2018 Nautilus Lead Science Communication Fellowship

Educators selected to participate as Lead Science Communication Fellows (Lead SCFs) in the Nautilus Exploration Program are ambassadors for ocean exploration sharing the excitement of exploration and research with students and public audiences in their communities and around the world. They serve as mentors to the 2018 SCF cohort and as key advisors to the OETTeam.

Lead Science Communication Fellows will have the opportunity to gain further exposure to and experience in the application of science, technology, engineering, and mathematics (STEM) in the field of ocean exploration. Lead SCFs act as mentors and team leaders for the OET outreach, education and communication team while onboard Nautilus. OET is looking for Lead SCFs with perspective to lend experience to new fellows and provide guidance on successful ways to bring the Nautilus experience back to a home community, school, or organization.

The year-long Science Communication Fellowship includes: participation in the 2018 science communication workshop at the University of Rhode Island Graduate School of Oceanography in April 2018, experience sailing 2-3 weeks as a team leader within the exploration team on board an oceanographic expedition in the Eastern Pacific Ocean between June and November 2018, year-long collaboration with STEM professionals, educators and research scientists, development of STEM-lessons or outreach materials for your education audience, role modeling for OET’s national audiences based on the Nautilus experience, and free access to Nautilus Exploration Program education resources for your community. Before, during and after the experience at sea, Lead Science Communication Fellows will work with OET to engage their students, organizations and communities in the excitement of ocean exploration and STEM.

The Nautilus Exploration Program is run by the non-profit Ocean Exploration Trust. The Ocean Exploration Trust was founded in 2008 by Dr. Robert Ballard and continues to lead the field in telepresence-enabled exploration of our deep oceans. Our international program centers on scientific exploration of the ocean launched from aboard Exploration Vessel (E/V) Nautilus, a 64-meter research vessel.
Lead Science Communication Fellowship Requirements

Participants are expected to fulfill the following requirements during the year (March 2018 – March 2018) as a Science Communication Fellow:

- Attend the Science Communication Workshop at the University of Rhode Island Graduate School of Oceanography April 17 - 20, 2018. Please note that Fellows must be available to attend all portions of this training to be considered for this program. Lead Fellows will participate in a training April 15 - 16.

- Join the Corps of Exploration aboard E/V Nautilus for 2 - 3 weeks during the 2018 field season. Expedition dates will fall between June and November. Fellows must be flexible and should understand sailing dates will not be assigned until after acceptance into the program. Sailing dates are determined by the Ocean Exploration Trust and cruise assignments and length are determined by coordinating SCF availability and ship’s port stop and expedition schedule.

- Assist with control van and SPL training for expedition team, and continue to mentor SCFs in SPL protocol and content. Train and mentor SCFs in conducting successful live interactions. Assist expedition team and mentor SCFs with creation and editing of digital content including blogs and photo albums while at sea. Maintain ship-to-shore education and communication workflows with guidance from OET team. Serve as onboard liaison for education and outreach efforts by consistently communicating and sharing content for OET's review and approval.

- Work closely with OET Education Team to contribute expertise and contribute ideas on the development and refinement of STEM Learning Modules and digital education resources.

- Submit an original STEM-oriented lesson plan (or in the case of informal educators, an appropriate alternative deliverable approved by OET Education staff) to share with the growing network of Science Communication Fellows and educators nationally through the Community STEM Program. Some deliverables may be integrated partially or completely into the OET STEM Learning Modules or website resources.

- Lead at least two presentations during the fellowship year to share his/her experience with the Nautilus Exploration Program and generate enthusiasm and participation within the Fellow’s community engaging students, organizations and/or community members. Document these presentations for OET’s impact and outreach tracking.

- Work with Ocean Exploration Trust employees to help disseminate press releases, announcements, and social media related to his/her participation in the program. Track all the media coverage generated through your efforts throughout the fellowship year.

- Will participate in all program assessments which may include verbal and written feedback in phone calls, e-mail questionnaires, or comprehensive evaluations completed online. I agree to share with OET any student-based assessments and survey results related to activities undertaken as part of my Science Communication Fellowship.

- Conduct his/herself in a professional manner as a representative of the Nautilus Exploration Program and serve as an exemplary role model for future explorers.

2018 Lead Science Communication Fellowship

Applications due: January 15, 2018 (by midnight EST)
Submit application online at: http://www.oceanexplorationtrust.org/communication-fellowship
Program contact: education@oet.org
Science Communication Fellowship Overview

The Science Communication Workshop
The Fellowship begins in March 2018. In April 2018 fellows will attend a workshop at the University of Rhode Island Graduate School of Oceanography where they will be trained in science communication skills and telepresence technologies. The 2018 SCF cohort will learn about the scientific objectives of the upcoming season from lead scientists and expedition team members. Additionally Lead Fellows will:

➢ Receive training and materials to support their growth to become well-informed ambassadors of the ocean exploration mission, program goals, and educational outreach of the Nautilus Exploration Program throughout their Fellowship.

