



Esperanza College and Fox Chase Cancer Center

FlyLab: An Immersion Science Camp

ATTENTION HIGH SCHOOLERS

Join us for a week of FUN and SCIENCE and become a member of the STEM-Gen! Esperanza College is hosting the hands-on experience: Real World- FlyLab this Summer!

FlyLab is a fun, informative, inquiry-based event that is a great introduction to how experiments are performed in cancer research labs, such as Fox Chase Cancer Center.

In ONE week FlyLab runs from Benchwork Bootcamp to Experimental Analysis ALL performed by the students using techniques and equipment common to researchers the world 'round.

Students will be introduced to basic genetics, observe the stages of fruit fly development, work to make connections between diet & health, and share their findings.

Research 4-1-1

- BOY it's important to know the girls from the boys. Let's sort our flies to set up experiments throughout the week!
- How good are YOUR observational skills? Put them to the test examining various fruit fly phenotypes (physical characteristics)!
- Get up CLOSE and personal with fruit flies using Leica brand stereo-microscopes! Take pictures of your experiments to share what you are learning!
- Micropipetting? Mass less than a gram?? Try your steady hand at measuring and moving tiny volumes and mass! These skills are ones ALL researchers need!
- Make your own grape juice plates! Learn the many types of solutions common to lab "recipes" and put them to use in one needed for YOUR experiments!
- Analyze the effects of diet on the fruit fly development by feeding them healthy vs. junk food and compare them to fruit flies eating regular food. Learn to collect data using fertility and mortality protocols!

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Program's Time Commitment:

This is a one-week summer camp that takes place from **June 25th to June 29th, 2018** from 9:00 am to 1 pm at Esperanza College 4261 N 5th Street, Philadelphia PA 19140.

Application Requirements:

- Students finishing 9, 10, 11 or 12th grade are welcome to apply.
- Students **MUST** commit to participate in all 5 days of the event.
- Student must complete an application form and write a 1-2 page essay;
- Submission of a letter of recommendation (See details, page 4)
- Have a parent's or guardian's permission to apply.

Course Fee:

A \$25.00 refundable registration fee will be collected (cash or check).
Money will be returned upon completion of the program.

Application Deadline:

Completed applications must be postmarked by June 8th 2018.

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FLYLAB: SUMMER CAMP APPLICATION

*Please type or print clearly the following information and return on or before
Friday, June 8 2018:*

Attn: Nilsa Graciani
Esperanza College
4261 N. 5th St.
Philadelphia, PA 19140
ngraciani@esperanza.us

Student Information

Student Name: _____ Current Grade: _____

Address: _____ Phone (H): _____ (Cell): _____

_____ E-mail: _____

Parent/Guardian Information

Parent/Legal Guardian

Name: _____

Address (If different from above): _____

Phone (H): _____ (Cell): _____

T-Shirt Size (Unisex): S M L XL (please mark one)

School Information

High School Name: _____

Address: _____

I agree that the information provided on this application is correct. I understand that false information might lead to my not being selected for the camp.

Student signature _____ Date _____

I hereby give permission for my son/daughter/ward to apply and, if selected, to participate in the 2018 Esperanza College and Fox Chase Cancer Center Immersion Science Camp and any and all of its activities.

Parent/ Guardian signature _____ Date _____

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Letter of Recommendation

Please include a letter of recommendation from your high school or after-school program in a signed & sealed envelope.

These references can be one of the following individuals:

- High school administrator (Assistant Principal, Principal, Counselor, etc.)
- High school teacher of academics (Math, Science, English, etc.)
- Current or previous employer
- Minister or clergyman from your place of worship
- Supervisor from a current or previous volunteer position
- Athletic or Academic coach/advisor (Swim, Track, Science Olympiad, Debate Team, etc)

Essay

On a separate sheet of paper please write or type an essay of no more than two pages addressing the following topic and signing the bottom of the page.

Please tell us how this summer science immersion camp fits your personal career goals and how you are planning to use the knowledge gained in the future.