

Chairmen's Report & Evaluation 2017



26th April 2017

science4 Transformation

showcasing exciting careers in science



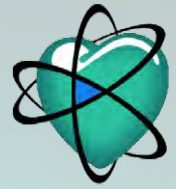
#science4u2017

The 14th Annual Schools Science Conference
Presented by science4u.info
in collaboration with University of Westminster

Science for Transformation

The 14th Annual Schools Science Conference | Presented by science4u.info in collaboration with University of Westminster | 26th April 2017





Chairmen's report

On the morning of 26 April almost 100 volunteers prepared to describe to 295 secondary school students the role of science in the world at the 14th Annual Schools Science Conference, **Science for Transformation**.

Registration was swiftly followed by some brief housekeeping guidelines and then students went straight into their programme sessions.

The theme, **Science for Transformation**, was chosen as there is a real emergence of new therapies that are making national headlines (eg genetically modified immune cells to treat cancers) that are transforming our approach to patient treatment.

We were delighted this year to have our keynote speaker, Professor Clare Elwell, Professor of Medical Physics, Department of Medical Physics and Biomedical Engineering, University College London. Her talk, **Shedding Light on the Human Brain**, showed how cutting edge innovations in physics and engineering are transforming how, when and where we can image the human brain and was a fascinating and inspirational talk.

There were 5 exciting sessions for the students:

Transforming Pathology

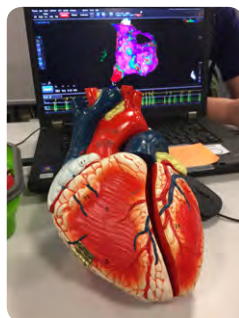
Presented by the Royal College of Pathology

Did you know that pathology is involved in over 70% of diagnoses in healthcare? In this practical workshop **The Royal College of Pathologists** explained about the current innovations transforming pathology and how pathologists are involved in the prevention, diagnosis and treatment of disease.

Science in Practice - 1 & 2

Sponsored by the Society for Applied Microbiology

Over 40 hands-on interactive displays showcased what healthcare and other scientists do. This gave the students a chance to meet scientists, discover what they do and why, as well as trying some of the tasks for themselves. In this informal and fun session, the students were able to see the practical application of what they have been learning in the school classroom and gain an insight into the different career paths available to them. The activities ranged from blood transfusion, microbiology, transplantation, radiotherapy, resuscitation, physiotherapy, perfusion, immunology, histology, haematology, audiology, cardiology, genetics, pharmacy, chemistry to nuclear medicine and much more. There were opportunities to win prizes for participation. The students asked lots of searching questions, including what the scientists enjoyed about their jobs and what qualifications were needed.





The Science of You

Presented by University of Westminster

The Science of You had a number of interactive stands showing how each of us is a product of the science that is constantly occurring within and around us. Increasing our understanding of nutrition, health, materials, biology and medicine to help us know more about ourselves.

Science for Experimentation

Supported by The Association for Clinical Biochemistry & Laboratory Medicine

Supported by **The Association for Clinical Biochemistry & Laboratory Medicine**. This was an opportunity for the students to present research of their own in order to win the Trophy for the **Don Henderson Award**. The standard of research and presentation was excellent, and the judges had a difficult time in determining the winners, however, **Ellen Wilkinson School for Girls** won.

Teachers' Workshop - Youth Grand Challenges

Provided by the British Science Association

Drawing on the **BSA's** 30 years' experience in running **CREST Awards**, the BSA shared best practice for running inspiring and challenging science projects. Teachers tried out hands-on stimulus activities from the brand new **Youth Grand Challenges** and reflected on ideas for open-ended investigations these could lead to.

Feedback

Feedback has been very positive. All teachers found the event was of benefit to their students. Most importantly the students had a great educational time with comments including *'Magnificent'* and *'Unique'* as well as praise for the speakers and volunteers. Some students wrote –

- *'All of the people were very welcoming and all the stalls were extremely interesting'*
- *'Today was great; wish I could do again! Learnt lots!'*
- *'It was very interesting event; I realise there are many careers in the field of science'*

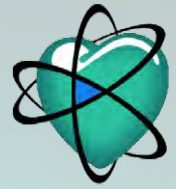
Of the students who completed the evaluation after the event, when asked whether they would recommend this event to their friends 99% said *'Yes'*.

The Organising Team are very grateful to all of our presenters for giving their time and for their inspirational sessions. We are also indebted to the **University of Westminster** and our many sponsors.

Kimberly Gilmour & Stuart Adams

Kimberly Gilmour & Stuart Adams
Chairmen of the Organising Committee





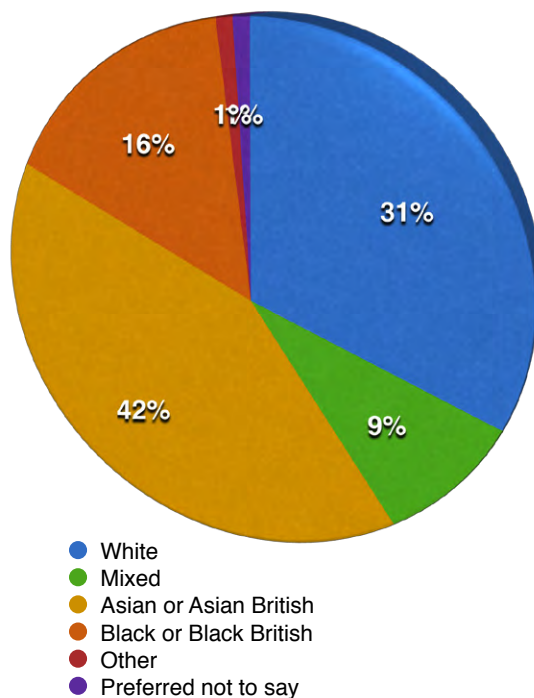
Evaluation Report

The 14th Annual Schools Science Conference - **Science for Transformation** - was held at the University of Westminster on the 26th April, 2017. This is a conversational event aiming to bring scientists and students together to discuss science and science careers. A total of 295 students in years 9 to 11 from secondary schools and colleges across London attended. They were accompanied by their teachers and teaching assistants. The event was organised by an enthusiastic group of volunteers consisting of scientists from various London hospitals, colleges and associated organisations.

