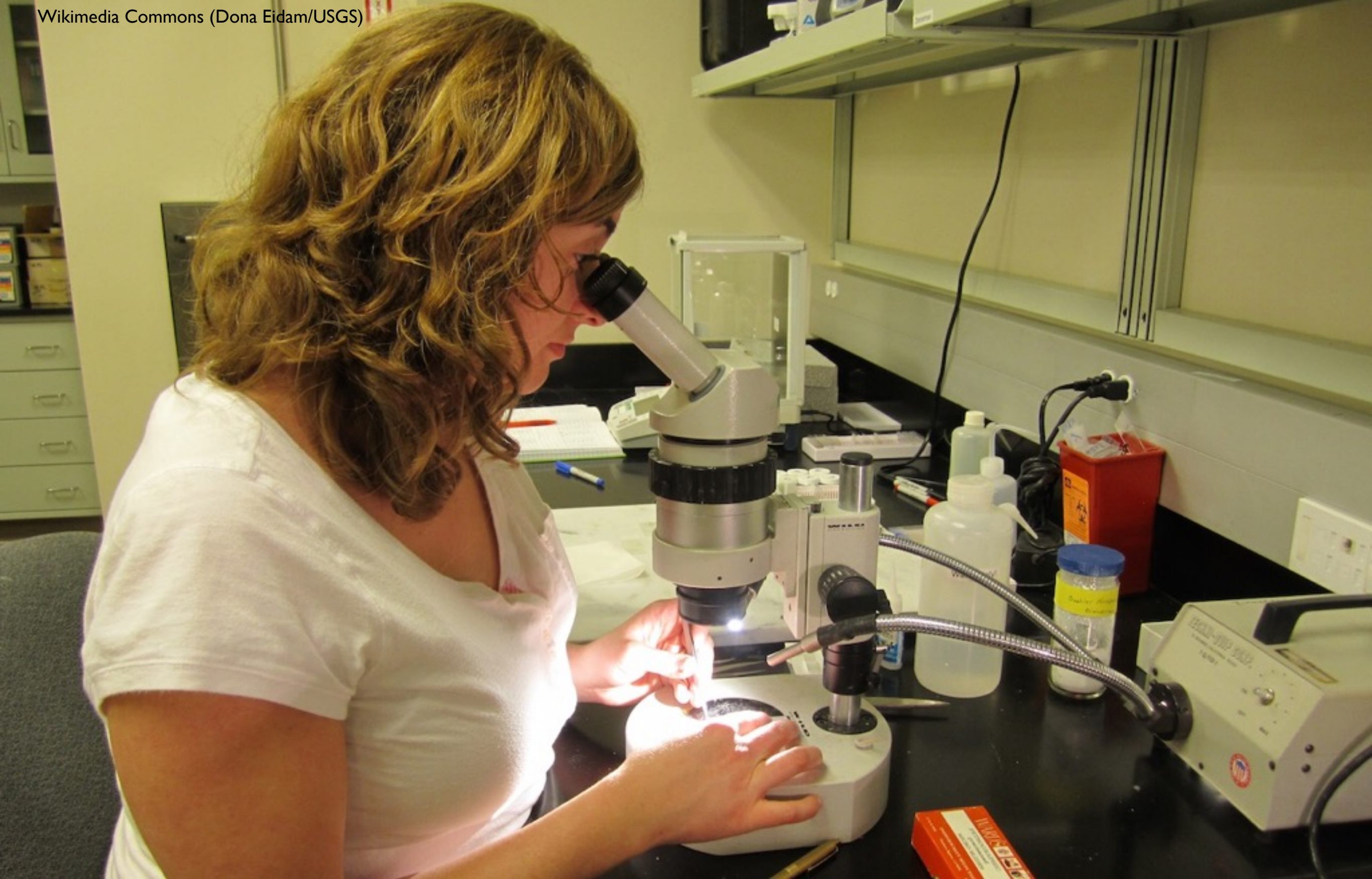


Why Should You Communicate Science?

(and how)

Professor Stephen Curry
Imperial College London



What kind of scientist do you want to be?



I've seen things you people wouldn't believe.

