

Imperial College Science in Medicine School Team Prize 2025

Annual Report

In 2025, the National Heart and Lung Institute (NHLI) at Imperial College London offered the 5th Annual Science in Medicine School Teams Prize to engage sixth form school students with the pursuit of science and engineering for health.

The aims of the competition remain to excite school sixth formers and specifically to:

- stretch beyond the school curriculum and think outside the traditional bubble.
- realise the importance of scientific evidence for improving health.
- consider how trends in science and engineering will impact on health and medicine.
- understand the importance of a multidisciplinary teamwork.
- realise the importance of affordability, availability and acceptability.
- reflect on inequality-related poor health outcomes.
- appreciate the importance of art and design in communicating innovation.

More details can be found at the competition website:

[Science in Medicine School Teams Prize 2025 | Faculty of Medicine | Imperial College London](#)

Any educational organisation in the UK with 6th form students could participate and collaborations between UK schools or between a UK organisation and an equivalent organisation outside the UK were welcomed. Each team could be composed of up to six members, ideally with varied interests to provide a multidisciplinary approach. Examples of possible student scientific interests include biology, chemistry, physics, engineering, mathematics, computing, data science, social science, and economics. Teams were advised to include a member skilled in art or design.

Teams were invited to design an ePoster which illustrated a strategy for using science and/or engineering to improve health and reduce deaths and disabilities. Special emphasis was given to communication, including to the general public.

There were five separate contests, each with a £6,000 prize pot:

The British Heart Foundation Cardiovascular Prize This year the prize focuses on diet and nutrition as a science in the prevention of cardiovascular disease. Teams were asked to outline the scientific foundations for a general or specific dietary plan for actively promoting cardiovascular health and provide strategies for evaluation, dissemination and public adoption. The prize was supported by the Imperial British Heart Foundation Centre of Research Excellence and the Cardiovascular Theme of the Imperial NIHR Biomedical Research Centre.

The Lung Prize Teams were asked to focus on any aspect of novel prevention or treatment of respiratory disease or on a non-pharmaceutical approach to improving the quality of life and well-being of people with chronic lung disease. This prize was funded by the National Heart and Lung Institute and the Respiratory Theme of the Imperial NIHR Biomedical Research Centre.

The Rare Autoimmune Rheumatic Disease Alliance (RAIRDA) Prize Rare autoimmune rheumatic diseases include Systemic Lupus Erythematosus, Scleroderma and Raynaud, Sjögren's Disease and Vasculitis. The challenge was to design an innovative, non-pharmaceutical solution based on science/technology to help improve the quality of life and wellbeing of people with RAIRDs. This

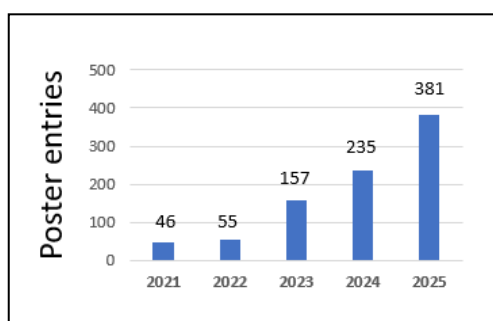
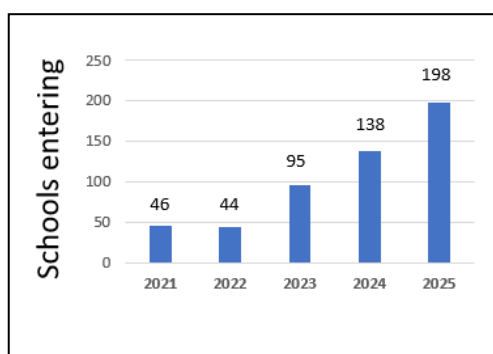
prize was supported by the RAIRDA and the Immunology Theme of the NIHR Imperial Biomedical Research Centre.

The Global Health Prize Teams were asked to design a practical and innovative approach to mitigate a health impact of climate change within the next 10 years. Teams could consider solutions that could be implemented in the UK, in a low/middle income country or globally. This prize was supported by the Imperial College School of Public Health.

Cancer Research UK Convergence Science Centre contest The task set the teams was to develop an idea based on science/technology that enhances the cancer patient journey by offering guidance, distraction, or emotional support during treatment. This contest was supported by the Cancer Research UK Convergence Science Centre.

