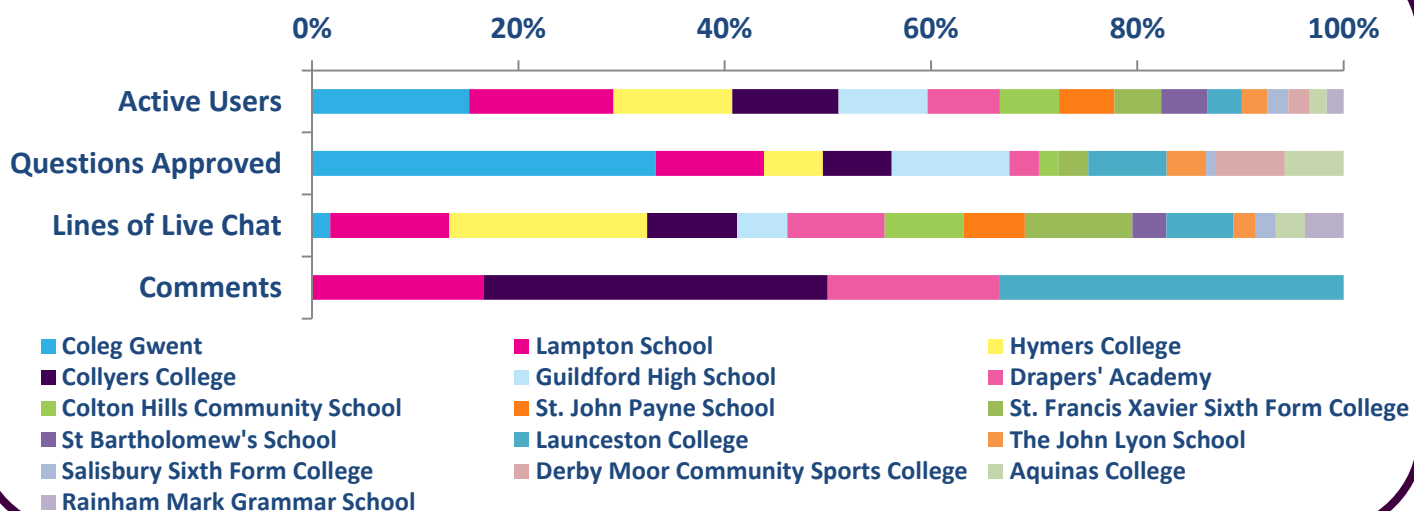




June 2015

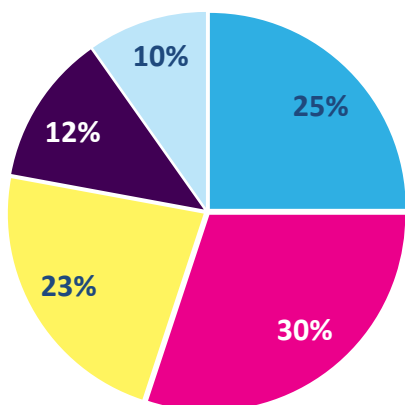
The Pharmacology Zone was a themed zone part funded by the Wellcome Trust and the British Pharmacological Society, and the five scientists participating were members of the Society. It was a sixth form only zone and had the lowest number of registered students of the June Zones, but the highest number of schools (16). The questions in the Zone were focused around pharmacology, chemistry and careers. The live chats in the Zone were calmer than a typical zone and during these Laura, Richard and Vedia in particular engaged very well with the students. Overall, there was a high level of productive conversation in the Zone on the theme of pharmacology and scientific research in general.

School data at a glance

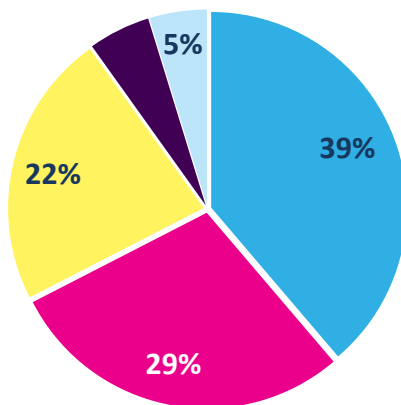


Scientists activity

Answers



Lines of Live chat



Scientist	Profile views	Position
Richard Prince	1,077	Winner
Vedia Can	1,044	2nd
Laura Newton	598	3rd
Alex Agyemang	538	4th
Hannah Greenwood	535	5th

