# SITKA SOUND SCIENCE CENTER

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Position Title	Postdoctoral Fellowship: Landslide modeling and mapping in Southeast
<u>Alaska</u>	
SSSC Status	Regular, Full Time, Overtime Exempt, Working Remote possible
Compensation	Salaried, Holiday and Leave as outlined in SSSC Employee Handbook
Place of Work	Can be remote. HQ located at: 834 Lincoln Street, Sitka Alaska
Salary	\$60,000-\$65,000
Term	2.5-year, renewable contingent on funding

Sitka Sound Science Center (SSSC) is a nonprofit 501(c)3, research and education organization. Our mission is to improve the understanding and awareness of terrestrial and aquatic ecosystems of Coastal Alaska through scientific research and science education. With a population of 9,000, SSSC is located in Sitka, Alaska in Southeast Alaska.

## **Position Summary:**

This postdoctoral fellow will help communities adapt to landslide hazards posed by atmospheric rivers in Southeast Alaska. Climate change is increasing the frequency and intensity of storms that initiate landslides in the region and four fatal slides have occurred since 2015. In 2022, the National Science Foundation Coasts and People (CoPe) program funded a team of social scientists, risk communicators, geomorphologists, hydrologists, and atmospheric scientists to work with communities to reduce the risks associated with extreme precipitation. This project, known as <u>K</u>utí, works directly with community members to identify, prioritize, and mitigate hazards associated with landslides and flooding. Additional funding through the University of Alaska Sea Grant Program has expanded this work to include more communities in the region. The fellow will join the research team and conduct translational research by modeling landslide initiation and runout and developing visualizations for remote communities in Southeast Alaska. The research will draw upon community observations, landslide inventories, and newly developed monitoring programs, to model and map landslide hazards at regional and local scales. The maps will be used to increase community awareness and aid in hazard planning and mitigation.

While it is preferable that the fellow reside in the region, this position can be done remotely, but will require periodic travel to Alaska. The position will be part of the project team with primary supervision by Co-PI Josh Roering, University of Oregon. Other PIs include: Ron Heintz (Sitka Sound Science Center), Gordon Grant (Oregon State University), Rob Lempert (RAND Corporation), Ray Paddock (Tlingit-Haida), Jon Rutz (UC SD, Scripps), and Sunny Rice (UAF/SeaGrant).

### **Example of Duties:**

- Participate in community listening sessions and workshops to understand community needs and priorities.
- Work with team geoscientists, project partners, and community members to perform initiation and runout models and validate model outputs.
- Publish original research on relationships between landscapes, land use practices, climate, and landslide risk.

- Present research at professional meetings.
- Communicate landslide hazards to local community stakeholder meetings and public gatherings.
- Participate in monthly Research Team meetings to share results.

### **Minimum Qualifications**

Doctoral candidates who will complete their PhD by fall of 2024 and early-career PhDs within 5 years of receiving their doctoral degree are eligible for the position. Experience in computer simulation of Earth surface processes and visualization is strongly encouraged. The candidate is also expected to have a strong interest in community-based participatory approaches to research. This 5-yr project is entering the 3<sup>rd</sup> year and funding up to 2.5 years is possible given successful performance after year 1. Extension of the term is dependent on additional funding from NSF.

Sitka Sound Science Center seeks a postdoctoral fellow with a background and interests in one or more of the following areas:

- Geomorphology
- Hydrology
- Geotechnical analyses and modeling
- Computational simulation of physical processes
- Fieldwork
- Cultural and Cross-Cultural Studies
- Community Resilience
- Rural Studies and Rural Development

### **Desired Qualifications**

Individuals with interdisciplinary training and interests, and who are interested in geoscience careers that focus on rural and remote communities are likely to be a good fit for this position. Experience working with Indigenous Peoples is highly valued. The ability to adapt research and communicate to different audiences is critical.

Inclusion and equity are core values of the Sitka Sound Science Center. We are passionate about building and sustaining an inclusive and equitable working and learning environment for students, researchers, and staff. We believe every member of our staff and visitor to our facility enriches our diversity by sharing a broad range of ways to understand and engage with the world, identify challenges, and discover solutions. We welcome the unique contributions each person brings through their education, opinions, culture, ethnicity, race, sex, gender identity or expression, nation of origin, age, color, religion, disability, sexual orientation, veteran status, ancestry, and beliefs.

### How to Apply

Email curriculum vitae, cover letter, and contact information for three references to Ron Heintz, Research Director, Sitka Sound Science Center at <u>rheintz@sitkascience.org</u> by November 1, 2024 using "Landslide Post-Doc" in the subject line.