



Australia's National
Science Agency

Women in STEM: Decadal Science Plan

CSIRO Champion Response | 2022 update



We are Australia's national science agency and one of the largest and most diverse scientific research organisations in the world. Our research focuses on the biggest challenges facing the nation. We play an instrumental role in driving change across the STEM workforce. We believe diversity is the compass that guides us through the ambiguity of innovation –

and our performance shows diversity works.



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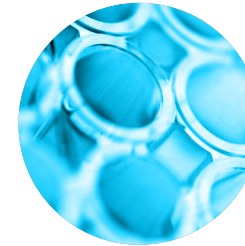
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Opportunity 1:

Leadership and cohesion

Strong cohesion and leadership across the Australian STEM ecosystem to amplify and strengthen diversity outcomes.

CSIRO is a founding member of the Science in Australia Gender Equity (SAGE) initiative, with Bronze Accreditation and aspirations to achieve Silver.

“Since 2015, we’ve increased gender diversity at the fastest rate ever. We have looked at every single element of working life at CSIRO to unpick where we were unconsciously excluding women.”

— Larry Marshall, CSIRO Chief Executive



Image: CSIRO's new Board Chair, Kathryn Fagg AO.

Champions of Change Coalition

Our Chairman, David Thodey and Chief Executive, Dr Larry Marshall are Male Champions of Change (MCC).

Larry Marshall has been a Male Champion of Change since 2016, raising the visibility of gender inequality and leading change across the innovation system including:

- a champion in the development of the MCC Future of Work Report
- stepping down from panels or speaking opportunities when no meaningful steps have been taken to achieve gender diversity, and
- our Chief Executive quarterly blogs dedicated to gender equity.

2022 UPDATE: CSIRO continues its commitment to the Champions of Change Coalition through our Chief Executive, Dr Larry Marshall, CSIRO Board Member, Professor Tanya Monro, Chief Defence Scientist, Defence Science and Technology Group, Department of Defence, and CSIRO Board Chair, Kathryn Fagg AO, who is also a Board Director of the Champions of Change Coalition.

Chief Executive Larry Marshall attended an event to launch the Male Champions of Change Future of Work discussion paper, urging leaders to take this opportunity to shape the workplace of the future.



Executive leadership

Chief Scientist

Dr Cathy Foley is our second consecutive female Chief Scientist. She is a strong advocate for women in science, technology, engineering, and mathematics. In 2013 Cathy Foley was named 'Woman of the Year' by the NSW Government and elected as a Fellow to the Australian Academy of Science in 2020.

2022 UPDATE: Professor Bronwyn Fox, continues in the role of CSIRO's Chief Scientist (CSIRO's fourth consecutive Chief Scientist), having commenced this role in October 2021.

Leadership Team

Our leaders are building strong collaborative networks across the national science sector on gender equity strategies and actions such as inclusion, intersectionality and process. Our Leadership Team has performance indicators directly accountable for diversity and inclusion outcomes in their portfolios of responsibility. The majority of CSIRO Directors and senior leaders are members of CSIRO's SAGE team, actively developing, guiding, and championing our action plan.

2022 UPDATE: CSIRO's Executive Team is now comprised of 50% Women as is the CSIRO Board. The percentage of women in leadership roles at CSIRO now stands at 42.3%, a steady increase from 29% in 2015 and 38% in 2021.

The percentage of women in leadership roles at CSIRO has increased from

29% to 38%
in 2015 in 2021



Image: CSIRO's new Chief Scientist Professor Bronwyn Fox.

Opportunity 2: Evaluation

Establishing a national evaluation framework will guide decision making and drive investment and effort into measures that work.

Image: Elline Camilet partnered with Regina Coeli School as part of our STEM Professionals in Schools program that aims to increase student understanding and engagement with STEM.



CSIRO is a member of the SAGE initiative, an evidence-based approach to analysis, action and demonstrable impact.

Gender benchmarks and targets

- Developed methodology for discipline-specific gender benchmarking and shared 24 discipline-specific reports across CSIRO Business Units and Support Functions to guide aspirational targets and progress.
- Annually, results are shared with the Executive Team, Board and externally through SAGE, Champions of Change Coalition and Senate Estimates.

