Candidate Information Pack Australian Antarctic Division Chief Scientist Contact: Andrew McEncroe, Managing Partner, Derwent Search October 2020





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Advertisement

Chief Scientist - Australian Antarctic Division

- Strategic leadership of Australia's Antarctic Science Program
- Engage stakeholders with a compelling vision
- Harness new, transformative capabilities and assets

The Australian Antarctic Division (AAD), within the Department of Agriculture, Water and the Environment, is responsible for Australia's presence and activities in the Australian Antarctic Territory and the Southern Ocean. The AAD based in Tasmania leads Australia's Antarctic Program to deliver Australia's national interests and vision for future engagement in Antarctica as set out in the Australian Antarctic Strategy and 20 Year Action Plan.

The AAD is currently going through a significant transformation program, with several major projects that present many opportunities for innovation in science delivery and application. The projects include the new icebreaker, RSV Nuyina, a new Antarctic traverse capability to deliver the Million Year Ice Core project, and activities to support year-round aviation access to Antarctica.

The Chief Scientist leads, coordinates and implements Australia's Antarctic Science Program, and the achievement of the Australian Antarctic Science Strategic Plan. This Executive level role also leads the engagement with the national and international Antarctic science community on behalf of the Department.

As a member of the AAD Executive, the role is part of the strategic decision-making team responsible for delivering a transformational agenda to progress Australia's Antarctic Program. The Chief Scientist is also General Manager of the Science Branch, responsible for the strategic and operational management, leading a large high performing team to advance and deliver science that informs the development of sound environmental policy.

At a time of unprecedented focus and spending on Australia's presence in Antarctica, we are seeking a strategic leader who can effectively engage stakeholders in a compelling vision for how Australia's Antarctic Science program can support Australia's strategic interests. You will have strong credibility in the leadership of complex multidisciplinary science programs, and we encourage applications from talented executives with relevant experience in the private, NGO and public sectors.

The AAD is committed to inclusion and diversity in research or other programs, and an unwavering commitment to increase participation in science from people from diverse backgrounds and progress an agenda to support the development of new generations of Women in STEM.

For a copy of the candidate information pack and to apply for the position, please go to www.derwentsearch.com.au and search for the role title. Your application should include a resume and a cover letter highlighting your suitability. For further information, please email AAD@derwentsearch.com.au or call Andrew McEncroe or Kate Bromley at Derwent on 02 9091 3282.

Applications close Sunday, 27 November 2020.



Australian Antarctic Division



About the Australian Antarctic Division

The Australian Antarctic Division is part of the Australian Government's Department of Agriculture, Water and the Environment.

The Division, based in Kingston, Tasmania, leads and coordinates and delivers the Australian Antarctic Program.

All Australian Antarctic expeditioners are trained and equipped at the Division before heading south to Antarctica or sub-Antarctic Macquarie Island.

There are 300 full time staff at the Division undertaking operational, medical, science, policy and support functions.

Antarctic Operations

Australia's activities in Antarctica, from scientific research through to logistics and transport, are coordinated through the Australian Antarctic Program.

The Program is highly collaborative, with partnerships across government and more than 150 national and international research institutions. Australia also works with other countries' Antarctic programs to run joint international scientific and logistical operations.

Australia's national interests and vision for future engagement in Antarctica are set out in the *Australian Antarctic Strategy and 20 Year Action Plan*. The Plan recognises Australia's strong strategic and scientific interests in Antarctica and the Southern Ocean, and aims to build Australia's role as a leader in the region.

By studying the region, we can unlock the secrets of the past and predict future changes. Antarctic science tells us how the Southern Ocean and Antarctic icesheets respond to rising temperatures and greenhouse gases and how we might be affected by climate change.

From the smallest microbes, to krill (the keystone species of the Antarctic ecosystem), to blue whales (the largest animals to have ever existed), the research conducted through the Australian Antarctic Program helps protect the unique environment and biological systems of Antarctica and the Southern Ocean.

This research enables Australia to contribute to and strengthen the Antarctic Treaty system and its environmental protection regime. The Antarctic Treaty establishes Antarctica as a natural reserve devoted to peace and science and puts in place principles for the governance of the region.

