

Women in STEMM @ UNSW

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Opportunity One: LEADERSHIP

Our leadership has set and is committed to delivering our gender equity targets.

UNSW Sydney is aiming for 40% female representation at senior academic levels D and E and 50% at senior professional staff level 10+ by 2025. These targets are:

- Reviewed regularly and progress tracked by UNSW's Equity Diversity and Inclusion Board, which is chaired by UNSW's first Deputy Vice-Chancellor, Equity Diversity and Inclusion, Professor Eileen Baldry.
- Embedded in each Dean and Division Leader's key performance indicators (KPIs).
- Supported by initiatives, including the rollout of unconscious bias training and participation in the Science in Australia Gender Equity (SAGE) initiative, Athena SWAN in Australia, which address the under-representation of women, including transgender women and nonbinary people, in Science, Technology, Engineering, Maths and Medicine (STEMM) disciplines.
- Reported publicly in a two-year progress update by UNSW's Chancellor and our President and Vice-Chancellor in our 2025 Strategy In Action publication.

Opportunity One: LEADERSHIP

Our leadership has set and is committed to delivering our gender equity targets.

In addition to implementing and tracking our gender equity targets, as part of the Athena SWAN initiative we have made commitments to:

- Set annual targets for the number/proportion of women to be included in the promotion pool.
- Undertake a review of training and development programs across the institution to ensure consistent, standard and quality delivery which better meets the needs of staff, especially women.
- Establish a steering committee that reports into the Management Board, who will make recommendations about the best options for expanding childcare services at UNSW.
- Ensure all policies apply a diversity, equity and inclusion lens when undergoing review or development and have this tracked by Governance.
- Undertake a review of workload allocation models used across STEMM and other disciplines to develop a guideline for Deans and Heads of School (HoS) in considering gender equity in workload allocation decisions.
- Implement improvements to the questions in UNSW Sydney's 'Personal Statistical Profile' and the way personal data is captured in UNSW's information systems, to encourage higher completion rates.
- Conduct focus groups with female staff to explore how inequities due to gender are amplified by other personal characteristics such as cultural background, Indigenous status and disability.

Opportunity Two: EVALUATION

Our evaluation approach is multi dimensional, tracking gender equity targets and reviewing individual experience.

Current and planned activities to track equity in recruitment and remuneration include:

- Implementation of gender reporting requirements, to enable detailed gender analysis throughout the recruitment life cycle.
- Regular, comprehensive pay reviews reported to UNSW's EDI and Management Boards to assess if pay equity targets are being achieved.
- Progress reported at the Faculty and Division level and communicated to key stakeholders, including Deans and Division leaders.
- Regular bonus reviews conducted by gender to ensure that the average bonus percentage is equitable.
- Ensure all new policies consider equity, diversity and inclusion through tracking and evaluation by Governance.

Opportunity Two: EVALUATION

Our evaluation approach is multi dimensional, tracking gender equity targets and reviewing individual experience.

Current and planned activities to review individual experience through feedback include:

- Targeted surveys of recent female leavers at level D and above to develop improved understanding of barriers to retention.
- Survey recent female hires about the recruitment experience and refine recruitment processes based on their feedback.
- Conduct focus groups with female staff to obtain insight on how other personal characteristics, such as cultural background, Indigenous status and disability, impact gender inequality.
- Review workload allocation models in STEMM disciplines to develop guidelines for ensuring gender equity in workload allocation decisions, and track equity in workload allocations at the school level.

Opportunity Three: WORKPLACE CULTURE

Creating an enabling environment and inclusive culture at all levels of our organisation is key to achieving our gender equity goals. We are committed to embedding equity and diversity into the fabric of all our endeavours.

Development and retention of women at UNSW Sydney is fostered through multiple programs:

- In 2017, UNSW Sydney launched a performance development program for all employees called **myCareer** to provide guidance and structure for managers to discuss role expectations, career goals, development options and performance feedback.
- UNSW Sydney has an integrated **Academic Career Development Framework** providing free-of-charge career development opportunities for academic and research staff. The framework integrates academic development across teaching, research, leadership and engagement and is aligned with promotion criteria.
- UNSW's **Women in Leadership** program builds and supports a cohort of high potential academic and professional women on their trajectory towards senior leadership roles. Since 2006, 202 female academic staff from STEMM and other disciplines have benefited from this program.
- **Women in Research Network (WiRN)** is UNSW's forum for research-active women of all levels and roles and offers support, information and advocacy. It is run by an executive committee.
- **Unconscious bias training** has been delivered to over 300 senior leaders.

