
MELISSA CADENA

San Antonio, TX 78240 ♦ 210 787 0766 ♦ mcadena1008@gmail.com

EDUCATION

Bachelor of Science: Biomedical Engineering, May 2020

The University Of Texas At San Antonio (UTSA) - San Antonio, TX

GPA: 3.75 Minor: Mathematics

Maximizing Access to Research Careers (MARC-U*STAR) Scholar, UTSA Honors College

22 Dual Credits in *Laredo Community College*., Laredo Texas **GPA: 4.0**

16 Dual Credit in *Texas A&M International University*, Laredo Texas **GPA 4.0**

SCHOLARSHIPS AND HONORS

Johns Hopkins Summer Undergraduate Research Leadership Alliance Scholar, Aug. 2019

President's List, May 2019

UTSA BMES Fellowship, April 2019

ABRCMS Conference Travel Award, April 2018

UTSA Future Roadrunner Interview and Article, Aug.2018 <https://future.utsa.edu/rowdy-zine/melissa-cadena/>

Second Place in UTSA MAKE-A-TON, April 2019

UTSA SPURS Scholarship, Aug. 2018

USAA Scholarship Recipient, Oct. 2017.

PUBLICATIONS

Cellular Refractive Index Comparison of Various Prostate Cancer and Noncancerous Cell Lines via Photonic-Crystal Biosensor, Frank DeLuna, Melissa Cadena, Bingzhi Wang, Lu-Zhe Sun, Jing Yong Ye

ABSTRACT AND POSTER PRESENTATION

Melissa Cadena, Visualizing Graphene with Fluorophores Under Ultraviolet Light for Improved Surface Transfer

Annual Biomedical Research Conference for Minority Students (ABRCMS), November 14-17, 2018

Annual Conference for the Society for Advancement of Chicanos and Native American in Science (SACNAS), October 11-13, 2018

Melissa Cadena, Label-free Detection of Prostate Cancer Cells via a Photonic Crystal Biosensor

Biomedical Engineering Society Symposium, March 27, 2019

UTSA Undergraduate Research Showcase, April 25, 2019

Melissa Cadena, Myo-Electric Hand Brace: Increasing Hand Mobility from Traumatic Injuries

UTSA Engineering Tech Symposium, April 30, 2019

EXPERIENCE

Undergraduate Research Assistant, 10/2017 to Current

Advanced Biophotonics And Nanotechnology Laboratory – University Of Texas At San Antonio , San Antonio, Texas

Advisor: Dr. Jingjong Ye, Ph.D

Honors Thesis: Detect Prostate cancer cell through digitonin- cholesterol interaction monitored with a photonic crystal biosensor

Undergraduate Research Fellow, 05/2019 to 08/2019

Institute For NanoBioTechnology (INBT)/Leadership Alliance – Johns Hopkins Univeristy , Baltimore, MD

Advisor: Dr. Soojung Claire Hur, Ph.D

Project on In vitro Protein synthesis in Nano Scaled Unilamellar Lipsomes.

Undergraduate Summer Research Fellow, 05/2018 to 08/2018

Naval Research Laboratory Summer Research Program (HBCU/MI) – Washington, DC

Advisor: Dr. Keith Whitner, Ph.D

Academic Math Tutor, 02/2017 to 06/2018

Math Matters – The University Of Texas At San Antonio, San Antonio, TX

LEADERSHIP AND COMMITTEES

President, Engineering Student Council, April 2018- Pres., **Marketing Chair**, Aug. 2017- April 2018

University Relations, Biomedical Engineering Society, Oct. 2016-Pres.

Vice President, Society of Women's Engineering, Jan 2018- Pres., **Treasurer**, Apr.2017-Jan 2018., **Mentor**,Sept. 2017-Pres.

Quality of life Organization, September 2018

UTSA Engineering Ambassadors, Aug. 2017-Pre.

SKILLS

Software: Origin analysis (Intermediate), Mathlab(Intermediate), Solidworks (Intermediate), Adobe Acrobat

Photoshop(Intermediate), Image J(Intermediate), R Studio (Beginner), Python(Beginner),Arduino Processing(Intermediate)

Foreign Language: American Sign Language(Intermediate), and Spanish(Fluent)

INTERESTS

Research: Biosensors, Graphene Engineering, Biophonics, Laser Processing, Nanomaterials and Nanotechnology, NueroEngineering

Activities: Basketball, Volleyball, and playing the Clarinet