

# PharmTox Weekly Buzz

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

Week of January 10-14, 2022

## Dr. Shuk-Mei Ho and Dr. Ricky Leung Awarded DoD Grant



Congratulations to professor Shuk-Mei Ho and associate professor Ricky Leung on their new Department of Defense award, “DNA methylation markers associated with exposure and adverse health outcomes in veterans exposed to airborne hazard from open burn pits.” Dr. Ho is Co-PI on this award along with Dr. Kalpana Padala from Central Arkansas Veteran’s Health System. Dr. Leung is co-investigator.

Many veterans were exposed to smoke from open burn pits during Middle East combat deployments. Yet the content of the waste, the duration of exposure, the environmental toxicants in the smoke, and the internal doses in the exposed individuals were poorly documented, making immediate and long-term assessment of health impacts close to impossible. The goal of this study is to investigate the levels of persistent toxic chemicals and DNA methylation in blood and examine their correlation with the level of burn-pit exposure as well as specific health outcomes. Such biochemical and molecular measures may become novel biomarkers that enable the prediction of risk for disease and adverse disease outcomes so that preventive measures can be employed.

## Welcome New Postdoctoral Fellows



Please welcome new postdoctoral fellows, Rami Shahrour and Gopinath Venugopal. Dr. Shahrour is working in the lab of assistant professor Abdelrahman Fouda. Dr. Shahrour received his Ph.D. in neural regenerative medicine from Taipei Medical University-Taiwan, and a M.Sc. in medicine and a M.Sc. in molecular medical biology from Orebro University-Sweden. He was previously a research fellow at the Shock, Trauma and Anesthesiology Research Organized Research Center (STAR-ORC) in the School of Medicine at the University of Maryland. Dr. Shahrour has contributed to a number of neurotrauma projects related to the development of highly-potent genetically-modified stem cells for traumatic brain injury therapy. He has authored or co-authored a number of articles in peer review journals in the field of neuroscience. He is also a fellow in the Society for Neuroscience and National Neurotrauma Society.



Dr. Gopinath Venugopal has joined assistant professor Nirmala Parajuli’s lab. Dr. Venugopal received his Ph.D. in biomedical sciences from Free University in Berlin, Germany where he studied *Brugia malayi* cystatin induced immunomodulation of human monocytes and macrophages and also identified some of the candidate gene polymorphisms which are associated with chronic lymphatic filariasis. He was previously a postdoctoral fellow in assistant professor Tiffany Weinkopff’s laboratory in the Department of Microbiology and Immunology, where he studied the molecular mechanism involved during inflammation in a murine model of cutaneous leishmaniasis. In his current position, Dr. Venugopal will investigate the mechanisms of cold storage-induced injury during preservation in order to improve clinical outcomes after kidney transplantation.