



National Youth
Science Forum



NATIONAL YOUTH SCIENCE FORUM

ANNUAL REPORT
2023-2024

This report is for the financial year
1 April 2023 to 31 March 2024 for the
National Youth Science Forum (NYSF).

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www.nysf.edu.au



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

2024 marks the 40th anniversary of the National Youth Science Forum (NYSF). We are proud to celebrate the incredible impact this organisation has had in nurturing and inspiring generations of science and technology leaders. Since 1984, over 15,000 young Australians have participated in our flagship NYSF Year 12 Program. This experience has shaped careers and enriched communities across the country.

While celebrating this milestone, we reflect on the enduring support of our alumni, partners, volunteers, and supporters, without whom NYSF could not have inspired so many to take up careers in science, technology, engineering and mathematics (STEM).

Later this year, we will come together to honour the achievements of our alumni and to thank all who have contributed to the NYSF's successes over the past four decades. Our 40th-anniversary celebrations will culminate in a Gala Dinner at Australian Parliament House. We look forward to continuing to inspire and empower young people for another 40 years.

The 2024 NYSF Year 12 Program provided 503 participants from across Australia with real-world exposure to a diverse range of people and facilities in STEM.

Our commitment to inclusivity is reflected in the fact that 68% of NYSF Year 12 Program participants were women, 45% came from regional and remote areas and 14 identified as Aboriginal or Torres Strait Islander. With the support of our partners and donors, we awarded a record 96 NYSF Access and Equity Scholarships, making the program accessible to students who would not otherwise have been able to attend.

In January 2024, we returned to residential delivery of the NYSF Year 12 Program after three years of hybrid programming due to the pandemic. It was fantastic to see participants meeting their peers, connecting with presenters, visiting STEM facilities and taking part in a wide range of activities, from digging for fossils and building prototype robots to fieldwork knee-deep in rivers and lakes, to name but a few.

We are proud to retain our STEM Hubs in Melbourne, Sydney/Newcastle, Perth, and Adelaide. NYSF STEM Hubs provide a taste of the NYSF experience in a day-visit setting within a week of school holidays. This year's STEM Hubs are scheduled for July 2024 in Melbourne, Sydney/Newcastle, and Adelaide, making our programs more accessible nationally.

In July 2023, we launched the pilot of the National Youth STEM Summit. This exciting initiative grew from our NYSF alumni reporting a lack of connectedness and support after they have finished school. While many may have started study or training, or even their first STEM job, they lacked information on the wide range of STEM opportunities, including internships and jobs. They were seeking opportunities to develop a network and further the skills required to thrive in the science and technology sector.

NYSF was delighted with the pilot National Youth STEM Summit. Held in Canberra, it attracted wide support from senior science and technology leaders and Parliamentarians. Both our alumni and new NYSF participants rated the experience highly in terms of inspiring and informative presentations from science leaders and making a range of valuable connections with peers, and science organisations and businesses.

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

- All NYSF Partners 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 and NYSF alumni for their support, passion and the many hours given to ensure the success of NYSF programs.
- The many organisations and individuals who have opened their facilities and workplaces to our participants throughout 2023–2024 and supported our programs, existing and new..
- NYSF Patrons, 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.
- 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.

A heartfelt thank you to everyone for their support over another tough but exciting year. We particularly thank our hard working and dedicated NYSF Corporate team and the NYSF Board – our achievements are very much a direct result of the effort and passion you all put into the NYSF.

Over the coming year, we look forward to helping more young people, and particularly those that have been traditionally most underrepresented in the STEM sector, to connect with their science and technology future.



**Patricia Kelly PSM
GAICD**
Chair of the Board
(16/06/23 - present)



Dr Melanie Bagg GAICD
Chief Executive Officer
National Youth Science Forum



GOVERNANCE

The National Youth Science Forum (NYSF) is governed by an experienced Board of Directors. The Board includes senior members of the STEM community plus those experienced in government and business sectors, as well as the NYSF CEO. Board members from 1 April 2023 to 31 March 2024.

