

PharmTox Weekly Buzz

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

Week of November 29-December 3, 2021



Department of Pharmacology and Toxicology Holiday Breakfast

Thursday, December 9, 2021

9:00 -10:00 a.m.

Pharma Place (Skywalk between Biomed I and II)

Dr. Basnakian will be cooking pancakes and there will be door prizes. Stop by between 9-10 a.m. and grab a plate and beverage. Then use the zoom link from your desk to enjoy breakfast and listen to Holiday music while visiting virtually with friends in the department!

Accepted Review for McGill Lab



Graduate student, Joel Vazquez and assistant professor, Mitch McGill had an invited review accepted in the journal *Livers*. “Redrawing the map to novel DILI biomarkers in circulation: Where are we, where should we go, and how can we get there?” looks at drug-induced liver injury (DILI) as a major clinical and regulatory challenge. Clinically, it is the foremost cause of acute liver failure throughout most of the world, but it is exceedingly difficult to diagnose. In addition, determining which patients need

a new liver to survive is very difficult. From a regulatory perspective, it is challenging to detect DILI with certainty during clinical trials. This review is an opportunity to step back and evaluate where we are in the field, how we got here, and how we should move forward.

Dr. Morris Contributes to Newly Published Study

Professor Andrew Morris contributed measurements of particular lipids to a newly published study in *Cell Rep*. “Autotaxin impedes anti-tumor immunity by suppressing chemotaxis and tumor infiltration of CD8 + T cells” identified a role for the enzyme autotaxin (ATX; ENPP2) and its product lysophosphatidic acid in cancer immunotherapy. The primary authors of the work are long standing collaborators at the Netherlands Cancer Institute in Amsterdam. ATX produces lysophosphatidic acid (LPA) that regulates multiple biological functions via cognate G protein-coupled receptors LPAR1-6. ATX/LPA promotes tumor cell migration and metastasis, yet its actions in the tumor immune microenvironment remain unclear. The findings from this study highlight an unexpected role for the pro-metastatic ATX-LPAR axis in suppressing CD8+ T cell infiltration to impede anti-tumor immunity, suggesting new therapeutic opportunities.