Roy Batty, Blade Runner



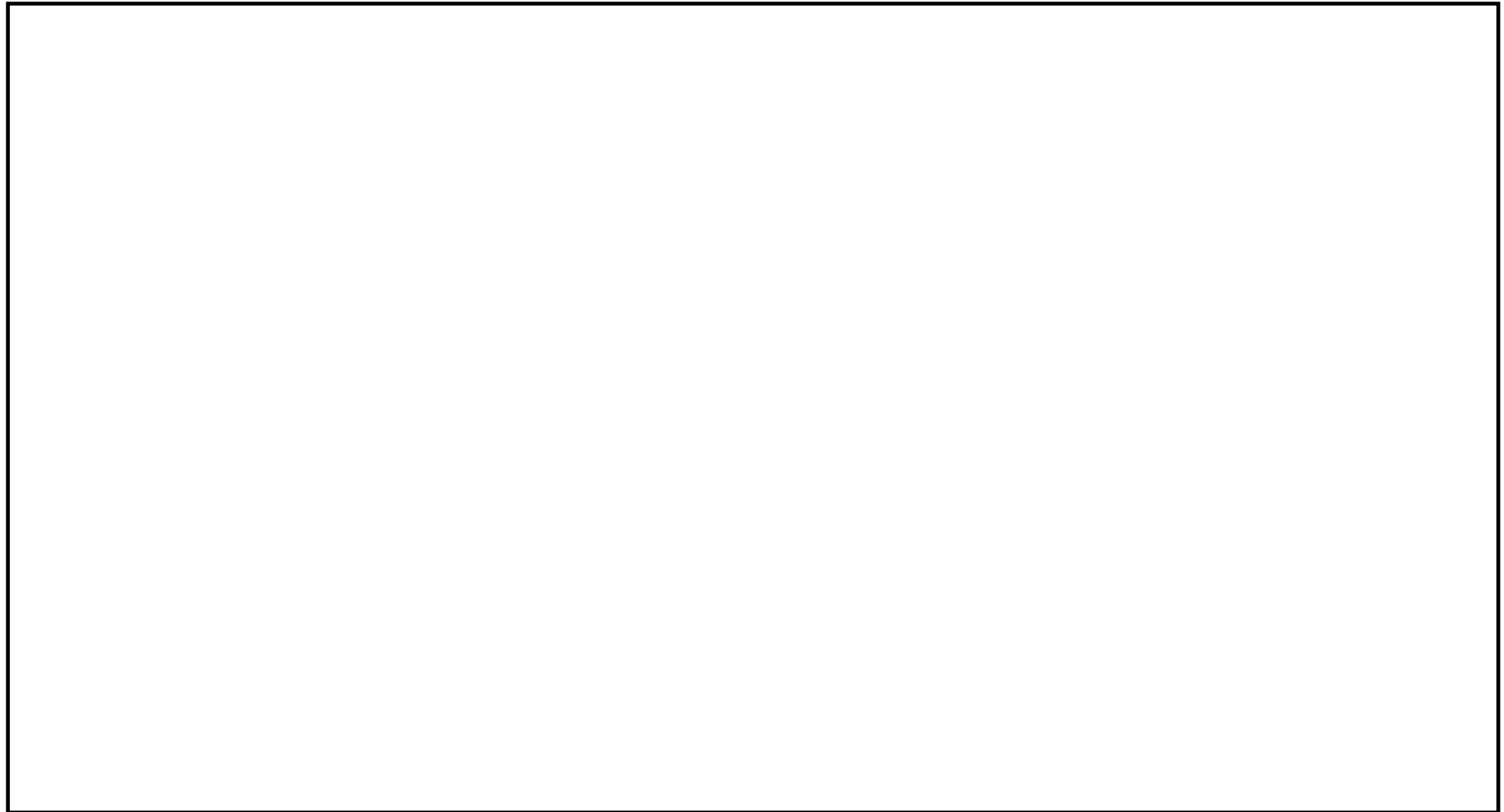
Human beings are a disease, a cancer of this planet. You're a plague and we are the cure.

Agent Smith, *The Matrix*

In the beginning...

Q13: Outline of public engagement plans

(No more than 250 words)

A large, empty rectangular box with a thin black border, intended for the user to write their outline of public engagement plans. The box is positioned below the question text and occupies the lower half of the page.

In the beginning... but then the internet changed everything

Q13: Outline of public engagement plans

(No more than 250 words)



