

# STEM CELLS AND BIOTECHNOLOGY

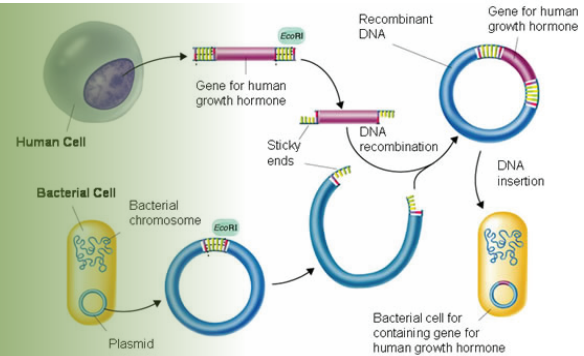
**Age:** 11-15

**2024 Dates:** July 15th – 19th | August 5th – 9th

**Duration:** Five Days

**Location:** Torrance, California

\$895



## Explore the fascinating science of biotechnology, genetic engineering and biomanufacturing

Stem Cells and Biotechnology explores the science, practice and business of agricultural and medical biotechnology. Participants learn how cells are used to biomanufacture medicines and food working hands-on with professional scientists in a biotech research laboratory.

### Program Overview:

#### Session 1 (Day 1-3): Biomanufacturing of human insulin from 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