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**EDUCATION**

***PhD Student***

Yale University

Expected 06/2022

**Bachelor of Science in Chemical Engineering**

The University of New Mexico  
Summa Cum Laude

06/2016

GPA 3.85

**PROFESSIONAL EXPERIENCE**

***Rotating Graduate Research Assistant***

Yale University, New Haven, CT

Fall 2016 – Spring 2017

P.I.: Prof. Anjelica Gonzalez (Fall 2016) & Prof. W. Mark Saltzman (Spring 2017)

Project summary: In Fall 2016, I investigated the mechanical effects on pericytes and endothelial cell growth and function using polyacrylamide hydrogels.

In Spring 2017, I characterized a novel family of poly(amino-co-ester) terpolymers for the use in targeted gene delivery.

***Undergraduate Research Assistant***

The University of New Mexico, Albuquerque, NM

05/2014 – 05/2016

P.I.: Prof. Heather Canavan

Project summary: Development of a human skin irritation assay derived from poly(N-isopropyl acrylamide) cell sheets for drug testing

***Undergraduate Research***

Harvard University, Cambridge, MA

Summer 2015

P.I.: Dr. Kevin Kit Parker

Project summary: Creation of a cardiac impulse propagation model employing heart-on-a-chip technology to study the effects of cell alignment on cardiac electric propagation.

**AWARDS**

- NSF Computer Science and Engineering Scholarship Program Fall 2015 – Spring 2016
- SACNAS Travel Scholarship Fall 2015
- John A. Paulson School of Engineering and Applied Sciences  
2015 Research Experience for Undergraduates (REU) Summer 2015
- UNM El Centro de la Raza-El Puente Fellows Program Fall 2014-Spring 2015
- NSF STEP Program Summer 2014
- Dean's List Fall 2013 – Spring 2016
- Harry and Mabel F. Leonard Scholarship Fund Fall 2012 – Spring 2016

**PRESENTATIONS**

**Ledesma-Mendoza, A.,** Ulibarri, S., Chavez, M., Pham, T.K., Saavedra, B. "Novel Method for Sour Water Cleaning" Presented at the 2016 UNM SOE Research Symposium, Albuquerque, NM, 05/04/16

**Ledesma-Mendoza, A.,** Pasqualini, F.S., Moran, Y., Parker, K.K., "Cardiac Propagation on the Heart-on-a-Chip" Presented at the 2015 SACNAS National Conference, Washington, DC, 10/29/15

**Ledesma-Mendoza, A.,** Pasqualini, F.S., Moran, Y., Parker K.K., "Cardiac Propagation on the Heart-On-A-Chip". Presented at the John A. Paulson Annual 2015 REU Symposium, Harvard University, Cambridge, MA. 8/15/15

**Ledesma-Mendoza, A.,** Canavan, H. E., "Development of a scaffold-free human skin equivalent using pNIPAM substrates" Presented at UNM Shared Knowledge Conference, UNM, Albuquerque, NM. 4/23/15