Environmental Health: Zebrafish Toxicology

Identifying Contaminants in Living Material
(Rising High School Sophomores, Juniors, and Seniors)

Description
This laboratory project-based course teaches the fundamentals of designing and carrying out all aspects of a scientific investigation. Students will learn how to evaluate the effects of a toxicant on a living organism, in this case the Zebrafish embryo. Students will further investigate the implications of their results in the context of environmental hazards on human health.

Highlights
• Hands-on laboratory work
• Work with a dyad partner
• Establish an environmental research study
• Collect and analyze data
• Perform database searches on-line and at the Levy Library
• Integrate background reading into project
• Get to know the Mount Sinai campus and its facilities
• Meet Mount Sinai Research faculty

Requirements
• Full attendance
• Maintain a detailed logbook
• Regular oral and written progress reports
• Completion of pre/post tests
• Completion of a final written and oral research report

Eligibility
• Demonstrated interest in biomedical sciences and research
• Must be a rising high school sophomore, junior, or senior, with a minimum GPA of 80
• Must be an under-represented minority and/or economically disadvantaged

The application must include:
• At least one letter of recommendation from a science teacher, math teacher, or other applicable professional
• A personal essay expressing how this course will help the student pursue a specific career in the health field and help the student reach his or her goals
• A fully completed application form (including signed consent forms: parental/medical/publicity)
• Copy of the student’s latest transcript