BOARD OF DIRECTORS



Chair
From 16/6/23
Ordinary Director
To 16/6/23
Patricia Kelly PSM
GAICD



Deputy Chair
From 16/6/23
Chair
To 15/6/23
The Hon Kate Lundy



Deputy Chair
Dr Geoff Garrett AO
FTSE



Secretary
Sally Vardy GAICD



Finance Director
Bruce Hunter



Alumni Director
To 25/11/23
Colonel Dr Renée
Kidson CSM



Alumni Director
From 1/12/23
Dr Subho Banerjee



Ordinary Director
Loren Atkins



Ordinary Director
From 1/12/23
Professor Bradley
Moggridge



Rotary Liaison
Officer
To 13/7/23
Kenneth R Hall



Rotary Liaison
Officer
From 28/7/23
Tonia Barnes



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

- His Excellency General the Honourable David Hurley AC DSC (Retired), the Governor-General of the Commonwealth of Australia
- Her Excellency Mrs Linda Hurley

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 National Youth Science Forum (NYSF) is a not-for-profit organisation that runs a number of residential programs to encourage young people in their passion for science, technology, engineering and maths (STEM). Our programs show the wide variety of engaging, rewarding and inspiring study and career options available in STEM fields.

Our flagship program is the NYSF Year 12 Program, which runs in January each year for students about to enter 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).

VISION

Inspiring more young Australians to engage in science and technology futures.

PURPOSE

Creating opportunities to inspire and connect young Australians with diverse science and technology pathways.



ROTARY SUPPORT

The 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 are enthusiastic volunteers at other newer NYSF programs, such as the NYSF STEM Hubs.

ROTARY DISTRICT CHAIRS 2023/2024

9423 – Simon Cubitt

9510 – Dr Sean Geoghegan

9650 – Graham Reveleigh

9620 – Bruce Jones

9640 – Dr Danielle Stanisic

9660 – Di Hall

9675 – Dr Hilary Lloyd

9685 – Dr Parry Monckton

9705 – Matthew Crouch

9780 – Allan McKinnon

9790 – Nigel Liggins

9800 – Bronwyn Fanning and Chris Richardson

9810 – Malcolm Chiverton

9820 – Chris Such

9830 – Stephen Porter



NYSF PARTNERS

The National Youth Science Forum extends its deepest appreciation to our many partners and supporting organisations, whose financial, strategic, and in-kind support is essential to our success. Their 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 as we transitioned back to a residential format for our 2024 NYSF Year 12 Program, and continued the delivery of our newly established NYSF STEM Hubs, National Youth STEM Summit, and NYSF for Educators initiative.

We'd like to particularly thank Lockheed Martin Australia (LMA) and the Department of Industry, Science, and Resources (DISR) for their significant and ongoing support of the NYSF.

Between 1 April 2023 to 31 March 2024, the NYSF also welcomed new partnerships with:

- The Australasian College of Physical Scientists and Engineers in Medicine (ACPSEM)
- The University of Canberra

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.





PROUDLY PARTNERED WITH



AND





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.

96 NYSF Access and Equity Scholarships (19% of participants), totalling \$84,900, were awarded to assist students from disadvantaged backgrounds to attend the 2024 NYSF Year 12 Program.

NYSF Access and Equity Scholarships were made possible thanks to:

- Department of Industry, Science and Resources (DISR)
- Western Australian Department of Jobs, Tourism, Science and Innovation
- GHD Foundation
- Office of the NSW Chief Scientist and Engineer
- Queensland Department of Environment and Science
- Pawsey Supercomputing Research Centre
- Donations from members of the NYSF community

“

“The whole program was a blessing and changed my life for the better.”

- 2024 Scholarship Recipient

“The NYSF program is a life-changing and valuable opportunity that provides a chance for us to immerse ourselves in the world of STEM. Through its engaging activities and networking opportunities, our sense of curiosity and collaboration was fostered.