Opportunity Three: WORKPLACE CULTURE

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The formal development programs are supported by multiple policies and structures aimed at creating and supporting an equitable workplace:

- UNSW Sydney has appointed a **Deputy Vice-Chancellor, Equity Diversity & Inclusion**, established an EDI Board, and EDI committees in every faculty and has appointed five Diversity Champions.
- In 2018 UNSW Sydney implemented a **Regular Team Meetings Hours Policy**, that recognises that many staff, including those with caring responsibilities, may be unable to attend essential meetings if they are scheduled too early or too late in the day.
- In 2019 the University has implemented **Flexible Work Guidelines**, to help foster a workplace culture that supports the work and life needs of its staff.
- UNSW Sydney has a **Parenting Booklet**, providing information on leave entitlements, staying in touch and flexible work arrangements. Employee and manager checklists are available to help staff navigate the period before, during and after taking parental leave.
- UNSW's **Enterprise Agreements** outline paid and unpaid maternity leave, adoption leave and primary carer leave entitlements (paid leave entitlements range from 14-36 weeks, depending on contract type and length of service) and partner leave entitlements (2 weeks paid leave). These entitlements are explicitly inclusive of same gender couples.

Opportunity Four: VISIBILITY

UNSW Sydney websites and marketing collateral use diverse images to ensure visible gender balance. Women are featured in news stories and in key print publications.

UNSW Sydney is currently working towards improving the visibility of our talented female staff. Some examples of our commitments are:

- The UNSW Sydney Management Board has committed to the Male Champions of Change 'Panel Pledge', to ensure consideration is given in the planning stage to representation of women at conferences, events and lectures with the aim of gender parity. The Deputy Vice-Chancellor, Equity Diversity and Inclusion has also taken the Panel Pledge, as have the Faculties of Arts and Social Sciences, Business, Medicine and the Built Environment. UNSW's other faculties are currently considering similar action.
- To develop University guidelines for public events to ensure gender balance is always considered.
- To develop a directory of UNSW Sydney female STEMM experts who can be called on for media opportunities and commentary, so women are represented as experts in newsprint media and part of public discourse.
- To create a 'UNSW women in STEMM' portal, and profile role models to inspire up and coming female academics.

Opportunity Five: EDUCATION

UNSW Sydney is committed to encouraging capable students to overcome barriers to admission and take advantage of the education we offer, irrespective of their background or personal circumstances. This commitment includes encouraging girls and women to study STEM.

Mathematical sciences:

- **"Girls Do the Maths" workshop**, organised by the School of Mathematics and Statistics, attracts up to 400 female year 11 and 12 students from across Sydney and regional NSW. These workshops aim to show young women that maths and statistics are an attractive future career for them.
- **Paradice Scholarships** encourages female students to undertake a Honours Year Program in the School of Mathematics and Statistics, and is funded by philanthropy.
- As a full member of The Australian Mathematical Sciences Institute (AMSI), UNSW Sydney works closely with AMSI's **"ChooseMaths" program**, which works with students, parents and teachers over five years to turn around community attitude to participation in mathematics, especially for girls and young women.

Opportunity Five: EDUCATION

Examples of faculty-led activities that support and/or encourage girls and women to study STEMM:

UNSW Faculty of Engineering

The Women in Engineering (WIE) program aims to inspire girls in high school to pursue engineering degrees and careers. The program, launched in 2014, also supports women studying engineering at UNSW, and celebrates the successes of female engineering graduates. Initiatives include:

- Women in Engineering Camp, an industry mentoring program, and the WiESoc student society.
- Girls in Engineering Club, for students in years 7-12. It's more than 800 members have opportunities to participate in online holiday workshops, a monthly engineering challenge, and access inspiring interviews with female role models, blogs and Q&As.
- Over 60 scholarships awarded since 2015, valued at +\$2.3million. Currently 150 female recipients are studying in UNSW Engineering.

Impact:

- 78% increase in first-year female engineering enrolments post launch.
- 27% female student cohort commencing UNSW Engineering in T1 2020.

