

November 2019

The Microbe Zone was a themed zone, supported by the Microbiology Society. There were six scientists taking part in the zone:

- Tom Snelling is a research scientist studying cells in the body that fight back against germs
- Steven Rudder uses DNA sequencing to detect and explore genomes of bacteria inside humans and animals, to understand what makes us ill
- Jessica Mitchell is a post-doctoral researcher looking at ways people in poorer countries, without access to doctors, take care of their health
- Haafizah Hoosen is a PhD student investigating parasites and how we can stop them making us sick
- Clio Andreae is a senior scientist working within an infection team to help accelerate the development and testing of new antimicrobial compounds and vaccines
- Bruno Silvester, the winner in this zone, is a research scientist germs that cannot be killed by medicines

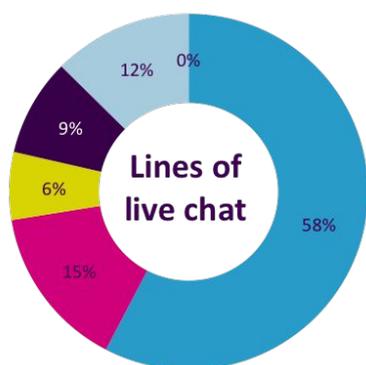
Key figures

A higher than average number of students logged in to the Microbe Zone.

Bruno, the winner of the zone, was the most active scientist and attended every single live chat, accounting for nearly 60% of all lines and 31% of answers in ASK.

	MICROBE ZONE	NOV '19 ZONES AVERAGE	2012-19 ZONES AVERAGE
Schools	11	10	10
Students logged in	451	368	389
% of students active in ASK, CHAT, VOTE, or comments	94%	91%	87%
Questions asked	451	571	659
Questions approved	214	262	291
Answers given	439	457	525
Comments	51	45	69
Votes	371	294	307
Live chats	20	18	17
Lines of live chat	6665	6334	5771
Average lines per chat	333	352	356

Scientist activity



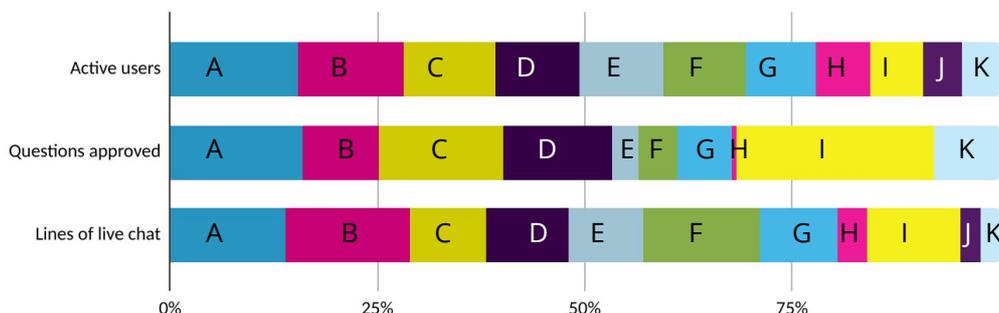
SCIENTIST

PLACE

- Bruno Silvester Lopes
- Clio Andreae
- Jessica Mitchell
- Tom Snelling
- Steven Rudder
- Haafizah Hoosen

- 1st
- 2nd
- 3rd
- 4th
- 5th
- 6th

School activity



	YEAR GROUP(S)	CLASSES
A Bingley Grammar School, Bingley (U)	8	2
B The Petchey Academy, London (WP)	7, 8	3
C Summerhill School, Kingswinford (U)	10	2
D Ridgewood High School, Stourbridge (U)	10	2
E The Charles Dickens School, Broadstairs (WP/U)	9,10, 11	3
F Cross & Passion College, Ballycastle (WP/U)	8, 9	2
G The Holmesdale School, Snodland (U)	10, 11	2
H Down High School, Downpatrick (U)	13	3
I Hounslow School, Southampton	7	1
J Aquinas College, Stockport	12	1
K Weston College, Weston-Super-Mare (U)	12	1

