REU position at Oregon State University,
NEON Wind River Experimental Forest &
AmeriFlux Metolius sites

We are seeking applicants for an NSF-funded Research Experience for Undergraduates (REU) position in summer 2021 to do tree physiology and ecohydrology research at the AmeriFlux Metolius site (US-Me2), a Ponderosa pine forest on the east slope of the Oregon Cascades near Sisters, Oregon, and also at the NEON Wind River experimental forest, an old-growth Douglas fir/western hemlock forest in the Columbia River Gorge near Carson, WA. (For more site information please visit http://terraweb.forestry.oregonstate.edu/metolius-mature-pine-ameriflux-site-us-me2 and https://www.neonscience.org/field-sites/wref). This project will focus on better understanding the properties of plants, ecosystems, and climate that govern ecosystem evapotranspiration (ET).

The REU student will play an integral role in data collection and analysis. The student will be trained to collect field measurements including leaf water potential, leaf photosynthetic rates, and soil water retention curves. The student will have the opportunity to participate in multiple field campaigns throughout the summer collecting data with a team of researchers.

The REU student will be asked to focus on one research question relating tree transpiration data from sapflow measurements with above and below canopy evapotranspiration measurements to identify the relative contributions of soil and canopy evaporation, understory evapotranspiration, and tree transpiration to total ET fluxes and investigate how these relative contributions change throughout the growing season.

This research will contribute to a larger project leveraging networks of eddy-covariance measurements that span a range of ecosystems and combining them with new stable isotope measurements of carbon and water indicative of biophysical function. The project is focused on better understanding the drivers of ET partitioning and guiding management activities aimed at improving ecosystem resilience and our ability to predict land-atmosphere water exchanges now and in a warmer climate.

The goal of this program is to provide undergraduate students an opportunity to participate in 10 weeks of mentored, paid, independent research. The program includes an opportunity for the student to interact with a variety of scientists, including OSU faculty and graduate students conducting research in the area. Participants will work with the PI's (Dr. Chris Still and Dr. Stephen Good) and a postdoc (Linnia Hawkins) working on the project. The REU student will conduct supervised and guided research and be encouraged to tailor the research project to their own individual interests.

The position will be based at Oregon State University in Corvallis, OR and travel will be required for multiday trips to the field sites. This position lasts for 10 weeks, starting in May/June 2021 (dates flexible), working 40 hours/week. The student will be responsible for: 1) conducting independent but mentored research in the context of a larger project; and 2) writing a final research report on their research experience. Housing on Oregon State University Campus

housing and a weekly stipend of $600 will be provided ($6000 total stipend). There are also some funds to defray the cost of traveling to Oregon State University.

Position Requirements: Applicants should have a valid driver's license, and ideally the ability to carry a heavy pack (40+ lb) and be comfortable spending long days on their feet in the field. The position will involve working in inclement weather. University COVID-19 policies will be observed at all times, and COVID-19 precautions and contingencies will be in place for all field work. Students with experience and/or interest in plant physiology, field measurement techniques, and data analysis are particularly encouraged to apply. Eligibility is limited to currently enrolled undergraduates that have a graduation date no sooner than fall 2021. All applicants must be U.S. Citizens or permanent residents. Women, underrepresented minorities, and persons with disabilities are especially encouraged to apply.

To apply: Please submit a brief cover letter (1 page) indicating your interest, experience and professional goals after graduation, curriculum vitae or resume, transcripts (unofficial are acceptable) and 3 professional references (names, addresses, phone number, and email address) as 1 document to: Linnia.hawkins@oregonstate.edu and chris.still@oregonstate.edu . Please include in the subject: REU 2021 Application. Only complete applications will be considered. Review of applications will start Apr. 1st, 2021 and continue until a suitable candidate is identified.