

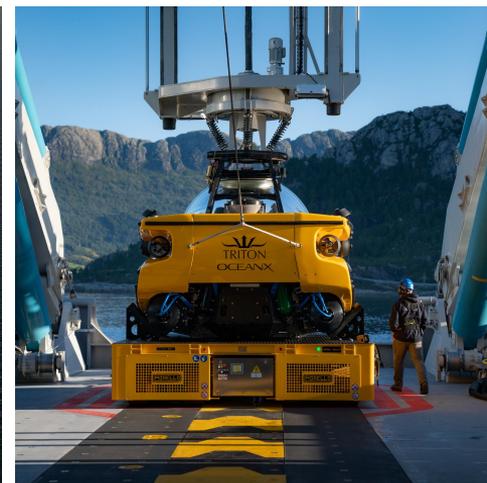
OCEANX PRESENTS

OCEANXPLOERER¹



OceanXplorer is the most advanced exploration, scientific research, and media production vessel ever built.





***OceanXplorer* was built to help OceanX realize its core mission of exploring the ocean and bringing it back to the world.**

The vessel was designed and constructed to push the boundaries of ocean exploration, to facilitate groundbreaking scientific research, and to document stories of discovery to share with the public worldwide.



Dry Lab One



ROV
Sub Garage

***OceanXplorer* is a powerful integrated research platform. It will expand not only where scientists research but also how they conduct it.**

OceanXplorer will provide access to the most advanced research and analytical tools in the world, including advanced submersibles, ROV, AUV, chemical, biological, and geophysical sampling tools and a centralized data integration system. These tools allow scientists to conduct incredibly comprehensive marine research and data analysis, all onboard.

Its missions will provide a comprehensive, real-time picture of ocean ecosystems from surface to seafloor.

The ship's tools allow it collect all types of biological, geological, and chemical data, as well as a centralized onboard system for data analysis and visualization—all without needing to send data or samples to external labs for processing.



Nadir Triton
Completing Test
Dive in Norway

OceanXplorer's incredible research capability is combined with Hollywood-quality production facilities and set design.

Every detail of *OceanXplorer's* media equipment has been designed for seamless expedition filmmaking that pushes the limits of nature cinematography.



OceanXplorer
Helicopter Rig

The ship was built in consultation with the legendary filmmaker James Cameron and production designer N. C. Page Buckner (*One Night in Miami, The Amazing Spiderman, Iron Man 2*) to give it all the functionality of a studio-set—while sailing some of the ocean’s most difficult conditions.

Our goal is to bring the same global attention to and enthusiasm for ocean exploration that space expedition has. Humans have livestreamed broadcasts from the moon and beamed back images from Mars—yet the environments in our terrestrial oceans can be even more alien and extreme. We will document the adventures of the daring scientists and explorers who are pushing hard to expand our knowledge of Earth’s most precious natural resource.



Nadir
Sub Camera Rig

**Currently, over 80%
of the global oceans
are unmapped and
underexplored.**

As *OceanXplorer* travels to remote locations, OceanX will illuminate these areas and seek to collect as much information as possible in order to inform conservation and management—and excite the world through discovery. Each expedition will be multidisciplinary, utilizing the vessel's vast array of assets and equipment to better understand our underwater world.



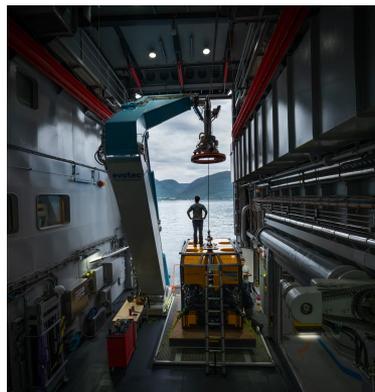
OCEANXPLOERER¹

**INTEGRATED SCIENCE
& MEDIA LIKE NEVER
BEFORE**

***OceanXplorer's* fully-equipped “floating research institution” will allow scientists from marine institutions around the globe to comprehensively characterize the ecosystem’s geological, oceanographic, and biological qualities from surface to seafloor.**

For example, *OceanXplorer* can be deployed to survey an unexplored ecosystem and characterize its unique geological and biological features. Arriving in the study area, sonar systems onboard can be utilized to create a high-resolution 3D map of the bathymetry, including what’s under the seafloor. That data is processed and analyzed in real time aboard the vessel, allowing the team to strategically deploy our deep-sea assets: the subs, ROV, or both.

If the survey finds an anomalistic feature, for example a possible active hydrothermal vent field, the ship’s CTD device can be used to “sniff” out the chemical signature that would triangulate the vent site location and provide details on its activity. Then, depending on the depth, we can deploy our ROV to fly down and show us, from a livestream camera feed, what that vent looks like.