Scientific Research

The Australian Antarctic Division leads the Australian Government's scientific program in Antarctica.

AAD research addresses critical issues including:

- climate change
- the human footprint in Antarctica
- the conservation of Antarctic and Southern Ocean wildlife
- the sustainable management of Southern Ocean fisheries in the face of increasing demands for fish and krill caused by human population growth.

AAD's diverse research program covers physical and life sciences in the atmospheric, terrestrial and marine domains, as well as human biology and medical research. It also includes long-term observational activities such as a network of meteorological facilities; ionospheric activity monitoring; seismic, magnetic and GPS networks; and hydrographic and bathymetric (seafloor) mapping.

AAD's research is directed by the Australian Antarctic Strategic Plan 2011-12 to 2020-21.

AAD science supports Australia's role in many international treaty bodies including the:

- Committee for Environmental Protection of the Antarctic Treaty
- Convention for the Conservation of Antarctic Marine Living Resources
- International Whaling Commission







Agreement on the Conservation of Albatrosses and Petrels

The <u>Australian Marine Mammal Centre</u> at the Australian Antarctic Division also coordinates studies focussed on understanding, protecting and conserving whales, dolphins, seals and dugongs.

More than 100 projects are undertaken in Antarctica, the subantarctic and in Australia, involving scientists from some 28 countries and 176 institutions (<u>search our project database</u>). About 90 Australian graduate students are also associated with the program.

The Australian Antarctic Science Council

The Australian Antarctic Science Council (the Council) was established in 2019 to advise Government on the Australian Antarctic Science Program, including Antarctic science priorities in the context of the Australian Antarctic Strategy and 20 Year Action Plan. The Chief Scientist of the Australian Antarctic Division serves as the Executive Officer to the Council.

The Council is made up of:

- Chair (currently vacant)
- Independent Member, Professor Sabine Dittmann (Flinders University)
- Independent Member, Professor Noel Cressie (University of Wollongong)
- Ex officio members
 - o Chair, National Committee for Antarctic Research
 - o Director, Australian Antarctic Division
 - o CEO, Australian Research Council
 - o Department of Industry, Science, Energy and Resources
 - Bureau of Meteorology
 - o CSIRO
 - o Geoscience Australia

Council priorities

The <u>Terms of Reference</u> for the Australian Antarctic Science Council outline key areas of focus, including advising Government on:

- Arrangements to implement the <u>Australian Government response to the Australian Antarctic Science Program Governance Review (2017)</u>; and
- Options to maintain or enhance Australia's reputation on Antarctic science including by maximising the use of the Government's Antarctic infrastructure and supporting annual planning of the Australian Antarctic Science Program.

Antarctic science strategic plan

The Council has developed a new Antarctic Science Strategic Plan (the Plan) in consultation with the Antarctic science research sector, Commonwealth government agencies, Tasmanian government, universities and industry stakeholders.

Building on the achievements of the previous science strategic plan implemented in 2011, the new plan will significantly advance Australia's Antarctic science over the next 10 years, maximising new Antarctic science and operational capabilities.

The plan will oversee the delivery of key research outcomes outlined in the Australian Antarctic Strategy and 20 Year Action Plan under the following three key research areas:

- Environmental Protection and Management;
- Ice, Ocean, Atmosphere and Earth Systems; and
- Human Presence and Activities in Antarctica.

The Council's next step will be to consult further with the Antarctic science research sector and stakeholders to develop an action plan to guide implementation of the plan over the first two to three years.







