

Improving Diversity, Equity, and Inclusion in the Woods Hole Scientific Community: 2021 Update

By The Woods Hole Diversity Initiative

Institutional Representatives

David Mark-Welch, Marine Biological Laboratory
Nicole Cabana, NOAA Northeast Fisheries Science Center
Peg Brandon, Sea Education Association
Rob Thieler, U.S. Geological Survey, WHDI Chair
Meg Tivey, Woods Hole Oceanographic Institution
Heather Goldstone, Woodwell Climate Research Center
Max Holmes, Woodwell Climate Research Center

Executive Summary

In 2004, the leadership of Woods Hole's six science institutions came together to form the Woods Hole Diversity Initiative (WHDI) with the goal of working together to build more diverse workforces and more inclusive workplaces. This collaboration has continued through multiple changes in leadership; the current heads of all six institutions recently reaffirmed the WHDI memorandum of understanding that commits us to this goal.

The unusual combination of two federal government science centers, three non-profit research institutions, and a field-based undergraduate education organization has yielded unique opportunities and innovative programs, such as the Partnership Education Program, a nationally-recognized undergraduate summer research experience. However, substantive change in organizational demographics, structure, and culture has not progressed as quickly as hoped by many.

In 2017, the WHDI commissioned Dr. Robert Livingston of Harvard University's John F. Kennedy School of Government to conduct a study that would identify key areas of concern, and suggest concrete courses of action to address them. The resulting report galvanized our community and has informed work across all levels of each institution, as well as collective efforts to improve cultural competence, address systemic racism and cognitive biases, and develop more inclusive and just processes and policies. These activities fall into three broad themes and reflect not only the work of the WHDI and institutional leadership, but also grassroots initiatives developed within our institutions by staff, faculty, students, and members of the local community.

Diversity: The WHDI institutions have embraced a range of strategies for actively seeking more diverse applicants for existing educational and employment opportunities, as well as creating new pathways for engagement across career types and stages. This includes developing or deepening relationships with historically Black colleges and universities, community colleges, and minority-serving schools and organizations; advertising job opportunities through minority-serving organizations; and creating new opportunities to bring scientists at different career stages to Woods Hole.

Inclusion: The WHDI institutions are actively engaged in the necessary and difficult work of cultural change. Leadership is more communicative about diversity, equity, inclusion and justice (DEIJ) values and initiatives. The WHDI institutions have undertaken workplace culture or cultural competence assessments, offered new educational and training opportunities, adopted land acknowledgements and inclusive language practices, developed new support systems for community members from underrepresented and/or marginalized backgrounds, and increased resources for staff to engage in DEIJ work.

Sharing Learning: The WHDI institutions have gathered their senior staff for workshops and training in antiracism, hiring practices, and workforce development. In addition to working to improve our local institutions and community, Woods Hole community members are sharing lessons learned through courses and conferences designed to provide opportunities for the broader scientific community to engage in learning together.

This update reflects the ongoing commitment of the WHDI and its member institutions to the critical and sustained work required to make meaningful change. We acknowledge that we still have a long way to go to reach the goal of a diverse, equitable, and inclusive research community in which all individuals feel fully supported, valued, and included. Indeed, the exercise of compiling this update has highlighted not only building momentum, but also opportunities for greater synergy, as well as the need for more formalized accountability and reporting structures, a redefined role for the WHDI and any future joint Office of Inclusion and Diversity, and sustainability strategies for WHDI programs. As a group, leadership at the WHDI institutions commit to addressing these needs, and to a biennial progress review as an initial accountability measure.

Introduction

In 2004, the six Woods Hole science institutions – Marine Biological Laboratory (MBL), NOAA Northeast Fisheries Science Center (NEFSC), Sea Education Association (SEA), United States Geological Survey - Woods Hole Coastal and Marine Science Center (USGS), Woods Hole Oceanographic Institution (WHOI), and Woodwell Climate Research Center (Woodwell) – signed a Memorandum of Understanding (MOU) that established the Woods Hole Diversity Initiative (WHDI). The MOU recognized that diversity is a strength to be developed in our community. The WHDI enabled the institutions to work collaboratively to create “pathways of opportunity” that work to attract people from underrepresented groups by showing that the Woods Hole scientific and educational community has opportunities beginning with primary education and leading to higher education, postgraduate work, research and lifetime careers, both in Woods Hole and in the global scientific community.

