

## **Geology & Environmental Science University of Pittsburgh**

## Spring 2024 Colloquium Series

## **MASON STAHL**

The James M. Kenney Assistant Professor of Environmental Engineering in the Department of Geosciences and Environmental Science, Policy and Engineering program at Union College.

## Hydrologic controls on arsenic and uranium contamination: Insights from the US Northern Plains and Cambodia

Contamination of drinking water with arsenic (As) and uranium (U) affects more than 100 million people globally, including millions of people across the US. Furthermore, rice, which globally supplies more than 20% of human caloric intake, is often high in arsenic and represents a common route of exposure. The release of both As and U from soils, sediments, and rocks is strongly dependent on a range of environmental factors, many of which are heavily influenced by hydrologic processes.

In this talk, I will present findings from my ongoing research into As and U contamination of both surface water and groundwater across the US Northern Plains and As contamination of groundwater in Cambodia. In addition, I will discuss preliminary results from my research in Cambodia examining As uptake into rice.

Across all of these research questions I will highlight the role of hydrology in the mobilization of these toxic elements.

Bagels, donuts, and coffee available in **SRCC 219** before the talk!

February 8, 2024
Thaw 104 @ 4:00PM