

## 2023 Phenomics Data – REEU Schedule

Activities	Tentative timeline	Responsible Party	Virtual/In-person
Students reach out to mentors to get to know each other and tentative discussion of project and gather relevant materials to read.	15 April – 15 May	Mentor-Student	Self-Organized
Arrival at WSU Campus (for those in Pullman)	29 May – 19 June	Office of Undergraduate Research (OUR)	-
WSU Summer Research Welcome Orientation CUE Atrium and CUE 203 (Smith Center for Undergraduate Education)	31 May 8.30 – 11.00 am	OUR	In-Person
REEU program evaluation survey <ul style="list-style-type: none"> <li>▪ Evaluators Introduction <ul style="list-style-type: none"> <li>▪ <b>Zoe Higheagle Strong</b></li> <li>▪ <b>Landon Charlo</b></li> </ul> </li> <li>▪ Meeting with project evaluators</li> </ul>	31 May 3.00 – 4.30 pm	Mentor	Virtual
REEU research site presentation – <ul style="list-style-type: none"> <li>▪ Know the mentors and their research. Their background, career path, and research directions <ul style="list-style-type: none"> <li>• <b>Stephen Ficklin</b></li> <li>• <b>Rebecca McGee</b></li> <li>• <b>Mike Pumphrey</b></li> <li>• <b>Sindhuja Sankaran</b></li> </ul> </li> <li>▪ Summary of REEU research site and expectations</li> <li>▪ Know the mentors and their research. Their background, career path, and research directions <ul style="list-style-type: none"> <li>• <b>Arron Carter</b></li> <li>• <b>Lisa DeVetter</b></li> <li>• <b>Kate Evans</b></li> </ul> </li> </ul>	2 June 10.00 – 10.30 am  5 June 10.00 – 10.30 am	Phenomics Program	In-Person/Virtual
<b>Student headshot and brief intro about themselves for project website</b> [Example: <a href="https://labs.wsu.edu/sankaran-phenomics/undergrad-research-exp/students/">https://labs.wsu.edu/sankaran-phenomics/undergrad-research-exp/students/</a> ]	5 June 5.00 pm	Student	Self-Organized
Mentor Introduction and Phenomics Data Boot Camp <ul style="list-style-type: none"> <li>▪ Ag basics – Strategies to improve production and management [<b>Clarke Neely</b>]</li> <li>▪ Molecular genetics/Basics in genetics – RNA, DNA – Central dogma [<b>Yu Ma</b>]</li> </ul>	2 June 9.00 – 9.30 am  2 June 9.30 – 10.00 am	Phenomics Program	In-Person/Virtual
[Program and Mentor Introduction]	2 June 10.00 – 10.30 am		
Breeding cycle (genetic gain, process, timeline, challenges) – Field crops [ <b>Rebecca McGee</b> ]	2 June 10.30 – 11.00 am		
▪ Breeding cycle – Tree fruit [ <b>Kate Evans</b> ]	2 June 11.00 – 11.30 am		
[Program and Mentor Introduction]	5 June 10.00 – 10.30 am		
<ul style="list-style-type: none"> <li>▪ Genomics [<b>Mike Pumphrey</b>]</li> <li>▪ Phenomics [<b>Sindhuja Sankaran</b>]</li> </ul>	5 June 10.30 – 11.00 am 5 June 11.00 – 11.30 am		

