Fruit Fly Genomics

*Introduction to Research and Genetics*

*(Rising High School Sophomores, Juniors, and Seniors)*

**Description**

This laboratory project program teaches the fundamentals of designing and carrying out all aspects of a scientific investigation in the field of genetics and genomics. The live materials selected and the equipment used will be simple. The intent of the course is to involve students in each step of the scientific process through engagements in a descriptive investigation. The outcomes of every project will be presented orally and in writing at the end of each semester.

**Highlights**

- Hands-on laboratory work.
- Work with a dyad partner.
- Establish a 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 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.