

Scripps operates oceanographic research vessels recognized worldwide for their outstanding capabilities. Equipped with innovative instruments for ocean exploration, these ships constitute mobile laboratories and observatories that serve students and researchers from institutions throughout the world.

R/V SALLY RIDE: AMERICA'S NEWEST RESEARCH VESSEL



Construction continues aboard *Sally Ride* to install, integrate, and commission the ship's systems in preparation for the vessel's delivery in spring 2016. Planning is underway for post-delivery installation of scientific instruments, sensors, and systems, followed by a four-month period of comprehensive sea trials and scientific system characterization. Once complete, the ship will undergo a final inspection in order to be designated "fit for unrestricted service" as a UNOLS research vessel, anticipated late 2016.

UC SHIP FUNDS PROGRAM

The Scripps commitment to world-class research and education is exemplified by the UC Ship Funds Program, which enables students, postdoctoral researchers, and early career faculty to pursue independent research at sea aboard Scripps ships. In 2015 more than 270 Scripps students, mentors, scientists, and technicians sailed aboard 11 dedicated research missions made possible through the program.

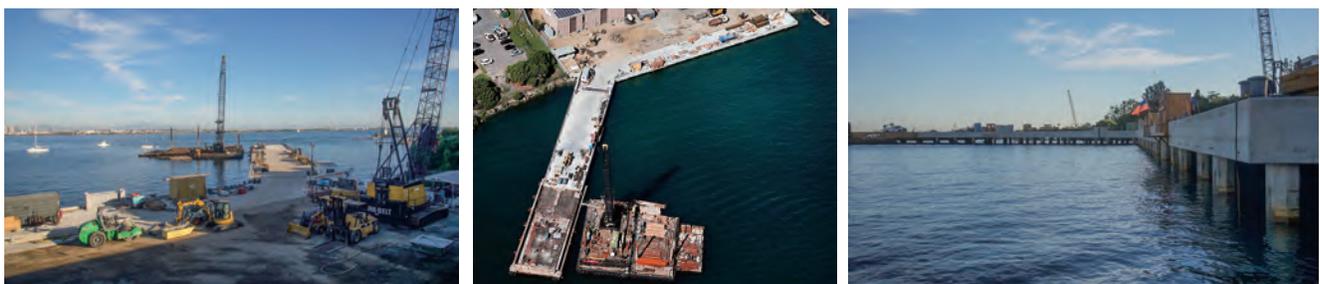
REVITALIZATION OF MARINE FACILITY WHARF AND PIER

For more than 50 years, the Nimitz Marine Facility (MarFac) has served as the Scripps home port on San Diego Bay. Last year we initiated a \$25.5 million project to revitalize the wharf and pier berthing facilities at MarFac, with structural and utility upgrades to enable efficient scientific mobilization of research

vessels. We will also improve our existing capabilities for "cold-iron" berthing, for a cleaner, quieter environment. When complete in January 2016, MarFac will be positioned to serve as America's finest oceanographic support center for the next half-century and beyond.



THE NIMITZ MARINE FACILITY (MarFac)



AMERICA'S FORWARD-DEPLOYED MOBILE LABORATORY

Global-class research vessels are critically important to America's worldwide research efforts. During 2015 our R/V *Roger Revelle* served with distinction in the South and West Pacific and Indian oceans for an impressive 306 days. With major support from the National Science Foundation and Office of Naval Research, *Roger Revelle* hosted scientists who studied risks related to submarine volcanoes, earthquakes and tsunamis, confirmed the presence of skyscraper-size internal waves, documented ecosystems at deep-sea hydrothermal vents, and defined the role of the oceans on the Asian monsoon.

