

Buffett Undergraduate Research Fellowship Opportunity

Validating the Sexual Relationship and Activities Questionnaire Among Older Adults in a rural sub-Saharan African population (Nouna, Burkina Faso)

Faculty Mentor: Emily Ho, Assistant Professor, Feinberg School of Medicine

Project Synopsis: There is growing evidence that sexual health and well-being positively contributes to one's overall physical, mental, and emotional health, and overall quality of life, particularly in older adults. However, less is known about sexual health and well-being in a sub-Saharan African context. Data on the Sexual Relationship and Activities Questionnaire (SRA-Q) was collected as part of the Centre de Recherche en Santé de Nouna's (CRSN) 2021 Heidelberg Aging Study (CHAS), which aimed to understand the burden of multimorbidity, or the presence of multiple health conditions in older individuals living in low-income countries (LICs). The goal of this project is to submit a publication reporting on the results of this work to a peer-reviewed outlet.

The SRA-Q includes 5 different domains, although analyses are only done for individual questions, following the methods from the original publications.

- 1. Sexual behaviour (3 questions) and activities (1 question) in the past 12 months
- 2. Sexual functioning during the past month (5 questions)
- 3. Changes in sexual behaviour and function compared to a year ago (4 questions)
- 4. Sexual health concerns during the past month (4 questions)
- 5. Partnership and relationship satisfaction during the past 3 months (4 questions).

The primary research question is how the SRA-Q measure compares in a rural sub-Saharan African sample (N = 2336, 56.8% male, 81.5% reporting no formal education, Nouna, Burkina Faso), who speak a local dialect (Dioula or Moore) compared with that in an English-speaking sample (taken from a large-scale observational longitudinal study, the English Longitudinal Study of Ageing), and quantifying the ways in which they differ. Using statistical techniques from psychological measurement (i.e., psychometrics and scale validation methods), we will determine whether the SRA-Q measure assesses the same construct in these two aging samples. The end goal of the projects involves 1) presenting a poster at Northwestern University Feinberg School of Medicine's Global Health Day in the Fall Quarter 2025, giving the selected student an opportunity to network with other global health trainees and faculty



at the medical school and practice his/her oral and scientific presentation skills, and 2) submitting a publication reporting on the results of this work in a peer-reviewed outlet such as *BMJ Global Health* or *Quality of Life*.

Project Term: Summer and Academic Year

Project Location: Remote

Job Description: The student will read and summarize literature on global health, sexual well-being, including summarizing the official definitions from the World Health Organization. They will learn about scale development techniques and use, adapt, and write statistical code from other scale development manuscripts (i.e., see this link for open R code sharing from a published manuscript that the faculty mentor led: https://osf.io/4rbve/) to validate the SRA-Q questionnaire in this sample, and compare its results with that of a prior published study. The student will be mentored through all the steps of writing the manuscript, from the Introduction (i.e., literature review) to the detailed reporting of the Methods and Results (producing publication-ready figures and tables). Finally, the Discussion will be written by the student, with close mentorship with the faculty mentor.

Time Commitment: 20 hours a week. The work is flexible. There will be weekly meetings with the study team that can either be remote or in-person (either on the Evanston campus or the Chicago one where the faculty mentor's office is based).

Number of available positions: One, preselected