Exploring STEMM Careers - UNSW Science and UNSW Engineering together run two days of activities during the winter school holidays for year 10 girls interested in STEMM careers. In 2020 100 girls took part. Participants have the opportunity meet professional scientists and engineers and to visit organisations, such as Cochlear and Google. The students also participate in STEMM workshops and talks hosted by UNSW Sydney.

Opportunity Five: EDUCATION

Examples of faculty-led activities that support and/or encourage girls and women to study STEMM:

UNSW Faculty of Science

- **Women in Science Symposium** - Each year to celebrate International Women's Day, UNSW Science and the Australian National Maritime Museum host a free Symposium for 400 high school students to celebrate women in science. Participants get to participate in a Young Scientists discussion session with guest speakers and have exclusive tours through the museum.
- **L'Oreal Girls in Science Day**, run jointly with Australian L'Oreal-UNESCO for Women in Science Fellows for girls in years 9-11. Participants get to hear from the Fellows about their research and experiences as scientists, and discuss potential future study or careers in science.
- **Science 50:50** - Universities, research organisations and industry come together to deliver this program, which aims to inspire young women to pursue careers in science and technology. The program comprises school visits, competitions, school holiday programs and science-based events.
- **The Office of the Women in STEM Ambassador**, hosted by UNSW Science, runs national awareness-raising initiatives to promote STEMM study and careers to girls. An example of one of these is a partnership with Questacon, the National Science and Technology Centre, to deliver free events throughout 2020 that guided parents, carers and teachers on how to effectively engage young people in STEMM.
- **The Women in Maths & Science Champions Program** is for women PhD students and early career scientists. Participants on the program have a unique opportunity to strengthen their communication and leadership skills. For example, the women develop skills and confidence to build their public profiles, make a positive impact to the broader science community, and establish a connected network of women in maths and science. Another component of the program is an outreach activity; our program 'Champions' have undertaken over 2,000 hours of outreach activity, reaching approximately 6,000 school-aged students since 2018.

Opportunity Six: INDUSTRY ACTION

The UNSW 2025 strategy outlines the University's commitment to a just society including improved equity, diversity and inclusion both within the University sector and society as a whole.

UNSW Sydney is committed to thought leadership in the wider community and provides a number of programs to develop future entrepreneurs and to support equity, diversity and inclusion in other organisations:

- The **Founders New Wave program** addresses the underrepresentation of women in entrepreneurship by empowering UNSW Sydney students, staff or alumni who identify as women to launch start-ups.
- The New Wave program collaborates with **TechConnect**, a UNSW Sydney initiative to connect small and medium businesses with UNSW talent.
- UNSW Sydney partners with **Franklin Women**, a community for the promotion and support of women across the biomedical research industry.
- The **Transforming Women's Leadership Pathways initiative (TWLP)** is a flagship initiative by the PLuS Alliance (whose three members are Arizona State University, King's College London and UNSW Sydney). Launched on 1 October 2020 by the former Prime Minister of Australia, the Rt Hon, Julia Gillard, the TWLP initiative is intended to fast track women's progress into leadership positions by bringing together leading global universities, industry, governments and students, to co-develop action plans to transform women's leadership pathways in the Arts, Corporate, Engineering, Entrepreneurship & Innovation, Higher Education, Media & Communications, Medicine, Policy & Politics, Science and Technology. The TWLP's goal is to establish gender parity, equity and diversity as the norm by 2030.

Appendix: RESPONSE TO COVID-19

UNSW Sydney has taken steps since to mitigate the potential negative impacts of COVID-19 on gender equity.

