

2023 Summer Internships for Undergraduates

About the Water and Life Interface Institution (WALII, pronounced “Wally”): [WALII](#) studies how life interacts with water, from the molecular to the organismal level, across plants, fungi, and animals. [WALII is a virtual institute, with scientists located at nine research facilities across the United States.](#) Working together, WALII team members aim to uncover the rules by which organisms interact with water, exploring four integrated themes: 1) the physical and molecular determinants that allow organisms to survive in the solid state; 2) rehydration responses in desiccation-tolerant and -sensitive systems; 3) the molecular grammar of desiccation tolerance conferred by intrinsically disordered proteins; and 4) the short- and long-term evolutionary history of desiccation tolerance. WALII team members have diverse expertise, ranging from biophysics to plant biology, and experience with several desiccation-tolerant and -sensitive systems.

About WALII 2023 Summer Internships: Summer internships for undergraduate students are available at eight of the Water and Life Interface Institution campuses. [Each location has a separate application process and offers different experiences.](#) Students interested in WALII projects are encouraged to [apply to multiple campuses.](#) No previous research experience is required.

Interns working on WALII projects will form a virtual cohort*. Interns will participate in a mentorship program, online career development activities (such as a Q&A career panel and a graduate school preparation workshop), and will present at the annual WALII Virtual Symposium. All internships are paid opportunities, but the stipend amounts and program benefits may vary by geographic region.

Interns hosted by labs at Baylor College of Medicine, Carnegie Institution for Science, University of California (Merced), Michigan State University, and University of Wisconsin-Madison will also be part of an **on-campus cohort of interns unaffiliated with WALII and will have additional opportunities for in-person social activities.*

DEI Statements: *WALII is deeply committed to scientific excellence and diversity. We strongly encourage applications from candidates who will enrich and foster a diverse and inclusive environment. All WALII member institutions are equal opportunity employers. All applicants will receive consideration for employment without regard to race, color, religion, gender, sexual orientation, gender identity or expression, national origin, age, genetic information, disability, veteran status, or any other characteristics protected by law.*

Internship at WALII Campus: University of Wyoming (Boothby Lab)

WALII Project: Surviving The Solid State (Theme 1)

About the Boothby Lab: The Boothby Lab uses tardigrades as a model for answering the questions: “How do organisms survive in extreme environments? And, What are the abiotic limits of life?” Answering these questions for organisms found on Earth will help to guide our search for life, both here on Earth and elsewhere. The Boothby Lab is addressing these questions by searching for organisms inhabiting environments that push the boundaries of what we consider possible conditions that can sustain life, and by employing synthetic biology to see how far we can push those boundaries. Learn more at:

<https://www.boothbylab.org/>

How to apply: Send an email to Thomas Boothby (tboothby@uwyo.edu) with the following documents:

- CV detailing past academic, professional and research experience
- Cover letter describing why you are interested in our lab, the questions that you want to pursue, and your goals.

Application due date: March 31, 2023

Questions? Contact Thomas Boothby at tboothby@uwyo.edu