



Jump start or boost your career by gaining an integrative and operational understanding of translational research fundamentals, applied drug discovery & development and stem cell translation. Apply your newly learned skills to make a difference in your workplace and distinguish yourself as an effective leader.

As new biotech, pharma and diagnostic companies continue to emerge, mature and develop in California's vibrant life science ecosystem, entrepreneurial and integrative R&D professionals are in high demand.

#### Courses offered:

- Translational Research Fundamentals (CLRE-236)
- Applied Drug Discovery & Development (CLRE-238)
- Stem Cell Translation (CLRE-237)

Each course takes 11 weeks and costs \$ 1560 in tuition fees, not counting registration fees, and is an approved 2-unit elective credit towards the Master's degree in Clinical Research.

#### These courses are ideal for:

- Enrolled UC San Diego graduate students in PhD, PharmD, MD, engineering and MBA programs
- Concurrent external students, especially developing professionals from academia, medical institutions, startups, established biopharmaceutical companies, regulatory and legislative bodies, contract manufacturing organizations (CMOs) and contract research organizations (CROs), health insurance companies, and investment companies





so badly needed in the

biopharmaceutical industry.

Mark Fineman, PhD, MAS Chief Scientific Officer Elcelyx Therapeutics, Inc. Graduate of the Master's degree program in Clinical Research at UC San Diego

# Courses

#### Translational Research Fundamentals (CLRE-236) Offered summer and winter quarters.

Students learn principles and practices of translational medicine applied to discovery and development of diagnostics, drugs, and cell-based therapies. Topics covered include biomarkers, intellectual property, omics, translational imaging, pharmacogenomics-driven treatment, and discovery and development of diagnostics, drugs and stem cell therapies.

### Applied Drug Discovery and Development (CLRE-238) Offered fall and spring quarters.

Students will understand the drug discovery & development process through case studies in mentored teams. Each team is assigned a pharmacotherapeutic modality and will use publicly disclosed information to reconstruct the entire translational chain of events from new drug idea to market and back. (Prerequisite CLRE-236 or consent of the department required.)

#### Stem Cell Translation (CLRE-237) Offered fall and spring quarters.

Course focuses on practical application of the principles of translating stem cell based therapies, especially those in early development and phase 1 studies. Acquire the skills needed to translate these interventions from the bench to the bedside by designing a trial. The differences between drug and stem cell based therapies will be highlighted.

## **Faculty**



Regent Laporte, DVM, MSc, PhD Research Fellow, Bio Nova Institute Translational Research Fundamentals (CLRE-236) Applied Drug Discovery and Development (CLRE-238)



Pierre Riviere, PhD Research Fellow, Bio Nova Institute Applied Drug Discovery and Development (CLRE-238)



Sheldon Morris, MD, MPH Assoc. Professor, Dept. of Medicine, UC San Diego Stem Cell Translation (CLRE-237)







