Teaching resources for "Live from the Field: Microbes of Sickness & Symbiosis" event on October 3, 2025

Pre-event student reading assignment (5-10 minutes total)

Module 1 - Oropouche fever in the Americas:

o Gala module: https://www.learngala.com/cases/oropouche

QUBES Abstract: doi:10.25334/ATXD-WK91

Module 2 - Plant-microbial mutualisms in canopy gap recover:

Gala module: https://www.learngala.com/cases/treefalls-plant-microbes

QUBES Abstract: doi:10.25334/989X-RW04

Online Modules, Implementation plan and Teaching Notes

Title of module: Oropouche Fever in the Americas: Discovering the mystery of the virus behind an emerging zoonosis

Module Authors: Carlos Goller¹, Daniel Romero-Alvarez², and Luis Escobar³

¹North Carolina State University, ²Universidad Internacional (SEK), Ecuador, ³Virginia Tech University

Gala link to module: https://www.learngala.com/cases/oropouche

Title of module: Plant-microbial mutualisms in canopy gap recovery: How do soil microbial symbionts help tropical forests recover from treefall gaps?

Module Authors: Lindsay McCulloch and Jorge Mora

University of California-Riverside

Gala link to module: https://www.learngala.com/cases/treefalls-plant-microbes

Implementation Plan Author: Arindam Mitra, Dean at the School of Allied and

Healthcare Professions, RV University, Bengaluru, India

Audience/Context: Biology majors

Link to QUBES publication of Implementation Plan: doi:10.25334/YSY0-FP39

Citation for QUBES pub of Implementation Plan:

Mitra, A. (2024). <u>Implementing an online module on microbe-plant interactions in the context of ecological disturbance for Microbiology and Biochemistry courses in India. OCELOTS</u>, QUBES Educational Resources. <u>doi:10.25334/YSY0-FP39</u>

Short quotes from Teaching Notes:

- The module's questions that made students think about what they had learned were interesting and easy for them to understand.
- The implementation of the case was engaging for students in the classroom. It also helped students to become exposed to scientific literature and how to interpret data from graphs.
- The case adds value to my course. I would like to implement other cases as a resource from Gala in other courses in the future.

For questions, contact Ann Russell: arussell@iastate.edu