March, 2019

The Organs Zone was a themed zone for primary schools, supported by Wellcome. There were six scientists taking part in the zone:

- Rebecca Gosling is a heart doctor trying to prevent heart attacks with computer programs
- Raashid Ali is a clinical scientist who works with doctors and nurses to support patients’ organs.
- Matthew Smith, the winner of the Organs Zone, is a cancer researcher trying to understand the disease of pancreatic cancer.
- Marie Cameron is a Lecturer, biomedical scientist and health service researcher.
- Hanna Jeffery is a clinical scientist at the Aneurin Bevan University Health Board.
- Gareth Nye is a scientist understanding problems during pregnancy.

Key figures from the Organs Zone and the averages of the March zones

<table>
<thead>
<tr>
<th>PAGE VIEWS</th>
<th>ORGANS ZONE</th>
<th>MAR ’19 ZONES AVERAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total zone</td>
<td>15,669</td>
<td>15,399</td>
</tr>
<tr>
<td>ASK page</td>
<td>1,523</td>
<td>1,114</td>
</tr>
<tr>
<td>CHAT page</td>
<td>1,272</td>
<td>1,291</td>
</tr>
<tr>
<td>VOTE page</td>
<td>1,521</td>
<td>1,327</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ORGANS ZONE</th>
<th>MAR ’19 ZONES AVERAGE</th>
<th>IAS 2012-19 AVERAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organs Zone Schools</td>
<td>9</td>
<td>8</td>
</tr>
<tr>
<td>Students logged in</td>
<td>392</td>
<td>388</td>
</tr>
<tr>
<td>% of students active in ASK, CHAT or VOTE</td>
<td>93%</td>
<td>92%</td>
</tr>
<tr>
<td>Questions asked</td>
<td>597</td>
<td>443</td>
</tr>
<tr>
<td>Questions approved</td>
<td>245</td>
<td>216</td>
</tr>
<tr>
<td>Answers given</td>
<td>636</td>
<td>437</td>
</tr>
<tr>
<td>Comments</td>
<td>32</td>
<td>29</td>
</tr>
<tr>
<td>Votes</td>
<td>344</td>
<td>312</td>
</tr>
<tr>
<td>Live chats</td>
<td>19</td>
<td>19</td>
</tr>
<tr>
<td>Lines of live chat</td>
<td>9,022</td>
<td>6,732</td>
</tr>
<tr>
<td>Average lines per live chat</td>
<td>475</td>
<td>352</td>
</tr>
</tbody>
</table>

Popular topics

Discussions in the Organs Zone were very on topic, and students were interested in each of the scientists’ research areas.

They asked Rebecca a lot about the heart and heart diseases, and were very keen to know about Gareth’s work with babies and problems in pregnancy.

There were also more general science questions about organs, such as how they work and the differences between them.

Students got to know the scientists on a personal level, sharing experiences, hobbies, favourite foods and more.
School data at a glance

<table>
<thead>
<tr>
<th>Active users</th>
<th>Questions approved</th>
<th>Lines of live chat</th>
</tr>
</thead>
<tbody>
<tr>
<td>A: 326892</td>
<td>B: 607</td>
<td>A: 82</td>
</tr>
<tr>
<td>C: 700</td>
<td>D: 25</td>
<td>B: 16</td>
</tr>
<tr>
<td>E: 421</td>
<td>F: 11</td>
<td>C: 28</td>
</tr>
<tr>
<td>G: 353</td>
<td>H: 1</td>
<td>D: 26</td>
</tr>
<tr>
<td>I: 559</td>
<td>J: 5</td>
<td>E: 9</td>
</tr>
<tr>
<td>K: 376</td>
<td></td>
<td>F: 19</td>
</tr>
</tbody>
</table>

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/.

Scientist activity

<table>
<thead>
<tr>
<th>SCIENTIST</th>
<th>PROFILE VIEWS</th>
<th>POSITION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Matthew Smith</td>
<td>607</td>
<td>Winner</td>
</tr>
<tr>
<td>Rebecca Gosling</td>
<td>700</td>
<td>2nd</td>
</tr>
<tr>
<td>Gareth Nye</td>
<td>421</td>
<td>3rd</td>
</tr>
<tr>
<td>Marie Cameron</td>
<td>353</td>
<td>4th</td>
</tr>
<tr>
<td>Raashid Ali</td>
<td>559</td>
<td>5th</td>
</tr>
<tr>
<td>Hanna Jeffery</td>
<td>376</td>
<td>6th</td>
</tr>
</tbody>
</table>
**Top Keywords of questions approved in the Zone**

Area represents frequency of use

- animal
- cure
- disease
- ear
- baby
- heart
- human body
- organ
- medicine
- career
- food
- hobby
- job
- school
- scientist
- work