Key figures from the Pharmacology Zone, and the averages of the June zones

PAGE VIEWS	PHARMACOLOGY ZONE	JUNE '15 ZONES AVERAGE
Total zone	19,341	23,412
ASK page	1,079	1,818
CHAT page	3,247	2,946
VOTE page	1,181	1,587

	PHARMACOLOGY ZONE	JUNE '15 ZONES AVERAGE	IAS 2012-15 AVERAGE
Students	285	411	342
% of students active in ASK, CHAT or VOTE	89%	91%	85%
Questions asked	168	805	702
Questions approved	105	358	302
Answers given	276	578	555
Comments	34	57	79
Votes	203	330	273
Lines of live chat	4643	5,928	4,784
Live chats	20	18	14
Average lines of live chat	232	328	338
Schools	16	12	9

Popular topics

The students who took part were mainly studying chemistry at A-Level and pharmacy and pharmacology were popular themes in both ASK and the live chat. Given the older age of the studentst here was also a strong focus on career advice, universities, opportunities and the scientists were enthusiastic in giving advice from their own experience of academic and professional life.

The questions in this zone were often centred around a specific process or mechanism of action, science in society, ethical issues, and the scientists' own careers. Although there were relatively few questions in ASK, a high proportion of submitted questions were approved (nearly 2 in 3). There were also extended conversations in the comments sections between the scientists which illustrated the critical nature of scientific discussion, as well as providing more in depth information about the subjects.



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



Ask ?

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



Example Questions (click for links)

- “What is the exact transport mechanism by which proteins travel through the Golgi body?”
- “What are your views on the use of animals for drug testing?”
- “What's your opinion on biology being a cause of criminal behaviour?”
- “What are your views on compulsory vaccinations? What's more important, personal choice or risk of epidemics?”
- “Do you agree with modifying genes? Do you think it is right or do you believe it is playing God? If you agree, what animals would you mix together?”
- “What will you learn if you volunteered to work at a pharmacy?”
- “Which one do we prioritise: work experience or grades?”
- “How did you first come up with the idea of the 'molecular probe'?”
- “What do you think of the work of Hans Eppinger? He tried to make seawater drinkable. If this is possible, do you think this will solve world thirst?”
- “Why do you think it is important to inspire students to become enthused about your scientific field?”
- “Taking into account the rate of progression of new scientific discoveries, where do you think science will be in 10-20 years?”
- “How do you collect your clinical data?”
- “Once you've chosen a specific disease to target, how do you go about designing a chemical compound to treat it with?”
- “Did you ever doubt your chosen career path?”
- “What is the possibility of fully developing a cure for HIV/AIDS by 2020?”
- “How do you keep your research interesting and come up with new ideas when your studies don't give the results you expect?”

Examples of good engagement

There were several instances in which students were keen to follow up discussions which had been had in the live chats, which gave students the opportunity to gain career advice:

“Hi Vedia, I spoke to you earlier, my name is Grace. You said you worked in industrial pharmacy, I was wondering if you could tell me what it entails?” – Student

“Hi Grace!! I remember our earlier on conversation :)

I was involved in the research and development of new medicines, where I got to use the latest technologies, processes and methods to develop new medicines for patients. However, industrial pharmacists are also involved in ensuring the drugs we (the company) develop are safe to administer to patients and they are of excellent quality (this is the quality checking process); the medicine contains correct ingredients and in the right amount; must correspond to what its label states.

You can also read up on some of the journal abstracts (<http://www.industrialpharmacy.eu/>) to give you an insight in the recent developments in the regulation of the pharma industry, and the outcomes of quality control checks carried out on new drugs across the world. The UK has very high standards in patient safety, and as a result pharma companies in the UK adhere to strict quality control guidelines and measures.

Scientist winner: Richard Prince

Richard’s plans for the prize money: *“I envision the activity running on University Open Days and perhaps being taken into local schools. Participants would begin by extracting and diluting some dried chilis and would then be able to “taste test” their dilutions to establish a Scoville value for the particular chili they’d been provided with. Interactive e-learning packages would be made available on laptops or iPads to enable people to find out more about capsaicin, the active ingredient of chili peppers, and the target this drug binds to in the body, which is a protein called the vanilloid receptor.”* Read Richard’s [thank you message](#).