➢ Work closely with the Education, Outreach & Communication team to brainstorm and implement goals for the 2018 SCF cohort and SCF contribution to OET’s education initiatives

➢ Refresh practice with the suite of STEM education materials built by Ocean Exploration Trust to engage classrooms, after school programs, and everyday learners.

➢ Network with the 2018 SCF cohort, including leading training sessions designed to model the roles and responsibilities of SCFs at sea.

➢ Meet expedition scientists, engineers, OET staff, and members of the expedition team to participate in discussions about the expedition research missions.

➢ Become familiar with Ocean Exploration Trust’s digital outreach platforms. Training will include general navigation of the Nautilus Live website, social media storytelling training, best practices in facilitating on-air scientific broadcasts, and experience accessing live incoming questions from the global audience.

➢ Receive on-camera presenting training and guidance on how to facilitate and participate in live ship-to-shore studio interactions and media interviews.

➢ Tour the Inner Space Center (ISC), a facility at the URI Graduate School of Oceanography that utilizes telepresence technologies to connect the world to exploration projects in real-time. The ISC facility includes the Studio and Production Room used by broadcast, education, and outreach professionals to create and deliver educational content for OET exploration projects.

➢ Brainstorm deliverable lesson plans and products. Fellows will also draft plans to engage students, organizations, and communities in the excitement of ocean exploration.
Sea-going Exploration Expedition

Lead Fellows spend 2-3 between June and November 2018 working on board E/V Nautilus as important expedition team members. Fellows’ primary role is to serve as key communicators of the expeditions’ discoveries and importance to the public through the Nautilus Live website and through live interactive ship-to-shore broadcast presentations to onshore students and public museum audiences. Lead Fellows will be trained to mentor new members of the SCF cohort and to serve as leaders for the education & outreach mission under the guidance of the OET team.

Fellows stand watches in the control room alongside scientists, engineers, and students to conduct exploration operations which may include dives with the remotely operated vehicles Hercules and Argus or seafloor mapping operations with the ship’s multibeam sonar. Expedition tools and objectives vary depending on the expedition the Fellow is scheduled to join. Nautilus Exploration Program expeditions focus on a wide range of oceanographic disciplines including archaeology, geology, biology, and seafloor mapping. In 2018, E/V Nautilus will explore in the eastern Pacific Ocean between Canada, Hawaii, and the western United States coast.

Engaging Students, Organizations, and Communities

An equally important aspect of the fellowship is bringing the excitement of ocean exploration and STEM storylines home to local schools and communities throughout participation in the fellowship. Science Communication Fellows network with their peers and expedition team members to create STEM-oriented lesson plans to share with a growing international network of educators. Formal educators will have the opportunity to contribute to OET’s STEM Learning Modules by creating original STEM lessons within the year-long fellowship. Informal educators will create an artifact bringing the expedition experience to their community in activities, writing, art, public media pieces, or other deliverables. Fellows are empowered and expected to serve as role-models for ocean exploration in the community which includes giving presentations on their experience throughout their schools and hometown. The mentoring and role modeling of past fellows contributes vastly to the growth of the Nautilus Exploration Program and the Science Communication Fellowship. In order to continue to improve our education programs SCFs will participate in program evaluations.
Costs Associated with Lead Science Communication Fellowship

Travel & Board
Applicants who are selected as 2018 Lead Science Communication Fellows will be provided full travel to and from Rhode Island for the Science Communication Workshop in April as well as full travel to and from their expedition in the Eastern Pacific. During expeditions, Fellows are provided full room and board in the form of shared cabins and three full meals per day.

Reimbursements for Classroom Substitutes
If needed, substitute fees for the workshop days and the travel days to/from the expedition can be provided. Fees are reimbursed at the rate of the substitute pay in the school district for up to a maximum of $200/day. Proof of payment must be submitted with a reimbursement form. OET can not reimburse for substitutes for all expedition sailing dates.

Professional Development
Professional development credits for the Fellowship may be obtained in the form of graduate study credits through the University of Rhode Island at the expense of the Fellow. Continuing education hours can be provided without charge. More details will be available upon acceptance.