Not only does it expose the participants to various STEM fields, but also encourages personal growth and provides guidance to making informed decisions about future career paths.”

- 2024 Scholarship Recipient



NYSF PROGRAMS

The National Youth Science Forum stands tall in its community and STEM-focused range of programs. From our flagship NYSF Year 12 Program in January to the recurring webinars we hold for NYSF Connect, NYSF is constantly preparing and delivering quality programs for our audiences.

NYSF Year 12 Program

The NYSF Year 12 Program gives students entering year 12 a broader understanding of the study and career options available in STEM.

NYSF Connect Webinar Series

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

Student Staff Leadership Program (SSLP)

The Student Staff Leadership Program provides leadership training to selected NYSF Year 12 Program alumni, who return as volunteers and help run the program the next year.



NEW NYSF PROGRAMS

The NYSF is growing our audience and our reach post-pandemic. Inspired by identifying areas of growth and opportunity, we now include the following in and amongst our well known programs.



National Youth STEM Summit

The National Youth STEM Summit is a three-day, conference-style event that equips delegates in the early stages of their studies, training or careers with the knowledge, skills, and confidence to establish themselves as a leading candidate in the Australian STEM sector.



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.



NYSF STEM Hubs

NYSF STEM Hubs are non-residential STEM experiences where year 12 students connect with local STEM pathways and careers in states where NYSF does not offer the NYSF Year 12 Program.

An accessible taste of the NYSF experience, NYSF STEM Hubs will take place from June 2024 during the school holidays for an extended audience. Due to timing, they will have a feature in next year's annual report.



NYSF YEAR 12 PROGRAM

The NYSF Year 12 Program is our flagship program and a key focus of our efforts each year. The 2024 program began with the Canberra session on 5 January, welcoming 249 students at the Australian National University (ANU). It was followed by the Brisbane session on 12 January, hosting 254 students at the University of Queensland (UQ).

The NYSF Year 12 Program 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.



503 PROGRAM PARTICIPANTS

Selected from 315 schools across Australia.



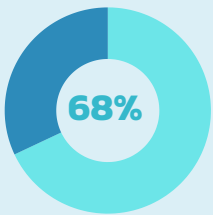
56 STUDENT STAFF LEADERS

Provided youth stewardship of the program.



14 ROTARY DISTRICTS

Volunteered their support to NYSF in 2023 - 2024.



of participants identified as female or gender-diverse



51,300

total reach and impressions across NYSF social media platforms in January



45%

of participants were from remote, rural or regional Australia



specialist lectures on diverse STEM topics



NYSF partner organisations met, inspired, and connected with our participants



different STEM visits held in person as we return to residential delivery



program participants were awarded an NYSF Access and Equity Scholarship



career sessions highlighting STEM pathways

OUR IMPACT

The NYSF surveys participants before and after the NYSF Year 12 Program. The data shows that the program significantly impacts participants' study and career decisions by providing access to STEM facilities and professionals across Australia and globally.

The program exposes young people to real-life STEM experiences and supports them to explore previously unconsidered STEM study, training and career pathways.

71% 

of respondents said their STEM study choices expanded or changed. 23% said it confirmed their choice.

100% 

of survey respondents are likely to recommend the NYSF Year 12 Program to others.

89% 

of 2024 survey respondents plan to pursue further study in a STEM field following the program.

“

I had such an amazing time at the NYSF. I made new friends, learnt so many interesting things and finally worked out what I want my life after high school to look like! It would not be an exaggeration to say that it actually changed my LIFE.

- 2024 NYSF Year 12 Program Participant



NYSF YEAR 12 PROGRAM HIGHLIGHTS

SESSION A, CANBERRA

AUSTRALIAN NATIONAL UNIVERSITY FENNER SCHOOL

With help from the Australian National University's (ANU) Fenner School, participants got their hands dirty and learnt about soils, geology, flora, fauna, and more.

Students took samples from the earth and spent time in the lab analysing their findings. The session incorporated agricultural science, chemistry, biology, and environmental science and helped students understand how they all work together.

