

Science & Technology Australia

ANNUAL REPORT

2023



scienceandtechnologyaustralia.org.au

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From the President

Three-word summary: Wow. Just. Wow.

In this final annual report of my two-year term as President of Science & Technology Australia, I am so proud of all we have achieved together.

STA's policy influence is now at an all-time high. We have deep relationships and respect on issues that affect Australia's STEM sector. This was clear in our highly regarded submissions, countless opportunities on which STA's trusted advice was actively sought this year, in my appointment to the Review of the Australian Research Council Act, and our CEO's appointment to the Universities Accord Ministerial Reference Group.

In 2023, STA delivered a major report on STEM Career Pathways for the Prime Minister's National Science and Technology Council and Office of the Chief Scientist. Our flagship event Science Meets Parliament was a stellar success. We launched National Science Week, and a new National Industry PhD Program with the Department of Education. We advocated tirelessly for Indigenous knowledges and discovery research to be headlined as dedicated priorities in Australia's next National Science and Research Priorities. And we led a push for Australia to adopt an official R&D target to propel the next wave of Australian prosperity.

STA is a champion for equity, diversity and inclusion – this is core business for us. Our community campaigned yes for an Indigenous Voice to Parliament in this year's historic referendum. We grieve the loss of that vote, and a missed opportunity for our country, and we redouble our work to elevate and invest in Indigenous people and organisations in STEM. Our Innovate Reconciliation Action Plan reflects these ambitions. Our world-leading Superstars of STEM program is creating powerful new media role models of diverse women and non-binary talent in STEM and inspiring more diverse young Australians into STEM.

STA's strongly growing membership – now representing 115,000 STEM experts and entrepreneurs through 138 member organisations – is a source of great optimism. We are led by an impressive Board and staff. I extend my gratitude to our Misha Schubert for her skilled and tireless leadership as CEO. Her care for, and nurturing of, our STA team is a joy to see. Our staff consistently go the extra distance for the organisation, its mission and our members, and they have our deepest appreciation.

Our financial result for 2022-23 has been nothing short of spectacular. A surplus of over \$800,000 and doubling our asset base to \$1.5 million highlights strong financial stewardship as we seek to put the organisation on a more secure footing than ever in its history.

As I hand the baton to incoming President Professor Sharath Sriram, I express my deep gratitude to the STA community for your trust and cooperation over the past two years. The power of a united community of scientists and technologists can never be underestimated. It has been an immense privilege to be a part of this journey with you.



Professor Mark Hutchinson

*President
Science & Technology Australia*

From the CEO

This has been a truly transformative year for Science & Technology Australia.

Our clear-eyed strategy to grow membership, build deep policy influence, diversify our revenue, secure our long-term financial future and invest in our staff has paid dividends. Through our 138 members, STA now speaks for a powerful grassroots network of more than 115,000 science and technology experts and entrepreneurs spanning both industry and the research sector.

STA's mass and momentum have never been stronger. Nor has our influence. Among our policy wins (page 27) were ensuring bipartisan support for legislation to create Australia's new research commercialisation fund – Australia's Economic Accelerator – and a commitment to abolish the Ministerial veto on Australian Research Council grants. We launched Australia's new National Industry PhD Program and advocated for Indigenous knowledges and discovery research to be enshrined in Australia's new National Science & Research Priorities. We advised on the establishment of the National Reconstruction Fund and Industry Growth Program. And we spoke up strongly for deeper research investment in the Australian Universities Accord review.

As part of our deepening influence, STA researched and wrote a major research report on STEM Career Pathways for the Prime Minister's National Science & Technology Council and the Office of the Chief Scientist. Our flagship annual event Science Meets Parliament engaged a record 40% of Australia's Parliament – 95 MPs and Senators – in its 23rd year.

STA has championed diversity at every turn. Our Superstars of STEM program – funded by the Australian Government – is powerfully creating more high-profile role models of diverse women and non-binary STEM experts appearing in the media. STA's Indigenous member organisations are a source of constant inspiration and partnership. And we continue to support the fledgling National Indigenous STEM Professionals Network.

Our finances are in excellent shape. In 2022-23, we secured long-term funding arrangements for our major grant-funded programs – Science Meets Parliament and Superstars of STEM – and multi-year contracts for

our services – the National Industry PhD Program and Science Policy Fellows Alumni. We grew our acclaimed Super STEM Communicator Training series – adding a Government Relations Bootcamp and a module on National Interest Test statements. This year we doubled our annual turnover (now \$2.9 million), posted a surplus of \$800,000 and doubled our assets to \$1.5 million.

At the 2023 AGM, we farewell our outgoing President Professor Mark Hutchison – and welcome incoming President Professor Sharath Sriram. On behalf of the staff, Board and members, we thank Mark for his stellar Presidency of STA over the past two years. He has led with vision, energy, strategy, clarity, kindness and compassion. He has devoted vast amounts of his time to STA, chaired major projects, made generous financial contributions, nurtured our staff and offered wise counsel. We warmly welcome Sharath to the role and are so excited to work with him as he begins forging his legacy.

