

AltaSea's High School Research Mentorship Program

2021 Handbook



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

Application and Statement of Commitment



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Staff Participating with High School Research Mentorship Program

AltaSea Staff:

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

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

Mentors:

Dr. Nathan Churches, Holdfast Aquaculture, Chief Science Officer and Co-founder

Graduate Student Mentors, Oregon State University



AltaSea at the Port of Los Angeles 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 STEM program that includes a wide variety of learning resources and internship opportunities. The Project Blue virtual Research Mentorship Program for high school students will focus on Sustainable Aquaculture and Ocean Energy solutions. Upon completion, students will receive 10 volunteer hours of service to help them achieve an optimal college application packet.

The students will be expected to develop a research project analyzing a mutually agreed upon Ocean STEM topic. They will work closely with an AltaSea staff member and with dedicated scientific mentors over the duration. Students will fulfill the program by writing a scientific research paper representing their evaluation of the chosen topic. This paper will be published on AltaSea's Project Blue education website <https://altasea-project-blue.org/> and will be made available as a research resource for other students interested in marine science.

The research program is projected as follows:

High school students will be selected from the AltaSea application essays submitted. Applicants will study under the Sustainable Aquaculture focus and the Ocean Energy focus. An AltaSea staff member will remain in weekly contact with the students providing them administrative help.



Calendar

Week 1: Student will begin investigating different options for their paper. Research should be completed on at least three different topics finding background information on each. At the end of the week, students will email their scientific mentor with two or three thesis paper ideas.

Week 2: Student will contact their scientific mentor scheduling a 15-minute call in order to finalize their topic choice. They will present their three ideas to their mentor, who will discuss each and help guide them to their topic. The mentor will consider the student's interests and provide them with additional information to researching their chosen topic. Topics finalized and research will begin.

Week 3: Student will continue their research gathering as much information as possible. A broad outline/layout of information should be completed by the end of the week.

Week 4: Student will expand on their outline. At the end of Week 4, the order and content of their paper will be discussed with their AltaSea liaison to make changes and optimize quality. The paper should be well organized and have an adequate amount of information per section. Students will email their mentor to review the outline and to schedule another 15-minute call for answering any questions the student may have.

Week 5: The rough draft of the paper is written this week.

Week 6: The rough draft should be completed. **The paper will be reviewed by the scientific mentor before the student moves on to their final version.** After making corrections, the student will proceed with their final paper.

Week 7: Student continues to finalize the paper.

Week 8: The paper will be finished including a bibliography/works cited.

Research papers will be electronically sent to student's scientific mentor, school advisor who recommended the AltaSea program, and to Robin Aube, AltaSea Manager of Advancement at raube@altasea.org.



APPLICATION

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?

Sustainable Aquaculture

Ocean Energy

Statement of Interest

Please send a Statement of Interest with your application explaining what is most interesting to you about the focus you chose. (Essays should be a maximum of 250 words).

Please 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, we will send you a confirmation email.



Statement of Commitment

If I am selected as an AltaSea High School Research Mentorship program, I commit to the best of my ability to due diligence in writing a comprehensive research paper reflecting my focus chosen.

As a participant, I understand I will be virtually working with an accomplished professional in the individual field and with an AltaSea staff member investigating a mutually agreed upon topic.

The research paper will include the following:

- Abstract
- Introduction
- Methodology
- Results
- Discussion
- References

The program will formally begin on **April 5, 2021** and I will dedicate a minimum of 3 hours a week in writing this paper. The research paper is to be electronically sent to Robin Aube raube@altasea.org no later than **May 28, 2021 at 5:00 pm**.

Upon submission and approval that the research includes the six major parts referenced above, I will receive 10 volunteer hours towards my college application packet from Altasea at the Port of Los Angeles in a formal letter signed by AltaSea’s Chief Executive Officer, Tim McOsker.

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 work virtually with AltaSea partners; professionals in the Sustainable Aquaculture or in the Ocean Energy fields while completing this scientific research paper.

Parent Signature _____ Date _____