The following year, the Woods Hole Diversity Advisory Committee (DAC) developed a roadmap to guide WHDI activities and initiatives. That roadmap catalyzed early successes, such as the launch of the Partnership Education Program (PEP), establishment of the John K. Bullard Diversity Award and Ambrose Jearld, Jr. Lecture, and creation of diversity committees and programming at individual organizations. However, the WHDI recognized that there were ongoing, structural challenges to its mission of developing diversity as a strength in our community.

Thus, in 2017, the WHDI commissioned Dr. Robert Livingston of the Harvard University John F. Kennedy School of Government to delve into these challenges and develop tailored recommendations. The Woods Hole Diversity and Inclusion Report was finalized and communicated to the WHDI institutions in April 2018 and has become known informally as the “Livingston Report.” The report illuminates issues of lack of diversity and systemic racism and bias in our scientific community, and in the larger community in which we live. The Livingston Report also provided a five-year “rehabilitation plan” consisting of discrete strategies and measurable steps.

The WHDI recognizes that our institutions have a responsibility to bring change to our Cape Cod community locally, and to the Earth and ocean sciences community globally. This process starts

with identifying problems and making changes in our own institutions. A commitment to change requires resources and hard work at all levels of our institutions.

Taking these steps is part of our commitment to reform, to improve equity and equality, and to better reflect the society that we serve as scientists, engineers, and educators. This requires sustained efforts at each of our institutions, and in the community at large. The WHDI member institutions reaffirmed their commitment to this work by re-signing the WHDI Memorandum of Understanding on July 27, 2021.

The WHDI and our respective institutions have taken the Livingston Report as a call to action. Much remains to be done but notable initial progress has been made, with the six institutions working to implement the recommendations in ways that fit their different organization types, sizes, funding models, and modes of operation. Here, we use elements of the topical structure of the Livingston Report to describe such work and progress. While the WHDI commissioned the Livingston Report and endeavors to support and amplify efforts to address its recommendations, individual and grassroots efforts have been critical in advancing important institutional and community issues, and are essential to create the changes that we seek as a scientific community.

What follows is not an exhaustive list of each action and initiative, but rather, an overview of our individual and collective approaches to addressing each recommendation of the Livingston Report, with representative and notable examples from individual institutions. Each institution maintains more complete accounts of their efforts and accomplishments from which content in this report is drawn.

Laying the Foundation

Commitment and learning on the part of institutional leadership is critical to the success of diversity, equity and inclusion initiatives. Shortly after delivering his report, Dr. Livingston met with leadership from all six institutions and developed a set of action items – separate from the report recommendations – that included:

- each institution developing and posting a formal diversity and inclusion statement, and developing an inclusive language policy;
- each director sending a personal email signaling commitment to inclusion and diversity across their organization;
- posting signage stating the commitment to diversity and inclusion;
- requiring inclusion plans for all recruitment and hiring processes;
- deepening the institutional commitment for a collaborative Office of Inclusion and Diversity; and
- fostering more community engagement.

Many of these action items emphasize the importance of communication. The individual institutions have developed diversity and inclusion statements (either posted or emailed), and there is a variety of inclusion-related signage around Woods Hole. Both individual directors and the WHDI as a group have issued multiple public statements reiterating commitment to DEI

work and recently provided public comment on the Town of Falmouth's hiring of a DEI Coordinator.

The WHDI has worked to engage our local community through public events organized by the Diversity Advisory Committee (see below), including Harambee and the Black History Month lectures that began in Woods Hole several decades ago, and Juneteenth celebrations. In addition, the WHDI sponsored three Listen Up! events in which people of color shared their experiences living and working in Falmouth and Woods Hole.

Individual organizations have also organized a range of events to highlight DEIJ issues, introduce new perspectives, and provide opportunities for discussion. For example, WHOI's 2020 Summer Lecture Series for PEP and WHOI Summer Student Fellowship (REU) students focused on early career researchers and speakers from groups underrepresented in ocean science who spoke about their background and path, as well as their research. Woodwell also launched an Indigenous Perspectives on Climate Change lecture series in summer 2021.

