

# PharmTox Weekly Buzz

(A publication of the UAMS Department of Pharmacology and Toxicology)

Week of July 26-30, 2021

## Accepted Collaborative Manuscript by Basnakian Team

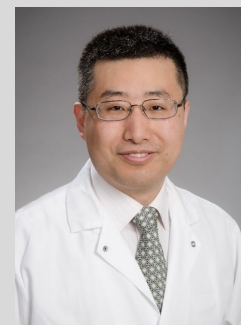


Professor Alexei Basnakian and research associate Alena Savenka, in collaboration with a team of scientists led by associate professor Mohammad Alam of Arkansas State University, are co-authors on a manuscript accepted for publication in the British journal, the *Royal Society Open Science*. The manuscript titled “Antimelanoma activities of chimeric thiazole-androstenone derivatives” describes newly discovered compounds that are more toxic to melanoma cells compared to the commonly used anti-

melanoma agent dacarbazine. The new compounds induce oxidative injury, caspase-independent EndoG-mediated apoptosis, and caspase-mediated apoptosis. Dacarbazine induces only EndoG-mediated apoptosis, which may explain why it is less cytotoxic to melanoma cells than the new compounds.

## Dr. Zhang Selected for Training Course in Aging Research

Assistant professor Huiliang Zhang has been selected to attend the 28th Annual National Institute on Aging’s Summer Training Course in Experimental Aging Research. Dr. Zhang is one of approximately twenty junior research scientists from across the country selected for the class. The course provides intensive exposure to current concepts in experimental aging research. Teaching faculty include some of the world’s leading scientists in the aging and longevity research community. The course will be held in Seattle at the University of Washington.



## Dr. Kiaei and Daughter Co-author a Paper



Assistant professor Mahmoud Kiaei and his daughter, Lily, along with colleagues from Shahid Beheshti University in Iran had a manuscript accepted by the journal *Metabolic Brain Disease*. The article is titled “Detection of structural and conformational changes in ALS-causing mutant profilin-1 with hydrogen/deuterium exchange mass spectrometry and bioinformatics techniques”. The authors provide a new and effective method to generate valuable data with the intent to understand how a single amino acid change in a small protein results in a toxic molecule leading to ALS symptoms. The approach will be useful for designing small molecules as novel drugs to neutralize the pathological changes caused by the profilin-1 mutation to prevent neurotoxicity in ALS.

Lily is an intern in Dr. Kiaei’s company, RockGen Therapeutics, LLC. She is also an intern at Memorial Sloan Kettering this summer. She will be a senior in high school this fall.