Who Should Apply?
Formal and informal educators that have previously participated in the Nautilus Exploration Program aboard E/V Nautilus are eligible to apply. Preference will be given to Fellows that have participated in the program for one year and will be returning for the first time. Previous fulfillment and performance in the Fellowship obligations will also be considered.

The Ocean Exploration Trust encourages a diverse pool of applicants including educators from traditionally underrepresented minority populations or serving schools with students traditionally underrepresented in STEM. Ocean Exploration Trust does not discriminate on the basis of race, color, religious creed, marital or parental status, sexual orientation, gender identity or expression, national origin, ancestry, age, or handicap.

The Lead Science Communication Fellowship is open to educators living in the United States, Canada, and Mexico. There is no citizenship requirement, but your citizenship may be taken into account due to foreign visa requirements.
Selection Criteria

Communication
Applicants should have strong written and verbal communication skills for STEM subjects and conversational skill. They should be comfortable speaking in front of a camera and on SPL. Preference will be given to educators who can clearly articulate how a second experience in the Fellowship will help them engage their students or community in STEM and ocean exploration. Applicants must be fluent in English (verbal and written). Fluency or familiarity in a second language is helpful, but not required.

Teamwork
Applicants need strong interpersonal-relationship skills and conversational ability to discuss topics with diverse team members. Applicants should have ease moderating a conversation or conducting a Q&A session with their peers. They should enjoy working with others in team settings, mentoring other educators, and be open to new collaborations, ideas, and activities. Lead SCFS should be able to work independently, and able to adapt to ever-changing conditions while at sea.

Experience
Prior seagoing experience with OET is required.

Technical
Applicants should be willing to learn new technologies and comfortable with computers.

Health
Applicants must be physically and mentally capable of meeting the demands of living and operating aboard a working exploration vessel, and must be able to live in close quarters with other expedition team members. Proof of a negative tuberculosis test within twelve months is mandatory for all expedition members before sailing on E/V Nautilus.

Travel
Applicants must be comfortable with travel and be willing to travel independently. Applicants must be eligible for a passport and willing to obtain one immediately after acceptance if they do not already hold one valid until December 2018.

Estimated Number of Fellowships
The Ocean Exploration Trust anticipates offering 3-4 Lead Science Communication Fellowships for the 2018 season. The Fellowships are made possible through sponsorships by the Office of Naval Research, CITGO, and private sponsors.

Contact Information for Questions
If you have any questions about the Science Communication Fellowship or application process, please contact the Ocean Exploration Trust Education Team at education@oet.org
Summary of Application Requirements

All application materials are to be uploaded to the online form. Please review the application requirement descriptions carefully and ensure you have all materials ready to upload at the time of submission. The Science Communication Fellowship application requires the following documents:

- General Application Form
- Cover Letter (SCF2018_Lastname_Firstname_CoverLetter.pdf)
- Statement of Understanding (SCF2018_Lastname_Firstname_Understanding.pdf)
- Optional Sample of Lesson/Representative Work (SCF2018_Lastname_Firstname_Sample.pdf)

Important Dates

<table>
<thead>
<tr>
<th>September – Jan 15, 2018</th>
<th>Lead SCF applications accepted</th>
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<tbody>
<tr>
<td>Jan 15, 2018</td>
<td>Lead SCF applications and supporting documents due</td>
</tr>
<tr>
<td>Jan 29 - Feb 7, 2018</td>
<td>Online interview period with select applicants</td>
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<tr>
<td>Feb 9, 2018</td>
<td>Lead SCF recipients notified</td>
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<tr>
<td>April 15 - 16, 2018</td>
<td>Lead SCF Training</td>
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<tr>
<td>April 17 - 20, 2018</td>
<td>2018 Science Communication Workshop</td>
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<tr>
<td>June - November 2018</td>
<td>Expedition dates: TBD 2-3 weeks</td>
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How to Apply

To apply to become a Lead Science Communication Fellow, please complete the application form in its entirety by the January 15, 2018 deadline. Applications must be received complete and on time to be considered. Files that you will need to prepare ahead of applying are marked “UPLOAD” in the checklist below.* Please ensure that you note the file type and appropriate naming scheme for each file. If you have any difficulty, please contact us at education@oet.org and note that you are applying for the Lead Fellowship.

