Position Details

Research Scientist/Engineer- CSOF7

THE FOLLOWING INFORMATION IS FOR APPLICANTS	
Advertised Job Title	Senior Marine Population Dynamicist
Job Reference	84621
Tenure	Indefinite, Full time
Salary Range	AU$141,949_ to AU$157,055 (pro-rata for part-time) + up to 15.4% superannuation
Location(s)	St Lucia, Brisbane, QLD
Relocation Assistance	Will be provided to the successful candidate if required
Applications are open to	All Candidates
Position reports to the	Team Leader Fisheries Assessment & Marine Ecology
Client Focus – Internal	25%
Client Focus – External	75%
Number of Direct Reports	0
Enquire about this job	tonya.vandervelde@csiro.au or phone +61 0477364786
How to apply	Apply online at https://jobs.csiro.au/ Internal applicants please apply via **Jobs Central** If you experience difficulties when applying, please email careers.online@csiro.au or call 1300 984 220.

Acknowledgement of Country

CSIRO acknowledges the Traditional Owners of the land, sea and waters, of the areas that we live and work on across Australia. We acknowledge their continuing connection to their culture and pay our respects to their Elders past and present. View our vision towards reconciliation.

Role Overview

CSIRO's Ocean and Atmosphere business unit is uniquely placed to deliver significant economic, social and environmental benefits for Australia and the region. CSIRO Oceans and Atmosphere provides the knowledge to manage Australia's marine estate and atmospheric environment, plan for and respond to weather and climate related natural hazards and ensure sustainable coastal development and growth of marine industries. We seek to secure Australia's future through our seas and skies.

CSIRO Coasts and Ocean Research (COR) Program is a world leader in fisheries research, focusing on environmental, economic and social impacts if fishing. It conducts empirical and quantitative modelling research for management of domestic fisheries managed federally in Australia and throughout the Indo-Pacific, including stocks that straddle jurisdictional boundaries.

The role of Research Scientist Staff in CSIRO is to conduct innovative research leading to scientific achievements that are aligned with CSIRO's strategies. They are expected to:

1. Engage in scientific activities ranging from fundamental research to the investigation of specific industry or community problems,
2. Build and maintain networks,
3. Play a lead role in securing project funds,
4. Provide scientific leadership and pursue new ideas and approaches that create new concepts, and
5. May be involved in leading research projects or undertaking work that has impact on the development of scientific or technical knowledge.

They will also work in a team conducting fisheries research including stock estimation in Australian and international fisheries, with a particular application to management related issues. The successful applicant will have a good understanding of statistics, including estimation and feedback control, and be able to apply this understanding through quantitative simulation modelling and analysis for decision support. The position will contribute to a range of studies and potentially involve a variety of different quantitative and qualitative research methods. They will require high level skills with demonstrated ability to work with industry, develop and maintain a network of clients, and secure a broad diversity of research funding.

Duties and Key Result Areas:

- Undertake research and analysis of harvest strategies and data poor methods for national and international fisheries.
- Apply Management Strategy Evaluation methods
- Develop statistical population dynamics models
- Interact with other CSIRO researchers in identifying research priorities and developing new project proposals.
- Engage and build upon a current network of CSIRO clients and collaborators.

- Work collaboratively and honestly with internal and external colleagues, clients and partners to develop and progress challenging but realistic research plans for a range of research projects.
- Work effectively as part of a multi-disciplinary, often regionally dispersed research team, under guidance from Team and Group Leaders.
- Manage projects, timeframes, and budgets.
- Participate in communication processes within CSIRO and with outside stakeholders.
- Undertake other scientific activities as directed by the Group or Program Leader.
- Produce high quality scientific papers suitable for publication in quality journals and for presentation at national and international conferences.
- Provide advice to policy makers and inform and transfer knowledge to non-scientific audiences.
- Lead, coach and supervise staff to ensure work is established in accordance with research design, within agreed timelines and budget.
- Act as a trusted advisor, utilising knowledge of client's business and understanding of their underlying needs.
- Anticipate industry and/or community needs and market direction through client liaison/networking and identify and adapt quickly to changes.
- Within broad guidelines, use professional expertise, knowledge of other disciplines and research experience/achievement to formulate, develop and complete an approved research program with general direction as to the aims of their activities.
- Provide advice to policy makers and inform and transfer knowledge to non-scientific audiences.
- Communicate openly, effectively and respectfully with all staff, clients and suppliers in the interests of good business practice, collaboration and enhancement of CSIRO's reputation.
- Adhere to the spirit and practice of CSIRO's Code of Conduct, Health, Safety and Environment procedures and policy, Diversity initiatives and Making Safety Personal goals.
- Other duties as directed.

