



A Floating University for the Pacific Islands

**A university like no other, for the people and
nations of the Pacific Islands.**

PHOTO CREDIT: Rebekah Parsons-King/NIWA



Pacific
Community
Communauté
du Pacifique



The ocean sustains and connects Pacific Island nations and communities. Along with natural hazards, such as tsunamis, challenges such as sea level rise, ocean acidification and marine debris all impact the well-being of Pacific Island communities. However it is also the ocean itself that holds the key to understanding new and evolving challenges such as the sustainable management of coastal and pelagic fisheries.

1. Our Changing Ocean

There is an urgent need for Pacific Island nations to understand the changing ocean and how these changes, challenges and threats are undermining the resilience of island communities.

Despite the efforts of regional organizations, donors, and other partners, we need to find a better way for Pacific Island nations to develop their own science capacity. With a greater ability to understand ocean systems and emerging challenges, Pacific Island nations will be able to make more informed decisions about how to progress toward a sustainable and resilient future.

Ocean science is an expensive undertaking and Pacific Islanders currently have limited opportunities to pursue ocean science careers, and fewer still opportunities to participate in operations and research at sea.

2. A Floating University for the Pacific Islands

The Floating University for the Pacific Islands is a proposed platform for early-career scientists from Pacific Island nations to explore and resolve the key issues affecting their countries and communities. It will combine western science and indigenous and traditional knowledge, over time creating a community of scientists who will be able to draw upon one another's expertise throughout their careers.

The Floating University will initially be based on scheduled cruises by the RV Tangaroa, NIWA's deep-water research vessel. These planned cruises will be undertaken to service the new Deep-Ocean Assessment and Reporting on Tsunami (DART) network that was established across the southwestern Pacific Ocean to support detection and analysis of potential tsunami risks.

In 2023 and 2024, Pacific Island early-career scientists and students will join the Tangaroa on its scheduled DART maintenance cruises and participate in an ongoing ocean monitoring program by collecting and processing samples, managing data, and analyzing results. Participants will also be exposed to basic ocean engineering, instrumentation, and other technologies involved in ocean science.

While starting with the Tangaroa, the Floating University concept will create a platform on which other organizations that operate research vessels in the Pacific can also participate and contribute. The Floating University will create a community of participants and provide opportunities for them to share scientific results in local and regional forums and to engage with policy makers who need their science.

This and other research voyages in the Pacific would allow students and early career scientists from Pacific Island nations to conduct research at sea which is driven by community needs and priorities. The Floating University would support cohorts of participants and provide an environment to help young scientists progress in their careers whilst meeting Pacific Island needs for ocean science.



3. Benefits

The Floating University program would deliver direct benefits to Pacific Island nations including a network of scientists and practitioners across the Pacific region that could:



Identify

Identify solutions that resonate with Pacific Island nations as they address real-world problems and challenges;



Research

Research and analyze ocean processes that have profound implications for the region, such as impacts on regional tuna fisheries;



Strategize

Contribute to management strategies for issues like sustainable fisheries, biodiversity beyond national jurisdiction, and marine debris;



Collaborate

Create relationships and partnerships with organizations and scientists that will lead to future opportunities for collaboration; and,



Integrate

Create opportunities to bring together traditional and indigenous knowledge and western science in at-sea operations and to learn how at-sea research should be modified to conform to the cultural protocols of Pacific Island countries.

4. Program Development

NIWA, in collaboration with the Pacific Community, is supporting development of the Floating University for the Pacific Islands Programme. A first-year implementation plan has been developed with the expectation that a mentor and student development team will trial the concept during NIWA's May 2023 DART maintenance cruise and refine concepts and approaches for the first full Floating University for the Pacific Islands cruise in 2024. NIWA has funding for DART cruises through to 2032, but we expect that other government and non-profit research vessels will also participate in the Floating University initiative helping to create even greater opportunities for Pacific Island students and scientists.

“The Pacific is the largest ocean in the world, but Pacific Islanders have the least capacity in ocean science. The Floating University of the Pacific could help build the ocean science capacity we urgently need to make better decisions about our most important resources.”

KATY SOAPI, COORDINATOR FOR THE PACIFIC COMMUNITY CENTRE FOR OCEAN SCIENCE





First Year - 2023

January-February	Project planning, monitoring program design, mentor and participant selection
April-May	Participant orientation and training, including introduction to regional Indigenous and Traditional Knowledge
May-June	Demonstration Floating University for the Pacific Islands cruise; program and training module development at sea
June-August	Post-cruise evaluation and assessment; briefings for stakeholders and sponsors
September	Revised implementation plan
October	Applications for grant and other funding

Second and Following Years

November-December	Call for participant and mentor applications; initial cruise planning
January-March	Participant and mentor selection, cruise planning, science plan, and regional Indigenous and Traditional Knowledge integration
April-June	Participant, mentor, and crew orientation training
July-August	First operational Floating University for the Pacific Islands cruise
September	Cruise evaluation and assessment
September-December	Revised implementation plan, partnership development, funding applications, call for participant and mentor applications; initial following year cruise planning

“In the Pacific we really need more of our young people to study oceanography because we are Islanders and we use the ocean every day. The Floating University of the Pacific could help us build a new generation of ocean scientists.”

DANNY SHADRECH, OCEANOGRAPHER, SOLOMON ISLANDS
METEOROLOGICAL SERVICES