



UCLA BIOENGR 233A/MGMT 271A
MedTech Innovation (MTI) I:

Entrepreneurial Opportunities in Medical Technology

Winter 2021

Welcome to the Winter Quarter of the MedTech Innovation (MTI) Program at UCLA! This program will provide students a framework for developing medical device innovations and prepare students for careers in healthcare, product development, and entrepreneurship. The two-quarter course provides guided learning in lean startup principles, design thinking ideology, value proposition development, brainstorming techniques, and tools for clinical concept generation.

Innovation

Learning

Networking

Entrepreneurship



UCLA Samueli
Bioengineering

UCLA Anderson
School of Management

 **SoCalBio**
Southern California
Biomedical Council

 David Geffen
School of Medicine

C N S I

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Offered in Partnership with the Southern California Biomedical Council (SoCalBio)

Winter 2021

Instructors

Wentai Liu, PhD	H. R. Tseng, PhD	Ahmed Enany	Alex Shen, PhD	K. Shivkumar, MD, PhD
UCLA BioEngineering & CNSI	UCLA School of Medicine & CNSI	SoCalBio	Kite Pharma	UCLA School of Medicine & Cardiac Arrhythmia Center

In the Winter Quarter, students research unmet clinical needs from a list created by the MTI team. This “Needs List” is a result of insights gained from UCLA hospital and other industry professionals. Students may also explore opportunities outside the “Needs List”. Self-assembled, interdisciplinary project teams will be formed based on common goals and/or unmet clinical needs and collectively brainstorm and develop concept solutions. At the end of this quarter – which marks the midpoint of the course – student teams present three final concepts to a panel of clinicians, industry experts, and venture capitalists. This will prepare the students for the Spring Quarter class which will help refine their projects and take them beyond the proof-of-concept stage towards commercialization.

Course Schedule at a Glance (*Class is offered virtually through Zoom*):

WK 1: Jan 06	Introduction to MTI & Identifying Unmet Clinical Needs in a Patient-Centric Healthcare Delivery System
WK 2: Jan 13	Commercializing Medtech Innovations in a Value-Based Healthcare Regime
WK 3: Jan 20	Need Assessment in Changing Financial and Market Landscapes
WK 4: Jan 27	Medtech Value Creation by Leveraging Digital Health Innovations
WK 5: Feb 3	Clinical Needs Poster Session
WK 6: Feb 10	Participation in the 4 th SoCalBio Digital Health Conference
WK 7: Feb 17	MedTech Innovations: to Patent or Not to Patent
WK 8: Feb 24	Anticipating the Regulator-Payor Evidence Gap in Medtech Product Conception and Development
WK 9: Mar 03	Building Lean Companies, Developing Business Models, and Communicating the Value Proposition
WK 10: Mar 10	Final Concept Presentations

For More Information, Contact Teaching Assistants:

Matthew Smalley, MBA at smalleymatthewd@gmail.com or **Sonali S. Namiranian, MBA-BT, CCRP, Director of Operations, Pulsar** at ssnamiranian@gmail.com