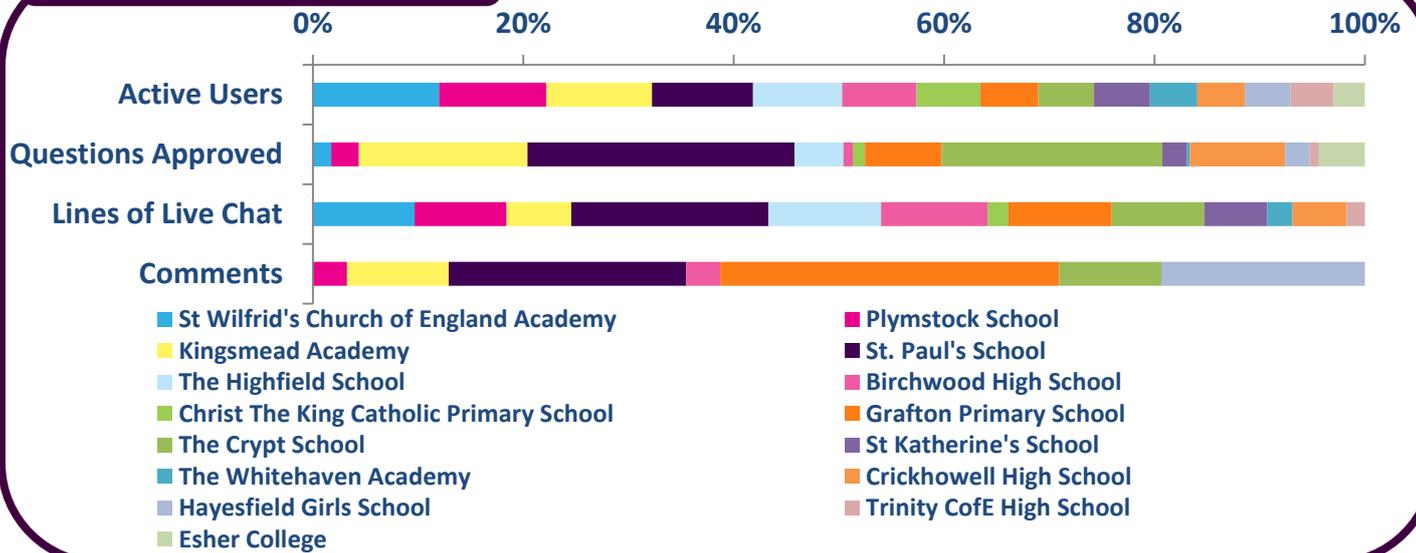




November 2015

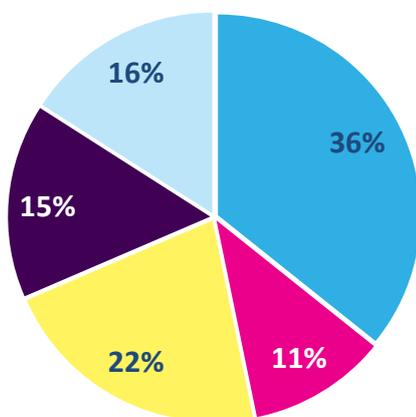
The Heart Zone was a themed zone funded by the Wellcome Trust, and Michael and Loan do research related to the Trust. The scientists looked at areas such as the genetics of heart disease, stem cells involved in heart repair, blood vessel development, and how fat damages the heart. This was one of the busiest November zones in the live chats and also saw over 1000 questions submitted by students in ASK. The heart was the strong focus of the zone, with student's especially keen to find out about heart diseases and treatments. The scientists also talked about their research and what they get from doing their work. Cristina, in particular, engaged strongly in ASK and live chats, in which Praveen also worked hard to connect with the students.