Entries

There has been a year on year increase in participation. 198 schools entered at least one contest, representing a 44% increase over 2024. There were 381 posters submitted, representing a 62% increase. A total of 1664 school students were involved in submissions, but this is a significant underestimate of participation. As schools could only enter one team into each contest, many schools held internal selection competitions.



Short-listing:

- Each eligible submitted entry was scored blind of school identity by at least three judges (see Appendix I).
- Judges evaluated each of the following domains:
 - The problem – demonstrating its relevance and importance.
 - The new idea- including its scientific basis; description of proposed innovation; and how it could be evaluated.
 - Feasibility, including its availability, accessibility, acceptability and affordability.
 - The poster layout and novel illustrations.
 - Clarity of message and communication value of the poster to the general public.

Finals Events:

- For each prize, the ten top scoring teams from the short-listing were invited to present their posters at online finals events, which were held online in late September – early October 2025.
- Short-listed teams were asked to give a Power Point presentation lasting seven minutes, which was followed by three minutes of questions and answers. Judges (see Appendix II) scored the following domains:
 - The health issue.
 - The new idea.
 - Feasibility, including its availability, accessibility, acceptability and affordability.
 - Teamwork.
 - Communication value.

The 2025 prizes went to:

The British Heart Foundation Cardiovascular Prize

First Prize – The Judd School

Second Prize – The Perse School

Joint Third Prize – Simon Langton Girls' Grammar School and Clyst Vale Community College

The Lung Prize

First Prize – The Cardinal Vaughan Memorial School

Joint Second Prize – St Mark's Catholic School and London Academy of Excellence, Stratford

The Rare Autoimmune Rheumatic Disease Alliance (RAIRDA) Prize

Joint First Prize – St Olave's Grammar School; The Tiffin Girls' School & Wallington County Grammar School

The Global Health Prize

Joint First Prize - King Edward VI Camp Hill School for Girls & Wycombe High School

Third Prize – Newham Collegiate Sixth Form

Cancer Research UK Convergence Science Centre contest

First Prize – London Academy of Excellence, Stratford

Second Prize – The Perse School

Joint Third Prize – The Douay Martyrs Catholic Secondary School and Invicta Grammar School

Awards:

- Prizes for each contest were £3000 - 1st, £2000 - 2nd and £1000 - 3rd and were intended for supporting science-related activities in the winning schools.
- Prize-winning teams were offered the opportunity for online mentoring session with an academic.
- All team members received personal certificates of participation.
- Participation helps strengthen university or job applications and preparation for interviews.

Breakdown of awards to state-maintained versus independent schools:

Conscious that independent schools might be thought to have an advantage, we have monitored the balance between independent versus state-maintained entries. In 2021, 40% of schools entering were independent. With state-maintained school participation increasing over five years, this figure has dropped to 32%. As mentioned above, entries were shortlisted blind of the name of the school and the percentage of independent schools selected for Finals was 30%. Once schools entered, prizes were significantly more likely to go to state-maintained schools (15 *versus* 2, $p < 0.05$ by Chi square). This demonstrates that the independent schools are not at an advantage in the competition. There was no significant bias to winning a prize between comprehensive and selective state-maintained schools. As far as we can tell, teams in the Finals were judged solely on merit.

Schools	State-maintained		Independent	Total
	Comprehensive	Selective		
Entries	80 (40%)	55 (28%)	63 (32%)	198
Short-listed	18(36%)	17 (34%)	15 (30%)	50
Any prize	7 (41%)	8 (47%)	2 (12%)	17
1st prize	3 (37%)	5 (63%)	0	8

Feedback: see Appendix I

Judging panels: see Appendix II

Acknowledgments and thanks:

The competition could not have taken place without massive support. First we thank our sponsors: NHLI, Imperial NIHR Biomedical Research Centre, the British Heart Foundation, The Rare Autoimmune Rheumatic Disease Alliance (RAIRDA) and the Cancer Research UK Convergence Science Centre; secondly the innumerable individuals that have offered invaluable advice on how to improve the competition and what challenges to set; thirdly our judging panels; and fourthly the wonderful administrative team (Jaya Rajamanie, Courtney Chattertin-Bartle and Lucy Payne) who have made this complex operation look simple.