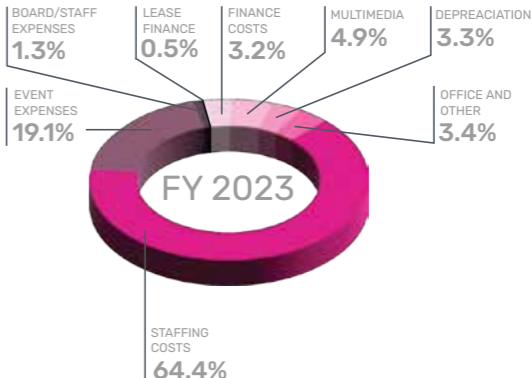
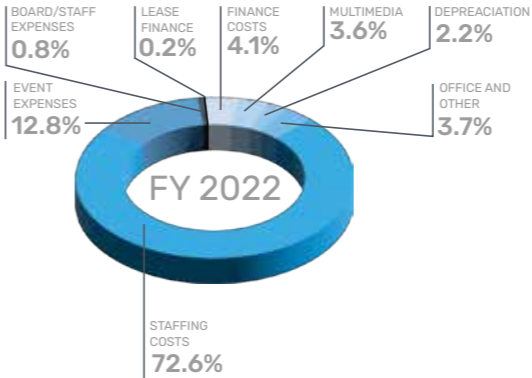
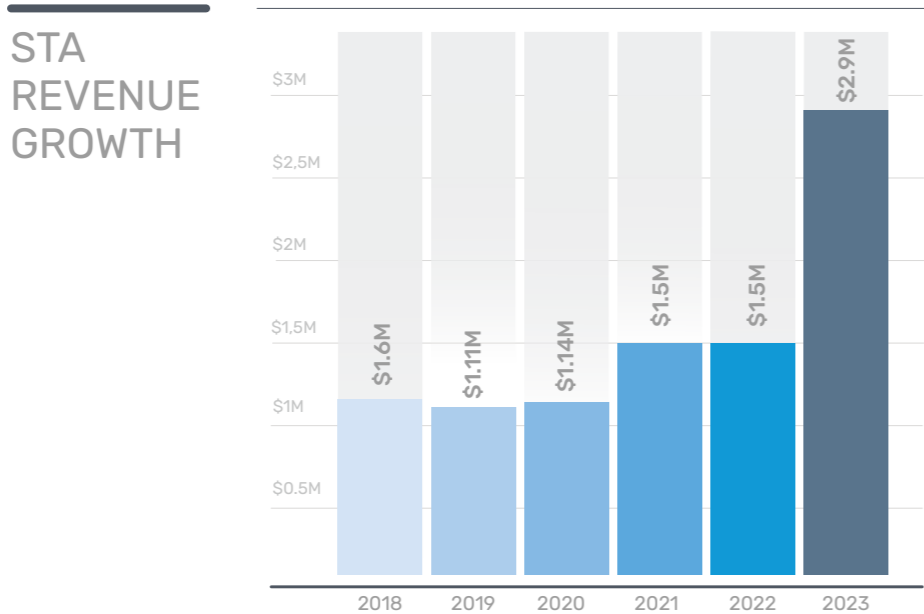
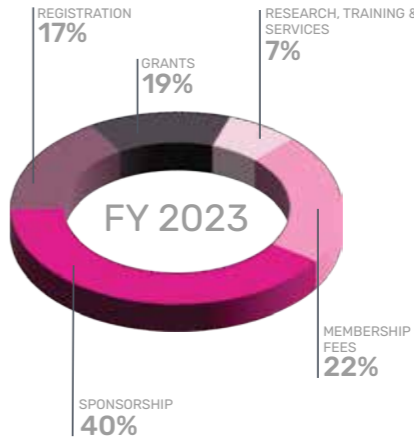
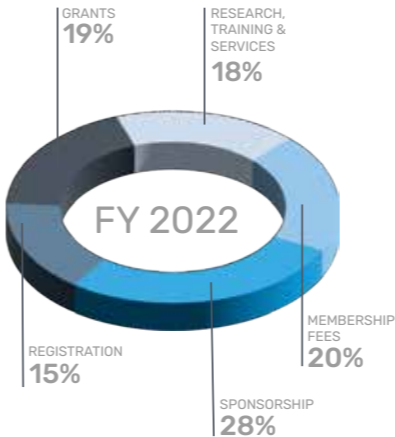
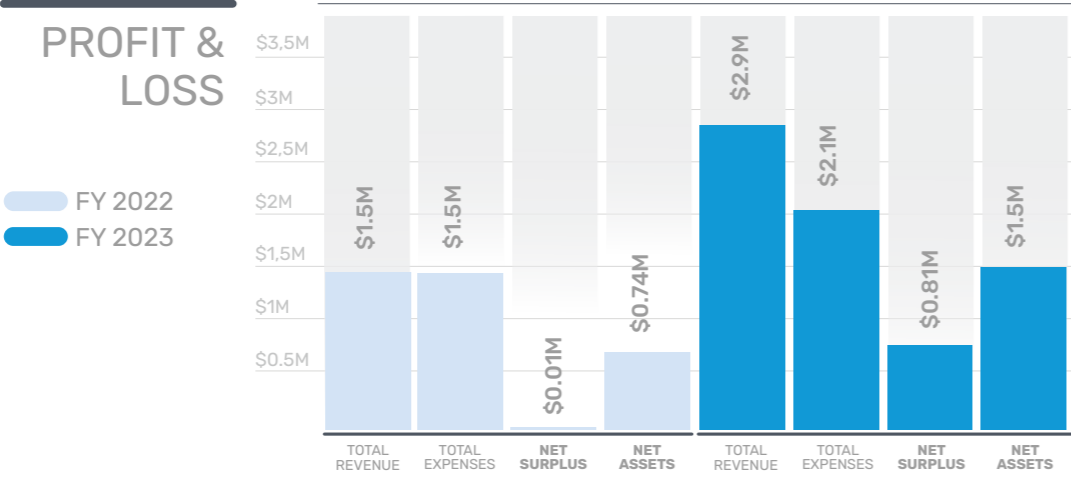
Finally, a huge thanks to our staff, Board and members. STA is honoured to work with you to ensure the sector's concerns, challenges and expertise are front and centre to help Australia navigate its most complex challenges. As I prepare to hand on the CEO role next February, I do so knowing the organisation is in such safe hands with our remarkable staff and Board. Thank you for the work each of you do – and for being part of STA.



