The Institute of Marine Sciences at the University of California, Santa Cruz (UCSC) invites applications for the position of Project Scientist to conduct original research on the response of anadromous salmonid populations to climate change, under the direction of Dr. Benjamin Martin at the National Marine Fisheries Service.

Predicting how species will respond to climate change is a central challenge in ecology. For highly migratory species, such as Pacific salmon and other anadromous fishes, such predictions are especially challenging, as individuals of these species move through a sequence of dynamic environments over the course of their life cycle. A common way to deal with such complexity has been to reduce it, for example by evaluating the effect of riverine conditions (e.g. temperature and flow) at specific points in time and space on particular populations or life-stages. This project will take a different approach by considering the entirety of the abiotic landscape in space and time over which anadromous salmonid populations must complete their lifecycles. The overarching question motivating this work is, what are the abiotic conditions required in space and time for various anadromous salmonid life histories to persist? Furthermore, how have changes in spatial-temporal signature of abiotic conditions due to anthropogenic and climatic influences affected the status anadromous salmonid populations?

To address these questions the Project Scientist, in collaboration with scientists at UCSC and the National Marine Fisheries Service will construct spatial-temporal maps of abiotic conditions in streams throughout North America’s western coast. The Project Scientist will use these maps as the basis for phenomenological (e.g. image analysis/machine learning) and/or process-based (e.g. dynamic programming) models to identify the conditions required in space and time for salmonid populations to complete their life cycles. Duties include compiling and analyzing data, developing statistical and/or process based models, and disseminating results in the form of refereed journal publications and/or meeting presentations and seminars. Preferred qualifications include experience in data compilation and management of large datasets; performing meta-analysis/macroecological analysis or quantitative synthetic analyses; familiarity with geographic information systems and stream temperature modeling; and a strong quantitative background with a demonstrated ability to learn and apply new computational, statistical, and mathematical skills as needed.

**RANK:** Assistant-Associate Project Scientist

**SALARY:** $55,000 minimum starting salary, commensurate with qualifications and experience

**BASIC QUALIFICATIONS:**
- Ph.D. or foreign equivalent in Quantitative Ecology, Fisheries, Macroecology, Ecophysiology or a related field
- Documented experience writing scientific manuscripts
- Documented experience programming in R, Python or MATLAB

**POSITION AVAILABLE:** As soon as possible

**TERM OF APPOINTMENT:** The appointment is for two years, with funding expiring July 2019. Should the hiring unit propose reappointment; a review to assess performance will be conducted. Reappointment is also contingent upon availability of funding.

**TO APPLY:** Applications are accepted via the UCSC Academic Recruit online system, and must include the following items: 1) letter of application that addresses how you meet the qualifications; 2) Curriculum Vitae; 3) a summary of your research; 4) one to two representative scientific manuscripts (drafts of manuscripts in review are also acceptable); and 5) the names and email addresses for three references (confidential letters of recommendation* will be sought for applicants who are under serious consideration). Documents/materials must be submitted as PDF files.

**APPLY AT** https://recruit.ucsc.edu/apply/JPF00446

Refer to Position JPF00446-17T in all correspondence.

*All letters will be treated as confidential per University of California policy and California state law. For any reference letter provided via a third party (i.e., dossier service, career center), direct the author to UCSC’s confidentiality statement at http://apo.ucsc.edu/confstm.htm.

**CLOSING DATE:** Review of applications will begin on May 17, 2017. To ensure full consideration, applications should be complete and letters of recommendation received by this date. The position will remain open until filled, but not later than 6/30/2018.