Tim Berners-Lee at the Olympic opening ceremony, 2012

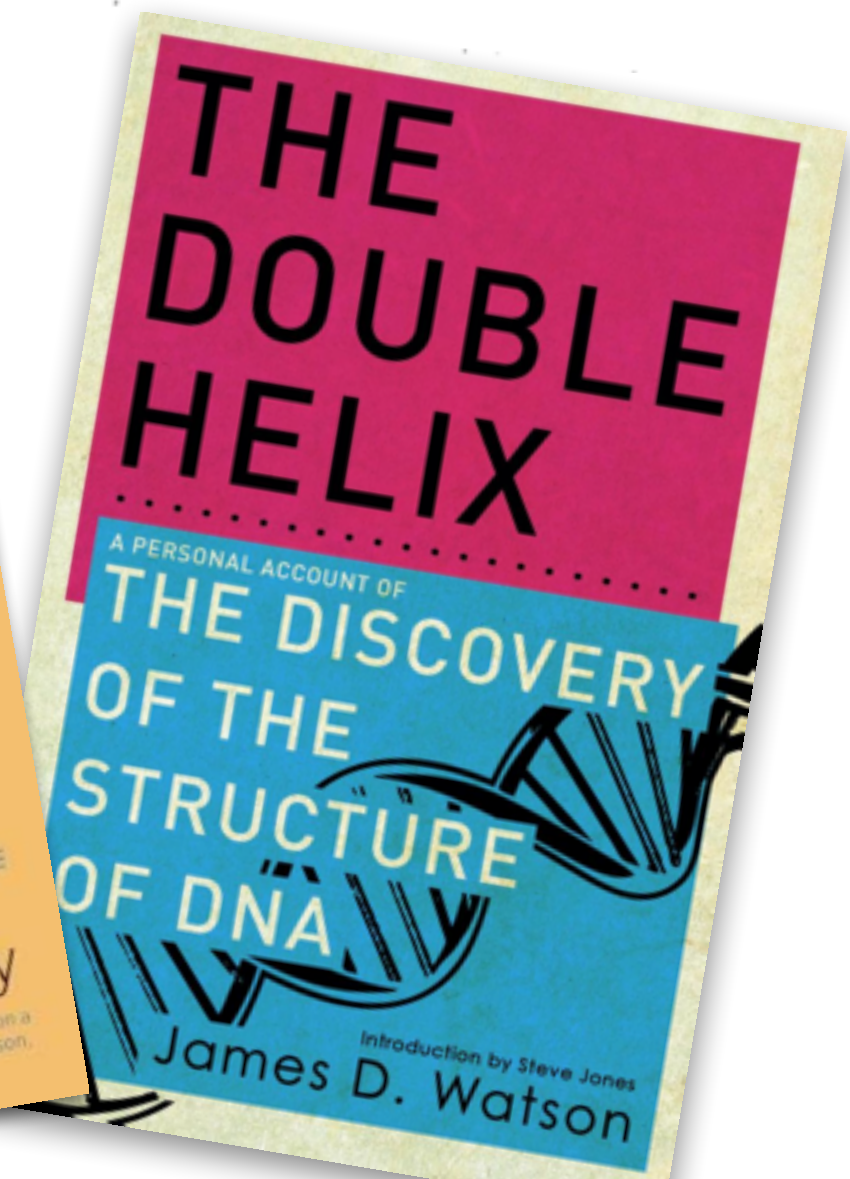
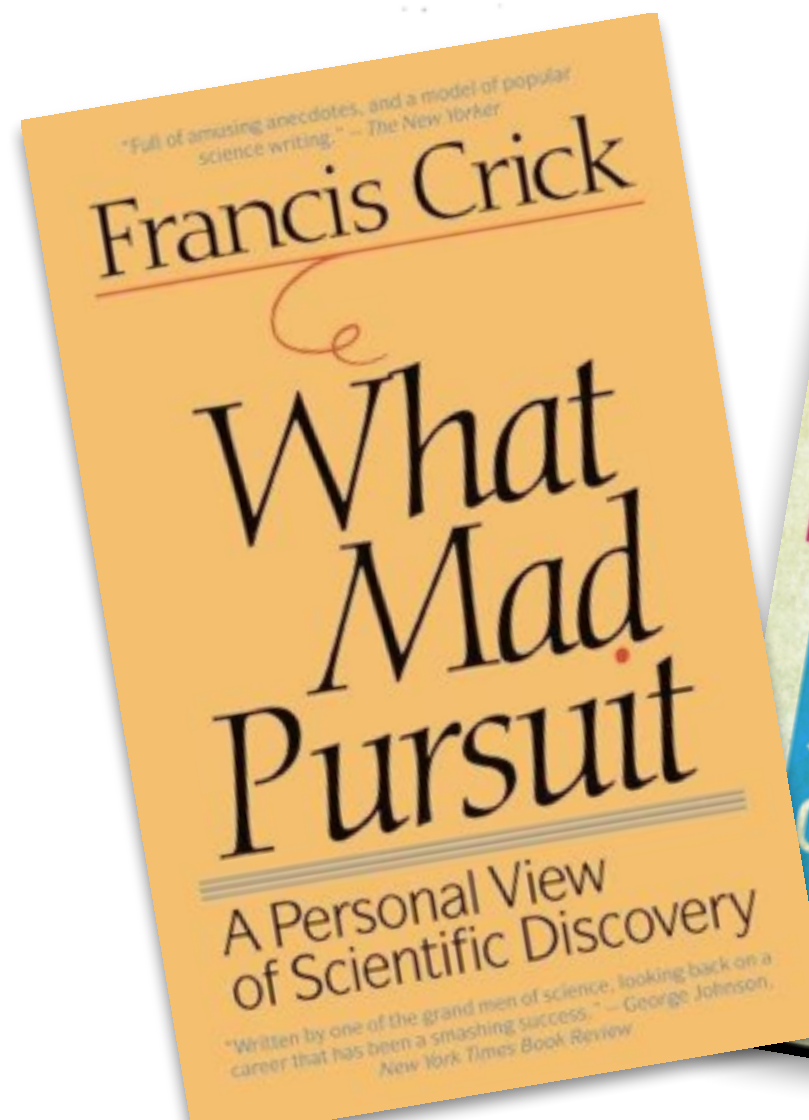


Jude Law, Elliot Gould in Contagion (2011)

“Blogging isn’t writing. It’s graffiti with punctuation”

Letter from Francis Crick to Jim Watson (April 1967)

the point of science is what is discovered, not how it was discovered or by whom. It is the results which need to be brought home to the public. It is quite inexcusable to invade someone's privacy to describe how the structure of DNA was discovered to people who don't even know what it is, nor why it is important. I have no objection to a genuine historical description. It is vulgar popularization which is indefensible.