100 PERCENT RENEWABLE FUEL ABOARD R/V SPROUL

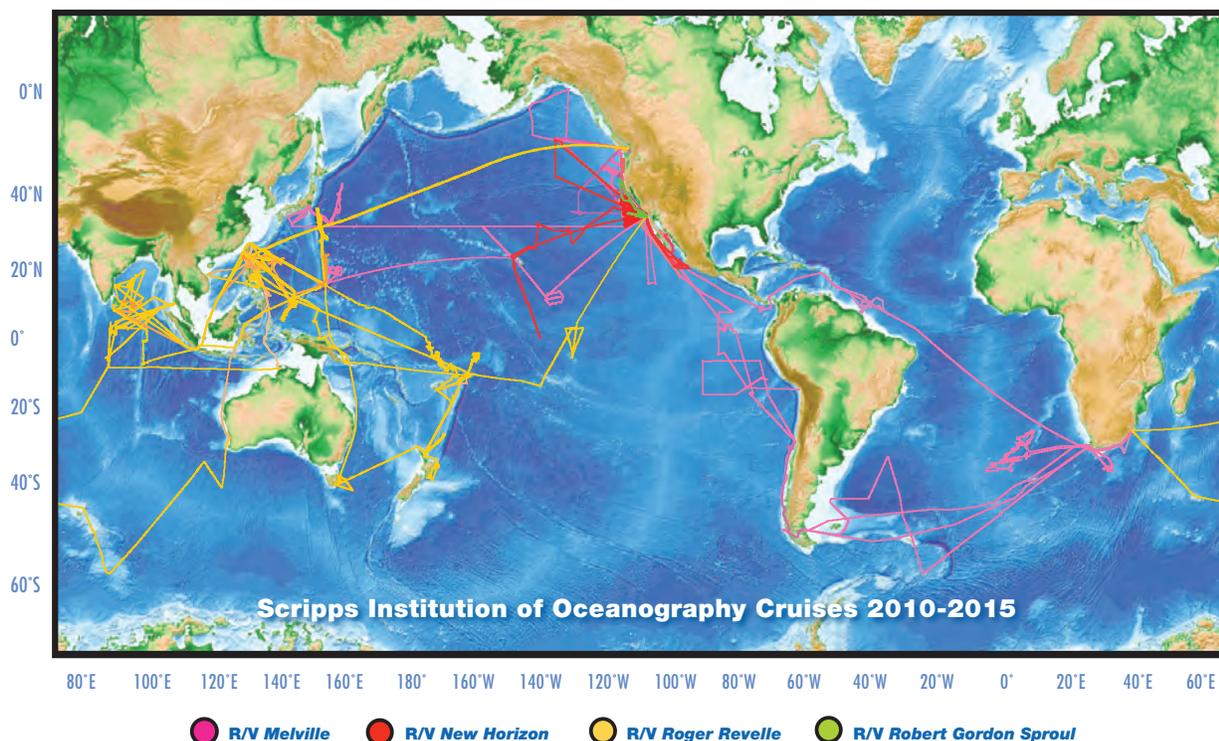
Advancing our role in environmental stewardship, in 2015 we demonstrated the practical viability of using 100 percent renewable biofuel to power a research vessel during normal

operations. Supported by a grant from the U.S. Department of Transportation, we operated R/V *Robert Gordon Sproul* exclusively on commercially available renewable diesel, produced from 100 percent renewable materials, as a drop-in replacement for petroleum fuel. During the study, Scripps atmospheric chemist Lynn Russell and her students continuously measured vessel emissions to understand biofuel exhaust impacts on air quality.

ALOHA TO MELVILLE AND NEW HORIZON

Two of our esteemed research vessels reached retirement age in 2014-15, and have been rotated out of active service. R/V *Melville*, owned by the U.S. Navy and operated by Scripps since 1969, was retired in October 2014 and is now being offered by the Navy to foreign governments. R/V *New Horizon*, which began service in 1978, completed two final CalCOFI missions before retiring in April 2015.

RESEARCH VESSEL TRACKLINES, 2010-2015



Scripps ships venture worldwide to address society's most fundamental concerns about our planet, our environment, and life on Earth. Crewed by professional mariners and marine technicians renowned for their skill in the demanding field of scientific ship operations, our vessels serve as mobile laboratories and control centers that allow teams of scientists at sea (and through telepresence, on land) to survey, observe, and assess our planet in a way that no other platform can. For more than a century Scripps research vessels have enabled safe, capable, and efficient scientific operations to scientists, educators, and students. Over the past five years, we have completed 304 separate research missions, carrying to sea 4,526 scientists, students, engineers, and explorers from 425 different research institutions and laboratories.