



Broadening Engagement and DEIJA



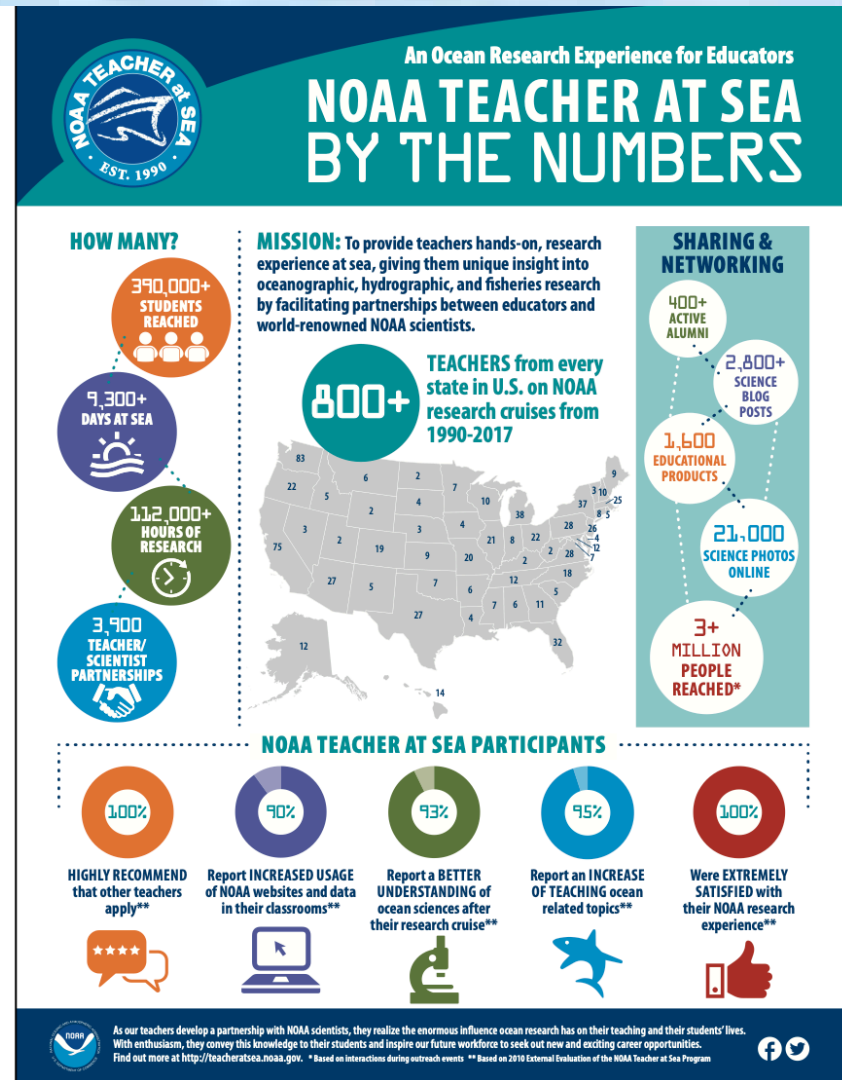
Diane Stanitski
NOAA Pacific Marine Environmental Laboratory
and colleagues

NOAA Teacher at Sea Program



NOAA Teacher at Sea Program

- Teacher at Sea has accepted teachers from all 50 states, American Samoa, Puerto Rico and Guam
- Teacher at Sea has sent over 800 teachers out on NOAA Research cruises
- Over 390,000 Students Reached
- Graduate Credits Awarded: 16
- Days at Sea: 9,300
- Research Hours: 112,000
- Active Alumni: 400+
- Media (articles, radio, TV, blog posts): 2,800+
- **Teacher/Scientist Partnerships: 3,900**



Commitment to Diversity, Equity, and Inclusion

NOAA's Teacher at Sea Program is committed to improving the diversity, equity, and inclusion of our program to better serve all Americans.