UNIVERSITY OF CANBERRA ROBOTICS

In this session at The University of Canberra, participants learnt about robotics through exciting activities using different types of robotic devices.

Participants heard from academics and UC Robotics students before testing out what they learned in the UC Advanced Engineering Laboratory.

Inside the laboratory, participants were exposed to unique robots, including humanoid forms and cobots, expanding their understanding of what a day in the life of a robotic engineer is like.

ADF DRONES

Australian Defence Force (ADF) Drones brought along their Drone Racing Team and let participants fly some of the quickest drones they have created.

Participants explored the technical side of drone racing and the engineering behind drone functionality. It was fascinating for participants to learn about the various uses for drones in a hands on session.



NYSF YEAR 12 PROGRAM HIGHLIGHTS

SESSION B, BRISBANE

FORENSIC SCIENCE QUEENSLAND

Forensic Science Queensland (FSQ) provides forensic biology and forensic chemistry services to the Queensland justice system. FSQ's key stakeholders are the Queensland Police Service and the Queensland Courts.

NYSF participants were introduced to the critical services FSQ provides, including illicit drug testing, DNA-based identification, evidence recovery, and more—offering a glimpse into the high-stakes world of forensic science and its vital role in upholding justice.

BOP INDUSTRIES: CITY OF THE FUTURE

BOP Industries hosted an engaging two-hour workshop on the 'City of the Future', where participants were challenged to engage in a design-thinking sprint focused on envisioning what their local community would need to thrive in the years ahead.

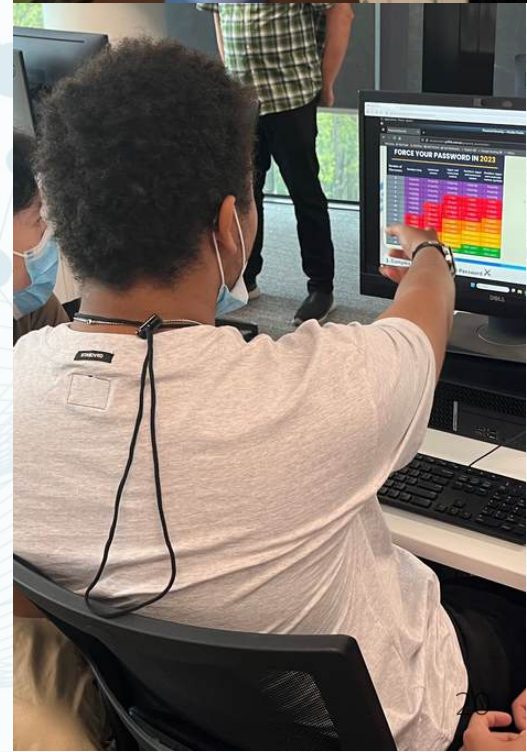
Working in teams, they collaborated to brainstorm and develop concepts for a futuristic community space. The workshop encouraged them to explore key themes such as technology, sustainability, and user-centred design while thinking critically about the evolving needs of their local environments.

GRIFFITH UNIVERSITY CYBERSECURITY

In Griffith University's cybersecurity workshop, participants mastered the fundamentals of cryptography before putting their new skills to the test with a code-cracking challenge!

They explored a range of encryption methods, from historical ciphers to the cutting-edge algorithms that protect our data today. The workshop offered a fascinating glimpse into the world of cryptography, one of the fastest-growing industries in Australia.

This hands-on experience gave participants a taste of the essential skills needed to build a career in cybersecurity, where they can help shape the future of digital security in an increasingly interconnected world.





MAYA NYSF ALUMNA '23

Maya, an NYSF 2023 alum, has a passion for STEM that knows no bounds. This passion began through reading copious amounts of science fiction and was nurtured by her chemistry teacher, Lucy Thomas. However, growing up as a student in regional New South Wales, Maya says opportunities in STEM were limited.

