



# NAML EDUCATION COMMITTEE UPDATE

MELINDA SIMMONS

EDUCATION COMMITTEE, VICE CHAIR

SAML Annual Meeting


16-18 April 2023

Dauphin Island Sea Lab

Dauphin Island, AL



IN 2022...

- EDUCATION WEBINARS
  - PAST RECORDED WEBINARS CAN BE FOUND AT:  
[HTTPS://WWW.NAML.ORG/RESOURCES/WEBINARS.PHP](https://www.naml.org/resources/webinars.php)
  - COMMUNITY OF PRACTICE CALLS
  - OTHER UPDATES
- 

# 2023-2025 – EDUCATION COMMITTEE

## COMMITTEE LEADERSHIP

- ITCHUNG CHEUNG - CHAIR, HATFIELD MARINE SCIENCE CENTER, OREGON STATE UNIVERSITY
- MELINDA SIMMONS, VICE CHAIR, JACKSONVILLE UNIVERSITY
- TERRY DONALDSON - MEMBER AS CHAIR OF PUBLIC POLICY COMMITTEE

## NEAMGLL

- LIZ SUTTON, SCHOOL OF FRESHWATER SCIENCE, UNIVERSITY OF WISCONSIN, MILWAUKEE
- CHRISTINA CATANESE, ANNIS WATER RESOURCES INSTITUTE, GRAND VALLEY STATE UNIVERSITY

## SAML

- VICTORIA YOUNG, SAVANNAH STATE UNIVERSITY
- KELLY DARNELL, UNIVERSITY OF SOUTHERN MISSISSIPPI

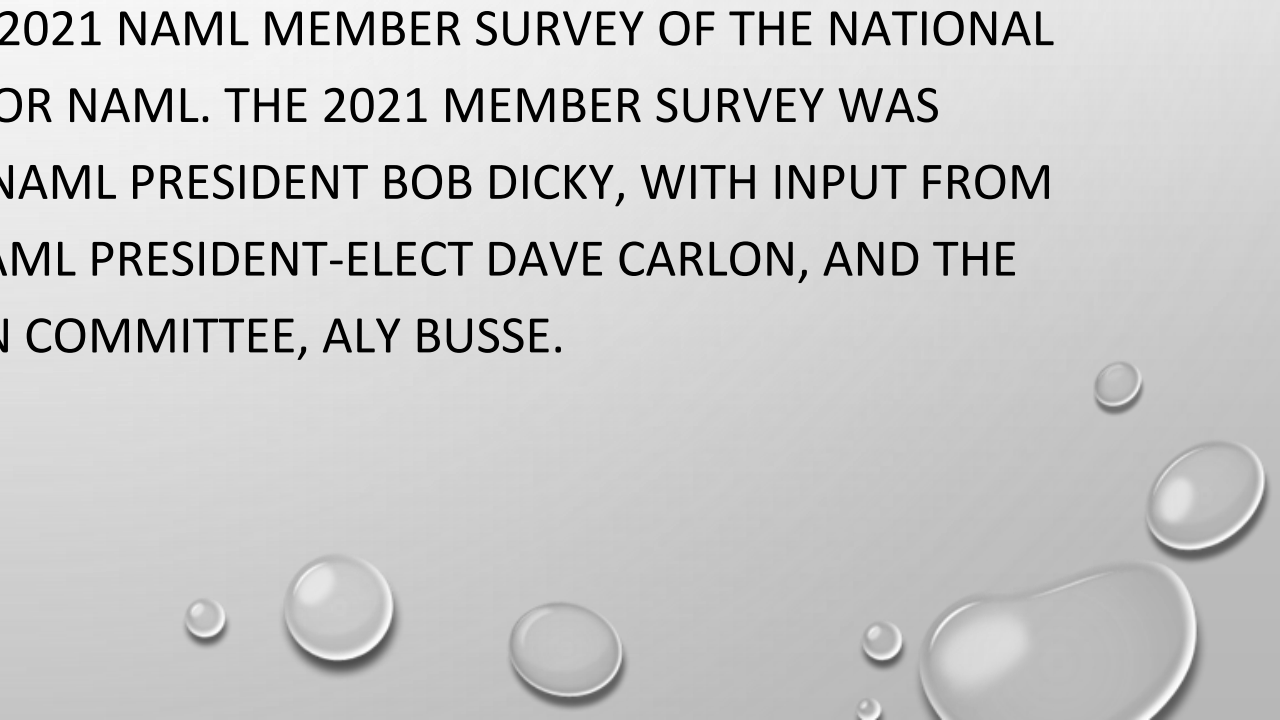
## WAML

- LAUREN WETZELL, UNIVERSITY OF HAWAI'I AT MANOA, KEWALO MARINE LABORATORY
- JEFF BOWMAN, SCRIPPS INSTITUTION OF OCEANOGRAPHY