Approximately 100 volunteer scientists mainly from the healthcare sector were recruited to showcase their professions. Students from the **Public Health England** acted as hosts conducting the students around the different activities. Professor Clare Elwell, Professor of Medical Physics, Department of Medical Physics and Biomedical Engineering, University College London, kindly gave the keynote speech. The students, teachers and volunteers were asked to complete an evaluation form and this is the summary of the responses.

Diversity

What is your ethnic group? - Overview

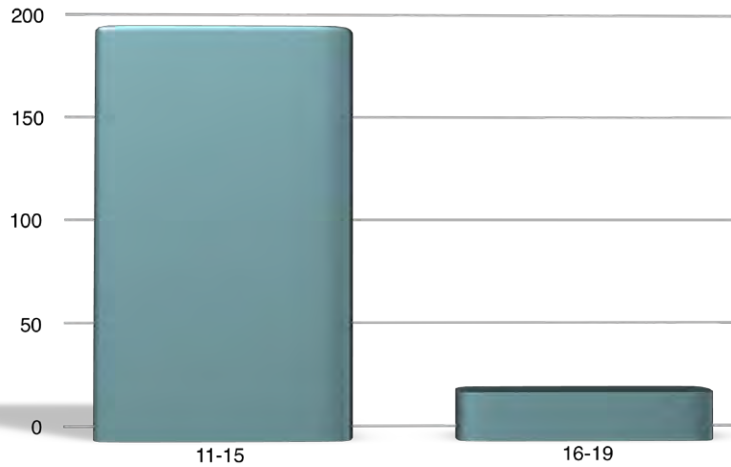


Evaluation Report



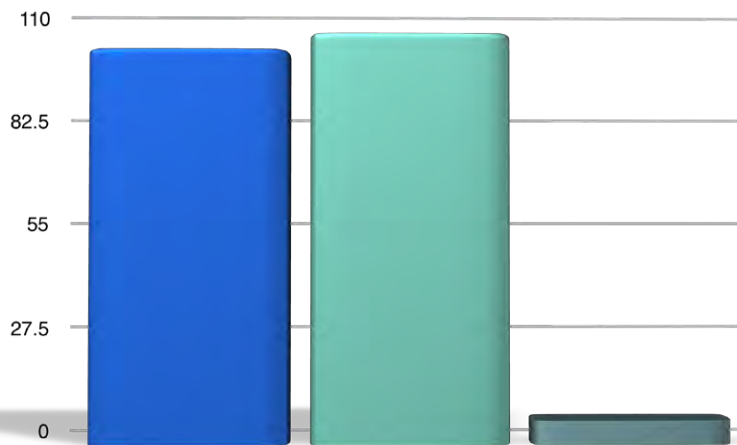


Age of Students



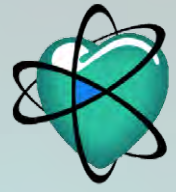
Gender

■ Male ■ Female ■ Preferred not to say

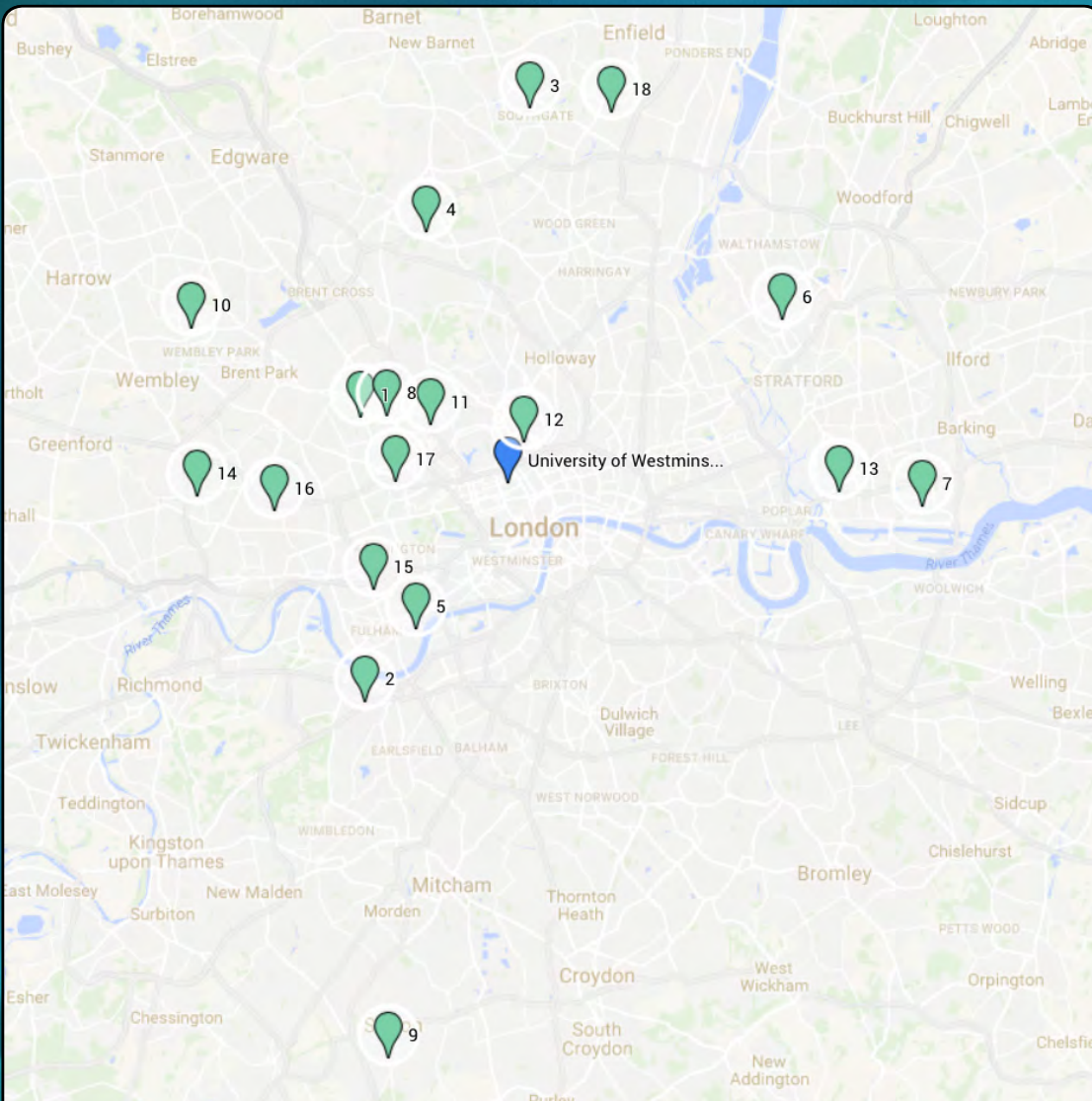


Evaluation Report





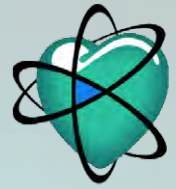
Location of schools attending



Attendees

- | | | | |
|---|-------------------------------|----|--------------------------------------|
| 1 | Al-Sadiq and Al-Zahra Schools | 9 | Overton Grange School |
| 2 | Ashcroft Technology Academy | 10 | Preston Manor School |
| 3 | Barnet and Southgate College | 11 | Quintin Kynastan Academy |
| 4 | Bishop Douglas School | 12 | Regent High School |
| 5 | Chelsea Academy | 13 | Rokeby School |
| 6 | George Mitchell School | 14 | The Ellen Wilkinson School for Girls |
| 7 | Kingsford Community School | 15 | The Fulham Boys School |
| 8 | Marylebone Boys' School | 16 | The King Fahad Academy |
| | | 17 | Westminster Academy |
| | | 18 | Winchmore School |



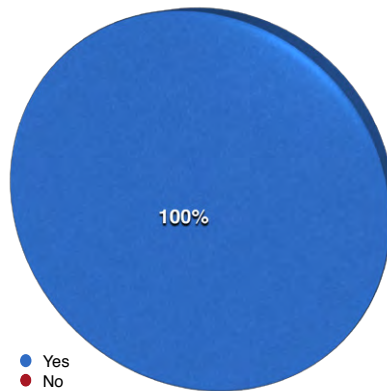


Teachers' comments

What was the most benefit to you and your students?

- All of them - especially the quizzes
- CPD / Group sessions
- Hands-on activities
- Interaction with real scientists
- Lots of interesting and innovative information
- Meeting and talking to everyone
- Meeting professionals
- Meeting professionals
- Real feel of what students learn (hands-on activities)
- Science of You
- Seeing application of science and careers
- Stalls from professional bodies
- Students' hands-on workshops
- Talking to scientists - interaction
- Workshops
- Workshops very engaging
- Workshops/networking

