

The Waite Lab at the USDA ARS Tree Fruit Research Lab in Wenatchee, WA is looking for a postdoctoral researcher to join us in our research on pear rootstocks. Please find more information below on the lab, the initial project focus, desired skills, employment notes, and the Wenatchee area!

Waite Lab research focuses and goals: Our overall goal is to understand and improve pear rootstock traits, using genetic, molecular, and genomic tools. We work at the intersection of basic and applied science to address various topics related to pear rootstocks, including: understanding mechanisms of dwarfing and precocity, root system development and architecture, development and application of biotechnological tools for breeding and research, and tissue culture techniques. We work closely with the pear rootstock breeding program, located across the parking lot at the WSU Tree Fruit Research and Extension Center. We work hard to foster and maintain a lab environment that is welcoming, respectful, supportive, and safe for all people, and uplifts curiosity, thoughtfulness, and ethical practices in research. <https://waitelab.weebly.com>

USDA ARS Tree Fruit Research Lab: The unit's mission is to expand the knowledge of deciduous tree fruit production systems in the areas of plant disease and fruit quality. We have 7 PIs, 6 located in Wenatchee and 1 in Hood River, OR, divided between two research units, one focused on soil borne diseases and root systems, and the other on post-harvest physiology of tree fruit. We are co-located with the WSU Tree Fruit Research and Extension Center, and together we have a sizeable community of science students, postdocs, and faculty working on a wide range of topics related to tree fruit. <https://www.ars.usda.gov/pacific-west-area/wenatchee-wa/physiology-and-pathology-of-tree-fruits-research/>

Postdoctoral position initial focus: Rooting in pears is notoriously difficult. We are interested in better understanding responses to hormone-based rooting treatments, with the goal of improving predictability of rooting for the micropropagation and nursery industries. The project focus will include: characterization of hormone responses as they relate to rooting (de novo root regeneration) and how these responses differ across pear cultivars; taking a comparative transcriptomic approach to understand gene expression changes in response to hormone-based rooting treatments across cultivars; using biotechnological techniques to develop pear research tools for studying hormone responses.

Desired skills: Ideally, the candidate will have experience with: bioinformatic analysis, especially mapping and analysis of transcriptomic data; plant development research (particularly background in genetic or molecular biology); if possible, familiarity with tissue culture techniques.

Other employment info: This position is for an ARS postdoc, so U.S. Citizenship is required. Funding for 2 years is guaranteed, likely extendable to 4. Please note, ARS postdoc terms have a limit of 4 years. The position will likely start at GS-11 Step 1, with "Rest of the U.S." locality pay: <https://www.opm.gov/policy-data-oversight/pay-leave/salaries-wages/salary-tables/23Tables/html/RUS.aspx>

A bit more about the Wenatchee area: The Wenatchee area has a lot to offer! We are located very close to the Cascade mountains, at the confluence of the Wenatchee and Columbia Rivers, allowing for many outdoor activities (hiking/climbing, boating/kayaking, skiing/snowshoeing, etc). Wenatchee is a medium-sized town (~116k) with lots of amenities, but also only 2.5 hours from Seattle if you need city time. Climate is semi-arid, with hot and dry summers (lots of sun!), cold and sometimes snowy winters.

If you are interested, please contact Dr. Jessica Waite to further discuss! jessica.waite@usda.gov