National



More Information

- > [Teacher at Sea Program](#)
- > [Diversity and Inclusion at NOAA Fisheries](#)

Recent News

FEATURE STORY

[\\$3.2 Million Recommended for Great Lakes Habitat Restoration National](#)



FEATURE STORY

[Stranding Network Partners Successfully Relocate Trapped Mother and Dolphin Calf in Louisiana](#)

[Southeast, National](#)



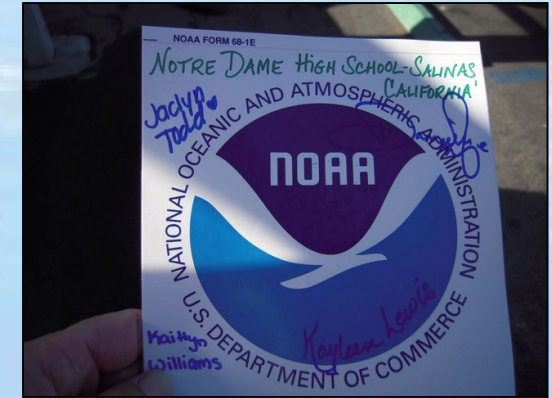
FEATURE STORY



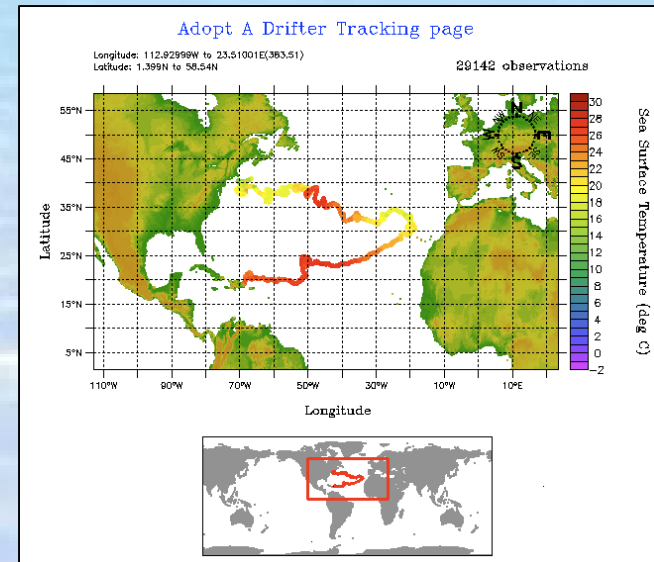
NOAA's Adopt a Drifter Program



A Program to Enhance Formal Education



Mission: To establish scientific partnerships between schools around the world to engage students in activities and communication about ocean climate science



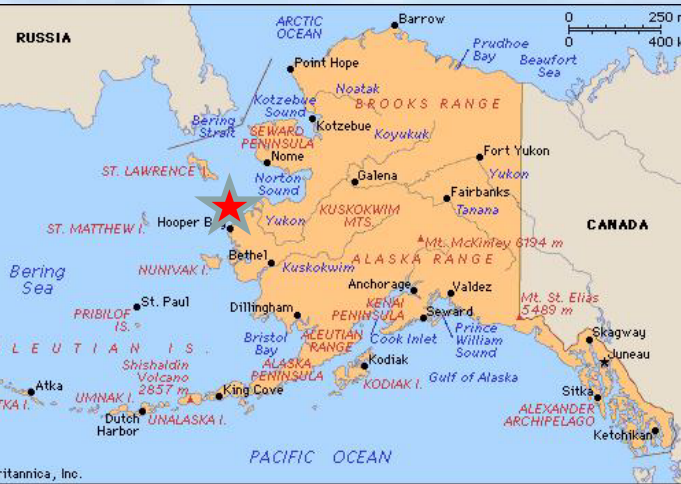
Adopt a Drifter Web Page - <http://www.adp.noaa.gov>

A NOAA Program Supporting Teacher-Scientist-Student Interactions: Exploring Science in an Alaskan Yup'ik Village