Additional Information

https://www.antarctica.gov.au/

Australian Antarctic Strategy and 20 Year Action Plan







Australian Antarctic Division Structure Current as at 14 August 2020

Executive Officer

Director Kim Ellis

Executive Assistant to the Director

Assets &

General Manager

Strategic Infrastructure

Nuyina Project

Program Support

Science Coordination

Davis Aerodrome **Project**

Mechanical

Traverse Capability

Antarctic Infrastructure

Environmental Management

Strategic Property

Policy & International

General Manager

Territories, Environmentand **Treaties**

Technology& Innovation

General Manager

Australian Antarctic **Data Centre**

Capabilities and **Facilities**

Polar Linkages Vacant

Polar Technology Vacant

Chief Scientist:

Antarctic Climate

Environmental Protection

Marine Conservation and Management

Science Planning and Coordination

Antarctic Operations & Safety

General Manager

Supply Services

Polar Medicine Unit

Operations Manager

Operations Taskforce

Transformation & Strategy

General Manager

Governance and Strategy

Vacant

Media and Communications

Planning, Projects and Risk

Strategic Projects

COVID-19 Business Continuity Unit

Enabling Services%							
Financial	Human	ICT, including	Workplace Health	Business and	Records		
Services^	Resources~	Field ICT~	and Safety~	Property Services^	Management^		

Stations					
Casey	Macquarie Island	Mawson	Davis		

^{*}denotes acting arrangement

[~]AAD oversight provided by Charlton Clark

[^]AAD oversight provided by Dr Rob Wooding % denotes direct report to Canberra





Position Description					
Job Title:	Australian Antarctic Division Chief Scientist				
Classification:	Chief of Division Grade 1				
Branch:	Science				
Section:	Executive				
Job is accountable to:		Director, Australian Antarctic Division			
Security clearance level required:		NEG VET2			

Working Environment

About the Australian Antarctic Division:

The Australian Antarctic Division (AAD), within the Department of Agriculture, Water and the Environment, is responsible for Australia's presence and activities in the Australian Antarctic Territory and the Southern Ocean. The AAD leads Australia's Antarctic Program. Australia's national interests and vision for future engagement in Antarctica are set out in the Australian Antarctic Strategy and 20 Year Action Plan.

The AAD is currently going through a significant transformation program, and is managing several major projects at various stages of implementation. These new projects present many opportunities for innovation in science delivery and application. The projects include the new icebreaker, RSV Nuyina, a new Antarctic traverse capability to deliver the Million Year Ice Core project, and activities to support year-round aviation access to Antarctica.

About this role:

The Chief Scientist leads, coordinates and implements Australia's Antarctic Science Program, and the achievement of the Australian Antarctic Science Strategic Plan. This Executive level role also leads the engagement with the national and international Antarctic science community on behalf of the Department.

As a member of the AAD Executive, this role is part of the strategic decision-making team who collectively, are responsible for delivering a transformational agenda to progress Australia's Antarctic Program.

The Chief Scientist is also the General Manager of the Science Branch within AAD, leading a high performing team of research scientists, technical specialists and policy co-ordinators, to advance and deliver science that informs the development of sound environmental policy. As a General Manager, the role is also responsible for the strategic and operational management of the branch, including providing effective leadership and financial management.

Key Activities/Responsibilities

The AAD Chief Scientist will have excellent strategic leadership capabilities, as well as strong credibility in the leadership of complex multidisciplinary science programs. They will have experience and capabilities that transfers to the effective strategic leadership of Australia's Antarctic Science program and the AAD Science branch.

The role requires:

- an engaging communicator committed to building the profile and influence of AAD Science and able to demonstrate its value to a wide range of audiences;
- a constructive and inclusive leader to head a diverse group of scientists, policy officers and technical staff with a common goal of building the strength of AAD Science's impact;





Australian Antarctic Division

- a compelling vision for how Australia's Antarctic Science program can support Australia's strategic interests in Antarctica, and the ability to bring others along with that vision;
- a demonstrated ability to enhance inclusion and diversity in research or other programs, and an unwavering commitment to increase participation in science from people from diverse backgrounds and progress an agenda to support the development of new generations of Women in STEM;
- a strategic thinker who can continue to shape the AAD Science program and find opportunities to further progress its research agenda and deliver relevant, impactful and valuable outcomes;
- excellent stakeholder engagement skills and the ability to build and maintain strong and effective relationships across the Antarctic research community and within government and has a reputation for constructive collaboration;
- a strong commitment to the highest quality standards of environmental protection;
- the ability to effectively represent the AAD at national and international level scientific and policy forums;
- the willingness and ability to work collaboratively and strategically with other members of the AAD Executive, and the AAD more broadly.
- A high level of personal and professional credibility and ethical behaviour.