- In **May 2020** UNSW Sydney was among the first Australian universities to sign a “Joint Sector Position Statement on Gender Equity”. This entails a commitment to preserving gender equity as a higher education priority during and after COVID19. See: <https://www.edi.unsw.edu.au/staff/gender-equity/australian-higher-education-joint-sector-position-statement>.
- UNSW Sydney has consulted staff to identify the impacts of COVID19 and gather feedback about how we should respond:
 - In **May 2020**, our President and Vice-Chancellor and the Provost invited all staff to participate in the “Taskforce 20/21 staff survey”. Staff provided feedback on four themes that encapsulated the challenges and opportunities arising from COVID-19: Faculties, Divisions, Horizons and Recovery. Each theme was allocated a Taskforce, comprising a female and male Co-Chair and staff volunteers, which made recommendations to management about the way forward. One of the five guiding principles for the Taskforces was an emphasis on equity, diversity and inclusion.
 - During **May-June 2020**, our President and Vice-Chancellor and the Provost invited all staff to participate in the “COVID-19 survey for all UNSW Sydney staff”. Staff feedback assisted UNSW Sydney’s planning for return to campus and future work arrangements.
 - In **May 2020** the UNSW Sydney Early Career Academic Network (ECAN) conducted a survey to gain insight into the issues causing most concern and how prevalent they are, how early career academics are coping, and determine what could be done to help.
 - In **May 2020** UNSW Sydney Women in Research Network members were invited to complete a short survey about their experience working from home since 1 March 2020, the start of the COVID-19 pandemic.

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- In **July 2020** our Vice Chancellor presented on the “Next steps in the UNSW response to COVID-19”. The presentation reaffirmed UNSW Sydney’s Strategy 2025 commitments (including a commitment to social impact) and announced a new faculty model which will embed social impact across the full breadth of academic excellence.
- In **July 2020** UNSW Sydney formally launched its new “EDI Principles Framework (Staff)”, which contains “guiding principles for decision making, especially during these challenging times of change [following on from COVID19] at UNSW Sydney. It has been endorsed by Management Board to assist staff in supervisory positions”. The Framework was prepared by the Division of EDI, and considered feedback based on broader staff consultation. It was launched by the new Deputy Vice-Chancellor, Planning and Assurance, and included in formal communications to UNSW Sydney leaders about preparations for upcoming workplace change.
- On **31 July 2020**, UNSW Sydney’s Division of HR launched a new monthly ‘EDI data sheet’ for HR Business Partners, to help them support the divisional and faculty leadership teams throughout the proposed workplace changes. These reports provide a snapshot of a division or faculty’s current diversity position from a number of angles, including gender.
- **Throughout the workplace change process**, each faculty and division has to submit a plan detailing proposed changes in their area. In this plan they are asked to consider and report on any potential EDI impacts emerging from the proposed workplace changes, as well as strategies that could be enacted to mitigate these impacts.

UNSW Women in STEM Decadal Plan Champion 2021 Annual Review

OPPORTUNITY ONE: LEADERSHIP

UNSW has continued with the actions outlined in our original submission, including a targets of 40% female representation at senior academic levels D and E by 2025 and maintain 50% at senior professional staff level 10+. These targets continue to be supported by a robust framework of monitoring and accountability.

Parity at professional staff levels 10+ has now been achieved, and female representation at academic levels D and E has risen from 31% in 2018 to 36% at the end of 2021.

UNSW has committed to proceeding from the Athena Swan Bronze Award to Athena Swan Silver Accreditation with a new Academic Leadership team for the program and a refreshed SAT (Self Assessment Team)

The annual Academic and Professional Women in Leadership Program (APWIL) continues to empower women to strive for career progression, by becoming more confident to put their hand up to lead or activate leadership in their existing role; more than 300 women have completed the program since its inception.

A Career Coaching for Carers program is being developed in 2022 that will support women staff with carer responsibilities at UNSW Sydney to develop their academic careers and not only address disadvantages due to COVID 19 but also the ongoing disadvantages experienced by women staff.

Programs supporting UNSW's female representation targets include the Science Faculty's Level-Up Program, which targets specific cohorts of academic women (eg Lvl C-D) to mentor and guide them through the promotions process.

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OPPORTUNITY TWO: EVALUATION

UNSW continues the evaluation commitments made in our original submission, including regular gender reporting and pay analysis, and Faculty and Division-level progress reporting.

In 2021 the Athena Swan Self-Assessment team undertook a review of actions to date, and continually monitors and evaluates UNSW gender equity initiatives.

The Athena Swan Silver Accreditation process from 2022-2025 will include a structured evaluation phase focussing on impact and outcomes of initiatives to date.

The Athena Swan evaluation process in 2022-2023 will identify gaps for further action.

UNSW has undertaken repeat COVID-19 impact surveys in 2020 and 2021, and through the Athena Swan program, has focussed evaluation on the impact on women's careers at UNSW.

UNSW Women in STEM Decadal Plan Champion 2021 Annual Review

OPPORTUNITY THREE: WORKPLACE CULTURE

Commitments made in UNSW's original submission continue, including the myCareer performance development framework, the Women in Leadership Program, and the Women in Research Network.

