

Araceli Ciarra Duron (She/her/hers)

Date of Birth: 07/11/2002
Applicant type: Undergraduate student
Application date: 02/05/2024



Contact Information

Email 1: araceliduron24@gmail.com
Current Address: 2535 W Irvington Avenue , San Bernardino, CA 92407, USA
Permanent Address: 2535 W Irvington Avenue , San Bernardino, CA 92407, USA
Cell Phone: +19094368978
Ok To Send Text Message? Yes

Demographic Information

Race: I do not wish to provide this information
Ethnicity: Hispanic or Latino
Sex Assigned at Birth: Female
Gender Identity: Female
Veteran Status: Non-Veteran
Received Pell Grant: No
Disability:
Seeing: None
Hearing: None
Walking: None
Lifting: None
Concentrating, remembering, or making decisions: None

Family Information

Parent or Guardian 1: Female
Highest degree: Bachelor's degree (e.g., BS, BA, AB)
Occupation: Social Workers

Parent or Guardian 2: Male
Highest degree: High school diploma or equivalent
Occupation: Other, Transport Truck Driver

Current Enrollment

Enrolled in post-secondary degree? Yes
Institution: San Bernardino Valley College
Location: San Bernardino, CA
Carnegie Basic Classification: Associate's Colleges: Mixed Transfer/Vocational & Technical-High Traditional
College Level: At least 2 but less than 4 years
College Control: Public, 2-year
Historically Black College and University: No
Hispanic Serving Institution: Yes
Minority Serving Institution: Yes
Tribal College: No
Predominantly White College: No
Status: Full-time
Degree: Associate's degree (e.g., AA, AS)
Primary Major: Oceanography
Expected Degree Completion: 05/21/2024
Expected Class Standing, Fall: Sophomore
College GPA: 3.8
GPA Scale: 4.0
How are you financing your degree(s)?
Financial assistance from parents, spouse, other relatives, not to be repaid: Yes
Financial assistance from your employer: No
Financial assistance from the Veterans Educational Assistance Act: No
Loans from parents or other relatives, to be repaid: No
Loans from the school you attended, banks, federal or state government: No

Education

High School: Cajon High School District:
Location: San Bernardino, CA 92407

Experience

Prior Research Experience

Prior research experience: No

Work Experience

Currently working as a teacher or professor? No

Test Scores

SAT

Not Available

ACT

Not Available

GRE

Not Available

Program Awareness

How did you hear about the NSF program?
Family or friend
Professor

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Tuition waivers, fellowships, grants, scholarships: Yes

Assistantships or work study: Yes

Earnings from employment: Yes

Personal savings: Yes

Other, please specify:

Additional Questions

1. Describe the areas of research in the marine geosciences that interest you most, your personal goals for this internship, and indicate your preference for working in office, lab, or field settings. (200-300 words)

As I am gearing up to be a marine geologist, the areas of research that I find to be most intriguing are Sediment Transport, Seafloor Mapping, Sedimentology of Upwelling Biogenic Sediments, and Coastal Erosion. While these research topics can be considered out of my realm of current knowledge, I possess a strong will to take a deeper look into each and come out of this opportunity with a better understanding than before. I am currently viewing this internship as a chance to gain a deeper understanding of oceanography and how it is inherently interdisciplinary. My goal is to understand the collaborative effort that is maintained between physical, chemical, geological, and biological oceanographers, and to appreciate that this interdisciplinary approach is crucial for understanding the ocean's role in our environmental system. To be a part of this program would be an exciting opportunity, it would provide the chance for me to step outside my comfort zone and learn more about the effort it takes to become a marine geologist. When it comes to my preferences regarding workspaces, I am primarily interested in fieldwork. To have the opportunity to directly observe, collect samples, and conduct experiments regarding the ocean floor and coastal areas, this would provide invaluable insights into Earth's geological processes. Fieldwork would be a great opportunity, however, lab work does pose its intrigue as it provides the opportunity to analyze sample collections to study Earth's composition. Both settings offer unique insights and learning experiences, but ultimately, I am open to working in either environment as they both play to my interests in exploring and understanding Earth's history.

2. Write about what your career goals are and how participating in this REU program will help you meet these goals. (200-300 words)

Becoming a part of this program is one of my last few career goals before transferring from my local community college and becoming a part of the UC system. As my time dwindles, I begin the process of drawing out a new plan of action for immersing myself further into the field of earth sciences, geosciences, and oceanography. This internship will serve as my launchpad, a chance to take my first step into the world of oceanography and finally develop a better understanding of how I can truly find myself in this career. My goal for this program is to soak up as much information as I can, gaining an understanding of what it is actually like to perform the scientific process. I plan on asking all the questions that I have to my mentor, I plan on creating strong relationships with the students that surround me, and most importantly I plan to broaden my horizons and gain a new perspective on different disciplines of oceanography. This opportunity will not be used as a mere accolade but as a symbol of my future and a testament to my devotion to my studies. Down the line, when I am at a point where I want to step away from conducting research for environmental organizations, I want to spend my time teaching in my community. I envision coming back to my hometown, prepared to share my wealth of knowledge and provide curious students with information regarding my academic journey and how I found myself journeying deeper into the earth sciences. This program is not the only step I plan to take for my career, but it is the springboard that I will use to catapult me forward into the wonderful world of oceanography.