Dorian Haskard, Director
Cecilia Johansson, Deputy Director
November 2025

Appendix I Feedback

This year we were able to catch up with and interview two students that were members of winning teams in 2021. We took the opportunity to record a short interview with each of them. See link to video: <https://youtu.be/-tmhIvYGBpc>

Participating school teachers were asked to provide feedback on this year's competition. Of the 25 teachers that answered, 19 responded "strongly agree" that the prize was an exceptional opportunity for their students, and 6 wrote "agree". None were neutral or negative. More specifically, teachers agreed that the competition helped students to:

- understand the importance of science for improving health (n=13)
- develop a deeper interest in science and health-related careers (n=12)
- understand complex ideas and communicating to a lay audience (n=13)
- learn time management and the importance of teamwork (n=14)

Free text feedback included:

- The large amount of prize money is a really important external motivator, as is the cachet of Imperial College being the organisers. Do try and get enough funding to keep running it! (Channing School)
- It encouraged the students to research widely and to carefully consider the accuracy of their research. (Challoners High School)
- The students developed research skills, preparation for HE. Perhaps have levels such as participations, Commended, highly commended, Bronze, Silver, Gold, etc. (Francis Holland, London)
- Students were in varied groups where not everyone was interested in medicine, so they got to experience that solving healthcare problems can involve professionals in many different areas. Only feedback for this year we received notification of not being a finalist a bit late. The feedback given is always superb, but a bit earlier would be great! (Simon Langton School)
- Gained teamworking skills and time management. (Sir Robert Patinsons Academy)
- An excellent competition. It really promotes creativity and innovation, something that can often be missing from Science at School and Undergraduate study. The students developed their research skills and learnt how to critically appraise papers. Thank you – our students have really benefited from this competition. I'm really hoping that it can continue! (The Wilsons School)
- All of the Prizes should be offered again, there is enough variety and it means more students can take part rather than only being one prize available it has been a really good experience for the students overall. (the Tiffin Girls' School)
- Useful to take part in a formal competition and plan something as a team for a deadline, improves their profile at school and visibility. Many thanks for providing the opportunity. (Latymer Upper School)
- Engaging with academic research, collaborative working, creativity (Derby Moor Spencer Academy)
- Detailed feedback that was also provided, specific to their own piece of work, which was so helpful in seeing what was successful, but what would need to be improved on in terms of presentation/level of explanation required for a poster for a lay audience, and how to make their recommendation less vague, and to think harder about how to be more innovative in their suggestion. Thank you for all you provided for our students! (St Andrews Catholic School)

- The students achieved all of the below! Deeper understanding, research skills, communicating ideas, working in a team, managing their time, learning how to reference correctly. (Ashmole Academy)
- Being able to discuss this in their UCAS applications as a super-curricular research project was greatly beneficial as we do not have the EPQ. As a state school where opportunities are not as widely available this was so helpful! (Ashmole Academy)
- The teamwork aspect and joy of independent research and producing something worthwhile – this cannot be measured but was obvious by their enthusiasm for it. (Caterham School)
- Participating in the Imperial College Science in Medicine competition (we entered all 5 prizes and hosted our own internal competitions) has been an incredible learning experience for our students - we have entered each year since 2021. Beyond developing their scientific and technical understanding, they gained confidence in presenting their ideas, communicating complex concepts clearly, and working collaboratively under pressure. They also learned to critically evaluate feedback and consider real-world applications of their ideas, which is invaluable for anyone considering a career in medicine, science, or engineering. The experience has encouraged them to think creatively about global health challenges and to appreciate the importance of innovation in addressing pressing medical problems. (Yarm School)
- The competition is extremely well-organised and motivating for students, providing a real taste of professional scientific research and presentation. Thank you so much for providing the opportunity - it has now become a regular event in the school calendar! Sincere thanks once again (Yarm School)
- Excellent for science pupils to mix with one or more non science pupils and realised how important design is e.g. when scientists present posters at a conference. Great that we could enter 5 teams as a school as there were 5 categories and that pupils could pick a category that most interested their group. Develops pupils' independent research skills, evaluative skills and initiative – having to think of a proposal, not just summarise existing literature/research. Feedback given from judges to some categories was really useful. (Norwich School)
- Thank you for running this excellent competition. So useful for pupils' UCAS applications as well as developing their skills. Feedback really varied between categories with some giving extensive feedback and others none (apart from saying they didn't get to the next round). (Norwich School)
- They enjoyed the challenge and the novelty of working across year groups (Tonbridge Grammar School)
- The group that was able to present in the final really got a lot out of seeing what the other schools got up to and it humbled them to see the high levels (Eton College)
- They enjoyed the challenge of the competition and appreciated the feedback. I would like to add my thanks for organising this competition for school. (Queen Elizabeth's School)
- My students thoroughly enjoyed working on the ePoster, and we look forward to participating in future competitions. The students made use of Sora AI to carefully generate images that seamlessly fit into the poster's flow. They dedicated significant effort to ensure the theme remained consistent throughout the entire journey, as one of the requirements was the integration of IT and technology. Considerable research went into this project, and with each student contributing their interest in areas such as cardiovascular health, diet, and medical apps, they collectively decided on creating a "journey"-style poster. (The Sixth Form Bolton College)
- Our teams and staff at St. Olave's have been delighted with the School's success in this year's competition and we are very grateful to you for running such a motivating and challenging event. We really appreciate how much time and effort goes into organising the five School Teams Prizes. Please pass on our thanks to everyone involved. Eighteen teams signed up for our internal competition in March and without doubt every student benefited enormously