Gender pay equity

An analysis of gender pay equity in like-for-like roles achieved gender pay equity at an organisational level. We continue to deepen our analysis to ensure the organisational average does not disguise any hidden inequities.

SAGE 90-point action plan

The SAGE Project team diversity dashboard, updated quarterly, presents diversity metrics that enable data breakdowns and trend analysis. Our SAGE tracker, accessible to all our people, shares our 90-point action plan and current progress increasing transparency and accountability across CSIRO. Quarterly reports are also produced for our CSIRO Executive Team.

90-point action plan 52% complete 40% in progress 8% not started

2022 UPDATE: CSIRO continues to progress towards the SAGE Silver Accreditation via the Cygnet Awards. As part of this process, we have focused on the first of our five barriers to inclusion. We are building on our successes by identifying opportunities to embed and leverage initiatives that have successfully delivered impact more broadly throughout the organisation. We are aligning to our latest Diversity, Inclusion and Belonging Strategy to ensure alignment and consistency with broader organisational objectives. Key achievements in this period include initiatives to enhance the diversity of candidates through several innovative recruitment campaigns and processes.

Opportunity 3:

Workplace culture

An inclusive and respectful culture, challenges traditional stereotypes, is free of discrimination and bias, enables flexibility and accommodates career interruptions and changes maximising women's participation in the workforce.

Image: Our Baby Booklets offer a guide to planning, entitlements, and leave for a baby while working at CSIRO.



Supporting our people with caring responsibilities

- Our Balance initiative, established July 2017, makes flexibility the norm across the whole organisation, regardless of gender.
- Assessment of output by full-time equivalent years rather than calendar years for grants and promotion cases, piloted in 2018-2019, and implemented in 2020.
- Expansion of support for people returning to the workforce with caring responsibilities including CSIRO baby booklet and bag. Since launching in November 2018, we have sent out bags to over 200 of our people.
- Inclusive leader programs to foster more inclusive leaders and leadership teams.

2022 UPDATE: CSIRO strongly encourages flexible working for our people. The COVID-19 pandemic fast tracked and supercharged many initiatives to further support flexible working and in particular, we introduced ‘Our Ways of Working’ – resources and advice on the different ways of working in CSIRO, including different work modes available to support people to work flexibly. In 2022, beyond mandated lockdowns, our people continue to manage their time and work location to balance their work and outside work commitments.

Networking and sharing best practice

We bring together our Diversity Champions through symposiums, networks, and Communities of Practice.

- Global Communities of Practice share and better leverage knowledge and opportunities across our workforce to build global capability.
- Pride@CSIRO (Marching in the 2019 and 2020 Sydney Gay and Lesbian Mardi Gras).
- Empowered Inclusion and Diversity teams working with the Corporate Diversity and Inclusion team for shared learning and impact.

2022 UPDATE: CSIRO held its second Diversity Month in 2022, a celebration and exploration of our diversity and an opportunity to build our sense of belonging. There were 1,500 attendees across the range of events and approximately 15,000 engagements in our Yammer conversations during Diversity Month.

Inclusive culture

Fostering an inclusive and psychologically safe workplace through the creation and dissemination of resources including Inclusive Meeting and Virtual Meeting Guidelines, and Inclusive Planning Outlook Calendar showing regional holidays, international days of recognition, and other major events potentially impacting our people.

Recruitment

- Transition to all-gender inclusive language in our recruitment and HR systems.
- Piloting new recruitment initiatives to diversify our recruitment pools including gender-balanced selection panels and short-lists.

Fostering and promoting inclusive leadership across the board, including in recruitment where calls for leadership positions highlight the importance of inclusive leadership, seek a diverse range of applications and encourage the recruitment panel to focus on applicants' track history of demonstrating inclusive behaviours.

2022 UPDATE: CSIRO recognises the value that all forms of diversity contribute to the workplace. During 2022, CSIRO continued a series of focused recruitment campaigns to increase the number of women hired into the organisation. We are also reviewing our talent acquisition processes and procedures with a view to address historical barriers to entry and promotion for women.

Image: Our Inclusive Meeting Guidelines facilitate inclusion, so everyone has the opportunity to contribute fully.