Misha Schubert

*Chief Executive Officer
Science & Technology Australia*

Finances at a glance



STA STEM AMBASSADORS

- 26 new STEM ambassadors selected in 2023
- 70 STEM ambassadors trained since 2019
- 26 Parliamentarians registered in 2022

SUPERSTARS OF STEM

- 60 new Superstars of STEM started training in 2023
- 210 Superstars trained since 2017
- 105,000,000 people reached via media
- 66,000 school students reached at 325 schools

SCIENCE MEETS PARLIAMENT 2023

- 418 online and in person delegates
- 63 diverse and stellar speakers
- 95 MPs and Senators involved
- 87 meetings with MPs and Senators
- 40% of the Parliament engaged
- 97% of delegates recommend SMP
- 84% acquired career-accelerating skills

NATIONAL INDUSTRY PHD PROGRAM

- 72 Industry PhD projects funded in Round 1 and 2
- 34 projects at universities
- 38 projects in industry
- 214 applications submitted
- 1043 sign-ups to the mailing list
- 27 targeted marketing emails
- 140+ social media posts *

SUPER STEM COMMUNICATOR TRAINING

- 17 sessions delivered

SCIENCE POLICY FELLOWS ALUMNI

- 71 Science Policy Fellows Alumni
- 4 alumni meetings
- 3 alumni networking events

NATIONAL SCIENCE WEEK LAUNCH

- Audience of **1.7 million** Australians
- 539 direct media mentions
- 130+ launch attendees
- Lightning talks from 8 VIPs including Deputy PM and Minister for Science.
- 20 MPs and Senators helped launch the week

PARLIAMENTARY FRIENDS OF SCIENCE

- 2 high-quality briefings for MPs and Senators

MEDIA & ENGAGEMENT

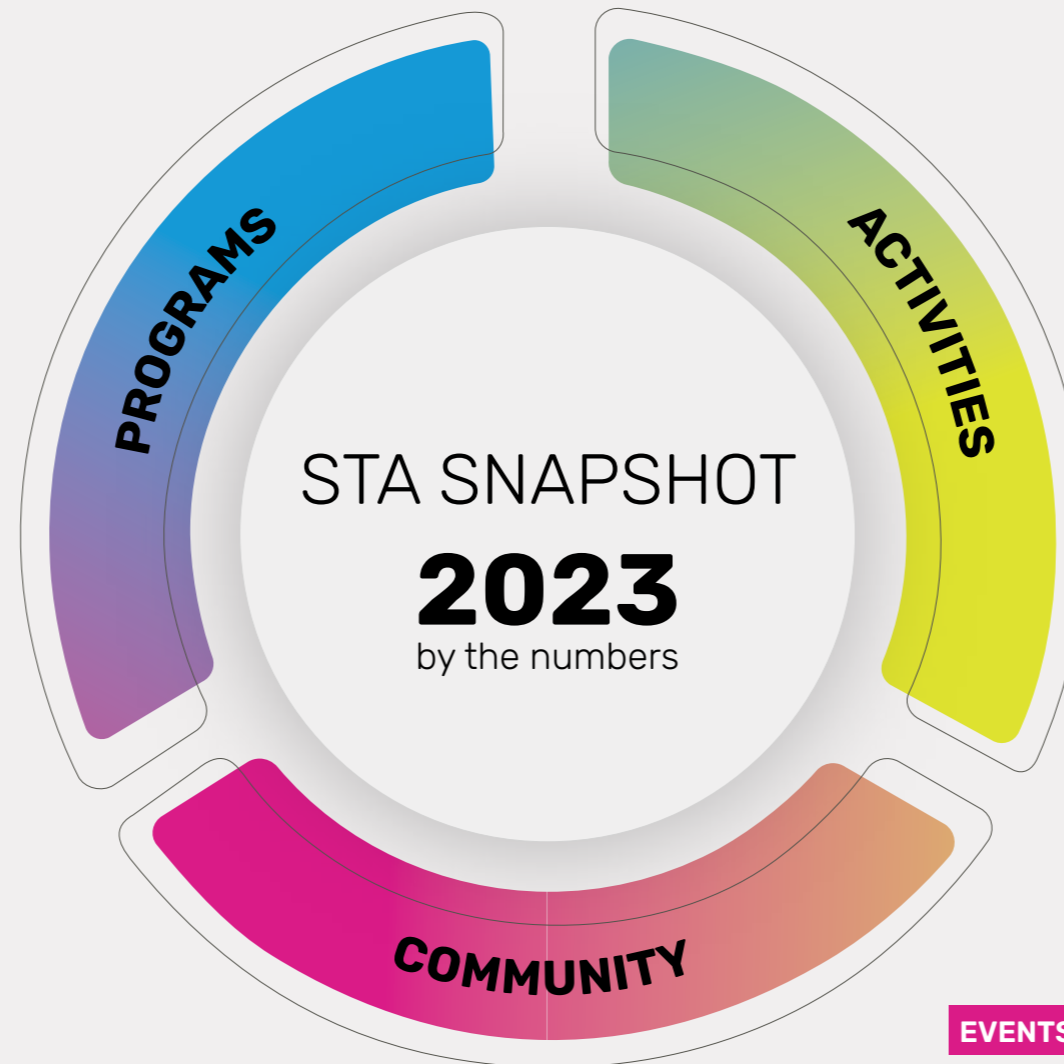
- 25 national media releases
- 8 opinion pieces
- 32,5K Twitter followers
- 12K LinkedIn followers
- 1,5K Instagram followers
- 7K Facebook followers

POLICY & ADVOCACY

- 18 high-quality policy submissions
- 1 Parliamentary hearing
- 66 Government and Parliamentary engagements
- 127 STEM sector engagements
- 13 global engagements

COMMISSIONED RESEARCH

- 1 STEM Career Pathways report for the PM's National Science & Technology Council and the Office of the Chief Scientist



EVENTS

- 1330 people attended STA events

EQUITY, DIVERSITY AND INCLUSION

STA's 2nd Reconciliation Action Plan launched

MEMBERSHIP

- 115000 scientists & technologists represented
- 138 STA member organisations
- 29 new members in 2023 (Dec 2022 to present)
- 55 member meetings (Dec 2022 to present)

Programs

SCIENCE MEETS PARLIAMENT 2023

Science Meets Parliament is the world's most successful and longest-running event forging connections between leaders in science and policymaking.

It powerfully deepens the skills of emerging and established STEM leaders to engage effectively in policymaking, and showcases the inspiring work of Australian scientists, technologists, engineers, and mathematicians to policymakers.

Created by Science & Technology Australia in 1999, Science Meets Parliament brings together key national decision-makers with leading STEM professionals.