# SUMMARY REPORT OF THE NATIONAL ASSOCIATION OF MARINE LABORATORIES 2021 MEMBER SURVEY FEBRUARY 2023

THIS REPORT IS BASED ON THE RESULTS OF THE 2021 NAML MEMBER SURVEY OF THE NATIONAL ASSOCIATION OF MARINE LABORATORIES, OR NAML. THE 2021 MEMBER SURVEY WAS DEVELOPED IN 2021 UNDER THE GUIDANCE OF NAML PRESIDENT BOB DICKY, WITH INPUT FROM NAML EXECUTIVE DIRECTOR LOU BURNETT, NAML PRESIDENT-ELECT DAVE CARLON, AND THE CHAIR OF THE EDUCATION COMMITTEE, ALY BUSSE.




# THE INTENT OF THIS REPORT ON THE 2021 MEMBER SURVEY IS TWOFOLD

1. PROVIDES NAML MEMBERS WITH A BROAD PERSPECTIVE OF NAML MEMBERSHIP AND NAML ACTIVITIES, INFORMATION THAT WILL BE HELPFUL TO MAKE SURE THAT EACH MEMBER IS CONTINUALLY SUPPORTED BY THEIR OWN ADMINISTRATION.
2. PROVIDE A MORE ACCURATE PICTURE OF THE CURRENT SCOPE OF OUR ACTIVITIES SO THAT OUR COLLECTIVE CONCERNS ARE BETTER REPRESENTED TO THE DIFFERENT BRANCHES OF LOCAL GOVERNMENTS AND THE UNITED STATES GOVERNMENT.



# EDUCATIONAL ACTIVITIES

**GOAL:** TO ASSESS THE CONTRIBUTION OF NAML INSTITUTIONS TOWARDS EDUCATING STUDENTS, DEGREE PROGRAMS IN WHICH UNDERGRADUATE AND GRADUATE STUDENTS SPEND A SIGNIFICANT TIME AT AN INSTITUTION'S LABORATORY INVOLVED IN COURSEWORK OR RESEARCH TOWARD A DEGREE WERE ASSESSED.



# EDUCATIONAL ACTIVITIES

## *Areas of Student Training*

NAML members support training in a variety of areas (science communication, statistics, using large data sets, and “omics”) at the undergraduate and graduate levels (*Q38 – College Student Training*). There was significant activity in all these areas (Table 3).

Table 3. Extracurricular training opportunities with a marine emphasis are strongly supported by NAML member institutions.

	UNDERGRADUATE STUDENT	GRADUATE STUDENT	TOTAL RESPONDENTS
Science Communication - public speaking/presentation	84.00% 42	80.00% 40	50
Science Communication - writing	80.00% 40	84.00% 42	50
Statistics	85.71% 30	82.86% 29	35
Using Large Data Sets	67.44% 29	86.05% 37	43
Omics (e.g., genomics, proteomics, metabolomics)	62.96% 17	92.59% 25	27

# INTERNSHIPS

## *Internships*

Internship programs are common among NAML members, with 57 responding institutions reporting one or more kinds of programs (*Q40 – Internships*). Undergraduate students account for most internships, followed by graduate students and high school students from 57 respondents (Table 4).

Table 4. The number of students involved in internships annually at NAML member institutions.

ANSWER CHOICES	AVERAGE NUMBER	TOTAL NUMBER	RESPONSES
Middle School	1	11	16
High School	7	186	28
Undergraduate	19	988	53
Graduate	7	222	33
Adult/Lifelong Learners	4	59	14
Total Respondents: 57			



# WE ASKED A FOLLOW-UP QUESTION SPECIFICALLY ABOUT UNDERREPRESENTED MINORITY (URM) STUDENTS INVOLVED IN INTERNSHIPS (Q41 – URM INTERNSHIPS).

Table 5. The number of Underrepresented Minority (URM) students involved in internships annually at NAML member institutions.

