



Pacific
Community
Communauté
du Pacifique

JOB DESCRIPTION

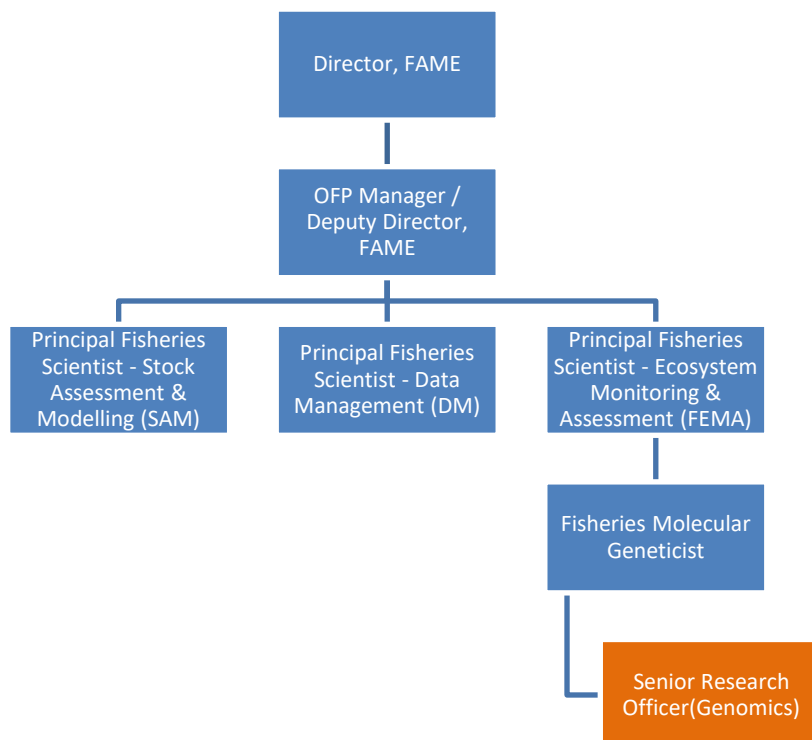
Job Title:	Senior Research Officer (Genomics)
Division / Programme:	Oceanic Fisheries Programme, FAME
Location:	Noumea
Reporting to:	Fisheries Molecular Geneticist
Number of Direct Reports:	0
Purpose of Role:	The purpose of the job is to undertake a programme of work that supports the development and application of fisheries science to tuna fisheries in the western and central Pacific Ocean. The role will have a strong focus on projecting the impact of climate change on tuna populations over seasonal, decadal and longer timeframes to assist the development of advanced warning systems and to evaluate adaptation options that mitigate adverse climate impacts on fisheries.
Date:	September 2022

Organisation Context:

The **Pacific Community** (SPC) is the principal scientific and technical organisation in the Pacific region, supporting development since 1947. We are an international development organisation owned and governed by our 26 country and territory members. In pursuit of sustainable development to benefit Pacific people, our unique organisation works across more than 25 sectors. We are known for our knowledge and innovation in such areas as fisheries science, public health surveillance, geoscience, and conservation of plant genetic resources for food and agriculture.

The **Fisheries, Aquaculture and Marine Ecosystems** (FAME) Division includes the Oceanic Fisheries Programme (OFP) and Coastal Fisheries Programme (CFP). The goal of the OFP is to ensure fisheries that exploit the region's resources of tuna, billfish and related species are managed for economic and ecological sustainability using the best available scientific information. In pursuing this goal, the OFP provides scientific support for the management of fisheries for tuna and associated species, with a strong focus on stock assessment and modelling, fisheries and ecosystem monitoring and analysis and data management. The OFP works closely with member countries and territories, the Western and Central Pacific Fisheries Commission, the Forum Fisheries Agency, the Parties to the Nauru Agreement and other regional and sub-regional entities.

The **Fisheries & Ecosystem Monitoring & Analysis** (FEMA) Section of the OFP undertakes a broad range of tuna fisheries and tuna ecosystem monitoring and analysis work. This work is supported by data collection and monitoring from the fisheries and the oceanic tuna ecosystem and the development of ecosystem and tuna models. The Senior Research Officer will facilitate FEMA's increasing volume and diversity of genomic research by ensuring data quality through laboratory best practices, conducting in-house protocols such as eDNA assessments and the development and use of species, sex or age identification assays, and preparing samples for external analysis. The list of responsibilities will continue to develop with changing technology and research demands.



Key Result Areas:

The position of **Senior Research Officer (Genomics)** encompasses the following major functions or Key Result Areas:

- Genomic and biological sample analyses. (35%)
- Supervision of Genomics lab and its maintenance (35%)
- Data quality and database support. (15%)
- Communication, reporting and training (15%)

The requirements in the above Key Result Areas are broadly identified overleaf.

