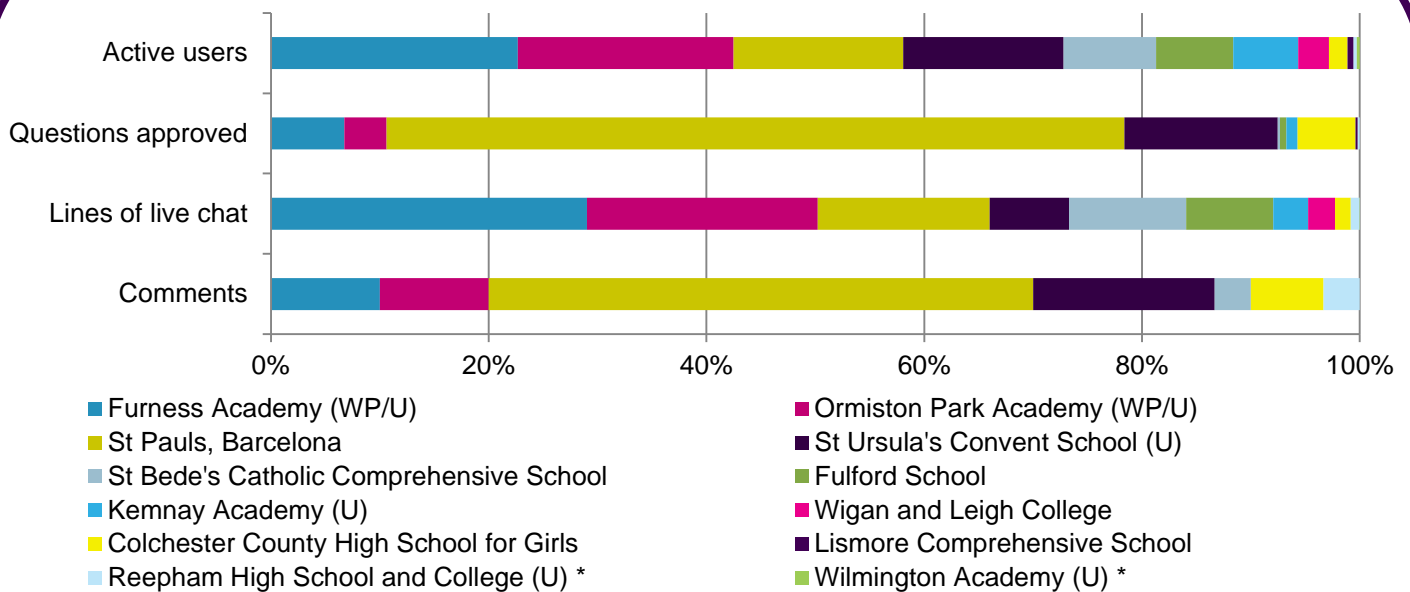


March 2018

The Immune System Zone was supported by Wellcome. Sian is researching new medicines through microbial fermentation, Max (the winner of this zone) is a PhD student using gene editing to understand how white blood cells cause cancer and Lizzie works with biotech companies to help them communicate information about diseases to doctors. Francis is a post-doctoral researcher finding out how we can use a patient's immune cells to fight cancer, Ben works in an immunology lab finding new ways to help people with arthritis and Ashlea is a PhD student studying how the immune system works and how it can go wrong.

This zone had the highest number of questions asked (897) and approved (489) out of all the zones in March's event, with students engaging well with the topic and wanting to find out more about the scientists' work. There was an even mix of questions about science topics, how science works and careers.

School data at a glance

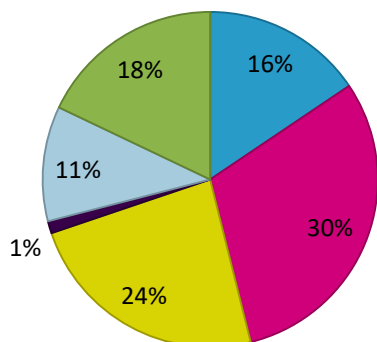


We want to increase the participation of under-represented groups going into STEM careers. Find out what we mean by our under-served (U) and WP schools (WP), and how you can support us in working with more of these at about.imascientist.org.uk/under-served-and-wp/

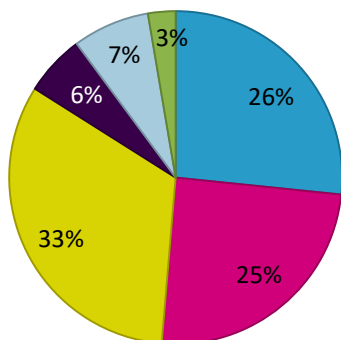
* Students were able to join other zones than their own to join open live chats and ASK questions. Students at these schools joined from other zones in the March event.

