



College of Earth, Ocean, and Atmospheric Sciences

Oregon State University

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**College of Earth, Ocean, and Atmospheric Sciences
Institutional Research Associate (Postdoctoral)**

<https://jobs.oregonstate.edu/> Posting 0016715

The College of Earth, Ocean, and Atmospheric Sciences (CEOAS) at Oregon State University, Corvallis, Oregon, invites applications for a full-time (1.0 FTE), 12-month, fixed term Institutional Research Associate (Postdoctoral). Renewal is at the discretion of the Dean. The position funding is expected to be two years.

This Institutional Research Associate (Postdoctoral) position will have a focus on marine geospatial analysis and planning. The term marine in this context encompasses coastal terrestrial, estuarine, and ocean systems, and constituent bio-physical and human systems, and their interaction. The pressures of climate change, changing ocean ecosystem dynamics, and intensifying human use, demand improved understanding of the spatial distribution of marine resources, while advances in geospatial technology are revolutionizing our capacity to visualize and model marine systems. The position will contribute to CEOAS's growing expertise in Marine Spatial Planning (MSP), a public process of analyzing and allocating the spatial and temporal distribution of human activities in marine areas to achieve ecological, economic, and social objectives, thus it addresses current and future uses of marine and coastal systems and assessing tradeoffs among alternatives. MSP is ecosystem-based, area-based, integrated, adaptive, strategic and participatory. Geospatial analysis for MSP involves statistical methods and models. This could include, but not limited to, spatial statistics, probabilistic and Bayesian analysis, location and network analysis, Geographic Information Science, and game theory approaches to representing the spatial allocation and dynamics of human activities and their consequences for physical and biological resources in the marine environment.

CEOAS is an internationally recognized leader in the study of the Earth as an integrated system. It operates numerous state-of-the-art laboratories and two oceanographic research vessels. The College has an annual budget of more than \$50 million, with support coming from the National Science Foundation, National Oceanic and Atmospheric Administration, National Aeronautics and Space Administration and other federal agencies. It has more than 100 faculty, 200 graduate students and 600 undergraduate students. Graduate programs include Master's and PhD degrees in Ocean, Earth and Atmospheric Sciences; Geology; and Geography; and a Master's degree in Marine Resource Management. The college has undergraduate programs in Earth Sciences and Environmental Sciences, with several minors and certificate programs.

CEOAS is a partner in the Marine Studies Initiative (MSI) at OSU. The MSI will address emerging issues and challenges facing Oregon and the globe. The MSI will be a transformative approach to the study of marine systems, incorporating both the natural and human environment, and covering "ridge to ridge" (the mountains to the mid-ocean ridge). Focus will be on linking the natural and social sciences of marine systems, use these bridges to build new collaborative approaches to policy and decision-making, and develop and incorporate data-intensive methods in research and education. The MSI will build on the existing strengths in marine sciences, geospatial science, environmental economics, and public policy at OSU. The MSI will encompass both research and education by building new programs at the undergraduate, graduate, and post-graduate levels. <http://marinestudies.oregonstate.edu/>

Responsibilities and Duties:

Successful candidates will be paired with faculty mentors in Geography and Marine Resource Management for training in the development and submission of fundable research proposals, research collaboration, publication of results, teaching, and other skills needed to build a clear career path to a position in academic teaching, research and outreach. CEOAS institutional postdocs will be encouraged to seek external funding, and may serve as Principal Investigator, or co-Principal Investigator, on grant proposals ideally that would include students in interdisciplinary programs such as Marine Resource Management. May be appointed as Instructor of record to develop and/or teach a course on a subject in his/her expertise that would be of interest to students in interdisciplinary programs such as Marine Resource Management and others across the College. As such, these scientists will continue to develop the skills and track record that makes them strong candidates for faculty hires at this and other universities.

60% Research and scholarship: Conduct research in fundamental methods of geospatial analysis to understand and manage human activities in marine systems. Research could focus on any aspect of coastal and marine geospatial analysis and planning including: (1) multidimensional spatial decision support systems for ocean and coastal planning such as for ecosystem-based fisheries management or renewable marine energy systems; (2) geovisualization techniques for marine and coastal data that support marine and coastal planning and management; and (3) coastal hazard analysis including community resilience and the human dimensions of natural hazards. Research addressing trans-boundary or international problems, with a geographic scope that links mountain to marine systems, is of particular interest to the College. Prepare research results that will lead to publication in peer-reviewed journals. Present research results at appropriate conferences of scientific organizations. Deliver seminars at OSU and other institutions.

25% Grant preparation and submission to agencies and foundations to gain external funding.

15% Service: As part of the mentoring plan, the postdoc will gain exposure to curriculum design, co-teach and provide guest lectures in areas of expertise, faculty governance, promotion and tenure, peer review of teaching, participate in college committees, and other processes within an academic institution.

Qualifications:

Candidates are required to have

- Ph.D. degree in geospatial analytics and planning or clearly related fields addressing natural resources (e.g. fisheries, aquaculture, coastal agriculture, renewable energy, coastal tourism, coastal land use change, marine pollution, natural hazards, marine spatial planning) by start of employment;
- Evidence of scholarship (peer-reviewed papers);
- Excellent quantitative analytical skills (appropriate to their field);
- Experience with spatial and temporal analysis;
- Excellent command of the English language including written and verbal communication skills;
- A demonstrable commitment to seeking external funding;
- A demonstrable commitment to promoting and enhancing diversity.