3. What unique qualities and characteristics will you bring to our program? (you can also add an explanation to what might appear to be gaps or weaknesses in other parts of your application. Feel free to explain your side so these gaps or weaknesses do not detract from your strengths.) (300-400 words)

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As a student deeply intrigued by geological oceanography, I am eager to offer my vivacious nature, my innovative outlook, and my foundational understanding of Chemistry, Physics, and Mathematics toward this wonderful opportunity. While my academic journey thus far has primarily concentrated on lower-division courses, with a strong emphasis on Physics and Calculus, I am convinced that the courses I have taken have laid the groundwork necessary for a successful adventure into the world of oceanographic research. My blend of knowledge makes me a rather adaptable individual, I will be able to provide insight into various facets of this project. Setting aside my coursework, I believe that my innovative thinking can provide a fresh perspective on subjects and can bring about new questions on topics that may have not been previously considered. As a curious thinker, I believe my questions will guide our research forward and will help to bridge any gaps of misunderstanding between student and mentor. As researchers, I believe that the power of communication is key, and my ability to effectively communicate will prove to be useful as I will take the initiative to help present our findings to a wider range of audience. Throughout my academic journey, I have had extensive experience in being able to cultivate diverse team members and establish harmonious groups that represent the very meaning of synergy. This experience has not only enhanced my interpersonal skills but has also reinforced my belief in the power of teamwork. My application to this program is the very testament to my passion for oceanography, as well as my self-awareness that I possess the qualities needed to become an exemplary candidate. I will bring a high level of motivation, a readiness to engage, and an eagerness to contribute significantly to this field. I am fully committed to this research journey, and I am ready to utilize my skills.

4. This REU program is dedicated to enhancing the diversity of future scientific communities and sharing our science with a broader audience. Please describe how you, based on your personal background and life experiences (including social, cultural, familial, educational, or other opportunities or challenges) will contribute to this mission during and after participation in this REU. (200-300 words)

Growing up in San Bernardino, California, success stories especially in the realm of science are rare to hear about. Not many individuals choose to pick the career path of STEM, nor does the community inspire them to dream big and aim for higher goals. The San Bernadino County is an underperforming city, riddled with major issues such as high unemployment and poverty rates, low graduation and high dropout rates, scarce educational and healthcare resources, high crime rates, under-resourced law enforcement, poor air quality, high rates of homelessness, lack of affordable housing options, and limited access to safe drinking water. The San Bernardino community struggles as a whole, and with all the problems that we face, few can truly consider the option of trying for a better life. San Bernardino is a struggling community, but it is all the better reason for someone to step up and make a change and ignite hope. I believe San Bernadino needs a success story, so I am committed to giving back to my community. I aim to inspire young Latinas that a career in science is a valid and attainable career choice. Participating in the Research Experiences for Undergraduates (REU) program will equip me with essential research skills and serve as a foundation for my ambition to encourage students in the San Bernardino County schools. By sharing my journey, I hope to mentor young students, showing them that they can rise above their circumstances and achieve greatness. REU is not just a step towards my professional growth, but it is a symbol that proves that with hard work and passion anyone can succeed in any field of STEM.

5. REU Mentor #1 Name: Please review the mentors and projects list (<https://csumb.edu/reu/mentors-and-projects/>) and consider who you are most interested in working with as your first choice (REU Mentor #1). Please list the first and last name of REU Mentor #1 here.

Ivano Aiello

6. REU Mentor #1 Explanation: Please explain why you chose REU Mentor #1. (50-100 words)

After reading through Dr. Aiello's biography, CV, and selected publications, I found myself captivated by his wealth of knowledge as well as drawn to his research in sedimentology and structural geology. Exploring Dr.

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Aiello's work, particularly his research on the Evolution of marine sedimentation in the Bering Sea since the Pliocene, left me fascinated with the idea of diving into lithostratigraphy and developing a keen understanding of petrographic analyses. Dr. Aiello's work is inspiring, and I am convinced that this mentorship could provide me with a solid foundation in sedimentology, which will significantly enhance my academic pursuit in marine geology.

7. REU Mentor #2 Name: Please review the mentors and projects list (<https://csumb.edu/reu/mentors-and-projects/>) and consider who you are most interested in working with as your second choice (REU Mentor #2). Please list the first and last name of REU Mentor #2 here.