Was this event useful to you and your students?



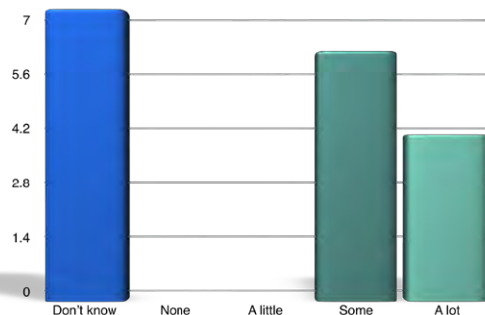
What was of least benefit to you and your students?

- Presentations went on too long
- Science for Experimentation - too long

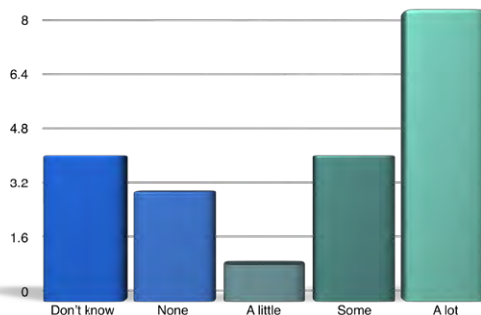
What issues have you found that have made it difficult to bring your students along to this event?

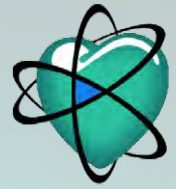
- We arrived late due to traffic (Westminster Academy)
- Nothing major other than travelling on the Underground
- Cover issues: cost for larger groups ratio with teachers
- Students carry a lot of baggage
- Early start time: school party travel tickets only valid from 09:30

If your school has attended one of our previous events what impact did it have on those students' subject choices?



If your school has attended one of our previous events what impact did it have on those students' career aspirations?





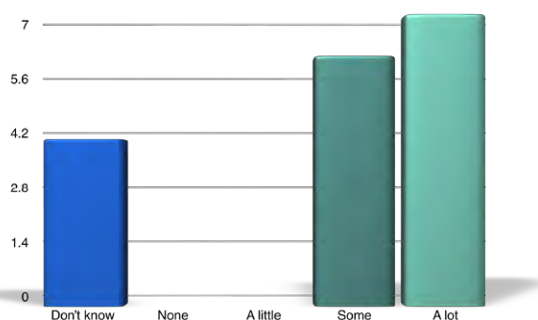
How could we improve this event for you and your students?

- Have a clear plan of the day to avoid confusion
- Have a cloakroom for bags/coats
- Incorporating new developments in scientific and technological fields
- It was great!
- Less time on lunch; more time on the fantastic activities
- Longer in each room - 1h20m is a long time in science4 Experimentation
- Longer sessions so students can spend more time on each station
- More hands-on activities with a corresponding information sheet or website link for students to refer back to
- More interactions
- Restructure afternoon - too much sitting
- School visits to allow more students to know about this
- Sentence to describe each activity programme for clarity
- Shorter day - students' interest started to fade towards the end as they were really tired
- Shorter event
- Teachers need to quieten students during presentations
- Winner per group - not overall

Is there anything the organisers could do to make it easier to bring your students along to this event?

- Not really
- No
- No
- Cover cost
- Cloakroom
- Later start time: school party travel tickets only valid from 09:30

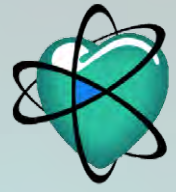
If your school has attended one of our previous events what impact did it have on those students' motivation to study science?