Image: Courtesy RyanHawk.com

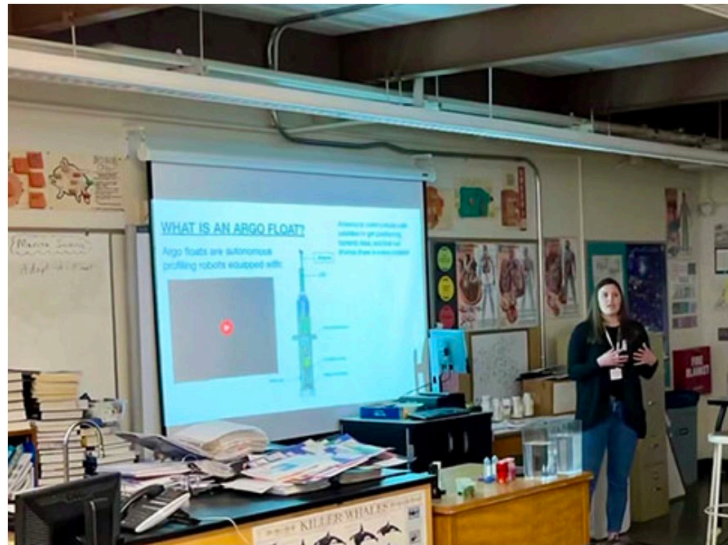
Watch TAS video: <https://www.youtube.com/watch?v=7TqDB15-YWc>



Opportunities to train future generations



- **NOAA Ambassadors Program**
 - Encourages employees to participate in NOAA-related outreach, education, and service activities in their communities
 - Ambassador Toolkit
 - Sign up here: <https://sites.google.com/noaa.gov/noaa-ambassadors-program/be-an-ambassador/sign-up>
- Mentor a Student
- Adopt-A-Float Programs
- NOAA Adopt a Drifter Program
- NOAA Teacher at Sea / NOAA Teacher in the Lab
- Broaden our engagement by incorporating requirements about including early career scientists, which strengthens our succession planning efforts and seeks to be inclusive



Andrea Fassbender discusses the basics of Argo floats with a class at Ingraham High School (3/2/23).

- Southern Ocean Carbon and Climate Observations and Modeling (SOCCOM),
- Global Ocean Biogeochemistry Array (GO-BGC),
- PMEL Global Observations of Biogeochemistry and Ocean Physics (GOBOP)



Big Green

Deerfield Academy, Deerfield, MA.



SOCCOM Adopt-A-float Reference Table - date last updated: 12-Dec-2020 05:12: (Click on table header items to sort)

You can use your float's Adopted Name, MBARI ID, or World Meteorological Organization
 - Track your float's location on the SOCCOM interactive map [here](#) (MBARI ID or WMO#)
 - Click [here](#) to find your float on the US Argo Global Data Assembly Center (GDAC) Have fun!

School_Name	Town	State	Float_Name	UWID Ocean-Ops link	WMO Euro-Argo link	Drop_Date	Date_last	Lat_last	Lon
Princeton Day School	Princeton	NJ	Huey	9668	5904663	20151208	20200909	nan	na
Princeton Day School	Princeton	NJ	Louie	9666	5904662	20151228	20180331	-47.885	-36.1
Princeton Day School	Princeton	NJ	Dewey	9646	5904661	20151228	20200530	-44.696	-14.4
Universidad Austral de Chile- Blog Winner	Valdivia	Chile	Jose Iriarte	9749	5904675	20160112	20191219	-43.7	110.6
John Witherspoon M.S.	Princeton	NJ	John Witherspoon	9645	5904676	20160117	20200815	-59.063	172.8
John Witherspoon M.S.	Princeton	NJ	Nemo	9757	5904679	20160118	20200302	-56.536	121.1
Lakeside Middle School	Seattle	WA	Tator Tot	0564	5904687	20160222	20160502	-62.521	83.6



#GOBGC Adopt-a-Float Reference Table - date last updated: 18-Feb-2022 05:32:16
 # (Click on table header items to sort)
 # You can use your float's Adopted Name, MBARI ID, or World Meteorological Organization (WMO#) to:
 # - Track your float's location on the SOCCOM interactive map [here](#) (MBARI ID or WMO#)
 # - Click [here](#) to find your float on the US Argo Global Data Assembly Center (GDAC) repository (WMO#)
 # To watch a float being deployed, click [here](#) to download a movie Tigger.MOV from soccom.princeton.edu
 # Have fun!

