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SPOTLIGHT 13.

Reaching Out and Preparing the Next Generation

Outreach in scientific ocean drilling over the last five decades has taken many forms and has targeted diverse audiences, including the lay public, students and educators, and the Deep Sea Drilling Project, Ocean Drilling Program, Integrated Ocean Drilling Program, and International Ocean Discovery Program (IODP) communities themselves. The primary objectives are to raise awareness of scientific ocean drilling and its benefit to society, to encourage global scientific literacy and foster enlightened stewardship of the planet, and to inspire students and attract them to the general field of Earth sciences and to scientific ocean drilling in particular. To achieve these goals, evidence-based outreach components are strategically employed, including ship-to-shore video events, collaborations with museums, lecture programs, graduate student fellowships, training schools for early career scientists, web-based educational materials for teachers, and traditional and social media activities.

Recent high-profile IODP expeditions have sparked significant media and public interest. The British Broadcasting Corporation (BBC) and the US Public Broadcasting System (PBS) aired documentaries on Expedition 364 (Chicxulub Impact Crater), and Expedition 371 (Tasman Frontier Subduction Initiation and Paleogene Climate) engendered more than 100 television stories and a viral social media response. In addition, Expedition 343 (Japan Trench Fast Drilling Project) was featured in the museum exhibit *Deep-Ocean 2017* (Tokyo, Japan) and attracted 617,062 visitors in 79 days.

One of the more novel IODP-related outreach initiatives is a traveling exhibit, *In Search of Earth's Secrets*. Funded by the US National Science Foundation, this project involves “pop-up” science events at various venues that target traditionally underserved communities and features a 13.7 m inflatable replica of *JOIDES Resolution*. A multi-screen array inside the replica displays a looped video that highlights IODP’s major scientific achievements. Six interactive kiosks, each focusing on a different scientific or engineering aspect of the program, and a large floor map of the world’s ocean bottom complete this immersive educational experience.

In addition to producing content for the general public, IODP strives to reach out to young scientists to ensure a continuous supply of new participants and novel ideas to sustain the program’s cutting-edge scientific ambitions and achievements into the future. In the aggregate, approximately one-fourth of all IODP science parties are composed of graduate students who are mentored at sea by experienced program participants from all IODP nations. In addition, the European Consortium for Ocean Research Drilling organizes shore-based “virtual drill-ship” training schools at the Bremen Core Repository in Germany, and workshops are organized across the program for early career scientists to help “demystify” the IODP proposal process. In early 2018, Japan also conducted a successful “Core-Log-Seismic Investigation at Sea” aboard *Chikyu* that brought 14 international early career scientists together with a multidisciplinary group of scientific mentors as an adjunct to IODP Expedition 380 (Nankai Trough Seismogenic Zone Experiment).

While the immediate goal of scientific ocean drilling is to expand our knowledge of Planet Earth, it is communication of the program’s discoveries and achievements to public stakeholders, future generations of IODP scientists, and society at large that completes the IODP mission.

– Carl Brenner, Nobu Eguchi, and Antony Morris



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YEARS OF OUTREACH ON D/V CHIKYU 2016–2018

Expedition Videography for 2016–2018:

7 Videos for Expedition 365
2 Videos for Expedition 370
1 Videos for Expedition 358

Exhibition in Museum in 2017:

617,062 visitors (7,811/day)

Media Coverage for 2018:

128 for internets
15 interviews for TV and radio
71 newspapers
4 books and magazines

Social Media for 2018:

22,431 Twitter followers



W. Crawford, IODP JRSO

A YEAR OF OUTREACH ON JOIDES RESOLUTION 2017

Onboard Outreach Officers:

14 officers from 8 countries

Ship to Shore Video Events:

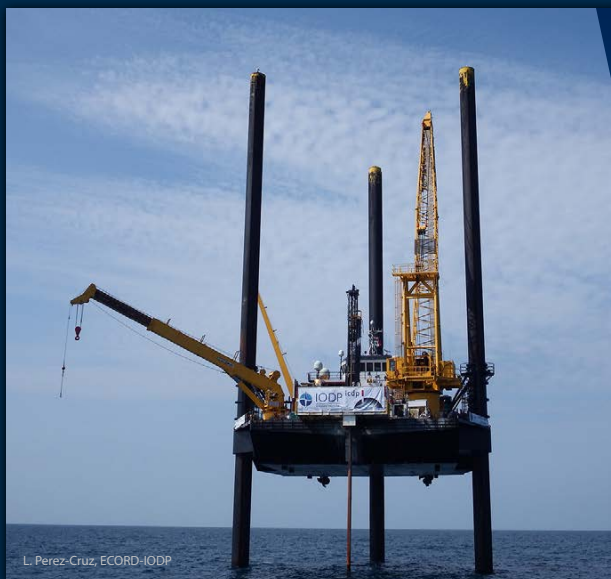
344 broadcasts to 17,132 viewers in 17 countries

Record-Setting Media Coverage (Expedition 371):

98 television stories
24 radio reports
27 online news features

Social Media:

902 new Facebook followers
768 new Twitter followers
305 new Instagram followers



L. Perez-Cruz, ECORD-IODP

YEARS OF OUTREACH ON MISSION SPECIFIC PLATFORMS 2016–2018

MSP Expedition Web-based Outreach:

21,200 visitors from > 70 countries to the Expedition 381 blog site
16,893 blog views during Expedition 364
6,198 participants in Expedition 364 Reddit AMA sessions

Museum Exhibition on Expedition 381:

7,000 visitors to exhibit at Our Dynamic Earth, Edinburgh UK

Social Media:

1,615 Twitter followers
1,043 Facebook followers
6,300 ECORD YouTube channel views