from their participation. It is an amazing opportunity that stretches and challenges our students in a unique way. Many wish to pursue careers in medicine and related scientific disciplines and so this gives them the chance to perfect their research, presentation and collaborative skills. (St Olave's Grammar School)

- Thank you all again so much for the wonderful opportunities these competitions have provided for our students to explore new fields of interest, to collaborate, to create, to problem solve and in the case of the cardiovascular team, to present their ideas. I thought the field in the final this year was outstanding - we were up against some amazing competition. Every year the bar is raised. There's our challenge for 2026! (Concord College)

Appendix II - Judges

Cardiovascular prize

Short-listing

Professor Martin Wilkins, National Heart and Lung Institute
Professor James Howard, National Heart and Lung Institute
Professor Gary Frost, Department of Metabolism, Digestion and Reproduction
Dr Andy Cowburn, National Heart and Lung Institute
Dr Graeme Birdsey, National Heart and Lung Institute
Dr Chris Rhodes, National Heart and Lung Institute
Dr Rasha Al-Lamee, National Heart and Lung Institute
Dr Blerina Ahmetaj-Shala, National Heart and Lung Institute
Dr Alex Ainscough, National Heart and Lung Institute
Dr Arun Sau, National Heart and Lung Institute
Dr Aygul Dagbasi, Department of Metabolism, Digestion and Reproduction
Dr Cristobel Roderio-Gomez, National Heart and Lung Institute
Dr Benedict Reilly-O'Donnell, National Heart and Lung Institute
Dr Daria Kostyunina, National Heart and Lung Institute
Dr Elisa Duregotti, National Heart and Lung Institute
Dr Jose L. Sanchez-Alonso, National Heart and Lung Institute
Dr Courtney Chatterton-Bartley, National Heart and Lung Institute
Dr Siqi Yin, National Heart and Lung Institute
Ms Elizabeth Pyman, National Heart and Lung Institute, PhD student
Ms Sophie Newton, National Heart and Lung Institute, PhD student
Mr Wei Zhong, National Heart and Lung Institute, PhD student
Ms Victoria Noakes, National Heart and Lung Institute, PhD student
Ms Mira Subramanian, National Heart and Lung Institute, PhD student
Ms Kitti Vitai, National Heart and Lung Institute, PhD student

Finals

Professor Barbara Casadei, National Heart and Lung Institute
Professor Manuel Mayr, National Heart and Lung Institute
Professor Gary Frost, Department of Metabolism, Digestion and Reproduction
Dr Blerina Ahmetaj-Shala, National Heart and Lung Institute
Dr Aygul Dagbasi, Department of Metabolism, Digestion and Reproduction
Mr Kieran Gill, Medical Student Newcastle University
Ms Shruti Rajendra, Imperial College Faculty of Medicine undergraduate
Mr Gulled Bulhan, Imperial College Faculty of Medicine undergraduate
Ms Kitti Vitai, National Heart and Lung Institute, PhD student
Ms Aimee Eckert, BHF Research Advisor
Ms Margaret Wright, BRC Community Partner

