Position Description –

Australia’s National  
Science Agency

Science Leader/Future Science Platform Director, Advanced Engineering Biology

Information for applicants



About CSIRO

The Commonwealth Scientific and Industrial Research Organisation (CSIRO) is one of the world’s largest and most successful publicly funded research and development organisations and has over 50 locations across Australia and internationally.

CSIRO is committed to complementing world-class science capabilities with outcome-focused research that will generate economic, environmental, and social benefits for Australia in a global context.

About the Future Science Platform

The CSIRO portfolio of Future Science Platforms (FSPs) address emerging scientific challenges having important implications for Australia and the world (https://www.csiro.au/en/about/strategy/future-science-platforms). FSPs represent a significant investment in emerging science areas that will underpin innovation having the potential to (re)invent and create entire new industries, providing significant economic, environmental, and social outcomes for Australia and beyond. FSPs facilitate the development of capability and capacity to build a new generation of researchers and are designed to attract the best researchers and students.

FSPs support research teams that integrate science and delivery over the long term, looking to the future science needs of CSIRO and Australia, along with our external partners and stakeholders with a five to ten-year vision.

Engineering Biology (also known as Synthetic Biology) has the potential to unlock a new BioEconomy that will deliver 50,000 new jobs and $30 Billion a year to the Australian economy, while facilitating the transition to low emission industries and circular economies.

Building on the accomplishments of the SynBio Future Science Platform (FSP), which built capability, capacity, as well as a national synbio strategy and community of practice (<https://research.csiro.au/synthetic-biology-fsp/>), the Advanced Engineering Biology (AEB) FSP has recently been launched by CSIRO. The AEB FSP seeks to position Australia at the forefront of science and technology focused on providing future technologies for Australia that supercharge the speed of new biotechnology delivery through streamlined, molecular design & engineering tools, highly efficient bioproduction systems and data-driven decision-making tools. These new technology platforms will deliver innovative solutions that tackle the emerging national challenges of food security, national health & wellbeing, and carbon-neutral future industries and a circular economy.

About the role

The Leader of the Advanced Engineering Biology FSP will coordinate a multi- and trans- disciplinary program of fundamental (‘Horizon 3’) research across multiple CSIRO Business Units and facilities, including the CSIRO BioFoundry, a transformative capability for high throughput biodesign and engineering. The outputs from the FSP will include novel science and new technologies that support accelerated delivery of national and international impact through current and developing CSIRO strategies.

The FSP Leader will be an impact driven, entrepreneurial and collaborative science leader. The successful applicant will actively develop and manage an exciting portfolio of science across several application domains and multiple CSIRO Business Units that includes but is not limited to: Land and Water, Manufacturing, Agriculture and Food, Health and Biosecurity, and Data61. A key responsibility will be to promote collaboration across the science portfolio to bring the best internal and external capability to address the needs of the FSP.

The FSP Leader will report to the CSIRO Science Council and the Land & Water Business Unit Science Director and will be supported by a steering committee comprised of the Land & Water Science Director, relevant Research Program Directors (or their representatives) from participating CSIRO Business Units and the CSIRO BioFoundry Director. The leader will be responsible for the day-to-day management of the science platform, including financial management of the platform and accountable for the delivery of science to CSIRO Business Units and the Science Council.

Key result areas and duties

Impact science leadership

* Support and develop the 5 to 10-year strategic science vision across the science horizons and application domains embodied within the FSP. Develop an R&D environment characterised by science excellence, creativity, innovation, and flexibility.
* Develop and manage the research portfolio according to CSIRO’s Project Management Standards including prioritisation of effort, resource allocation and financial accountability
* Where required, identify and manage the Platform’s portfolio of Intellectual Property.
* Identify and progress opportunities and engagement with external stakeholders.
* Coordinate the response from the FSP to internal and external review processes, as required.
* Undertake long term science impact planning, in partnership with Business Units, to address national challenges and to build CSIRO’s capacity to innovate for science discovery.
* Promote science opportunity through collaborative engagement and support of workshop events and communications across CSIRO’s AEB research platform.
* Interface with the AEB FSP Steering Committee and the International Advisory Panel

Engagement and partnerships

* Identify and manage projects with the support of Business Development and contributing Business Unit Research Programs to ensure project delivery, schedule, scope and cost are being met.
* Build strategic and collaborative relationships within CSIRO to support Business Unit strategies, including fostering mobility and cross‐deployment of personnel.
* Develop and maintain national and/or international research collaborations and professional networks to keep abreast of emerging advances in relevant science fields.
* Communicate the Advanced Engineering Biology FSP strategy and goals to internal and external stakeholders.
* Coordinate, with Business Development support, high level contact and customer engagements for future collaboration with Business Unit Programs, other Future Science Platforms, CSIRO Missions and external partners.

Capability leadership

* Champion and lead the support of research capability and professional development of scientists deployed to the platform across CSIRO.
* Attract, develop and support world class talent which will meet current future needs of the CSIRO.
* Plan for resourcing of the platform, liaise with Research Programs across the contributing Business Units (BU) to identify capability and identify new opportunities for the stakeholders to contribute.
* Build effective teams and support career development for CSIRO BU staff that are aligned with the science platform.
* Effectively lead change initiatives across the Platform and the broader scientific and industrial community leading to science capability development and uptake of research developments.
* Model appropriate and professional behaviour in the workplace and manage people matters proactively.
* Strive for ‘Zero Harm’ (physical and psychological) and actively promote a healthy, safe and environmentally sustainable workplace.