“Living in regional Australia, I have had few opportunities to engage in the future of science, with those that I have been able to participate in and benefit from being online. For example, in year 10, students get the opportunity to go on work placement with local businesses. However, I was unable to get work experience in the STEM field due to an absence of local science opportunities.”

The lack of STEM opportunities in her local community led her to seek out other learning and leadership experiences, including participating in the United Nations Youth Negotiations competition, helping to organise the School Strike 4 Climate movement, and applying for the National Youth Science Forum.

Reflecting on her time at the NYSF, Maya says every session accumulated a perspective shift that showed her the many different things she could do and explore in STEM.

[Read the full story here.](#)

MEDIA COVERAGE

The 2024 NYSF Year 12 Program was launched with a [media release](#).

NYSF CEO and participants spoke on ABC Canberra and ABC Tasmania during the program, and The Canberra Times published an article and video about NYSF activities and young people's outlook on the future.

WIN TV covered the Careers Day in Canberra. NYSF participants Luca and Konan shared their experiences as regional students, emphasizing the exposure to new opportunities. NYSF CEO Dr Melanie Bagg spoke about the importance of providing students with opportunities to connect with industry professionals and learn from real-life STEM professionals across the sector. Professor Russell Gruen shared his insights, noting that these students represent the country's investment in the future. The spot can be found on our YouTube channel [here](#).

Community print and online articles detailing students' NYSF experiences are shared regularly, and program highlights are shared through NYSF channels by participants, visit hosts, alumni, as well as high schools and Rotary Clubs around Australia.

The NYSF website and social media channels showcased a wide range of events and activities throughout January. NYSF Partners were recognised and tagged in social media posts.



I have met so many people that have really niche careers that I never knew was a thing, and it really makes me think that you can do what you love as a career.

- Konan , NYSF Year 12 Program Participant



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, outcomes-focused 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 2023, there were over 100 applications across all three program levels. From this, 56 program positions were offered: 2 Chiefs of Staff (CoS), 14 Admin Staff, and 40 Group Staff). 55 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 2023/24. The program included a mixture of digital and in-person experiences delivered by the NYSF, Staffie team and external providers, including;

- Monthly digital training sessions between June and December
- Four-day in-person training for CoS and Admin Staff in Canberra in June
- Digital child protection training provided by Childwise
- Completion of first aid and CPR qualifications
- In-person pre-session training 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 2024 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.



"In reflecting on my Student Staff experience, I'm grateful for the opportunity to contribute to NYSF and be part of such a meaningful program. The connections I've made with fellow volunteers and participants have been invaluable, and witnessing the impact of the camp on young minds has been truly inspiring."

"I'd just like to say that my experience as a Student Staff Volunteer has significantly benefited me and my personal growth. I feel like my leadership, teamwork and facilitation skills improved so much throughout the session, and I can honestly say that without experiencing the NYSF as a Student Staff Volunteer, I would have been significantly more apprehensive and much less confident about moving to university. Thank you so much for giving me this opportunity."

– 2023/24 SSLP Participants



NYSF CONNECT WEBINAR SERIES

The NYSF Connect Webinar Series provides continuing STEM career education, engagement, and networking opportunities to our 15,000 NYSF Year 12 Program alumni. Recent NYSF Alumni are invited to host webinars, providing them with professional development and networking opportunities.

In 2023, we presented four webinars between August and December. Across the series, we featured nine STEM professionals from a wide range of fields, including Government, pharmacy, engineering, and medicine.

Feedback from attendees was consistently high, with an average rating of 4.5 out of 5 stars across the series. There were 170 live attendees across all webinars, and currently, over 116 views across our YouTube-hosted recordings are available to alumni who missed any of our four webinars.

In March, participants heard from Julia Dickinson from Lockheed Martin Australia's Space team about the state of space in 2024, the space missions and technology on the horizon that will shape our future in space, and the role Australia can play in enabling that future.