Do you know of any instances where students attending one of our previous events have chosen a career pathway into science?

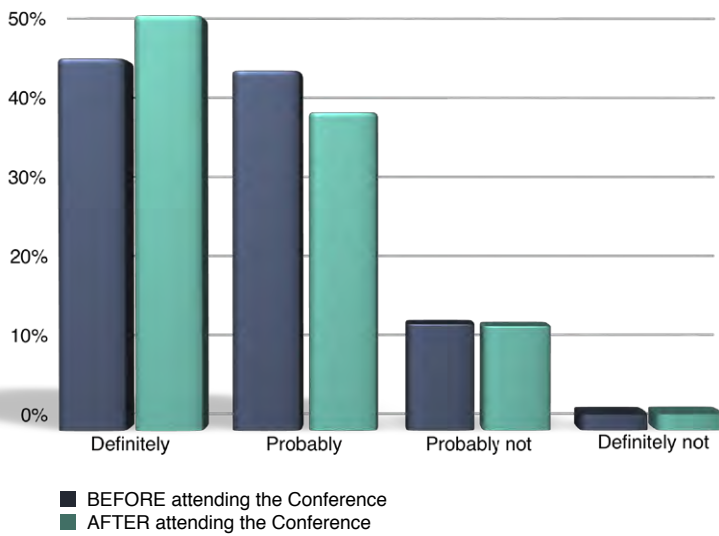
- At university studying science
- Biomedical science/ radiography
- Gone to do applied science, also to study IBDP in sciences
- Lots of IGCSE students chose a career in science (in last two years)





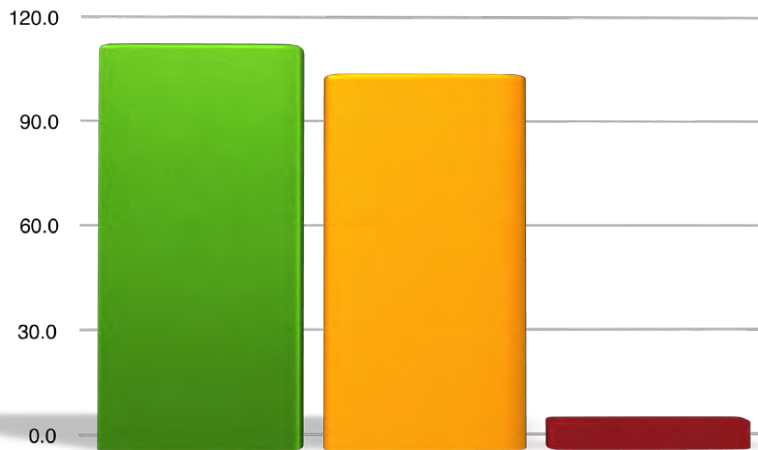
Students' Comments

Had you considered a career in science?



How I felt about Science

■ I loved science
 ■ I was interested
 ■ Science was not for me

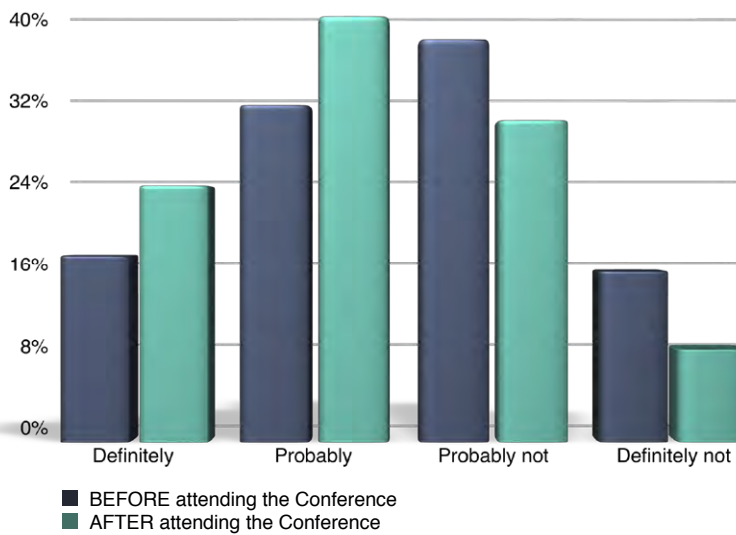


Evaluation Report

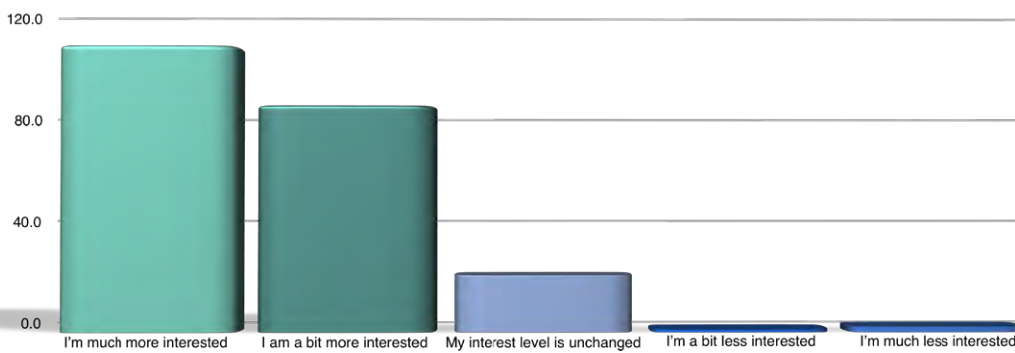




Had you considered a career in healthcare within the NHS?

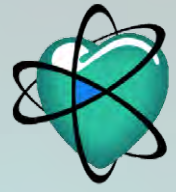


How has this event affected your interest in science?