School data at a glance

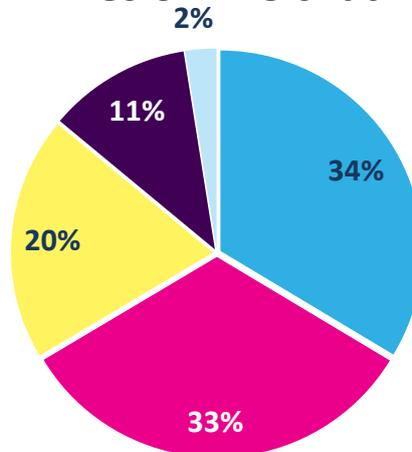


Scientist activity

Answers



Lines of Live chat



Scientist	Profile views	Position
Cristina Villa Del Campo	885	Winner
Praveen Surendran	894	2nd
Gemma Barron	1,042	3rd
Loan Nguyen	720	4th
Michael Schneider	692	5th

Key figures from the Heart Zone and the averages of the November zones

PAGE VIEWS	HEART ZONE	NOV '15 ZONES AVERAGE
Total zone	27,603	25,973
ASK page	2,019	1,881
CHAT page	3,239	3,193
VOTE page	1,793	1,761

	HEART ZONE	NOV '15 ZONES AVERAGE	IAS 2012-15 AVERAGE
Schools	15	16	9
Students logged in	599	481	353
% of students active in ASK, CHAT or VOTE	87%	90%	85%
Questions asked	1,016	956	717
Questions approved	341	352	307
Answers given	327	463	552
Comments	41	59	78
Votes	414	377	281
Live chats	20	20	14
Lines of live chat	6,652	6,083	4,827
Average lines of live chat	333	313	322

Popular topics

Many questions in the zone were focused on the theme of the heart, especially from a health perspective. Students wanted to know about the different types of heart diseases, what causes them, and how they could be prevented. Some questions asked for the scientists' personal preference for which heart disease they wanted to be cured and what the future of treatments for heart disease was

Several questions picked up on details of the scientist's research, such as the vesicles Cristina studies and inflammatory molecules in blood that Gemma is researching. There were also a number of questions about the effects of heredity and lifestyle influences, such as food or exercise on heart problems.

In both ASK and live chats the scientists were asked for their perspective on the education and the skills needed to become a scientists. The students were also interested in the personal motivations of the scientists. The students also used the opportunity to talk to scientists to ask about other biomedical topics, with a particular focus on genes and DNA which had links with Praveen, Cristina and Michael's work.



