

### LONDON INTERNATIONAL YOUTH SCIENCE FORUM

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The Backpack:-





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# INTRODUCTION

LIYSF is an impartial, accredited not-for-profit social enterprise established in 1959 and has changed the lives of over 22,000 students and counting. It has a rich history of empowering young science students from across the globe, by facilitating opportunities and networks to enable them.

LIYSF is a modern event that is up to date with the latest technologies and developments, whilst also ensuring we uphold our prestigious and respected standing, as the longest running STEM event of its kind. LIYSF is launching a hybrid digital option online to offer the LIYSF experience to more students. We introduce our students to a wide variety of researchers and important figures who serve as role models.



LIYSF has worked hard to help those from disadvantaged

backgrounds and to empower female scientists, as well as students from diverse ethnic and cultural backgrounds. The strategy for the future is to ensure that global representation is seen at LIYSF and help more students reach further. Just one example is our scholarship scheme, which we are growing.

I am proud of the work we do and extremely excited about our future, as we look to empower more young people from all backgrounds to pursue their potential. We are fortunate to have the support and trust of leading scientific figures and organisations across the globe, as well as wonderfully enthusiastic and dedicated students. They all inspire us to be better and I would welcome further thoughts, from any of our stakeholders and friends, on what we can do to achieve greater impact.

LIYSF is already a precedent unto itself and we strive to detect the ripples of our impact through the generations of students that shape us and into the future we aim to define. This is an exciting time to be brave, to be honest, to be better.

Richard Myhill Chief Executive

## ROYAL PATRON HRH THE PRINCESS ROYAL

LIYSF is honored to have Her Royal Highness The Princess Royal as our Royal Patron (2020 to present). HRH The Duke of Edinburgh is our founding Patron (1959-69).

Her Royal Highness is involved with more than 300 charities and organisations worldwide, many of which focus on improving education and the well-being of children. HRH is the Royal Patron of WISE (Women in Science and Engineering) and has "enjoyed being part of trying to encourage more girls to look at engineering as a realistic career".\*

HRH's commitment to promoting youth in education and the UK is in alignment with LIYSF's mission to stimulate youth in science and engineering.



# **PRESIDENT** PROFESSOR CLARE ELWELL

Professor Clare Elwell is Vice-Dean for Impact and Professor of Medical Physics at University College London (UCL). She attended LIYSF 1984.

Professor Elwell develops novel optical systems for monitoring and imaging the human body. She currently leads the Bill and Melinda Gates Foundation/UCL Brain Imaging for Global Health (BRIGHT) project. She is President of the Society for Functional Near Infrared Spectroscopy, and is Founder and Trustee of the charity Young Scientists for Africa.

Clare has won the 2016 WISE Research Award, the UCL Provost's Public Engagement Award, Medical Research Council Science Suffrage Award, Inspirational Teacher Award at the UK Inspirational Awards for Women.



\*Vanity Fair article

## WHAT WE DO

The primary function of LIYSF CIC is to organise the annual London International Youth Science Forum (LIYSF). LIYSF was started in 1959 with the idea of bringing young people from different nations together to learn about each other and our different cultures through a shared passion for science. LIYSF was formed in the aftermath of the world wars, placing equal focus on cultural understanding as well as science learning and discovery. We cover all STEM (science, technology, engineering and mathematics) when we say science.

- Annual residential science enrichment programme
- ⇒ 15-day programme with the latest science research, including, health, artificial intelligence, cyber security, sustainable food, energy, climate change, pandemics, nano- technology, engineering and robotics
- → Next generation of the best young science students attend annual forum
- $\bigcirc$  500 students selected each year based on talent
- → Students aged 16-21 years old attend from more than 70 countries
- → 10 plenary lectures from Nobel prize Laureates, academic and industry pioneers
- $\ominus$  32 specialist lectures from leading researchers
- 50 visits to top university departments, research centres and industrial sites across the UK
  including Oxford and Cambridge Universities and industrial sites, like Rolls Royce, Airbus and government facilities
- $\bigcirc$  Deliver platform of young talent to bring ideas to tackle global challenges
- → Most participants are supported to attend as prize winners of national and international science competitions. Many receive scholarships from educational bodies, schools and colleges, grants from institutions and funding from charitable foundations
- There is an active social calendar at LIYSF to facilitate interaction and sharing cultures, with 10 events in the programme. A vital part of LIYSF is about students teaching and learning about different cultures and traditions

