# UNDERGRADUATES PURSUING RESEARCH IN SCIENCE AND ENGINEERING (UPRISE)

## SCHOOL OF ENVIRONMENT AND SUSTAINABILITY ARTS AND SCIENCES

#### SUMMER RESEARCH OPPORTUNITIES FOR UNDERGRADUATE students

FOR APPLICATION YEAR: 2025

### PROJECT TITLE: Methane emissions and sources in the Cincinnati region

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### Project Description

Methane is a powerful greenhouse gas with many different sources from human activities, and concentrations of methane are rising quickly in Earth's atmosphere. These rapidly rising emissions are partially responsible for some of the rapid climate change impacts that are hardest for people to adapt to. Research in Professor Townsend-Small's group is focused on finding the methane emissions and sources that are easiest to reduce right away, and working with policymakers and other members of the public on ways to reduce them, so we can have more time to adapt to climate change in the longer term. I am looking for a student to help with a project studying methane emissions and sources in the Cincinnati area. This project involves multiple ways of approaching the problem, including measurements in the field, assembling datasets from scientific literature, and making laboratory measurements.