

# The world's only undersea research lab

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Aquarius Reef Base – the world's only undersea research lab – has come back to life under the auspices of Florida International University.

On Wednesday, FIU researchers celebrated the completion of a NASA training mission, "Sea Test II," the first since FIU took over Aquarius operations earlier this year, and offered the public a peek inside the habitat that allows scientists to live, work and train 63 feet under the sea for weeks at a time. Aquarius is located off Conch Reef in the [Florida Keys National Marine Sanctuary](#).

"Today we celebrate the re-birth of Aquarius," said FIU President Mark

B. Rosenberg. "We are grateful to our partners in the federal government and so many others who have made it possible for us to rescue this unique scientific gem and put it back to work for the benefit of the [global community](#)."

Aquarius, deployed in 1993 by the National Oceanic and Atmospheric Administration (NOAA), was slated for decommissioning this year, when FIU stepped forward with a plan to keep the reef base operational.

The special diving capability of Aquarius, called saturation diving, allows scientists to work underwater up to nine hours a day without fear of getting the bends, compared to one hour if they were diving from the surface. Increased research time is the key element that enhances scientific productivity beneath the sea. Aquarius is also used by NASA to train [astronauts](#) and develop engineering concepts, since the undersea environment is similar to conditions in space.



Jim Fourqurean, Aileen Soto and Christian Lopes pose under the wet porch of Aquarius.

"Our team has worked very hard over the past year to save Aquarius because we know the great work that has been done here, and we believe in the reef base's potential as a source of new scientific understanding and student discovery," said Kenneth G. Furton, dean of the College of Arts & Sciences. "We have an aggressive business plan in place and will continue to pursue financial viability through grants, gifts and underwritten missions."

The latest NASA mission, which ended last week, focused on proof-of-concept engineering demonstrations and refining space communication techniques.

"After many years of working at Aquarius, we are very happy that FIU has taken over the operations," said Bill Todd, project lead for NASA's Sea Test and NEEMO projects. "All of the staff were very well prepared and allowed us to complete another successful astronaut training and engineering mission. The teamwork between NASA and its international partners, the U.S. Navy and FIU on this very first mission under FIU leadership was exemplary."

Provided by Florida International University

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