Opportunity 4:

Visibility

Seeing women in diverse STEM careers, and equally represented in the media, in public events, and in other forums like boardrooms and classrooms will provide role models for girls and women and inspire a nation.

Image: Dr Rachel Makinson featured in our International Women's Day campaign in 2020. Dr Makinson was the first woman at CSIRO to become a Chief Research Scientist and to hold the position of Acting Chief of a division.



Raising the visibility of Women in STEM

Annually, for International Women's Day we showcase women in CSIRO's history and current day. Throughout the week we share stories of inspirational women on social media and CSIRO's website.

We have set aspirational targets for gender-balanced images and spokespeople in our internal and external communications contributing to remedying the current deficit in female STEM role models.

CSIRO has strong embedded practice in making diverse scientists and diverse science teams and leaders visible both within CSIRO and externally, consciously working to showcase diversity.

50:50 panel pledge

The 50/50 panel pledge is a campaign to drive and embed a culture of diversity by encouraging gender balance on panels, committees, and project teams.

2022 UPDATE: We continue to strive for gender-balanced images and spokespeople in our internal and external communications, such as CSIRO Says, all-staff webcasts, internal panel discussions, our external blogs and across our social media channels.

Currently, as part of our media release review process, we actively consider diversity of spokespeople and look for women, as well as people of a diversity of ages and cultural backgrounds. We also have a database of female science spokespeople, which currently has 82 women and their field of expertise listed.

Development opportunities

Supporting female scientists to take up development and role modelling opportunities through:

- Superstars of STEM.
- Inclusive design and delivery of CSIRO's leadership and talent development programs.
- Proactive attention to gender balance in CSIRO's leadership and talent development programs.
- Participation in external programs and development initiatives that support development of women leaders and are fit for the STEM context.

2022 UPDATE: CSIRO continues to proactively consider gender and other forms of diversity when promoting and offering development opportunities, including leadership and talent development programs. Careful consideration is given to the design of CSIRO's leadership and talent management frameworks, processes and in-house leadership development experiences, as well as the selection of external programs, to ensure these are as inclusive as possible and we are committed to improving this.

During 2022, CSIRO's internal leadership and talent development programs met or exceeded 45% female leader participation. Several cohorts of women leaders also participated in external women leadership development experiences. CSIRO provided access to bespoke programs targeting development of women in STEM, including the Coaching for Women in Digital Program offered via CSIRO's Digital Academy.



Intersectionality workshop

Working towards understanding diversity through an intersectional lens so we can be more inclusive and value the diversity this brings to science and leadership. Developed in collaboration with the Australian National University, University of Canberra, CSIRO, Charles Sturt University, and SAGE.

STEM's got talent but nearly lost it

CSIRO, together with several universities in the Australian Capital Territory SAGE regional network produced the 'STEM's got talent but almost lost it' video. The collaboration captures the stories of successful individuals who have pursued careers in science; how at times, they nearly turned away from STEM, and how a range of obstacles were overcome along the way.

Image: CSIRO's cotton research team.

Case Study

Pawsey SuperComputing Centre

The Pawsey SuperComputing Centre based in Western Australia increases the visibility of female scientists as role models through:

- International days of recognition including:
 - Women in High Performance Computing
 - Women in Technology
 - Women in STEM
 - WiTWA (women in tech [+] WA)
 - UN Women.
- SuperSTEM communication and media training of 10 female scientists in 2019.
- 700 attendees at the National Data Science Week launch in 2019, showcasing Women in Data Science.
- Over 1300 views of publicly available profiles of women-led research projects on the Pawsey website.

Image: Pawsey celebrating International Women's Day.



Opportunity 5:

Education

Young Indigenous Women's STEM Academy.

Strengthening the education system to support teaching and learning on a national scale will enable and encourage girls and women at all levels to study STEM courses and equip them with the skills and knowledge to participate in diverse STEM careers.

Image: Young Indigenous Women's STEM Academy participants and staff at the Inaugural Camp held in January 2020.



CSIRO Education Programs, including the BHP Foundation Science and Engineering Awards, Generation STEM and STEM Professionals in Schools all have key performance indicators for gender participation.

Female STEM professional participation is 43% which is significantly higher than the national female STEM qualified population of 17%.