Selection Criteria

In achieving the objectives, the Chief Scientist will:

- 1. **Shape strategic thinking:** be capable of developing and leading the strategic direction for science within the AAD, and be an active and effective member of the AAD Executive;
- 2. **Achieve results:** be responsible for achieving the outcomes and goals of the Australian Antarctic Science Strategic Plan, and effectively manage the operations of the Science branch;
- 3. **Cultivate productive working relationships:** have a demonstrated ability to build collaborative working relationships with small and large teams and with internal and external stakeholders, and be able to facilitate and nurture cooperative partnerships across the science and government communities;
- 4. **Exemplify personal drive and integrity:** demonstrate professionalism and probity, engage with risk, show personal courage, commit to action and display resilience;
- 5. **Communicate with influence:** be able to effectively communicate the vision, purpose and work of the Science Branch to a wide range of stakeholders, and be able to influence the Antarctic science community.

All criteria will be assessed in relation to the applicants' relative ability to perform the duties of the position in accordance with APS Values, APS Employment Principles and the APS Code of Conduct, details of which can be found on the <u>APSC website</u>, as well as in accordance with the social justice principles of equity and workplace diversity and workplace health and safety policy, practices and procedures.

Qualifications/Job Requirements

- A PhD in a relevant discipline from an Australian University, or qualification of equivalent standard from an Australian or overseas university, or other qualifications appropriate to the duties of the position.
- Success in science leadership of multidisciplinary and multi-institutional science programs.
- Understanding of the role of science and innovation in environmental policy development and implementation.
- The ability to travel to Antarctica and internationally to represent Australia.
- The successful incumbent must be an Australian citizen with an ability to hold a Security Clearance

AUSTRALIAN ANTARCTIC DIVISION

The Antarctic is crucially important to Australia. The Australian Government has recognised this through the Australian Antarctic Strategy and 20 Year Action Plan.

The Australian Antarctic Division (AAD), a division of the Department of the Environment and Energy, is the custodian of Australia's relationship with Antarctica. We manage the Australian Antarctic Program to realise the value of the Antarctic continent and Southern Ocean to our national interests.

This Strategic Plan provides direction for the AAD in a period of significant strategic change, driven by the Australian Antarctic Strategy and 20 Year Action Plan and unprecedented focus and spending on Australia's presence in Antarctica. The Plan sets out our five year strategy.

STRATEGIC PLAN 2019-2024

OUR VISION

Ensuring that Antarctica is valued, protected and understood.

OUR MISSION

Advancing Australia's national interests through leading and promoting Antarctic science, knowledge, capabilities and environmental protection.

OUR COMMITMENTS TO EACH OTHER

Approachable

We help our colleagues

Respectful

Collaborative

We interact professionally

We work together to achieve our shared vision

Generous

We share our knowledge

Safe

We behave safely and look out for one another

Valued

We appreciate and acknowledge everyone

OUR CHALLENGE

To transform ourselves to take best possible advantage of the step change in our capabilities, increase our influence and deliver science that matters to Australia and the world

STRATEGIC PRIORITIES AND **OUTCOMES**

Deliver and strengthen capabilities to 1. enhance our environmental, operational, science and policy interests

> We are a leader and the partner of choice throughout East Antarctica, answering important scientific questions and delivering improved environmental outcomes.

Maximise Australia's influence in 2. Antarctica

We ensure the Antarctic treaty system (ATS) delivers on Australia's interests. The community and government value Antarctica and Australia's Antarctic Program.

Lead and deliver science that has impact 3. and is relevant

> We lead and collaborate on science which delivers national priorities and answers key questions of global significance.

Implement innovative approaches to 4. delivery

We work smarter and more sustainably, with greater safety and care for individuals and the environment.

Ensure our people and culture can best deliver our strategy

Our people, supported by great leadership, are engaged, respectful, skilled and work together, and can adapt to meet our challenges and opportunities.

