## **Jorge Alberto Reyes**

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#### **EDUCATION**

Wentworth Institute of Technology (WIT), Boston, MA

Exp. Apr

2016

## **Bachelor of Science in Biomedical Engineering**

**GPA:** 3.2/4.0

Relevant Coursework: Biomechanics, Engineering Mechanics, Anatomy & Physiology I & II, Medical Device & Systems

## **TECHNICAL SKILLS**

**Biological Laboratory Experience**: Tissue Cultures, shRNA transfection, Preparation of Solutions, Immunofluorescence, Protein electrophoresis, Western Blotting, NMR Spectroscopy, PCR, Subcloning **Computer Programs:** SolidWorks, AutoCAD, LabVIEW, MatLab, Microsoft Office, C++, R Programming, Chenomx

**Electrical Laboratory Experience:** Digital Multimeter (DMM), Oscilloscope, TI Microcontrollers, Analog and Digital Circuit Design, Breadboard/Data acquisition board, Function generator, Power supply, and Strain gauge

**Medical Device Experience:** Vernier sensors, including EMG, EKG/ECG, pulse oximeter and blood pressure cuff

Language: Fluent in English and Spanish

#### RELATED EXPERIENCE

Cerebral Palsy Walking Aid, WIT, Boston, MA 2015 - Aug 2015 Jan

Senior Design I & II

- Developed a new gait trainer for children with cerebral palsy
- Utilized SolidWorks and Working Model to design a 3-D model
- Wrote the technical approach in the design report, which includes the requirements for the design, cost.

concepts, customer needs, and weight, using input from physical trainer at Boston Children's Hospital

# Cancer Research Assistant Intern, TUFTS UNIVERSITY, Dental and Medical School, Boston, MA Jun 2014 - Present

- Observed & maintained two different types of cancer cells that were used at the lab
- Preformed lentivirus-medicated shRNA transfection for the characterization of proteins involved in endocytosis
- Analyzed metabolic profile of two cancer cell types by using Nuclear Magnetic Resonance Spectroscopy for two cancer varieties

### Peritoneal Dialysis Catheter Port, WIT, Accelerate, Boston, MA Apr 2014 - Present

Anatomy & Physiology II

- Designing a peritoneal dialysis catheter port as part of an ongoing interdisciplinary team project
- Successfully pitched the project through Accelerate, an innovation and entrepreneurship program for

funding to start prototyping, testing, and researching

## **ACADEMIC PROJECTS**

Colorimeter Dec 2014

Sep 2014 -

Microcontrollers & Embedded Systems

- Designed colorimeter structure through SolidWorks and Soldered mini printed circuit board with a variety of components
- Collaborated with a large group to assemble colorimeter components

# Additive Manufacturing Applied to Anatomy 2013

Nov 2013 - Dec

Anatomy & Physiology I

Designed the masseter muscle on Solid Works, printed out a 3D model, and wrote technical report

Mass Conversion Mar 2012 - Apr 2012

Intro to Engineering and Design

 Built load cell with strain gauge and used as a mass to convert prices for supermarkets, then created a LabView program that calculated measurements as outcome

#### **LEADERSHIP**

**Treasurer**, Society of Hispanic Professional Engineer **Sept 2013 - Aug 2015** 

- Allocated funds based on yearly events, while monitoring and updating budget plan
- Took lead in meeting, events, and provide support to other e-board members

## Orientation Leader, Wentworth Institute of Technology

Aug 2012

& Aug 2013

 Provided guidance to freshmen during orientation, facilitate small group conversations related to Wentworth policies

## Wentworth Leadership Program

Jan

2012 - Aug 2013

 Established awareness of important leadership skills for my engineering career including group dynamics, ethical decision making, and professional communication

### **PUBLICATIONS**

- 1. Bingham, E., Kamlarz, S., Saffari, S., Tay, R., Reyes, J., Baleja, J., and **Alt-Holland, A.** Dab2-E-cadherin Duo: A New Role in Squamous Cell Carcinoma Development. American Association for Dental Research conference, Boston, MA, March 2015.
- **2.** Saffari, S., Kamlarz, S., Bingham, E., Tay, R., Reyes, J., Baleja, J., and **Alt-Holland, A.** Dab2-Dependent Modulation of the Tumor Microenvironment can Promote Cancer Development. American Association for Dental Research conference, Boston, MA, March 2015.