Francisco Chavez

8. REU Mentor #2 Explanation: Please explain why you chose REU Mentor #2. (50-100 words)

Exploring Dr. Chavez's study on the Sampling of Vertically Migrating Biological Layers by an Autonomous Underwater Vehicle, rekindled my fascination with diel vertical migration. The migration patterns of pelagic zooplankton and micronekton, alongside research methods such as the use of sonar, direct sampling via nets and optics, acoustic instrumentation, and ROVs to acquire eDNA samples, are all incredibly fascinating. I would be eager to delve into this research and learn more about the methods used in this study. Working with Dr. Chavez would provide me with the opportunity to explore marine ecosystems and gain better insight into biogenic sediment deposition.

9. REU Mentor #3 Name: Please review the mentors and projects list (<https://csumb.edu/reu/mentors-and-projects/>) and consider who you are most interested in working with as your third choice (REU Mentor #3). Please list the first and last name of REU Mentor #3 here.

Tom Connolly

10. REU Mentor #3 Explanation: Please explain why you chose REU Mentor #3. (50-100 words)

While combing through Dr. Connolly's work, I found myself drawn to his focus on coastal zone dynamics and its ecological impacts. Looking further into his studies, I was intrigued by his publication on the Regional Impact of Submarine Canyons During Seasonal Upwelling, as it covered aspects of nutrient cycles and ecosystem dynamics. Working with Dr. Connolly would provide a great opportunity for me to gain a deeper understanding of coastal circulation dynamics and their ecological consequences.

References

Reference 1

Reference Writer Name: Matthew Robles

Position: Professor, Earth Science

Institution: San Bernardino Valley College

Phone: +17604089497

Email: mrobles@valleycollege.edu

Status: COMPLETED

Reference Submitted Date: 02/01/2024

How long have you known the applicant? 24

Capacity: Professor

How applicant compares? Top 5%

Intellectual ability: Outstanding

Integrity: Outstanding

Work Habits: Outstanding

General Motivation: Outstanding

Leadership: Outstanding

Reference 2

Reference Writer Name: Todd Heibel

Position: Professor, Geography

Institution: San Bernardino Valley College

Phone: +19093848638

Email: theibel@sbccd.cc.ca.us

Status: COMPLETED

Reference Submitted Date: 02/02/2024

How long have you known the applicant? 1

Capacity: Professor

How applicant compares? Top 10%

Intellectual ability: Outstanding

Integrity: Outstanding

Work Habits: Outstanding

General Motivation: Outstanding

Leadership: Outstanding

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Creativity: Outstanding
Ability to work with others: Outstanding
Maturity: Outstanding
Writing skills: Outstanding
Verbal communication: Outstanding
Reference File Name : AraceliDuronLOR.pdf

Creativity: Outstanding
Ability to work with others: Outstanding
Maturity: Outstanding
Writing skills: Outstanding
Verbal communication: Outstanding
Reference File Name : Araceli Duron Monterey Bay REU Program Recommendation Letter.pdf

Araceli Duron

2535 Irvington Avenue | San Bernardino, CA 92407

(909) 436-8978 | araceliduron24@gmail.com

EDUCATION

San Bernardino Valley College

San Bernardino, CA

A.A. Biological and Physical Science

Aug 2020 - May 2024

- GPA: 3.8

- *Awards and Honors:*

NASA Community College Aerospace Scholars Program (2023)

Edison STEM Scholarship (2023)

Dean's List- Highest Honors (2022, 2021, and 2020), Dean's List-Distinction (2023)

- *Leadership Involvement:*

Alpha Gamma Sigma, California CC Honor Scholarship Society

- *Relevant Coursework:*

Elements of Oceanography

General Chemistry I,

Physics I, II (in progress), and III (in progress),

Single Variable Calculus I, II, and Multivariable Calculus (in progress)

WORK EXPERIENCE

STEM-MESA Tutoring Center

San Bernardino, CA

Office Secretary

Oct 2021 - Dec 2022

- Managed incoming calls providing accurate information regarding operating hours and location details.
- Conducted data entry duties by compiling and processing student log-in hours onto an Excel spreadsheet.
- Performed secretarial duties such as taking and delivering messages, photocopying, filing, printing student information, greeting visitors, and responding to queries.

The Music Key School

Rancho Cucamonga, CA

Receptionist

Feb 2023 - Present

- Managed appointments and consistently updated the master calendar and made it accessible for all staff.
- Communicated with other departments to relay messages and assist with organizational tasks.
- Performed administrative tasks such as filing, photocopying, preparing documents, receiving/sorting mail, and relaying messages between business locations.

LEADERSHIP EXPERIENCE

Alpha Gamma Sigma-Honor Society

San Bernardino, CA

Member

Aug 2022 - Dec 2023

- Active participation in river cleanup projects, raising community awareness of the effects of littering,
- Participated in organizing and executing food drives to support the local community.
- Contributed unique ways to garner student interest in participating in fundraising activities and community service projects.