LABC
LA Biotech Center

HIGH SCHOOL

310.483.3651

REGENERATIVE MEDICINE AND DISEASE MODELING

Age: 15-18
Grade: 9-12
Duration: Two weeks; 10am-3pm
2026 Dates: Jul 13th-24th | Aug 3rd-14th
Location: Torrance, California
$2,300

Explore the Science of Regenerative Medicine. Learn How Scientists Create Beating Heart Cells for Disease Modeling Research

Regenerative Medicine and Disease Modeling explores the transformative potential of stem cells in human health, including the possibility of growing human hearts. Through hands-on experiences, participants learn to generate stem cells from patient-derived skin samples and differentiate them into beating heart cells. They also design and conduct their own disease modeling experiment.

During this two week course you will:

- Learn essential concepts in regenerative medicine and disease modeling
- Reprogram, culture, and characterize human induced pluripotent Stem Cells (hiPSCs)
- Convert hiPSCs into beating heart cells
- Plan, implement and analyze your own independent stem cell research experiment
- Work in a biotech research laboratory alongside professional scientists

Course Provides:

- Hands-on classes
- Advanced lab skills
- Research experience
- Real world experience
- Biotech exposure
- Experienced science mentors
- Career education
- College preparation
- Certificate of completion
- Alumni support

The Regenerative Medicine and Disease Modeling Program is the first and only initiative to offer high school students practical training in human regenerative medicine.