First post... (and the value of a network)



Sept 2008

Blog Manifesto:

I won't promise to post regularly.

I won't promise to be unembarrassed to admit that I am a blogger.

I won't promise to have anything terribly insightful to say.

Speaking out...

guardian.co.uk

[News](#) | [Sport](#) | [Comment](#) | [Culture](#) | [Business](#) | [Money](#) | [Life & style](#)

Comment is free

Scientists, you are fallible. Get off the pedestal and join the common herd

Climatologists above all need to rediscover the virtue of self-criticism - or others will continue to question their evidence



Simon Jenkins

guardian.co.uk, Thursday 4 February 2010 21.00 GMT

[Article history](#)

So scientists are human after all. They are no different from bankers, politicians, lawyers, estate agents and perhaps even journalists. They cheat. They make mistakes. They suppress truth and suggest falsity, especially when a cheque or a plane ticket is on offer. As for self-criticism, that is for you, not me.

guardian.co.uk

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Comment is free **Response**

Series: [Response](#)

We're not on a pedestal: peer review keeps scientists firmly grounded

We deal in theories and uncertainty - not egocentric preaching, say Stephen Curry and Bill Hanage

Stephen Curry and **Bill Hanage**

The Guardian, Thursday 11 February 2010

[Article history](#)

Simon Jenkins is dismayed by reports of the lax behaviour of some scientists on the Intergovernmental Panel on Climate Change, and the allegations of some stem cell researchers that their work is being held up by rivals during peer review ([Scientists, you are fallible. Get off the pedestal and join the common herd](#), 5 February).

Conflating these stories with his ill-founded distrust of epidemiology, Jenkins paints a grim picture of science and scientists as corrupting and corruptible: "They cheat. They make mistakes. They suppress truth and suggest falsity, especially when a cheque or a plane ticket is on offer."

Science and society

Online



Outside

Simon Singh:
The British Chiropractic
Association... *"happily
promotes bogus treatments"*.

nature.com nature.com nature.com > nature.com blogs

Reciprocal Space
a nature network blog by Stephen Curry

HOME ARCHIVE ABOUT

This appeal must be allowed
Posted by Stephen Curry on Apr 1, 2010

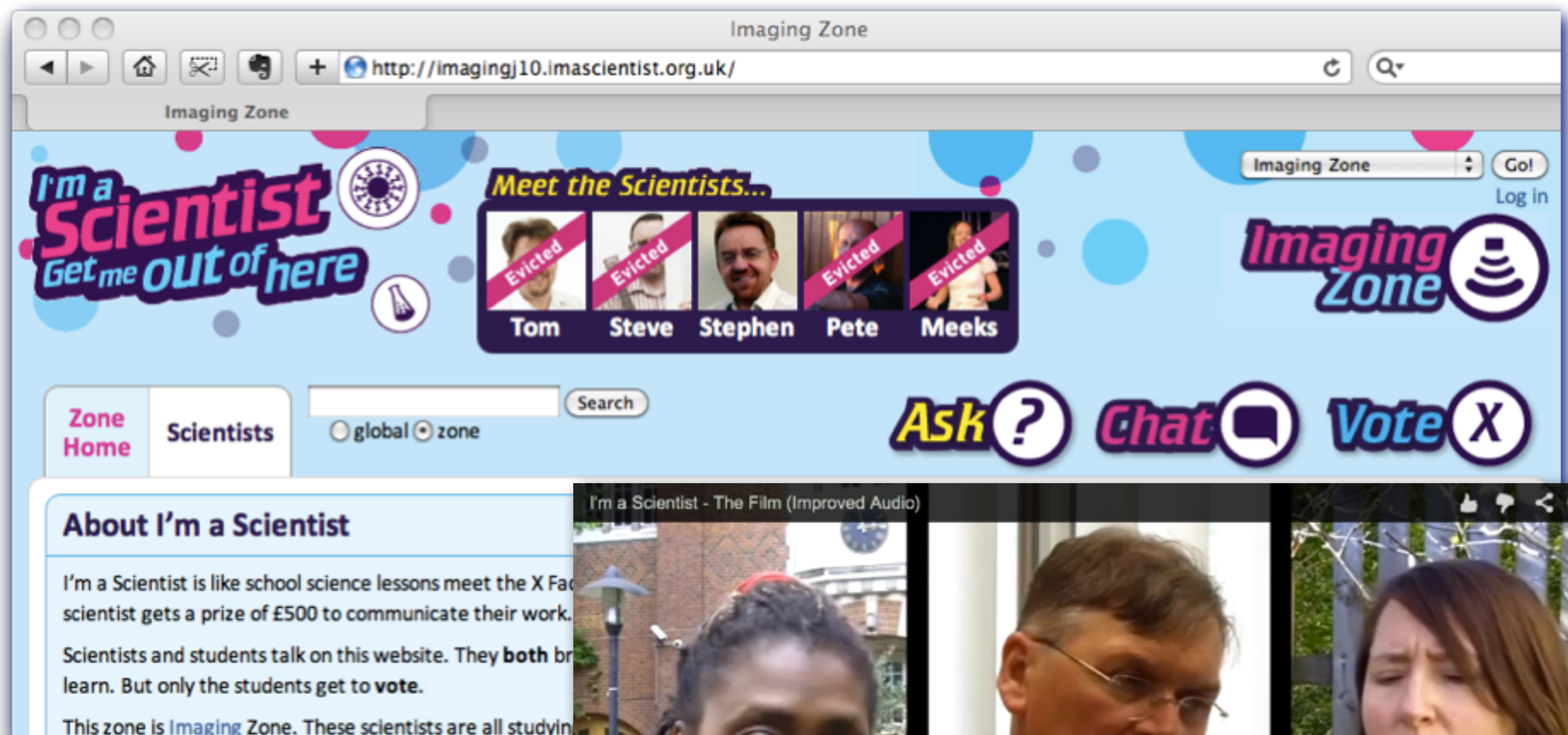
I was in Court 4 at the Royal Courts of Justice at 9.30 this morning, the Court of the Lord Chief Justice. This one was a 'real' court room, all oak panel, wall-to-wall shelves of legal