*all files must be 1MB or less in size to upload to application form online

Application Checklist:

- Online Application Form
  - Use the Online Application Form to submit all of your application materials. The form is not editable once submitted so make sure you enter all required information correctly. Please familiarize yourself with the application before you begin to ensure you have all the necessary information at hand.
  - Referee names, email addresses and optional phone numbers
  - At-sea availability (indicate specific dates that you are NOT available to join an at-sea expedition from June to November 2018)
  - Confirmation of your availability to attend the Science Communication Workshop April 17- 20, 2018. Identify any conflicts for Lead SCF Training April 15th & 16 with travel on April 15th.
  - Apply online at: http://nautl.us/2x4CQj

Applications due: January 15, 2018 (by midnight EST)
Submit application online at: http://www.oceanexplorationtrust.org/communication-fellowship
Program contact: education@oet.org
Cover Letter (UPLOAD)
- Cover letter should cover why you want to return as a Lead Science Communication Fellow, what unique qualities you bring to the Corps of Exploration, and how you envision using this opportunity to further incorporate the experience in your education philosophy, students, organization and/or community.
- Save Cover Letter as a PDF following the naming convention: `SCF2018_LastName_FirstName_CoverLetter.pdf`

Signed Statement of Understanding (UPLOAD)
- Fill out and sign the Statement of Understanding with your administrator or supervisor. The Education Team is happy to speak with school administrators if additional information is required for approval. Contact the team at education@oet.org
- Scan the form, save as a PDF following the naming convention: `SCF2018_LastName_FirstName_Understanding.pdf`

Optional Application Components
- Sample Lesson Plan, Activity, or Sample of Work
  - Classroom educators: Share a sample lesson plan or activity you feel best represents how you engage students in learning about ocean exploration.
  - Informal (non-classroom) educators: Share an activity or sample of your work you feel best represents how you engage students and/or audiences in ocean exploration (e.g., collection of online resources you've authored, description of an activity you do with learners, media pieces highlighting your style of science communication, etc.)
- If your lesson cannot be made into a PDF, please contact education@oet.org
- Save lesson sample as PDF following the naming convention: `LeadSCF2018_Lastname_Firstname_Sample.pdf`

The Selection Process
Lead Science Communication Fellows are selected by a staff committee from Ocean Exploration Trust. Selections are made by the committee as a whole, not by individuals. All applications will be reviewed after the January 15, 2018 deadline. Due to the number of applications we receive, we regretfully cannot offer individual feedback on individual applications. Interviews using Google+ Hangout will be scheduled for January 29 - Feb 7, 2018 and we will aim to make all program selections by February 9, 2018.
STATEMENT OF UNDERSTANDING

The following statement of understanding must be read and signed by both the applicant and his/her principal or president if the applicant is a school, college, or university educator. If the applicant is not a school, college, or university educator, this statement of understanding must be read and signed by the head of the applicant’s organization or facility, a supervisor or administrator who can best represent the wishes or agreement(s) of the applicant’s organization.

If I am selected for the 2018 Science Communication Fellowship, I understand and agree that I:

➢ Will commit one year of participation from March 2018 – March 2019 to engage with, improve, and assess the Science Communication Fellowship Program. This may include conference calls, webinars, and e-mails and will require me to provide feedback and input when needed on various program aspects.

➢ Will be available between June - November 2018 during agreed upon dates to join the Corps of Exploration at sea for 2 - 3 weeks aboard E/V Nautilus.

➢ Will be available to participate in the Science Communication Workshop, April 17-20, 2018 as well as the Lead SCF Training April 15-16 with travel days on April 15 and 20.

➢ Will participate in pre-expedition conference calls and/or webinars (dates TBD) and a post-expedition debriefing conference call following my expedition.

➢ Will be a key contributor supporting the Ocean Exploration Trust’s education and outreach mission including facilitating broadcast conversations on the Nautilus Live live stream during my time at sea. Additional activities may include: writing blog content, creating digital photo albums, providing audio scientific interpretation, facilitating studio-based live online question-and-answer sessions and STEM discussion, contributing to social media and participating in live, interactive ship to shore events.

➢ Will have the opportunity to coordinate at least one live, interactive ship-to-shore event with my community. I understand and my administrator understands, this will involve at least one other educator and/or an IT contact at my school or organization to help during both testing and live event times.

➢ Will lead at least two presentations in my school, organization or community during the fellowship year to share my experience with the Nautilus Exploration Program and generate enthusiasm and participation in STEM programs. I will document these presentations for OET’s impact and outreach tracking.

➢ Will participate in all program assessments which may include verbal and written feedback in phone calls, e-mail questionnaires, or comprehensive evaluations completed online. I agree to share with OET any student-based assessments and survey results related to activities undertaken as part of my Science Communication Fellowship.
➢ Will develop and submit a deliverable (STEM lesson plan, activity, or approved alternative) based on my experience in the Fellowship. I acknowledge some or all of my lesson may be integrated into the OET STEM Learning Modules.

