

**From:** Francesco Ferretti  
**Subject:** Post-doctoral position on high seas fisheries and large marine reserves at Stanford University

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**Position Summary:**

We seek candidates for a Postdoctoral Research Position who will join Stanford University's Hopkins Marine Station to conduct new research on resource overexploitation in the open ocean and protection of large marine reserves. The research will evaluate the status of large predatory fish such as northern bluefin tunas, sharks, and billfishes with innovative analytical and technological approaches. The postdoctoral position will be based in the Block lab ([https://urldefense.proofpoint.com/v2/url?u=https-3A\\_\\_www.stanfordblocklab.org\\_&d=DwIF-g&c=Ngd-ta5yRYsqeUsEDgxhcqsYYY1Xs5ogLxWPA\\_2Wlc4&r=e2OJ1azRFn8ihJzb2HxZT0AqoiqLvxfeeTyN59ZLoI&m=hGgxPDFfNb2jPmIJ41-Y\\_x8aRVvdILLloaiXYVeVOrl&s=dryxdH\\_RikFRo61GQwxxcr399GvLc09UI-OCJkH2Z3Y&e=](https://urldefense.proofpoint.com/v2/url?u=https-3A__www.stanfordblocklab.org_&d=DwIF-g&c=Ngd-ta5yRYsqeUsEDgxhcqsYYY1Xs5ogLxWPA_2Wlc4&r=e2OJ1azRFn8ihJzb2HxZT0AqoiqLvxfeeTyN59ZLoI&m=hGgxPDFfNb2jPmIJ41-Y_x8aRVvdILLloaiXYVeVOrl&s=dryxdH_RikFRo61GQwxxcr399GvLc09UI-OCJkH2Z3Y&e=)) and the researcher will work with Dr. Barbara Block and

Dr. Francesco Ferretti on fisheries stock assessments, mark-recapture and habitat models for large pelagic predators, machine learning approaches and spatial models for data from animal-borne electronic tags and remotely sensed fishing vessels. The Postdoctoral candidate will conduct research focused on creating innovative conceptual approaches and analyses in support of management of pelagic fisheries and marine ecosystems and will be expected to interact with tuna regional fisheries management organization such as ICCAT, IATC, WCPFC and IOTC and other federal and international fisheries management institutions. In particular, she or he will design and conduct analyses and models aimed at quantifying population reference points for fisheries management, habitat suitability models, population dynamics models and large-scale characterization of industrial fishing dynamics. We seek a creative individual with expertise in a relevant ecological, oceanographic or fisheries discipline (e.g., quantitative marine ecology, fisheries science, statistical modeling –using both Bayesian and frequentist approaches - and spatial analyses) and the ability to effectively work in interdisciplinary teams on cross-cutting issues. The researchers should have proficiency in programming languages such as R, MATLAB, or Python, experience with state of the art fisheries stock assessment models, approaches and software, data visualization, programming, data management/protocol, version control, coding, metadata, ability to manage servers and relational databases. Given the focus and goals of the project and of the groups involved, we seek a person with experience and/or interest in both advancing scientific frontiers and addressing real-world challenges of sustainability in the open ocean. The position is for one year, starting in 2018, with potential for renewal up to four years.

**Qualifications:**

The successful candidate will have a Ph.D. in a related field and preferably 1-2 years of experience in advanced technical work, including demonstrated ability to analyze complex systems and solve advanced technical problems, capability to source, handle and analyze large and disparate dataset type and formats, using spatial analytic methods, stock assessment models, Bayes and hierarchical modeling approaches, and experience in environmental data analysis/interpretation using statistical methods and/or modeling. Preference will be given to those with some proficiency in marine science methods and technologies, issues related to fisheries, as well as demonstrated scientific productivity through peer-review publications. Candidates must possess strong teamwork skills and ability to work effectively with students and staff, as well as work successfully within an interdisciplinary group of researchers. The successful candidate will be a self-starter, with the ability to work independently on quantitative problems in a multidisciplinary framework, and as a member of a team.

Stanford is an equal opportunity employer and all qualified applicants will receive consideration without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, disability, veteran status, or any other characteristic protected by law.

To be considered, interested candidates should provide a cover letter and Curriculum Vitae and the names and contacts of three references to Barbara Block at [block@stanford.edu](mailto:block@stanford.edu). The position is to be filled in the winter quarter of 2018.