OUR ONGOING WORK

Policy, Planning and Strategy

Science and Science Support

Capabilities and Assets

Antarctic Operations

Support Services



Safety is a priority for all our operations

AUSTRALIAN ANTARCTIC DIVISION

STRATEGIC PLAN 2019-2024

OUR KEY RESPONSIBILITIES

Policy, Planning and Strategy

Coordinate the implementation of the Australian Government's Antarctic Strategy and 20 Year Action Plan.

Lead and support Australia's engagement in the international governance of Antarctica and the Southern Ocean.

Provide advice on Antarctic policy matters for the Australian Government.

Fulfil our administrative responsibilities for the Australian Antarctic Territory and Heard Island and McDonald Islands.

Coordinate the Division's planning process to enable the successful delivery of this strategy and our full work program.

Deliver a comprehensive communication program that promotes the value of the Australian Antarctic Program.

Continue to enhance our international partnerships, engagement and collaboration.

Science and Science Support

Lead, conduct and support a world class program of scientific research and environmental management, consistent with national priorities, through the Australian Antarctic Science Strategic Plan.

Provide research and advice to support
Australia's Antarctic policy objectives; including participation in the Antarctic Treaty system and other international committees, commissions and Intergovernmental panels.
Provide scientific advice

Provide scientific advice and technical support for Antarctic capability projects.

Provide scientific and research advice to support regulatory and management decisions.

Undertake targeted outreach promoting the value of Australian Antarctic Science.

Conduct impact assessments and strategies to address environmental legacies. Capabilities and Assets

Plan future Australian Antarctic Program capabilities and assets.

Manage the scoping, procurement, construction and entry into service of major capabilities for the Australian Antarctic Program.

Coordinate the delivery of the Australian Antarctic Division's capital program.

Continue the development, implementation and continuous improvement of effective asset management systems.

Complete the work required to enable the Government to make an investment decision on delivering year-round aviation infrastructure in Antarctica.

Antarctic Operations

Plan and conduct the resupply of our stations and field programs, improving key assets, capabilities and environmental stewardship.

Ensure provision of essential services at our stations.

Plan and effectively deliver essential operational support for the implementation of science and modernisation projects.

Expand the activities of the Centre for Antarctic, Remote and Maritime Medicine (CARMM).

Maintain and expand mutually beneficial arrangements for sharing logistics and other capabilities with other Antarctic nations.

Maintain and expand beneficial third-party contract work, capability sharing and other innovative service delivery arrangements.

Provide effective supply chain management throughout and beyond the Antarctic summer season. **Support Services**

Support the delivery of a safe and secure working environment.

Plan and deliver expeditioner recruitment, assessment, training and support; and enable non-expeditioner workforce recruitment, training and HR services.

Support and deliver ICT systems that are fit for purpose, reliable and ensure 24/7 Antarctic communications

Provide transparent, timely and accurate financial information to support AAD activities.

Ensure business continuity for all AAD activities.





AUSTRALIAN ANTARCTIC SCIENCE STRATEGIC PLAN

MISSION

Conduct world-class scientific research for Antarctica and the Southern Ocean that has global benefits and that supports Australia's responsibilities for the region.

VISION

Leadership and excellence in Antarctic science

PRINCIPLES

- Providing Australian leadership in the Antarctic Treaty system through science
- Undertaking Antarctic science for societal benefits
- Collaborating to ensure multidisciplinary and diverse teams
- Open access to outcomes and data
- Leading a new generation of Antarctic researchers
- Technical and operational innovation at the forefront of endeavour
- Operating safely and efficiently
- Adaptability for a rapidly evolving world

ENVIRONMENTAL PROTECTION AND MANAGEMENT

Targeted research and monitoring for improved management of Antarctica and the Southern Ocean

- Climate change impacts
- Ecosystem conservation and management
- Area protection of natural values
- Fisheries management
- Environmental monitoring and assessment
- Environmental remediation

ICE, OCEAN, ATMOSPHERE AND EARTH SYSTEMS

Understanding the role of
Antarctica and the Southern Ocean
on Australia and the World

- High-latitude climate science
- Role of the East Antarctic ice sheet in global sea-level rise
- Interpreting past climate records to inform future climate understanding
- Southern Ocean circulation, heat and acidification
- Geophysical mapping
- Atmosphere and weather
- Climate change mitigation