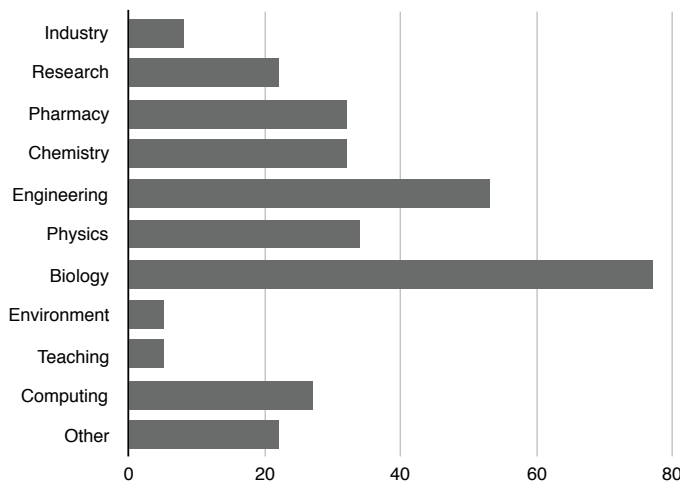


Evaluation Report

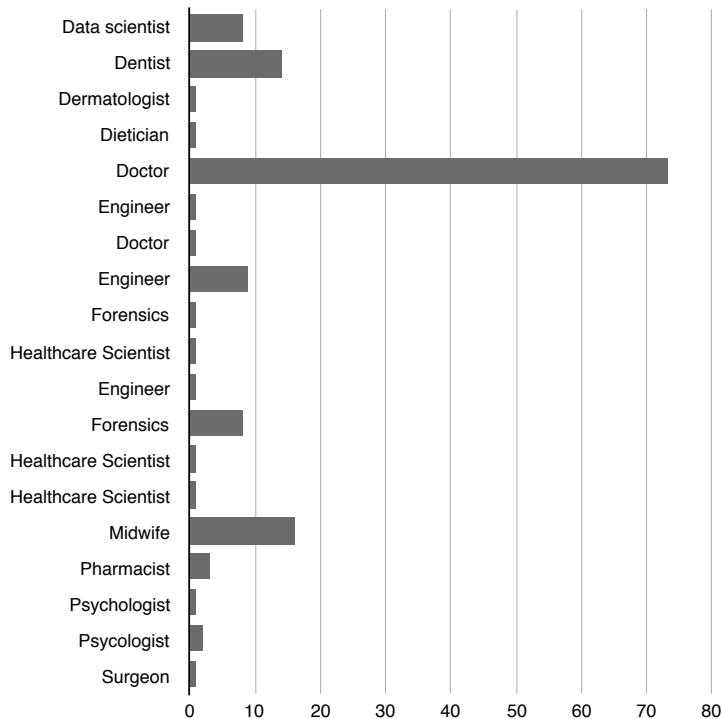




BEFORE ATTENDING:
 If you answered definitely or probably, in what area?



BEFORE ATTENDING:
 If you answered definitely or probably, what as?

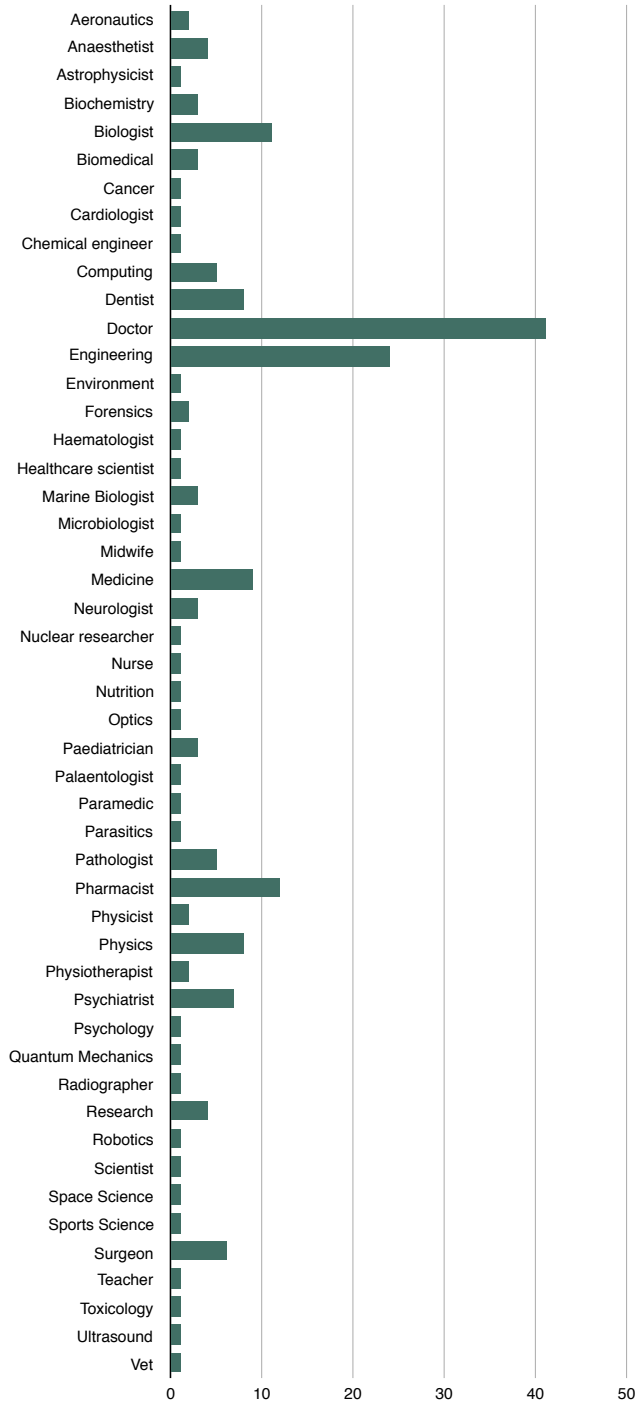


Evaluation Report



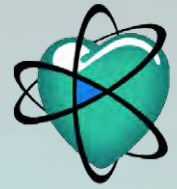


AFTER ATTENDING: Which science careers would you consider taking up in the future?

