



Yousef



Rachel



Petrina



Michael



Jason



Emma



## November 2018

The Sleep Zone was a themed zone supported by The Physiological Society and featured six scientists:

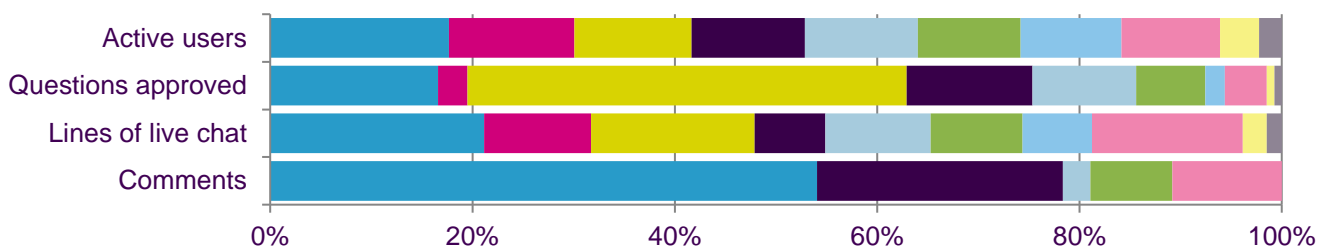
- Yousef Alqurashi is a doctoral student researching sleep and treating patients with sleep problems
- Rachel Sharman, the winner of this zone, is at the University of Oxford looking at sleep medicine interventions in adolescent sleep and digital therapy for insomnia
- Petrina Lau, from MRC Harwell, researches sleep and how it relates to disease conditions
- Michael Ambler is trying to understand why animals hibernate to see if it would be possible for humans
- Jason Ellis is a professor of sleep science and is trying to understand what happens in a person's brain when they are sleeping
- Emma Gale is currently a postgraduate student in sleep medicine at the University of Oxford

### Extra resources

In the Sleep Zone we asked scientists to answer an extra question – 'What's the most important thing about sleep?' – on the interview section of their profiles. Featured on all student profiles was a list of 'Tips for a good night's sleep' and a 'What type of sleeper are you?' quiz, where students could find out their sleep chronotype.

We also gave teachers a link to some extra teaching resources provided by Hayley Moulding, sleep researcher and PhD Student at the MRC Centre for Neuropsychiatric Genetics and Genomics, Cardiff University. These resources included a Sleep Diary, the above mentioned chronotype questionnaire, activities for younger students and links to NHS advice on sleep and tiredness.

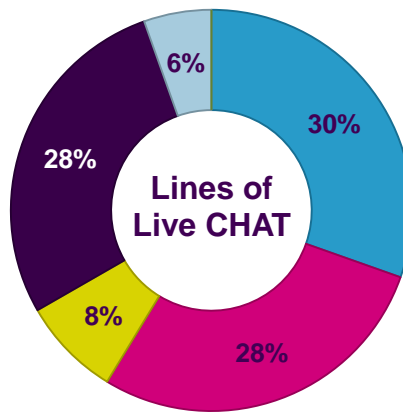
### School data at a glance



- St Anne's RC High School, Stockport (WP)
- Churnet View Middle School, Leek (WP/U)
- St Paul's School, Barcelona, Spain
- Acklam Grange School, Middlesbrough (WP/U)
- Furness Academy, Barrow-In-Furness (WP/U)
- Fitzharrys School, Abingdon
- Corpus Christi Catholic High School, Cardiff
- St Dominic's High School, Belfast (WP)
- The Elton High School, Bury
- Mallaig High School, Highland (U)

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](http://about.imascientist.org.uk/under-served-and-wp)

## Scientist activity



| SCIENTIST        | PROFILE VIEWS | POSITION |
|------------------|---------------|----------|
| Rachel Sharman   | 766           | Winner   |
| Jason Ellis      | 657           | 2nd      |
| Yousef Alqurashi | 829           | 3rd      |
| Petrina Lau      | 561           | 4th      |
| Michael Ambler   | 620           | 5th      |
| Emma Gale        | 691           | 6th      |