School Name	Town	State	Float Name	Ocean Ops link	Euro-Argo link WMO	Operator InstID	Date_first GMT_UTC	Lat_first degrees_N	Lon_first degrees_E	STN -999	CAST -999	Date_last GMT_UTC	I
Fauquier County Public Schools	Warrenton	VA	Eurona	OceanOps	5906342	19142	20210325	40.2430	-52.5570	18	1	20220210	3
Lewisburg High School	Lewisburg	PA	Lewisburg Eel Express	OceanOps	5906341	19061	unknown	unknown	unknown	25	1	unknown	u
Visitation School	Mendota Heights	MN	Vanadium Iodine Sulfur	OceanOps	5906440	19107	20210330	31.7300	-52.3100	32	1	20220213	3
Anoka Middle School for the Arts	Anoka	MN	Winston 7	OceanOps	5906435	19512	20210401	27.6020	-52.3240	39	1	20220216	2
Bayside													

Screenshot

Opportunities to support underserved/underrepresented



- NOAA Office of Education's José E. Serrano Educational Partnership Program with Minority Serving Institutions (EPP/MSI) Cooperative Science Centers (CSCs)
 - **NOAA Center for Coastal and Marine Ecosystems II** (CCME II - <http://ccme.famu.edu/>)
 - **NOAA Living Marine Resources Cooperative Science Center II** (LMRCSC II - <https://www.umes.edu/lmrcsc/>)
 - NOAA Center for Atmospheric Sciences & Meteorology II (NCAS-M II)
 - NOAA Center for Earth System Sciences & Remote Sensing Technologies II (CESSRST II)
- From 2003-2019, NOAA EPP/MSI supported:
 - 35% of African-Americans awarded PhD degrees in marine science
- Biannual NOAA EPP/MSI FORUM 2022
 - FL A&M University



Opportunities to support underserved/underrepresented



- Support/Sponsor Professional Societies – attend annual meeting, present, judge papers & posters, career panels
 - [American Indian Science and Engineering Society \(AISES\)](#)
 - October 19-21, 2023 - Spokane, WA
 - [Society for Advancement of Chicanos/Hispanics & Native Americans in Science \(SACNAS\)](#)
 - October 26-28, 2023 - Portland, OR
 - [National Society of Black Engineers \(NSBE\)](#)
 - March 20-24, 2024 - Atlanta, GA
 - [The Alaska Native Science & Engineering Program](#)



- OAR Tribal Working Group
- Co-production of science
 - Involve communities from the start
- Relevant metrics of success
 - Ask our partners what successful outcomes look like to them
 - “Permission to define metrics of success differently”
 - Value different approaches to success
- Reevaluate lengths of funding cycles
- Is making it easier for NOAA scientists to engage in partnerships with tribes and other underserved/underrepresented communities a priority?