Scientist activity

Answers



Lines of chat



SCIENTIST	PROFILE VIEWS	POSITION
Max Jamilly	944	Winner
Ben Mulhearn	829	2nd
Francis Man	755	3rd
Ashlea Rowley	677	4th
Sian Richardson	694	5th
Elizabeth Wright	515	6th

Key figures from the Immune System Zone and the averages of the March zones

PAGE VIEWS	IMMUNE SYSTEM ZONE	MAR '18 ZONES AVERAGE
Total zone	24,047	19,571
ASK page	3,144	1,625
CHAT page	1,876	1,691
VOTE page	2,038	1,422

	IMMUNE SYSTEM ZONE	MAR '18 ZONES AVERAGE	IAE 2012-18 AVERAGE
Schools	12	14	11
Students logged in	409	437	387
% of students active in ASK, CHAT or VOTE	86%	89%	86%
Questions asked	897	529	697
Questions approved	489	258	303
Answers given	848	469	541
Comments	42	62	75
Votes	408	348	304
Live chats	17	19	16
Lines of live chat	5,825	7,268	5,472
Average lines per live chat	343	388	354

Popular topics

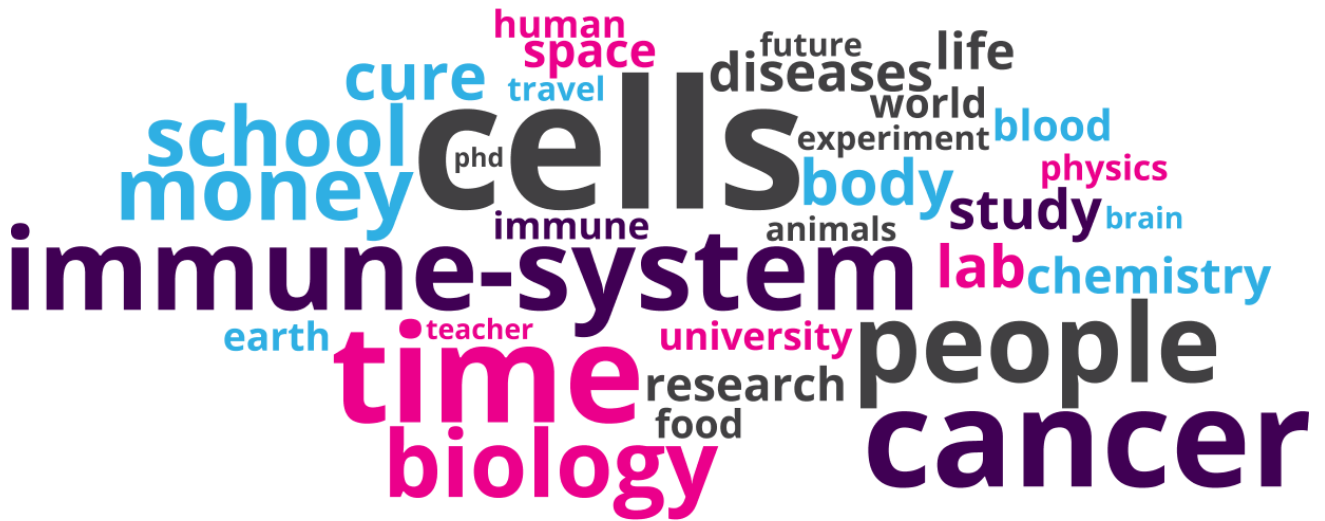
Students engaged really well with the zone theme and there were lots of general questions about the immune system. They wanted to know about how the immune system reacts to different diseases, the types of cells it is made up of and whether it can be affected by your emotions. There were many conversations which helped increase students' science capital, such as how they can improve their own immune systems, and the scientists were good at explaining how simple things like having a healthy lifestyle and getting vaccinations can help.

Sian was asked about the different drugs she is developing and diseases she is working on, as well as about her work with Botox and the dangers behind using it. There were lots of questions about cancer and Francis was asked about how it could be cured, how common different types of cancers are and why he chose to study the disease.

Students also wanted to know about the scientists' experiences in school and university, and why they chose to become scientists. They asked what the scientists hoped to achieve in the future and whether they would ever like to work in a different area.

