

## APRIL 2023 BIOCHEMISTRY NEWS



### CONGRATULATIONS TO...



The Office of Research, College of Ag, and the Department of Biochemistry held a Symposium to celebrate **Dr. Clint Chapple's**, Distinguished Professor, appointment to the National Academy of Sciences. The event included four scientific talks and a panel discussion by former members of the Chapple lab.



**Avery Hurst** (undergraduate student) has been awarded a Fulbright Scholarship to conduct academic research at the University of Crete in Heraklion, Crete for the 2023-2024 academic year. She will be a member of the Tsatsanis laboratory in the School of Medicine studying a marine-based nutritional supplement. In previous years, the Tsatsanis lab identified potent anti-inflammatory properties in vitro from compounds derived from a red-algae species located on the coast of Kefalonia island in Greece. The algae are commonly used in the local diet, but their effect on human health has not been studied. Anti-inflammatory action has been determined in cell cultures, and her project will focus on gathering data in vivo using mouse models fed a diet supplemented with the algae derivatives.

The effect of the supplementation on obesity, inflammation, gut microbiome composition, type II diabetes, and other chronic inflammatory disease models will be assessed. This research will pave the way for identifying new compounds that lower disease risk and potentially treat them as well. The Tsatsanis laboratory focuses on the role of innate immune response in chronic disease development and progression. She is excited about this opportunity to learn more about the biochemistry of the immune system and its function in disease while developing international relationships and strengthening her cultural understanding.



**Noelle Naughton** (undergraduate student) received the Barry M. Goldwater Scholarship. The Barry M. Goldwater Scholarship was established in 1986, the Goldwater Scholarship Program, one of the oldest and most prestigious national scholarships in the natural sciences, engineering, and mathematics in the United States seeks to identify, encourage, and financially support college sophomores and juniors who show exceptional promise of becoming this Nation's next generation of research leaders in these fields.

**Isaiah Mensah** (graduate student, Gowher lab) participated in the Three Minute Thesis (3MT) competition on April 11<sup>th</sup>. Isaiah won the People's Choice Award! You can view the whole competition here: (Isaiah is at the 48:00-minute mark) <https://www.youtube.com/watch?v=Ygv2CCyGlo4&t=3022s>



**Karlie Tischendorf**, (senior Biochemistry major) was inducted into the Honor Society for Biochemistry and Molecular Biology at the meeting in Seattle, WA. (Pictured below with Dr. Orla Hart)

## 2023 Axelrod Distinguished Lecture...

**Dr. Jerry Workman**, Investigator, Stowers Institute for Medical Research was this year's Axelrod Distinguished Lecturer. Dr. Workman is known for his pioneering work uncovering the role of histones in the regulation of gene expression. At the Stowers Institute, he continues his work in gene regulation in yeast, fruit flies, and mammalian cells. In addition to his research, Dr. Workman heads the postdoctoral training program. He has trained several generations of postdoctoral researchers, including our very own, Dr. Vikki Weake. Pictured below are Dr. Jerry Workman, Dr. Vikki Weake, and members of her lab.



## GOING THE EXTRA MILE...

**Dr. Clint Chapple**, Distinguished Professor of Biochemistry, served on the external departmental review team for the Department of Biochemistry at the University of Nevada-Reno March 28-30.

**Dr. Clint Chapple**, Distinguished Professor of Biochemistry, served on the external departmental review for the Department of Botany at the University of British Columbia from April 17-18.

**Dr. Kyle Cottrell**, Assistant Professor, attended the GRC RNA Editing conference in California. He also gave a talk titled “

**Dr. Natalia Dudareva**, Distinguished Professor of Biochemistry, traveled to Israel and served as a Chairperson of the BARD's Technical Advisory Committee from March 27 to 29.

**Dr. Natalia Dudareva**, Distinguished Professor of Biochemistry, gave an invited talk on March 26 at the Weizmann Institute of Science (Rehovot, Israel) titled “Fascinating World of Plant Volatiles: Beyond the Traditional View”. She also gave a Keynote lecture at the “Plant Specialized Metabolism” meeting, Neve-Ya’ar Research Center, Agricultural Research Organization, Ramat Yishay, Israel, on March 30 titled “Plant Volatiles: What do We Learn from Nature so Far?”.

**Dr. Sujith Puthiyaveetil**, Associate Professor of Biochemistry, and **Matthew Martin** (graduate student in Puthiyaveetil lab) attended the Chloroplast Biotechnology Gordon Research Conference in Ventura Ca., on March 26-31.

**Dr. Sujith Puthiyaveetil** was a discussion leader and speaker at a session entitled “Controlling Plastid Gene Expression”.

## GRANTS...

**Dr. Ann Kirchmaier** received \$ 148,994 from Dept. of Defense for her proposal “Replication Stress in Lung Cancer”.

**Dr. Sujith Puthiyaveetil** received \$99, 978 from DOE as supplementary funding for his proposal “Core phosphorylation as a modulator of photosystem II functional and biogenetic assembly”.

**Dr. Sujith Puthiyaveetil** received \$30,000 from the Center for Plant Biology as a seed grant (with John Morgan as Co-PI) for their proposal "A multiomic analysis of diatom carbon assimilation under low and surplus iron".

## RECENT PUBLICATIONS...

Cummins, A.J., C.J. Silver, J.M. Olson, A. Kaur, A.K. Hamdani, L. K. Olson, **B.P. Dilkes**, L. E. Sieburth. 2023. A cryptic natural variant allele of BYPASS2 suppresses the bypass1 mutant phenotype. *Plant Physiology*. Online ahead of print.

Svoboda, V., H. M. O. Oung, H. Koochak, R. Yarbrough, S. D. Mckenzie, **S. Puthiyaveetil**, H. Kirchloff. Quantification of energy-converting protein complexes in plant thylakoid membranes. *Biochimica et biophysica acta. Bioenergetics*. **1864**(2):148945.

Jauregui-Lozano, J., S. E. McGovern, K. M. Bakhle, A. C. Hagins, **V. M. Weake**. Establishing the contribution of active histone methylation marks to the aging transcriptional landscape of Drosophila photoreceptors. *Scientific reports*. **13**(1):5105

Driscoll, W.W., **J. H. Wisecaver**, J.D. Hackett, N.J. Espinosa, J. Padway, J.E. Engers, J.A. Bowers. Behavioural differences underlie toxicity and predation variation in blooms of *Prymnesium parvum*. *Ecology letters*. Online.

## IMPORTANT DATES...

April 29	Classes end
May 1-6	Finals Week
May 12-14	Commencement
May 29	Memorial Day, University Closed