

# NATIONAL YOUTH SCIENCE FORUM

ANNUAL REPORT 2024/2025



CELEBRATING 40 YEARS OF THE NYSF

This report is for the financial year 1 April 2024 to 31 March 2025 for the National Youth Science Forum (NYSF).

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The NYSF acknowledges the Traditional Owners of the country throughout Australia and pay respect to their scientific knowledge and continuing connection to land, sea and community. We pay our respect to their Elders past, present, and emerging.

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# MESSAGE FROM NYSF CHAIR AND CEO

The National Youth Science Forum (NYSF) continued its 40<sup>th</sup> anniversary celebrations in the second half of 2024, with a Gala Dinner at Australian Parliament House, bringing NYSF alumni, partners and supporters together from far and wide. Since 1984, over 15,000 young Australians have participated in our flagship NYSF Year 12 Program, shaping careers and enriching communities across the country.

The 2024 National Youth STEM Summit and 40th Anniversary Gala Dinner were resounding successes. Two significant announcements were made: the newly appointed Governor-General of the Commonwealth of Australia, Her Excellency the Honourable Sam Mostyn AC, confirmed her patronage of the NYSF, and the Minister for Industry and Science, the Honourable Ed Husic MP, announced additional funding for the organisation over the next four years. A silent art auction at the dinner successfully raised \$8,800 in support of NYSF Access and Equity Scholarships.

The 2025 NYSF Year 12 Program provided 455 participants from across Australia with real-world exposure to a diverse range of STEM people and facilities. Throughout the program, participants engaged in over 150 visits, workshops, lectures, and other STEM-related activities. Evaluation before and after the NYSF Year 12 Program showed that the program expanded awareness of study and career options for 58% of participants and confirmed future pathways for 24% of participants. As a result of the program, 11% of participants reported they are now likely to pursue further STEM study and careers.

NYSF's commitment to diversity and inclusion is reflected in the NYSF Year 12 Program participation rate, with 54% of participants from public schools, 67% female, 45% from regional or remote areas, and 3% identifying as Aboriginal and Torres Strait Islander.

NYSF remains committed to improving access and equity in STEM participation. This year, we expanded support for NYSF Access and Equity Scholarships and put extra effort into regional outreach to reach cohorts traditionally underrepresented in STEM, including disadvantaged schools around Australia. 15% (69) of participants received an NYSF Access and Equity Scholarship to attend the 2025 NYSF Year 12 Program. We are proud of the steps taken to ensure our programs are accessible and inclusive and hope to increase the number of students we can support with scholarships in the future.

In a first, we ran three STEM Hubs in Adelaide, Melbourne, and Sydney/Newcastle with 140 participants attending. NYSF STEM Hubs make NYSF programs more accessible nationally and provide a taste of the NYSF experience in a day-visit setting within a week of school holidays.

From the huge success of the pilot last year, the second National Youth STEM Summit was held in mid-August 2024. The Summit fills a key need as a first conference experience for STEM professionals who have started studying or training, or even their first STEM job, who are seeking opportunities to develop a network and further the skills required to thrive in the science and technology sector. Delegates were engaged in keynote presentations, panel discussions, professional development workshops, networking events and a career and study expo.

The work we do at NYSF would not be possible without the ongoing support from our partners, sponsors, and supporters. We give our thanks and appreciation to:

- All <u>NYSF Partners</u> and particularly acknowledge our Major Partner, Lockheed Martin Australia (LMA), Rotary, the Department of Industry, Science and Resources (DISR), and our two host university partners, the Australian National University (ANU) and the University of Queensland (UQ);
- Rotary volunteers, Student Staff Leaders, the Selection Panel, educators in schools around Australia, and NYSF alumni for their support, passion and the many hours given to ensure the success of NYSF programs and participants;
- The many organisations and individuals who have opened their facilities and workplaces to our participants throughout 2024–2025 and supported our programs, existing and new;
- NYSF Patrons, Her Excellency the Honourable Sam Mostyn AC, His Excellency General the Honourable David Hurley AC DSC (Retd), Governor-General of the Commonwealth of Australia and Her Excellency Mrs Linda Hurley;
- NYSF Science Patron, Professor Tanya Monro AC FAA FTSE FOSA FAIP GAICD, an NYSF alumna and Australia's Chief Defence Scientist; and
- The Chief Scientist of Australia, the Chief and Lead Scientists in each State and Territory, and the State Governors and Administrators throughout the country, for their invaluable support of our programs.

We extend our sincere thanks to everyone who supported us through our 40<sup>th</sup> year. In particular, we acknowledge the dedication of the NYSF Corporate team and the NYSF Board. Our achievements are a direct result of the commitment, expertise, and passion you bring to the organisation.

In the year ahead, we look forward to expanding our impact by connecting more young people with their science and technology futures.



Patricia Kelly PSM GAICD Chair of the NYSF Board



Dr Melanie Bagg GAICD Chief Executive Officer National Youth Science Forum





### **GOVERNANCE**

NYSF is governed by an experienced Board of Directors. The NYSF Board includes senior members of the STEM community, those experienced in government and business sectors, and the NYSF CEO.

