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DIRECTOR’S NOTE

As an anthropologist conducting social and cultural research on various coastal communities, I have been struck more by our similarities than our differences. One recurring theme I have seen across the world is the inequity between who has access to and benefits from oceans and who relies on oceans to live.

We know that the human relationship with oceans under modern market systems is unsustainable, unstable and inequitable. We hear that in stories about overfishing and plastic straws and coral reefs. What we do not often see are the human stories about the ocean communities that are already facing urgent ecological, social and political problems, even before complex environmental challenges are layered on. We are not in the rooms where scientists and leaders make political and societal decisions to the best of their ability while trying to avoid further disadvantaging the marginalized and the disempowered. We need to create a new platform for ocean governance to identify the inequities that exist, develop knowledge-based solutions, and actually enact these changes to make oceans equitable for everyone.

This is the aim of the Ocean Nexus Center, a 10-year collaboration between The Nippon Foundation, a global leader in addressing the complex challenges facing our oceans, and EarthLab, a new institute at the University of Washington designed to co-produce actionable research to address urgent environmental challenges.

With such vast issues to work out, I find it important to clearly say that we will not solve these issues on our own, nor will we cover the entire expertise of societal issues of oceans. We are academics
convening a transdisciplinary team from across the whole system to understand what is happening now, share stories with evidence, examine power dynamics, and propose solutions and tools that are needed for immediate outcomes today and to transform the system for the future. We are an enterprise to promote inclusive but critical thinkers, which do not have any support from political actors and do not serve any particular sector or state.

By engaging in interdisciplinary research, developing an innovative ocean network, creating fellowship programs, and through effective science communication, the Center will serve as a link between all its components to catalyze interactions and promote adaptability to emerging challenges and opportunities.

In our first year, we focused our efforts on building a broad network of partner institutes and researchers from around the world. Due to our unique approach, we recruited an array of social and natural science researchers on equity, social change capacity-building, policy and governance, and other disciplines for holistic study of changes to oceans and impacts on the communities that rely on them. The foundation of this network comes from the Nereus Program, a successful decade-long global partnership of 17 leading institutes working to advance our comprehensive understanding of the global human-ocean system across the natural and social sciences.

In tandem with growing our network, we are growing the capacity for our sector to do this work long into the future through our fellowship programs. This year, we have supported and collaborated with 30 fellows that are a mix of undergraduate, graduate, and PhD students and postdoctoral candidates.

While the COVID-19 pandemic has changed some aspects of how we will do this work in the short term, I am beyond proud of my nimble program team that has acted with care and urgency to set up our Center, build our network and programs, and plan an annual policy course, starting this fall. I am pleased to share that Ocean Nexus principal investigators have already started over 60 research projects on themes from ocean leadership to health and development to climate adaptation.

With all of this in place, Ocean Nexus is in a one-of-a-kind position to expand our understanding of our relationship with oceans, so all can access and benefit from the oceans equitably. And yet, after over a decade of working in this field, I am keenly aware of the magnitude of our mission. We will face many obstacles as we work towards shedding light on inequities, implementing solutions, and challenging power structures. This year, it is a pandemic. Nine years from now, who knows? What I know for sure is that systemic inequalities will not wait.

Yoshitaka Ota
Director
Nippon Foundation Ocean Nexus Center
PARTNERSHIPS

The Nippon Foundation Ocean Nexus Program has recruited partner institutions, principal investigators and fellows with a wide range of experience and expertise from around the world, as seen in Figure 1.

Each institution offers a unique perspective and capacity for research that can support and enhance the work of the other partner institutions. Contemporary issues related to our oceans require an interdisciplinary, collaborative approach to research and management. This network of connections and collaborations is key to advancing the Ocean Nexus research plan.

Figure 1 Map of partner institutions as of September 30, 2020.

MAP KEY:
- Ocean Nexus Partners
- Nereus Network Partners
PRINCIPAL INVESTIGATORS

Ana Spalding, Marine and Coastal Policy, Oregon State University

Andrés Cisneros-Montemayor, Institute for the Oceans and Fisheries, University of British Columbia; Deputy Director, Ocean Nexus

Annet Pauwelussen, Forest & Nature Conservation Policy Group, Wageningen University

Chris McOwen, United Nations Environment Programme-World Conservation Monitoring Centre

Chris Rothschild, Information School, University of Washington

Eddie Allison, WorldFish; Research Director, Ocean Nexus

Elaine Faustman, School of Public Health, University of Washington

Elsie Sunderland, Department of Environmental Health, Harvard University

Grant Blume, Evans School of Public Policy and Governance, University of Washington

Gerald Singh, Department of Geography, Memorial University of Newfoundland; Deputy Research Director, Ocean Nexus