In an effort to honor Indigenous communities, the MBL, SEA, and Woodwell have chosen to observe Indigenous Peoples' Day on the second Monday of October. The Town of Falmouth recently adopted this recognition as well.

Woodwell's Diversity, Inclusion, Equity and Retention Committee members worked with the Mashpee Wampanoag tribe to create a land acknowledgement statement and attended a land acknowledgement workshop to further understand the 'why' of land acknowledgements. This land acknowledgement is included in email signatures and at the opening of all Woodwell-hosted events, both internal and external. Similarly, SEA and the MBL are actively discussing adding a land acknowledgment to all employees' email signatures, before presentations, lectures or workshops.

In addition, multiple institutions have adopted inclusive language standards and inclusive event guidelines, including preferred pronouns and land acknowledgements.

In an effort to permanently and publicly honor the contributions of traditionally marginalized scientists, multiple WHDI organizations are engaged in naming or renaming of campus spaces. In one notable example, WHOI worked with the Town of Falmouth to rename Maury Lane, which was named after oceanographer Matthew Maury. During the Civil War, Maury resigned from the U.S. Navy and joined the Confederate Navy, and took clear and public stances in support of slavery. The lane that is on the WHOI Woods Hole Village Campus is now Marie Tharp Lane, in honor of oceanographic cartologist Marie Tharp.

Institutional commitment to a joint Office of Inclusion and Diversity, as well as institutional structures for DEIJ work, has deepened. Since the Livingston Report, WHOI, MBL, and Woodwell have all established internal diversity and inclusion committees which now receive institutional funding to support their efforts. WHOI has hired a Chief Diversity, Equity, Inclusion Officer, while Woodwell is actively seeking funds for a DEI Coordinator, as well as fellowship programs described later in this report. USGS has identified a staff administrative position responsible for DEI program coordination within the Center, with USGS headquarters, and the

Woods Hole science institutions. SEA has created a DEI Task Force that includes board as well as staff representation. The WHDI continues to explore options to establish and sustain an Office of Inclusion and Diversity that will facilitate coordination among the six institutions and the broader community.

The WHDI has also strengthened the existing structure for joint DEIJ activities, adopting a formal charter for the Woods Hole Diversity Advisory Committee (DAC). The DAC supports WHDI member institutions in their efforts to promote diversity and inclusion in and among the WHDI member institutions, as well as the wider Woods Hole, Cape Cod and Islands communities. The DAC is composed of 2-3 staff members from each of the WHDI member institutions.

Diversity: Recruitment

To date, efforts to increase diversity in recruitment have focused primarily on three of the six possible strategies presented in the Livingston Report: widening the net, building bridges and fueling the pipeline, and bringing people to Woods Hole.

Widen the Net

The Livingston Report called on the institutions to think more broadly about hiring in different academic disciplines across the institutions; to consider new approaches to recruiting for positions and roles beyond science; and to better connect with the local community for job recruiting. A number of efforts are responsive to this call.

Job Postings

NEFSC has established an email listserv, nefsc.di-wideningthenet@noaa.gov, which is used to distribute job opportunities as well as internships and fellowship opportunities available at the NEFSC and NOAA to minority serving schools and organizations (e.g., Black Girls Dive, University of Maine, University of Maryland Baltimore County, American Association for the Advancement of Science, Association for Women in Science, Hispanic Association of Colleges and Universities, National Association of Black Scuba Divers, American Indian Science and Engineering Society). Similarly, Woodwell has expanded advertising for scientific and administrative job opportunities to include historically Black colleges and universities (HBCUs), Diversity.com, VeteranJobListings.org, Association for Women Geoscientists, National Association of Black Geoscientists, and the Society for Advancement of Chicanos/Hispanics and Native Americans in Science (SACNAS), among others.

NEFSC has also established as a business practice actively engaging hiring managers with the NOAA/Office of Human Capital Services business advisor prior to the distribution and publication of a vacancy announcement.

WHOI has significantly increased participation of underrepresented minority students in its Summer Student Fellowship program (undergraduate) and its flagship MIT-WHOI Joint Program (graduate) through a range of initiatives, including redesigning recruitment materials to

be more inclusive, developing social media channels and campaigns aimed at interacting with underrepresented affinity groups, publishing a student newsletter, and launching a support system for candidates unfamiliar with the application process. In 2020, the WHOI Academic Programs Office selected and funded two dedicated DEI faculty advisors to focus on recruiting students and postdoctoral researchers from diverse backgrounds, and on making WHOI a more inclusive environment.