#### **BOARD OF DIRECTORS**



**Chair** Patricia Kelly PSM GAICD



**Deputy Chair** The Hon Kate Lundy



**Finance Director**Sally Vardy GAICD
(from 3 August 2024)





Finance Director
Bruce Hunter (until 2
August 2024)



Rotary Liaison Officer Tonia Barnes (until 28 March 2025)



**Alumni Director** Dr Subho Banerjee



**Ordinary Director** Loren Atkins



**Ordinary Director** Professor Bradley Moggridge



**Rotary Liaison Officer** Veronica Lawrance (from 29 March 2025)



CEO
Dr Melanie Bagg
GAICD

#### **NYSF COUNCIL**

The NYSF is guided by the NYSF Council. The Council includes representatives of organisations relevant to the purpose and mission of NYSF, including:

- Australian Academy of Science
- Australian Academy of Technological Sciences and Engineering (ATSE)
- The Australian National University (ANU)
- University of Canberra (UC)
- Commonwealth Scientific Industrial Research Organisation (CSIRO)
- Former NYSF Chiefs of Staff

#### **NYSF PATRONS**

- Her Excellency the Honourable Sam Mostyn AC (August 2024 onwards)
- General David Hurley AC CVO DSC (Retd) and Mrs Linda Hurley (until August 2024)

#### **NYSF SCIENCE PATRON**

 Professor Tanya Monro AC FAA FTSE FOSA FAIP GAICD, Australia's Chief Defence Scientist, NYSF Science Patron, and NYSF 1990 Alumna

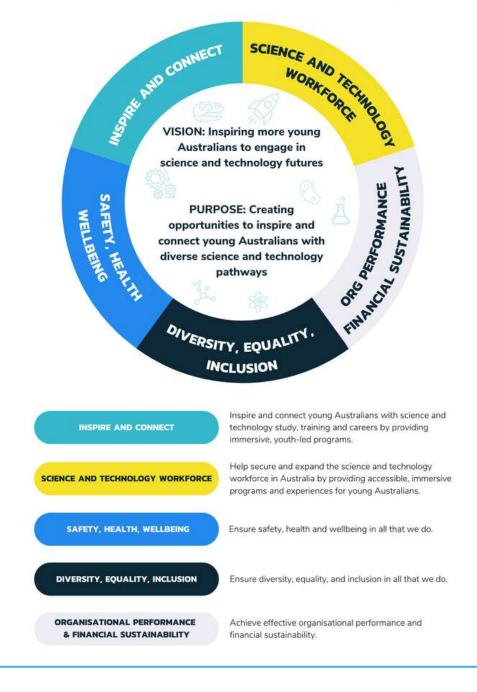
## WHAT WE DO

The NYSF is a not-for-profit charity that runs youth-led programs to connect young Australians with their science, technology, engineering, and maths (STEM) futures.

Our programs connect young people with real-life STEM professionals and STEM facilities to show the diverse variety of study and career options available in STEM nationally.

Our flagship program, the NYSF Year 12 Program, runs in January each year for students about to start year 12. Since 1984, more than 15,000 young Australians have progressed through the NYSF Year 12 Program, including those run under the organisation's previous banner, the National Science Summer School (NSSS).

#### **NYSF STRATEGIC PLAN 2022 - 2026**





## THE ROLE OF ROTARY

NYSF greatly appreciates and values our long partnership with Rotary in Australia.

Rotary's support for the NYSF Year 12 Program has been integral to the program's success for the past 40 years. Rotarians promote the NYSF in local schools and communities, especially championing the program in regional and remote communities.

Rotary brings a wealth of local knowledge in selecting NYSF Year 12 Program participants and provides significant funding to help students attend. Rotary provides volunteers to assist with the delivery of the program in January, and they are enthusiastic volunteers at other newer NYSF programs, such as the NYSF STEM Hubs.

#### **ROTARY DISTRICT CHAIRS 2024/2025**

9423 - Simon Cubitt

9510 – Dr Sean Geoghegan

9620 - Bruce Jones

9640 – Dr Danielle Stanisic

9660 – Di Hall

9675 – Dr Hilary Lloyd

9705 - Matthew Crouch

9790 - Nigel Liggins

9800 – Bronwyn Fanning and Chris Richardson

9810 - Malcolm Chiverton

9820 - Chris Such

9830 - Stephen Porter

#### THE SELECTION PANEL

The NYSF Year 12 Program selection process plays a critical role in shaping the NYSF Year 12 Program.

Historically, Rotary Districts across the country conducted mostly face-to-face interviews. During the COVID years, we adapted with safer alternatives, including Zoom interviews and desktop assessments. Over the past couple of years, selection methods have varied between Districts, combining these approaches.

In consultation with Rotary District Chairs, we trialled several methods and have now implemented a nationally consistent, desktop-based application and selection process. Rotarians and Alumni join the NYSF Selection Panel annually and help assess applications and scholarship requests using agreed-upon rubrics.

This change ensures that all applicants across Australia are assessed fairly and equitably.

Thank you to Rotarians and NYSF alumni volunteers for the hours spent on onboarding training and assessing applications from around Australia. Your involvement helps ensure we reach a diverse and passionate group of STEM enthusiasts.



Rotary volunteers at the 2025 NYSF Year 12 Program in Canberra



Rotary volunteers at the 2025 NYSF Year 12 Program in Brisbane

# **NYSF PARTNERS AND SUPPORTERS**

The National Youth Science Forum extends its deepest appreciation to our many <u>partners and supporting organisations</u>, whose financial, strategic, and in-kind support is essential to our success.

