

Translational Science

Specialized Certificate

As new biomedical product companies continue to emerge and mature in San Diego's vibrant life science ecosystem, entrepreneurial Research and Development (R&D) professionals are in high demand—biomedical products encompass everything from drugs, cell therapies, and gene therapies, to medical devices, including diagnostics, and health information technology (IT)/digital health products. The Specialized Certificate in Translational Science provides an integrated, comprehensive, and operational understanding of what it takes to innovate in biomedical R&D, from product idea to market, in a rapidly changing environment. The program aims to develop well-rounded aspiring biomedical leaders, teach the principles and practices of Translational Science applied to the discovery/design and development of biomedical products. Through didactics and case study, the curriculum will use publicly disclosed information to reconstruct the entire translational chain of events from new product idea to market in an iterative manner. Faculty members with a strong background working with innovation in the biomedical R&D field will provide an interactive learning experience.

Key Topics:

- Translational science applied to the discovery/design of biomedical products (drugs, cell therapies, gene therapies, diagnostics, medical devices, health IT/digital health products)
- Biomarkers, intellectual property, omics, translational imaging
- Regulatory, ethical, and study design considerations for developing stem-cell-targeted therapies

Core Courses:

- Translational Research Fundamentals
- Applied Translational Research
- Capstone Project

Benefits:

- In-class courses scheduled during weekdays' early evening hours for maximum flexibility
- Hands-on curriculum taught by experienced biomedical industry professionals
- Practical training to develop integrative and entrepreneurial biomedical R&D professionals
- Engage in San Diego's leading biomedical and UC San Diego's academic resources

Elective Courses:

- Applied Translational Research II
- Translational Regenerative Medicine

Become a biomedical leader, innovator, or entrepreneur and accelerate the translation of ideas into high-quality and highly differentiated biomedical products.

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