The NYSF Connect program continues to be relevant to alumni in today's ever-changing world, in which isolation and a lack of resources can affect emerging STEM professionals in their career journey. It offers access to experts and leaders in STEM, information to further their careers and study, and resources to connect with the broader community.

The NYSF Connect Webinar Series covered the following topics this year:

2023

- August** National Science Week Webinar - Innovation: Powering the Future
- September** Engineering our future, with Lockheed Martin Australia
- October** How to nail your dream job, with Karrie Bishop, Rheinmetall
- November** Beyond Clinical Medicine

2024

- March** Lift-off: Launching Australia's role in the century of space



I would definitely be interested in attending future webinars, and would love to see some webinars on anything related to renewable energy, and environmental engineering in general, in regards to the challenges in that area but also the upcoming innovations.

- NYSF Alum

When asked on ABC Breakfast TV, "What was your highlight of National Science Week?" by ABC Breakfast Weather Presenter and NYSF Alum, Nate Byrne, Dr Cathy Foley AO, Chief Scientist of Australia responded:

I had a webinar, or a discussion, with the National Youth Science Forum we just talked about what it was to become a scientist for me, and about some of the work I've done in the past, the great opportunities science has, and the need we have for science to solve some of the biggest challenges facing us... ..so I guess what I've loved about National Science Week is the opportunity to talk with people about that. And to say that any one of you that has a spark or an interest, or a curiosity, and sees science as a possibility, you can do it.

- Chief Scientist of Australia,
Dr Cathy Foley AO PSM FAA FTSE

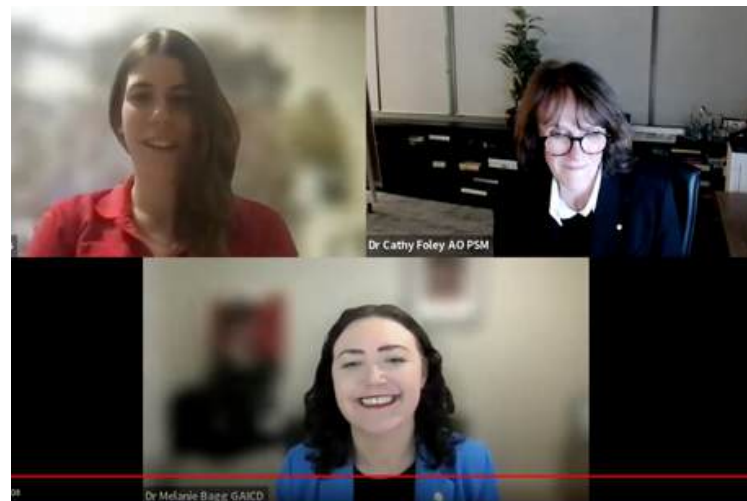


Thank you to all of our webinar guests in 2023 - 2024:

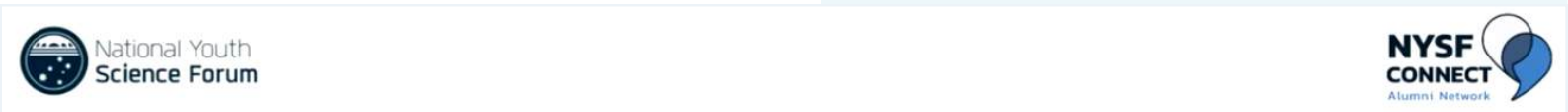
- Dr Edith Botchway-Commey - Neuropsychology & Sleep Researcher
- Associate Professor Kelly Johnstone – School of the Environment, Faculty of Science, University of Queensland
- Professor Nancy Baxter – Head, School of Population and Global Health, Melbourne School of Population and Global Health, Melbourne University
- Julia Dickinson – Chief Engineer, Military Satellite Communications, Lockheed Martin Australia
- Dr Cathy Foley AO PSM – Chief Scientist of Australia
- Spencer Olds – Hardware Engineer, Lockheed Martin Australia
- Jessica Sharp – Hardware Engineering Supervisor, Lockheed Martin Australia
- Kendall Jenner – Associate Research Engineer, STELaRLab, Lockheed Martin Australia
- Karrie Bishop – Early Careers Talent Partner, Rheinmetall
- Alana Philips – Senior Medical Advisor, Organon