Keywords from live chats in the zone, size of the word represents its popularity

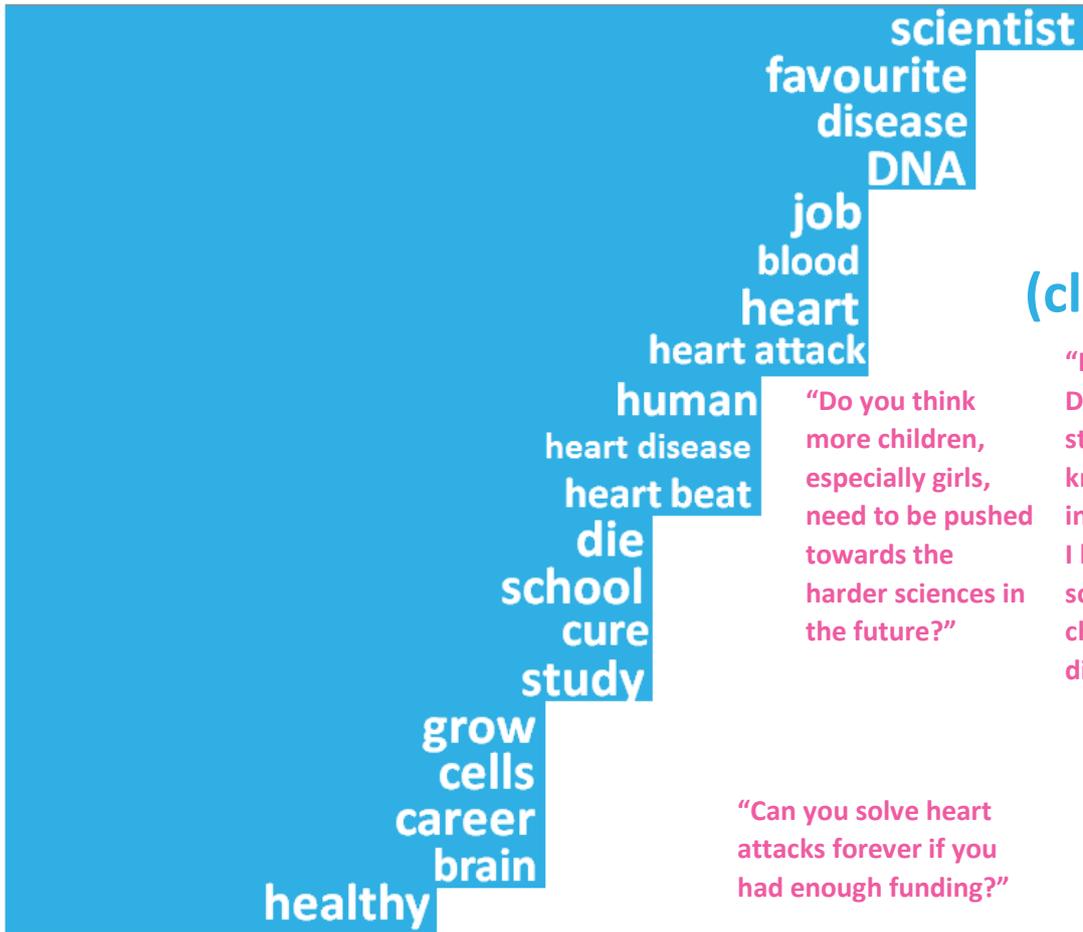


Above is the word 'heart' compared to the other words mentioned in live chats.



Keywords of questions asked in the zone, length of bar represents frequency of use

0 1 2 3 4 5 6 7 8 9 10



Example Questions (click for links)

“Do you agree with David Attenborough's statement that children's knowledge is decreasing in science? I believe that I have tried really hard in science like a lot of other children so I respectfully disagree with him.”

“Is a heart failure or anything that faults your heart something in the genes throughout the family?”

“Do you think more children, especially girls, need to be pushed towards the harder sciences in the future?”

“Can you solve heart attacks forever if you had enough funding?”

“Will they ever be able to bring back dinosaurs using DNA or similar, much like in Jurassic Park/World?”

“Will robots have any use for curing cancer?”

“Which type of blood vessel would have the most fat deposits?”

“How many atoms make up the heart?”

“How can fish regenerate their heart?”

“Where does the beating of your heart come from?”

“Is there any way you can predict if a blood clot can happen in the body?”

“How can we make our lifestyle healthier to improve our heart strength?”

“Have u found cases where changes in DNA have influenced heart disease?”

“Why are heart diseases so life threatening?”

“Aren't women protected from heart disease because of oestrogen?”

“What do you do if you go a long time without making a new discovery?”

Examples of good engagement

The live chats in this zone were often engaging, and the scientists always made the effort to answer specific technical questions, as well as personal questions, in a thoughtful and informative way:

“What inspired you to become a scientist”– **Student**

“I became a scientist because I thought I could cure the world of diseases. I thought that if I worked hard and learned what makes us ill, I can help make us better. But it is very hard. What we know is very little compared to what we don't know. But what I have learned will hopefully contribute to helping doctors of the future to make us more resistant and stronger to disease.” – **Loan, scientist**

“What changes in DNA can influence risk of heart disease” – **Student**

“Great question. Not all changes in DNA will increase the risk for a certain disease. There are some changes that are beneficial. In general, changes in letters of DNA, some fragments of DNA missing (deletions) etc can be associated with diseases” – **Praveen, scientist**

“What qualifications did you have to complete to get your job” – **Student**

“We shouldn't work on qualification for a certain job. May be focus on the skills that you need to do the job. For example, you don't need a PhD to do my type of job. Masters in Statistics with some experience in programming will help. Hence focus on what's of interest to you, identify the skills and excel in those.” – **Praveen, scientist**

Scientist winner: Cristina Villa Del Campo

Cristina's plans for the prize money: *“I'd invite students to the lab to spend a day with me doing experiments, feeding beating cells and using microscopes to see them. I am also organising a stall in Oxford's science fair and I hope I can use some of the money for that as well. All in all I am very excited for this and on top of these projects I have also become a STEM ambassador so hopefully I can contribute to that as well”* Read Cristina's [thank you message](#).



Student winner: jflynn

For great engagement during the event, this student will receive a gift voucher and a certificate.

Feedback

We're still collecting feedback from teachers, students and scientists but here are a few of the comments made during the event...

“Thank you for the great answers. Pupils are buzzing - they think you are both great” –
Teacher

“I am going to miss the chats and the questions! Such a good platform.” – Cristina, scientist

“It has been a great experience” – Praveen, scientist