In 2023, Science Meets Parliament set new records – engaging 40% of Australia's Parliament (95 MPs and Senators) and more than 450 STEM experts and entrepreneurs.

This year's program featured superstar global science talent. It was headlined by Dr Kati Kariko – the scientist who gave the world mRNA vaccine technology and winner of the 2023 Nobel Prize in Medicine this October – and the world's greatest living mathematician: Fields medallist and 2022 Global Australian of the Year Professor Terence Tao.

More than 400 online delegates accessed high-quality professional development and impressive keynote speakers in our online program. Then 450 STEM leaders descended on Canberra for two days of speaking sessions, tours, meetings with Parliamentarians, a Gala Dinner and a National Press Club address by Industry and Science Minister Ed Husic.





Building the SABRE Alliance

Leveraging Science Meets Parliament 2023, Science & Technology Australia partnered with Australia's Department of Defence to host a bonus one-day event to build a new civilian-industry-defence network of biotechnology leaders.

The SABRE Alliance (Safeguarding Australian through Biotechnology Response and Engagement) draws together civilian research, industry and defence talent and capabilities.

SABRE was created to leverage expertise in Australian biotechnology research and development to meet defence and national security needs and prepare for future threats.

At the SABRE event, 130 delegates participated in three simulation exercises based on hypothetical biosecurity threats to Australia. In real-time, they assembled response teams and drew on existing capabilities to mount a rapid response.



A record-breaking event

Science Meets Parliament 2023 smashed all previous records for participation.

An impressive 40% of the Australian Parliament was involved – the highest participation ever recorded in the event's 23-year history – with engagement from every political party. 95 Parliamentarians took a meeting, spoke as part of the program, or attended the Gala Dinner in the Great Hall of Parliament House.

Dinner speakers included Industry and Science Minister Ed Husic, Shadow Minister for Science Paul Fletcher, Deputy Prime Minister Richard Marles, and former Industry and Science Minister Karen Andrews. Ngambri-Ngunnawal custodian Paul Girrawah House offered a warm Welcome to Country at dinner, and his cousin Ngunnawal custodian Serena Williams graciously welcomed delegates at the opening of the day's program in Canberra.

Science & Technology Australia thanks our generous sponsors, MPs and Senators, speakers, volunteers and delegates for helping to make SMP23 such a success. We look forward to seeing you all next year at SMP24.



“Science Meets Parliament holds a very special place in my heart because it was the first official speaking role that I had as the Minister for Industry and Science. And it was a unique opportunity to be able to meet with you all.”

- Ed Husic



“To all the scientists in the room the message that the politicians here are sending you fundamentally is how much we respect and admire what you do.”

- Paul Fletcher



“We need to value science. We need to see it much more front and centre in terms of the way we see the world.”

- Richard Marles



“I think that there are so many enormous opportunities for us to continue to work together, to make sure that we educate our parliamentary colleagues, that science holds its rightful place in the further development of the Australian economy.”

- Karen Andrews



“To secure our future as Australians and to ensure our Prosperity, Australia needs science more than ever, and Australian science needs its friends, champions, and allies in the parliament.”

- Misha Schubert



“We listen to our old people, our ancestors, our elders, and they show us the straight, the correct path. Good path. They nurture us, they guide us, they protect us.”

- Paul Girrawah House





SUPERSTARS OF STEM

STA's Superstars of STEM is a game-changing Australian program that smashes stereotypes and advances gender equity in STEM.

It is powerfully tackling the challenge of under-representation of women and non-binary people in STEM – by creating a constellation of high-profile diverse media stars who are showing young Australians from all backgrounds that STEM is for them.

This world-leading program recruits diverse STEM experts from across Australia, builds their media skills, profile and confidence, and boosts their public profiles as generous leaders who pay-it-forward.

The Superstars of STEM become visible public role models who inspire our next generations of young people into STEM – tackling the challenge that 'if you can't see it, you can't be it'.

Since creating the program in 2017 with the support of the Australian Government and the Department of Industry, Science and Resources, Science & Technology Australia has now trained 210 Superstars of STEM.

In 2023, our Superstars reached media audiences of more than 105 million people and did 325 school visits and talks, reaching an impressive 66,000 school students.

In November 2022, Industry and Science Minister Ed Husic MP announced the new cohort of Superstars of STEM. They include three Indigenous Superstar scientists, six new Superstars from regional Australia, and Superstars from a wide array of cultural backgrounds. It also includes Superstars from low socio-economic backgrounds and first-in-family to attend university.



Superstars on stage and screen

The career-accelerating and profile-raising power of the Superstars of STEM program created an array of opportunities for diverse Superstars in the national spotlight.

2023 Superstar of STEM Tiahni Adamson – a Torres Strait Islander scientist working on new technologies to slash carbon emissions using cattle feed derived from asparagopsis seaweed – was named South Australia's Young Australian of the Year for 2024.

Fellow 2023 Superstar Dr Christina Maher was a stellar MC of the 2023 InnovationAus awards gala dinner in Sydney. And 2021-22 Superstar and television megastar Dr Vanessa Pirotta shone as MC for the 2023 Prime Minister's Prizes for Science in Canberra – and appeared in an episode of the hit children's television show PlaySchool.

Among a wide array of awards, prizes and promotions, 2021 Superstar Dr Parwinder Kaur was appointed to a three-person eminent panel leading the Pathways to Diversity in STEM Review – and Dr Karen Livesey did a national speaking tour for Women in Physics to inspire more young women into this crucial fundamental science.

