

Job Announcement

Title: Science Manager

Reports to: Executive Director

Employee Classification: Exempt Full-Time

Hours: Flexible schedule with some weekends/evenings

Location: Monterey Bay, California

Anticipated start: Early 2023

About the Western Flyer Foundation

In 1940, John Steinbeck and Ed Ricketts chartered the fishing vessel *Western Flyer* for a sixweek exploration of Mexico's Gulf of California, resulting in their groundbreaking works, *Sea of Cortez: A Leisurely Journal of Travel and Research* (1941) and *Log from the Sea of Cortez* (1951). The boat returned to fishing for decades, changed names and owners, disappeared, sank, and was in disrepair when marine geologist John Gregg purchased her in 2015. Inspired by a vision to restore the iconic boat and bring her back into service for research and education, he launched the Western Flyer Foundation, a 501(c)(3) nonprofit with a mission "to stir curiosity by connecting art and science in the spirit of John Steinbeck, Ed Ricketts, and their journey on the *Western Flyer.*"

The Western Flyer Foundation has spent the past seven years working with shipwrights and craftspeople in Port Townsend, Washington, to carefully restore the *Western Flyer*, with the goal of preserving her historical significance while equipping her with state-of-the-art technology and marine research equipment. The boat is now in Seattle having the engine installed and is scheduled to return to Monterey Bay in early 2023. At that time, we will finalize the boat's interior, including an onboard classroom. Once complete, the *Western Flyer* will embark on its next exciting chapter as an education and research platform, inspiring future generations of marine scientists, ecologists, writers, and artists. The *Western Flyer* will operate primarily in Monterey Bay but will also visit other West Coast ports in the US and Mexico, focusing on traditionally underrepresented communities. For more information about the Western Flyer Foundation, visit www.westernflyer.org.

Programs

The Western Flyer Foundation aims to integrate the sciences and humanities, drawing from the collaborative vision of John Steinbeck and Ed Ricketts. Through our STEAM programs (science,

technology, engineering, arts, and mathematics), teachers, researchers, and students will experience and study marine and coastal ecosystems while immersing themselves in the rich literary and historical traditions associated with the *Western Flyer*.

We are piloting a program called **SEACOAST** (STEAM Experiential Approach to Critical Ocean and Atmosphere Science Topics) to engage high school and post-secondary students and their teachers in ocean and atmospheric science through classroom and field activities on the *Western Flyer*. The vessel will be equipped with research-grade instrumentation, and student learning experiences will center on participant engagement with these technologies. Students will participate in activities using marine research equipment, such as:

- Conductivity-Temperature-Depth (CTD) to document and monitor key features of the water column.
- Scientific echosounder to document schools of fish and invertebrates.
- Remotely Operated Vehicle (ROV) to document benthic terrain and individual organisms.
- Plankton nets to capture living zooplankton and study onboard with video microscopes.

A complete list of instrumentation is provided below.

Position Summary

The Western Flyer Foundation seeks a Science Manager to oversee the science and research activities onboard the *Western Flyer*.

Responsibilities and scope:

- Work closely with WFF staff, Science Committee, and partners to develop at-sea STEAM activities on the *Western Flyer*.
- Develop background information modules for SEACOAST topics to support the education program (i.e., oceanography, meteorology, and links to marine ecology).
- Operate and maintain scientific instrumentation onboard the vessel and develop guides and processes for instruments.
- Train and assist students and teachers on the proper and safe use of instruments and data collection.
- Conduct ongoing data acquisition, archiving, and management and share with appropriate public databases.
- Help strategize development of a student-friendly user interface for visualizing and sharing data between participating classes.
- Prepare and deliver regular updates on data and performance for staff and the WFF Science Committee.
- Participate in Western Flyer-sponsored research as opportunities arise.
- Provide research and writing support for grant proposals and reports.
- As a vital member of a small team, assist with communications and outreach, events, administrative tasks, strategic planning, and other duties as assigned.

Requirements

- Degree in the natural or physical sciences or engineering, and three years of related experience, or an equivalent combination of education and experience. Master's degree or above desired.
- Strong background in oceanography, including conducting research on a vessel at sea.
- Experience with instrumentation, including engineering and data acquisition (maritime data collection techniques preferred).
- Proficiency in a structured programming language such as Python, Matlab, etc.
- Strong communication and organization skills and the ability to work with diverse groups of people.
- Ability to work a flexible schedule, including weekends.
- Ability to travel to communities along the West Coast from Baja to Alaska (estimated 25% of the time).

Desired Qualifications

- Bilingual in English and Spanish.
- Interest in literature and humanities.
- Science outreach and education experience.

Salary and Benefits

Salary range between \$65,000 and \$80,000. Generous benefits and paid time off.

Application Process

Interested candidates should send a cover letter and resume (both required) to jobs@westernflyer.org with "Science Manager" in the subject line. The position will be open until filled, but priority consideration will be given to those who apply by November 15th, 2022. No phone calls, please.

The Western Flyer Foundation is an equal-opportunity employer. We welcome people from all walks of life into our team and strongly encourage people of color, LGBTQ+ individuals, veterans, and people with disabilities to apply.

On-Board Equipment

- A research-grade meteorological sensor suite mounted to the ship's bow mast.
- Seabird SBE19plus V2 SEACAT CTD profiler with oxygen, fluorescence, pH sensors, and SBE33 Deck Unit & PDIM
- Custom meteorological array designed by Naval Postgraduate School
- Simrad EK80 Portable Scientific Echosounder
- Poseidon Robotics Lanai Pro ROV
- Teledyne RDI Sentinel V100 300 khz ADCP

- Plankton tows (nets, Olympus SZX10 video microscope and Excellis AU-600 HD video camera)
- Other equipment to be added as the Western Flyer scope of activities evolves