

scientists
are
HUMANS
be more kind

Alison, Alexia, Hannah, Karel, Maire, Yolanda
Presentation: Hannah Dee, Computer Science,
Aberystwyth University

**The
Alan Turing
Institute**

@scientistshuman / @handee

STEM Gamechangers

Organised by the Turing institute

Brought together diversity specialists and activists from across STEM

Aim to **change the game**

Hackathon format – 8 projects pitched to a panel of judges. We were one of the projects.



The winning projects

Roots to STEM - A project aiming to grow STEM aspirations and inclusivity among Keystage 2 children and their parents and carers

Out and About in STEM - The development of a legal framework to support the global mobility of LGBTQ+ community in higher education was seen as critical for forwarding scientific research often supported through overseas development funding

Check yourself – An online tool providing ten easy steps to check the culture of diversity in the workplace

Next Level – A long term sustainable mentoring scheme aiming to raise awareness of career routes and opportunities in STEM.

Scientists Are Humans

The group who pulled together the ideas for Scientists Are Humans contained people who were...

... undergrad, permanent staff, contract researcher, postdoc, school teacher, black, disabled, woman, LGBT+, people with mental health problems, people who had changed career, people who'd had long term illness ...

We all fit in more than one box

Intersectionality isn't just a buzzword

Quotes

“As researchers we have succeeded in our University studies and got our PhDs. We are used to solving problems, achieving highly and getting stuff done. When faced with a mental health condition, we feel desperately that we need to understand and solve the problem, and soon. But even after many years I do not fully understand my mental health problems. I cannot fix them or solve them as I would a problem in the lab..”

**Dr Joanna Waldie, Postdoctoral research fellow
Physics, Cambridge University**

<https://scientistsarehumans.com/2018/12/05/researcher-mental-health-a-personal-perspective/>

Why?

We need to be able to bring our whole selves into work or study to be the best we can.

For many, a sense of belonging is the key to happiness at work and study.

As scientists, students and teachers we need to be sensitive to each others' situations and needs.

We need to **Be More Kind**



No this isn't a totally new idea



<http://www.kindnessinscience.org/>
New Zealand – held a workshop, got a writeup in Nature

How can we convince our colleagues, our students and ourselves?

Kindness in Science is going to take all of us

- Some may already want to help - we can give them the tools
- Some may consider it someone else's job e.g. HR, networks
- Some may not be aware there is a problem

We need to start with understanding the experiences of others.

Scientists Are Humans is a means of doing this.

Quotes

“Diversify your network to challenge your mindset.

Irrespective of whether you are a scientist or not, if you are willing to develop the understanding that struggles are different for people from different parts of the world, if you can realize that someone’s notions may be completely different from yours yet not be wrong, and if you can question your traditional beliefs, you will make more than friendships.”

Soumya Singh, final year undergraduate
Computer Science, Durham University

<https://scientistsarehumans.com/2019/01/29/moving-abroad-for-higher-education/>

What makes Scientists Are Humans different?

We aren't concentrating upon those who've made it and are doing laboratory science.

STEM is a broad set of disciplines, and we want to influence the entire "pipeline".

There are aspects of STEM culture which deter people at all stages.

The idea that the perfect scientist can work long hours, and will go without sleep on the tail of a discovery, filters down into undergraduate perceptions

Undergrads who see overworked staff wonder if STEM is for them. Setting unrealistic deadlines for assignments is just like setting unrealistic deadlines for conferences.

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We want to change
the culture of
Science, Technology,
Engineering and
Mathematics

Yes it is a bit ambitious...
...for what is basically a website

Quotes

“Are you up to much over the weekend? I (perhaps naïvely) asked of an undergraduate student one Friday afternoon.

I’ll be here, running experiments all weekend he said.

In fact, he had a series of time-sensitive experiments to do, which would involve sleeping in short bursts in his car (campus security isn’t keen on anyone sleeping at their desk after hours) and stop him from straying too far from the lab over the next few days. ”

Nathan O’Brien, research support
Flinders University, Adelaide

<https://scientistsarehumans.com/2018/11/23/a-life-outside-science/>

Scientists Are Humans' Manifesto

1. I will BE MORE UNDERSTANDING
2. I will develop a WORK-LIFE BALANCE
3. I will set KIND DEADLINES
4. I will give THOUGHTFUL PRESENTATIONS and LECTURES
5. I will engage in KIND PEER REVIEW
6. I will build KIND TEAMS
7. I will give KIND FEEDBACK
8. I will be MORE THOUGHTFUL when I am LEARNING
9. I will participate in and organise FRIENDLY CONFERENCES
10. I will PAUSE FOR THOUGHT & think of the human behind the science

<https://scientistsarehumans.com/manifesto/>

What's that got to do with teaching?