Student winner: Radhika

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...

“Had a lovely time speaking, and thanks for replying” – Grace, student

“Thank you so much for your advice, I’ll think more about the benefits of studying such an established subject!!!” – Cindy, student



Vedia Can
@Vedzy

Fantastic Day 2 of #iasuk @imascientist!!
Brilliant questions asked by the students!
Keeping us on our toes :) @UniWestminst

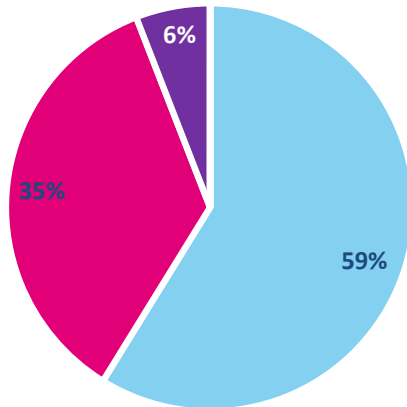
Additional Survey Questions

20 students responded to questions about their understanding of pharmacology in a post - event survey. 29% had not heard about Pharmacology before taking part in the activity, but most of them (94%) gain a better idea of what pharmacology is after taking part.

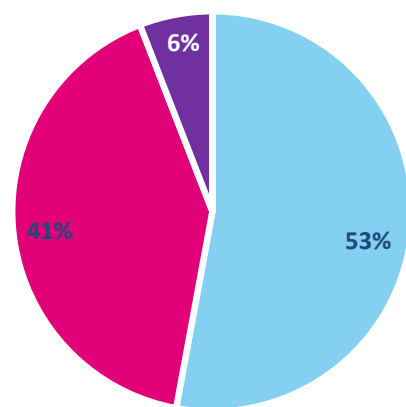
The results also showed that 88% of the respondents felt they now had a better understanding of the applications of pharmacology and 84% had a greater understanding of what pharmacologists do. In addition 88% agreed that they had a better understanding of the role of pharmacologists in society after taking part and 53% said they would consider pharmacology as a career for themselves.

After taking part in the Pharmacology Zone, I have a better understanding of...

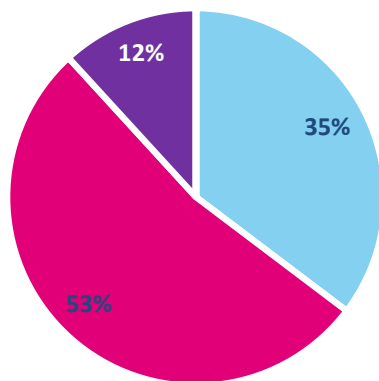
... what pharmacology is



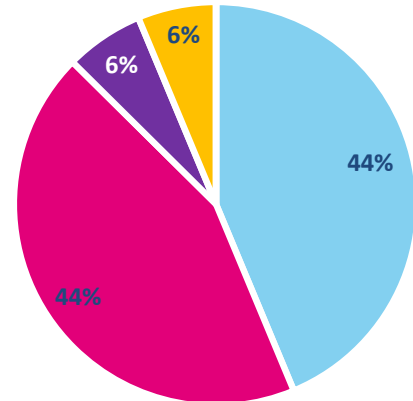
... what pharmacologists do



... the role of pharmacologists in society

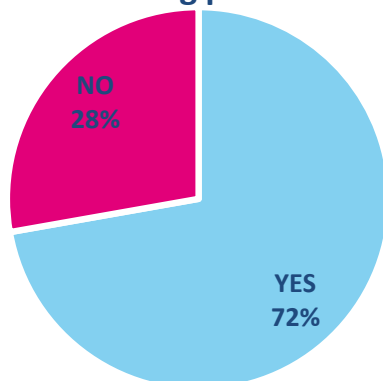


... the applications of pharmacology



Legend: Strongly Agree (light blue), Agree (pink), Neither Agree nor Disagree (purple), Disagree (yellow), Strongly Disagree (grey)

Had you heard about Pharmacology before taking part in the Zone?



I might consider pharmacology as a career now