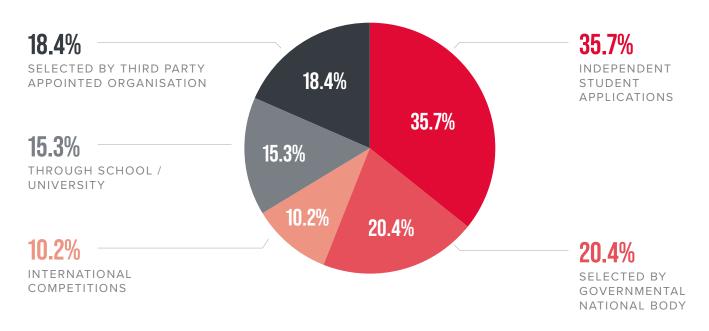
"LIYSF aims to give a deeper insight into science and its applications for the benefit of all humankind and to develop a greater understanding between young people of all nations."

## CONNECTING STUDENTS GLOBALLY

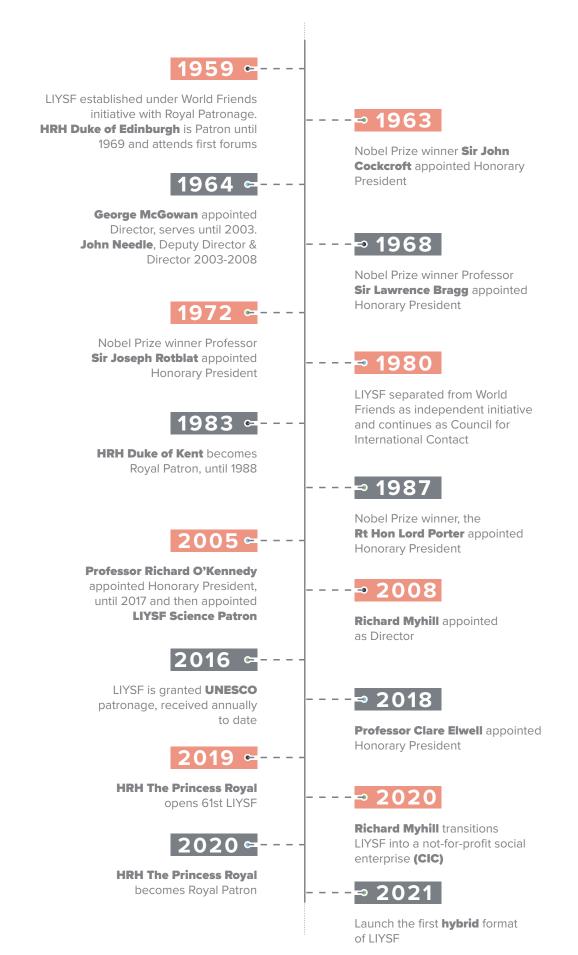




ATTENDANCE MAKE-UP



# LIYSF TIMELINE



# OUR VISION

LIYSF provides benefit to students aged 16 - 21 years old that are interested in science, technology, engineering and mathematics. LIYSF enables students in the pursuit of science for the benefit of all. Empowering passionate individuals and to facilitate capacity building. This is our community purpose interest as a community interest company, limited by guarantee (CIC).

## KEY GOALS

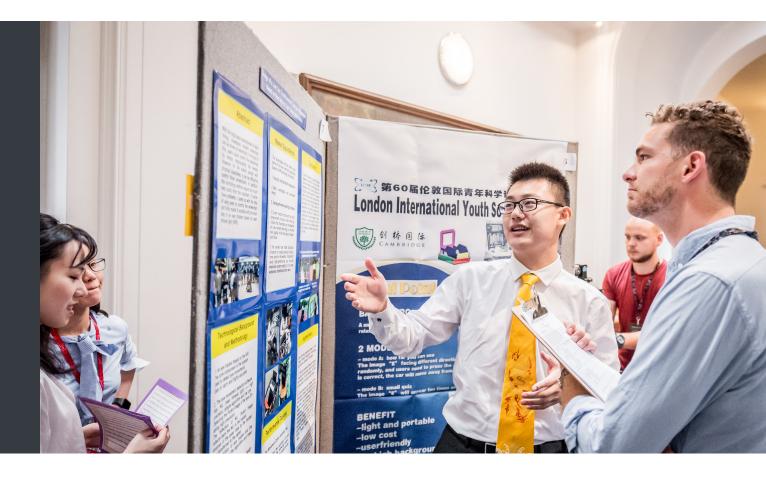
- Education, with a focus on the application of knowledge for economic & social benefit
- ⊖ Positive impact on individuals and through them on the world
- Empowerment in STEM. Enabling students to explore and fulfil individual potential
- Enabling students to acquire skills, confidence and knowledge
- → Facilitate and showcase international collaboration
- Ochallenge students to think in new ways
- ⊖ Encourage and enable networking
- → Training in effective communication
- O Cultural interaction to ensure open and informed world citizens