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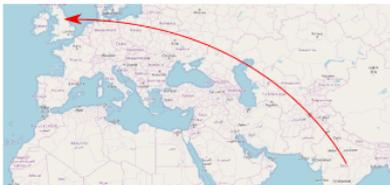
<https://scientistsarehumans.com/manifesto/>

Quotes

“... a sense of isolation was always present as **I was the only black person**. This was not only in relation to the student population. I was still the only black person when I expanded my search to consider the staff and academics. Whilst ethnic diversity is a problem for all people of colour (POC), in my entire four years of study, I did not feel as though I had any representation. ”

Karel Green, recent MSc graduate
Physics, Queen Mary University of London

<https://scientistsarehumans.com/2019/01/17/my-university-experience-as-black-woman-in-physics/>



MOVING ABROAD FOR HIGHER EDUCATION

📅 January 29, 2019 👤 sahguest

This is a guest post by Soumya Singh <https://www.linkedin.com/in/soumyasingh1/>, <https://twitter.com/singhuist1>, who is a fourth-year undergraduate in Computer Science at Durham University, UK and an

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MY UNIVERSITY EXPERIENCE AS BLACK WOMAN IN PHYSICS.

📅 January 17, 2019 👤 sahguest

This is a guest post by Karel Green who set up POCSquared (a site which showcases the achievements of People of Colour in STEM –

Continue reading »



A LIFE OUTSIDE SCIENCE

📅 November 23, 2018 👤 sahguest

This is a guest post from Nathan O'Brien who works at Flinders University in Adelaide, Australia. "Are you up to much over the weekend?" I (perhaps naively)

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IF YOU WERE THE ONLY GIRL IN THE ... ROOM?

📅 November 2, 2018 👤 leenafarhat42



IS YOUR INNER IMPOSTOR HOLDING YOU BACK?

📅 October 4, 2018 👤 Carron Shankland



Be more understanding

📅 September 28, 2018 👤 handee

Kind lectures

- Remember there are language learners in your audience
- Circulate slides in advance
- Use amplification where possible
- Don't use a tiny font
- Give clear signposts (subsections)
- Recordings (audio) can be very useful for some students
- Don't single out students for comment or questions

Quotes

“ I felt like I stuck out in lectures and practicals, and I could never be absent because the lecturer would always figure out that I was missing. Being the only girl, both my presence and absence were noticeable. No skipping lectures for me, not that I really did that kind of thing anyway. ”

Leena Farhat, second year undergraduate
Computer Science, Aberystwyth University

<https://scientistsarehumans.com/2018/11/02/if-you-were-the-only-girl-in-the-room/>

Kind Feedback

- Be on time with feedback, where possible.
- Try to ensure that the feedback shows the author what they need to do to improve.
- Be generous with praise.
- Provide feedback which helps constructively.
- Do not avoid highlighting limitations, knowing that developing a piece of work requires careful criticism as well as praise.

Quotes

“My first ever scientific presentation was for my 6-month Masters project as part of my Physics degree. And it was bad. The presentation started off ok-ish, but I began to increasingly panic during the talk, until the penultimate slide when I broke down and began to cry. I was giving the presentation to a room of around 30 experienced physicists and biologists who my supervisor had invited to watch. It was truly embarrassing! ”

Yolande Ohene, PhD student

Biomedical imaging, Imperial College

<https://scientistsarehumans.com/2018/10/09/my-worst-presentation/>

SAH Stats

- 16 different authors (Who? Prof, retired prof, senior lecturer, lecturer, ex-university, academic publishing, post-doc, post-grad, under-grad)
- 14,000 web views
- 650 twitter followers
- 6 editors (each article is checked by at least one and preferably two)
- £0 funding – apart from The Turing paying my conference fees for this presentation (thanks!)

Thanks

The Turing Institute : for bringing us together, and for supporting me with conference fees

The original team: Alison Young (Exeter, Physics),
Alexia Wight (Schoolteacher, Physics),
Karel Green (pocsquared & QMUL, Astrophysics)
Maire Gorman (Aberystwyth, Physics),
Yolanda Ohene (Imperial, Biomedical imaging)

(and me – Aberystwyth, Computer Science)

The editors: Helen Ougham, Rebecca Kirk, Naomi Penfold, Eirini Komninou

All the authors



What now?

Promote kindness in science (we have posters).

Share your stories, write us an article.

Think about kindness in teaching. Talk to your students. Find out what it's like to be in a minority. Find out what you could do to make things better.



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<https://www.facebook.com/scientistsarehumans>

<https://twitter.com/scientistshuman>