Jack Kittinger, Global Institute of Sustainability, Arizona State University

Kate Barclay, Fisheries, Maritimes and Coastal Studies, University of Technology Sydney

Kate Crosman, NF Ocean Nexus Center, EarthLab, University of Washington; Principal Research Scientist, Ocean Nexus

Mathieu Colléter, École Nationale Supérieure Agronomique de Toulouse

Megan Bailey, Marine Affairs Program, Dalhousie University

Michael Fabinyi, Fisheries, Maritimes and Coastal Studies, University of Technology Sydney

P. Joshua Griffin, School of Marine and Environmental Affairs, American Indian Studies, University of Washington

Quentin Hanich, Australian National Centre for Ocean Resources & Security, University of Wollongong

Richard Caddell, School of Law, Cardiff University

Ryan Kelly, School of Marine and Environmental Affairs, University of Washington

Sherry Pictou, Schulich School of Law and School of Public Administration, Dalhousie University

Terrie Klinger, School of Marine and Environmental Affairs, University of Washington

Wilf Swartz, Marine Affairs Program, Dalhousie University; Deputy Director, Ocean Nexus
INNOVATIVE OCEAN NETWORK

Nexus partnerships complement the vast network of natural science-based studies undertaken by Nereus Program researchers to generate innovative and multi-dimensional research that will bring clarity to decision makers in ocean governance. Since 2011, the Nippon Foundation Nereus Program has led a global partnership of 17 leading institutes working to advance our comprehensive understanding of the global human-ocean system across the natural and social sciences. This includes almost 50 Fellows and Alumni with diverse backgrounds and expertise in a wide range of disciplines.

In Year One of Ocean Nexus, we created two interdisciplinary Nexus-Nereus workshops to develop a comprehensive typology that reflects the diversity of fisheries conflicts and to address environmental dynamics and food systems.

RESEARCH

Ocean Nexus research brings together expertise in social and natural sciences, from critical theory to policy analysis to equity and the environment, for a holistic study of changes to oceans and impacts on the communities that rely on them. Instead of modeling for the future, we address current issues with evidence and identify equitable solutions that can be immediately implemented for an equitable outcome.

In our first year, we funded 61 research projects and we have already published 14 reports, 13 in peer-reviewed journals such as Conservation Letters and Marine Policy.

![FUNDED PROJECTS BY CATEGORY](image.png)
### FOCUS AREAS

<table>
<thead>
<tr>
<th>Ocean Leadership</th>
<th>Governing Oceans</th>
</tr>
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<tbody>
<tr>
<td><strong>Develop scholarship for best practices in shared leadership.</strong> Consider how to foster shared leadership that would elevate the values of accountability, transparency, and legitimacy in ocean governance. 2020 projects include:</td>
<td><strong>Understand ocean governance processes.</strong> Investigate the decision-making process, from agenda setting and implementation to impact and evaluation. 2020 projects include:</td>
</tr>
</tbody>
</table>
| | |  • Gender and Indigenous perspectives  | • Blue Economy  
| | |  • Building Equitable Frameworks  | • Transparency in Decision-making  
| | |  • Collective Decision-making  | • Economic Impact of COVID on Fisheries |

<table>
<thead>
<tr>
<th>Human Dimensions</th>
<th>Protected Areas</th>
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<tbody>
<tr>
<td><strong>Promote community-based management and community-driven research on coastal environment and fisheries.</strong> Examine management and conservation project design and challenges that community face to develop self-determination. 2020 projects include:</td>
<td><strong>Examine the current strategy of Marine Protected Areas from both conservation and ocean governance perspective.</strong> Review the current implementation approach of MPAs and suggest alternative values and perspectives. 2020 projects include:</td>
</tr>
</tbody>
</table>
| | |  • Community-based Decision-making  | • Systematic Conservation Planning  
| | |  • Indigenous Ocean Ecologies  | • Linkage to the Land  
| | |  • Indigenous Scholarship Approach and its Application to MPA Design  | • Indigenous Scholarship |

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<tr>
<th>Ocean Tools</th>
<th>Ocean Assessment</th>
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<tr>
<td><strong>Develop and assess research tools and strategies.</strong> Create new tools and perspectives for ocean technology and develop new regulations for emerging tech. 2020 projects include:</td>
<td><strong>Co-develop and co-design indicators, assessments, and governance tools.</strong> Critically consider contexts and roles of ocean assessment while exploring tools and perspectives that would promote inclusivity and environmental justice. 2020 projects include:</td>
</tr>
</tbody>
</table>
| | |  • SDGs and Global Change: Strategic Priorities for SDG Attainment  | • Monitoring Ocean Acidification Impact on Oysters  
| | |  • Adapting Research Methodologies in the COVID-19 Pandemic  | • Data for Decision-making in Coastal Communities  
| | |  • Ocean Nexus Performance Measurement  | • Oceans and Public Health |