On-site Recruiting and Partnerships

All six institutions are engaged in some form of on-site recruiting at HBCUs. NEFSC will conduct a Historically Black Colleges and Universities (HBCU's) Job Fair Tour 2022-2024, targeting majors that correlate with their recruitment plan. Woodwell is in the early stages of planning for post-pandemic on-site recruiting at HBCUs. Staff from MBL, USGS, and WHOI have attended SACNAS to recruit students and scientific staff. In addition, WHOI and their partners at MIT have visited (virtually) Rose-Hulman Institute of Technology and several minority-serving conferences, including Ivy Plus Puerto Rico, American Indian Science and Engineering Society, and the California Forum for Diversity in Graduate Education.

MBL also has a targeted recruitment plan in place, which includes reciprocal in-person visits to HBCUs and the MBL campus. These visits focus initially on sending individuals in leadership positions (e.g., graduate program directors), who already have broad networks in place and can therefore serve as ambassadors for further recruitment. In addition, MBL is working in partnership with the Morehouse School of Medicine and the University of Pittsburgh to bring cohorts of undergraduates from Morehouse and other HBCUs to embed for several days in MBL's Advanced Research Training Courses.

NEFSC has established contacts with over 10 minority serving organizations to formalize external partnerships, which has resulted in Memoranda of Understanding with the Hispanic Association of Colleges and Universities (HACU), Minorities in Aquaculture, and National Association of Black Scuba Divers.

As an organization primarily serving undergraduates and high school students, SEA's efforts have focused on expanded high school student recruitment through partnerships with select institutions that primarily serve Black, Indigenous, and People of Color (BIPOC) underrepresented in STEM. In summer 2021, SEA fully funded four students for a month-long Science at SEA program that included time in Woods Hole as well as a two-week expedition on an ocean-going research vessel. SEA has launched a permanent endowed scholarship fund to strengthen and grow these partnerships.

Build Bridges and Fuel the Pipeline

The PEP experience has led to new opportunities for students to continue their engagement with Woods Hole institutions. For example, several PEP alumni have participated in Woodwell's Polaris Project. PEP alumni have received graduate research and postdoctoral fellowships that enabled further collaboration with USGS and WHOI scientists. The PEP II program provides a

post-baccalaureate summer research opportunity for recent graduates to continue developing skills, networks, and experiences prior to entering the workforce or graduate school.

WHDI institutions are expanding relationships with minority-serving schools and organizations not only as a direct recruitment tool, but also with the goal of introducing a more diverse group of younger students to Woods Hole and opportunities in science, more broadly. For example, USGS has expanded existing programs with HBCUs and minority-serving institutions (e.g., City College of New York, Tennessee State University, University of Puerto Rico) to provide internships, seminars and course lectures introducing students to geoscience research and opportunities within its Center and the Woods Hole science institutions.

Another area of focus has been outreach to local primary and secondary schools to provide greater access to opportunities at the WHDI institutions. For example, USGS developed a local Secondary Transition to Employment Program - USGS Partnership (STEP-UP) with Falmouth Public Schools to provide students (mostly ages 18-22) with cognitive and other disabilities training experiences with USGS to gain valuable job skills to support their goals of seeking employment and living independently. NEFSC has sent inquiries to all school districts in all five geographical locations of the NEFSC from Maine to New Jersey seeking outreach partnerships, and is working to formalize an established informal partnership with Pope John Paul Middle School (primarily minority population) in Dartmouth, Massachusetts. MBL is offering a growing number of programs to high schools across the country, and has received funding to support local BIPOC students to participate.

One particularly exciting development is the creation of The Woods Hole Partnership. All six science institutions are signatories on a memorandum of understanding with Falmouth Public Schools that forms the basis for equitable integration of Woods Hole science and scientists into the curriculum at multiple grade levels. Staff and leadership from all WHDI institutions were involved in the development of this program. Falmouth Public Schools is currently in the process of hiring a liaison to formally launch programming in the 2021-22 school year.

