SUMMER SPRINGBOARD
Look Inward. Go Upward.

Biotechnology Infosheet

New student admissions for Summer 2023 are open.

Program Highights

- Work alongside scientists discovering treatments for various diseases.
- Start with molecule design and compound creation, and follow the process to the point of in vitro biological activity.
- Take part in a trypsin purification program as well as grow a protein in e-coli
- Learn how to harvest and isolate a protein, and see how it reacts to various compounds in an advanced research laboratory.
- Create a molecule, and test its biological results practicing the scientific method from hypothesis to conclusion.

Academic Program Overview

Are you interested in medicine, science, and technology? Is your goal to create a life-saving drug? This is a unique opportunity for high school students to gain real exposure and hands-on experience working in a biotechnology lab utilizing state-of-the-art equipment. The goal of this program is to provide students intensive laboratory skills experience, and to understand fundamental chemical processes common in prokaryotic and eukaryotic biology, and classical and molecular genetics with an emphasis on gene expression and genetic engineering. The biotechnology industry draws from a variety of different specialties, with microbiology, genetics, biochemistry, and I.T. all having a significant impact. In addition to lab work, students will have an opportunity to visit biotech incubators and hear from industry professionals.

Excursions

Students do their daily class directly inside a biotechnology lab. This past summer students toured JLabs and other incubators in San Diego.

Instructors

UCSD - Dr. Vicki Nienaber-Meadows, Ph.D.

Dr. Nienaber has over 30 years' experience at large companies, mid-sized biotech, and her own biotech, Zenobia Therapeutics. Throughout Dr. Nienaber's career she has been both an early adopter as well as an inventor of instrumentation and technology directed towards early-stage drug discovery. She is best known as lead inventor of the crystallographic fragment-based lead discovery method that is still used worldwide to identify clinical candidates and marketed products. She was also the technical lead for invention of the first crystal mounting and alignment robot, ACTORTM, which was recognized with an R & D top 100 innovations award. The robot is now sold commercially by Rigaku. Dr. Nienaber has overseen large multinational drug discovery programs, early-stage drug discovery pipelines and build platforms consisting of robotics, procedures, and relational databases and two companies. She has been awarded grants from the Michael J Fox Foundation, California Institute for Regenerative Medicine, National Institutes of Health and National Science Foundation.

Course Structure

There are nine 3-hour class sessions over the two-week course. During week one, students have class from 9am-12pm Monday - Friday. During week two, students have class from 9am-12pm Monday through Thursday. Wednesday afternoons of each week are dedicated to students' course-specific academic excursion, guest speaker, or activity.

UC Berkeley - TBD

Courses are taught by accomplished and passionate faculty recruited from many area colleges, universities and professional forums. Each faculty member is selected for their subject area expertise and proven ability to both challenge and captivate students.




Tuition Information:

Residential Students:

- Includes: all meals, lodging, excursions, academic course, weekend excursions
- Excludes: optional airport pickup and drop off service (available for an additional fee)
- Price: See prices under 2023 dates*

Commuter Students:

- Includes: lunch, academic course, excursions, programming from 9am to 5pm, Monday-Friday
- Excludes: lodging, breakfast, dinner, weekend excursions
- Price: $3,098

Extended Commuter Students:

- Includes: lunch, dinner, excursions, academic course, programming from 9am to 8pm, weekend excursions
- Excludes: lodging, breakfast
- Price: $3,698

Supplements:

- Application fee: $99 (mandatory, non-refundable)

More info on Airport Transfer

More info on Unaccompanied Minor Service

2023 Dates

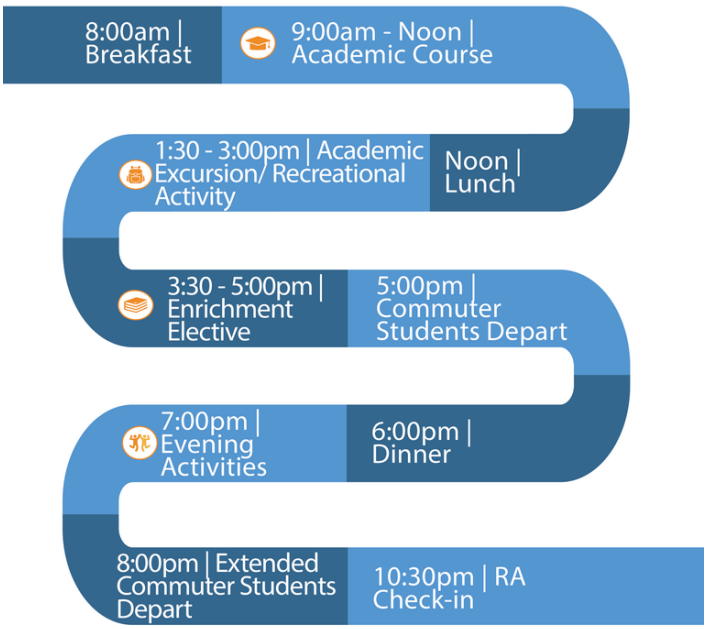
UC BERKELEY ($5,698)

- Session 1: June 18 - June 30
- Session 2: July 2 - July 14
- Session 3: July 16 - July 28

UC SAN DIEGO ($5,398)

- Session 1: July 9 - July 21
- Session 2: July 23 - August 4

Typical Schedule



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