Reef Restoration and Adaptation Program
Opportunity:

Research Scientist - Benthic Invertebrate Reproductive and Larval Ecology

CANDIDATE INFORMATION PACK
The Australian Institute of Marine Science acknowledges the Traditional Owners of the land and sea on which we work. We recognise the unique relationships and enduring cultural and spiritual connection that Aboriginal and Torres Strait Islander people have to land and sea, and pay our respects to Elders past, present and future.

Photographic credits

Cover (Top to bottom):
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The Australian Institute of Marine Science is a corporate Commonwealth entity established under the Australian Institute of Marine Science Act 1972 (AIMS Act). As Australia’s tropical marine research agency, it is our mission to provide the research and knowledge of Australia’s tropical marine estate required to support growth in its sustainable use, effective environmental management and protection of its unique ecosystems.

To accomplish our mission, AIMS delivers independent science to help realise three key long-term impacts for the nation:

- Improve the health and resilience of marine and coastal ecosystems across northern Australia.
- Create economic, social, and environmental net benefits for marine industries and coastal communities.
- Protect coral reefs and other tropical marine environments from the effects of climate change.

Our research is focused on the priorities of our stakeholders, including Commonwealth, state and territory governments, industry, and Traditional Owners. Our research continues to:

- Underpin Australia’s environmental management of the Great Barrier Reef (GBR) to ensure that this World Heritage Area remains healthy and resilient.
- Support the sustainable development of coastal industries and ports across northern Australia.
- Provide the environmental baselines and condition and risk assessments required for current and future resource and industrial developments in Northern Australia.

THE WAY WE WORK

- **Our Values**
  - Treat everyone with dignity, value diversity, support others
  - Minimise our footprint
  - Respect
  - Energy that inspires excellence
  - Care for ourselves and others in all that we do
  - Integrity
  - Always transparent, ethical and objective
  - Innovation
  - Vision and creativity to solve big challenges
  - Collaboration
  - Together we create impact
The Great Barrier Reef program conducts interdisciplinary research to provide managers and policymakers with a better understanding of the Reef’s vulnerability to climate change and ocean acidification, and its interactions with local and regional environmental stressors.

**Reef Restoration and Adaptation Program (RRAP)**

RRAP is the largest, most comprehensive program of its type in the world; a collaboration of leading experts in reef ecology, water and land management, engineering, innovation and social sciences, drawing on the full breadth of Australian expertise and that from around the world. It aims to strike a balance between minimising risk and maximising opportunity to save Reef species and values.

After completing the world’s most rigorous and comprehensive investigation into medium and large-scale reef intervention in 2019, RRAP is now is embarking on a long-term R&D program to develop, test and risk-assess novel interventions to help keep the Reef resilient and sustain critical functions and values.

The goal is to provide reef managers and decision-makers with an innovative suite of safe, acceptable and cost-effective interventions to help protect the Reef from the impacts of climate change, in conjunction with best-practice reef management and reducing carbon emissions. RRAP will be in a race against time to produce solutions and will require our best minds to work in partnership across many organisations and fields of expertise.

While RRAP is initially focused on developing technology and solutions to help the Great Barrier Reef, these solutions could also be applied to other reefs in Australia and around the world.

The first four years of the RRAP R&D Program, beginning in 2020, is funded through the $100M allocated for reef restoration and adaptation science as part of the $443.3M partnership between the Australian Government’s Reef Trust and the Great Barrier Reef Foundation. This is to be supplemented with $100M each from philanthropy and research providers.

Australia’s tropical marine research agency, The Australian Institute of Marine Science (AIMS) is the managing entity for the RRAP R&D Program. Other partners include CSIRO, Queensland University of Technology, James Cook University, The University of Queensland, Southern Cross University and the Great Barrier Reef Foundation. The R&D proposed within AIMS for which we are currently recruiting falls within three sub-programs: Eco RRAP, Coral Aquaculture and Deployment, and Enhanced Corals and Treatments.
About this opportunity

As our **Research Scientist – Benthic Invertebrate Reproductive and Larval Ecology** you will lead and facilitate relevant research within the Coral Aquaculture and Deployment sub-program within the Reef Restoration and Adaptation Program. In this exciting role you will work independently to design and develop research, contribute to ongoing projects through collaboration and student supervision and contribute to the development of proposals. Using aquarium and field experiments, and existing ecological data, you will examine how structural, bio(chemical) and/or ecological factors influence the capacity of reefs to recover from disturbances at multiple life stages as well as the scope for adaptation in coral holobiont partners.

**About you**

You will have earned your PhD and possess considerable postdoctoral experience that demonstrates your substantive work on the biology, ecology, and/or physiology of benthic sessile reef invertebrates, with a focus on reproduction and larval ecology. Then, relying on your expertise, you will significantly contribute to the design of high-impact research towards innovative Reef Restoration and Adaptation Program objectives. Your ability to meet AIMS’ field work requirements including boating and diving will allow you to participate in reef-based research on the Great Barrier Reef.

