COMISION INTERAMERICANA DEL ATUN TROPICAL
INTER-AMERICAN TROPICAL TUNA COMMISSION

8901 La Jolla Shores Drive, La Jolla CA 92037-1509, USA – www.iattc.org
Tel: (858) 546-7100 – Fax: (858) 546-7133 – Director: Arnulfo Franco

Vacancy Announcement

Senior Quantitative Fisheries Scientist for the Inter-American Tropical Tuna Commission (IATTC)

The Inter-American Tropical Tuna Commission (IATTC) invites applications for the position of Senior Quantitative Fisheries Scientist. This is a full-time appointment to work at the headquarters of this international organization, located in La Jolla, California, U.S.A.

The IATTC is one of five regional fisheries management organizations in the world. The IATTC is responsible for ensuring the long-term conservation and sustainable use of the stocks of tunas and tuna-like species, and other species, taken by vessels fishing in the eastern Pacific Ocean. The IATTC employs a dedicated scientific staff that operates under the supervision of the Director of the Commission and of its Coordinator of Scientific Research. The functions of the scientific staff include, among others, conducting scientific research, providing information and scientific advice for management, and development and maintenance of data collection programs. More information about the IATTC can be found at www.iattc.org. The staff's scientific research activities defined under the IATTC Strategic Science Plan are divided among several programs: Stock Assessment, Ecosystem and Bycatch, Biology, Data Collection and Database. The selected applicant will be in the Stock Assessment Program and supervised by Dr. Mark Maunder (www.populationassessment.com).

The applicant will work in a variety of capacities including both applied and theoretical. A substantial component of the work will focus on research to develop new and/or extend existing quantitative methods as required to solve applied problems in fisheries. Most of the work will involve conducting data analyses to support the IATTC Stock Assessment Program. However, the selected applicant will also be expected to assist IATTC scientific staff members from other programs.

Work in the Stock Assessment Program covers range of topics (see Staff Activities Report), which often involve quantitative methods development, including data rich and data poor stock assessments, population trend estimation, population assessments, data analysis, data collection design, catch and catch composition estimation, and Management Strategy Evaluation (MSE). Several recent projects at the IATTC include:

- Spatio-temporal modelling of tuna tagging data. This project involves joining a spatio-temporal mixture model for the tuna population distribution with an advection-diffusion model of the tagged individuals to deal with spatially limited tag releases and the consequent initial non-mixing.
- Close-kin mark-recapture. This project involves the use of genetics to "tag" adults through kinship (parent offspring pairs (POPs) and half sibling pairs (HSPs)) to

estimate species abundance. Feasibility studies are underway for yellowfin tuna, silky sharks, and dolphins.

- Management Strategy Evaluation (MSE) of bigeye tuna. Including the development of operating models, estimation models, harvest control rules, and simulation analysis.
- Developing advanced spatio-temporal models (e.g., integrating multiple gear and data types, including preferential sampling, joint modelling of CPUE and length composition) to improve CPUE standardization and catch composition estimates.
- Evaluation of the impact of the purse seine fishery on dolphin populations. Application of integrated fishery stock assessment models to a marine mammal population.

Duties of the selected applicant may include, among others:

- Leading the stock assessment for one of the three tropical tuna species (e.g., yellowfin).
- Leading the Management Strategy Evaluation (MSE) for one of the three tropical tuna species (e.g., yellowfin).
- Leading the IATTC contribution to the assessments of shared stocks (e.g., through the IATTC participation in the scientific work developed by the Working Groups of the ISC).
- Developing stock assessment and related methods to deal with novel data or extract more information from exiting data, diagnose model performance, account for uncertainty, and provide robust management advice within an MSE framework.
- Analyzing various types of univariate and multivariate fisheries data (e.g., catch and effort, morphometric, environmental, mark-recapture, genetics, electronic monitoring).
- Developing sampling designs for diverse data collection programs, including catch and effort, electronic monitoring and mark-recapture.
- Providing quantitative support to various IATTC scientific programs.
- Working with large, relational databases.
- Contributing quantitative analyses to reports and publications led by fisheries scientists.
- Writing IATTC technical reports and publications for peer-reviewed journals on quantitative matters.
- Presenting results of quantitative analyses and methods development at IATTC meetings.
- Teaching courses on stock assessment modeling and related topics.

Selection Criteria

A PhD from a quantitative and ideally interdisciplinary graduate program (e.g., quantitative fisheries, wildlife statistics, ecological modelling). A PhD in statistics with both theoretical and applied components will also be considered. Candidates with extensive relevant work experience will be considered for applicants with a master's degree in statistics or from a quantitative interdisciplinary graduate program.

The following skills are desired in the ideal candidate:

- Experience developing (including coding) and applying stock assessment models.
- Experience developing and applying Management Strategy Evaluation (MSE) to marine resource stocks.
- Experience with the stock assessment package Stock Synthesis.
- Proficiency in exploratory data analysis methods, including techniques for multivariate data.
- Proficiency with standard statistical modeling techniques such as generalized linear and additive models, mixture models, for Gaussian and non-Gaussian data, including count data with zero-inflation.
- A solid understanding of theoretical statistics and how to apply this knowledge to create new methods and modify existing methods to solve practical problems.
- Experience in the use of machine learning algorithms (e.g. random forests, support vector machines, clustering algorithms).
- Experience with AI tools for coding and other tasks.
- Expertise in the R programming language and experience coding reproducible analyses to solve applied problems.
- Willingness to work in an office setting, primarily with computer databases, computer programs, and statistical software.
- Willingness to travel when necessary.
- Strong interpersonal skills and experience working as a part of a team, as well as working independently.
- Willingness to learn new skills and to self-teach new quantitative methods.
- Creativity to adapt current methods or develop new methods to solve practical fisheries problems.
- Excellent communication skills, both oral and written.
- Working knowledge of English or Spanish, and at least reading fluency in English and an ability to hold a technical conversation in English.
- Multiple first-author publications in peer-reviewed journals.
- Experience using RTMB, RStudio, Quarto, GitHub, Claude Code, tidyverse, Zotero.

Salary and Allowances

Commensurate with qualifications, skills, and experience the candidate chosen for the post will be appointed as "Senior Quantitative Fisheries Scientist". The base salary for an applicant with a PhD and limited experience will be equivalent to an adjusted US Federal pay grade GS 13:1. (currently US$ 130,096 per year). Higher salaries will be considered based upon experience.

Allowances include annual leave with pay, sick leave with pay, medical, dental and life insurance and a defined contribution pension plan.

Availability

The candidate chosen for the post should be available to report at IATTC headquarters in early February, 2027, or as soon as possible thereafter.

Applications

Applications may be submitted in either English or Spanish and should be sent no later than **15 December 2026** in electronic format to tmusano@iattc.org, or to the following address:

Teresa Musano
Inter-American Tropical Tuna Commission
8901 La Jolla Shores Drive,
La Jolla CA 92037-1509
USA

Applications should include the following:

- A cover letter containing a statement of purpose of the application and succinct descriptions of the applicant's experiences and abilities.
- Completed IATTC personal history form that can accessed at http://www.iattc.org/StaffVacancies/IATTCPersonalHistoryForm.pdf
- Curriculum Vitae (which may replace some of the information in the personal history form and that listed below)
- Official copy of transcripts and college degree.
- List of training courses, special skills, certificates and licenses, honors, or awards that relate to the specific description of this announcement. Please do not include copies of certificates.
- List of publications
- Letters of reference from persons with a recent knowledge of the applicant's character, qualifications and experience.
- A statement as to whether or not the applicant's current supervisor may be contacted.