Defamation Act 2013

Simon Singh - b Supporters gather Simon Singh speaks to reporters after this morning's ruling

The next generation



Connects the kids to real scientists
Tough but energising
Fresh perspective
Youthful idealism
Makes **you** think



<http://imascientist-film.org.uk>

Science and Politics

Opportunities for political engagement...

Photo: Joe Dunckley



Photo: Radiokate





Home Current campaign: 2015 About Updates Get involved Our supporters

Science: As Vital As Ever

Update: 22 November 2015

Our Science: As Vital as Ever campaign culminated on Wed 18th November 2015 with the delivery of well over 1600 postcards to George Osborne at the Treasury.



If Britain is to become the best place to do science and apply it, we have to give British science the funding it needs for the long term.
— George Osborne, April 2014

We couldn't agree more!
— Science is Vital

About us...
Find out more about who we are, and what we're doing.

Latest News
[Spending Review 2015: we want your reactions!](#)
27 November 2015
This week, the government announced the outcome of the 2015 Spending Review exercise. The science budget was frozen in real terms, and [read more](#) »

Donate
[Donate](#)

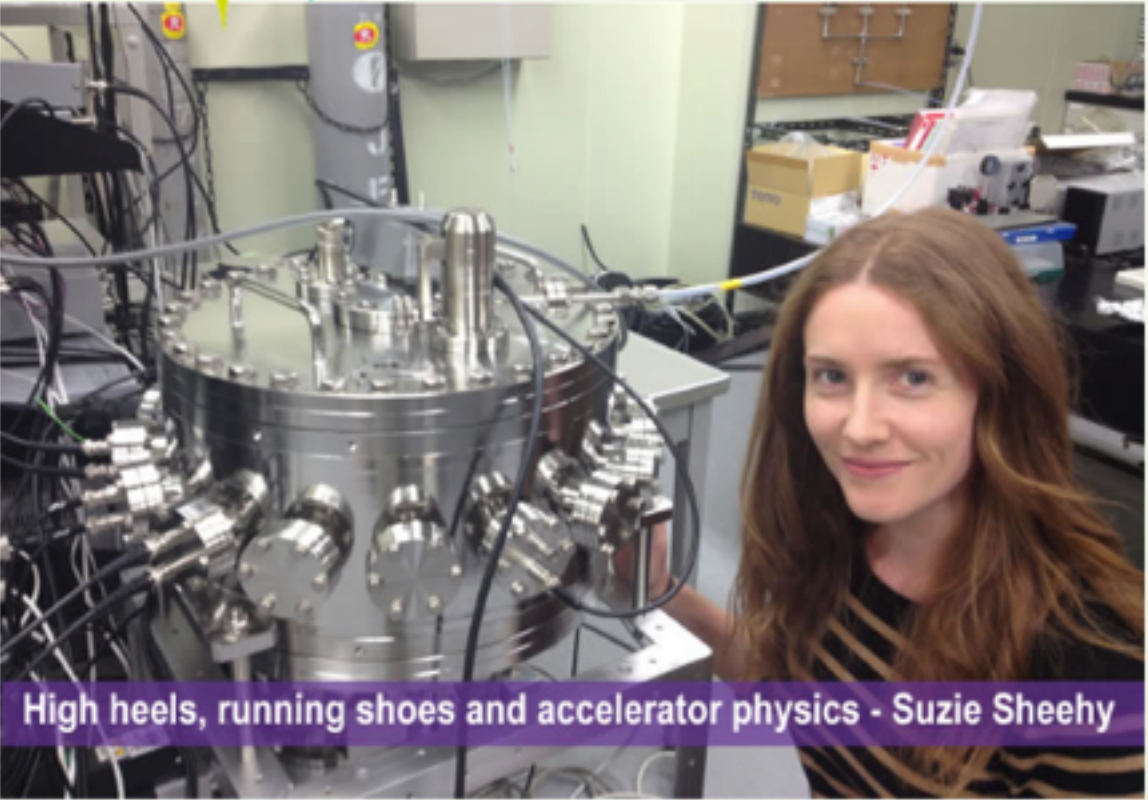

Get involved...
Please help to keep Science is Vital going: every penny helps and we need your support! This will also let you receive our mailing list and newsletter (coming soon).

