

STEM CELLS AND BIOTECHNOLOGY

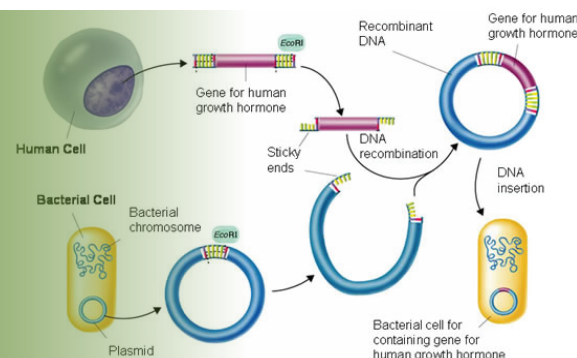
Age: 11-15

2026 Dates: July 13th – 17th | August 3rd – 7th

Duration: Five Days; 9am – 3pm

Location: Torrance, California

\$895



Explore the fascinating science of biotechnology, genetic engineering and biomanufacturing

Stem Cells and Biotechnology offers an in-depth exploration of the science, practice, and commercial impact of agricultural and medical biotechnology. Participants work side by side with professional scientists in a real biotech research lab, gaining hands-on experience as they learn how living cells are harnessed to biomanufacture medicines and food.

Program Overview:

Session 1 (Day 1-3): Biomanufacturing Human Insulin Using Recombinant E.coli

Session 1 focuses on the technical process cloning the human insulin gene and engineering bacteria to produce human insulin. Participants also complete a BioArt project - painting with fluorescent bacteria.

Session 2 (Day 4-5): Production of Lab Grown Meat from Mammalian Stem Cells

Session 2 focuses on the technical process of growing meat in the lab from cultured animal stem cells. Participants also learn about the regulatory bodies that oversee biomanufacturing (FDA and USDA).

Course Provides:

- Hands-on classes
- Advanced lab skills
- Science literacy
- Real-world experience
- Inquiry driven experiments
- Biotech exposure
- Fascinating science discussions
- Professional science mentors
- Certificate of completion
- Fun and friendships