

## David L Nieland

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**Subject:** Postdoc - Marine Biodiversity at UCSB

\*Quantitative Ecology Postdoctoral Scholar Position: \*The Marine Science Institute at the University of California Santa Barbara seeks a quantitative ecologist for a post-doctoral research position with a focus on biodiversity. The candidate will work closely with UCSB PIs on estimating, monitoring, and modeling biodiversity across multiple spatial scales. Key research questions will include: 1) How can data from diverse sources can be combined to estimate biodiversity? 2) How does uncertainty in estimates of biodiversity depend on the types of sampling chosen? 3) How can local observations be combined with physical covariates and remote sensing data to obtain regional inferences about biodiversity?

The position will be part of the Marine Biodiversity Observation Network project, funded by NASA, the Bureau of Ocean Energy Management and the National Oceanic and Atmospheric Administration (NOAA). The MBON is an interdisciplinary project involving scientists from UCSB, the United States Geological Survey, NOAA, the National Marine Fisheries Service and UC San Diego's Scripps Institution of Oceanography. This five-year project aims to track the diversity of a broad range of marine organisms in the Santa Barbara Channel. The project benefits from extensive existing data about the biological and physical conditions in the region which will be integrated over large spatial scales using geostatistical models and remote sensing. This integration will be supported by new genetic and imaging techniques for observing marine biodiversity, also being developed by the project. In addition, mathematical models will be developed to examine the value of information on biodiversity in making management decisions, and to explore optimal allocation of resources across different methods of sampling.

The candidate should have training in the fields of quantitative ecology and expertise in spatial statistics or geostatistics (a PhD in quantitative ecology, statistics or related field is required) and strong skills in advanced statistical modeling, computational analysis, and scientific programming. An ideal candidate will have experience with quantification of multivariate spatial heterogeneity, change of support, spatial regression models, geostatistical prediction and simulation, and spatial sampling design. The ability to handle large amounts of data in a GIS environment is also an important qualification. The candidate will be expected to lead a portion of the research, in collaboration with the MBON team, including UCSB PIs Phaedon Kyriakidis, Bob Miller, Andrew Rassweiler and David Siegel. Excellent verbal and written communication skills, and proven capacity to publish in peer-reviewed journals are requirements.

Initial appointment will be for one year, with anticipated funding for three or more years, conditional upon performance, and UCSB offers competitive salary and benefits packages. Screening of applications will begin December 1, 2014 with an anticipated start in winter or spring of 2015, but the position will be open until filled. For further information, please contact Dr. Phaedon Kyriakidis at [phaedon@geog.ucsb.edu](mailto:phaedon@geog.ucsb.edu) or Dr. Andrew Rassweiler at [andrew.rassweiler@lifesci.ucsb.edu](mailto:andrew.rassweiler@lifesci.ucsb.edu). Send applications including cover letter, Curriculum Vitae, and contact information for three references to:

<https://recruit.ap.ucsb.edu/apply/JPF00414>

The department is especially interested in candidates who can contribute to the diversity and excellence of the academic community through research, teaching and service. The University of California is an Equal Opportunity/Affirmative Action Employer. All qualified applicants will receive consideration for employment without regard to race, color, religion, sex, national origin, or any other characteristic protected by law including protected Veterans and individuals with disabilities.

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