## Key figures from the Sleep Zone and the averages of the November zones

| PAGE VIEWS        | SLEEP ZONE | NOV '18 ZONES AVERAGE |
|-------------------|------------|-----------------------|
| <b>Total zone</b> | 23,002     | 18,272                |
| <b>ASK page</b>   | 2,712      | 1,482                 |
| <b>CHAT page</b>  | 1,901      | 1,443                 |
| <b>VOTE page</b>  | 1,122      | 742                   |

|  | SLEEP ZONE | NOV '18 ZONES AVERAGE | IAS 2012-18 AVERAGE |
|--|------------|-----------------------|---------------------|
| <b>Sleep Zone Schools</b>                        | 10         | 10                    | 10                  |
| <b>Students logged in</b>                        | 542        | 471                   | 391                 |
| <b>% of students active in ASK, CHAT or VOTE</b> | 91%        | 87%                   | 86%                 |
| <b>Questions asked</b>                           | 1,092      | 711                   | 690                 |
| <b>Questions approved</b>                        | 410        | 337                   | 302                 |
| <b>Answers given</b>                             | 254        | 585                   | 539                 |
| <b>Comments</b>                                  | 51         | 57                    | 74                  |
| <b>Votes</b>                                     | 536        | 378                   | 307                 |
| <b>Live chats</b>                                | 23         | 21                    | 16                  |
| <b>Lines of live chat</b>                        | 9,156      | 8,300                 | 5,642               |
| <b>Average lines per live chat</b>               | 398        | 395                   | 358                 |

## Popular topics

Students were very interested in the zone's theme, asking questions such as "Why do people sleep walk?" and "How long can people go without sleep?".

Compared with other November zones, Sleep had the most questions about the theme, and less about careers and university.

There was lots of discussion using the term 'brain' in live chats, usually relating to Jason or Rachel's research areas. 'Dream' was another popular topic, with students wanting to know why they did, or didn't dream, or what their dreams might mean.

In ASK, 'animal' and 'hibernation' were common keywords in questions asked to Michael about his research, but also to the other scientists, linking their work such as "Why don't animals sleepwalk?" asked to Jason.

