Final Report: WCU Innovation in Diversity & Inclusion Grant (2024-2025 AY), Fork "Building On The Success of the Diversifying Biology Seminar Series"

Program overview and goals

This funding supported a continuation of the "Diversifying Biology Seminar Series" that began during the 2023-2024 academic year with support from a WCU Innovation in Diversity & Inclusion Grant. In addition to the original goals of the program (below), this year we added formal evaluation while continuing to strengthen the seminar series in its second year. I am also proud to share that we have obtained external support for Year 3 of the seminar series from a private donor.

Student retention in Biology and other STEM fields can be enhanced by developing students' sense of belonging in their department and, more broadly, in their field of study. This program continued the success of last year's seminar series, connecting students in WCU's Department of Biology to diverse early-career biologists through a series of four seminars, receptions, and lunches with students.

The goals of this program are threefold:

- 1. To increase representation of biologists from minoritized groups for WCU Biology students,
- 2. To build a greater sense of inclusion and belonging among WCU Biology students, both in our department and as members of the field, and
- 3. To raise the profile of WCU's Department of Biology as a place for faculty job seekers from minoritized groups, to improve the diversity of future hiring pools and the future faculty composition of the Department of Biology.

During the 2024-2025 academic year, the "Diversifying Biology Seminar Series" brought four early-career biologists to WCU's campus. These visiting scholars are postdoctoral scientists or graduate students at regional institutions and have one or more identities that are underrepresented in our current Biology faculty and the field of Biology at large (e.g., Immigrants, Non-native English Speakers, First-generation College Students, People of Color, Queer). We selected these four scholars from a pool of more than 50 scholars who stated their interest through an online form circulated to regional postdoc groups. Importantly, we chose these scholars democratically, with the Biology DEI committee (composed of both faculty and students) creating a short-list and the students of the Biology capstone seminar course (Bio490) ranking their top choices for scholars to invite to campus.

Outcomes

The second year of the "Diversifying Biology Seminar Series" brought the following early career biologists to WCU's Department of Biology for lunches with students, a research seminar, and a reception open to all:

| Name | Date of visit | Role & affiliation | Seminar title |
|----------------|---------------|------------------------|---------------------------------------|
| Victoria | 21 October | Recent PhD graduate, | "The role of the transcriptional |
| Oladosu | 2024 | Binghamton | regulator, FleQ, in the antimicrobial |
| | | University | tolerance of Pseudomonas |
| | | | <i>aeruginosa</i> biofilms" |
| Janani | 28 October | Postdoctoral | "Soil Tendrils: Bacterial Genes, |
| Hariharan | 2024 | Researcher, Bucknell | Landscapes, and Collaboration" |
| | | University | |
| Rinnie Hewlett | 31 March | PhD student, | "Microbe-Microbe Interactions in |
| | 2025 | University of | the Gut Exacerbate Clostridioides |
| | | Pennsylvania | difficile Infection" |
| Wes Wilson | 14 April 2025 | Postdoctoral | "Cellular T cell Therapy for Adult |
| | | Researcher, University | Brain Tumors; There & Back Again" |
| | | of Pennsylvania | |

Each of these visiting scholars shared lunch with a group of 4-7 students from the Department of Biology. Faculty did not attend these lunches to facilitate students' growth and confidence as independent scholars interacting with near-peers. However, in response to feedback from students last year, I created and shared a guide to help student attendees prepare questions and effectively network that helped scaffold the experience.

The research seminars presented by each of the visiting scholars were included as part of the Biology Capstone Seminar (Bio490), with an enrollment of about 50 upper-level students each semester. The seminar series was open to other students and faculty, and the room, which seats 78, was often filled to capacity. In past years, Biology faculty members did not often attend seminars, but this series has revitalized a culture of seminar attendance in our department. Further, students asked thoughtful and intelligent questions at every seminar.

An important addition in this second year of the program is formal evaluation. As part of this IRB-approved research, we are conducting longitudinal surveys of students to measure how their sense of belonging in the department and in the field has changed over the course of the 2024-2025 academic year and whether participation in the programming affects their sense of belonging. We are also surveying the scholars who have visited to ask about the impact of participating in this program on their careers.

Next steps

We are delighted to have received external support from a private donor to support the third year of this program. We will continue to host early-career biologists with underrepresented identities to share their research, increasing opportunities for WCU Biology students to see and interact with diverse biologists. These opportunities will continue to contribute to the goals of the department and the University.

During summer 2025, we will analyze the data from our program evaluation to assess the effectiveness of the seminar series in increasing students' sense of sense of community in our department and belonging in our field. We hope to use these outcomes as evidence in future proposals to fund this series. We may also seek to publish these results.

Thank you for your support!

Respectfully submitted,

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