Resource leadership

* Engage productively with CSIRO research facilities, including the CSIRO BioFoundry
* Lead and manage the Program’s financial resources, people, infrastructure and other assets to ensure their effective and efficient use.
* Ensure effective management of physical infrastructure and resources in an environmentally sustainable way.
* Ensure best practice governance and management of commercial activities and intellectual property in the platform

Key capabilities

**CSIRO is a values-based organisation**

**People First:** We put the safety and wellbeing of our people above all else, and we know that diversity is the compass to navigate innovation (*Respect, Caring, Inclusive*).

**Trusted:** We earn trust everywhere, because we deal only in facts, and we operate with unwavering integrity (*Partnering, Cooperative, Humble*).

**Further Together**: We collaborate widely and generously to boldly take on challenges that are bigger than ourselves (*Curious, Adaptive, Entrepreneurial).*

**Making it Real:** We don't just do research – we deliver solutions that create change in our world (*Accountable, Authentic, Courageous*).

Experience

* Demonstrated leadership and excellence in a science or engineering discipline relevant to biological sciences.
* Science leadership and excellence in a relevant research field as demonstrated by high‐quality peer-reviewed publications since PhD (or equivalent combination of education and experience in science or engineering); external research funding; international research reputation and credibility; and outstanding leadership and outcome delivery in a high technology, R&D or innovation delivery role relevant to the Platform’s impact areas.
* Managed and developed multi‐disciplinary teams across a number of science areas.
* Implemented and developed strategically aligned research activities.
* Successful track record in project delivery.
* Demonstrated experience in developing and supporting a research capability area.

Personal and leadership attributes

* Personal effectiveness to drive and coach for performance.
* Credibility by demonstrating a poise and confident demeanour that is consistent with CSIRO vision and values.
* Establish and sustain trusting relationships and leveraging insights to effectively manage both self and team responsibilities.
* Passion for results by driving high standards for individual, team and organisational achievement.

Selection criteria

Mandatory

1. PhD in Chemical Engineering, Engineering Biology, Biological Data Science or equivalent in a relevant field, combined with significant experience and depth of scientific understanding in an area relevant to biological engineering or biobased production systems research, or experience gained in R&D and/or with Industry*.*
2. Established reputation and credibility in a relevant engineering or biological sciences domain with evidence of effective world‐class science, for example through publication, research and/or innovation leadership.
3. Evidence of successful development, initiation, and leadership of scientific research.
4. Demonstrated ability to empower and develop world class talent and to promote wellbeing and foster creativity in and across multidisciplinary teams.
5. Evidence of strong engagement skills and strategic relationship management that grows new research partnerships and develops opportunities for future outcomes.
6. Demonstrated knowledge/understanding of scientific and logistical challenges associated with the building of a platform area of new research.
7. Demonstrated record of exemplary leadership behaviour, and an approach that actively promotes internal and external collaboration.

Desirable

* Experience in a relevant research environment with appreciation of the challenges and opportunities presented for current and future research.
* Working understanding of the existing CSIRO FSP model and operations and an understanding of the CSIRO strategy, research models and operations.

Conditions of employment

* An attractive senior salary package will be offered to the successful candidate.
* CSIRO offers four weeks recreation leave with 15 days sick leave and carer’s leave.
* CSIRO has a flexible working policy.
* Regular interstate and some international travel will be required for this role.
* Relocation will be provided to the successful candidate where required.
* Specified Term for up to 4 years (to 30 June, 2025), with a minimum of 80% specific allocation to the role.
* This role is open to all candidates. A work visa and relocation can be provided if required.

Location

CSIRO has major Biotechnology hubs in Brisbane, Canberra and Melbourne; However, all major cities in Australia would be considered.

**Contact**

For further information about this role contact:

Terri Ward at terri@towardco.com or call +61 447 667 439.

**How to Apply**

As part of their application, candidates are requested to provide the following in Microsoft Word format:

* **Curriculum Vitae**
* **Cover Letter –** outlining the motivation and relevant capabilities and experience you could bring to this role. This document should not be longer than two pages.
* **Contact details for three Referees –** Referees will only be contacted after prior consultation with the candidate. It is the candidate's responsibility to ensure that their referees are willing to provide reports when contacted by CSIRO.
* **Date of commencement –** An indication of the earliest date on which the candidate could commence in the position.

**PLEASE SUBMIT YOUR APPLICATION DIRECTLY TO TERRI WARD AT** [**terri@towardco.com**](mailto:terri@towardco.com) **QUOTING CSIRO** **AEBFSP22 IN THE SUBJECT LINE**

**Applications close 11pm 19 APRIL, 2022.**

Flexible Working Arrangements

We work flexibly at CSIRO, offering a range of options for how, when and where you work. Talk to

us about how this role could be flexible for you. [Work life balance](https://www.csiro.au/en/Careers/The-CSIRO-Experience/Balance).

Diversity and Inclusion

We are working hard to recruit diverse people and ensure that all our people feel supported to do

their best work and feel empowered to let their ideas flourish. [Diversity and Inclusion Strategy](https://www.csiro.au/en/About/Policies-guidelines/Working-at-CSIRO/Diversity-strategy).

We are committed to the safety and wellbeing of all children and young people.

|  |  |  |
| --- | --- | --- |
| As Australia’s national science agency and innovation catalyst, CSIRO is solving the greatest challenges through innovative science and technology.  CSIRO. Unlocking a better future for everyone.  Contact us  1300 363 400  +61 3 9545 2176  csiro.au |  |  |