We have found that schools that are more than 30 minutes travel time from their closest Higher Education Institution are less likely to receive visits and benefit from engagement activities. We give priority to underserved (U) and widening participation (WP) schools when allocating places. Find out more about our research at <https://about.imascientist.org.uk/2017/school-engagement-in-stem-enrichment-effect-of-school-location/>

Popular topics

The Microbe Zone was very on topic, with students showing a clear interest into bacteria, disease, vaccinations and microbiology research, as well as the scientists' individual areas of research. Students asked about the different types of bacteria, how the scientists grow bacteria in the lab and about the different experiments they have done to find out about its effects.

Students wanted to know how the scientists' current work will benefit people or the environment, and more generally about what inventions and discoveries the scientists think have been most revolutionary.

Nearly 40% of questions in ASK were about careers and education, with students asking about the scientists' experience in school and university, as well as general questions about salaries in science, qualifications and for advice on studying.



Tom



Steven



Jessica



Haafizah



Clio



Bruno

Examples of good engagement

The chats allowed students to increase their science knowledge and understanding on the zone theme. Many students were interested in vaccinations, and the scientists were good at explaining their importance in ways that interested the students:

"Hello, what is your opinion on mandatory vaccination?" – Student

"I feel it is necessary to protect us by developing a 'herd immunity'... India for instance has been declared polio free in 2014. This would have been impossible if not for the vaccination drives that took place. Vaccination allows us to develop the necessary immunity to fight against viruses and other pathogens that have the potential to cause severe disease" – Bruno, Scientist

"I agree that vaccinations are important, but do you think we can force people to get them?" Student

"I think forcing people to get them will cause them to harbour resentment. It's better to try and educate them so they make the right choice for themselves (even though that's hard and frustrating!). They should be mandatory for children though" – Emily, Scientist

"We can't force so we have to come up with alternatives...there is always a huge dilemma between ethics and medicine and how to get these together to stop diseases" – Bruno, Scientist

"Those are all interesting points, thanks!" – Student

In the zone, students got to know scientists as normal people through discussions about personal interests and pets. This enables students to see scientists as 'people like me' and not as a stereotype - one of the dimensions of Science Capital:

"Do you like dogs?" – Student

"Dogs are the best. I'd love one of my own when I have a garden. I often imagine one running beside me" – Clio, Scientist

"Yes! We have an English bull terrier!" – Tom, Scientist

"If you could have any breed of dog what would it be?" – Student

"I have a soft spot for working spaniel breeds as I had them when I was younger, and we bred ours so had 9 puppies in our kitchen at one point." – Clio, Scientist



Scientist winner: Bruno Silvester Lopes

Bruno's plans for the prize money: "I would want to make some educational videos and use some money to travel to various schools that are located in the suburban or rural areas of Aberdeen where I can help children discover more about the microbial world and develop their interest in this field. I will also use it for my microbiology event here at the annual May festival which I have been organising since 2013."

Read Bruno's [thank you message](#)

Student winner: Bob.T.G

As the student winner, Bob.T.G will receive a certificate and a gift voucher.

Feedback

We're still collecting feedback from teachers, students and scientists but here are a few of the comments made about November's *I'm a Scientist*...

Both classes absolutely loved taking part and my class actually clap at the end of the live chat...This project encourages a greater understanding and interest in science. Pupils see scientists as real people with interests like their own. It breaks down the stereotypes around the career. Taking part also encourages the pupils to think about the world of work and future careers.

— Teacher

We had our first live chat today and the students loved it!! It was so lovely to see them so engaged with the live chat and some of their questions were fab!

— Teacher

I particularly enjoyed the live chats with classes because the engagement was totally led by them and it was a lot of fun to chat about such a variety of things, from being a researcher, to their questions about dementia, to our favourite snacks, to Netflix - I'll miss doing them a lot! And, in chats, there were some questions that came up frequently, which has given me a better idea of some of the concerns/questions of younger people.

— Scientist

I'm a Scientist has changed my perspective on science

— Student