



Master Thesis @ Massachusetts Institute of Technology (MIT)

In collaboration with:



BRIGHAM AND WOMEN'S HOSPITAL

Have you ever thought about doing a research project at MIT?
Here is your opportunity: Collaboration MIT-ETSEIB.

The Clinical Research Center (CRC) at MIT offers a one year bioengineering Master Thesis project starting February 2020.

What we do

The CRC is a center in the Institute for Medical Engineering and Science (IMES) at MIT charged with accelerating the translation of early stage medical technology into clinical practice. MIT has a long standing history of leveraging fundamental concepts in engineering into breakthrough technologies. Doing this in the medical arena poses unique challenges. Complex ideas and tools must not just be proven in the laboratory, but validated in model systems (animal, computational, even human) of relevance to patients and simplified greatly for clinical applications. Unique challenges extend from prototype development/systems design/midscale manufacturing/miniaturization to consideration of emerging regulatory hurdles and patient/physician/hospital adoption of new technologies. Merging elements of engineering (from fluid and structural dynamics to simulation, control optimization, and machine learning), manufacturing (from 3D printing to scale-up injection molding), and biology (from molecular and cell biology to integrated physiology) we develop medical diagnostics and devices with a focus on cardiovascular technologies.

What we offer

A research project for a proactive and highly motivated student willing to take a deep dive in research in one of the most prestigious institutions in technology worldwide. The student will be mentored by Dr. Kolandaivelu.

Dr. Kolandaivelu received his BS and MS in Mechanical Engineering, and PhD in Medical Engineering & Medical Physics from MIT. Following an MD from Harvard Medical School in the HST Division, he completed training in internal medicine and cardiology at BWH and is currently an Attending Physician in the BWH Cardiovascular Division and Medical Director of the MIT CRC.

Benefits

- Dynamic environment working in teams of individuals with multiple backgrounds on unique, interdisciplinary projects.
- Application-oriented experience in the design, development, and evaluation of complex medical technologies.
- Tuition fee and Visiting Student Visa sponsored by CRC.

Requirements

- No previous knowledge in bioengineering is required but we encourage an interest in this field. Must be motivated.
- Master students from ETSEIB to perform their Master Thesis.
- Advanced English level.
- Incorporation date February 2020 until February 2021.

Recruiting Process

- Send your CV, cover letter and official transcripts (Bachelor's and Master's if applicable) in ECTS format to clinicalresearch@mit.edu.
- **Application deadline: January 27th.**
- Applications will be reviewed and top candidates interviewed via Skype between January the 29th and 30th.
- Given tight schedule, candidates should still apply for other exchange programs and will be notified by January the 31th.
- For questions or additional information contact by email or visit the website: <http://crc.mit.edu>

