

Fisheries stock assessment researcher

This is a unique opportunity for a stock assessment scientist to focus purely on research, without being responsible for providing assessment advice for a particular stock in management forums. In realization of the demand for stock assessment scientists and to attract the best candidates, the remuneration is substantially higher than provided for typical postdoctoral positions. Position tenure is for two years, with extension depending on performance and funding.

The position is located in La Jolla, CA (USA) at the recently established Center for the Advancement of Population Assessment Methodology (CAPAM). The CAPAM is a collaboration between the Southwest Fisheries Science Center (NOAA/NMFS/SWFSC), the Inter-American Tropical Tuna Commission (IATTC), and the University of California San Diego, Scripps Institution of Oceanography (UCSDSIO). The immediate setting for the position is a newly constructed, \$75 million, multi-faceted federal laboratory on SIO's main campus. A primary goal of the CAPAM is to develop standard approaches for data analysis that can be used by assessment analysts to more efficiently construct and produce reliable scientific assessments, based on a general, broadly implemented stock assessment program, such as Stock Synthesis. The CAPAM focuses intensively on research related to quantitative methods generally used in stock assessment modeling efforts conducted worldwide. Specifically, emphasis will be on assumptions used in contemporary stock assessment models, e.g., selectivity/catchability, growth, natural mortality, stock-recruitment relationship, covariates, spatial structure, data/likelihood weighting, multi-species and ecosystem considerations, and diagnostics. The CAPAM infrastructure consists of postdoctoral researchers, visiting scientists, on-site collaborators, and workshops.

The initial research will focus on modeling selectivity in fisheries stock assessment models. In general, research will include reviewing the scientific literature, statistical modeling, simulation testing, writing manuscripts, and assisting workshop coordination. Specifically, research will address evaluating the performance of different functional forms and appropriateness of time varying properties associated with modeling selectivity in multiple data source, fully-integrated fish stock assessment models. The successful candidate will be supervised by Drs. Mark Maunder (IATTC), Paul Crone (SWFSC), and Brice Semmens (UCSD-SIO), and will interact with other collaborators and visiting scientists involved in the overall research effort.

Experience with implementing and fitting population dynamics models to data is essential, preferably in a fisheries stock assessment context. Familiarity with AD Model Builder, R, and/or Stock Synthesis or similar software is necessary to carry out the analytical aspects of the research. A PhD is preferred, but relevant experience will be strongly considered for other cases.

Position will remain open until filled. Contact Mark Maunder (mmaunder@iattc.org), Paul Crone (paul.crone@noaa.gov), and Brice Semmens (semmens@ucsd.edu) for further information.