NYSF Partner input is critical in assisting us in continuing and expanding our impact on Australia's next generation of scientists, technologists, engineers, and mathematicians. Together, we have a profound impact on passionate, diverse young people in their pursuit of STEM studies and careers.

We thank them in particular for their support for our 2025 NYSF Year 12 Program and for continuing to deliver NYSF STEM Hubs, the National Youth STEM Summit, and the NYSF for Educators initiative.

We would like to particularly thank Lockheed Martin Australia (LMA) and the Department of Industry, Science, and Resources (DISR) and our Host University Partners, the Australian National University and The University of Queensland for their significant and ongoing support of the NYSF.

We thank them for their commitment to the NYSF and our participants and look forward to continuing our legacy of supporting young people in STEM.





NYSF participants at the Careers Expo at the 2025 NYSF Year 12 Program

#### **Major Partners**







#### **Host University Partners**





#### **Corporate and Government Partners**















#### **University Partners**













### **Supporting Organisations**















# NYSF ACCESS AND EQUITY SCHOLARSHIPS

The NYSF is committed to growing the STEM workforce and improving accessibility and diversity by promoting inclusive pathways for women, Indigenous Australians, regional and remote young people and others typically underrepresented in STEM.

#### **SCHOLARSHIP FUNDING**

In 2025, **73% of NYSF Year 12 Program participants received some form of financial support to attend the program.** This support was proudly provided by the following organisations and by donations from the NYSF community:













66%

Of survey respondents received financial support from Rotary Clubs across
Australia.

69/147

Out of 147 applications, 69 participants were awarded an NYSF Access and Equity Scholarship.

\$82,890

Was raised to support 2025 NYSF Year 12 Program Access and Equity Scholarships.



# **NYSF PROGRAMS**

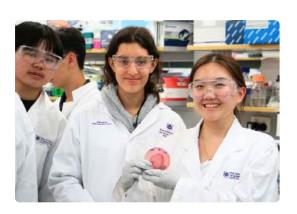
#### **NYSF STEM Hubs**

The NYSF STEM Hubs, hosted in Adelaide, Melbourne, and Sydney/Newcastle, are non-residential STEM experiences. In 2024, STEM Hubs were attended by year 12 and early university students to connect them with local STEM pathways, professionals and careers.



#### NYSF Year 12 Program

The NYSF Year 12 Program is a residential oncampus experience that gives 460 students about to start year 12 a unique opportunity to explore a diverse range of study and career pathways in STEM through Careers and Study presentations, workshops, lectures and STEM visits.



#### Student Staff Leadership Program

Each year, selected participants from the NYSF Year 12 Program join the NYSF Student Staff Leadership Program (SSLP), where they develop leadership, teamwork, and self-reflection skills. They then have the opportunity to return as Student Staff Volunteers (Staffies) to help deliver the NYSF Year 12 Program in a by-youth, for-youth mode the following year.



#### **National Youth STEM Summit**

The National Youth STEM Summit, held in Canberra in 2024 and Melbourne in 2025, is a three-day, conference-style event that equips delegates in their post-year 12 studies and early careers with the knowledge, skills, and confidence to establish themselves as a leading candidate in the Australian STEM sector.



# **NYSF PROGRAMS**

#### **NYSF Connect Webinar Series**

The NYSF Connect Webinar series provides continuing STEM career education, engagement, and networking opportunities to the NYSF Year 12 Program alumni and those in the wider NYSF Community.



#### **NYSF for Educators**

NYSF for Educators supports secondary school science teachers, career advisors, and lab technicians to understand what real STEM careers look like. The program provides educators with complimentary access to NYSF Webinars, which allows them to meet STEM people in a range of STEM areas and career stages. By taking STEM from the abstract to real life, Educators can better inspire and guide the next generation of Australian STEM professionals.





## **2025 NYSF YEAR 12 PROGRAM**

The NYSF Year 12 Program is our flagship program and offers a diverse range of STEM activities to selected students entering year 12, enabling them to explore the vast opportunities available in STEM beyond high school.

Each year, we strive to enhance the program by expanding the activities offered and increasing participation as new Australian STEM priorities emerge. We collaborate with our NYSF Partners and host universities to diversify the program and enrich its offerings. Our dedicated Student Staff leaders and Rotarians play a vital role in providing leadership for the significant number of attendees.

The Canberra session ran from 6-14 January, hosting 228 participants at the Australian National University. The Brisbane session ran from 15-23 January, with 227 participants at The University of Queensland.



455

2025 NYSF Year 12 Program participants.



73%

Of participants received financial support to attend the program.



Volunteers supported the program including Rotarians and NYSF Student Staff Leaders.



68%

Of participants were young women or gender diverse.



3%

Of participants identified as Aboriginal and Torres
Strait Islander.



Over 150 visits, workshops, lectures, and formal events delivered throughout the program.



46%

Of participants were from remote or regional Australia.





STEM Professionals involved across the variety of NYSF Year 12 Program activities.

#### **IMPACT**

Survey analysis revealed key areas of impact, including participant feedback on NYSF's application and selection processes, on-program experience, and insights into their STEM study and career knowledge, awareness, and intentions.



**75%** 

Of participant respondents are 'extremely likely' to recommend the program to others.



