

REGENERATIVE MEDICINE AND DISEASE MODELING

Age: 15-18

Grade: 9-12

Duration: Two weeks | 10am-3pm

2025 Dates: Jul 14th-25th | Aug 4th-15th

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 application of stem cells in human medicine and whether it may one day be possible to grow human hearts. Participants learn to create stem cells from patient derived skin samples then convert them to beating heart cells. They also implement their own disease modeling experiment during a research training activity.

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 program to provide high school students with practical training in human regenerative medicine and stem cell research.