**Chat** 

Keywords from live chats in the zone. Size of the word represents its popularity



Keywords from chats with 'sleep' removed

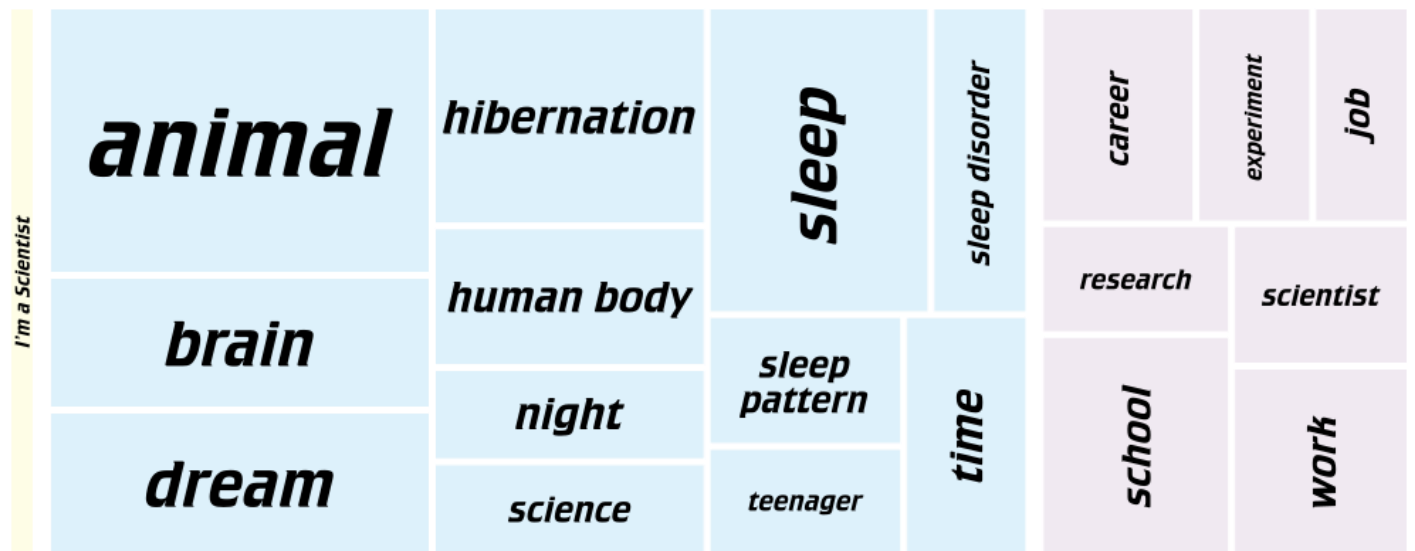


Keywords from chats with 'sleep' included

**sleep**

**Ask?** 

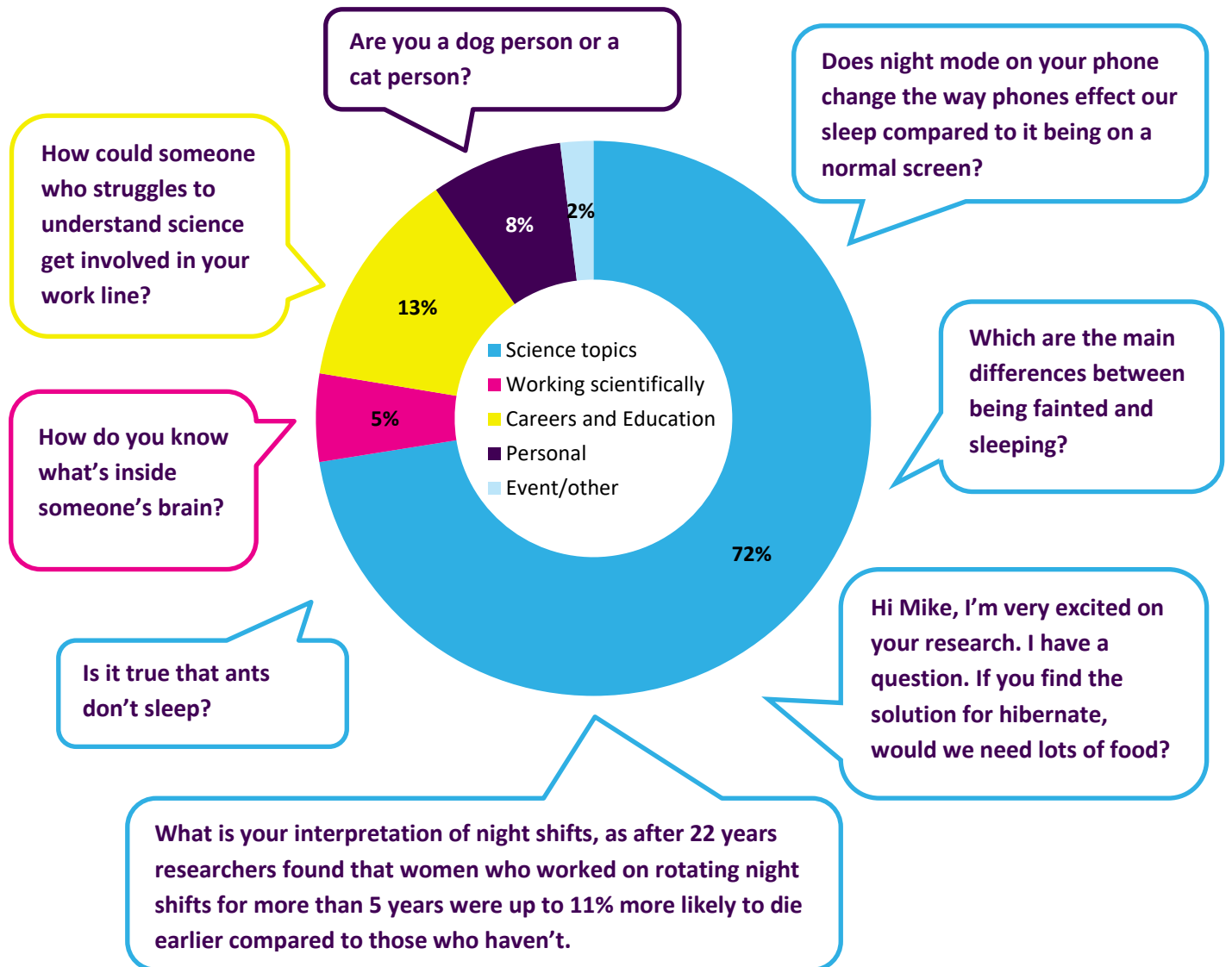
Top Keywords of questions approved in the Zone