Bring People to Woods Hole

Many of the recruiting and educational programs already described include opportunities for students to visit Woods Hole. In addition, the WHDI institutions host multiple research training programs and are expanding opportunities to connect Woods Hole with a more diverse network of scientists across career stages.

The Partnership Education Program is a ten-week summer research experience for undergraduates from underrepresented backgrounds that is jointly funded and operated by the WHDI institutions. This program has garnered national recognition, and has been growing in size and scope. To deepen the experience of PEP students, WHDI expanded the program's 10th anniversary celebration to include more awareness-raising activities. In June 2019, we also hosted a national conference on Optimizing Undergraduate Research Internship experiences for underrepresented groups in STEM.

Woodwell's Polaris Project engages college students from a diversity of backgrounds, supporting them on trajectories to solve scientific and societal challenges. The students and scientists use an interdisciplinary approach to research climate change in the Arctic, spending time in both Woods Hole and the Alaskan Arctic. This project creates long-term mentorship relationships, and Woodwell currently has two Polaris Project alumnae on its staff.

Multiple Woods Hole institutions have developed or are developing fellowship programs to bring students and staff from underrepresented backgrounds to Woods Hole. For example, USGS has provided dedicated funding for a USGS-WHOI postdoctoral fellowship to broaden participation by underrepresented groups, while the MBL has re-framed its E.E. Just Fellowship to broaden support for faculty from HBCUs or MSIs to include a research budget and funding to support accompanying undergraduate students with room and board. WHOI has secured funding to establish intern collaborations with Cape Cod Community College and UMass Dartmouth focusing on under-served populations. Woodwell is planning to launch a series of fellowships spanning career stages: Visiting Principal Investigator Fellow, Postdoctoral Fellow, and Early Career Scholar.

Through the E.E. Just Fellowships, MBL-Morehouse-UPitt consortium, and other newly established efforts through its Advanced Research Training Courses, MBL is bringing in a number of new stakeholders for first-time introductory visits to MBL and Woods Hole. These range from students to faculty to administrators with large networks of contacts who can themselves serve as ambassadors to recruit further.

Diversity: Hiring

Recommendations from the Livingston Report include a range of steps to make hiring procedures more equitable, including diversity policies for contractors, diverse interview panels, training for hiring panels, and professional development for new hires.

As a first step, WHDI obtained a grant from the Howard Hughes Medical Institute to conduct an antiracism workshop in May 2019 for senior staff from all six institutions, led by Crossroads Antiracism Organizing and Training. In addition, the WHDI provided inclusion and hiring manager training in September-October 2019 conducted by Dr. Robert Livingston, which focused on inclusive organization attributes and diversity hiring. Senior leaders involved in recruitment, hiring, and retention learned what inclusion means, and strategies for inclusive organizations to achieve more diversity in applicant pools.

Train and Employ Diverse Hiring Panels

Following the initial joint training workshops, each organization has pursued additional steps to diversify and train hiring managers and selection panels, as appropriate for the institution's size and structure. Below are a few examples.

MBL's faculty search committees are intentionally diverse and now include an assigned diversity "monitor" to attend to the diversity amongst the application pool and to ensure holistic and equitable review of all applications. Structured interviewing has also been implemented, and

MBL is working on how to extend these practices to staff hires. In partnership with the University of Chicago, all MBL hiring managers and Advanced Research Training Course Directors attend annual diversity and inclusion training, as well as other non-mandatory workshops and discussions which are available to all faculty and staff.

At Woodwell, a recruitment committee is working to establish diversity goals and strengthen recruitment and hiring protocols. The current hiring process is highly collaborative, with candidates meeting multiple staff members to enable insight into the organization and ensure that Woodwell's Human Resources staff receive diverse input. As any staff member may be called on to participate in hiring, recruitment and hiring practices are covered in all-staff diversity and inclusion training.

WHOI has created multiple positions in Human Resources tasked with reviewing and enhancing DEI practices in recruitment, hiring, and professional development. WHOI has also engaged a consultant to review and recommend hiring practices for research faculty, established diversity recruitment strategy meetings, and engaged in more training of hiring managers.

