

## Ocean Explorers: Unlocking Mysteries



### Instructions

1. The people below are helping to change our understanding of the ocean. Check off those you would most like to learn more about.
2. Rank your choices from 1–5 with numbers to the left of the check boxes. You will be creating a persuasive presentation about one of your top choices and how they have been important in helping us better understand the ocean and how it works.



Malanai N. Kāne Kuahiwinui

### Explorers

- Shawn Arellano, Ph.D.**—marine scientist who studies larvae and deep-ocean environments
- Steve Auscavitch, Ph.D.**—marine ecologist who studies deep-sea corals
- Robert (Bob) Ballard, Ph.D.**—oceanographer who studies shipwrecks and much more
- Jack Barkowski, M.S.**—marine technician/scientist who studies humpback whale vocalizations
- Jennifer Berglund, M.Sc.**—science communicator and deep ocean explorer
- Katlin Bowman, Ph.D.**—oceanographer focused on mercury and plastic pollution
- John Calambokidis, B.S.** —marine mammal biologist
- James Cameron**—deep-sea explorer, film director, film producer and screenwriter
- James (Jim) Delgado, Ph.D.**—maritime archaeologist who studies shipwrecks
- Maria Cristina Diaz, Ph.D.**—maritime taxonomist and sponge scientist
- Sylvia Earle, Ph.D.**—marine biologist, oceanographer and explorer
- Peter Etnoyer, Ph.D.**—marine ecologist who studies deep-sea corals
- Dijanna Figueroa, Ph.D.**—ocean explorer, scientist and educator
- Allison Fundis, M.S.**—marine geologist and expedition leader
- Esther Guzmán, Ph.D.**—molecular biologist who studies marine products to cure diseases
- Moronke Harris, Ph.D. student**—oceanographer and science communicator
- Leila Hatch, Ph.D.**—marine ecologist who studies underwater sounds
- Jill Heinerth**—underwater filmmaker and photographer
- Santiago Herrera, Ph.D.**—biologist who studies patterns of diversity in the ocean
- Paul Kanive, Ph.D.**—white shark research; marine ecologist
- Christina Kellogg, Ph.D.**—research microbiologist who studies microbes found on coral
- Malanai N. Kāne Kuahiwinui**—lead science communication fellow, Ocean Exploration Trust
- Randall (Randy) Kosaki, Ph.D.** —zoologist who studies coral reef fishes
- Catherine Macdonald, Ph.D.**—marine biologist who studies sharks and rays
- Rachael Zoe Miller**—oceanographer focused on marine debris cleanup
- Thomas Morrow, Ph.D.**—marine geologist who studies seamounts
- Elizabeth Urban-Gedamke, M.S.**—marine biologist who studies deep-sea sponges
- Jason White**—remotely operated vehicle (ROV) technician
- Edith (Edie) Widder, Ph.D.**—marine biologist and engineer who studies bioluminescence
- Another ocean explorer: \_\_\_\_\_

- 3. Let's research!** Record your ideas below or in science notebooks in sentences and/or pictures.
- a. What kind of work does this explorer do? What is their specific area of expertise?
  
  - b. What methods do they use to study the ocean? Describe technology or processes they use.
  
  - c. Why is their work important? Explain how their work helps us better understand the ocean, helps the organisms that live there and/or helps humans.
  
  - d. In what parts of the ocean do they do their work? Which expeditions have they participated in? What was the purpose of those expeditions?
  
  - e. In which marine sanctuaries have they worked (if applicable)? Sanctuary maps: <https://sanctuaries.noaa.gov/about/maps.html>
  
  - f. How is information about this explorer's work and our ocean shared with others?
  
  - g. What questions would you ask this explorer about their job, research and background?
  
  - h. What do you find most interesting about their work? What surprised you? In what ways might their research in the ocean connect to your own life?
  
  - i. What sources of information did you use?
  
  - j. What are the basic steps of doing scientific research? How might ocean exploration differ from research done in a laboratory?