Supervisor Internship Evaluation Form

College of Earth, Ocean, and Atmospheric Sciences

Oregon State University

104 CEOAS Administration Building

Corvallis, OR 97331-5503

To be **completed by Internship Supervisors** and submitted directly to [erin.lieuallen@oregonstate.edu](mailto:erin.lieuallen@oregonstate.edu), the CEOAS Experiential Learning Coordinator. This evaluation will influence the student’s Pass/No Pass credit grade and must be submitted before a grade is issued. Please contact Erin Lieuallen at (541) 737-1267or erin.lieuallen@oregonstate.edu if you have any questions or concerns. ***Thank you for your feedback!***

**Student Information**

Last Name: Miller First Name: Morgan

Internship Host Organization: Summer Research Experience for Undergrads (REU) 2023

Name and Title of Supervisor: Dr. Ricardo I. Alcala Briseño, Postdoctoral Scholar OSU

Supervisor Email: ricardo.alcalabriseno@oregonstate.edu Phone Number: 352-460-8011

**Internship Evaluation**

Approximately how many total hours did the student work? 300 hours Suggested Grade (Pass/No Pass). Pass

*Please rate the following questions regarding the student’s performance in this internship.*

1. Student conducted him/herself in a professional manner.

Excellent Good Satisfactory Needs Improvement Unsatisfactory N/A – unable to rate

1. Student was engaged and willing to learn new skills.

Excellent Good Satisfactory Needs Improvement Unsatisfactory N/A – unable to rate

1. Student effectively worked with other people.

Excellent Good Satisfactory Needs Improvement Unsatisfactory N/A – unable to rate

1. Please rate the student’s oral communication skills.

Excellent Good Satisfactory Needs Improvement Unsatisfactory N/A – unable to rate

1. Please rate the student’s written communication skills.

Excellent Good Satisfactory Needs Improvement Unsatisfactory N/A – unable to rate

In the space provided, please briefly describe the work performed by the student and any other additional comments you may have.

Morgan gained exposure to various tools and programming languages essential for microbiome analysis, such as the bash command line, Python, and R, during the REU internship. Throughout the internship, Morgan focused on processing Illumina paired-end reads from Poplar wood infected with the fungal pathogen *Sphaerulina musiva*. Initial steps involved assessing the quality of the reads and implementing filtering procedures based on standard parameters. The host reads were removed for the microbiome analysis, retaining only fungal reads to generate amplicon sequence variants (ASVs). Furthermore, the taxonomic classification of these ASVs was executed, and fungal databases were used for reference. Morgan finalized the internship by evaluating the fungal ASVs implementing ecological indices complemented by statistical analysis to distinguish between the fungal taxa associated with diseases Poplar trees infected with *S. musiva*. This approach established the basis of the wood fungal composition linked to leaf spot and canker disease in Poplar.