Of participants said the program 'confirmed my [study and career] choices'.



**73%** 

Of participants rate the NYSF as 'better' or 'much better' to similar programs they've experienced.



**† 63%** 

63% increase in participants' knowledge and awareness of NYSF Partner organisations.



Of participants said the program 'expanded my [study and career] options'.



**† 11%** 

11% increase in participants' likelihood to pursue STEM study and careers.

#### **VOLUNTEER SUPPORT**

The NYSF sincerely thanks the volunteers who made the 2025 NYSF Year 12 Program possible, including our incredible Student Staff Leaders, Rotary volunteers, Communications Interns, STEM visit hosts, and guest speakers. Their time, expertise, and generosity were invaluable in enabling NYSF to connect young Australians with a variety of real-life STEM professionals and workplaces.



"One of the best experiences of my life, I got to meet amazing people and participate in incredible and inspiring activities that change the way you think about science"

"It made me realise that many STEM careers helped and touched the lives of people in ways I had not anticipated therefore expanding my interest to fields of science I had not really explored, for example renewable energy."

- 2025 NYSF Year 12 Program Participants

#### **HIGHLIGHTS**

The 2025 NYSF Year 12 Program opened with keynotes from Kerri Hartland, ASIS Director-General (Canberra session), and Taylah Griffin, Indigenous Aerospace Engineer (Brisbane session).

Participants engaged in Careers Days, STEM Communication and Great Debate sessions, Specialist Lectures, and Live Crosses to CERN, Antarctica, and the Lunar Rover mission. They honed communication and critical thinking skills, networked with NYSF Partners and Alumni, and explored real-world STEM at 150+ site visits. The program concluded with a 'Next Steps' panel, where professionals at various career stages shared their journeys and key decisions.

#### **University of Canberra | Robotics**

Participants explored the Collaborative Robotics Lab, diving into the latest robotics and AI research. They interacted with robots and even got to program them to complete different tasks!



#### **Snowy Hydro**

Participants embarked on an inspiring tour of the Jindabyne Pumping Station, discovering how Snowy Hydro generates renewable energy. They explored hydropower technology and uncovered exciting career possibilities in the renewable energy sector.



#### **Griffith Sciences**

Participants visited Sea World's Sea Jellies exhibit, observed dolphin enrichment activities, and explored Griffith University's animal care and research facilities.



# Advanced Robotics for Manufacturing (ARM) Hub

Participants toured the ARM Hub, diving into the fascinating field of robotics and Al in manufacturing. They learned about cutting-edge technology integration and optimizing the workforce of tomorrow.







Will participating in a discussion on space ethics at NYSF



## **WILL** NYSF ALUM '25

After attending the NYSF Year 12 Program in January 2025, Will has his sights firmly set on studying civil engineering – and he is more motivated than ever to make it happen.

"I went to NYSF in January, and it was one of the most eye-opening and motivating experiences of my life. I have always been interested in how things work, especially in the physical world, so STEM always felt like a natural fit. I love Physics, which I do through Distance Ed, and I want to be the first in my family to go to uni and study civil engineering at the University of Newcastle."

For Will, NYSF was not just something to do over the summer; it was an eye-opener.

"Since coming back, I have taken my studies more seriously, because now I have got something to aim for. It has also helped with motivation; being around other students who are just as keen on science and engineering made me want to push myself more."



Read the full story on the NYSF website



Isobel speaking at the 2024 NYSF Year 12 Program in Brisbane



# **ISOBEL** NYSF ALUM '24

Young Palawa woman Isobel is the first recipient of the NYSF x LIYSF Indigenous Scholarship. She attended the London International Youth Science Forum from July to August 2024.

Isobel found herself at a crossroads in year 11, realising that her true passions are broad. Living in lutruwita/Tasmania presented challenges in accessing a wide range of STEM opportunities.

Exploration during the specialist lectures at NYSF led Isobel to discover a fascination and potential future with aerospace and astrophysics.

"I wanted to be an astronaut for a long while when I was little, but I thought I couldn't do it. Being Tasmanian and being a woman, I had people tell me that I couldn't. So I kind of lost that. Going away to NYSF in Brisbane reignited the passion; it made me feel like it was a bit more possible when I learned about the first Australian woman astronaut. I saw that, and it strengthened my motivation to go into the field. It's been a twisty path, but it's come back in a nice circle!"



Read the full story on the NYSF website

### **2024 NYSF STEM HUBS**

In 2024, the NYSF delivered a series of STEM Hub day programs in states where NYSF does not offer the residential NYSF Year 12 Program, making STEM careers and pathways more accessible to more young Australians.

NYSF STEM Hubs were held in:

- Melbourne 1-4 July;
- Adelaide 8-11 July;
- Sydney/Newcastle 15-18 July.

#### Melbourne

Visits included a Speed Meet event, the University of Melbourne and Monash University, Defence Science Technology Group, OzGrav, medical physics at the Prince Alfred Hospital with the Australasian College of Physical Scientists and Engineers in Medicine, Dark Matter and Gravitational Waves at Swinburne University's Advanced Manufacturing and Design Centre and a social event including a STEM challenge.



#### Adelaide

Visits in Adelaide included a Speed Meet event, University of Adelaide, Defence Science Technology Group, Australian Defence Force Recruiting, medical physics at the Royal Adelaide Hospital, The Australian Space Agency and a social event including a STEM challenge.



