



AltaSea's High School Research Mentorship Program

2022 Handbook



Application and Statement of Commitment
Due May 31, 2022 at 5:00 PM

We turn to the ocean to develop solutions for
some of the planet's most pressing challenges.



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Staff Members Participating in High School Research Mentorship Program

AltaSea Staff:

Robin Aube, AltaSea Director of Advancement, raube@altasea.org

Meredith Brooks, AltaSea Programs and Grants Manager, mbrooks@altasea.org

Jenny Krusoe, AltaSea Founding Executive Director, jkrusoe@altasea.org

Mentors:

Emily Vidovich, AltaSea Journalist and Editor

Nuzhdin Seaweed Lab Graduate Students, USC Dornsife, College of Letters, Arts and Sciences

AltaSea at the Port of Los Angeles is located at 2451 S. Signal Street, Berth 58, San Pedro, 90731



High School Research Mentorship Program

Introduction

AltaSea at the Port of Los Angeles is poised to become the premier site where the best of science, business, and education come together to protect the oceans for future generations, while inspiring our youth and invigorating our economy. AltaSea is fortifying Los Angeles as the hub of the Blue Economy and, as a result, will find ocean-based solutions for mankind's most pressing challenges. We are passionate about providing the next generation of scientists, ocean explorers, educators, and entrepreneurs with the opportunities necessary to find solutions to food and climate security while also developing new technologies that will advance ocean exploration, clean energy security and protect the environment.

Ocean-related education is a vital component in preparing all students for Ocean STEM fields and our emphasis is on building a talented, diverse and inclusive workforce. Project Blue is AltaSea's ocean education program that includes a wide variety of learning resources and internship opportunities. The Project Blue Research Mentorship Program for high school students offers two separate opportunities, Regenerative Aquaculture or Ocean Literacy Through Journalism. Students will be expected to commit 4 hours a week for 6 weeks commencing on Monday, June 20, 2022.

The Regenerative Aquaculture program will require students to work alongside USC mentoring graduate students in the Nuzhdin Aquaculture Lab at the AltaSea campus performing duties necessary in kelp and seaweed husbandry in relation to the mentor's research. High school students will keep weekly notes and write a 2 page scientific review (review outline template to follow) of their experience to be submitted to AltaSea staff at the end of the summer program, July 29, 2022.

Those students preferring a virtual program will work with AltaSea's journalist and blogger, Emily Vidovich. High school students will learn to research and write informative Blue Ocean Economy articles. Student blogs will be published on the AltaSea website.

Upon program completion, students following each pathway will receive 24 volunteer hours of service helping them achieve an optimal college application packet



USC Nuzhdin Seaweed Lab

The Nuzhdin aquaculture lab at AltaSea is developing a seed bank from giant and golden kombu kelps. Student researchers will be provided with bulk seeds and learn how to cultivate and identify the fastest growing seeds, sort them out to individual cultures, and determine their growth rate. The project will also involve extracting DNA from the seeds, releasing seeds and attempting to grow kelps attached to gravel or lines in tanks or the ocean.

USC Nuzhdin Seaweed Lab Template for the Scientific Review due July 29, 2022

1. Introduction should include a short biography and original expectations of the program
2. Describe your research and how it fits into AltaSea's mission
3. Provide a summary of the work you participated in with your mentor
4. Reviewing the research, explain how you feel it will contribute to solving some of the planet's challenges we face
5. Describe how the mentorship program will contribute to your growth as a student



Blue Economy Blogger with Staff Journalist, Emily Vidovich

- Tasks: source articles for the AltaSea newsletter, Trending Research and write an original article
- Outcome: one published blog highlighting a Blue Economy topic published on the AltaSea website

WEEK	MEETING	TASKS	PROGRESS CHECK
1	Zoom (half hour) with Emily: introduction to AltaSea, article expectations, how to find reputable sources.	Source articles and studies related to your article topic. Create a document or spreadsheet where you have links to each article, notes on what you learned from each, and quotes you like. Find one new article for Trending	By Thursday evening: Share your document with research notes with Emily, along with a paragraph reflection on what you learned or any story ideas related to the topic that came up as you learned more. Share article for Trending with Natasha, AltaSea Director of Communications Fill in your timesheet.
2	Zoom (half hour) with Emily: students report back on their research and identify the “story,” go over how to structure the article.	Identify the main focus of your story. Create an outline of the article and see where your research can fit in. Identify any gaps and do research as needed. Find one new article for Trending.	By Thursday evening: Share your article outline with Emily Share article for Trending with Natasha. Fill in your timesheet.