We're not the only ones...

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Because science is for everyone



High heels, running shoes and accelerator physics - Suzie Sheehy

Welcome to ScienceGrrl

We are a group of people who are passionate about celebrating women in science and passing on our love of science to the next generation. Find out more about who we are and what we are doing.



Read the new ScienceGrrl report on STEM skill shortages and the lack of female representation in these fields:
"Through Both Eyes: the case for a Gender lens in STEM".

<http://sciencegrrl.co.uk>

Blogging at work: research & microbiology

Diamond nights

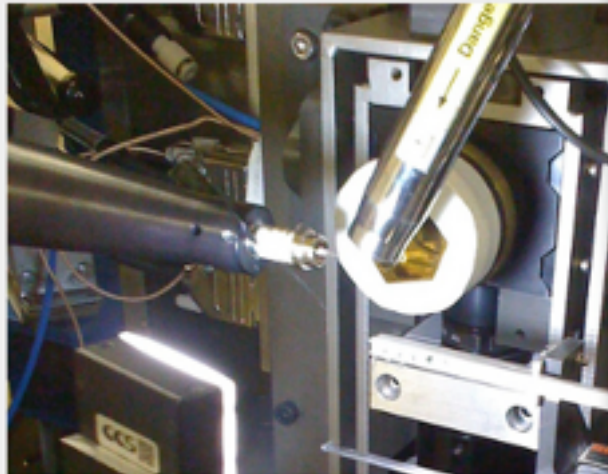
Posted on December 19, 2008 by Stephen

Yesterday morning I awoke in crumpled clothes on a strange surface, unwashed. I'd crashed there at about 5.30 am and only snatched a few minutes of sleep. As I gazed blearily at unfamiliar surroundings, a woman I barely knew handed me a cup of tea. I nodded and mumbled thanks.

Partying hard in the run-up to Christmas? No, it was the aftermath of a [time](#) to the [Diamond Light Source](#) just outside Didcot.

The symptoms will be familiar to most protein crystallographers: mental derailment, churned up guts that are no longer in sync with the rest of the body, having left the ground.

Three of us had arrived bright-eyed on Wednesday morning for the micro-focus beam-line (I24) at Diamond. The beam-line is a wondrous experimental station isn't quite fully operational. But it works very well, a mutual back-scratching agreement with Gwyndaf, the beam-line scientist, some time for our project. I24 focuses the intense X-rays generated by the beam that is only about a tenth of the thickness of a human hair. It's needed since our crystals were tiny needles of about the same size.



The crystal (invisible!) is on the end of the horizontal pin in the

News Science Occam's corner

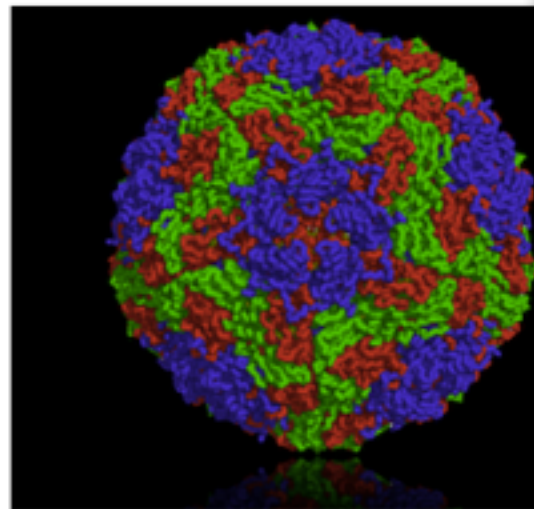
OCCAM'S CORNER

HOSTED BY THE GUARDIAN

Previous

The science behind the new mouth disease vaccine

The creation of a new synthetic vaccine for foot and mouth disease is a stranger and more impressive advance than the media



FMDV may be small — only 0.000035 mm — but is still

A paper describing a new synthetic vaccine for foot and mouth disease (FMD) was all over the news. It's an impressive advance on the old, dangerous disease in ch

News Science Occam's corner

OCCAM'S CORNER

HOSTED BY THE GUARDIAN



Previous

Blog home

Next

The Bridge: scientific spoiler alert

Warning: do not read this blog post if you have not yet seen the final episode of season two of *The Bridge* (BBC4). You may not want to read it even if you have, as it could still spoil your enjoyment.