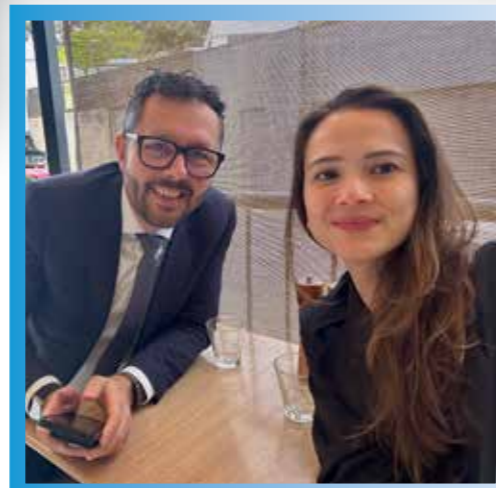
Three 2021 Superstars – Dr Lila Landowski, Dr Jiawen Li and Associate Professor Noushin Nasiri – were shortlisted for Eureka Prizes. Dr Sonia Shah was shortlisted for the 2023 Inspiring Women in Science award and Dr Jiao Jiao Li won the 2023 Metcalf Prize for stem cell research.

Building Superstar skills

In a uniquely powerful program of media and leadership training, the 2023 Superstars of STEM have been equipped by some of the nation's leading news broadcasters, journalists and science communicators.

They deepened their skills in public speaking and using social media to build a strong public profile and audiences – including a TikTok masterclass from Wiradjuri astrophysicist and global social media star Kirsten Banks.

Nurtured by a constellation of star mentors including top Australian CEOs, leading company directors, broadcasters and science leaders, they also navigated how to grow public profiles and wider community and organisational leadership roles.



Superstar diversity

STA broadens the diversity of the Superstars of STEM program in every cohort, in line with the aims of smashing stereotypes and showcasing the most brilliant STEM experts.

The 2023-24 cohort has three inspiring Indigenous STEM experts. Dr Susan Beetson is a Ngemba, Wayilwan and Wiradjuri Computer Scientist who works with Aboriginal communities to use emerging technologies to teach and collect Cultural Knowledges.

Kaureg Torres Strait Islander woman Tiahni Adamson is part of a dynamic team at CH4Global that is turning seaweed into stock feed to cut methane emissions from livestock as a powerful way to combat climate change.

And CSIRO ecologist Sophie Gilbey is an Alywarr woman from North-West QLD. Her experience as a jillaroo and a ranger inspired her to study how water interacts with and changes the land.

The 2023 intake includes a record number of Superstars from regional and rural areas across Australia, and many Superstars from underrepresented STEM fields such as engineering, IT, and mathematics. The year also marks the highest representation of LGBTQIA+ STEM experts in the program.



STA STEM AMBASSADORS

A growing number of Parliamentarians seeking regular expert advice on complex science and technology issues saw Science & Technology Australia appoint a record-breaking 26 new STEM Ambassadors in 2023.

The STEM Ambassadors program was created by Science & Technology Australia in 2019 to expand access to expert advice on exciting opportunities emerging from science, technology, engineering and maths.

The 2023 intake of STA STEM Ambassadors will meet regularly with their matched federal MP or Senator over the next two years.

“We’re at a remarkable point in history where an explosion of complex science and technology advances are about to dramatically reshape our economy, our lives and our jobs,” CEO Misha Schubert said.

“And what we’re seeing in response is a strong surge in the need for expert advice as lawmakers seek to keep pace with those developments and learn more about new technologies and their implications.”

“Through this unique program, we match MPs and Senators with their own STA STEM Ambassador to give them regular access to a powerful network of Australian STEM experts to inform policy development.”

Providing broad scientific knowledge

From Artificial Intelligence to agriculture, STA STEM Ambassador Angela Noack has provided her local Parliamentarian Rebekha Sharkie with a broad range of science advice as part of the program.

Angela’s broad scientific knowledge is tapped and called on through the program, where she provides significant and useful scientific knowledge to the MP.

“As a crossbench member, Ms Sharkie is across a broad range of issues,” Angela says. “Our discussions have included climate change, soil health and water quality, agriculture and mining, and artificial intelligence.”

Photo, below:

Angela meets with Rebekha Sharkie, Federal Member for Mayo in South Australia, and the MP’s team at her local electorate office in Mount Barker.

Opening doors to policy engagement

Being an STA STEM Ambassador can open doors to deeper engagement in public policy and parliamentary processes.

STA STEM Ambassador Professor Lee Baumgartner has been providing science advice through the program to New South Wales Senator and Nationals Deputy Leader Perrin Davey for nearly two years.

The close working relationship they have developed led to Lee being invited to appear before the Senate Environment and Communications Legislation Committee to give expert evidence to the Committee on the Water Amendment (Restoring Our Rivers) Bill 2023.

Lee provided quality scientific evidence to the Committee members, both at the hearing – now recorded in perpetuity in the Parliament’s Hansard – and through a written statement.

This powerful engagement in parliamentary processes came about because of the ongoing connection forged between Lee and the Senator through the STA STEM Ambassador program.

A powerful vehicle for policy engagement

Politicians and their advisors need access to up-to-date scientific and technological information in order to make considered decisions on the many complex public policy issues that come across their desks.

That need is what makes STA’s STEM Ambassador program such a powerful vehicle for policy engagement and influence.

Independent Senator for the ACT David Pocock has been able to call on the scientific expertise of Wiradjuri Gundungurra environmental chemist Brianna Gordon through the STA STEM Ambassador program.

Her role as an STA STEM Ambassador has seen her provide advice to the Senator on issues such as climate and pollution, and both Brianna and the Senator’s team have identified areas for further collaboration and guidance.

“I have thoroughly enjoyed my time as a STEM ambassador,” Brianna says.

“Senator David Pocock has been very welcoming and engaged with the program, and we have met to discuss my expertise in climate science and chemical pollution. I have made plans to work more closely with his team over the next few months to provide detailed scientific advice.”

“The most useful thing I have learned so far in the STEM Ambassador workshops is how to work with the media and other important communication skills. As a young scientist working in a potentially politically contentious field, it is very useful to have advice from the media experts in STA to help guide me in how to navigate the media and prepare for interviews.”



SCIENCE POLICY FELLOWS ALUMNI

The Australian Science Policy Fellowship Program is an initiative of the Office of the Chief Scientist, modelled on the successful US Science & Technology Policy Fellowships program. Launched in 2018, it recruits early-to-mid career professionals with a STEM PhD to deploy their STEM analytical skills in the public service and policy-making.