3	No scheduled meetings unless Emily's feedback given on your outline is unclear, then an individual phone call can be arranged.	Using the feedback on your outline, write your first draft. Find more sources if needed. If new information requires you to refine your main point, do so as needed. Find one new article for Trending.	By Thursday evening: Share the first draft of the article with Emily. Share article for Trending with Natasha. Fill in your timesheet.
4	No scheduled meetings unless Emily's feedback given on your outline is unclear, then an individual phone call can be arranged.	Use the feedback on your first draft to edit and refine your second draft. Find one new article for Trending.	By Thursday evening: Share the second draft of the article with Emily. Share article for Trending with Natasha. Fill in your timesheet.
5	No scheduled meetings unless the feedback the supervisor gives on your draft is unclear, then an individual phone call can be arranged.	Use the feedback on your second draft to edit and refine your third draft. Find one new article for Trending.	By Thursday evening: Share the third draft of the article with your Emily. Share article for Trending with Natasha. Fill in your timesheet.



APPLICATION DUE MAY 31, 2022 AT 5:00 PM

Students must complete all required fields for your application to be considered complete. **Applicants who submit incomplete applications will not be considered for selection.**

Name _____

Email Address _____

High School Grade Level _____

High School Attended _____

Parent Name (please print) _____

Parent Cell Number _____

Which one of the following focuses are you most interested in applying for?

Regenerative Aquaculture

Blue Economy Journalism (Virtual)

Statement of Interest

Please send a Statement of Interest with your application explaining what is most interesting to you about the focus you chose. (Statements should be a maximum of 200 words).

Submit your completed application and essay to Robin Aube raube@altasea.org

Your application will not be accepted until we receive all completed application materials and signatures. Once we receive your completed application, you will be sent a confirmation email that the application process is complete. You will then be notified if you have been chosen as one of AltaSea's High School Researchers for Summer 2022.



Statement of Commitment

If I am selected to participate in the AltaSea High School Research Mentorship program, I will commit to the best of my ability 4 hours per week to the summer program.

As a participant, I understand I will be working with an accomplished professional in the field I have chosen and the program will be closely overseen by an AltaSea staff member.

The program will formally begin on **June 20, 2022** completing on **Friday, July 29, 2022**. The day of the week and the time of day that the four hours you commit to the program will be mutually agreed upon between you and your mentor. For those participating in the USC Nuzhdin Lab program, the scientific review should be electronically sent to Robin Aube raube@altasea.org no later than **July 29, 2022 at 5:00 pm**.

Statement of Commitment: I will commit to the best of my ability 4 hours per week to the AltaSea Research Mentorship summer program. Upon submission and approval of either the blog I have written for the journalism focus or submission and approval of the scientific review I have written for the aquaculture focus, I will receive 24 volunteer hours towards my college application packet from AltaSea at the Port of Los Angeles in a formal letter signed by AltaSea's President and Chief Executive Officer, Terry Tamminen.

Signed _____

Date _____



Dear Parent,

Please sign and date below acknowledging that you are aware your child will be participating in AltaSea’s High School Research Mentorship Program requiring your child to either work virtually with AltaSea staff or work with USC graduate students at the AltaSea campus in the USC Nuzhdin Seaweed Lab while completing this summer program.

If you have any questions please email Robin Aube, AltaSea’s Director of Advancement at raube@altasea.org or call her at (424) 210-4973.

Parent Signature_____

Date_____