Thank you to our Student Staff Leader hosts, Q&A facilitators, and tech support assistants in 2023 - 2024:

- | | |
|------------------|----------------|
| Leo Rodrigues | Caitlyn Jones |
| Anneliese Joy | Celeste Nutley |
| Eliza Dampney | Zeb Napier |
| Taylor Randall | Jack Niu |
| Annie Chen | Zoe Adams |
| Jason Pouliezios | Zeph Hardie |
| Airlie O'Brien | |



“The general discussion of the upcoming technologies I found really interesting and exciting.”
 - NYSF Alum





DIYA NYSF ALUMNA '24

Diya visited us at the start of 2024 from Melville High School in Western Australia. She loved the experience so much that her school interviewed her, encouraging others to apply for the program.

“I was so scared going in with no friends but came out of the camp with so many friends whom I still keep in touch with now! It’s so amazing the amount of similarities you have with all these amazing people and how you click straight away.”

Diya’s interview is honest about her anxieties about partaking in the program but draws attention to the comfortable reception she received when she arrived.

“As much as there were science stuff, there were also discos, icebreakers, games, and talent nights that were great opportunities to make friends.”

Her experience is one that is relatable for a lot of our participants, who may be travelling across the country for the first time in order to participate in the program.

[Read the full story here.](#)

NATIONAL YOUTH STEM SUMMIT

The inaugural National Youth STEM Summit took place between 17-20 June 2023 in Canberra, ACT. Over 250 people were involved in the Summit, including delegates, staff, volunteers, speakers and VIPs, which saw 90% of delegates rating the Summit as good to brilliant.

For most delegates, this was their first experience at a professional conference. Over the 3.5 days, there were 21 sessions covering leadership, personal development, critical technology, medical/health, environment, climate change and networking. All delegates rated the speakers as good to brilliant with the key highlights being networking at Australian Parliament House, a presentation by the National Intelligence Community, a night event at Questacon, and the Careers and Study Expo.



252

people were involved in the Summit



For the majority of delegates, this was their first professional conference



21

sessions over the course of the Summit



98%

of delegates valued the engagement at Australian Parliament House as good to brilliant



93%

rated networking at the Summit as very good or brilliant



100%

of delegates engaged meaningfully with top sponsors

“

An amazing opportunity to go and be inspired by leaders of Australia's community, develop key networking skills and rediscover your passion for STEM.





Parliament of Australia
NYSF National STEM Summit
Parliamentary Chamber
19 Jun 2023
1:30 PM - 7:00 PM

 National Youth
Science Forum

SPEAKERS

The NYSF STEM Summit was supported by nine unique speakers across panel discussions and keynote presentations. Themes included leadership, identifying opportunities, professional and personal development, decision-making, engaging meaningfully with parliamentarians, responding to critical challenges, and networking.

Science Patron of the NYSF, Professor Tanya Monro AC FAA FTSE FOSA FAIP GAICD set the scene and was supported by Australian STEM leaders, including the Chief Scientist; Head of the Australian Space Agency; CIO of NBN; Deputy Secretary, Department of Industry, Science and Resources; Director-General of Australian Secret Intelligence Service; Chief Executive of Lockheed Martin Australia and New Zealand, Heads of the Academy of Science and Social Science, and the CEO of the Australian Academy of Technological Sciences and Engineering.

SPONSORSHIPS

Sponsorship was essential to deliver the pilot 2023 National Youth STEM Summit and make it such a success. Eight sponsors contributed to making the Summit accessible to young Australians by keeping the delegate fee lower and ensuring access to impressive facilities including Parliament House, the new ANU Physics Building, the Shine Dome and Questacon.