Young Indigenous Women's STEM Academy

The Young Indigenous Women's STEM Academy is the first program of its kind; offering long-term, individualised support to Aboriginal and/or Torres Strait Islander young women who want to pursue STEM studies and careers.

In partnership with CareerTrackers, the program has been operating since mid-2018, and has worked to support, engage and involve young women in STEM from Year 8 in secondary school through to University.

The key objectives of the Academy are to encourage young Aboriginal and Torres Strait Islander school students who identify as women, to pursue STEM studies and careers. The Academy strongly believes in recognising and celebrating Aboriginal and/or Torres Strait Islander excellence in STEM, which will in turn raise the aspirations of other young women to pursue STEM education and careers and build higher expectation relationships with teachers, schools, the community and families.

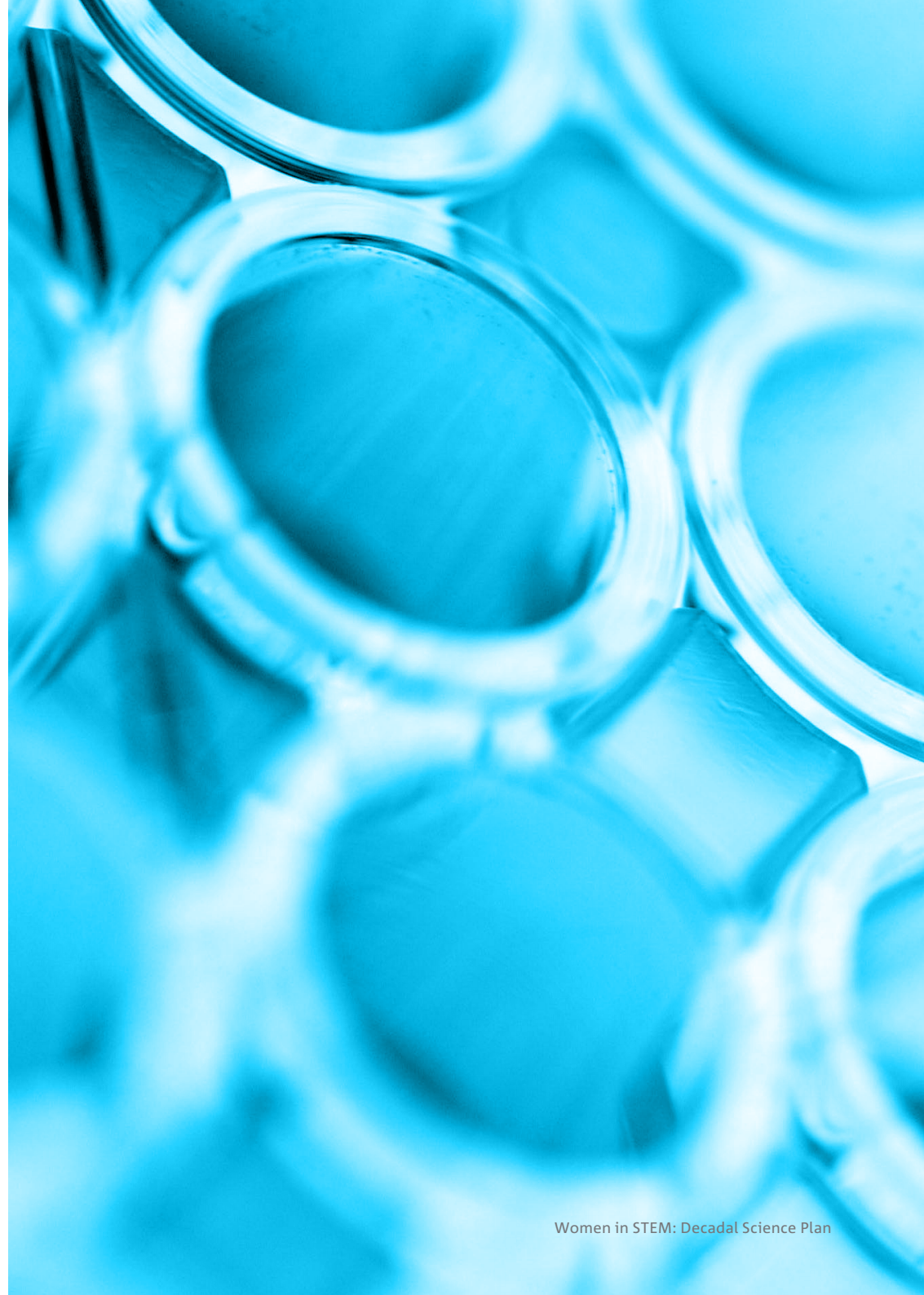
172 students enrolled with the goal to recruit
600 young women nationwide by **2028**.

