

Women in STEM: Decadal Science Plan

CSIRO Champion Response



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.



Overview

Opportunities











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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

Champions of Change Coalition

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

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 CCC 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.



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.

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, quiding, and championing our action plan.

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







Image: CSIRO's Chief Scientist Dr Cathy Foley.



Opportunity 2: Evaluation

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

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

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.



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.

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.

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.

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



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.

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.

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.

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.





Development opportunities

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

- Superstars of STEM
- Homeward Bound
- Gender balance in our leadership development programs.

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.

Image: CSIRO's cotton research team.

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.

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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

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.

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.



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.

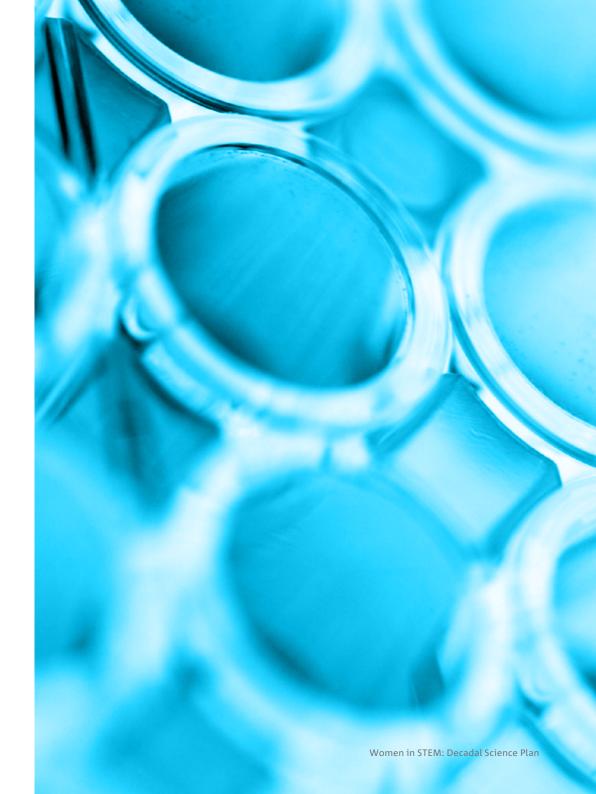
Collaboration

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.



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 1300 363 400 csiro.au/contact csiro.au For further information
Organisational Development
Kerry Elliott
+61 2 9490 8006
kerry.elliott@csiro.au