ANSWER CHOICES	AVERAGE NUMBER	TOTAL NUMBER	RESPONSES
Middle School	0	0	10
High School	4	76	19
Undergraduate	8	311	39
Graduate	2	47	21
Adult/Lifelong Learners	0	1	10
Total Respondents: 43			

# K-12 AND ADULT EDUCATION

Undergraduates averaged 157 students (n = 61 institutions) annually while graduate students averaged 37 students (n = 58 institutions) a year. Teachers and educators averaged higher than graduate students, with 53 served annually (n = 51 institutions).

Table 7. The number of individuals served by programs at NAML member institutions.

ANSWER CHOICES	AVERAGE NUMBER	TOTAL NUMBER	RESPONSES
K-12 served per year	3,327	199,592	60
Undergraduate Students served per year	157	9,572	61
Graduate Students served per year	37	2,164	58
Teachers/Educators served per year	53	2,707	51
Adults/Senior Citizens served per year	9,535	486,295	51
Total Respondents: 63			

PROGRAMS TARGETED TOWARD UNDERREPRESENTED MINORITIES (URM) AND USING THE SAME GROUPS (Q34 – URM NUMBER SERVED BY PROGRAMS), THE PROPORTIONS WERE VERY SIMILAR BUT THE TOTAL NUMBERS WERE MUCH LOWER (TABLE 8).

Table 8. The number of individuals served by programs of NAML member institutions that are targeted toward Underrepresented Minorities (URM). Compare with Table 7.

ANSWER CHOICES	AVERAGE NUMBER	TOTAL NUMBER	RESPONSES
K-12 URM served per year	602	20,482	34
Undergraduate Students URM served per year	19	848	45
Graduate Students URM served per year	5	207	38
Teachers/Educators URM served per year	15	439	30
Adults/Senior Citizens URM served per year	1,319	40,888	31
Total Respondents: 46			

# SUPPORTED ACTIVITIES FOR K-12 STUDENTS VERSUS ADULTS

Table 9. Supported activities for K-12 students and adults.

	K-12	Adult Education	Total Respondents
Onsite field trips	51	32	53
Outreach to schools	53	12	53
Camps (e.g., summer camps)	28	3	28
Residential programs onsite	14	7	18
Early childhood programs	3	1	4
Partnerships with schools (formal & informal)	45	13	45
Virtual programs	28	23	34
Research	30	20	37



# PRIORITIES AND ACTION ITEMS

CHECK OUT THE SUMMARY REPORT OF THE NATIONAL ASSOCIATION OF MARINE LABORATORIES  
2021 MEMBER SURVEY IS AVAILABLE ON THE NAML WEBSITE:

[HTTPS://WWW.NAML.ORG/RESOURCES/REPORTS.PHP](https://www.naml.org/resources/reports.php)



# MORE PRIORITIES AND ACTION ITEMS

- A CALL TO COMMUNITY TO PLEASE POST OPPORTUNITIES ON NAML WEBPAGE: [COURSES](#), [INTERNSHIPS](#), [JOBS](#)
- EDUCATION COMMITTEE/COMMUNITY OF PRACTICE DISCUSSIONS OPEN EVERY 3<sup>RD</sup> FRIDAY FROM 3-4 PM ET ON ZOOM.
  - NEXT MEETING SCHEDULED FRIDAY, 4/21
  - GUEST SPEAKER, CAIT GOODWIN, OREGON SEA GRANT EDUCATION SPECIALIST SHARING NEWLY DEVELOPED K-12 CURRICULUM OF THE VIRTUAL FIELD (THEVIRTUALFIELD.ORG)
- NAML TABLING PRESENCE, STUDENT AWARDS (PARAMETERS/ELIGIBILITY), EDUCATION NEWSLETTER
- ADDING LIST OF RESOURCES FROM THE NAML WINTER MEETING MENTORING PANEL TO THE NAML WEBSITE.
- DETERMINING NAML EDUCATION/EDUCATORS COMMUNICATION PLAN ELEMENTS – COMMUNICATION PLAN TO INCREASE NAML VISIBILITY

# QUESTIONS

WE ARE ALWAYS SEEKING FEEDBACK AND IDEAS FROM THE  
NAML COMMUNITY FOR AREAS OF FOCUS AND/OR  
COMMUNITY OF PRACTICE TOPICS. PLEASE EMAIL THEM TO

[EDUCATION.CHAIR@NAML.ORG](mailto:EDUCATION.CHAIR@NAML.ORG)