An Inclusive Leadership Program for senior staff of all Divisions and Faculties was piloted in 2021 in the Divisions of External Relations and Equity, Diversity and Inclusion and will be rolled out to all Faculties and Divisions in 2022.

SBS Core Inclusion modules (a self-paced, online inclusion training course), were available for all staff and students in 2021 and will be available in 2022, as will a specific module on Gender Equity.

UNSW published its first full Sexual Harassment annual report in 2021.

UNSW Canberra set up a 'Women @UNSW Canberra' program in 2021

UNSW continued to support our Gender Champions and Parents and Families Champions to enhance workplace culture at UNSW.

UNSW has developed a new Flexible Work Policy with robust underpinning principles that will support women's increased participation in the workforce.

The Vice Chancellor's Childcare Fund supports women researchers with the cost of extraordinary childcare to present their work at conferences.

The Science Faculty's Momentum Scheme provides academic and professional staff who are on or who are returning from sustained carer leave with support to help maintain career momentum.

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OPPORTUNITY FOUR: VISIBILITY

UNSW Sydney websites and marketing collateral continue to use diverse images and stories to ensure visible gender balance and the representation of multiple dimensions of diversity.

Professor Fiona Stapleton, Professor of Optometry and Vision Science, was appointed Academic Lead for Athena Swan in 2021-2023 with two deputy Academic Leads, Associate Professor Sue Williamson (UNSW Canberra) and Associate Professor Amelia Thorpe (Law).

In December 2021, UNSW Council approved a proposal to increase the visibility of women in the physical, digital and programmatic spaces of UNSW, including naming University spaces in perpetuity after prominent UNSW women.

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OPPORTUNITY FIVE: EDUCATION

The UNSW Women in Engineering Program has continued successfully targeting high school students and enrolled undergraduate and postgraduate students at UNSW with cohort-specific activities, support and scholarships. This program has seen a 78% increase in female first-year enrolments in Engineering at UNSW since 2013.

UNSW Science 'Girls do the Maths', Paradise Scholarships and 'ChooseMaths' Programs for girls and women continue to run as outlined in UNSW's original submission.

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OPPORTUNITY SIX: INDUSTRY ACTION

Industry-connected programs outlined in the Decadal Plan submission have continued throughout 2021 including the Founders New Wave Program and Franklin Women.

The Plus Alliance, an initiative of UNSW, Arizona State University and Kings College London, published a compilation of initiatives to support women's training and leadership, via the Transforming Women's Leadership Pathways Initiative [Knowledge Hub](#)

The UNSW Women's Wellbeing Academy brings together colleagues and collaborators from across UNSW community to enhance and highlight diverse multidisciplinary work in the area of women's wellbeing. Small grants enable innovative research-driven projects by WWBA members to support women's wellbeing at UNSW and elsewhere.

COVID-19 RESPONSE

UNSW's response to the early stages of the pandemic in 2020 is outlined in our original submission. In June 2020 UNSW became a signatory to a [joint position statement](#) on 'Preserving Gender Equity as a Higher Education Priority During and After COVID-19'.

UNSW has actively monitored the impact of COVID-19 related workplace change on the proportion of women employed at various career levels at UNSW with gender impact reports produced for executive committees following Workplace Change.

During the extended 2021 COVID-19 lockdown in NSW, UNSW implemented enhanced access to carer's leave for parents who were homeschooling children, enabling them to access up to 7 hours of their carer's leave per week specifically to care for school-aged children at home.

UNSW also granted a total of 2 free annual leave days ("wellbeing days") to all staff at UNSW during the lockdown, particularly acknowledging the impact of lockdown on carers.

UNSW has developed a new Flexible Work policy with an underpinning principle of flexibility being available to all, the culmination of research undertaken for UNSW's Athena Swan Bronze Award application, accelerated by the COVID-19 pandemic. Many staff expressed that the new norm of flexibility has enhanced their ability to participate in the workforce.

Through the Athena Swan program, UNSW has committed to participation and data analysis of a multi-university COVID-19 impact survey initiated by Griffith University.

Some UNSW Faculties have created targeted programs and funding for women researchers and for carers to support their research careers which may have been impacted by COVID-19.