Building a sustainable pipeline of clinical mentors for BME Design

A case study from Pontificia Universidad Católica de Chile

Introduction

Integrating clinical perspectives into Biomedical Engineering (BME) Capstone Design projects is crucial to enable clinically relevant decision making in student teams. However, engaging medical doctors as dedicated volunteer Clinical Mentors can be challenging. This handout summarizes the strategy implemented at Pontificia Universidad Católica de Chile that leverages external expert committees to organically grow a network of clinical mentors.

The challenge

Busy schedules and competing priorities often make it difficult to find clinicians that are interested in volunteering to serve as clinical mentors for our BME capstone design class. Directly inviting clinicians in mass institutional emails has proven largely ineffective. This highlights the need for innovative approaches to surmount this problem.

The solution

Our students invite clinicians to join committees that provide feedback to their project teams. This gives clinicians an opportunity to learn how the course works, allowing them to contribute to innovation and stay current with new technologies. Those who have participated as committee members then are more likely to be interested in volunteering as Clinical Mentor for a new project.

Outcomes

This strategy has helped grow our mentor network. 60% of our current Clinical Mentors became first involved as committee members. This increased availability has broadened project scope and enriched the student experience. Direct clinician interaction provides invaluable insights and motivates students.

Key Takeaways

This "committee-to-mentor" pipeline may be a widely sustainable model for integrating clinical perspectives into a BME capstone design class, fostering innovation and enhancing learning. Share your experiences and collaborate with us to adapt and implement this model, strengthening clinical partnerships and driving innovation in BME education.

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