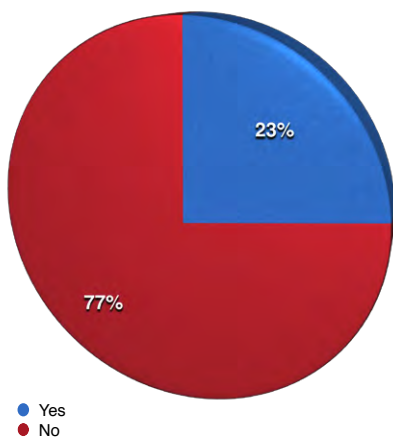


Evaluation Report

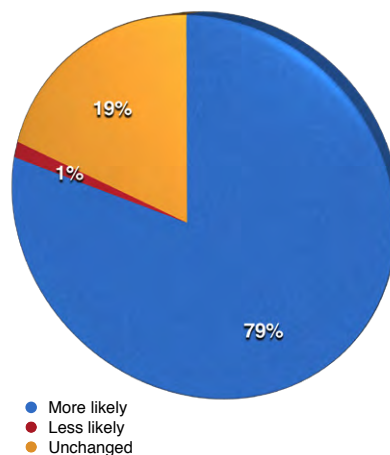




Were you aware that there are healthcare science careers that do not require a university degree?



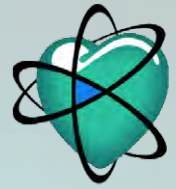
Are you more likely or less likely to consider going to University?



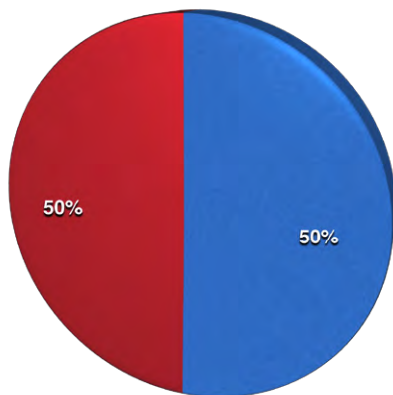
Are there any comments you would like to make about today's event?

- All of the people were very welcoming and all the stalls were extremely interesting
- And amazing opportunity; enjoyed it greatly
- Awesome! I loved it
- Engaging and unique
- Enjoy this very much and there were many interesting activities which helped me gain more knowledge about the NHS
- Experiments were amazing!
- Good guides to help us along!
- Good opportunity to meet new people and learn more
- Good, well organised, learnt a lot
- Great day - I learned some amazing things
- Great range of sciences and presentations
- I absolutely enjoyed it
- I enjoyed it and I've learnt a lot
- I enjoyed it and would consider returning
- I found it very interesting
- I had a lot of fun today - I enjoyed it
- I had fun and it was informative
- I had so much fun - I understand a lot more things - Loved the free stuff
- I really enjoyed it - I learnt a lot and it was also fun
- I really enjoyed the event especially the psychology stalls
- I really enjoyed today's event got to learn about things in new way
- I really liked how interactive this event was
- I think it was well planned and I learnt a lot more than I expected
- Include things other than medicine, such as more engineering
- It helped me a lot
- It was a very informative event
- It was amazing - I had fun and I wish I could do it again
- It was amazing - I learned so many new things
- It was an amazing experience - I had a lot of fun
- It was awesome!
- It was exceedingly interesting, motivating and inspiring
- It was fun and interesting and I learn new helpful things
- It was good fun!
- It was good to learn more and expand my horizons PS the freebies were great, now I do not need to buy anything until Uni
- It was great - keep everything on same
- It was great - lots of information given
- It was great as I learnt a lot and it was fun



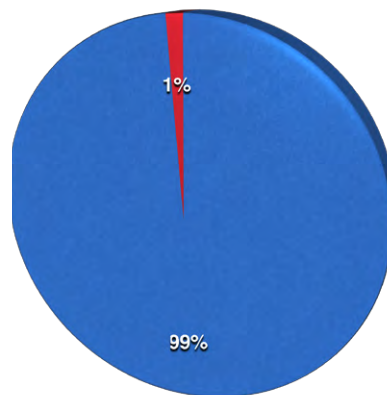


Has this event changed/influenced your subject choices?



● Yes
 ● No

Would you recommend this event to your friends?

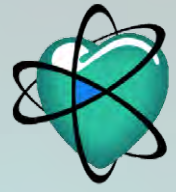


● Yes
 ● No

- It was interesting and good opportunity to meet different people
- It was interesting and I learned a lot of things I didn't know before
- It was nice watching presentations and learning new things
- It was perfect
- It was really helpful in choosing my future course
- It was really magnificent!
- It was very engaging and very interesting with all of the activities to participate in
- It was very enjoyable and interactive
- It was very good - I like Westminster University; it's good to find a small mosque in here
- It was very interesting and informative
- It was very interesting and very fun competing against other schools
- It was very interesting and very interactive
- It was very interesting event; I realise there are many careers in the field of science
- It was well organised; staff were really nice
- It was wonderful
- It's an amazing experience - thank you!
- Longer break
- More interactivity
- More time in each class... and more classes
- More time to present
- Much fun - exciting and interesting
- Presentations can be quite daunting in a hall full of strangers
- Really fun and engaging
- Really fun with good stalls and events
- Really helpful and had a wonderful time
- Thank you - I have learned a lot
- Thank you - it was good
- Thank you - it was so amazing
- Thank you for this event and for showing me all these opportunities in science
- Thank you! I learnt a lot from today
- Thanks for hosting it
- The activities were very enjoyable and informative - thank you!
- The activity section was a great way to learn
- There should be more geology
- This event was interesting for me as I learned new things
- Today was fantastic as I gained more knowledge in science
- Today was great; wish I could do again! Learnt lots!
- Very amazing! Loved it!
- Very good - thanks for having me
- Very helpful in showing me the wide range of science
- Very inspiring and informative
- Very interesting!