NEFSC is formalizing written and approved official NEFSC policies which (a) direct the usage of diverse interview panels with the requirement to explain any deviation from the policy to the pay pool manager for all hiring actions, and (b) direct a written certification of the referenced training materials within three days of an interview panel. Fifty resources have been identified to initiate the repository of resources which will be published on the NEFSC diversity and inclusion intranet. Further, NEFSC has invested in providing educational opportunities for its hiring managers and staff in building a more psychologically safe, diverse and inclusive work environment.

Provide Professional Development for All New Hires

NEFSC is utilizing various developmental programs such as NOAA's Leadership Competencies Development Program (LCDP), Presidential Management Fellows and other rotational opportunities to fulfill its NEFSC Strategic Diversity and Inclusion Plan 2020-2024. Competencies (e.g., overview of NOAA/NMFS, project management, technical writing) have been developed and approved for a NEFSC New Hire Professional Development program which is targeted to be initiated in calendar year 2021.

Woodwell has created an Educational Assistance Allowance Program for all staff, including new hires. This program was put on hold temporarily due to the COVID-19 pandemic. Woodwell offers all Research Assistants and Associates funding for professional development.

Hire Diverse Veterans

The Livingston Report singled out veterans as a diverse pool particularly suitable for recruitment by government agencies. In line with this recommendation, NEFSC is formalizing a policy which directs the NOAA Office of Human Capital Services (OHCS) to vet all vacancy announcements through all special hiring authorities to include the Veteran's preference

program. USGS has been very successful in using veteran’s hiring and excepted service appointing authorities (e.g., for persons with disabilities).

Diversity Policy for Contractors

As government agencies and organizations that are largely government-funded, the WHDI institutions face limitations on establishing policy relating to our contractor partners. However, we strive to hire a diverse set of contractors.

The Rooney Rule & Cluster Hiring

The Livingston Report recommended that the Woods Hole organizations adopt a Rooney Rule to ensure diverse applicant pools and engage in cluster hiring to provide new hires the support of a cohort; these are areas of ongoing work. Woodwell is in the process of adopting new application processing software which will enable the Center to enact a policy of only closing applications once the applicant pool has reached a predetermined diversity threshold.

Inclusion

One key recommendation of the Livingston Report was that leadership should communicate values and norms, and seize opportunities to exercise leadership and moral authority. As previously detailed, WHDI and individual institutional leaders have dramatically increased communication around DEIJ issues and are supportive – both philosophically and financially – of efforts to make Woods Hole’s science community more inclusive. The following are examples of such initiatives suggested by the Livingston Report.

Add New Wall Art

Multiple WHDI institutions are actively working to diversify the artists and subjects represented in wall art around our campuses. Upon reopening facilities, NEFSC plans to provide new wall art which represents diversity in science and other NEFSC occupations. WHOI has selected and hung diverse and inclusive wall art in the Joint Program Student Center.

In 2019, the MBL launched a project called “Selfies with Scientists,” in which summer camp attendees ages 8-12 interview a scientist of their choosing and write a short report with an action photo for display in a high traffic area outside the Swope dining hall. In 2021, the MBL changed the display of prominent scientists in the lobby of the Lillie building. The new "Legacy of Leadership" wall includes 10 scientists who better reflect the contributions of diverse MBL scientists. The name of the MBL's main auditorium was renamed in honor of one (now Cornelia Clapp Auditorium) and the wings of the MBL's main teaching building were named for the others. This year, MBL will have a rotating series of portraits (with short biographical information) displayed in high-traffic areas, highlighting the diversity of the resident and visiting/education community around the theme “Be Yourself @ MBL.”

Woodwell’s Art! Committee has developed a process for selecting and displaying art that represents its scientific community as well as the Indigenous and traditional communities where

the Center works in the field. This will be an ongoing activity, with the first new pieces slated for installation in 2021.

Create ERGs

NEFSC, WHOI, and Woodwell have all established a variety of employee resource groups (ERGs), and there are also cross-institution groups (e.g., GLOW, an LGBTQIA+ group in Woods Hole). USGS established a local group of Peer Support Workers (PSW) to promote awareness and provide outreach and education on topics and policies related to anti-harassment, discrimination, biases, and scientific integrity. The Center group is part of a USGS-wide PSW program through which PSWs receive formal training and support in their roles. The PSWs also connect local staff to a national network of USGS ERGs.

