

**Jackson Heart Study**  
**Graduate Training and Education Center**  
**Daniel Hale Williams Scholars Program**  
**Stipend Contract/Policies**

*(Effective Fall 2014)*

Daniel Hale Williams Scholar Program (DHWSP) is a graduate training and education program, housed at Jackson State University, designed to implement and evaluate comprehensive educational enrichment programs aimed at increasing the number and quality of minorities entering the biomedical workforce.

The Jackson Heart Study Graduate Training and Education Center Daniel Hale Williams Scholar Program (JHS GTC DHWSP) will provide a “standard” of excellence expected in the program, and will serve as an inspiring model for all of our scholars.

The Daniel Hale Williams Scholar Program is a two-year graduate program in cardiovascular epidemiology, with an emphasis on social epidemiology and health disparities.

The Daniel Hale Williams Scholars Program Summer Institute will be comprised of a series of four short courses that provide foundational information regarding epidemiology and the development of additional skills that are critically important for a successful career in biomedical research: writing and presentations. DHW Scholars will be strongly encouraged to complete these courses

Students selected for the Daniel Hale Williams (DHW) Scholars Program will participate in its’ five central components: (1) an enrichment program (during the school year); (2) a quarterly seminar series; (3) a research boot camp; (4) a career guidance/mentoring program; and (5) an intensive summer research workshop. The Summer Scholar Institute’s short courses are optional offerings. A brief overview of these components is described below.

1. Enrichment activities, however, are complementary to the core curriculum and are designed to further develop research skill sets. First-year DHW Scholars will participate in the interactive delivery of courses on the design, analysis, and evaluation of epidemiology research, with an emphasis on CVD. The second year will be characterized by hands-on opportunities to apply this knowledge using a data set derived from Exam 1 of the JHS data.
2. We propose to convene a quarterly graduate seminar focused on social epidemiology. Seminars will include presentations on social epidemiologic methods, identifying social interactions, experimental social epidemiology, and natural experiments in social epidemiology. Speakers within and outside of JSU and UMMC will be invited to participate.
3. Research camp will conduct a brief (one week), but intensive program focused on increasing students overall quality of research, knowledge about academic research, and oral and written communication skills. Entitled, “*Reading, Writing, Surviving, and Thriving*,” this annual boot camp will utilize didactic and interactive approaches. Lectures and exercises will address how to read and critique the scientific literature; scientific writing; enhancing skills in evaluation and statistics; designing epidemiological

studies; and career navigation

4. Mentoring is a critical element for advancement and success in academic careers. Ideally, mentors can catalyze and enhance productivity and provide education about explicit and tacit rules that often typify academic environments.

5. Scholars will participate in an intensive two-week, didactic and interactive summer research institute focused on social epidemiology, cardiovascular disease, cardiovascular epidemiology, health disparities/health equity research, and the JHS. Researchers with substantial expertise in these areas will deliver the curriculum via in-person, didactic sessions, as well as participate in career mentoring sessions. A substantial portion of the second week of the program will have a heavy emphasis on the JHS. DHW scholars will be exposed to the background and history of the study; have the opportunity to analyze JHS data; and contemplate the future of the JHS. The course objectives and overview of the curriculum are provided in the Methods section of this application

In addition, the Daniel Hale Williams Scholars will participate:

Short Courses in Epidemiology. We expect students to enter the DHW Scholars Program at different stages in their graduate careers and with variable levels of academic training in epidemiology.

Writing for Publication. Students will work in to critique published and unpublished manuscripts, and drafts of their manuscripts, with a focus on understanding the essential components of a scientific manuscript or presentation, as well as the process of publishing in the peer-reviewed literature and managing reviewer and editor comments.

Marketing Your Science. Participants will learn how to develop presentations, present key objectives and concepts, utilize effective use of visuals, handle questions from the audience, and overcome presentation anxiety.

Phase I: Phase I (the first three months of the enrichment curriculum) will include the utilization of the Global Burden of Disease (GBD) model developed at WHO by Lopez and Murray. This cardiovascular disease-based simulation model uses population attributable risk (PAR%) estimations and can calculate the attributable burden of a disease for a specific risk factor, population and time, defined as the difference between currently observed burden and the burden that would be observed if levels of exposure were those related to the lowest possible risk (Lopez, Mathers, Ezzati, Jamison, & Murray, 2006). The GBD model has five components: (1) causes of death, (2) descriptive epidemiology of disabling sequelae, (3) burden attributed to selected risk factors, (4) projections of burden for the future, and (5) sensitivity analyses. Utilizing archival data in these exercises will enable students to better understand incidence, prevalence, risk estimates and observe changes in these values when differential exposures are introduced. This simulation model has been previously validated for use with graduate students in an educational setting.

Phase II: In Phase II (the second three months of the enrichment curriculum), we will introduce students to the JHS. Instructors will cover the history of the study, local incidence and prevalence of cardiovascular disease in Jackson, Mississippi, methods of recruitment and retention used in the JHS, and the three waves of data collection and corresponding measures.

The Daniel Hale Williams Scholars Program will provide each student with an annual stipend of \$10,000, with half provided in the fall and the remaining payment in the spring semester.

Upon completion of the DHWS, students will receive a certificate of completion.

Students who fail to progress academically and/or whose grades drop below a B average will be asked to meet with the committee. Every effort will be made to work with students to determine the reasons for their academic problems and to provide a system of support to improve their grades, however, those who fail to remediate the situation within in a semester will be dismissed from the program.

*Signing below indicates that you have read and agree to the terms of this stipend contract.*

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Scholar's Name

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Date: