

Monitoring Environmental Microbiomes (MEM) **Fort Lewis College, Durango, CO, May 21 – 27, 2023**

Presented by: Joslynn Lee, PhD and Jennifer Lowell, PhD *Fort Lewis College*; Larry Hunter, PhD
University of Colorado Anschutz Medical Campus



MEM aims to increase the number of Native American and underrepresented students (low income, disabled, etc.) in data science and scientific computing by studying environmental microbiomes. Studying microbial systems enables researchers to understand the interactions in natural environments to gain insight into environmental microbiome dynamics. MEM utilizes microbiome research to study mining impacts to the San Juan Watershed alongside the context of environmental and social (in)justice perspectives. This workshop is designed to incorporate Indigenous values and approaches when conducting scientific research. Our workshop has an elder-in-residence to facilitate discussions and provide support during the workshop.

ELIGIBILITY Must be a current undergraduate student majoring in science or science education, and/or be currently in a science internship and have a GPA of 2.5. Students from groups underrepresented in science are encouraged to apply. American Indians and Alaska Natives students will be given priority but no one will be excluded from consideration based on their ethnic background.

Tentative schedule:

Sun May 21: Arrive at Fort Lewis College campus, Durango, CO

Mon May 22: Visit waterways of Southwest Colorado and meet local scientists

Tues May 23 - Wed May 24: Introduction to Bioinformatics and 16S rRNA data processing

Thurs May 25 - Fri May 26: Data Science - Understanding microbial communities through statistics & predictive modeling

Sat May 27 - Depart from Fort Lewis College campus, Durango, CO

See highlights from previous workshops: <https://faculty.fortlewis.edu/jslee/MEM/details.html>

APPLICATION PROCESS

1. To learn more, go to <https://forms.gle/4FQqLEEH1R41sqAM9> and click "Apply"
2. Statement of Interest (one page limit, word or PDF format): Describe your educational and career plans and how this workshop experience will benefit you.
3. Most recent college transcript(s) (unofficial is acceptable in Word or PDF format)
4. Resume (acceptable in Word or PDF format)
5. Select a Reference (Workshop organizers will contact them via phone): Need Name / phone number / email of a science faculty or science staff member who will serve as a reference.

**Applications will be considered starting March 24th, 2023! Open until spots filled. Resume and transcripts should be sent by email to:
Joslynn Lee (jslee at fortlewis.edu)**

All housing and meals will be arranged and paid by the workshop. Students will receive stipends for their time.

Questions? Contact Dr. Joslynn Lee

This workshop is supported by the University of Colorado Anschutz Medical Campus and Fort Lewis College.