

## Responsibilities of Offshore Outreach Officers on the *JOIDES Resolution*

*JOIDES Resolution* expeditions are 2-month long projects that aim to answer a set of scientific questions using sediment/rock samples and data collected from below the seafloor. Each expedition sails with ~30 scientists, ~25 technical staff, and 65 crew who work together to achieve the expedition objectives. The pace of work can be intense and each person on board is given a specific set of tasks. The science group typically includes 1–2 outreach officers whose mission is to convey the excitement of International Ocean Discovery Program (IODP) expeditions and the impact of their scientific discoveries to the public.

### Outreach officers

- raise awareness about the science obtained through ocean floor exploration and its central role in our understanding of the Earth's past, present, and future;
- inspire and prepare students for careers in science, technology, engineering, and math;
- facilitate and develop learning programs and materials based on fundamental Earth system science concepts; and
- use authentic data, inquiry-centered activities, and interdisciplinary explorations drawn from the scientists and technologies of *JOIDES Resolution* expeditions.

### A. General Responsibilities

Outreach Officers have a number of primary responsibilities that contribute to the overall success of the expedition and IODP's mission, as summarized below. Additional deliverables may be specified by the US Science Support Program (USSSP) or other sponsoring organizations (see **Postexpedition** section).

#### Expedition objectives

Each Outreach Officer is encouraged to become familiar with the scientific objectives of the expedition as outlined in the *Scientific Prospectus*. Additional background information may be obtained from the Co-Chief Scientists, Expedition Project Manager (EPM), or other members of the science party.

#### Work schedule

Work shifts are 12 hours a day, 7 days per week for the duration of the expedition, and typically extend from noon to midnight or from midnight to noon. Shift assignments are made by the EPM and Co-Chief Scientists, but there is flexibility so Outreach Officers can best achieve their duties. Occasionally, shifts extend longer than 12 hours, when meetings or other activities require it.

#### Outreach Reports

Outreach officers are required to provide reports summarizing their shipboard activities to the Co-Chief Scientists and EPM. These include ~8 weekly summaries and a brief summary of outreach activities at the end of the expedition. The latter is published in the *Preliminary Report* ~2 months postcruise. An additional comprehensive report may be required by the sponsoring organization.

#### Lab involvement

In addition to their major duties, Outreach Officers are encouraged to participate in lab activities if their outreach schedule allows. The type of activity can be adjusted to correspond to each Outreach Officer's

background. Outreach Officers' roles differ from those of the shipboard scientists in that they are not responsible for collecting, analyzing, and presenting scientific data.

### **Cruise evaluations**

Before the end of the expedition, Outreach Officers are encouraged to submit a cruise evaluation. These evaluations guide the JRSO in making laboratory and outreach upgrades and improving shipboard life.

### **Moratorium**

A moratorium of 12 to 18 months allows only shipboard and approved shore-based scientists and outreach officers to have access to expedition data and cores. The moratorium extends 12 months after personal samples are collected (either on the ship or during shore-based sampling) but cannot extend more than 18 months after the end of the expedition. All samples and shipboard data become available to the public following the moratorium.

### **Materials produced**

All materials produced during an expedition by the Outreach Officer can be used free of charge by the IODP-JRSO and other IODP entities for promotional purposes. This includes, but is not limited to, all digital imagery (photos, videos, animations), articles, and any other outreach products. Outreach officers retain the intellectual property rights of what they produce and are free to use these materials for freelance activities, such as magazine articles or professional blogs.

### **Internet access**

Outreach Officers have privileged access to the limited Internet bandwidth on board to conduct real-time ship-to-shore video conferences. The frequency and timing of such transmissions need to be agreed upon precruise (with some flexibility during the cruise) and monitored during the cruise to avoid conflicts. Outreach Officers are expected to manage internet usage judiciously (e.g., avoid hours when the scientists and staff are most likely to require access to the Internet).

### **Special needs**

The USSSP office provides basic audiovisual equipment on the ship. Outreach Officers can alert the JRSO if they have special computer needs and we will make an effort to accommodate them. However, we are unable to provide specialized software for video editing and animation. In addition, any third-party equipment brought to the ship needs to be approved in advance or it may not be allowed on board. Contact the expedition USSSP office to see what outreach software and hardware is available on board. Contact the EPM regarding export control requirements on equipment brought to the ship.

## **B. Outreach Duties**

### **Pre-expedition**

- Become familiar with the expedition's scientific objectives.
- Formulate a shipboard activity plan and reach out to the science party for collaborations.
- Attend in person or virtual training provided on *JOIDES Resolution* outreach activities, including:
  - social media sites (e.g., Facebook, Twitter, Instagram, Reddit, [www.joidesresolution.org](http://www.joidesresolution.org));
  - video conference procedures and software;
  - resources available on board and pre-existing education/outreach products;

- guidelines governing the distribution of photos and scientific data and images.
- Formulate an Internet (video conference) usage plan.

### During the expedition

- See the *Onboard Outreach Program Manual (USSSP)* for details.
- Work assigned shift and follow instructions given by the EPM and ship's crew (Siem Offshore).
- Produce reports as requested by the EPM, Co-Chief Scientists, and sponsoring organization.
- Implement the activities requested by USSSP, such as:
  - Organize and lead video conferences with schools and museums, and track the locations, types, and numbers of audiences reached.
  - Work collaboratively with the scientists to promote shipboard activities. Many shipboard scientists have outreach and social media skills, and are keen to work with and receive advice from outreach officers.
  - Contribute content to *JOIDES Resolution* social media (Facebook, Twitter, Instagram).
  - Contribute weekly or more frequent blogs on [joidesresolution.org](http://joidesresolution.org).
- Get approval from the EPM, Co-Chief Scientists, or other shipboard scientists before distributing any scientific information, such as scientific data and images.
- Get approval from Siem Offshore officers for any photos or video shared with the public that depict rig floor and other activities that involve the ship's crew.
- Collect materials needed for personal postexpedition activities.
- At the end of the expedition, provide a summary of outreach activities to the EPM.
- At the end of the expedition, provide a comprehensive report of outreach activities to USSSP or other sponsoring organizations.

### Postexpedition

- Conduct postexpedition activities as agreed upon with USSSP or the agency funding your participation. Examples include, but are not limited to:
  - Outreach to regional/national teacher networks
  - Participation at science teacher meetings (e.g., NSTA, NMEA)
  - Participation at scientific meetings (e.g., AGU, EGU, GSA)
  - Development of STEM-based classroom activities and resources
  - Publication of magazine articles (e.g., National Geographic, Discover)
  - Movies and interviews for YouTube
  - Science and technology animations
  - Feature-length documentaries
- Get approval from the EPM and science party for publications or presentations (talks/posters) delivered within the 12–18 month postexpedition moratorium at conferences and public venues, and adhere to the IODP authorship rules.
- Get approval from USSSP and the IODP-JRSO for any movies produced postexpedition.