If, after reviewing the position description (refer pages 9 to 13), you believe that your qualifications, experience and professional capabilities will enable you to successfully the deliver the position responsibilities, we would be very interested in hearing from you.

The successful candidate will be rewarded with:

- AIMS AOF Level 5 Salary ($105,706 to $115,882 pro-rata/per annum)
- 15.4% superannuation
- Generous leave provisions
- Part-time 58.75 hrs per fortnight, 2-year opportunity (with possibility of extension)
- Located in Townsville, Queensland
How to apply

Your application for our Research Scientist – Benthic Invertebrate Reproductive and Larval Ecology opportunity should include the following documentation:

- Current Resume (including two current references) – up to a maximum of 5 pages preferred;
- Document addressing the key essential selection criteria (refer to page 7) within the scope of the position description (refer to page 6); and
- A short cover letter.

Shortlisted applicants may be asked to complete a Personal Outlook Analysis Questionnaire using the Birkman Method.

**How to Apply:** Please submit your application via our website.

Further information on the application process and tips for addressing Selection Criteria are available via our Recruitment Application Guide

**Closing Date:** Friday, 25 September 2020 (12pm – Midnight (AEST))

**Recruitment Contact:** Position enquiries can be directed to l.bay@aims.gov.au.

To be considered for this opportunity applicants must be an Australian Citizen, Australian Permanent Resident, or hold a valid Australian Working Visa.
Key Selection Criteria

Your responses to the following Key Selection Criteria must evidence your suitability for this exciting opportunity within the scope of the position description (pages 9-13):

Essential

• An earned PhD and considerable postdoctoral experience demonstrating substantive work on the biology, ecology, and/or physiology of corals and/or other key coral reef benthic invertebrates, preferably with a focus on reproduction and early-life history transitions.

• Knowledge and skills to lead and implement research projects on coral reproduction and early life-history biology, and to develop and test tools for coral restoration across a variety of habitats and environmental gradients.

• Established or emerging international reputation for research excellence and academic achievement relative to career stage and opportunity as evidenced by publication history.

• Team player with strong self-awareness and interpersonal skills, able to foster an atmosphere of innovation, creativity, and excellence, among others.

• Ability to engage, communicate, build relationships, and negotiate with a diverse group of people, including stakeholders from industry, academia and/or government.

• Superior written and oral communication skills including sensitive personnel management.

• Demonstrated skills and track-record in a variety of communication and outreach activities including but not restricted to social media and radio, TV and news, public and school presentations.

• Ability to meet AIMS’ field work requirements including boating and diving (Dive Coordinator/Scientific Diver) and to work at sea in remote locations in often demanding conditions for extended periods (see AIMS Fieldwork Requirements on Page 8).

Desirable

• Experience in project management with ability to deliver to external stakeholders in a timely and professional manner.

Please address each selection criteria in a separate paragraph (max 250 words per criteria). The selection criteria and your CV are the documents against which we assess your suitability for the position.
**AIMS Field Work Requirements**

<table>
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<tr>
<th>Diving &amp; Boating Requirements</th>
<th>Qualification</th>
<th>Dive Hours</th>
<th>First Aid and Medical</th>
<th>Tasks</th>
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</table>
| Restricted Scientific Diver   | Rescue Diver qualification (or equivalent- CMAS 2 star) | 30         | • Dive Medical -2299  
• Current First AID (3 yrs.)  
• Current Advanced Resus (1yr) | • Act as dive buddy  
• Tasks as approved by ADO  
• 15m depth limit |
| Scientific Diver              | Min ADAS Restricted-2815.6 | 60         | • Dive Medical -2299  
• Current First AID (3 yrs.)  
• Current Advanced Resus (1yr) | • Dive Leader, SCUBA operations  
• Scientific SCUBA diving  
• Night diving  
• Low visibility diving |
| Dive Coordinator              | Min ADAS Restricted-2815.6 | 100        | • Dive Medical -2299  
• Current First AID (3 yrs.)  
• Current Advanced Resus (1yr) | • Dive supervision, SCUBA operations  
• Dive planning and record keeping  
• Dive Leading  
• Scientific diving  
• Night diving  
• Low visibility diving |
| Boat Operator (tender vessels) | • QLD Recreational Marine Driver’s License  
• Short Range Radio Operator certificate (or equivalent) | | • Current First AID (3 yrs.)  
• Current Advanced Resus (1yr) |
# Position Description