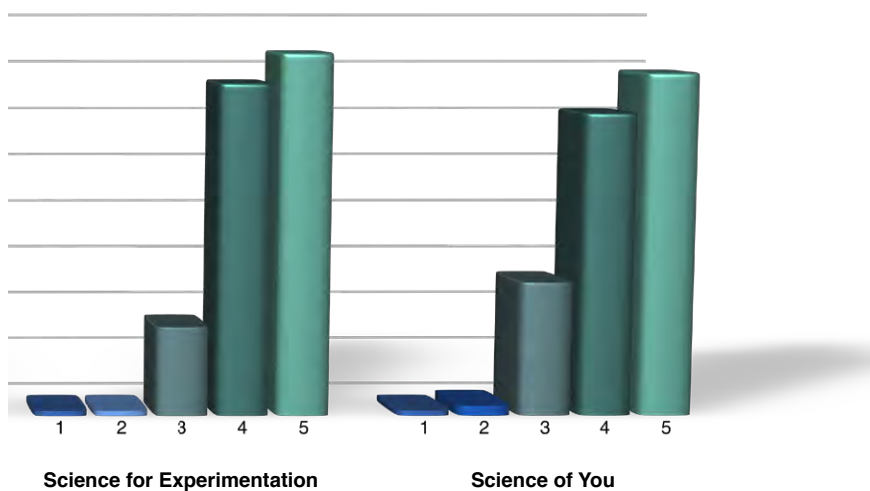
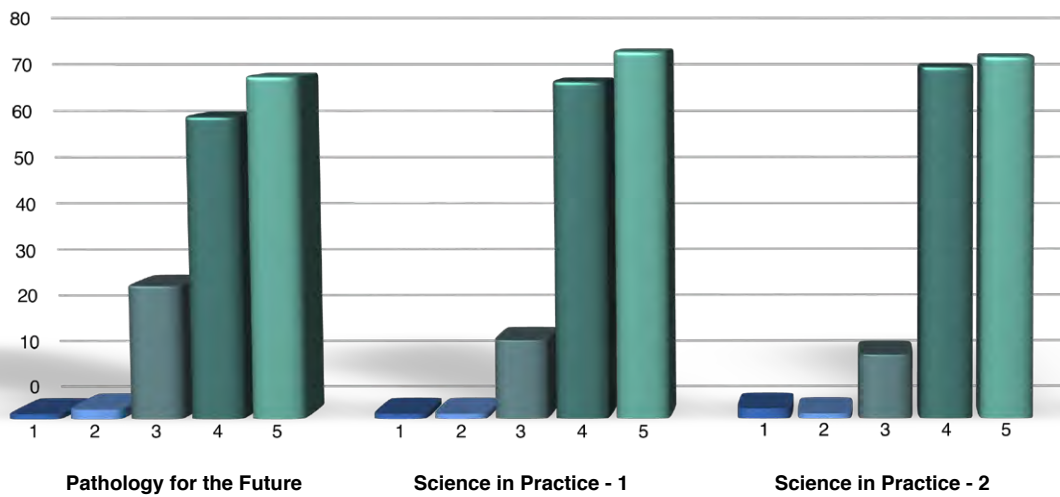
Evaluation Report





The Sessions

Students How would you rate the 5 activities?



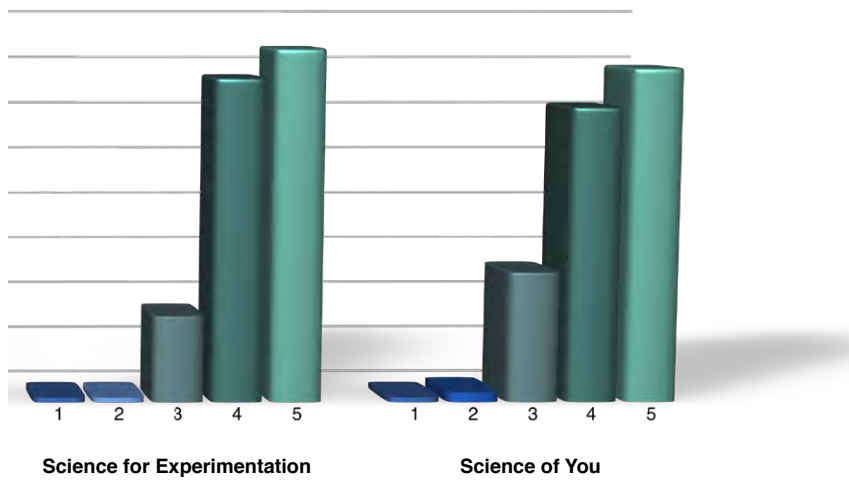
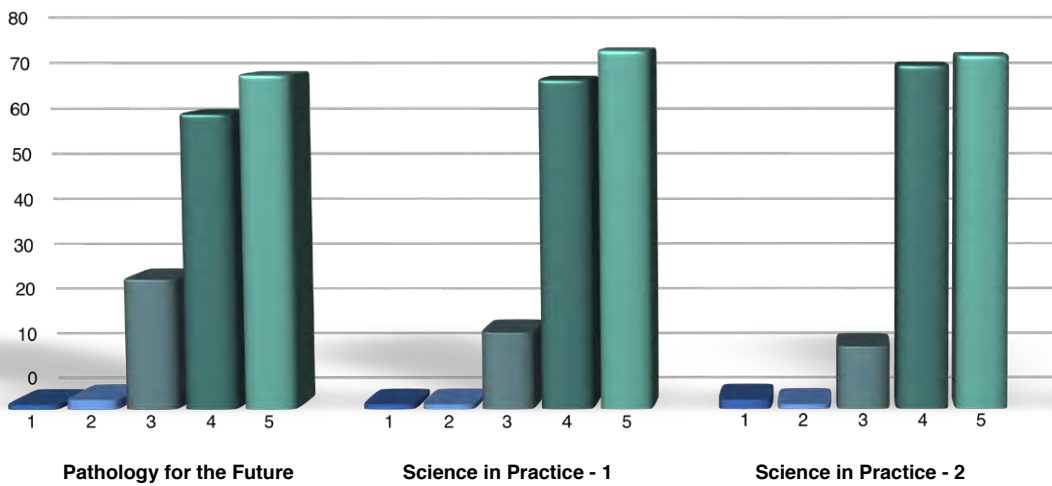
1 Boring
 5 Exciting

Evaluation Report





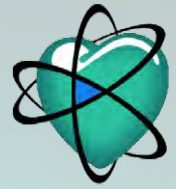
Teachers How would you rate the 5 activities?



1 Boring
 5 Exciting

Evaluation Report





Volunteers' comments

Why was the conference useful to you/your organisation?