Lung prize

Short-listing

Professor Miriam F. Moffatt, National Heart and Lung Institute
Professor James Pease, National Heart and Lung Institute
Professor Sejal Saglani, National Heart and Lung Institute
Professor Mo Shamji, National Heart and Lung Institute
Dr Katharine Lodge, National Heart and Lung Institute
Dr Jorge Bernardino de la Serna, National Heart and Lung Institute
Dr Dominic Hughes, National Heart and Lung Institute
Dr Ryan Thwaites, National Heart and Lung Institute
Dr Luke Allsopp, National Heart and Lung Institute
Dr Régis Joulia, National Heart and Lung Institute

Dr Eleanor Quek, National Heart and Lung Institute
Dr Stephanie Ascough, Department of Infectious Disease
Dr Joy Nakawesi, National Heart and Lung Institute
Dr Claudia Efstathiou, National Heart and Lung Institute
Ms Ellen Kong, National Heart and Lung Institute
Ms Ciara Campbell, National Heart and Lung Institute, PhD student
Mr Will Traves, National Heart and Lung Institute, PhD Student
Ms Dimple Zope, National Heart and Lung Institute, PhD Student
Dr Rebecca Speakman, Imperial Outreach

Finals

Professor James Pease, National Heart and Lung Institute
Professor Wisia Wedzicha, National Heart and Lung Institute
Dr Luke Allsopp, National Heart and Lung Institute
Dr Dominic Hughes, National Heart and Lung Institute
Dr Régis Joulia, National Heart and Lung Institute
Dr Stephanie Ascough, Department of Infectious Disease
Dr Franz Puttur, National Heart and Lung Institute
Ms Ciara Campbell, National Heart and Lung Institute, PhD student
Mr Matthew Qurku, Imperial College Faculty of Medicine undergraduate
Ms Kindha McLaren, Imperial College Faculty of Medicine undergraduate
Ms Iqra Dafedar, Imperial College Faculty of Medicine undergraduate
Dr Rebecca Speakman, Imperial Outreach
Ms Emi Johnson, BRC Community Partner

RAIRDA prize

Short-listing

Professor Allan Lawrie, National Heart and Lung Institute
Professor Chris Denton, School of Medicine, UCL
Professor Marina Botto, Department of Immunology and Inflammation
Professor Matthew Pickering, Department of Immunology and Inflammation
Professor Charles Pusey, Department of Immunology and Inflammation
Professor Peter Lanyon, University of Nottingham
Dr Steve McAdoo, Department of Immunology and Inflammation
Dr Taryn Youngstein, National Heart and Lung Institute
Dr Maria Prendecki, Department of Immunology and Inflammation
Dr Charis Pericleous, National Heart and Lung Institute
Dr Rob Maughan, Department of Immunology and Inflammation
Dr Andrew Porter, National Heart and Lung Institute
Dr Harold Wilson-Morkeh, Department of Immunology and Inflammation
Dr Kavita Gulati, Department of Immunology and Inflammation
Dr Jessica Fisher, Alder Hey Hospital
Dr Daniela Pirri, Department of Metabolism, Digestion and Reproduction
Professor Maresa Carulli, NHS Consultant, Imperial Trust

Finals

Professor Allan Lawrie, National Heart and Lung Institute
Professor Matthew Pickering, Department of Immunology and Inflammation
Professor Charles Pusey, Department of Immunology and Inflammation
Dr Taryn Youngstein, National Heart and Lung Institute
Mr Subee Jeyasangar, Imperial College Faculty of Medicine undergraduate
Ms Hani Patel, Imperial College Faculty of Medicine undergraduate
Ms Meeran Hamawandi, Imperial College Faculty of Medicine undergraduate
Ms Caroline Olshewsky, Chief Executive Officer at Lupus UK
Ms Zoi Anastasa, Director of Operations at Vasculitis UK

Ms Sue Farrington, Co-Chair at RAIRDA, and Chief Executive at SRUK
Ms Pat Wolstenholme, Trustee and Patient Representative at Sjögren's UK
Ms Claudia Miron, BRC Community Partner

