

SCRP Application for Urban Biogeochemistry Research Meyer Lab, Summer 2024

I am looking for two students to join me in the Meyer Lab in 2024. While some upper-level coursework in any STEM field would be a bonus, I am open to interested students at any level of experience. To apply to join the Meyer lab, first email me at <kmmeier> or use my appointments link (<http://tinyurl.com/Meyer-appts>) to schedule a 15–30 minute meeting with me. This meeting is an opportunity for you to ask any questions you have and for us to discuss the proposed summer project, schedule, and potential for extension of the project into the 2024-25 academic year.

After you have met with me, please complete the application below:

1. Please fill out the Google Form on the SCRП website to submit required elements for the common application.
2. A half-page description of your interest in working with me on local questions of urban biogeochemical cycling, how you think this research experience will enrich your college experience, and how it relates to your long-term goals and/or values.
3. Urban geochemistry/biogeochemistry is a rapidly developing discipline that investigates the complex interactions between human activities in urban contexts and geochemical and biological processes. This emerging field is broad in scope, with relevance to applied fields such as hydrology, urban planning, and emergency management, and human health. Please use the references I provide and other relevant peer-reviewed scientific journal articles that you find to build a basic understanding of questions and tools in the field. Then, use that understanding to develop and write a 1-2-page research proposal focused on any aspect of urban biogeochemistry in Salem, OR. Please include the following components:
 - a. An introductory paragraph on the broader context of urban geochemistry/biogeochemistry
 - b. 1-2 paragraphs on relevant background related to the research question that you develop
 - c. A paragraph that states and justifies the research question that you propose
 - d. A description of the sampling plan and lab methods required to gather data that addresses your research question
 - e. A paragraph of anticipated outcomes/results

Please ask me if you need help at any point in this assignment. In addition to getting you started with a few review articles, I am very happy to help you search for primary literature, interpret the paper, discuss analytical methods, etc.