

## Krystalle S. Diaz

[kdiaz17@email.arizona.edu](mailto:kdiaz17@email.arizona.edu)

---

### EDUCATION:

**University of Arizona**, College of Agriculture and Life Sciences, Tucson, Arizona  
**Bachelor of Science in Environmental Sciences**, Major GPA 3.538, December 2015  
**Honors College**

**SKEMA Business School**, Sophia-Antipolis, France, January-May 2014

- Took science classes with people from diverse cultural and linguistic backgrounds
- Adapted to different cultural norms while working in diverse groups

**Courses:** Environmental Microbiology, Soils, Environmental Chemistry, Biological Oceanography, Genetics, Ecology, Biology, Natural Resource Management, Hydrology, Environmental Risk Assessment, General Chemistry, Organic Chemistry

### RESEARCH EXPERIENCE:

**Microbial Ecology Laboratory, Virginia Rich, Ph.D, University of Arizona**, May 2013-current  
Research Assistant, Department of Soil, Water, and Environmental Science

*Sphagnum* Endophyte Project, August 2014-December 2014

- Search for methanotrophic lineage in *Sphagnum* moss microbial communities
- Use QIIME to perform searches for methanotrophic lineages in sequenced samples
- Use BLAST to match permafrost community lineages to GenBank and GreenGenes

Honors Independent Study, August-December 2014

- Perform research for *Sphagnum* Endophyte Project
- Write paper summarizing results

Honors College Internship, August-December 2013

- Performed research for Proteomics Project in Microbial Ecology Laboratory
- Wrote paper summarizing research experience
- Presented it at the American Society for Microbiology annual meeting in May 2015

Proteomics Project, June 2013-August 2014

- Established and optimized use of protein identification algorithms with Arctic soils
- Performed DNA extractions from soil samples
- Wrote paper summarizing results of Fall 2013 research for Honors College internship

### SKILLS:

- Bioinformatics: utilizing proteomics software, QIIME, basics of R, BLAST
- Scientific writing, proposal writing
- Laboratory techniques: DNA extractions, gel electrophoresis
- Bilingual in Spanish, functional in Japanese
- Microsoft Office Word, PowerPoint, and Excel
- Adobe Photoshop

### PRESENTATIONS AND POSTERS:

Honors College Undergraduate Research Grant, May-August 2014

- *To ID or Not to ID: Optimizing Microbial Community Protein Identification in Arctic Soil*
- Performed independent research with Dr. Virginia Rich at the University of Arizona
- Poster to be presented at American Geophysical Union 2014 Fall Meeting

American Society for Microbiology General Meeting, May 2014

- *Comparing Search Algorithms for Metaproteomics: Sequest v.27 versus TPP v4.6 X!Tandem for Soil Metaproteomes*
- Received full funding to attend meeting, pre-meeting institute, and present poster

**AWARDS:**

- Honors College Undergraduate Research Grant, May-August 2014
- American Society for Microbiology Undergraduate Capstone Institute, May 2014
- National Hispanic Scholarship, August 2011-present
- Father Joseph Patterson Scholarship, August 2011-present

**OUTREACH EXPERIENCE:**

Biosphere 2 Fall Discovery Nights, University of Arizona, Biosphere 2, October 2014

- Engaged K-8 students in activity about fossil fuel formation

Spooktacular Science Volunteer, SWES Club, University of Arizona, October 2013

- Actively engaged elementary school age children in soil texturing activity
- Introduced basic agricultural and microbiological concepts

Tucson Festival of Books, BIO5 Volunteer, March 2013

- Taught children about basic DNA concepts and maintained flow of presentation
- Engaged in basic DNA precipitation activity in arts-and-crafts format

**RETAIL EXPERIENCE:**

**Kay Jewelers**, November-January 2011 & 2012

Sales Associate, Tucson Mall, Tucson, Arizona

- Engaged customers, discovered needs, and ensured satisfaction
- Set up merchandise displays, took daily inventory, and filed paperwork
- Coped with myriad of customers during hectic holiday season