Required Competencies:

- **Teamwork and Collaboration:** Creates and fosters an environment in which there is a high level of cooperation within and between teams. Facilitates positive team relationships to build interactions across Business Units and the organisation.
- **Influence and Communication:** Identifies critical stakeholders and influences them via an influential third party, for example through an established network, to gain support for sometimes contentious proposals/ideas.
- **Resource Management/Leadership:** Provides leadership that fosters an environment that encourages new ideas and provides support for the development of emerging skills. Creates trust by displaying consistency, understanding, integrity and patience. Plans, seeks, allocates and monitors resources to achieve outcomes.
- **Judgement and Problem Solving:** Resolves major conceptual scientific, technical, commercial or management problems, which have a significant impact upon the field of research, professional function, the Business Unit or the Organisation. Situations faced have little or no precedent and require original concepts and approaches.

- **Independence:** Assesses the risk and opportunity of identified strategies, options and actions. Overcomes problems and setbacks in achieving goals. Invariably includes consideration of value-added future impact on bottom line when determining the optimal and efficient use of resources.
- **Adaptability:** Is flexible in response to external change or when faced with external constraints. Identifies and promotes the opportunities arising as a result of change.

Selection Criteria

Essential

Under CSIRO policy only those who meet all essential criteria can be appointed.

1. A PhD or equivalent, and research experience in environmental science or natural resource management, including formulating, implementing and applying quantitative natural resource models in an environmental or natural resource management context.
2. Demonstrated experience in developing and applying quantitative techniques to population dynamics in natural resource modelling (e.g. simulation, optimisation, estimation, control theory, and management strategy evaluation).
3. Demonstrated ability to initiate original research work and develop innovative approaches to research problems.
4. Demonstrated ability to engage and work with clients and collaborators.
5. Demonstrated ability to initiate and obtain research funding.
6. Computer programming in ADMB, TMB, R, C or similar language.
7. Demonstrated capacity for effective oral and written communication of research results and their general implications to a wide variety of audiences such as scientists, stakeholders, funding agencies, the media and the general public.
8. A demonstrated record of research excellence (indicated by the outcomes of completed work and scientific publications).
9. The ability to work effectively as part of a multi-disciplinary, regionally dispersed research team, and carry out independent individual research, to achieve organisational goals**.**

Desirable:

1. Knowledge of Australian and international fisheries management issues.
2. Experience in planning and leading research projects
3. An appreciation of modelling principles and frameworks such as MICE, size spectra or statistical multispecies modelling approaches
4. Interest and knowledge of new and emerging population dynamic assessment approaches.
5. Knowledge of fieldwork practices (such as data collection challenges, survey techniques)

Special Requirements

Appointment to this role may be subject to conditions including provision of a national police check as well as other security/medical/character clearance requirements.
Include if relevant:

- The successful candidate will be asked to obtain and provide evidence of a National Police Check or equivalent. Please note that people with criminal records are not automatically deemed ineligible. Each application will be considered on its merits.
- The successful candidate will be required to undertake a pre-employment medical examination prior to commencement.
- If the successful candidate is not an Australian Citizen or Permanent Resident, they may be required to undergo additional security clearances, which may include medical examinations and an international standardised test of English language proficiency (i.e. IELTS test).- https://ielts.com.au/

About CSIRO:

We solve the greatest challenges through innovative science and technology. Visit CSIRO Online and CSIRO's Oceans and Atmosphere Business Unit for more information.

CSIRO is a values-based organisation. In your application and at interview you will need to demonstrate behaviours aligned to our values of:
- People First
- Further Together
- Making it Real
- Trusted