2022 UPDATE: The Academy is currently supporting 406 young Indigenous women across Australia. This year, the Academy held five face-to-face STEM Camps, as well as a range of virtual STEM experiences to connect the young women with Indigenous STEM professionals and experiences from across a variety of STEM fields, including robotics and drones, DNA testing, Ant Lab, infra-red technologies, Virtual Reality. In addition to STEM experiences, the Academy provided the young women with a range of activities to support their wellbeing, including weaving, meditation and yoga. Fifteen young women have now graduated from university; eleven have commenced employment in various STEM fields; three young women are currently considering their options and one young woman has enrolled in an Honours course.

Opportunity 6:

Industry action

Establishing a national framework that guides and provides tools to address gender equity amongst Small to Medium Enterprises will impact the vast majority of businesses not reached by existing programs.



Collaboration

Along with our SAGE ACT Regional Network partners, we co-developed an ‘intersectionality’ walk to provide an experience of walking in the shoes of others to better understand systemic institutional barriers to inclusion of diversity, and to workshop mitigating actions.

Resource sharing

CSIRO resources and materials are actively shared in support of women in STEM fields:

- Domestic Family Violence and Abuse is a significant concern, particularly during COVID-19. Our guidelines and resources were shared across partner CCC organisations.
- Everyday sexism steers women away from STEM fields. Our animations and resources were also shared with CCC organisations.
- Our Inclusive Meeting Guidelines have been shared with several domestic and international organisations.

2022 UPDATE: Gender equality in the digital economy is a key focus for CSIRO, and through our Chief Executive’s participation in the Champions of Change Coalition, we are committed to improving gender equality in the digital economy.

New opportunity: COVID-19 response

CSIRO is committed to ensuring the safety and wellbeing of all our people.

Image: CSIRO opened Australia's first accredited testing facility for single use surgical face masks in 2020.



In response to COVID-19, CSIRO:

- established a COVID-19 Situation Management Team to proactively monitor and manage the evolving situation
- developed a COVID Safe Plan and a Return to Site Plan to protect the health and safety of our people, partners and the community
- held virtual catchups with those in locked down states and territories to check-in with people and provide an avenue to share experiences, seek and provide support, and discuss pertinent topics like home schooling children
- implemented pulse surveys to check-in more frequently with our people and understand what support and resources were needed
- offered the Work From Home package to provide our people with the physical infrastructure to support flexible work arrangements
- created a range of resources to support our people, including resources for Parents and Carers, a Wellbeing Hub, a Leaders Hub, and information about keeping well when working from home
- started a Yammer group to connect and support parents working from home
- provided information and resources on the variety of ways people could adopt flexible work modes to suit their circumstances
- updated leave provisions to support changing circumstances, such as domestic and family violence leave, and taking Paid Leave for Specific Purposes to care for / home-school children if no sick and carers leave credits were available.

We continue to monitor the impacts of COVID-19 to identify any disproportional impacts on our people.

2022 UPDATE: As we transition to a post-COVID-19 world, many of the initiatives developed in response to the pandemic and associated lockdowns continue. Virtual team meetings are still the norm, and All-staff briefings via video streaming have persisted. We also continue to have a significant number of our people making use of our flexible working options and working from home.

Image: CSIRO has on-site childcare services at our two largest sites to better support working parents.



As Australia's national science agency,
CSIRO is solving the greatest challenges through
innovative science and technology.

CSIRO. Unlocking a better future for everyone.

Contact

1300 363 400
csiro.au/contact
csiro.au

For further information
Life Portfolio, CSIRO People
Adam Gibson
+61 3 9545 2485
adam.gibson@csiro.au