COMISION INTERAMERICANA DEL ATUN TROPICAL INTER-AMERICAN TROPICAL TUNA COMISSION

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

23 February 2017 Ref.: 0059-410

To: Commissioners

From: Guillermo Compeán, Director

Re: Statistician - vacancy announcement

In accordance with the agreement reached by the Commission at its 87th (resumed) meeting, "that, in addition to the appropriate advertising of vacant posts on the Commission staff, the Members be expressly informed about them prior to their publication and also about the results of the selection process", please find attached the vacancy announcement for the position of Statistician at the headquarters of the IATTC.

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Vacancy Announcement

Statistician for the Inter-American Tropical Tuna Commission (IATTC)

The Inter-American Tropical Tuna Commission (IATTC) invites applications for the position of Statistician. 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 the regional fisheries management organization responsible for the implementation of the 2003 Antigua Convention, the objective of which is to ensure the long-term conservation and sustainable use of the stocks of tunas and tuna-like species and other species of fish taken by vessels fishing for tunas and tuna like species in the eastern Pacific Ocean. The IATTC employs a 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 are defined in article XIII of the Convention and include, among others, conducting scientific research, providing information and scientific advice and collecting statistical data. More information about the IATTC can be found at www.iattc.org.

The selected applicant will be expected to work as part of the IATTC Stock Assessment Program. However, the selected applicant will also be expected to assist IATTC scientific staff members from other programs, as well as scientists and relevant personnel or institutions from IATTC Members, in the area of statistical analysis. Duties of the selected applicant will be to conduct statistical analysis, as well as other support activities as appropriate and required. These duties may include, among others:

- Working with IATTC database managers to create data extractions necessary for statistical analyses.
- Post-processing data extractions to prepare data sets for statistical analyses.
- Undertaking exploratory data analyses, including developing algorithms for data quality screening, and preliminary analyses to inform formal statistical modelling and post-stratification of survey data.
- Analyzing various data types (e.g., target fisheries catch and effort data,

- morphometric data, bycatch data, environmental and oceanographic data).
- Fitting complex statistical models to various types of data.
- Developing new and extending existing statistical methods.
- Estimation of fishery totals (e.g., total tuna catch by species) from survey data and auxiliary information.
- Writing technical reports and publications on statistical matters .
- Presenting statistical analyses at IATTC meetings and others.
- Assisting other IATTC scientists with their own statistical analyses.
- Assisting IATTC Members with capacity building activities such as short courses on statistical analysis and sampling design.
- Assisting in the relationship between IATTC and other international institutions in the field of statistics and participating, as appropriate, in meetings and other collaborative activities in that field.

Selection Criteria

A PhD in statistics with both theoretical and applied components, or a PhD from a quantitative interdisciplinary graduate program, is preferred, but relevant work experience will be considered for applicants with a master's degree in statistics or related field.

Candidates should also possess the following skills:

- Strong proficiency in exploratory statistical methods, including multivariate analysis techniques.
- Strong proficiency in sampling design, including adaptive sampling methods.
- Strong proficiency with design-based and model-based methods for estimation of population totals from survey data and auxiliary information.
- Strong proficiency with standard statistical modeling techniques such as generalized linear models, generalized additive models, and mixture models (e.g., models for count data with zero-inflation).
- Strong proficiency with generalized linear mixed-effects models and generalized additive mixed-effects models.
- Good knowledge of spatial-temporal modelling approaches.
- Strong proficiency with the R programming language.
- Familiarity with fisheries and/or ecological data and environmental and oceanographic data.
- Willingness to work in an office setting, primarily with computer databases, computer programs, and statistical software.
- Willingness to travel when necessary.
- Strong inter-personal 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 statistical methods.
- Creativity to adapt current methods or develop new methods as required to solve applied problems.
- Excellent communication skills, both oral and written.
- Publications in peer-reviewed journals.
- Working knowledge of English or Spanish and at least limited knowledge of one of the two. Fluency in both languages, written and oral, will be considered as an asset.

Other desired skills

- Familiarity with ACCESS and SQL.
- Familiarity with C or C++.
- Familiarity with population dynamics modelling.
- Familiarity with AD Model Builder or Template Model Builder.
- Familiarity with machine learning techniques.
- Experience with purse-seine fisheries, including fisheries data and fishery operations.

Salary and Allowances

Commensurate with qualifications, skills, and experience. The base salary for an applicant with a PhD will be equivalent to an adjusted US Federal pay grade GS 13:1 (US\$97,158 per year).

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 May, 2017, or as soon as possible thereafter.

Applications

Applications may be submitted in either English or Spanish and should be sent no later than March 31, 2017 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.
- Curriculum Vitae preferably the applicant should fill, electronically or in hardcopy, the IATTC personal history form that can accessed at http://www.iattc.org/StaffVacancies/IATTCPersonalHistoryForm.pdf
- 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 health certificate or statement issued by a competent medical doctor indicating that the candidate is physically able to perform the functions of the position as described in this announcement, or is otherwise in good health.
- A statement as to whether or not the applicant's current supervisor may be contacted.

Additional Information

Please consult the IATTC website at www.iattc.org for complete information on IATTC duties and the application process.