Environmental Health: Zebrafish Toxicology

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

**Description**
In this course students will learn how to evaluate the effects of a toxicant on a living organism. Participants will be able to describe the impact of environmental hazards on human health, and experience first-hand the process that scientists use to investigate environmental health problems. Students will learn about epidemiology, dose/response, bio-pathways, biomarkers, bio-accumulation, risk assessment and many more. Students will also learn about the role of environmental contaminants in cancer and other illnesses.

**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 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).