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Posted by
Stephen Curry
Wednesday 5 February
2014 07:30 GMT
[theguardian.com](#)
[Jump to comments](#)
(37)



Sài Gòn Séamus

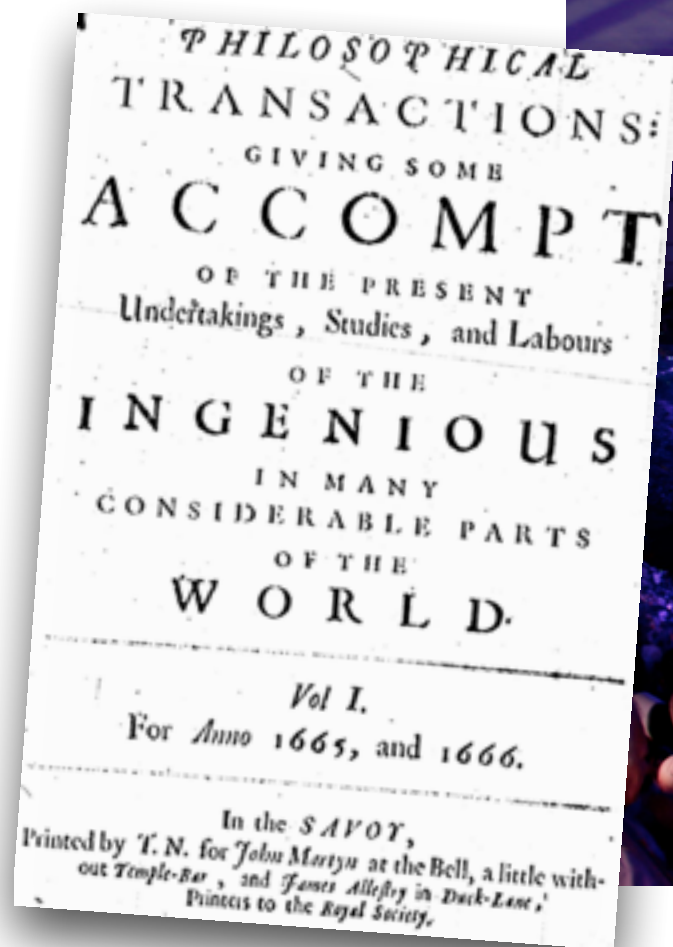
@SeamusOS

@Stephen_Curry @guardianscience thanks for the spoiler w**kers!
Unfollowed!

5:20pm - 5 Feb 14



The internet changes everything (and it's not done yet)



Dame Janet Finch:

“The principle that the results of research that has been publicly funded should be freely accessible in the public domain is a compelling one, and **fundamentally unanswerable.**”



OPEN ACCESS IS:

- ▶ Good for research & researchers
 - faster exchange of ideas
 - fosters inter-disciplinarity
 - stronger sense of community ownership?
- ▶ Good for the public (taxpayer)
 - access to the research they paid for
 - better cost control (eventually)
 - potential to change the dynamic of public engagement

Open access: challenges established journals...

occamstypewriter.org/scurry

Sick of Impact Factors

Posted on [August 13, 2012](#) by [Stephen](#)

I am sick of impact factors and so is science.

The impact factor might have started out as a good idea, but its time has come and gone. [Conceived by Eugene Garfield](#) in the 1970s as a useful tool for research libraries to judge the relative merits of journals when allocating their subscription budgets, the impact factor is [calculated](#) annually as the mean number of citations to articles published in any given journal in the two preceding years.



*"when assessing proposals for research funding RCUK considers that it is the **quality of the research** proposed and not where an author has published... that is of paramount importance."*

April 8, 2013

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...and raises questions about our modes of assessment

Evaluating how we evaluate

Ronald D. Vale

Department of Cellular and Molecular Pharmacology and the Howard Hughes Medical Institute, University of California, San Francisco, San Francisco, CA 94158

ABSTRACT Evaluation of scientific work underlies the process of career advancement in academic science, with publications being a fundamental metric. Many aspects of the evaluation

Vale, R. D. (2012) *Mol Biol Cell* **23**, 3285–3289.

My Word

The mismeasurement of science

Peter A. Lawrence

Answer from the hero in Leo Szilard's 1948 story "The Mark Gable Foundation" when asked by a wealthy entrepreneur who believes that science has progressed too quickly, what he should do to retard this progress: "You could set up a foundation

release. The song writers would soon find that producing junky Christmas tunes and cosying up to DJs from top radio stations advanced their careers more than composing proper music. It is not so funny that, in the real world of science, dodgy evaluation criteria such as impact factors and citations are dominating minds, distorting behaviour and determining careers.

Modern science, particularly biomedicine, is being damaged by attempts to measure the quantity and quality of research. Scientists are ranked according to these measures, a ranking that impacts on funding of grants, competition for posts and

Lawrence, P. A. (2007) *Curr. Biol.* **17**, R583–5.



