

# Biotechnology



## Program Highlights

- In partnership with NovoMedix, work alongside scientists doing early stage drug discovery for cancer treatment.
- Start with molecule design and compound creation, and follow the process to the point of in vitro biological activity.
- Learn how to 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.

## Campus Location

UC San Diego

- July 26-August 7, 2020

## Academic Course 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 work in a biotechnology lab utilizing state-of-the-art equipment.

Unlike other courses, the academic portion takes place in the lab of NovoMedix, 15 minutes from campus. NovoMedix has developed novel orally available small molecules with wide therapeutic windows to treat fibrotic disorders. These first-in-class small molecules co-target pathways that provide cardioprotective and synergistic anti-tumor effects with standard-of-care chemotherapies for the treatment of triple negative breast cancer.

## Career Exploration

The biotechnology industry draws from a variety of different specialties, with microbiology, genetics, biochemistry, and I.T. all having a significant impact. Students are guided by Dr. Cathy Swindlehurst, CEO of NovoMedix, who has over 25 years of experience with a background in assay and biomarker development. They will also work alongside Leah Fung, Vice President, Drug Discovery, and Laura Corral, Director, Discovery Biology.

## Instructor and Curriculum Advisor - Dr. Cathy Swindlehurst, Ph.D.

Dr. Swindlehurst is a founder and CEO of NovoMedix. She has over 25 years of experience in biotech and has a broad background in assay and biomarker development; drug discovery and development; as well as in project management, business development, and fundraising. Dr. Swindlehurst has held V.P. positions at several companies, including PanCel, MagneSensors, and NovaDx. She has led key collaborations with academic researchers and corporate partners and has

been directly involved in raising over \$10M in financing. Dr. Swindlehurst is an inventor on NovoMedix's key issued patents. In her role as CEO of NovoMedix, Dr. Swindlehurst has also raised \$5M in non-dilutive funding. Dr. Swindlehurst received a certificate in Business Management from UC San Diego; Ph.D. in Analytical Chemistry and Postdoctoral fellowship in Immunology from University of Illinois, Champaign Urbana; and her B.S. in Chemistry from University of California, Irvine.

### **Tuition**

- **Residential Students:** \$4,998
  - Includes: all meals, lodging, excursions, academic program, weekend excursions
  - Excludes: optional airport pickup and drop off service (available for an additional fee)
  
- **Commuter Students:** \$2,798
  - Includes: academic program, excursions, programming from 9am to 5pm, Monday-Friday
  - Excludes: lodging, breakfast, dinner, weekend excursions
  
- **Extended Commuter Students:** \$3,398
  - Includes: lunch, dinner, excursions, academic program, programming from 9am to 8pm, weekend excursions
  - Excludes: lodging, breakfast