<p>Research project (research-project and mentor preferred)</p> <ul style="list-style-type: none"> <li>▪ One-on-one meeting with mentor and team.</li> <li>▪ Research orientation &amp; project development</li> </ul>	<p>Between 1 June- 19 June – depending on arrival</p> <p><b>1-page document describing brief background and research objectives due at 5 pm on 9 June</b></p>	<p>Mentor-Student</p>	<p>In-person</p>
<p>Research project (research-project and mentor preferred)</p> <ul style="list-style-type: none"> <li>▪ Literature review</li> <li>▪ Research project implementation</li> </ul>	<p>1 June – 4 or 18 Aug</p>	<p>Mentor-Student</p> <p>Student</p> <p>Mentor-Student</p>	<p>In-person</p>
<p>Student-faculty interaction and student-student communication</p> <ul style="list-style-type: none"> <li>▪ REEU student-faculty</li> <li>▪ REEU student-graduate student/research associate</li> </ul>	<p>1 June – 4 or 18 Aug</p>	<p>Mentor-Student</p>	<p>In-person</p>
<p><b>Student reporting</b></p> <ul style="list-style-type: none"> <li>▪ <b>Progress presentation</b></li> <li>▪ <b>Abstract submission</b></li> <li>▪ <b>Poster Due to Mentor</b></li> </ul>	<p><b>10 July (4 pm)</b></p> <p><b>Due: 21 July (5 pm)</b></p> <p><b>Due: 31 July (5 pm)</b></p>	<p><b>Student</b></p>	<p><b>In-person</b></p>
<p>Professional/career development workshops</p>	<p>Workshop #1 - Thursday, June 8 from 11:00 a.m. – 12:00 p.m., CUE 405</p> <ul style="list-style-type: none"> <li>• Library Research with Emily Cukier (Science Librarian)</li> </ul> <p>Workshop #2 - Thursday, June 15 from 11:00 a.m. – 12:00 p.m., CUE 405</p> <ul style="list-style-type: none"> <li>• Graduate School with Raymond Herrera (Associate Vice Provost, Graduate School)</li> </ul> <p>Workshop #3 - Thursday, June 22 (re-scheduled July 11) from 11:00 a.m. – 12:00 p.m., CUE 405</p> <ul style="list-style-type: none"> <li>▪ Mindfulness - session with Trymaine Gaither, Special Assistant to the Provost for Inclusive Excellence.</li> </ul> <p>Workshop #4 - Thursday, June 29 from 11:00 a.m. – 12:00 p.m., CUE 405</p> <ul style="list-style-type: none"> <li>• Resume/CV – Part 1 (learn how to create an effective resume/CV) – Harrison Hughes, Career Coach and Academic Advisor, Academic</li> </ul>	<p>OUR</p>	<p>In-person</p>

	<p>Success and Career Center</p> <p>Workshop #5 - Thursday, July 6 from 11:00 a.m. – 12:00 p.m., CUE 405  • Resume/CV – Part 2 (bring your resume/CV to receive feedback) – Harrison Hughes, Career Coach and Academic Advisor, Academic Success and Career Center</p> <p>Workshop #6 - Thursday, July 13 from 11:00 a.m. – 12:00 p.m., CUE 405  • How to Write an Abstract with Jeremy Lessmann (Director, Undergraduate Research)</p> <p>Workshop #7 - Thursday, July 20 from 11:00 a.m. – 12:00 p.m., CUE 405  • How to Create a Research Poster with Jeremy Lessmann (Director, Undergraduate Research)</p> <p>Workshop #8 - Thursday, July 27 from 11:00 a.m. – 12:00 p.m., CUE 405  • Top Ten Tips for Scholarship Essays with April Seehafer (Director, Distinguished Scholarships)</p>		
Introduction to Extension ( <b>Lisa DeVetter</b> ) Discussion with <b>Aaron Esser</b>	30 June 2.00 – 3.30 pm 29 June (after Field Day)	Phenomics Program	Virtual In-person
Transgenic Crops- the methods, pros and cons of GMOs and biotechnology ( <b>Michael Neff</b> )	28 July 10.00 – 11.30 am	Phenomics Program	Virtual In-person
Field Trip – Smart Orchard Field Day, Grandview, WA 8:30 – 9:00 Registration and snacks 9:00 Smart Orchard Field Day - welcome and introduction. Host Steve Mantle, Innov8.ag and Gilbert Plath, Washington Fruit and Produce. 9:30 – 9:55 Nutrient Management and Soil Mapping. 9:55 – 9:20 Spray Technology 10:20 – 10:40 Irrigation Technology 10:40 – 12:30 Tech provider rundown and trade-show.	2 August 8.30 am – 12.30 pm	Phenomics Program	In-person

Field Day Participation	Wilke Farm Field Day 29 June	Phenomics Program	In-person
Poster submission for print	1 Aug	Phenomics Program	Virtual
▪ <b>Poster presentation and participation at WSU Summer Research Symposium</b>	<b>4 Aug</b>	<b>OUR</b>	<b>In-person</b>
Entertainment ▪ <a href="https://summerresearch.wsu.edu/summer-in-pullman/">https://summerresearch.wsu.edu/summer-in-pullman/</a> [In Pullman] ▪ <a href="https://www.tripadvisor.com/Attractions-g58622-Activities-Mount_Vernon_Washington.html">https://www.tripadvisor.com/Attractions-g58622-Activities-Mount_Vernon_Washington.html</a> [Mt. Vernon]	29 May – 5 Aug	Self-organized	In-person
REEU program evaluation survey	4 Aug 2.00 – 4.00 pm	Phenomics Program	In-person
Departure from WSU campus	5 Aug	-	-
Post-Summer Program Survey		OUR	Online