Since 2021, Science & Technology Australia has supported this exciting initiative by creating an alumni network to amplify the impact of the program.

The network gives the fellows opportunities to forge deeper connections with each other and with science leaders across Australia through STA.

The alumni network now has 71 members. In the past year, alumni had the chance to attend Science Meets Parliament, and STEM sector networking events in Sydney, Melbourne and Adelaide.



SPFA annual dinner

In August 2023, the annual dinner was attended by 22 alumni drawn from all intakes of the fellowship program. It was a vibrant event where alumni members made new connections and renewed old ones, identified work in areas of mutual benefit across the Australian Public Service, and strengthened this powerful professional network.

Australia's Chief Scientist Dr Cathy Foley AO welcomed the fellows and shared insights and advice about forging a career in public service. In an engaging interview with STA CEO Misha Schubert, Professor Anne Kelso – the longstanding CEO of the National Health and Medical Research Council – shared valuable wisdom about developing careers, navigating the responsibilities and upholding the codes of conduct of the public service, and methodical approaches to changemaking and evidence-based policy.



Alumni projects

The alumni leadership group has spent time this year planning the future of the network. All members of the network were invited to propose potential projects – and four were selected by the leadership group for action this year.

The projects include connecting with the AAAS Science and Technology Policy Fellowships program in the USA; professional development and training for the alumni; and setting up systems to evaluate the alumni program.

Alumni members have formed project groups to drive these initiatives, each of which is led by a member of the leadership group. Fellows from all different years of the fellowship program have joined these groups to contribute to the project and to grow the alumni network.

NATIONAL INDUSTRY PHD PROGRAM

In late 2022, Australia launched a new National Industry PhD Program. Over the next ten years, it will train 1300 PhD candidates in industry-research engagement, powerfully deepening links between Australian industry and the research community.

Science & Technology Australia was thrilled to be part of a consortium of delivery partners chosen by competitive tender to deliver the program for the Department of Education – joining forces with STA member organisations Campus Plus and Cruxes Innovation.

This prestigious new program is forging pathways for researchers to work in industry, opening doors to an array of new career opportunities for PhD graduates. It also enables industry to have staff do a PhD, working under the supervision of world-leading researchers in Australian universities, to boost the research heft of Australian business.

Deploying STA's deep technical expertise in marketing and communications in a strategy of precision audience targeting, the program and first two application rounds were launched with stellar metrics for expressions of interest and applications. STA's sophisticated marketing approach generated strong interest and prompted applicants at each stage.

STA engaged Indigenous design and digital creative agency Ingeous studios to develop a powerful brand identity for the new program. The stunning design conveys Indigenous design concepts for this transformative new initiative of the Australian Government.

STA produced a suite of quality social media collateral, copy blocks, shareable tiles and materials about the program. They were distributed to STA's extensive network of university and industry contacts through direct EDMs, newsletters, social media posts and engagement. STA also leveraged its uniquely large network of diverse STEM leaders to share information to promote the new program to a wide array of diverse communities.



Activities

POLICY WINS

A powerful voice for the sector

Science & Technology Australia is the voice of Australia's science and technology community.

STA advocates publicly and behind the scenes on behalf of 138 science, technology, engineering and maths member organisations, representing a unique grassroots network of more than 115,000 experts and entrepreneurs nationwide.

As a trusted voice with a reputation for high-quality policy advice, and deep links into both industry and research, STA has had a series of major policy wins in 2023.



Major wins on research commercialisation

In March 2023, legislation passed to create Australia's Economic Accelerator. For many years, STA made a powerful case for a new Research Commercialisation Fund. In 2022, the Morrison Government announced a \$2.2 billion research commercialisation fund and programs. STA confirmed bipartisan support for the legislation before the 2022 election.



Independent Review of the Australian Research Council Act 2001

STA made a comprehensive submission to Review of the Australian Research Council Act, reflecting membership input. Key STA recommendations were adopted:
An end to the Ministerial research veto:
The Panel recommended abolishing the Ministerial veto power on research grants. A shift to a 2-stage application process
STA has long called for grant applications to move to a 2-stage process. The ARC announced this change for Discovery Projects from 2024.
Enshrining a safeguard for discovery research
The review recommended legislative protection for discovery research – a long-term STA goal. Education Minister Jason Clare agreed to all the Panel's recommendations in August 2023.



Strong advocacy on Indigenous knowledges

In 2023, in close partnership with senior Indigenous STEM leaders, STA advocated strongly for Indigenous knowledges to become one of Australia's official National Science and Research Priorities.



'Be that teacher' campaign

STA called for a national campaign to boost the status and respect for teaching as part of the initial teacher education review. Education Minister Jason Clare launched the Be that teacher campaign in October 2023.



Demand-driven funding for Aboriginal and Torres Strait Islander students, regardless of where they live

STA's submission to the Australian Universities Accord included a recommendation to uncap government-supported university places to all Aboriginal and Torres Strait Islander students nationwide. This was included as a priority recommendation in the Accord Panel's Interim Report, released in July 2023. Education Minister Jason Clare announced the Government's support for the priority actions and legislation was passed in October 2023.



A global STEM superpower

In 2023, STA advocated for the new National Science Statement to set out a bold ambition to change Australia's relationship with science, put it at the very heart of our national self-image, and inspire many more Australians into STEM study and careers.



A new National Industry PhD Program

In 2022-23, STA launched Australia's new National Industry PhD Program for the Department of Education, Campus Plus and Cruxes Innovation. Round 2 was launched in August 2023.

POLICY ADVOCACY

In 2023, Science & Technology Australia's advocacy secured a series of major policy wins.

On our agenda were R&D investment, discovery research and research commercialisation, safeguarding Indigenous knowledges, and the establishment of the new National Reconstruction Fund. We also engaged closely in once-in-a-generation reviews of universities and the Australian Research Council legislation.

In early 2023, STA's long-term advocacy for a research commercialisation fund was realised with the passage of legislation to establish Australia's Economic Accelerator – with strong bipartisan support. This new \$1.6 billion fund – announced by the previous Government and legislated by the current one – sits alongside new ARC Industry Fellowships, a new National Industry PhD Program, and the Trailblazer Universities initiative to drive university research commercialisation.