Preference will be given to candidates with some combination of

- Experience with Bayesian approaches to analysis (WinBugs and Netica/Bayes nets)
- Experienced in programming languages/software including Python, R, Java;
- Research experience with coastal and marine spatial planning;
- Research experience in community resilience and collaborative governance;
- Research interests aligned with the CEOAS strategic hiring plan (<http://ceoas.oregonstate.edu/employment/strategic/>).

To Apply: go to <https://jobs.oregonstate.edu/> posting 0016715.
For information regarding the College of Earth, Ocean, and Atmospheric Sciences please visit <http://ceoas.oregonstate.edu/>.

When applying you will be required to attach the following electronic documents that should address the required and preferred qualifications:

- 1) Detailed curriculum vitae including a list of publications and the names and addresses of three referees willing to write confidential letters of recommendation.
- 2) A cover letter indicating how your qualifications and experience have prepared you for this position.
- 3) A two-page statement of proposed work, including identification of possible CEOAS faculty mentors.
- 4) Undergraduate and graduate school transcript.

We encourage applicants to contact faculty members with research interests fitting the proposed work: <http://ceoas.oregonstate.edu>.

Closing date: For full consideration apply by February 8, 2016. Final position closing date is February 29, 2016.

Selection: Awards are competitive, with a major emphasis on potential for independent, creative research, teaching, and outreach. Candidates will be selected based on overall excellence, including academic qualifications, letters of recommendation, and a statement of proposed work that is compatible with the CEOAS research themes as outlined on the college website (<http://ceoas.oregonstate.edu/research>). Starting postdoctoral full-time annual salary range is \$50,000 – \$55,000 plus OSU benefits <http://hr.oregonstate.edu/benefits/>

For questions regarding the application process contact CEOAS Human Resources Coordinator Sarah Haluzak, +1-541-737-5194, shaluzak@coas.oregonstate.edu

University and Community:

Oregon State is the state's [Land Grant](#) University and is one of only two in the U.S. to have [Sea Grant](#), [Space Grant](#) and [Sun Grant](#) designations. Oregon State is the only university in Oregon to hold both the Carnegie Foundation's top designation for research institutions and its prestigious Community Engagement classification. As Oregon's leading public research university, with \$285 million in external funding in the 2014 fiscal year, Oregon State's impact reaches across the state and beyond. With [11 colleges](#), [15 Agricultural Experiment Stations](#), [35 County Extension](#) offices, the [Hatfield Marine Sciences Center](#) in Newport and [OSU-Cascades](#) in Bend, Oregon State has a presence in every one of Oregon's 36 counties, with a statewide economic footprint of \$2.23 billion. Oregon State welcomes a diverse student body of over 30,050 students from across Oregon, all 50 states and more than 100 countries, choosing from more than 200 undergraduate and more than 80 graduate degree programs, including over 30 offered online through [Oregon State Ecampus](#). Oregon State increasingly attracts high-achieving students, with nationally recognized programs in conservation biology, agricultural sciences, nuclear engineering, forestry, fisheries and wildlife management, earth oceans and atmosphere, community health, pharmacy and zoology.

Oregon State is located in Corvallis, a vibrant college town of 58,000 in the heart of western Oregon's Willamette Valley. located about 90 miles south of Portland and one hour from the Pacific Coast and the Cascade Mountains. Corvallis is an idyllic college town, and is consistently ranked among the best and safest cities to live in the U.S. Corvallis is at the top of the list of most affluent cities in Oregon and number two among the most educated cities domestically. Recently, Corvallis was ranked the fourth best overall college city in America by WalletHub. Corvallis was also named the one of the most secure small towns in the U.S. by the Farmers Insurance Group, and Sunset magazine named Corvallis one of its five favorite eco-friendly small towns. Known

for being one of the most environmentally responsible towns, Corvallis sits in the middle of Oregon's finest recreational and scenic areas: ocean beaches, lakes, rivers, forests, high desert, and the rugged Cascade and Coast Ranges are all within a short driving distance.

For more information regarding OSU please visit: <http://main.oregonstate.edu/about>.

The OSU Marine Studies Initiative (MSI) will be a transformative approach to the study of marine systems, incorporating both the natural and human environment, and covering "ridge to ridge" (from the mountains to the mid-ocean ridge). It will focus on linking the natural and social sciences of marine systems, use these bridges to build new collaborative approaches to policy and decision-making, and develop and incorporate data-intensive methods in research and education. The initiative will build on the existing strengths in marine sciences, geospatial science, environmental economics, and public policy at Oregon State University. The MSI will encompass both research and education by building new programs at the undergraduate, graduate, and post-graduate levels. <http://marinestudies.oregonstate.edu/>

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OSU is committed to a culture of civility, respect, and inclusivity. As an Affirmative Action/Equal Opportunity employer, OSU values diversity in our faculty and staff regardless of their self-identity; to that end, we particularly encourage applications from members of historically underrepresented racial/ethnic groups, individuals with disabilities, veterans, women, LGBTQ community members, and others who share our vision of an inclusive community (<http://main.oregonstate.edu/equity-inclusion-and-diversity-oregon-state-university>).