

**Paid Summer Research Internship**  
**William Jewell College**  
**Summer 2021**

Interested in microbiology, molecular biology, and/or genetic engineering? Then apply for a PAID full-time summer research internship opportunity at William Jewell College in Liberty, Missouri! We are looking for students who want to conduct research on the following topic:

Communities of microbes live in many environments on Earth, including inside human bodies, impacting the environment, the food system, and human health. Like human communities encountering natural disasters or gentrification, microbial communities often encounter natural or human-caused disruption. Others have studied how human communities can be resilient or malleable to change in the face of such disruption. What features determine if a microbial community is resilient or malleable to change when disrupted? This project aims to address this question by creating simplified models of microbial communities, introducing disruptions like newcomer microbes or genetically altering existing community members, and then seeing how community composition and individual behavior change because of these disruptions. This research aims to uncover general rules that will allow more accurate predictions of microbial community responses to disruptions, which will allow design of interactions with natural microbial communities in ways that benefit humans and their environments.

**Eligibility:** Candidates must be currently enrolled students and not a graduating senior at William Jewell College or the University of Saint Mary and legally able to work in the US (US citizen or legal immigrant).

Internship benefits include the following:

- \$640 housing stipend. This can be used for on-campus summer housing at William Jewell College from 6/6/2021 – 8/1/2021 or to supplement any independently found housing off-campus.
- Pay of \$12 per hour for 40 hours/week of work, \$18 per hour overtime if work over 40 hours/week is necessary.
- A potential all-expenses paid trip (registration, transportation, lodging, & meals) to a conference in the continental US in the fall of 2021, depending on the COVID-19 situation and student availability.

**Timeframe:** The research internship is for 8 weeks between 6/7/2021 to 8/6/2021. Start and end dates are negotiable; the internship can be 8 continuous weeks or there can be a one-week break in the middle.

**Deadline & application details:** Students interested in this summer research internship opportunity should email Dr. Joseph Shih at [shihj@william.jewell.edu](mailto:shihj@william.jewell.edu) by 3/19/2021, with the following information:

1. Name
2. Year (rising sophomore, junior, or senior)
3. List of relevant STEM coursework: Please list all STEM courses taken or currently enrolled in or provide an unofficial transcript. Completion of or current enrollment in Cell & Molecular Biology (BIO 233) and Genetics (BIO 234) or their equivalents will be preferred in candidates.

4. 1 reference: contact information for a prior instructor in a lab course or advisor in a previous research experience.
5. A paragraph stating why this project interests you.