

JANUARY 2022
BIOCHEMISTRY NEWS



CONGRATULATIONS TO...
December Graduates...

PhD. Graduates

Emma Lendy



Next Stop: Postdoc position in Mesecar Lab

Eliana Torres-Zelada



Next Stop: Postdoc at University of Wisconsin, Madison

Peipei Zhu



Next Stop: Analytical Development Research Scientist I at Vertex Pharmaceuticals

UNDERGRADUATE NEWS...

B.S. Graduates



Lydia Kowalskyj

Next Stop: Commissioned Ensign on the USS Cole, US Navy

BIOCHEMISTRY IN THE NEWS...

Natalia Dudareva and a team of researchers mapped the biosynthetic pathway of an anti-cancer compound found in oregano and thyme, opening the door to potential pharmaceutical use. Read the full article [here](#).

Majid Kazemians paper, “Autocrine vitamin D signaling switches off pro-inflammatory programs of T_H1 cells” is featured on the cover of Nature Immunology this month. <https://www.nature.com/ni/volumes/23>.

GOING THE EXTRA MILE...

Jim Forney served on the 2021 ASBMB Accreditation Study Section on December 14th (virtual panel meeting). As stated on their website, “ASBMB accreditation is a national, independent, outcomes-based evaluation mechanism that recognizes excellence in B.S. or B.A. degree programs in biochemistry and molecular biology and related disciplines.”

GRANTS...

Brian Dilkes and Rajdeep Khangura received a \$22,4752.00 National Institute of Food & Agriculture grant for “Discovery and Characterization of Novel Genes Regulating Plant Architecture in Maize Using First Filial Hybrid Association Mapping”.

Ann Kirchmaier received a \$ 9,250 Indiana Clinical and Translational Sciences Institute Core Grant for “Metabolic Impacts on DNA Repair”.

RECENT PUBLICATIONS...

Krause, S.T.[#], P. Liao[#], C. Crocoll, B. Boachon, C. Förstera, F. Leidecker, N. Wiese, D. Zhao, J.C. Wood, C. R. Buell, J. Gershenzon, **N. Dudareva**, J. Degenhardt* (2021) The biosynthesis of thymol, carvacrol, and thymohydroquinone in Lamiaceae proceeds via cytochrome P450s and a short-chain dehydrogenase. *Proceedings of the National Academy of Sciences of the United States of America* **118** (52): e2110092118 (#Equal contribution)

Davidovich-Rikanati, R., E. Bar, G. Hivert, X.Q. Huang, C. Hoppen-Tonial, V. Khankin, K. Rand, A. Abofreih, J.K. Muhlemann, J. A. Marchese, Y. Shotland, **N. Dudareva**, M. Inbar, E. Lewinsohn. 2021. Transcriptional upregulation of host-specific terpene metabolism in aphid-induced galls of *Pistacia palaestina*. *Journal of Experimental Botany*. **73** (2): 555-570.

Torres-Zelada, E. F., S. George, H. R. Blum, **V.M. Weake**. 2021.

Chiffon triggers global histone H3 acetylation and expression of developmental genes in *Drosophila* embryos. *Journal of Cell Science*. Online ahead of print.

Jauregui-Lozano, J., S. Escobedo, A. Easton, N. A. Lanman, **V. M. Weake**, **H. Hall**. 2022. Proper control of R-loop homeostasis is required for maintenance of gene expression and neuronal function during aging. *Aging Cell*. 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/94513824090](https://PURDUE-EDU.ZOOM.US/J/94513824090)

February 8 Vikki Weake, Purdue University, Department of Biochemistry

February 15 Qixin He, Purdue University, Department of Biological Sciences

February 22 Lydia Taberner, (Virtual) The University of Manchester, School of Biological Sciences

March 1 Natalia Dudareva, Distinguished Professor, Department of Biochemistry

March 8 Jikui Song, University of California, Riverside, Department of Biochemistry