STA also engaged persuasively with the first review in 20 years of the legislation governing Australia's major research grants agency – the Australian Research Council. STA President Professor Mark Hutchinson served on the eminent review panel with Professor Margaret Sheil AO and Professor Susan Dodds.

Long-held STA policy advocacy goals – abolishing the Ministerial veto on ARC research grants, moving to a two-stage application process to save researchers valuable time, and safeguarding funding for discovery research in legislation – were all recommended by the review, and accepted by Education Minister Jason Clare.

A major review of the university sector – the Australian Universities Accord – was also commissioned by Minister Clare. STA made powerful major submissions and engaged the expert panel and Department to make the case for deeper research investment. Our CEO Misha Schubert was appointed to the Ministerial Reference Group.

STA has pushed for Australia to set a target for national investment in R&D, boost funding for university research via the ARC and NHMRC and Research Block Grants, strengthen job security for the university research workforce and boost investments in Aboriginal and Torres Strait Islander students and researchers.

Industry and Science Minister Ed Husic also commissioned two major consultations.

To shape the refresh of Australia's National Science and Research Priorities, STA urged the adoption of a 'grand challenges' model – and advocated strongly in partnership with Indigenous STEM leaders and organisations for Indigenous knowledges to be a dedicated priority. We made a similar case for discovery research.

In our advocacy on developing a new National Science Statement for Australia, STA urged the Government to set out a bold ambition to become a global STEM superpower, change Australia's relationship with science, put science at the very heart of our national self-image, and inspire many more Australians into STEM study and careers.

A further major review – Pathways to Diversity in STEM – was commissioned by Minister Husic to dismantle barriers for diverse talent. STA engaged with high-quality advice and recommendations to powerfully transform equity in the sector. It will report by year's end.

STA also made a submission and our President-Elect Professor Sharath Sriram and CEO Misha Schubert gave evidence at a public hearing of the Joint Standing Committee on Migration inquiry: Migration – Pathway to Nation Building.

The STA team engaged in consultations on the National Reconstruction Fund and the Industry Growth Program design, and discussions on the Government's proposed Quantum Growth Centre. STA also made submissions to an inquiry into Developing Advanced Manufacturing in Australia and the NHMRC's consultation on aligning funding schemes.



STA'S RECONCILIATION ACTION PLAN

In 2023, Science & Technology partnered closely with its three Indigenous member organisations to finalise our second Reconciliation Action Plan.

The new RAP was launched with an online event on the eve of National Reconciliation Week, with a strong turnout of STA member organisations. Speakers included Quandamooka mathematician and STA Board Director Professor Chris Matthews and Kamilaroi DeadlyScience founder and CEO Corey Tutt. At the RAP launch, the Yes23 National Campaign Director Dean Parkin spoke with STA members ahead of the referendum on Indigenous constitutional recognition in October to equip them with information and tools to actively support the Yes campaign.

A stunning bespoke artwork for the RAP was developed by young Wiradjuri artist Lani Balzan. It reflects how STA gathers people together as the nation's key connector in STEM, our values of respect and kindness, and our forward momentum depicted in kangaroo tracks. This artwork also featured as table centrepieces at the Science Meets Parliament Gala Dinner.

At major STA events, Elders and Custodians Uncle Warren Daly, Paul Girrawah House and Serena Williams offered generous Welcomes to Country. At regular meetings of STA, STA staff, committee members and program participants share responsibility for researching and delivering a deeply personal reflection as their Acknowledgement of Country and teaching knowledge into our community. STA offered three Indigenous scholarships to Science Meets Parliament 2023 with the support of our generous sponsors and engaged five Indigenous-owned companies in procurement of services.

STA's staff, committees and members attended events and training throughout the year to deepen their knowledge of Australia's history – and championed the work of STA's three Indigenous member organisations. In the two major weeks dedicated each year to deepen public awareness – National Reconciliation Week and NAIDOC Week – STA actively profiled the work of our Indigenous members, and solicited donations, volunteer time and engagement to help advance their work and priorities with support from the wider STA community. STA is implementing the actions pledged under our RAP.

PARLIAMENTARY FRIENDS OF SCIENCE

Science & Technology Australia established the Parliamentary Friends of Science in 2012, co-chaired by Deputy Prime Minister Richard Marles and former Industry and Science Minister Karen Andrews.

In 2022-23, STA has delivered quality briefings to MPs and Senators on timely and topical science and technology issues. We valued support from the Academy of Technological Sciences and Engineering, the Australian Academy of Science and the Australian Institute for Machine Learning.

'How batteries could power Australia's economic future' in November 2022 highlighted the vast opportunities for Australia in clean energy batteries and storage technologies – as the urgency of the climate transition becomes starker.

'Australia must not miss our Chat GPT moment' in May 2023 featured leading experts on generative AI briefing Parliamentarians on the regulatory and ethical challenges they should be considering with this transformative frontier technology.

And 'Securing Australia's future STEM workforce' in November 2023 will canvas policy and legislative changes to safeguard Australia's existing STEM talent, lure back Australian talent from overseas, and broaden the number of Australians pursuing STEM careers.



PROFILE AND ENGAGEMENT

Science & Technology Australia makes a powerful contribution to media and public discussions on science, technology, engineering, and mathematics.

In 2023, STA issued 25 media releases on issues important to the sector. Many highlighted recommendations from STA's policy submissions – showing the strong connection between the work STA does in gathering feedback from members and turning it into powerful public advocacy. These statements have generated significant coverage in mainstream, research sector and industry media outlets.

STA also ran high-profile media campaigns to launch National Science Week, release key findings from the 2023 3M State of Science report and announce our new intake of STA STEM Ambassadors. STA supported the rollout of the Government's National Industry PhD scheme with marketing and communications.