**Question themes and example questions in the Zone**

Find out about how we’ve coded the questions at about.imascientist.org.uk/what-do-students-ask-about/

- Are you an organ donator if yes what are the organs you are donating?
- We really want to know if bugs have organs or bones?
- Are there any animals who use the exact same organs as humans?
- Why has the worm adapted / got 5 hearts?
- What type of technology do you need for your job?
- What’s it like being in a room with tons of ill people and you’re the only one who isn’t ill?
- Has there ever been a moment in your career when you just wanted to give up?
- What skills do you need to be a nurse?
- What’s your favorite sweetie?
- do you like playing games?
Examples of good engagement

The students were asking lots of questions based around the heart and what different heart problems were. Students shared some of their own knowledge and personal experiences of heart-related illnesses, contributing to their science capital*:

“Whats a tripple hart byepass because my uncle had one and my grate grandad so I would like to understand them a little better?” – Student 1

“a heart bypass is when veins (tubes that carry blood) from the leg are removed and then sewn onto the heart to improve blood supply to the heart. The new tubes 'bypass' the diseased ones in the heart. Triple means he has had three of these” – Rebecca, Scientist

“ What are the chanses of surviving a hart attack if you are fit and healthy?” Student 1

“95% of people survive heart attacks these days! This used to be a lot less. It is only because we have developed new treatments and all the good work the scientists do to help us understand it more!” - Rebecca, Scientist

“My grandad had a heart attack” - Student 2

“Sorry to hear that! Was he ok? It can be very scary having a heart attack but we have good treatments available now” - Rebecca, Scientist

“Thanks for asking. He is okay but he couldnt do diving any more” - Student 2

*Science capital is a measure of someone’s engagement or relationship with science, how much they value it and whether they feel it is ‘for me’. More info at imascientist.org.uk/science-capital
There was an open discussion about allergies, with the scientists engaging with the students and sharing their allergies along with some science:

“do you have allergies” - **Student 1**

“I get hayfever which means grass makes me very sneezy!” – **Rebecca, Scientist**

“Only an allergy to nickel in jewellery, but no allergies to medicines” – **Marie, Scientist**

“I have allergies to food” - **Student 1**

“I’m sorry to hear that. It’s very common now, though. What are you allergic too?” – **Matthew, Scientist**

“my allergies are legumes nuts kiwi lupin mabye more cant remember” - **Student 1**

“who else is allergic to the thing they love (cats :()” – **Student 2**

“I am allergic to cat hair and i get hayfever :/” – **Matthew, Scientist**

“how are allergies formed to your body and why do people have them” – **Student 3**

“Allergies happen when the body thinks something that is good for the body is like a bug or virus and attacks it” – **Gareth, Scientist**

**Scientist winner: Matthew Smith**

Matthew’s plans for the prize money: “I want to buy extra equipment so that my institute can carry out extra outreach activities in the local community. I would also like to set up an event that allows us not only to showcase the work we do in our institute but also that of the work at the hospital, who we share a campus with.”

Read Matthew’s thank you message

**Student winner: Callum MCR17**

Callum MCR17 from St Bridget’s Primary School & Nursery Class was nominated by the scientists for, in their live chat, ‘moving the conversation onto ethics, and asking lots of probing questions.’

As the student winner, Callum MCR17 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 the Organs zone...

I had a brilliant time taking part in I’m a Scientist. It has made me think again about two things. First, ask your audience what they want to know! It’s so easy to get stuck in the habit of telling people stuff without really engaging with them. Secondly, it has enormously increased my appreciation for what primary school children want to know and can understand. I loved their energy, enthusiasm and thirst for finding out more. – Kathryn, scientist

It was fab! The children were engaged, there was a buzz around the room! What a pleasure to witness and inspire them! – Teacher

[I have learnt] a lot really about the level I should keep in a conversation to keep interest and how to give students little snippets of info s they do become curious... a crash course in communication really.

And I think i just became passionate about them, who they are what they think, what interests them – Silvia, scientist

I sign up every term as it is a great addition to help students engage with science. It also ticks an Ofsted box of helping disadvantaged students to relate what happens in the classroom to the real world. – Teacher

Thank you very much for answering all of our questions. we have learnt a lot today and we really appreciate it because it has truly inspired us to follow our dreams and not worry about all the bumps in the way – Student

[I have learnt] scientists are normal people aswell not just nerds – Student

love the live chats! It gives students the chance to ask anything and they really do! I have grown so much through my participation in this event! Thank You! – Scientist

And here are a few made about the March I’m a Scientist activity:

I had a brilliant time taking part in I’m a Scientist. It has made me think again about two things. First, ask your audience what they want to know! It’s so easy to get stuck in the habit of telling people stuff without really engaging with them. Secondly, it has enormously increased my appreciation for what primary school children want to know and can understand. I loved their energy, enthusiasm and thirst for finding out more. – Kathryn, scientist

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