#### Sydney/Newcastle

Visits included a Speed Meet event, the University of Newcastle, the University of New South Wales (UNSW), medical physics at the Alfred Hospital(Chris O'Brien Lifehouse), Atlassian, a specialist lecture at UNSW on Astrobiology, Nanosonics and a social event featuring a STEM challenge.



# **2024 NYSF NATIONAL YOUTH STEM SUMMIT**

The 2024 National Youth STEM Summit, hosted in Canberra from 17 - 19 August, welcomed 88 delegates from across Australia to kickstart their careers in science and technology. For the majority of delegates, this was their first time attending a conference-style event.

We were proud to welcome 21 scholarship recipients to the program, of whom 18 identified as Aboriginal and Torres Strait Islander, two identified as LGBTQIA+, and one travelled from Western Australia.

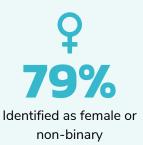
The program hosted a diverse range of keynote addresses, panel discussions, workshops, and networking opportunities and featured various leading STEM professionals from broad disciplines and career stages. Across the 12 sessions, delegates explored topics such as leadership, mentorship, science communication and the media, time management and work-life balance, ethics, entrepreneurship and more.

On average, delegates rated their Summit experience 4/5 and 85% were likely to recommend it to others. They also praised the Summit for the quality of the sessions delivered and the networking opportunities available throughout the program.







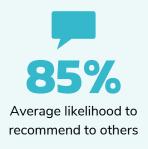












#### **KEYNOTE SPEAKERS**



PROFESSOR LACHLAN BLACKHALL FTSE

Deputy Vice-Chancellor, The Australian National University



DR CATHY FOLEY AO PSM FAA FTSE

Chief Scientist of Australia

There were two keynote addresses during the 2024 National Youth STEM Summit. Professor Lachlan Blackhall FTSE, Deputy Vice-Chancellor of the Australian National University, and Dr Cathy Foley AO PSM FAA FTSE. Chief Scientist of Australia.

#### **SPONSORSHIPS**

The National Youth Science Forum deeply appreciates the support of organisations that sponsored the delivery of the 2024 National Youth STEM Summit.

Our sponsors ensured we could make the Summit accessible to young Australians by keeping the delegate fees low, facilitating high-quality workshops, and giving access to impressive facilities such as the ANU Physics Research Building and Australian Parliament House.

Thanks to the 2024 National Youth STEM Summit Sponsors:

- Gold Sponsor: Department of Defence Defence Science and Technology Group (DSTG)
- Silver Sponsor: Australian Nuclear Science and Technology Organisation (ANSTO)
- Coffee Station Sponsor: Pawsey Supercomputing Centre

We would also like to thank those organisations that provided scholarships for students who otherwise could not have attended:

- Atlassian
- CSL
- Pawsey Supercomputing Centre
- The ARC Centre of Excellence in Quantum Biotechnology (QUBIC)
- The Young Indigenous Women's Academy, CSIRO

















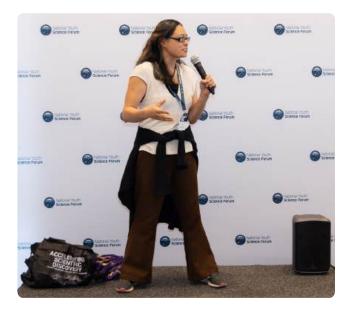
#### CAREER AND STUDY EXPO

A fresh take on the traditional expo format resulted in high impact, strong engagement and meaningful conversation between delegates and participating organisations.

The expo formalities kicked off with PitchFest, which provided participating STEM organisations with an opportunity to 'break the ice' and introduce themselves to delegates ahead of the event's networking component.

During the expo's networking time, delegates were encouraged to engage with exhibitors to learn more about their organisations and the opportunities they offer. Delegates who demonstrated a genuine interest and effort to network were awarded letters used to formulate STEM words with the potential to win the a prize.

Feedback from delegates indicated that this unique expo format facilitated their engagement with all exhibitors and the majority expressed their interest in hearing more about future opportunities from them.













The highlight of my STEM Summit was the careers expo, seeing what working in industry is like compared to the traditional path of academia we are exposed to at university.

- 2024 STEM Summit Delegate



I recently had the incredible opportunity to attend the NYSF National Youth STEM Summit, where I connected with amazing delegates from across Australia, all passionate about various STEM fields.

My highlight of the program was undoubtedly Dr. Cathy Foley's keynote lecture, where she spoke about Australia's future in STEM and the critical steps we need to take to address global challenges like climate change. It was truly inspiring. I was also honoured to meet Dr. Foley in person at the NYSF's 40th Anniversary Gala Dinner at Parliament House. A truly unforgettable experience!

I would like to thank QUBIC for sponsoring my scholarship which allowed me to attend this program. An experience I will never forget.

- Zebediah, QUBIC Scholarship recipient to the 2024 STEM Summit





### **40TH ANNIVERSARY GALA DINNER**

After the National Youth STEM Summit, a Gala Dinner was hosted in the Great Hall of the Australian Parliament House to celebrate the NYSF's 40th Anniversary.

Over 200 attendees, including STEM Summit Delegates, NYSF Alumni and members of the STEM sector, gathered to celebrate this momentous occasion.