Chat

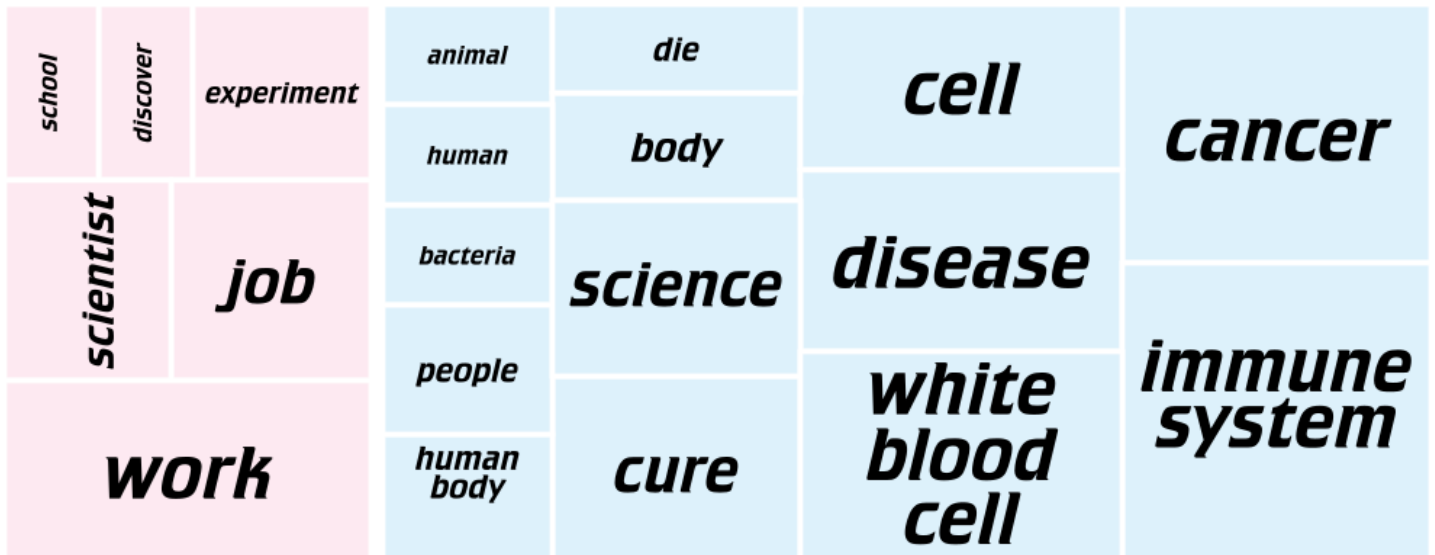
Keywords from live chats in the zone, size of the word represents its popularity



Ask?

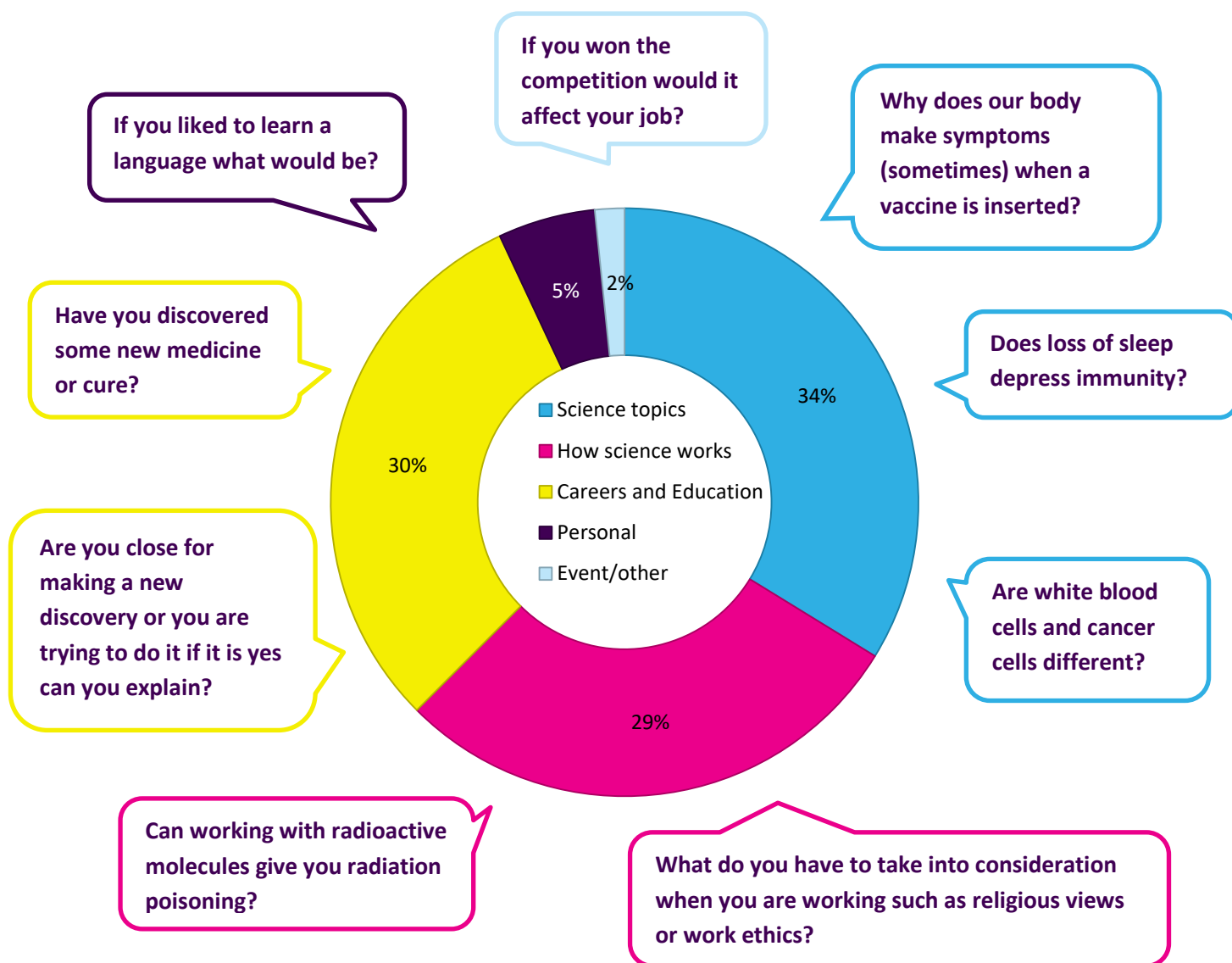
Top Keywords of questions approved in the Zone