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<tr>
<th>Climate Adaptation</th>
<th>Health and International Development</th>
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<tbody>
<tr>
<td><strong>Promote governance policies on climate adaptation that include measures for social equity and justice.</strong> Develop tools and networks that empower coastal communities to prepare for socio-ecological changes while protecting their interests and security. 2020 projects include:</td>
<td><strong>Strengthen knowledge on the relationship between human health and oceans including international development initiatives that influence human and social wellbeing.</strong> Develop a framework for human health risks, looking comprehensively the wellbeing of collective and individual living, and assessing the current progress of international goals, such as Sustainable Development Goals or more specific development initiatives. 2020 projects include:</td>
</tr>
</tbody>
</table>
| | |  • SDGs and Global Change  | • SDG Goals and Wellbeing  
| | |  • Small-scale Fisheries Adapting to Climate Change  | • China’s Belt and Road Initiative  
| | |  • Migration of Coastal Communities  | |
The following list provides the Nexus program publications in Year 1 (2019-2020). Nexus authors have been bolded.


FELLOWSHIP PROGRAMS

We seek to train early-career scientists who are interested in a human-centered approach to oceans research and who will advance new perspectives of ocean equity. Our Research Fellowship are awarded to postdoctoral researchers for full-time, two-year assignments, while our Associate Fellowship are awarded to undergraduate, graduate, and PhD students for specific assignments. Both roles allow researchers to develop experience in the co-creation of knowledge, co-definition of research problems, and successfully linking science and decision-making.

OCEAN NEXUS RESEARCH FELLOWS

Alejandro Garcia Lozano, Global Institute of Sustainability, Arizona State University, Conservation International

Annet Pauwelussen, Forest & Nature Conservation Policy Group, Wageningen University

Chris Rothschild, Information School, University of Washington, Innovation Fellow

Harriet Harden-Davies, Australian National Centre for Ocean Resources & Security, University of Wollongong

Jacob Bentley, United Nations Environment Programme World Conservation Monitoring Centre, Durrell Institute of Conservation and Ecology, University of Kent

Jessica Vandenberg, School of Marine and Environmental Affairs, University of Washington

Kirk Sato, School of Marine and Environmental Affairs, University of Washington

Leah Fusco, Department of Geography, Memorial University of Newfoundland

Marleen Schutter, NF Ocean Nexus Center, EarthLab, University of Washington

Mathieu Colléter, École Nationale Supérieure Agronomique de Toulouse

Suzy An, School of Public Health, University of Washington

Tu Nguyen, Marine Affairs Program, Dalhousie University
OCEAN NEXUS ASSOCIATE FELLOWS

Ana Pozas, Institute for Oceans and Fisheries, University of British Columbia

Anna Ducros, Institute for Oceans and Fisheries, University of British Columbia

Araba Sey, Research ICT Africa

Bianca Hass, Australian National Centre for Ocean Resources & Security, University of Tasmania

Camille Mancion, Marine Affairs Program, Dalhousie University

Carlin Van Holmes, Evans School of Public Policy and Governance, University of Washington

Holly Amos, Marine Affairs Program, Dalhousie University

Izzi Lavallee, School of Marine and Environmental Affairs, University of Washington

Jessi Florendo, School of Marine and Environmental Affairs, University of Washington

Kamal Azmi, Australian National Centre for Ocean Resources & Security, University of Wollongong

Katie Shelledy, School of Marine and Environmental Affairs, University of Washington

Katrina Nakamura, Sustainability Incubator, Visiting Fellow

Katy Seto, Environmental Studies, University of California Santa Cruz

Mairi Meehan, Department of Geography, Memorial University of Newfoundland

Michelle Voyer, Australian National Centre for Ocean Resources & Security, University of Wollongong

Leo Hummel, NF Ocean Nexus Center, EarthLab, University of Washington

Randa Sacedon, Australian National Centre for Ocean Resources & Security, University of Wollongong

Rebeca De Buen Kalman, Evans School of Public Policy and Governance, University of Washington

Ricardo de Ycaza, School of Public Policy, Oregon State University

Risako Sakai, Department of Anthropology, Oregon State University

Russell Fielding, HTC Honors College, Coastal Carolina University, Visiting Fellow

Ruth Davis, Australian National Centre for Ocean Resources & Security, University of Wollongong

Sallie Lau, School of Marine and Environmental Affairs, University of Washington

Sonia Garcia Garcia, School of International Studies in the Faculty of Arts and Social Sciences, University of Technology Sydney

Tiff-Annie Kenny, Faculté de médecine, de l’Université Laval

Victoria Cullen, Marine Affairs Program, Dalhousie University
LEADERSHIP DEVELOPMENT

One of our long-term goals is to build a sustainable platform for ocean equity governance long after Ocean Nexus completes its 10-year program. This will require training a new generation of ocean scientists who understand and promote the interconnectedness of humans and oceans.

