



POSITION DESCRIPTION

Job Title:	RAAP Shark PostDoc
Type of Employment:	Two year fixed term, subject to continuation of funds. Full time appointment
Remuneration:	A salary package consisting of: <ul style="list-style-type: none">• Salary commencement of AUS \$87,735 p.a. (Academic Level A step 6)• Employer superannuation of 9.5%• Employment specific training
Closing Date:	5:00 pm, 31 st May 2016
Further Information:	Dr Vic Peddemors 0411537268 Prof Rob Harcourt 0421780434

BACKGROUND

The Sydney Institute of Marine Science (SIMS) is a joint initiative of four universities (Macquarie University, University of Sydney, University of NSW and the University of Technology Sydney) to develop a multidisciplinary marine research institute. This collaborative venture is based at the former naval depot at Chowder Bay adjacent to Clifton Gardens and enables marine scientists and students in Sydney and NSW to investigate links between nearshore marine environments, urban harbours, fisheries and marine biodiversity.

SIMS hosts the NSW node for the Integrated Marine Observing System (IMOS) – a federal government initiative to support key marine infrastructure to collect valuable data about Australia's marine environment.

The NSW Government, through the NSW Office of Science & Research, has awarded SIMS a grant to facilitate use of IMOS data as a NSW-based National Collaborative Research Infrastructure Strategy (NCRIS) facility under its Research Attraction and Acceleration Program (RAAP). In 2015 the NSW government also launched a new Shark Management Strategy which is being implemented by the NSW Department of Primary Industries (DPI). The Strategy seeks to reduce the risks from shark bites associated with recreational activities in NSW coastal waters.

This PostDoc position will address this issue using IMOS and DPI data to characterise oceanographic conditions in relation to the NSW-DPI shark occurrence database and possible links to nearshore productivity hotspots.

This project will leverage existing infrastructure and the new NSW Shark Management Strategy to advance understanding of the oceanographic conditions that might influence shark distributions and movements. Up until now, the focus has been on documenting shark presence from animals caught in shark nets, from aerial surveillance, or from monitoring movement patterns of tagged sharks. There has been no synthesis of multiple data streams in an attempt to understand the complex processes that might entice sharks to come in close to shore and why some of them then occasionally bite people. This project will integrate oceanographic and biological data and develop a decision support tool to better manage the risk of shark encounters. This will ensure ongoing use and enjoyment of coastal amenities with potential for continued economic growth in these communities.

DUTY STATEMENT

Primary Purpose of Position

The primary purpose of the PostDoc position is to investigate what environmental factors are driving shark abundance and distribution in NSW coastal waters and to subsequently develop tools that will enable prediction of periods of potential increased nearshore shark activity.

Key Responsibilities

- Review the scientific literature on environmental conditions affecting shark abundance and distribution.
- Develop a centralised database for ongoing data storage of marine wildlife abundance, distribution and movement data streams.
- Obtain biotic and abiotic data of relevance to assessing factors affecting abundance, distribution and movements of potentially dangerous sharks.
- Evaluate and model relevant oceanographic and biological data.
- Develop a decision support tool to better manage the risk of shark encounters.

Reporting Relationship

The PostDoc position reports to the IMOS Animal Tracking Facility Leader, Prof Rob Harcourt, and the NSW DPI Shark Research Leader, Dr Vic Peddemors.

SELECTION CRITERIA

Qualifications

- a PhD degree
- Car driver's licence
- Current senior first aid provider's certifications

Knowledge and Skills

- High level of organisational skills including the ability to operate independently while prioritising demands and meeting deadlines.
- Familiarity with analytical techniques, high level competence and experience with R and GIS.
- Proven understanding of and demonstrated abilities in the use of statistical procedures, including spatial analysis and interrogation of large databases.
- Demonstrated ability to build models.
- Familiarity with the IMOS-Animal Tracking database.
- Proven knowledge of animal tracking (using acoustic and/or satellite tags).
- Proven ability to write scientific reports and publications.
- Proven oral and written communication skills.

Experience

- Demonstrated experience in the capture, and handling of large marine wildlife
- Validated experience deploying telemetry tags (acoustic and/or satellite)
- Proven boat-based research experience
- A coxswain certificate is advantageous

Personal Qualities

- Commitment to accuracy and attention to detail
- Ability to work with a diverse range of people
- Ability to work autonomously as well as part of a small team
- Good organisational and motivation skills
- Ability to maintain confidentiality and exercise discretion

APPLICATION

Applications must consist of the following:

- **Covering Letter.** The covering letter should include your email or postal address and telephone number. This is an opportunity in not more than one page to introduce yourself and outline the key reasons why you should be considered for the role.
- **Curriculum Vitae or Resume.** This is a history of your education, research, employment and experience that covers the following areas:
 - Educational qualifications that detail the full title of the qualification, year attained and title of the institution attended.
 - Research projects on which you have participated, in what capacity that was, and any outputs that emanated from that research.
 - Employment history in chronological order, starting with the most current position and specifying dates of employment, title of position, name of employer, main duties or accountabilities and achievements.
 - The names and contact details (preferably phone & email) of three referees, including if possible a senior person (preferably your supervisor) closely associated with your current position.
- **Selection Criteria.** A statement addressing how you meet each of the selection criteria is required to assist the Selection Committee to determine whether you have the relevant qualifications, knowledge/skills, experience and personal qualities.

Applications are to be sent to:

Sydney Institute of Marine Science
c/o Human Resources Manager
19 Chowder Bay Road
Mosman NSW 2088
Email: HR@sims.org.au

Please note:

Applications should be typed

Do not send applications that are bound or enclosed in plastic or manila folders

Staple the application at the top left hand corner

Retain a copy for your reference, applications will not be returned to the applicant

Selection Process

A Selection Committee will consider all applications and shortlist for interview candidates who appear to meet the selection criteria at the highest levels. They will be invited to attend an interview and the remaining unsuccessful applicants will be notified accordingly.