Establish Mandatory Diversity Training Program

In 2020, Woodwell engaged a consultant, The Avarna Group, to conduct a workplace cultural assessment and deliver five all-staff training webinars tailored to the results of the survey. The Center plans to conduct the cultural assessment annually to measure progress and determine new goals and challenges.

Similarly, USGS conducted an internal survey of workplace climate that measured staff concerns around diversity, equity, and inclusion. The Center began implementing activities targeting the most-frequent responses, including workshops on unconscious bias, microaggressions, and bystander intervention; employee support groups; office hours for support staff; cohort development for new hires. The Center conducted a center-wide, professionally-led unconscious bias workshop in September 2020, and PSWs are scheduling biannual workshops on cultural competence, diversity, inclusion, and psychological safety.

The NEFSC has engaged at the Center-wide level and respective division-level listening sessions on racial equity, gender equity, psychological safety, occupational bias and degree-ism, as well as trainings during All-Hands meetings on bias, emotional intelligence and emotional competency. The Center's educational opportunity forecast for the current fiscal year includes more diversity and inclusion awareness for all employees. Due to Federal laws and regulations, diversity training is currently voluntary rather than mandatory.

SEA has offered a series of training opportunities for faculty, staff and crew on bias topics including unconscious bias, anti-racism and pro-justice practices. Professional providers of these services include Tony Chapman and the Mosaic Project. Additionally, several faculty and senior staff completed a 14-week University of South Florida certificate program, Diversity in the Workplace, in spring 2021.

The MBL will hold an in person SafeZone training (post-pandemic) to create safe spaces on campus for BIPOC and underrepresented minority community members. Given the insight gained from the Livingston Report, MBL is committed to creating an environment where people who have experienced hostility or discrimination in our community or on the MBL campus feel

safe and assured reporting their experiences with the knowledge that MBL has a clearly defined reporting structure with a zero tolerance policy.

WHOI held three workshops on implicit bias to promote an understanding of how bias comes into play in its decision making. WHOI has also hosted a number of seminars, both internal and open to the public, on issues of discrimination and bias in science. While not formal training, the Committee for Diversity, Equity, and Inclusion hosts a Resource Library including links to antiracism resources, social media, toolkits, references, best practices, diverse speaker resources, minority organizations, bias calculators, and understanding racial trauma. In addition, MIT-WHOI Joint Program students provide near-peer mentoring for Summer Student Fellows and graduate students (including some SSF alumni), matched by surveys based on their interests, field of study, backgrounds and/or identities.

Foster Greater Warmth and Work/Life Balance

Each WHDI organization has pursued welcoming and work/life balance initiatives appropriate to their workplace. For example, the MBL has promoted different work day training opportunities, lectures, and cultural events (virtual and in person, local and national) amongst its faculty and staff to give people the chance to connect with peers on the topic of creating an institutional culture of inclusivity and to be part of a larger conversation.

The NEFSC has established two new programs implemented in January 2021: Casual Fridays and Morale and Collaboration Events. The established ERGs lead Casual Friday discussions centered around a variety of heritage months, as well as sociological issues in science (e.g., first-generation professionals, indigenous people commemoration, honoring veterans). The Morale and Collaboration Events focus more on personal growth and community engagement (e.g., fitness, team-building, kindness and gratitude, federal holidays).

Both NEFSC and USGS have introduced the concept of psychological safety to their staff. Accordingly, the leadership is committed to continuing educational opportunities and discussions on this topic.

In 2020, Woodwell began offering yoga during lunch once a week as part of a wellness program; this has continued virtually during the COVID-19 pandemic. In July 2020, Woodwell conducted a staff wellness survey and based on those findings they implemented the following changes: Slack Channel for staff to connect socially, happy hours, biweekly seminars, small group meetings outside, and small group dog walking. Additionally, Woodwell offers multiple resources to staff for mental and physical health through its health plan and sends regular reminders for staff to review those benefits. Woodwell plans to send the survey again in April, 2021 to measure progress.

WHOI's Workplace Climate Committee holds CommuniTeas, which have addressed topics such as Implicit Bias, and Hope Amidst Hurt: Anti-Racism and the Future of WHOI.

