Medical Physics Zone, March 2013



This report has been compiled by the I'm a Scientist team as a summary, containing moderator observations and our web data, to provide some meaningful information on the zone.

The Medical Physics Zone was busy, especially towards the end of the first week and at the start of the second week in terms of live chats, though few new questions were submitted outside of the chats in the second week.

<u>Number of page views in the 3 weeks</u> <u>surrounding the event</u>

Zone page	Page views	
Total zone	28,016	
ASK page	2,349	
CHAT page	2,073	
VOTE page	1,302	
Leila Nichol	1,341	
Jim O Doherty	904	
Frank Soboczenski	765	
Dhvanil Karia	645	
Charlotte Kemp	682	

<u>Key figures from I'm a Scientist March 2013 for the zone, the</u> average of all 11 zones, and the whole event

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	Zone	Zones average	Whole event	
Registered students	538	339	3,731	
% of active students (used ASK, CHAT, VOTE or commented)	91%	89%	-	
Questions asked	1,737	846	9,307	
Questions approved	473	356	3,921	
Answers given	1,258	669	7,357	
Comments	264	109	1,198	
Votes	445	296	3,255	
Live chats	20	16	179	
Lines of live chat	5,869	5,088	55,971	
Schools	5	9	97	

Popular topics

Students were curious about medical physics as a job, asking practical questions about how long you have to study for it, the pay etc. Many other questions were generic science questions, outside of the zone area. In the live chats there were many questions on animal testing and whether it is appropriate for medicines versus cosmetics, possibly relating to the recent EU ruling barring cosmetics testing on animals.

There were lots of career focussed questions outside of the live chats along with a number of personal preference questions on music, animals and food. Students frequently asked robot questions aimed at Dhvanil in response to his mention of making robots in his profile. Some of the more complex questions covered the nature of radiotherapy and its efficacy, and there were several personal stories about cancer, such as students mentioning relatives having had the disease. Other popular topics included accidents at work, whether scientists had saved lives and if they were about to cure cancer.

Sample questions

What does medical physics involve?

- What precautions do you use while experimenting with radioactive substances?
- Can radiotherapy become more advanced to make it more effective?
- Will it be ever possible to use nuclear power stations waste (radiation in particular) to cure people?

Do parts of animals (such as tigers' teeth) have any medical properties? Does air have a weight? If so, why doesn't gravity pull it down? Is it possible to make a real working light saber? You know, like in Star Wars? When someone dies do they lose all there memory when they get brought back to life? Because Jupiter has helium rain if you go there does your voice go squeaky when it rains?

Keywords of questions asked in the zone (the size of the word represents its popularity; the number indicates the number of times it was tagged as a keyword)

achievement15 animal16 body6 Cancer 45 career 6 chemistry8 cure11 death6 discovery6

disease13 education24 end of the world4 evolution5 experiment25 failure7 favourite15 force5

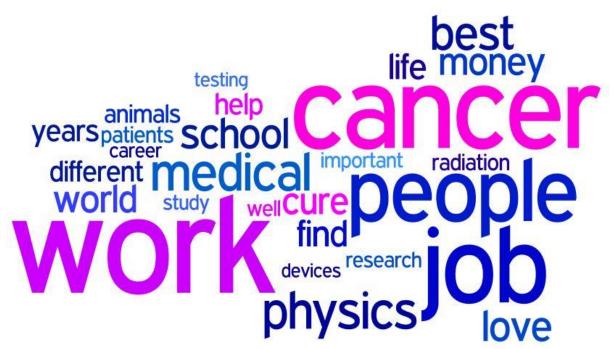
future25 harmful12 how science works23 inspiration10 medicine26 music9

neuroscience 6 nutrition 8 organ 4 personal 92 philosophy 26 preference 46 prize 4

quirky24 radioactive18 radiotherapy8 research33 robot7 routine12 science

communication7 technology28 topical9 universe14 vote4 win9 Work66 work-life balance5

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



Examples of good engagement

Jim and Dhvanil were quick to answer questions concisely, and all of the scientists responded well to humour in the chats when answering questions on zombies, robots and the end of the world:

nooblington : To be honest if animal testing wasn't legal then untested drugs could kill people, right? leilanichol : @nooblington exactly! drugs need to be tested to ensure they're safe! Otherwise we might end up with a Dawn of the Dead situation! nooblington : Agreed, we don't want Left 4 dead to occur, I don't have enough machine guns. dhvanilkaria : @nooblington We can invent super Xray guns to blast zombies nooblington : The power of science...



Scientist winner: Leila Nichol

Leila's plans for the prize money: "I'd like to raise awareness of science careers within healthcare. I was lucky enough to discover Medical Physics when I was at school, but a lot of people aren't aware it exists. So I'm going to look into creating information sheets, posters, a blog or website, maybe arrange some school visits, and try to collaborate with the Institute of Physics and Engineering in Medicine (IPEM) or STEMNET. It's an interesting and rewarding career and more people should know about it."



Student winner: darkopdisguised

For submitting lots of good questions, darkopdisguised will receive a £20 WHSmith 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...

"I've really enjoyed this experience, I've found it very interesting learning about the field of medical physics and the varied work of the scientists who've taken part. It has definitely made me consider medical physics as a career option!" – physicsfan, student

"My favourite part was taking part in the live chats – they definitely get the adrenaline pumping for those 30 minutes trying to answer as many questions as possible and keep my typing up to speed. It was great chatting to so many enthusiastic pupils who were interested in our careers, training, opinions and advice." – Leila Nichol, scientist

"I now want a career in science, you have opended my eyes to the world of science" – alicevescott, student

"@leila I had a vague idea about the medical physics but not as much as I do thanks to all the answers to the questions you have given us thanks" – kellierothery1, student

"Thank you all scientists, very interesting conversation, carry on being awesome!" - elliebellie, student

