaliana* seeds, grow bacteria on LB agar plates, and extract DNA from strawberries! Each week graduate student volunteers held video calls with the classroom and presented mini-lectures that introduced concepts such as GMOs, coding, and the scientific method. Students also engaged in Q&A sessions and reported their experiment results and conclusions to our volunteers. The program has received very positive responses and we are overly delighted to have made a direct impact on the K-12 community, even during a global pandemic. The GSO would like to acknowledge and thank the following volunteers: **Robert Auber** (Organizer), **Shannon Stirling**, **Matt Russon**, **Debasmita Saha**, **Spencer Escobedo**, **Sarah Stanhope**, **Srishti Chakravorty** and **Trevor Boram**.

We plan to scale this outreach program to multiple classrooms next year. If you are interested in our program and would like to incorporate it into a Broader Impacts section of a grant application, please contact chakrav9@purdue.edu (Srishti Chakravorty).



GOING THE EXTRA MILE...

Dr. Natalia Dudareva gave a virtual seminar, "Plant Volatile Emission: Beyond the Traditional

View” for the Department of Botany and Plant Sciences, Center for Plant Cell Biology, University of California, Riverside on May 5, 2021.

GRANTS...

Ann Kirchmaier was awarded a \$5,000 grant from PCCR Shared Resource Grant for her proposal “Metabolic Impacts on Stressed Replication Forks”.

Andy Tao (Co-PI) was awarded a \$685,032 grant from National Science Foundation for his proposal “Regulation of transcription coupled DNA repair”.

PUBLICATIONS...

Simpson J. P., C. Wunderlich, X. Li, E. Svedin, **B. Dilkes**, **C. Chapple**. Metabolic source isotopic pair labeling and genome-wide association are complementary tools for the identification of metabolite-gene associations in plants. *Plant Cell* **33**(3):492-510.

Patrick, R.M., X-Q Huang, **N. Dudareva**, Y. Li. Dynamic histone acetylation in floral volatile synthesis and emission in petunia flowers. *Journal of Experimental Botany*. **72**(10):3704-3722.

Escobedo, S., A. Shah, A. N. Easton, **H. Hall**, **V.M. Weake**. Characterizing a gene expression toolkit for eye-and photoreceptor-specific expression in Drosophila. **15**(1):73-88.

IMPORTANT DATES...

May 31	Memorial Day - No Classes
July 5	Independence Day Observed - No Classes
August 6	Summer Classes End
August 7	Summer Commencement

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.