Jobholder is accountable for	Jobholder is successful when
1. Genomics and biological sample analyses <ul style="list-style-type: none"> • Provide high quality data • Develop and adapt sampling and analysis protocols when required • Implement good laboratory practices • Contribute to sample collection and other analytical work when required such as stomach contents examination, histology of gonads, fish ageing. 	<ul style="list-style-type: none"> • Genomics samples and analyses completed to deadlines. • Protocols established and improved for the different types of analyses required data quality in requirements • New relevant documentation obtained
2 Supervision of Genomics lab and its maintenance <ul style="list-style-type: none"> • Plan, organise, direct and coordinate activities in the Genomics laboratory at SPC Headquarters • Ensure lab and equipment are clean and in good condition • Supervise lab equipment purchase • Ensure SPC Health and Safety, Procurement and Staff policies are adhered to (as related to work in the lab) • Oversee tests and experiments and ensure that all tests and projects are completed on time. • Manage storage of genetic samples associated with the Pacific Marine Specimen Bank • Increase the number of specimens in the collection • Supervise sample preparation when required 	<ul style="list-style-type: none"> • Lab in good condition with all necessary equipment available when needed • Lab use is well coordinated • Health and Safety protocols adhered to
3 Data quality and database support	

Jobholder is accountable for	Jobholder is successful when
<ul style="list-style-type: none"> • Enter data in the database including data checking • Screen, check and correct entered data to ensure high quality • Suggest improvement to the database if necessary • Supervision of database filling and maintenance • Improvement of the database including data quality checking • Extract data from the database as required 	<ul style="list-style-type: none"> • High reliability and quality of data entered • Ensure all data entered in the database within weeks after sample examination • Improved database practicability • Data provided timely for reporting
4 Communication, reporting and training <ul style="list-style-type: none"> • Produce reports as required and articles for newsletters and websites • Train lab assistant, students, trainees and volunteers • Participating and contributing to workshops and training to build capacity for national and regional institutions to obtain and interpret genomics data. 	<ul style="list-style-type: none"> • Lab assistants and trainees gaining knowledge and producing good quality work • Reports, articles and newsletters produced • Fisheries and other natural resource management officers in SPC member administrations are able to articulate the impacts of climate on tuna

Note

The above performance standards are provided as a guide only. The precise performance measures for this position will need further discussion between the jobholder and manager as part of the performance development process.

This section may be copied directly into the Performance Development forms (Part 1 – Expected Results).

Work Complexity:

Most challenging duties typically undertaken:

- Ensuring that sufficient number of samples are examined can be challenging when dealing with many different activities linked to the position and the team work and ad-hoc unplanned requests
- Establishing new protocols during the laboratory's ground-up development

Functional Relationship Skills:

Key Internal/External Contacts	Nature of the contact most typical
INTERNAL: <ul style="list-style-type: none"> • OFP-FEMA colleagues • OFP Stock Assessment and Modelling Section • OFP Data Management Section • Coastal Fisheries Programme • PCCOS • Climate Change and Environmental Sustainability Programme 	<ul style="list-style-type: none"> • Collaboration and information sharing with other OFP sections • Collaboration on research programmes • Administrative tasks
EXTERNAL : <ul style="list-style-type: none"> • SPC member fishery departments • Officers from other regional institutions (FFA, PNAO) • WCPFC Scientific Committee • Research Organisations and Universities (e.g. IRD, CSIRO, UNSW, IATTC, IFREMER, UNC, SPREP, USP, NIWA) • International Climate Change institutions 	<ul style="list-style-type: none"> • Collaboration on research programme. • Response to ad hoc requests for data and analyses. • Attendance at regional workshops, in-country visits. • Presentation of results and related stakeholder consultations.

Level of Delegation:

The position holder has no delegated responsibility as per SPC's Instrument of Delegation.

Person Specification:

This section is designed to capture the expertise required for the role at the 100% fully effective level. (This does not necessarily reflect what the current jobholder has.) This may be a combination of knowledge / experience, qualifications or equivalent level of learning through experience or key skills, attributes or job specific competencies.

Qualifications

Essential:	Desirable:
<ul style="list-style-type: none">Bachelor's degree in Molecular Biology or related fields	<ul style="list-style-type: none">Post Graduate Diploma in Laboratory Technology

Knowledge / Experience

Essential:	Desirable:
<ul style="list-style-type: none">Seven years molecular laboratory experienceTwo years laboratory supervisory/leadershipProficiency in the use and development of relational databasesWell developed technical writing competencies (in English)Excellent verbal communication in skills in English	<ul style="list-style-type: none">Working knowledge or better in FrenchExperience in marine animal stomach content examination.Experience in histologyExperience in fish ageingBiobank or specimen bank/repository experience

Key Skills /Attributes / Job Specific Competencies

The following levels would typically be expected for the 100% fully effective level:

Expert level	<ul style="list-style-type: none">General molecular laboratory methodsCommunication and organizational skills
Advanced level	<ul style="list-style-type: none">Laboratory leadership
Working Knowledge	<ul style="list-style-type: none">Fisheries science methodsTuna biology and ecology
Awareness	<ul style="list-style-type: none">Good understanding of tuna fisheries in the Western and Central Pacific regionFisheries management principalsSPC policies relating to recruitment, gender, harassment, and others

Key Behaviours

*All employees are measured against the following **Key Behaviours** as part of Performance Development:*

- Change and Innovation
- Interpersonal Skills
- Teamwork
- Promotion of Equity and Equality
- Judgement
- Building Individual Capacity
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Personal Attributes

- Highly motivated with strong interest in their work
- Effective communicator

- Patience and ability to keep focused on the job
- Thorough and conscientious
- Resilient
- High level of professional integrity and ethics

Change to Job Description:

From time to time it may be necessary to consider changes in the job description in response to the changing nature of our work environment – including technological requirements or statutory changes. Such change may be initiated as necessary by the Director Corporate Services. This Job Description may be reviewed as part of the preparation for performance planning for the annual performance cycle.