The Gala Dinner was MC'ed by NYSF alum and ABC weather presenter and science communicator, Nate Byrne. During the night, there were speeches made by:

- Governor General of the Commonwealth of Australia, Her Excellency the Honourable Sam Mostyn AC;
- Minister for Industry and Science, The Honourable Ed Husic MP;
- Shadow Minister for Science and the Arts, The Honourable Paul Fletcher MP:
- Australia's Chief Defence Scientist and NYSF Science Patron, Professor Tanya Monro AC FAA FTSE FOSA FAIP GAICD:
- CEO of Lockheed Martin Australia, Retd Air Marshall Warren McDonald AO CSC:
- Aunty Violet Sheridan, Ngunnawal Elder;
- CEO of the NYSF, Dr Melanie Bagg GAICD;
- NYSF Alum, Vaishnavi Muddam;
- · NYSF Board Chair, Patricia Kelly PSM.











NYSF alum Vaishnavi Muddam delivering the alumni address at the Gala Dinner



MC and NYSF alum Nate Byrne keeping the crowd entertained in the Great Hall, Australian Parliament House

#### A NEW PATRON FOR NYSF

A notable highlight from the evening included the Governor General, Her Excellency the Honourable Sam Mostyn AC, accepting the Patronage of the NYSF.

"To our young scientists, thank you for giving the riches of your intellect, curiosity and determination. Your discoveries, skills and insights underpin all our futures.

"And for all these reasons, and as I wish you all the very best as you place science at the centre of your world of possibilities, I am honoured and excited to accept the National Youth Science Forum's invitation to serve as Patron."







# AN EXCERPT OF THE SPEECH BY THE HON ED HUSIC MP, MINISTER FOR INDUSTRY AND SCIENCE

...This starts with an awakening in the minds of your Australians to the possibilities of STEM and careers in science.

That's why the National Youth Science Forum is so important - it been offering study, research and job opportunities to our young people for the past 40 years.

More than five hundred students took part in this year's Year 12 Program, they are part of 15,000 students who have been helped in the past 40 years.

That's a significant STEM legacy.

Drill down into that list and you will see names like Tanya Monro, Australia's Chief Defence Scientist and Tim Senden, Director of the ANU's Research School of Physics and ANSTO Board member.

Our excellent host **Nate Byrne** is also an alumnus.

And joining us here tonight is **Dr Catherine Sinclair** who took part in the inaugural NYSF program back in 1984.

She now works at Boeing in scientific visualisation creating graphic representations, a crucial process that allows for better understanding of data through imagery.

WSFee Control of the control of the

All of these alumni praise the program for having empowered or influenced them to set off down their chosen career paths.

What I particularly admire about the NYSF is how hard it worked to supported underrepresented groups to engage more with STEM.

More than half its participants are female and almost half come from regional and remote areas.

It is incredibly important we get more secondary school kids – regardless of gender, background, or postcode – enrolled in STEM subjects.

So again – thank you for your efforts. You're helping to ignite in them a love of science and technology, fostering a passion that can grow into rewarding careers...

...All those involved in the National Youth Science Forum – going back to 1984 – can take deep satisfaction in a job well done.

You have encouraged generations of young Aussies to think more deeply about the possibilities of STEM and given them the means to kick-start their careers.

Congratulations on your 40th anniversary, and I wish you every success for the future.

The Hon Ed Husic MP Minister for Industry and Science

19 August 2024 Australian Parliament House

Minister Husic also announced additional funding for the NYSF over the next four years, marking a significant boost for the NYSF and the STEM sector in our shared efforts to support a diverse science, technology, engineering, and mathematics (STEM) workforce.

#### **ALUMNI AND SUPPORTS SILENT ART AUCTION**

A key element of the 40th Anniversary Gala Dinner was the silent art auction, which raised money for the NYSF Access and Equity Scholarship Fund.

NYSF Access and Equity Scholarships provide invaluable opportunities for students from disadvantaged backgrounds—whether they are from remote and regional areas, Aboriginal and Torres Strait Islander communities, low socioeconomic families, minority groups, or those living with disabilities or as carers.

The silent art auction contained over 40 pieces of art generously donated by members of the NYSF Community, including prominent people in the STEM sector such as Dr Cathy Foley AO PSM FAA FTSE, Professor Genevieve Bell AO FTSE FAHA, Professor Brian Schmidt AC FRS FAA FTSE and Nobel Laureate Professor Barry Marshall AC FRACP FRS FAA.

The silent art auction raised over \$8,800 on the night.









# NYSF STUDENT STAFF LEADERSHIP PROGRAM (SSLP)

Each year, NYSF Year 12 Program participants are selected to participate in the NYSF Student Staff Leadership Program (SSLP). The SSLP is a voluntary program that provides practical, outcomesfocused training, culminating in workplace experience as a Student Staff Volunteer, or 'Staffies' as they are affectionately known, in the NYSF Year 12 Program.

SSLP participants are required to apply for a position in the program. In 2024, there were over 190 applications across all three program levels. From this, 58 program positions were offered: 2 Chiefs of Staff (CoS), 16 Admin Staff, and 40 Group Staff. 57 participants completed the program, forming the Staffie team.