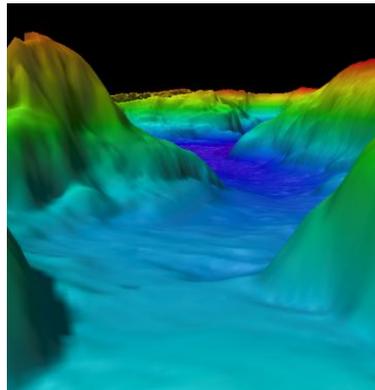


From there, we can survey the vent field, collect a variety of biological, geological, and chemical samples, and check for new species living in this extreme environment.

The ROV also can create a 3D map of each site surveyed and generate high-resolution video streams that can be viewed on any screen aboard the vessel or broadcast globally, giving audiences the experience of being right there along with the ROV.

Samples and species observed around the vent can be collected and brought onboard into our cold tank room and wet lab for identification, sorting, and filming. Unfamiliar species filmed from the subs or ROV can be collected and then undergo sample processing in our labs, including genetic sequencing to determine if the specimen collected represents the discovery of a new species.

This entire integrated work-flow compresses the timeline of scientific discovery—whereas typically the process of mapping, to feature discovery, to sampling, to characterization would unfold over multiple missions over long time periods, *OceanXplorer's* unique platform has the potential to bring both scientists and audiences along in real time.



OCEANXPLOERER¹

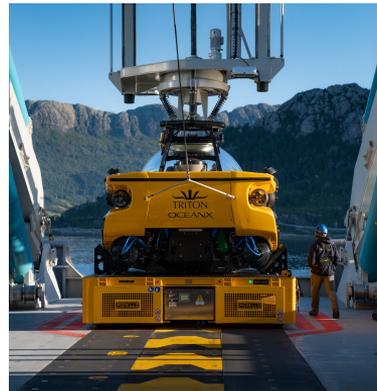
**SIMULTANEOUS LAUNCH OF
MULTIPLE SYSTEMS TO
SUPERCHARGE DISCOVERY**

Through its simultaneous launch capabilities, *OceanXplorer* can deploy a unique array of marine research assets to unlock the secret lives of some of the ocean's most mysterious creatures.

For example, sperm whales and their prey, the giant/colossal squid, have relatively little data collected about them because huge portions of their life cycles have never been observed in the wild. Sperm whales have often been seen at the surface or heard with hydrophones, but no one has successfully filmed a sperm whale's hunting behavior at depth.

The wide range of observation and discovery vehicles aboard *OceanXplorer* would allow scientists to start with aerially surveying and spotting sperm whales from the helicopter and tracking them over their spatial range, allowing them to capture their movement and behavior. Building on that understanding of their approximate range as well as simultaneous aerial spotting from the helicopters, they could then deploy hydrophones, cameras, and the submersibles/ROV in target areas in a way to maximize their chances of observing their behavior at depth.

While conducting these other operations, the team will also be able to sample the environment using the CTD and eDNA analysis to provide a complete characterization of the habitat preferred by these whales. With all this data in hand, scientists will be able to ask big questions about what environmental drivers are influencing sperm whale populations and how these drivers might change over time.



OCEANXPLOERER¹

**HOLLYWOOD PRODUCTION
QUALITY EMBEDDED INSIDE
A WORLD-CLASS RESEARCH
FACILITY**

Every aspect of *OceanXplorer's* scientific and operational equipment was custom-designed with media production in mind. These customizations allow for studio-quality cinematography without interrupting the conduct of groundbreaking marine research.

For example, when exploring a highly dynamic underwater environment such as the brine pools—highly saline underwater lakes inhabited by extremely unique organisms—camera crews will be able to film continuously using lighting rigs and camera housings that can be adjusted from both inside the submarines and at the ROV controls.

This will allow them to film for hours, following wildlife and natural phenomenon in real time without having to resurface to adjust settings.

The video stream from the submarines can be transmitted in real time via a novel optical modem to the ROV, where it can travel via fiber optic cable up to the ship for live broadcast worldwide. Meanwhile, in mission control, data streams from mapping and sampling devices will provide graphic visualizations of the environment that can be shared with viewers using onboard camera crews. When the sub brings a sample organism to the surface for further study, these same crews can follow the sample from sub recovery into the ship's wet lab, where ceiling-mounted tracks and power supplies can support production lighting and other equipment without cords, tripods, or other production tools getting in the way of the scientists at work. Across the ship, more than 3,000 custom light fixtures and dozens of smart glass and other screens will help document the work of the scientists as they learn more about rarely-studied specimens.

