



New Frontiers in Ocean Exploration

The E/V *Nautilus*, NOAA Ship *Okeanos Explorer*,
and R/V *Falkor* 2018 Field Season

GUEST EDITORS

Nicole A. Raineault and
Joanne Flanders

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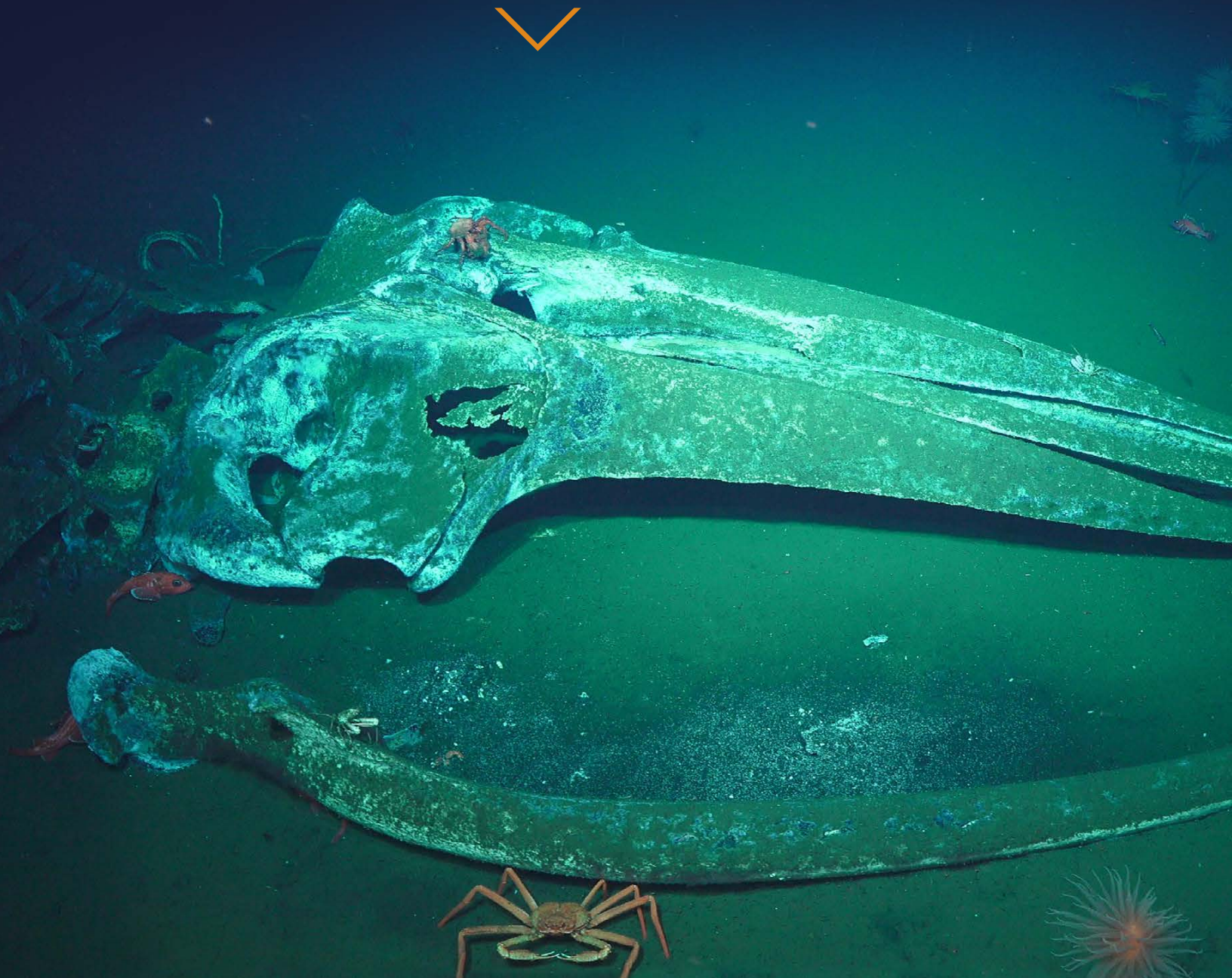
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FRONT COVER

A high-density habitat consisting of deep-sea sponge, coral, and squat lobsters on a previously unmapped and unexplored seamount in Papahānaumokuākea Marine National Monument. The photo was taken during E/V *Nautilus* cruise NA101. Image credit: D. Fornari (WHOI-MISO Facility) and OET

The R/V *Falkor* team dove on “Rosebud,” a whale fall that was placed by researchers off San Diego, California, in La Jolla Canyon. Researchers noted changes in composition and life forms around the location in a beautiful, exciting dive investigating ecosystems unique to whale falls. Image credit: SOI





a year for *Okeanos Explorer* as an at-sea Watch Lead. Neah has also completed work for the Ocean Exploration Trust aboard E/V *Nautilus*. The most recent addition to the OER Mapping Team is Shannon Hoy—a former EiT (2010) who participated in numerous research expeditions, working for multiple institutions, including the US Geological Survey, Ocean Exploration Trust, and the University of Bristol. She is completing a MS degree in ocean mapping at the University of New Hampshire.

The mission team from the 2017 *Okeanos Explorer* trip through the Panama Canal and transit mapping through the Caribbean. Back row (from left to right): Miya Pavlock McAuliffe (EPP), Derek Sowers (OER Expedition Coordinator/Mapping Lead), Daniel Freitas (Watch Lead), Susan Haynes (OER Education Program Manager), Charles Wilkins (Senior Survey Technician), Ko Barrett (NOAA Office of Oceanic and Atmospheric Research Deputy Assistant Administrator). Front row (from left to right): Amanda Bittinger (Watch Lead), Rebekah Hernandez (EPP), Kelsey Lane (EiT), and Victoria Dickey (EiT).

Demonstrating Commitment to Diversity, Equity, and Inclusion 2018

By Catalina Martinez, Daniel Wagner, Mashkoor Malik, Derek Sowers, and Susan Haynes

A key recommendation of a recent external review of the OER education program was to develop new opportunities to engage a broader audience. As part of this effort, OER is collaborating with the NOAA Office of Education and the newly developed Ocean Discovery Institute (ODI) in San Diego, California, to develop and implement ocean science/exploration programming tailored to the diverse City Heights community served by ODI. Listening sessions, an effort OER began at the American Indian Science and Engineering Society Annual Conference in fall 2018, will be conducted through this partnership to ensure all efforts meet the specific interests, needs, and requirements of the particular communities and groups OER hopes to reach.

OER continues working with teams across NOAA on a more visible and coordinated presence at key minority-serving conferences focused on relevant STEM fields. The strategy includes student-centered networking, engagement, and professional/career development opportunities, as well as recruitment efforts, leadership engagement, and a more deliberate approach to staffing and participation overall.

NOAA personnel worked with Kendall Moore, a University of Rhode Island professor of journalism, on a documentary titled “Can we Talk? Difficult Conversations with Underrepresented People of Color: Sense of Belonging and Obstacles to STEM Fields,” that includes interviews with



Global Foundation for Ocean Exploration Engineer Fernando Aragón explaining ROV operations in Spanish during ship tours of *Okeanos Explorer* while docked in San Juan, Puerto Rico, prior to the Océano Profundo 2018 expedition. Close to 50 local partners participated in the tours, including representatives from local management agencies, academic institutions, nongovernmental institutions, school groups, and the private sector. Ship tours, as well as other science and outreach activities, were given in both Spanish and English in order to engage a wide diversity of audiences in ocean exploration.