■ Event/other ■ Science ■ Being a scientist

## Question themes and example questions in the Zone

Find out about how we've coded the questions at [about.imascientist.org.uk/student-question-coding](https://about.imascientist.org.uk/student-question-coding)



## Examples of good engagement

Students were really engaged with the zone theme and had lots of questions about sleep and how they can get sleep better. The scientists were great at giving advice as well as explaining how our bodies work in regards to why we need to sleep.

*"How can I get better sleep?"* — Student

*"Well, making sure that you put the day to bed before you go to bed is a great start. Set some time for relaxing stuff about an hour before bedtime. The other thing is not to try to sleep...doesn't work!"* — Jason, scientist

*"Why do i feel like i have barely got any sleep on weekdays but sleep to around 10 a.m. on weekends? Is it because my body knows that there is no school?"* — Student

*"Great question. As we go through puberty our body clock moves backwards so we want to go to bed later and get up later...the difficulty is that school starts and we have to get up. Then at weekends we try to catch up on our sleep."* — Jason, scientist

*"Ok, thanks. Hopefully i can get to bed without a massive pile of homework!"* — Student

Students were also interested in the scientists' individual work areas, for example in this conversation where Michael gave an informative and honest explanation of his work in intensive care.

*"What is it like working in intensive care?"* — **Student**

*"Working in intensive care is great.... we get to look after all sorts of different patients with different problems. and we get all the best most interesting machines to help keep people alive. it is a real privilege to try to help patients and their families get through what is usually the worst thing that has ever happened to them. obviously it can be hard work with long hours and lots of night shifts, and when people die it can be upsetting but you get used to the ups and downs, and when things go well it makes it all worth it."* — **Michael, scientist**

### **Scientist winner: Rachel Sharman**



Rachel's plans for the prize money: *"help me and the rest of the Teensleep team to go to a few local schools and show students how to measure sleep and help them design and run their ideal sleep improvement intervention for their schools."*

Read Rachel's [thank you message](#).

### **Student winner: Sophie**

For great engagement during the activity, 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 about the Sleep Zone...

As a woman in science, first generation university graduate, and a person with dyslexia it was great to be able to chat about my science journey with students. — **Rachel, winner**

There are many interesting topics and things I did not know before. *I'm a Scientist* helped me answer a lot of questions that I've been wanting to ask and know the answer to. — **Student**

## Feedback

Here are a few of the comments made about November's *I'm a Scientist* activity...

The students were actually cheering when the first scientist answered a question. It was a fantastic moment. – **Teacher**

I have learnt about other scientists' lives and that even if they are scientists they have the same life as us. – **Student**

The whole event probably involved more students from a wider variety of backgrounds than any single real-life event. – **Scientist**

I have learnt that many scientists did not have any clue as to what they wanted to be when they left school. – **Student**

I would like to say thank you. Friday when our children went on the live chat, there was so much excitement with the children when they saw the scientist replying. The buzz they got from it was fantastic. It is a long time since I've seen children buzzing from science. – **Teacher**

I have learned that science isn't just sitting with some test tubes pouring them into a big pot and that they are real, rather interesting jobs that I could consider going into. – **Student**