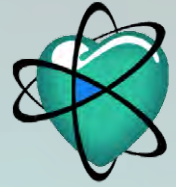
- Opportunity to show and discuss job role with potential future physiology students
- Some of the students were interested in our field so that was easy to show them or explain to them what we do
- Publicity - publicised Queen Mary University degree programmes
- Able to engage students in learning about CPR/resuscitation and general London Ambulance Service information
- It has been particularly interesting to have met the BMS and with BSc students seeing how they are progressing in their professions already
- Hosting the event and introducing students and teachers to our faculties
- Educated students about sleep and respiratory physiology and explained potential career pathways that were previously unknown to them
- Yes, encouraged us to think about how we describe ourselves, our roles and our place of work
- We are always keen to increase general knowledge in regard to radiotherapy and radiography - also opportunity to possibly create future professionals
- We have introduced GSK and who we are to the students. And, helped point them in the right direction to find all the career options available to them

What have you enjoyed about today?

- Great exhibits. The Students were very nice. The organisation and planning of the event and the support were all very good
- Interaction with students; they were great
- Love speaking to the other volunteers and seeing the equipment they use
- Meeting students that are very driven in their education and future careers; meeting other professionals
- Meeting the students - also other people and other staff
- Students were very engaged and engaging this year - appeared to have been prepped well for the event and some keen budding scientists - very well-behaved
- Talking to students about my profession and place of work
- Talking with the students, listening to their points of view, having a laugh with them
- The practical aspects of demonstrating our job

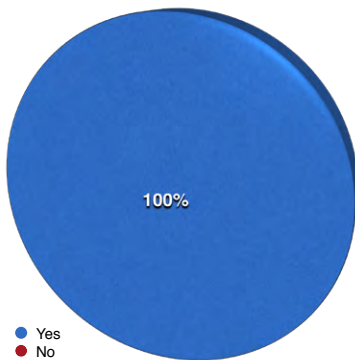
What can we do to improve the event in the future?

- A big screen to project the computer onto
- Flexible timing for groups - groups had to move on when students had just arrived at the stand
- Introduce more opportunities for other London schools to attend the event
- It went exceptionally well this year
- Make the stands easier to identify ie put a number on them; someone else stole mine before I arrived at 9:30 (which explains why I didn't get the equipment are requested)
- More food - maybe add food stands because access to halal food here is difficult
- Nothing that I can think of
- Provide more water
- Really enjoyed the event and looking forward to next year!
- This is my first year of attendance and my stand is very bare - more information on what other stands look like, particularly for new volunteers, would be very useful. Also, guidance on what is lacking at the conference that volunteers can provide would be helpful

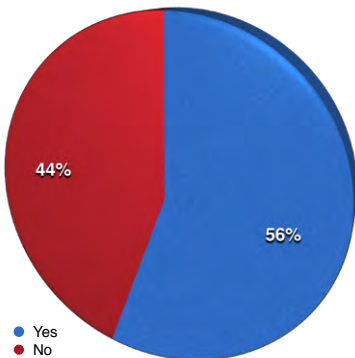


science4u.info

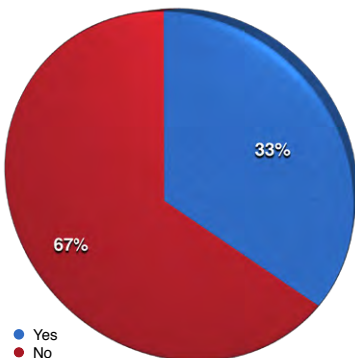
Was this event useful to you or your organisation?



Have you used the conference website?



Would you like to become a member of the Organising Group?



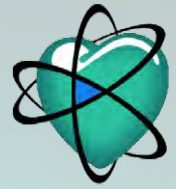
science4u.info
showcasing exciting careers in science

Organising Group 2017

- Don Henderson (Founder)**
- Kimberly Gilmour (Co-Chair)**
Great Ormond Street Hospital For Children NHS Foundation Trust
- Stuart Adams (Co-Chair)**
Great Ormond Street Hospital For Children NHS Foundation Trust
- Sue Alexander (Secretary)**
The Royal Marsden NHS Foundation Trust
- Manfred Almeida (Treasurer)**
Imperial College Healthcare NHS Trust
- Sarah Armstrong**
The Royal Marsden NHS Foundation Trust
- Mike Carter**
Public Health England
- Paul Hampson**
University of Westminster
- Theresa Hudson**
The Royal College of Pathologists
- Patrick Lees**
University of Westminster
- Ayuen Lual**
Public Health England
- Maria Rossini**
British Science Association
- Sharon Gage (Event Organiser)**
SRG Project Management

Evaluation Report





Acknowledgements & thanks

science4u is grateful to the following organisations and their staff for their kind participation and enthusiasm

- Barts Health NHS Trust
- British Science Association
- GlaxoSmithKline
- Great Ormond Street Hospital for Children NHS Foundation Trust
- Guy's and St Thomas' NHS Foundation Trust
- Institute of Biomedical Science
- Institute of Cancer Research Clinical Trials and Statistics Unit
- King's College Hospital NHS Foundation Trust
- London Ambulance Service NHS Trust
- London Metropolitan University
- London School of Hygiene & Tropical Medicine, Faculty of Infectious and Tropical Diseases
- NHS Blood and Transplant
- Plymouth Hospitals NHS Trust
- Public Health England
- Royal College of Anaesthetists
- Royal Marsden NHS Foundation Trust
- Royal Microscopical Society
- School of Engineering and Materials Science, Queen Mary University of London
- St George's University Hospitals NHS Foundation Trust
- The Association for Clinical Biochemistry and Laboratory Medicine
- The Royal College of Pathologists
- University College London
- University of Westminster

Continuing Professional Development

For our volunteers; this event is CPD credited with the Institute of Biomedical Science scheme and certificates are available



Science for Transformation was made possible thanks to the very generous support of our key sponsors

Funding

CA Redfern
Charitable Foundation

Philip King
Charitable Trust

Gold



The Westminster Almshouses
Foundation

Silver

Thanks also to the following organisations for their generous support



Supporters

Acknowledgements

