Juan Enrique Perez De Jesus

PhD Candidate

Education

PhD in Biomedical Optics Case Western Reserve University, Cleveland

JUN 2022 - PRESENT

BS in Biomedical Engineering Case Western Reserve University, Cleveland

AUG 2018 - MAY 2022 GPA: 3.67

Research

Developing PSOCT-NIRS Catheter for Ablation Treatment of Atrial Fibrillation, Case Western Reserve University, Cleveland

JUN 2022 - PRESENT

Polarization sensitive optical tomography (PSOCT) currently has limitations in imaging heart regions where tissue depth
is greater than 1mm. By complementing PSOCT with near infrared spectroscopy (NIRS), we aim to increase the imaging
depth and therefore increase proper lesion assessment induced by heart ablation procedures.

Cancer-focused Summer Undergraduate Research (CanSUR), Case Western Reserve University, Cleveland

JUN 2021 - AUG 2021

• 10-week research program that served as a continuation of my previous research.

Prostate Cancer Research, Case Western Reserve University, Cleveland

MAY 2020 - AUG 2021

- Responsible for cleaning up data
 - Automated using python
- Machine Learning
 - Preparing Data & Model

Teaching Assistant

Case Western Reserve University, Cleveland

JAN 2022 - MAY 2022

Grader & supplemental instructor for Principles of Biomedical Instrumentation.