First Year

**LAB-INTENSIVE COURSEWORK**
Learn laboratory skills necessary to develop cell-based therapies and tissue engineered constructs.

- Cell Culture and Tissue Engineering
- Surgery and Cell Transplantation
- Fluorescence and Confocal Microscopy
- Molecular Cloning and Gene Expression
- Transplanting therapeutic progenitor cells
- Studying leukocyte fate regulation

**CAPSTONE PROJECT**
Apply the knowledge and skills from coursework to an open-ended project (example topics below).

- Characterizing induced pluripotent cells
- Tissue-Engineering blood vessels
- Transplanting therapeutic progenitor cells
- Studying leukocyte fate regulation

Second Year

**9-MONTH, FULL-TIME PAID INTERNSHIP AT 1 OF 8 PARTNER SITES**

*Build cell-device combination products to functionally cure diabetes at ViaCyte*

*Build tools and technologies to enable cell therapy from discovery through commercialization at Thermo Fisher*

**Alumni Quotes**

"The program helped me to develop skills in cell therapy development, and I left with excellent critical thinking and troubleshooting skills that have allowed me to make an impact at small and large biotechnology companies alike."

- Shereen Aldaimalani, BMED, CLASS OF 2018

"Due to the education I received from the regenerative medicine program at Cal Poly, I was hired as a lead engineer at my internship site to oversee critical projects that bridged scientific and engineering concepts that I acquired during my time at Cal Poly."

- Vahid Hamzeinejad, BMED, CLASS OF 2018

Beyond

Extensive alumni network, 8 of 50+ biotech and medical device companies in California shown below.