Area represents frequency of use



■ Being a scientist ■ Science

Question themes and example questions in the Zone



Find out about how we've coded the questions at about.imascientist.org.uk/2017/student-question-coding

Examples of good engagement

Students were interested in understanding more about the scientists' work and diseases they were looking at.

"What is autoimmune disease?" – Student

"Where your immune system attacks your own body. I study rheumatoid arthritis, it's where the immune cells attack your joints and make them painful and stiff" – Ben, scientist

"Is that common?" – Student

"About 1 in 100 people in the UK get it. It's the most common autoimmune disease" – Ben, scientist

"Would be cracking my knuckles make it more common?" – Student

"Not at all! That's an urban myth." – Ben, scientist

"Thank god. What does cause rheumatoid arthritis?" – Student

"Really good questions, a mixture of about 100 genes, and things in the environment, like smoking." – Ben, scientist

Older students used the chats as an opportunity to get advice on their options after school, such as where to go to University. The scientists were all great at giving practical advice, for example in this conversation with a student wanting to do social work.

“What were the most important things for you to consider when you were applying to university? We are in year 12 so starting to think about it” – Student

“For me, I wanted somewhere with a good course with lots of options - for example, I got to spend a year of my degree working in Germany for a pharma company, which was a great experience, earned me some money and looked great on my CV.” – Lizzie, scientist

“I think that choosing a University which has the right course for you is important, but also WHERE the University is is really important. Where is everyone thinking of applying at what courses?” – Ben, scientist

“Social work at either Manchester or Salford” – Student

“Oh that’s interesting! I went to Manchester and loved it! I would definitely recommend it. Why social work?” – Lizzie, scientist

“Social work is a great course and it opens lots of different opportunities for you in the future. You must be a people person!” – Ben, scientist

“I currently study Sociology and I find it very interesting so I discovered that social work might be a good path to go down! I am quite a people person haha” – Student

“Do you know any social workers who you might be able to talk to about the job?” –Lizzie, scientist

“Unfortunately I don’t” – Student

“If you have time, you could try and contact your local hospital to see if you could spend a day with one of the hospital-based social workers, for a day of work experience.” – Ben, scientist

“That sounds fun!” – Student

Scientist winner: Max Jamilly

Max’s plans for the prize money: *“I want to start a podcast series, visiting schools to chat with students about immune disease and gene editing.”* Read Max’s [thank you message](#).



Student winner: 337munm47

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...

“You rarely get the chance to engage this easily with so many students.” – Scientist

“By participating as a judge in this competition, I have discovered how interesting science is, and I have become a lot more curious about how our body works, how we cure illnesses and doing experiments” – Student