The SSLP centres on developing leadership, teamwork, and facilitation skills with a specific residential program focus in 2024/25. The program included a mixture of digital and in-person experiences delivered by the NYSF, Staffie team and external providers, including;

- Two self-paced, online training modules;
- Three digital training sessions delivered via Zoom;
- Five-day residential training for CoS and Admin Staff in Sydney in July;
- Digital child protection training provided by Safeguarding Training Australia;
- Completion of first aid and CPR qualifications;
- Four-day residential pre-session training in each location in January.

The team enthusiastically engaged with the training program, making the most of the opportunities for growth presented to them. Pre-session training in January was a highlight for participants, providing an opportunity for team bonding and shared learning experiences.

During the 2025 NYSF Year 12 Program, the Staffie team applied their knowledge and experience and facilitated a memorable and impactful experience for students. Across both the Canberra and Brisbane sessions, they engaged with students, helping them to navigate the program and build connections that will support them through year 12 and beyond. They are all to be commended for their positive contribution to program delivery.

"Overall, I found the experience highly valuable. Not only did it expose me to many opportunities to expand my leadership and social skills, but it also provided me with a strong group of like-minded people that I love and cherish. As valuable as my experience was as a student, I found being selected as a Student Staff Volunteer even more incredible, as it was an opportunity for such growth. I really enjoyed the different responsibilities and opportunities it brought, as well as being able to be a part of students discovering their passions in STEM."

"I loved it! Super informative and beneficial in the development of many aspects of my communication, leadership, and teamwork skills."

- 2024/25 SSLP Participants





# NYSF CONNECT WEBINAR SERIES

The NYSF Webinar Series provides NYSF Alumni access to accurate, insightful, and inspiring information on current STEM studies and careers, projects and research. It also provides key networking opportunities to engage with leading scientists and other STEM professionals.

The NYSF Webinar Series is open to secondary school science teachers, career advisors, and lab technicians through our NYSF for Educators initiative. NYSF for Educators provides educators with complimentary access to NYSF Webinars, an exclusive opportunity to integrate the latest advancements into their classrooms, helping to inspire and guide the next generation of STEM leaders.

In 2024, we presented three webinars between May and October. In total, the series featured six STEM professionals in a wide range of fields, including water science, exercise physiology, botany and natural history. NYSF Student Staff Leaders (recent alumni of the NYSF Year 12 program) were invited to host the webinars, providing them with a unique professional development and leadership opportunity. We would like to thank Zebediah (Zeb) Napier for their support in hosting the May webinar.

Feedback from attendees was consistently high, with an average rating of 4 stars across the series. In total, there were 63 live attendees for the 3 webinars, and to date, there have been over 109 online views across all sessions, which are made available to alumni on our private alumni YouTube channel.

The NYSF Connect Webinar Series covered the following topics this reporting period:

#### 2024

September

October

	Climate Change: Understanding the
May	Impacts on Health and the
	Environment

Surviving Kingdoms: Exploring the science supporting the survival of organisms across the plant, animal,

and fungi kingdoms

Traditional ecological knowledge in palaeoecology: the importance of listening to, engaging with, and respecting Indigenous voices in

STEM related research.

# Thank you to all of our webinar guests in 2024:

- Professor Fiona Dyer Professor in Water Science, University of Canberra
- Dr Nicole Vargas Lecturer in Exercise Physiology, Australian National University
- Professor Sarah Kirkpatrick Professor in Climate Science, Australian National University
- Dr Anna Hopkins, Senior Lecturer in conservation biology and molecular ecology, Edith Cowan University
- Professor Kingsley Dixon Botanist
- Professor Simon Haberle Professor of Palaeoeoclogy and Natural History, Australian National University

### **MEDIA COVERAGE**

#### 2025 NYSF Year 12 Program

The 2025 NYSF Year 12 Program was launched via an article on the NYSF website and SciMex.

Media coverage included WIN TV, ABC Radio Canberra, and The Canberra Times, which featured NYSF CEO Dr Melanie Bagg GAICD, NYSF participants and Student Staff Leaders.

Throughout January, the NYSF website and social media highlighted program events, participant experiences, and contributions from NYSF Partners, with additional coverage from STEM professionals and organisations.

#### **National Youth STEM Summit**

Throughout the Summit, three press releases were issued:

- 1. Announcing the beginning of the 2024
  National Youth STEM Summit;
- 2. Announcing <u>The Governor General's</u>
  <u>Patronage of the NYSF;</u>
- 3. Highlighting the announcement of <u>additional</u> <u>Federal Government support.</u>

Our Summit press release and targeted media campaigning led to engagement with traditional media.

WIN News Canberra filmed a segment at the ANU during Day 3 of the Summit. It featured interviews with NYSF CEO, Dr Melanie Bagg, and three Summit delegates.

The key message of the segment revolved around keeping STEM talent in Australia, and successfully showcased the broad range of opportunities available in science and technology.











# NYSF ALUMNI AND ROTARY ENGAGEMENT

A new initiative at the 2025 NYSF Year 12 Program saw the NYSF Board, NYSF Partners, local Rotarians, and NYSF alumni invited to the residential colleges for a Networking Evening: Connections and Confections. Students and guests networked in an informal environment while enjoying delicious desserts and inspiring conversations.









## **NYSF SPEED MEETS**

Thank you to alumni and supporters who attend NYSF Speed Meets across the country!