HUMAN PRESENCE AND ACTIVITIES IN ANTARCTICA

Providing practical advice to address societal issues

- Polar medicine and human biology
- Social sciences policy and law
- Monitoring pollution
- Space and astronomy
- Human Impacts
- Biosecurity

DIGITAL INTEGRATION

Bringing it all together with innovation in data collection and analysis in accordance with FAIR principles (Findable, Accessible, Inter-operable, Reusable)

Innovative technology

GIS platform integration

- Remote systems
- Digital Model of Antarctica
- Data communications
- Statistical analysis and data analytics

HOW WE WILL DELIVER SCIENCE

- We will build on existing data and samples to complement and underpin our field programs
- We will transition our activities to new Australian Antarctic Program logistics as they come on line
- We will work with Australian and international research, industry and policy partners, encouraging collaboration with recent and new Antarctic science participants
- We will encourage a simple, transparent project application and assessment process
- We will support integrated and cross-disciplinary research
- Our science will be supported through a digital integration platform
- Our science will be routinely assessed to evaluate relevance and performance and to pursue excellence

SCIENCE OUTCOMES

Science that responds to and delivers on national science and research priorities and the Australian Antarctic Strategy and 20 Year Action Plan, including:

- Understanding and protecting Antarctica, particularly its environmental and ecological resilience and its connection to global systems
- Antarctica's influence on Australia, particularly its impacts on the wellbeing of Australians
- Science that supports Australia's key role in the Antarctic Treaty system and Australian Government legislative and international obligations
- Science to support current Australian
 Government priorities, including:
 consolidating science capabilities on the RSV
 Nuyina; krill research to inform management
 decisions; integration of Commonwealth
 science funding measures; Davis Aerodrome
 Project; search for the million year ice core







Further Information

This role will be located at the Australia's Antarctic Program's headquarters in Kingston, Tasmania. A relocation package will be discussed with the successful candidate.

The Application and Selection Process

COVID-19

We understand there are unique and significant challenges due to the COVID-19 pandemic. In this dynamic environment Derwent and AAD are responding to changes to ensure the safety and equity for all applicants and stakeholders. Currently, all interviews will be held via video conference (across a range of platforms to accommodate personal requirements) and any in person meetings will be subject to guidance of the Australian Government. We are happy to discuss these in greater detail with potential candidates and ensure that we are protecting the health and safety of everyone we work with.

Candidate Care

AAD and Derwent Search are committed to ensuring that potential applicants and candidates are treated respectfully and fairly. Derwent's consultants are available to field inquiries and ensure that applicants are informed about developments as they become available. Candidates who are shortlisted and complete assessments (including interviews) will be offered a feedback session to discuss their experience and the assessment results. We will also make adjustments to the process that are necessary to ensure inclusion and accessibility.

Application Process

Closing date: Sunday, 27 November 2020

Applications:

All applications are to be received by Derwent. To apply, please go to www.derwentsearch.com.au and search the role title. Your application should include a resume and a cover letter (up to 2 pages) highlighting your suitability for the role, guided by the Selection Criteria in the Position Description.

Information and Inquiries:

For a copy of the Candidate Information Pack please go to www.derwentsearch.com.au and search the role title. For other inquiries contact Andrew McEncroe or Kate Bromley at Derwent by email AAD@derwentsearch.com.au or call (02) 9091 3230. Derwent will maintain confidentiality with respect to contact by potential applicants.

Selection Process

Derwent will conduct assessments of all applications against the selection criteria for AAD to consider and to select a short list of candidates to be invited to attend an interview with the section panel (currently by video conference). Candidates may also be required to complete additional assessments such as personality profiles and cognitive ability assessments to inform the selection process. At least two references, including one from a recent manager, will be taken before an offer of employment.

Pre-employment verification and background checks

An offer of employment will be conditional on the following checks being completed to satisfaction:

- Academic Qualification Check
- Professional Membership Check
- Criminal History Check
- Employment History Check
- Financial Regulatory and Bankruptcy Check.

Thank you for your interest in the Australian Antarctic Division.

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