Thanks to the following sponsors of the National Youth STEM Summit:

- Department of Defence – Defence Science and Technology Group, CASG and the Graduate and early learning teams
- Department of Industry, Science and Resources (DISR)
- Australian Space Agency
- Australian Signals Directorate (ASD)
- CEA Technologies
- IP Australia
- Australian National University (ANU)
- Pawsey Supercomputing Research Centre



GOVERNMENT ENGAGEMENT

We're incredibly grateful to the following Parliamentarians for joining us to speak and meet Australia's future workforce at the National Youth STEM Summit.



The Hon Ed Husic MP,
Minister for Industry and
Science



The Hon Jason Clare MP,
Minister for Education



The Hon Dr Anne Aly MP,
Minister for Youth and
Minister for Early Childhood
Education



The Hon Paul Fletcher MP,
Manager of Opposition Business
in the House of Representatives

The networking session with parliamentarians and government department representatives was preceded by a professional development session on how to collaborate meaningfully with the Government featuring:

Anna-Maria Arabia
Chief Executive, Australian Academy of Science

Dr Sandra Gardam
Deputy CEO, Science and Technology Australia

Dr Melanie Bagg GAICD
CEO, National Youth Science Forum

Dr Geoff Garrett AO FTSE
Former Queensland Chief Scientist and NYSF
Deputy Board Chair





National Youth
Science

STEM
SUMMIT

Building and connecting Australia's
future STEM workforce

Australian Government
Department of Industry,
Science and Resources



MEDIA COVERAGE

The 2023 National Youth STEM Summit was highlighted on WIN News Canberra, featuring delegates Vaishnavi Muddam and Jackson Wilde, who expressed their thoughts on the importance of supporting their peers and exploring opportunities in STEM.

NYSF CEO Dr Melanie Bagg and Head of the Australian Space Agency Enrico Palermo discussed the initiative to include participants from all across Australia in NYSF programs, extending opportunities to everyone with a passion for STEM. The spot can be found on our YouTube channel [here](#).

“

I think over the weekend I realised how much ones journey can change, and how it's important not to box yourself in because your passions can change a bit, or your future can change.

- Vaishnavi Muddam, NYSF Alumni and inaugural STEM Summit Delegate

The speakers and the industry are obviously very important, but I'm most excited about my peers. These are really cool people, and I'm so excited to see where we end up - and how we end up working together in the future.

- Jackson Wilde, NYSF Alumni and inaugural STEM Summit Delegate



GOVERNOR'S RECEPTIONS

Over the last few months of 2023, State Governors and Administrators around Australia hosted receptions for students selected to participate in the 2024 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 Queensland, Victoria, Western Australia, Tasmania, South Australia and the Northern Territory Administrator for supporting the students and the 2024 NYSF Year 12 Program.

[Read about the Governor's Reception events here.](#)



NYSF IN THE COMMUNITY

NYSF was invited to AUS Cybercon for a meet and greet with Canadian astronaut Chris Hadfield. A big thank you to the Australian Information Security Association (AISA), the peak industry body for information and cyber security professionals in Australia, for inviting NYSF alumni Isabelle, Tobias, and Bettina, along with NYSF staff member Dr Catherine Wheller.

Chris Hadfield's YouTube videos hold a presence in our audience's lives and in their school science classes. This was an exciting and eagerly embraced opportunity and one we are grateful to have been a part of.



FINANCIALS

The NYSF's return to in-person and residential programming in 2023-2024 brought with it a degree of financial uncertainty. However, the NYSF is pleased to report a smaller deficit than initially projected due to the delivery of programs at capacity and the strong ongoing support of NYSF partners and supporters.

For the 2023–2024 financial year (1 April 2023 to 31 March 2024), the NYSF closed with a deficit of -\$73,924. To access the full financial report, download it from the Australian Charities and Not-for-profits Commission by scanning the QR code.



The NYSF continues to seek to maintain the affordability of all NYSF programs via government, corporate and university partnerships, and in doing so, continues to deliver on our commitment to foster youth engagement in STEM fields.



For more information visit
nysf.edu.au