The Olympic Coast as a Sentinel: An Integrated Social-Ecological Regional Vulnerability Assessment to Ocean Acidification

Jan Newton¹, Melissa Poe¹, **Simone Alin**², Samantha Siedlecki³, Melissa Watkinson¹, Richard Feely^{1,2},
Joe Schumacker⁴, Russel Svec⁵, Julie Ann Koehlinger⁶, Jennifer Hagen⁷,
Janine Ledford⁵, Rebekah Monette⁵, Ann Penn-Charles⁷, Justin Jaime⁷, Bernard Afterbuffalo⁶, Katie Wrubel^{5,8}
Jenny Waddell⁸, Steven Fradkin⁹, Meg Chadsey¹, Halle Berger³, Roxanne Carini¹

¹University of Washington, ²NOAA PMEL, ³University of Connecticut,
⁴Quinault Indian Nation, ⁵Makah Tribe, ⁶Hoh Tribe, ⁷Quileute Tribe,
⁸NOAA OCNMS, ⁹Olympic National Park

Funding: NOAA Ocean Acidification Program, UW College of the Environment, NOAA PMEL

Involves Indigenous coastal tribes with high ocean dependency: Four Coastal Treaty tribes
"The tribes of the west coast of the U.S. are literally on the frontline of ocean acidification impacts, we have a responsibility to know so we can plan for an uncertain future."

Schumacker, QIN

Watch a film about the project here: <https://youtu.be/Ud6mg3w5fiQ>



Extra slides

Broadening Engagement and DEIJA



- Where are we succeeding as a community? Where are the gaps in DEIJA we should focus on, both internally and externally?
- What opportunities exist for training future generations of ocean observers/scientists?
- Are we doing enough to reach and be responsive to the needs of underserved and underrepresented communities (both domestically and internationally)?
- Are we doing enough to include Tribal/Indigenous and other community voices in our work?
- What is working? What could we be doing better?



Cooperative Science Centers - NOAA Experiential Research and Training Opportunity (NERTO)

- NERTO is required for all CSC-award supported graduate students.
- Internship is minimum of 12 contiguous weeks at NOAA Facility guided by NOAA mentor and academic advisor.
- Students learn technical skills and understand organizational culture; apply academic training to real world problems and challenges; create networks for future academic and career success.
- Value to NOAA hosting office. Access to pool of new talent to advance mission critical research and operations.
- NERTO Development Protocol - <https://www.noaa.gov/office-education/epp-msi/nerto>

STUDENT SUCCESS STORIES

JEREMY CHUNG

Wednesday, August 09, 2017

Bethel, Alaska



Eighteen-year-old Jeremy Chung, Yup'ik from Bethel, Alaska, recently graduated high school and enrolled as an ANSEP **Summer Bridge** student. It was not a difficult decision for Jeremy to choose to spend his summer learning and getting real-world work experience – he has had his sights set on becoming a computer engineer for some time and knows this summer with ANSEP will give him a leg up. A first-generation college attendee at the **University of Alaska Anchorage** this fall, Jeremy says his computer engineering dreams are finally on the horizon, thanks to his drive for success as well as financial and academic support from ANSEP. We caught up with Jeremy this week to get to know this future Alaska engineer and learn what he's been up to this summer.

The Alaska Native Science & Engineering Program

<http://www.ansep.net/>



Support and encouragement from supervisors
who provide meaningful feedback, have confidence in you and act as an advocate.

1



Support and encouragement from peers
through sharing experiences and learning from and emboldening one another.

3



Mentoring schemes
which involve gaining guidance, skills and direction from mentor/s (including peer-, career development-, and/or personal mentor).

5



Improving academic or workplace culture
by providing a safe, supportive and collaborative environment for women leaders.

7



Adopting research strategies
which increase an individual's interdisciplinary skills and aid the design, delivery and impact of research.

9



Adopting specific characteristics and/or behaviours

2 which act as coping mechanisms, improve self-confidence, and/or aid career progression.

2



Informal networking

4 which connect women with internal and external networks of scientists (e.g. peer networking at conferences and meetings).

4



Implementing diversity, equity and equality policies

6 which aim to address inequity within academic institutions, amongst under-represented groups (e.g. women, minority or ethnic groups).

6



Creating a family-friendly environment

8 by implementing measures such as affordable childcare and adopting flexible work practices.

8



Putting women scientists forward for career opportunities

10 which aid career development and increase their visibility, including jobs, awards and presenting opportunities.

10