<table>
<thead>
<tr>
<th>Position Title:</th>
<th>Research Scientist – Benthic invertebrate reproductive and larval ecology</th>
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</table>
| Team Membership: | Program 1 - A Healthy and Resilient Great Barrier Reef  
Team 1.2 - Reef Recovery, Restoration and Adaptation |
| Primary Location: | Townsville, Queensland |
| Direct Supervisor: | Climate Change Scientist – Corals |
| Position Classification: | AIMS AOF Level 5, 0.8 FTE |
| Functional Area: | Research Scientist/Engineer |
| Position Summary: | The Research Scientist will lead and facilitate research within the Coral Aquaculture and Deployment sub-program within the Reef Restoration and Adaptation Program. The Research Scientist will work independently to design and develop research, contribute to ongoing projects through collaboration and student supervision and contribute to the development of proposals.  
The Research Scientist will use aquarium and field experiments, and existing ecological data, to examine how structural, bio(chemical) and/or ecological factors influence the capacity of reefs to recover from disturbances at multiple life stages as well as the scope for adaptation in coral holobiont partners. |
| Position Responsibilities: | Significantly contribute to the design of high-impact research, through aquarium experiments and/or field studies, delivered under the Reef Restoration and Adaptation Program.  
Lead and collaborate to produce scientific papers, technical reports, and oral presentations on key research.  
Take a leading role in the collection of high quality molecular, biochemical, or ecological data.  
Co-supervise research students and interns.  
Take a leading role in communication internally (within AIMS and RRAP), and support external activities as required.  
Lead and contribute to research to understand natural variation in coral reproduction and early survival, and to evaluate the performance of various reef-restoration techniques across habitats and environmental gradients.  
To secure funding through internal and external sources. To manage resources, staff, and students to deliver laboratory- and field-based studies on time and budget.  
Work with internal and external collaborators across disciplines to identify research needs and funding opportunities to deliver world-class research with fundamental and applied value. |
Identify and engage with opportunities for collaborative research within AIMS, and among AIMS, industry, and academia, nationally and internationally, to improve the science base for managing reef restoration in tropical Australia.

Engage with Traditional Owners and external stakeholders to promote the relevance and value of AIMS research activities and to foster productive and collaborative relationships.

Comply with AIMS’ workplace safety policies and procedures to ensure a safe workplace.

Comply with AIMS’ Intellectual Property policies and procedures to ensure AIMS intellectual assets are captured, managed and protected.

Comply with AIMS’ Code of Conduct ensuring the standards of conduct required of an AIMS staff member are upheld.

Adhere to, uphold, and demonstrate the AIMS values.

<table>
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<th>Key Responsibilities and Performance Standards</th>
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**Science Outputs:**

To lead and implement a research program to understand the biology and ecology of coral reproduction and early life-history, and to develop and test tools for coral restoration across a variety of habitats and environmental gradients.

To enhance the international profile of restoration science at AIMS through world-class publications and other influences (briefings, media outreach, etc).

To lead and contribute to scientific papers and reports emanating from the research program and maintain comprehensive and accurate records of all work.

**Occupational Health & Safety:**

In line with AIMS’ Health and Safety Policy policies and procedures, participate in Manual Task (Functional) Assessments and Fit for Work medical assessments as required.

Report immediately any work-related accident, injury or near accident to your direct supervisor.

Identify workplace hazards and take corrective action with your supervisor’s guidance.

Ensure visitors and staff for which you are responsible have completed the necessary OH&S inductions.

**Intellectual Assets:**

Comply with AIMS Intellectual Property policy, procedures, and guidelines.

**Delegations:**

Financial: $5,000 limit on individual purchases.

Performance Management: Complete Annual Performance Assessments for self and direct reports.
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<tr>
<th><strong>Recruitment</strong></th>
<th>Identify needs and recommend to Supervisor or Team Leader. Leave: Monitor and approve requests from reports to ensure that leave is managed appropriately.</th>
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<tr>
<td><strong>Teamwork/supervisory:</strong></td>
<td>Lead and motivate direct reports and participate constructively to teams to deliver quality results. To work as a member of a multi-disciplinary team that values diversity while ensuring achievement of AIMS goals and objectives. Lead laboratory and field-based research activities with responsibility for supervision, induction, and training of other staff and visitors. Supervise and mentor interns, higher degree-seeking students, postdocs, and technical staff.</td>
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<tr>
<td><strong>External Customer, Partner, Collaborator and Stakeholder Requirements:</strong></td>
<td>Participate in the management of projects with external parties including the delivery and reporting of science and training. Respond to science enquiries from external parties regarding coral and reef-restoration issues and provide scientific input as required. Promote the relevance and value of AIMS research activities on coral reef ecology, restoration, and adaptation, and foster productive and collaborative relationships in all areas of coral reproduction and early juvenile survival at AIMS.</td>
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<td><strong>Internal Organisational relationships:</strong></td>
<td>Develop positive work relationships with other science and service staff and maintain regular communication with research team, supervisor, and Program Leaders.</td>
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<td><strong>Financial responsibilities and accountabilities:</strong></td>
<td>Contribute to financial planning and management as required for the role. Manage AIMS’ funds in a responsible manner and within delegation. Comply with AIMS’ Fraud Prevention Plan ensuring the standards of conduct and ethical behaviour required of an AIMS staff member are upheld and that suspected fraudulent activity is prevented and/or reported.</td>
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<td><strong>Accountability:</strong></td>
<td>Accountable to sub-program leader. Committed to continuous organisational improvement by monitoring and challenging the performance of the project team and individuals.</td>
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<td><strong>Innovation, problem solving and continuous improvement responsibilities:</strong></td>
<td>Assist in the improvement of daily operations, systems and processes associated with AIMS research especially with respect to AIMS’ capacity to undertake reef-restoration science. Vigorously pursue new opportunities, make sound decisions, set priorities, and exercise good judgement. Set strategies with junior staff for career development and lead them for improved effectiveness and efficiency to build capacity at AIMS.</td>
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Planning responsibilities:

Plan work activities to ensure the achievement of timelines for field work, lab work, analyses, and reporting.
Contribute positional requirements to operational planning.
Ensure servicing of laboratory and field equipment is up to date.

Communication responsibilities:

Effectively communicate with team members, visitors, and other staff to achieve goals.
Disseminate data and information to internal and external clients in a style appropriate to the audience and context.
Support AIMS social media presence through Twitter and Facebook.
Participate in, and support, AIMS communications as requested, including radio, TV, and newsprint interviews.

Skills and Knowledge

Essential Skills and Knowledge:

Expert knowledge of the biology, ecology, reproduction, and physiology of key tropical benthic invertebrates, with a focus on corals.
In depth experience with the sexual and asexual production of corals, and advanced and well-developed knowledge of larval settlement processes and the early life history of sessile benthic reef invertebrates.
Ability to design, execute, and analyse experimental/ manipulative research to a very high level, including a high competence in experimental and survey design, multivariate analysis, and ecological modelling. Strong competence in analytical analyses in the statistical analysis software R, or similar.
Experience in aquaculture systems and processes, and husbandry techniques across life-history stages.
Team player with strong self-awareness and interpersonal skills able to foster an atmosphere of innovation, creativity, and excellence, among others.
Proven ability to work independently and complete assigned tasks to meet deadlines, including in the field, at sea, and at remote field stations.
High level of academic achievement, quality and number of publications, and/or other forms of research outputs.
Superior written and oral communication skills extending to sensitive personnel management.
Ability to build and maintain relationships with stakeholders from industry and government.
Strong commitment to, and sound knowledge of, applicable OHSE principles and practices.
Ability to work at sea in often demanding conditions for extended periods.
| Desirable Skills and Knowledge:               | Project and time management skills.  
|                                             | Experience in organising the logistics of field expeditions (including supervision of others), preferably in remote locations. |
| Qualifications and Experience               |
| Essential Qualifications and Experience:    | An earned PhD and considerable postdoctoral experience demonstrating substantive work on the biology, ecology, and/or physiology of benthic sessile reef invertebrates, with a focus on reproduction and larval ecology.  
|                                             | Excellent interpersonal skills and an ability to work independently and as part of a team.  
|                                             | An established or emerging international reputation for research excellence as evidenced by publication history.  
|                                             | Current Australian occupational Diver Accreditation or ability to obtain. |
| Desirable Qualifications and Experience:    | Training in media communications.  
|                                             | Current Senior First Aid, CPR and Oxygen Resuscitation certifications.  
|                                             | Current Australian marine license and short-range radio operator license, or ability to obtain. |
| Technology and Equipment                   |
| Technology & Equipment Used:               | Personal computing.  
|                                             | Diving equipment.  
|                                             | Familiarity with a variety of field survey equipment and underwater photography and videography.  
|                                             | Familiarity with control systems for manipulative experimental aquarium systems. |
| Special Requirements                       |
| Other Special Requirements:                | C Class Drivers Licence. |
Townsville

Townsville is a vibrant and rapidly growing city in North Queensland. Surrounded by the Great Barrier Reef, numerous coastal islands, the Wet Tropics rainforest and the outback, and less than two hours by plane from Brisbane, the region experiences a warm tropical climate with more than 300 days of sunshine each year.

A diverse economic base with strengths in government administration, health, defence, education, marine science, natural resource management, manufacturing and mining, ports and shipping and agriculture supports a current population of over 190,000 people.

Boasting a relaxed lifestyle, residents of Townsville enjoy access to world class educational, medical, sporting and recreational facilities. Townsville attracts high quality national and international festivals, cultural and sporting events.

For further information visit www.townsville.qld.gov.au.