2023 has been a year of extraordinary growth for STA's social media channels. We have 32,000 followers on X (formerly Twitter), 7,000 on Facebook, 1500 on Instagram, and 12,000 followers on LinkedIn – an increase of more than 4000 over the last year. One of our key communications tools on LinkedIn is our fortnightly Science and Technology Update launched in 2022. This powerful tool for member communication and public advocacy now has 6000 subscribers.

In March 2023, STA declared its strong support for a resounding Yes vote in the referendum on an Indigenous Voice to Parliament.

We took this public stance after extensive consultations with our Indigenous member organisations and in line with our long and proud history of equity and inclusion.

In the months leading up to the vote, STA ran a strong communications campaign to support our advocacy. This included opinion pieces from President Professor Mark Hutchinson, President-elect Professor Sharath Sriram, and CEO Misha Schubert, a series of web stories, and social media posts.



Community

MEMBERSHIP

Our members

Science & Technology Australia is a membership organisation which serves Australia's grassroots STEM community and nurtures Australian STEM talent and careers.

In 2022-23, STA welcomed 29 new members into this thriving community. We now represent 138 organisations and speak for more than 115,000 STEM experts and entrepreneurs nationwide.

STA's membership team regularly engages with members to identify challenges facing Australia's STEM workforce – and to inform our year-round policy advocacy.

This includes through Science Meets Parliament, Parliamentary Friends of Science, the annual Leadership Dialogue and STA's STEM sector networking events. Member engagement also occurs in regular meetings and our 'Ask us anything' sessions with CEO Misha Schubert.

In 2023, STA held networking events in Adelaide, Melbourne and Sydney and gave attendees an exclusive opportunity to meet with senior STEM sector leaders, STA staff and board members, other STA members, VIPs of the STEM community and Parliamentarians.

These networking events were a chance to hear from members and develop connections across our membership. Nearly 200 people attended STA networking events in 2023.

We look forward to running member events again next year and forging even stronger bonds with STA's membership.

STA INSTITUTIONAL MEMBERS



Sydney Nano Institute
Net Zero Initiative
Sydney Quantum Academy
Charles Perkins Centre



Hawkesbury Institute for the Environment
The MARCS Institute for Brain, Behaviour and Development
WSU STEM Cluster (Faculty of Science & Faculty of Engineering)



The Space Technology & Industry Institute
The Optical Sciences Centre (OSC)
The Centre for Astrophysics and Supercomputing (CAS)
Centre for mental health and brain science



Monash Biomedicine Discovery Institute
Monash Data Futures Institute
Monash Energy Institute
Securing Antarctica's Environmental Future



Centre for Regional and Rural Futures (CeRRF)
Institute for Mental and Physical Health and Clinical Translation (IMPACT)
HOME Research Hub
Institute for Health Transformation (IHT)
Deakin Marine Research and Innovation Centre
Centre for Social and Early Emotional Development (SEED)
Centre for Cyber Resilience and Trust (CREST)
Centre for Sustainable Bioproducts (CSB)
Institute for Physical Activity and Nutrition (IPAN) incl. Centre for Sports Research (CSR)
Research for Educational Impact (REDI)
Alfred Deakin Institute for Citizenship and Globalisation (ADI)
Applied AI Institute



La Trobe Institute for Molecular Science (LIMS)
La Trobe Institute for Agriculture and Food (LIAF)
School of Agriculture, Biomedicine and Environment (SABE)
School of Computing, Engineering and Mathematical Science (CEMS)



Queensland Alliance for Agriculture and Food Innovation (QAAFI)
Sustainable Minerals Institute (SMI)
UQ Research and Innovation
UQ Science Faculty



Institute for Climate Risk & Response ICRR
RNA Institute
Cities Institute
Institute for Cyber Security

SCIENCE MEETS PARLIAMENT PARTNERS

Foundation partners



Diamond partners



Platinum partners



Gala dinner partners



EDI & welcome reception partner



National Press Club address



Titanium partners



Gold partners



Silver partners



EDI & Coffee Cart partner



Childcare partner



Lanyard partner



SUPERSTARS OF STEM



OUR LEGAL PARTNER: THANK YOU



STA is deeply grateful to Gilbert + Tobin for extensive pro-bono legal support and guidance in the complex process of modernising our legal and governance structure and constitution.

BOARD AND STAFF

STA Staff 2023

Chief Executive Officer
Misha Schubert

Deputy Chief Executive Officer
Dr Sandra Gardam

Director of Membership and Events
Lucy Guest

Director of Communications
Martyn Pearce

Director of Policy and Engagement
Dr Sarah Tynan

Director of Research
Mike Teece

Executive Officer
Carly Davey

Communications Manager
Jodie Haigh

Programs Officer
Evelyn Fetterplace

Membership and Events Officer
Tristan Scotcher (Emma Hibbert to March 2022)

Policy Officer
Hari Konchada

Membership Assistant
Shannon Wong

Graphic Designer and Digital Communications
Mariana Oksdath (Emily Downie to August 2023)

Research Assistant
Genevieve Evans (to September 2023)

Research Assistant
Francine Machin (to September 2023)

Finance Services
Provided by Always Bookkeeping
Penny and Andy Thomson

STA Board Directors to January 2023

Michael Walker
Agricultural & Food Sciences Cluster Representative

Dr Rachel Przeslawski
Aquatic Sciences Cluster Representative

Dr Tatiana Soares da Costa
Biological Sciences Cluster Representative

Dr Francesca Gissi
Chemical Sciences Cluster Representative

Dr Sarah Kachovich
Geographical & Geological Sciences Cluster Representative

Professor Chris Matthews
Mathematical Sciences Cluster Representative

Dr Karen Gregory
Medical & Cognitive Sciences Cluster Representative

Professor Jodie Bradby
Physical Sciences Cluster Representative

Dr Bek Christensen
Plant and Ecological Sciences Cluster Representative

Dr Vipul Agarwal
Technological Sciences Cluster Representative

Dr Kathy Nicholson
General Science Cluster Representative

Heather Catchpole
General Science Cluster Representative

STA Board: November 2023

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Professor Mark Hutchinson

President-Elect
Professor Sharath Sriram

Vice President
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Jas Chambers

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