

Morehouse School of Medicine in collaboration with **the University of Georgia** is pleased to announce our newly NIH awarded NIEHS RISE R25 grant. The NIEHS RISE (R25) sponsored award for our innovative advanced program entitled “Frontiers in Environmental Science and Health (FrESH)” will train and mentor promising graduates, medical students, post-doctoral fellows and junior faculty from predominantly underrepresented communities in sophisticated technologies in Environmental Health Science Research.

The goal of **FrESH** is to provide an intense research experience to promising investigators who wish to gain or enhance their knowledge and expertise in environmental health science. The Principal Investigator, **Dr. Winston Thompson**, is chairperson in the Department of Physiology and Professor of Obstetrics and Gynecology at Morehouse School of Medicine.

Dr. Charles Easley, serving as Co-Principal Investigator, is an Associate Professor in the Department of Environmental Health Science in the College of Public Health at the University of Georgia. Both Drs. Thompson and Easley will serve as mentors for this program and participate in meetings where minorities represent a significant presence. The objective is to maximize the training of investigators of exceptional promise for academic success and leadership. Of foremost importance is to ensure that we have a significant cadre of trainees from URMs, especially African Americans and Hispanic Americans.



MSM Principal Investigator - Dr. Winston Thompson (left); UGA Co-Principal Investigator - Dr. Charles Easley (right)

FrESH focuses on the impacts of environmental exposures on human health, with a particular emphasis on highlighting and discussing the disproportionate ways URM communities are affected. Our program is uniquely poised to provide insight into the differences between urban vs rural exposures to participants and to promote the need for disseminating findings on environmental impacts on human health to the medical community to aid in diagnosing and treating patients. **FrESH** utilizes lectures, trainee-guided problem-based learning, and small discussions to provide participants with the proper training to pursue careers in the environmental health sciences. Additionally, innovative and exciting laboratories reinforce concepts from the lectures, challenge established paradigms, and provide the necessary hands-on training and practical experiences needed to become productive environmental health scientists. One of the strengths of our program is a national network of mentors and faculty who have devoted their careers to environmental health science research and who have demonstrated passionate commitment to training the next generation of scientists, especially those from URM backgrounds.

The **FrESH** program is mutually beneficial to URMs and non-URMs. The combination of the leadership and experience of the PIs and the richness of the host institution highlight our ability to successfully establish an innovative course that will meet the goals of the [NIEHS's Strategic Plan 2018-2023](#).

The FrESH program will work with Morehouse School of Medicine, University of Georgia, Clark Atlanta University, Morehouse College, and Spelman College and members of the Scientific Advisory Board to ensure that trainees from underrepresented communities are nominated and chosen each year.

Topics in **FrESH** include the following:

- 1) **Indoor and Outdoor Air Pollution Impacts on Human Health**
- 2) **Water Pollution Impacts on Human Health**
- 3) **Ubiquitous and Persistent Pollutants and Their Impacts on Human Health**
- 4) **Maternal/Fetal Health and Lifetime Exposure Effects on Human Health**
- 5) **Impacts of the Global Pandemic on Human Exposures to Environmental Toxicants**
- 6) **Dissemination and Implementation Strategies**



February 2020, just before COVID-19 quarantine, The most recent Frontiers in Stem Cells in Cancer course at Morehouse School of Medicine. The Course is fully diverse: 64% are URM members (34% African American, 30% Hispanic), 64% women, and 68% from URM institutions. PI/Program Director **Dr. Winston Thompson**: far right. SAB Director **Dr. Gerald Schatten**: center, front row.

During the week of June 5-12, 2022, twenty faculty members will be invited to an 8-day training at the campus of Morehouse School of Medicine. Senior invited faculty will participate in FrESH each year as resident and visiting lecturers and lab instructors annually.

FrESH financial support to help defray travel, lodging, and living expenses is provided to admitted students on the basis of need as presented in a financial aid request submitted with the admission application.

Qualified applicants will request partial sponsorship from their home institutions, and we subsidize, often fully, participants with funds requested for participant travel and participant lodging and living expenses. Providing the tuition support for course participants to be applied toward their costs of attending FrESH as there are significant expenses associated with the laboratories, lecture and lab manuals, and logistical/IT arrangements.

Application Process: Candidates will be able to apply online in Spring 2022 and asked to provide the following:

- Contact information, citizenship, professional status, and how applicants learned of the **FrESH** program
- Current *curriculum vitae* listing publications
- A Statement of Intent; The statement of intent request written responses (a) outlining your desire to bring environmental health science topics into their overarching research goals, (b) describing your laboratory and/or research experience, (c) explaining volunteer ships and outreach roles, and (d) describing their future plans, including career objectives.
- Two letters of recommendation