

PharmTox Weekly Buzz

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

Week of October 4-8, 2021

Dr. Rhee is Co-PI on NIH Award

Congratulations to professor Sung Rhee who is Co-PI with professor Brian Storrie (Department of Physiology and Cell Biology) on a new \$2.5 million NIH R01 Award, titled “Structure/function determinants of puncture wound thrombus formation”. With initial findings published in *Communications Biology* on September 16, 2021, this award will explore the vaulted thrombus (blood clot) structure, which is a discovery that surprised researchers and challenges long-held hypotheses about the basis of thrombus formation. The research team found that blood clots form in puncture wounds similar to a sky-



scraper with rooms and furnishings that scientists can now see. This discovery may guide drug development for bleeding cessation. During the next 4 years, Drs. Rhee and Storrie, with their research team that includes technician Kelly Ball, will study molecular-level coagulation factors and signaling between platelets that occur immediately before and during clot formation. The studies include analyses of common anticoagulant drugs to determine how they affect signaling pathways during thrombus formation.

Accepted Publication and National Publicity for Dr. Andrew Morris

Professor Andrew Morris’ manuscript titled “Serum concentrations of legacy and emerging per-and polyfluoroalkyl substances in the Anniston Community Health Surveys (ACHS 1 and ACHS II)” was accepted for publication in *Environment International*. Per and poly fluorinated alkyl substances are surfactant chemicals used in everything from fabric stain and water resistant clothing, to nonstick cookware, to firefighting foams. Widespread manufacturing and use of PFAS has resulted in extensive human exposure and they can be detected in the blood of most adult Americans. Exposure to PFAS is associated with increased risk of multiple human diseases including some cancers and cardiovascular diseases.



This study measured a panel of PFAS in subjects enrolled in a longitudinal study of the health effects of exposure to environmental chemicals. It identified associations with exposures to other classes of environmental chemicals, revealed temporal changes in circulating levels of different PFAS, and identified associations with inter-individual variability in susceptibility to some non-communicable diseases. PFAS were the focus of John Oliver’s “news” show on HBO recently, which can be viewed at <https://www.youtube.com/watch?v=9W74aeuqsiU>



Welcome GPIBS Student Mika Taylor

Welcome to Mika Taylor, a first year GPIBS student rotating in Dr. Abdelrahman Fouda’s laboratory. Mika is from Fort Worth, Texas and obtained her undergraduate degree from Stephen F. Austin State University in Nacogdoches, Texas. Mika’s career plan after achieving her PhD is to work on clinical trials at Mayo Clinic or a similar institution. In her spare time, Mika enjoys lifting weights and recently adopted a black cat named Lulu.

Get Your Flu Shot and Booster Vaccine!

Infectious disease experts warn that this flu season may be particularly severe this year. Considering the ongoing COVID-19 pandemic, getting the flu shot is more important than ever. All UAMS employees, students and volunteers are required to have an influenza vaccine each year. The good news is that **you can conveniently get your Pfizer COVID booster dose and your flu shot at the same time**. Student and Employee Health Services is offering these vaccines in the hospital Lobby Gallery from 7 am to 7 pm weekdays (except Thursdays).