Sharing Learning

In addition to working to improve our local institutions and community, Woods Hole community members are sharing lessons learned and creating opportunities for the broader scientific community to engage in learning together. Notable examples include:

- USGS has engaged with the larger USGS community through the Natural Hazards Mission Area's (NHMA) hazards, race and social justice program begun in 2020. Using natural hazards as a focal point, this program convenes USGS staff interested in hazards and risk with experts whose research stands at the intersection of race and disasters for structured discussions on race and social justice. The program is developing practices and activities that can be applied elsewhere in the USGS to further diversity and inclusion, and identifying challenges that must be overcome to make these activities more prevalent.
- In celebration of the tenth anniversary of the Partnership Education Program (PEP), an NSF funded workshop, Optimizing Undergraduate Research Internship Experiences, was held June 27-29, 2019 to discuss ways to increase diversity and inclusion in the geosciences workforce. The Workshop brought together more than 100 former interns, administrators of research internship programs and directors of scientific organizations from 19 U.S. institutions and minority serving internship programs. Participants shared perspectives on how well current research internship programs are working and what can be done to make them more supportive and more effective in encouraging members of under-represented minorities to follow careers in the Earth and ocean sciences.
- The six WHDI institutions have also benefited from learning opportunities developed independently in our community. For example, in spring 2021, staff from across Woods Hole participated in the Unlearning Racism in Geoscience (URGE) program. URGE is a nationwide journal-reading and policy-design curriculum developed by scientists and staff nationwide, including WHOI, Woodwell, and Mizar Imaging (a Woods Hole scientific equipment business affiliated with MBL), and funded by the National Science Foundation. It is designed to examine racism and representation in geoscience to improve accessibility, justice, equity, diversity, and inclusion. The URGE program seeks to improve the broad base of knowledge about the effects of racism on the participation and retention of people of color in geoscience. A novel, small-group learning approach used published literature, expert opinions, and personal experiences to examine and improve policies and strategies to be inclusive and anti-racist. Several thousand participants in small learning 'pods' engaged in eight two-week units that incorporated readings, interviews with experts, and discussions focused on learning about and implementing anti-racist strategies. The URGE program enabled a structured examination and documentation of issues and needed change in a series of reports delivered to the URGE program. For example, the USGS Woods Hole had 21 staff participate in the program. Nationwide, USGS had 126 participants. The USGS leadership supports URGE and welcomes recommendations that will challenge it to make policy changes that increase inclusivity and reduce racism in the USGS and, more broadly, the geosciences.

Looking Ahead

As a result of the Livingston Report's recommendations and the work that has followed, our institutions are ready to take more concerted actions to change or dismantle the structures that underpin the lack of diversity and inclusion. We will continue our efforts to identify the many ways our culture, processes, and policies can be changed to be more inclusive, equitable, diverse, and just. As described above, these efforts are driven by both staff and leadership at each organization, and complement other efforts underway to improve how we execute our mission as institutions committed to research, learning, and stewardship for the society we serve locally and globally.

While we have made significant progress implementing these recommendations and taking other actions to address systemic racism and bias in our community, there is still much more work to be done. Our actions to date have neither identified nor solved all the problems and barriers to improvement that we face, but we are all committed to doing this work. We recognize that cultural change does not happen quickly, and requires sustained effort.

As leaders in our institutions and in our community, we recognize the importance of our own actions, but our own actions alone will not change the community – each member of the community must also participate. This work is the responsibility of all. There is something in this report for everyone. As you have read it and the actions we have taken, are there parts of it that resonate with you? If there are, please consider what you might be able to do to help with these tasks. Every action matters.

Acknowledgments

We thank the many people and groups at all six institutions who have carried this work forward over the years, as well as members of our broader community, for providing input, encouragement, and accountability. We also thank the members of the Woods Hole Diversity Advisory Committee for their leadership and initiative in creating new opportunities and programs that advance WHDI goals.

Several members of our community bear special recognition. Ambrose Jearld, Jr. has provided enduring motivation and commitment. John Bullard provided leadership that facilitated the formation of the WHDI. Susan Gardner was directly responsible for obtaining the support that enabled the Livingston Report. They, along with many others over the years, in big and small ways and at critical times, did things that built awareness and momentum to change our community for the better.