➢ Will work with OET staff to help disseminate press releases and/or announcements related to my participation in the program. I will track the media coverage generated through my efforts throughout the fellowship year. I will generate enthusiasm and participation in exploration-related programming within my school, district, community or organization to the best of my ability.

➢ Am physically and mentally capable of meeting the demands of living and operating aboard a working exploration vessel and am able to live in close quarters with other expedition team members.

➢ Will conduct myself in a professional manner and serve as a role model for future ocean explorers.

______________________________________________

Applicant Agreement
I, ________________________________, understand the above commitments outlined in the Statement of Understanding and will fully comply if selected.

Signature: ________________________________ Date: __________________

______________________________________________

Principal/Supervisor Agreement**
I, ________________________________, have fully read and understand the Statement of Understanding signed by the applicant and give full consent for the applicant to participate in the Science Communication Fellowship Program if selected. I further agree that:

➢ I will allow release time (if applicable) for the applicant to participate in the Science Communication Workshop in Rhode Island, April 16-20, 2018.

➢ I will support the applicant in all aspects of the program as outlined in this statement.

➢ If the applicant is a classroom educator and requires a substitute teacher during the Science Communication Workshop, I recognize the ability to request OET to pay substitute reimbursements for the days of the workshop. If the applicant's at-sea expedition dates fall in the school year, I recognize we may request substitute reimbursement on the travel days to and from the expedition, but not the remaining at-sea dates.*

Signature: ________________________________ Date: __________________

E-mail: ________________________________ Phone: __________________

*Substitute reimbursements will be made at the rate paid by the school/district up to a maximum of $200/day. Proof of payment will be required for reimbursement, by June 30, 2018.

It is recommended that the principal or administrator retain a copy of this information packet and a copy of this Statement of Understanding for his/her records.
About The Nautilus Exploration Program

The Nautilus Exploration Program was founded in 2008 by Dr. Robert Ballard and is conducted by the Ocean Exploration Trust. Our international program centers on scientific exploration of the seafloor launched from aboard the Exploration Vessel (E/V) Nautilus, a 64-meter research vessel. In addition to conducting scientific research, the Nautilus Exploration Program offers its expeditions to explorers on shore via live video, audio, and data feeds from the ship. Ocean Exploration Trust brings educators and students aboard E/V Nautilus during expeditions, offering them hands-on experience in ocean exploration, research, and communications. The international Corps of Exploration consists of scientists, engineers, educators, communicators, and students. The Corps of Exploration aim to share their stories and their science with the world and believe in serving as STEM role models to future generations of explorers.

Our Goals

- To explore areas of the ocean that have never been explored before, seeking out new discoveries in the fields of geology, biology, maritime history, archaeology, and chemistry;
- To conduct all scientific research to the highest international academic standard;
- To push the boundaries of ocean engineering, technology, education, and communications;
- To share our expeditions with explorers around the world via live telepresence;
- To serve as role models for the next generation of scientists, engineers, and educators;
- To spread the excitement of ocean exploration and turn everyday viewers into explorers.
The 2018 Nautilus Exploration Program

The 2018 Nautilus Exploration Program season will be six months in the field exploring the eastern Pacific Ocean between Canada, Hawaii, and the western United States coast. Ocean Exploration Trust conducts exploration using multibeam mapping system, remotely operated vehicles, and telepresence technology. The Ocean Exploration Trust, which conducts the Nautilus Exploration Program, will announce specific expedition objectives and ports of call in April 2018.

E/V Nautilus is a 64-meter exploration vessel with 17 crew members and berthing for a 31-member rotating Corps of Exploration. The ship carries two Remotely Operated Vehicles (ROVs) named Hercules and Argus that explore the seafloor in real-time online via our telepresence technology. A hull-mounted multibeam system was installed during the winter of 2013 and is routinely used for full-ocean depth seafloor mapping. The ship also has a Data Lab and Wet Lab for processing digital data and physical seafloor samples. A key component of our exploration is to share our expeditions with students and colleagues globally. We stream live video from our ROVs and various locations on the ship online to the website www.nautiluslive.org. We encourage explorers of all ages to join our expeditions live by participating through the interactive portions of the website.

Living conditions on E/V Nautilus consist of shared rooms with bunk beds and bathrooms. We share three meals a day in a group dining room. Nautilus also has an outdoor lounge area and a state-of-the-art indoor lounge with exploration viewing monitors. Limited WiFi internet is available in common areas for personal use and a few landline telephones are provided in public spaces.

Relevant Links for Additional Information

For more information about the Nautilus Exploration Program, E/V Nautilus, our exploration vehicles and previous expeditions, please visit www.NautilusLive.org or our social media.

Ocean Exploration Trust
www.NautilusLive.org

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