HIV/AIDS Mentored Scholars in Quantitative Methods Program

The Program

The Mentored Scholars Program in Quantitative Methods is a one- to two-year program designed to help Early Stage Investigators develop HIV/AIDS data intensive research and reach targeted career goals. The program will help scholars learn to engage in interdisciplinary collaborations with quantitative scientists (e.g., biostatisticians, epidemiologists, psychometricians, data scientists, bioinformaticians, etc.). This program familiarizes scholars with quantitative methods to improve:

- 1) multidisciplinary team science communication,
- 2) experimental planning and design,
- 3) data analysis directly applicable to an ongoing research project.

Selected participants will gain experience in interdisciplinary data-intensive team science research with specialized mentorship from a scientist with appropriate expertise. Examples of expected outcomes of the program include submission of research papers, training awards, or research grant proposals.

Eligibility

The program is open to biomedical trainees: PhD students, postdocs, fellows, and NIH early-stage investigators doing research in HIV/AIDS. Trainees in the Duke Interdisciplinary Research Training Program in AIDS (IRTPA) T32, early-stage Duke CFAR investigators, and CFAR Pilot Grant applicants will have priority.

Successful trainees will be selected based on the strength of their research plan, the perceived value of quantitative mentorship to their career development, and the availability of a quantitative mentor with the appropriate expertise.

Mentorship

If selected, Scholars will be matched with a quantitative mentor to develop an Individual Development Plan (IDP) geared toward completing a feasible research outcome. The mentor is not expected to serve as 'the statistician' or oversee any analysis of the scholar's project, but rather to suggest resources to support that research and guide the scholar toward the desired research outcomes. Mentors and Scholars will have 1-1 meetings at least monthly over the year and have additional quarterly meetings with the program leaders to discuss project status.

Design Studios

Applicants will participate in a design studio with their scientific mentor, program leaders, and quantitative/domain experts, the latter of whom may serve as potential quantitative mentors. The design studio is an informal 1-hour presentation where the Scholar prepares 5-10 slides discussing their background, their areas of expertise, and the research question they have in mind. The group then provides various feedback in a free-flowing conversation.

Additional Opportunities for Mentored Scholars

- Attend <u>Quantitative Methods for HIV/AIDS workshops</u> that provide training in data science, predictive modeling, and complex assay analysis
- Attend professional development workshops
- Access to support from staff biostatisticians and bioinformaticians
- Collaborate with a quantitative graduate student intern in the Summer
- Invited seminar at <u>Immunology for Quants</u> (I4Q)

Application

Scholars interested in the Mentored Scholars Program should submit the following materials:

- A CV or NIH biosketch
- A 1-page research proposal that outlines your quantitative learning objectives
- A letter of intent that describes your interest in the program and potential impact on your career
- One letter of recommendation (waived for faculty applicants)

Applications for the 2023-2024 academic year are now closed.

For questions about the Mentored Scholars program, please do not hesitate to contact Kelly Sune (<u>kelly.sune@duke.edu</u>)