Cancer prize

Short-listing

Professor Deborah Ashby, Dean of Imperial Faculty of Medicine
Dr Alison McGregor, Imperial Faculty of Medicine
Dr Adam Sharp, Institute of Cancer Research
Dr Sylvain Ladame, Department of Bioengineering
Dr Charlotte Bevan, Department of Surgery and Cancer,
Dr Margaret Coffey, Department of Surgery and Cancer,
Dr Gemma Clunie, School of Public Health,
Dr David Mummery, School of Public Health,
Dr Rhea Harewood, Department of Surgery and Cancer,
Dr George West, CRUK Convergence Science Centre
Dr Patrick Kierkegaard, CRUK Convergence Science Centre
Dr Bowen Su, CRUK Convergence Science Centre
Ms Isla Leslie, CRUK Convergence Science Centre, PhD Student
Ms Germaine Chia, CRUK Convergence Science Centre, PhD Student
Mr Brian Cunningham, CRUK Convergence Science Centre, PhD Student
Mr Saverio Charalambous, CRUK Convergence Science Centre, PhD Student
Ms Sadiya Quazi, CRUK Convergence Science Centre, PhD Student
Ms Clare Gibson, CRUK Convergence Science Centre, PhD Student
Mr Killian O'Kane, CRUK Convergence Science Centre, PhD Student
Ms Maxime Giot, CRUK Convergence Science Centre, PhD Student
Mr Yarden Toiber Kent CRUK Convergence Science Centre, PhD Student
Mr Julian Boecker, CRUK Convergence Science Centre, PhD Student

Finals

Professor Deborah Ashby, Dean of Imperial Faculty of Medicine
Dr Charlotte Bevan, Department of Surgery and Cancer,
Dr Ehsan Ghorani, Imperial NHS Trust
Dr Margaret Coffey, Department of Surgery and Cancer,
Mr Simone Fratta, Cancer Research UK
Ms Germaine Chia, ICR Cancer Convergence Centre, PhD Student
Ms Isla Leslie, ICR Cancer Convergence Centre, PhD Student
Mr Ishir Sharma, Imperial College Faculty of Medicine undergraduate
Ms Devangi Vyas, Imperial College Faculty of Medicine undergraduate
Mr Haider Nazerali, Imperial College Faculty of Medicine undergraduate
Ms Almona Choudhury, Patient Representative
Ms Sophie Peet, CRUK Convergence Science Centre

Global Health prize

Short-listing

Professor Jonathan Weber, Department of Infectious Disease
Professor Ramzi Khamis, National Heart and Lung Institute
Professor Peter Howitt, Centre for Health Policy and Climate Cares Centre
Professor Arti Maini, School of Public Health
Professor Franco Sassi, Business School
Dr Ravi Parekh, School of Public Health
Dr Richard Pinder, School of Public Health
Dr Neil Jennings, The Grantham Institute for Climate Change

Dr Ray Wang, School of Public Health
Dr Neha Ahuja, School of Public Health
Dr Mirabelle Muûls, Business School
Dr Marisa Miraldo, Business School
Dr Shawn Lee, School of Public Health
Dr Luigi Mosca, Business School
Ms Abi Riley, Imperial College Faculty of Medicine undergraduate
Ms Chelsea Stubbs, Imperial College Faculty of Medicine undergraduate
Mr Aden Ho, Imperial College Faculty of Medicine undergraduate
Ms Hollie Meyers, Imperial College Faculty of Medicine undergraduate
Ms Yasmeen Syed, Imperial College Faculty of Medicine undergraduate
Ms Arushi Wasan, Imperial College Business School postgraduate
Ms Cameron Suttie, Imperial College Business School postgraduate
Ms Wiktoria Brdej, Cambridge University Student

Finals

Professor Jonathan Weber, Department of Infectious Disease
Professor Amir Sam, Imperial College School of Medicine
Professor Arti Maini, School of Public Health
Dr Ray Wang, School of Public Health
Ms Amna Rida, Imperial College Faculty of Medicine undergraduate
Ms Srisneha Mettu, Imperial College Faculty of Medicine undergraduate
Ms Cate Goldwater Breheny, Imperial College Faculty of Medicine undergraduate
Ms Sang-Ryun Kim, Imperial College Faculty of Medicine undergraduate
Ms Wiktoria Brdej, Cambridge University Student
Ms Aimee Taylor, BRC Community Partner