LIYSF contributes to all 17 UN sustainable development goals, with proactive action and effect on the thinkers of the future.



## UNIQUE Achievements

- ⊖ Connecting 22,000 students over 60 years
- ⊖ Deliver respected academic STEM programme, proven track record
- ⊖ Longest running student science forum of its kind, not a competition
- Established under Royal Patronage in 1959, HRH The Princess Royal current Royal Patron
- ⇒ Independent academic president, currently Professor Clare Elwell, University College London
- ⊖ UNESCO Patronage, Government support, British Council partnership
- World renowned venues in central London with global reach Imperial College London & Royal Geographical Society
- ⊖ Raft of success stories of former LIYSF alumni going on to change the world
- ⊖ Diversity strong focus on cultural interaction
- $\bigcirc$  Over 50% of attending students are female
- ⊖ Diversity of speakers, including gender balance with 50% female speakers
- $\bigcirc$  65% of attendees from outside EU
- → Nature of event nurtures students to stay connected long after event



### "LIYSF is an amazing forum with tremendous energy, truly inspiring and exciting."

Sir Jeremy Farrar, Director Wellcome Trust 2018 Key Note LIYSF Speaker



## LIYSF ALUMNI GO ON TO CHANGE THE WORLD



Professor Clare Elwell Vice Dean



Mark Shuttleworth CEO University College London Cannonical Ltd. First African Civilian Astronaut



**Dr Michael Amoo** 

Specialist Registrar In Neurosurgery Royal College of Surgeons



**Professor Richard** O'Kennedy Vice President of Research, Qatar Foundation



Dr Rubika Balendra Clinical Neurology King's College London



**Dr Michael Moloney** 

CEO American Institute of Physics



Professor **Christopher Kennard Clinical Neurology** Professor **Oxford University** 



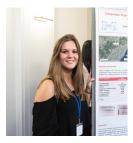
#### Aranza | Mexico

LIYSF helped me realise what I wanted to do with my life and it would be an honour for me to help other people do the same



#### Rivenaka | Sri Lanka

LIYSF showed and found me the path I was searching for, it showed me what I could become



**Ona | Spain** Thank you LIYSF for showing me how when people join forces, we can achieve anything we want



#### Salomé | France

LIYSF was truly the most eyeopening and inspiring experience motivating me to continue my future in the sciences field



#### Nairuthi | India

LIYSF has given me so much. It has changed my life in many ways. It has made me more confident, more connected to science, more kind and I'm more in love with science now



Mayrina | Indonesia LIYSF has opened so many amazing opportunities for me. I would never trade this for anything



"Science for all religion, for all cultures, for all colours. Science is universal"

**Professor Hayat Sindi,** UNESCO Goodwill Ambassador & Islamic Development Bank

### Diversity and Culture

LIYSF extends **further** than broadening scientific understanding, to engaging students in education on other **cultures** and **developing lasting**, **international friendships**.



# PARTNERS

LIYSF has established worldwide partnerships to enhance the scope and reach of our work, carefully choosing those whose values are aligned with empowering young scientists and have a proven track record of delivering impact.





"LIYSF enables real friendships to be formed. In my own experience, I am still in touch with people I met 30 years ago at LIYSF and there are names of people I met, that I read in the headlines, that I remember from that year. "

Mark Shuttleworth, CEO Cannonical Ltd, LIYSF Alumni, First African Civilian Astronaut

#### **MoreInformation**



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