These events provide a unique opportunity to reconnect with fellow alumni and STEM professionals, share your professional journey, and inspire the next generation of NYSFers!

An NYSF Speed Meet involves rapid-fire conversations with small groups of participants (in years 10-12), all eager to hear about career paths, industry insights, and real-world advice.

NYSF Speed Meets took place in:

As part of the 2025 NYSF Year 12 Program in:

- Canberra
- Brisbane

and as part of 2024 NYSF STEM Hubs in:

- Adelaide
- Melbourne
- Sydney/Newcastle





I had such an enjoyable time at the NYSF 'speed meet' chatting with the next generation of Australian scientists. The students were so engaged and enthusiastic, with really insightful questions about science and career pathways. I got the sense the students would have kept asking questions all afternoon if they had the time!

The event was seamlessly managed, and I appreciated just how many students I met, and substantial conversations I had, in such a short time.

Dr Tamarah King, Geoscience Australia



# NYSF AND THE INDIGENOUS YOUNG WOMEN'S STEM ACADEMY

In 2024/2025, the NYSF welcomed young Aboriginal and/or Torres Strait Islander women who are interested in STEM to NYSF programs through CSIRO's Young Indigenous Women's STEM Academy.

Participants joined us at the 2024 National Youth STEM Summit and at the 2025 NYSF Year 12 Program.

All Indigenous participants at the NYSF Year 12 Program and the STEM Summit were invited to connect with other Aboriginal and Torres Strait Islander participants at an informal lunch hosted by an Indigenous scientist.



STEM Summit delegates from the Young Indigenous Women's STEM Academy with Chief Scientist Dr Cathy Foley



# **GOVERNOR'S RECEPTIONS**

Over the last few months of 2024, State Governors and Administrators around Australia hosted receptions for students selected to participate in the 2025 NYSF Year 12 Program. These events allow students to celebrate their selection with their fellow NYSF participants, Student Staff Leaders, Rotary guests, and members of the NYSF Staff. We thank the Governors of Western Australia, Tasmania, South Australia and the Northern Territory Administrator for hosting participants of the NYSF Year 12 Program at a reception, and the Governor of Victoria for sending a congratulatory message.

"Being selected for the National Youth Science Forum is a terrific achievement. The forum is a lot of fun and will highlight the exciting study and career options open to you. It will foster your passion for science, technology, engineering or maths."

"It can help you follow in the footsteps of STEM legends like Doctor Andy Thomas – a South Australian aerospace engineer and former NASA astronaut - as well as Katherine Bennell-Pegg, Director of Space Technology at the Australian Space Agency here in Adelaide, as well as Australia's first female astronaut."

"Or, if you'd like to keep your feet on the ground, you may draw inspiration from South Australian Edward Robinson, who, more or less straight out of school, designed a flat-pack educational satellite kit and is now selling it to schools and universities. As these individuals know, great endeavours rely on great teams and great supporters – and the National Youth Science Forum is no different." – Her Excellency the Honourable Frances Adamson AC.

"May I first congratulate each one of you on your selection and achievement. You have all been selected on merit from around Tasmania, including schools in the North and the South. Rotary was a founding partner of this Forum and has provided significant support, especially in the form of grants to participating students to assist with the cost of their attendance. May I acknowledge that important support in making this Forum such a success." – Her Excellency the Honourable Barbara Baker AC.



Read the full story on the NYSF website

# **FINANCIALS**

The NYSF remains committed to improving access and diversity in STEM participation by delivering a suite of programs that connect young Australians with their science and technology futures.

This year, we welcomed 455 participants to our flagship NYSF Year 12 Program and awarded 69 NYSF Access and Equity Scholarships to 15% of the program participants in line with our commitment to diversity, equality and inclusion. For the first time, we ran three STEM Hubs in Adelaide, Melbourne, and Sydney/Newcastle with 140 participants attending. NYSF STEM Hubs make NYSF programs more accessible nationally to a broader cohort of young Australians.

We also celebrated 40 years of the NYSF with a 40th Anniversary Gala Dinner at the Great Hall, Australian Parliament House. Two significant announcements were made: the Governor-General of the Commonwealth of Australia, Her Excellency the Honourable Sam Mostyn AC, confirmed her patronage of the NYSF, and the Minister for Industry and Science, the Honourable Ed Husic MP, announced critical additional funding for the organisation over the next four years. A silent art auction at the dinner successfully raised \$8,800 in support of NYSF Access and Equity Scholarships.

The 2024 National Youth STEM Summit, hosted in Canberra from 17 - 19 August, welcomed 88 delegates from across Australia to kickstart their careers in science and technology. We were proud to welcome 21 scholarship recipients to the program, of whom 18 identified as Aboriginal and Torres Strait Islander.

For the 2024–2025 financial year (1 April 2024 to 31 March 2025), the NYSF incurred a deficit of (\$24,967). This was significantly less than the budgeted deficit, which was anticipated in the first year of facilitating the two new NYSF programs. This modest deficit was only achievable with the generous and much-needed ongoing support of NYSF Funding Partners and increased funding from the Department of Industry, Science and Resources. On an ongoing basis, NYSF aims to achieve a breakeven or small surplus to ensure ongoing financial viability.

To access the full financial report, download it from the Australian Charities and Not-for-profits Commission by scanning the QR code shown below.



# For more information visit nysf.edu.au







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