This year, we launched a policy training course that is a deep-dive into the world of ocean governance—how it works (or doesn’t), how research is used (or isn’t), and how to bridge the gap. Due to the COVID-19 pandemic, the 2020 summer policy training course has been adapted to an all online format beginning in October 2020. Up to 20 student fellows will attend lectures, discussion groups and office hours, scheduled at staggered times to allow participation across time zones.

2020 POLICY COURSE CURRICULUM

Over the course of one academic year, students will learn to answer the questions:

• What opportunities and mechanisms exist for fellows’ and PIs’ work to influence policy and management?
• How can fellows and PIs improve their ability to posit or analyze theories of change, and how can their input improve policy/management outcomes on the ground?
• How are decision-makers and the public likely to receive/understand fellows' work, and how do language, framing, level of specificity, etc. influence that reception?
• How can fellows and PIs craft research that will be of use to decision-makers, and understand the contexts in which their work may be used?
• What are the dimensions of social equity and how can they be applied to ocean governance and related research?
SCIENTIFIC COMMUNICATION

Building understanding is not enough. We need a new system of ocean governance that is socially equitable, inclusive, and promotes the diverse relationships that exist between people and oceans.

An integrative approach to science communication, engagement and outreach, beyond publication in peer-review journals, is fundamental to ensuring our applied research resonates with the people in charge.

This first year, we’re focusing on building the foundation for our digital footprint in order to track baseline numbers for future growth measurement. Longer term, we hope to change how decision makers and scientists discuss ocean governance and ocean equity. We’ll do this through publishing thought pieces, event presentations, social media, conversations with the media, and other high-impact activities.

SOCIAL MEDIA

TOP TWEETS

Ocean Nexus Center at UW EarthLab
@OceanNexusCn

Maintaining our various #HumanRelationships with the #ocean, keeping equity & inclusion at the center, can help build a #SustainableOceanEconomy that works for all. Learn more in new #BluePaper from @EddieAllison_ @OtaYoshitaka & @ICSF1 via @oceanapanel-
\[url]

Ocean Nexus Center investigators released a new resource for d... Researchers that typically rely on face-to-face forms of human interaction to collect their data can no longer do so due to h... [url]

Ocean voices need to be listened to.

Ocean Nexus Center at UW EarthLab
@OceanNexusCn

washington.edu/news/2020/06/3... Class and power determine who benefits from oceans and who does not. We’re here to change that. #oceanequity @uwearthlab

UW Earth Lab and The Nippon Foundation launch Ocean Nexus... The University of Washington and The Nippon Foundation today announced the launch of the Nippon Foundation Ocean... [url]

197 Followers
13 Tweets
520 Engagements
Our Twitter following is active and growing. Since our June 30 launch, we have added nearly 200 followers. Our average engagement rate per Tweet is 3.82%, far higher than the engagement rate widely considered effective, 0.48%.

Figure 2 shows where our followers call home. While almost 60% of our followers are located in North America, we are making headway in Europe and the Asia-Pacific regions.

PUBLISHED STORIES

Ocean Nexus has published five stories this year, not including the launch announcements covered in UW News, Mirage, and The Telegram. Our most popular story is the report on Adapting Research Methodologies in the COVID-19 Pandemic.

A “Green New Deal” for the oceans must prioritize social justice beyond infrastructure – Sept. 10, 2020

New “Blue Paper” highlights “once-in-a-generation” opportunity to transform our relationship with the ocean – September 8, 2020

DEOHS Professor Elaine Faustman leads health component of new interdisciplinary ocean research center – DEOHS, August 25, 2020

Memorial University professor part of global effort to better understand our relationship with the oceans – The Telegram, July 27, 2020


D4D Project Launch Under New Nippon Foundation Ocean Nexus Center at UW – July 6, 2020

ANCORS joins Nippon Foundation Ocean Nexus Center – Mirage, July 1, 2020

UW EarthLab and The Nippon Foundation launch Ocean Nexus Research Center – UW News, June 30, 2020

Changing the narrative on fisheries subsidies reform: Enabling transitions to achieve SDG 14.6 and beyond – May 1, 2020
OUR VISION

A future where oceans benefit everyone, equitably