Have you signed?

the sceptical chymist
a blog from *Nature Chemistry*

Nature Chemistry Blog Post

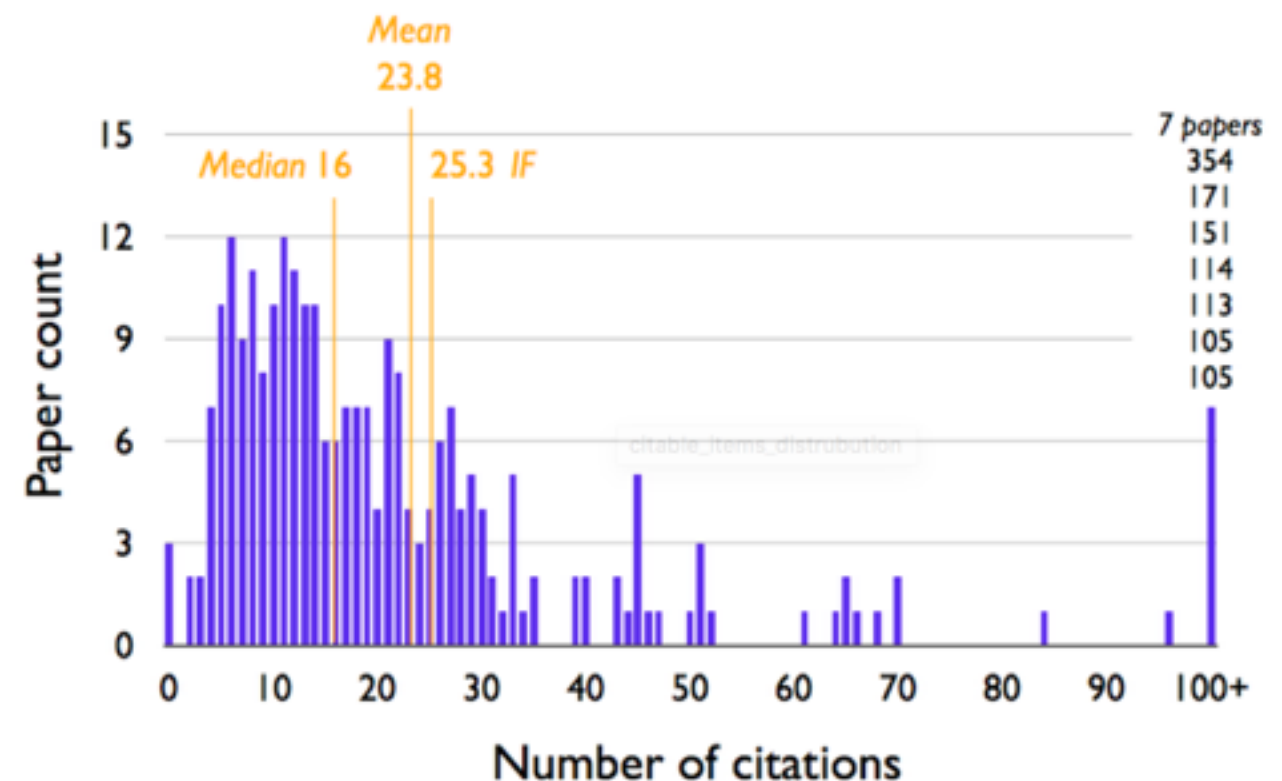
Previous post
[Avoiding redundant tautologies in scientific writing](#)

NATURE CHEMISTRY | THE SCEPTICAL CHYMIST

Nature Chemistry's 2014 impact factor citation distribution

05 Dec 2015 | 00:03 GMT | Posted by [Stuart Cantrill](#) | Category: [Journal journeys](#)

As pointed out yesterday in a [blog post](#) by [Stephen Curry](#) (and indeed in at least [one previous blog post](#)), some journals publish their citation distributions (this has also been [blogged about](#) by [Steve Royle](#) too – and probably by many others that I'm not aware of, I'm sure). I've been interested in doing this for *Nature Chemistry* for a while now, but have never quite found the time – but after [a brief exchange on Twitter this afternoon](#), I figured I should run the numbers... (what better way to spend a Friday evening?!).



<http://blogs.nature.com/the-scepticalchymist/2015/12/nature-chemistrvs-2014-impact-factor-citation->

Young scientists (**may**) need old scientists to set an example

Nobel winner declares boycott of top science journals

Randy Schekman says his lab will no longer send papers to Nature, Cell and Science as they distort scientific process

Ian Sample, science correspondent

Follow @iansample Follow @guardian

The Guardian, Monday 9 December 2013 19.42 GMT

 Jump to comments (299)



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Build a name for yourself. Share your work and make it more visible.



Reduce publishing costs

Open publishing can cost the same or less than traditional publishing.



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Know your rights. Keep your rights. Decide how your work is used.



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Meet funder requirements, and qualify for special funds.

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Publish in the journal of your choice and archive an open copy.

Get that promotion

Open research is increasingly recognized in promotion and tenure.



Dr Erin McKiernan

<http://whyopenresearch.org>

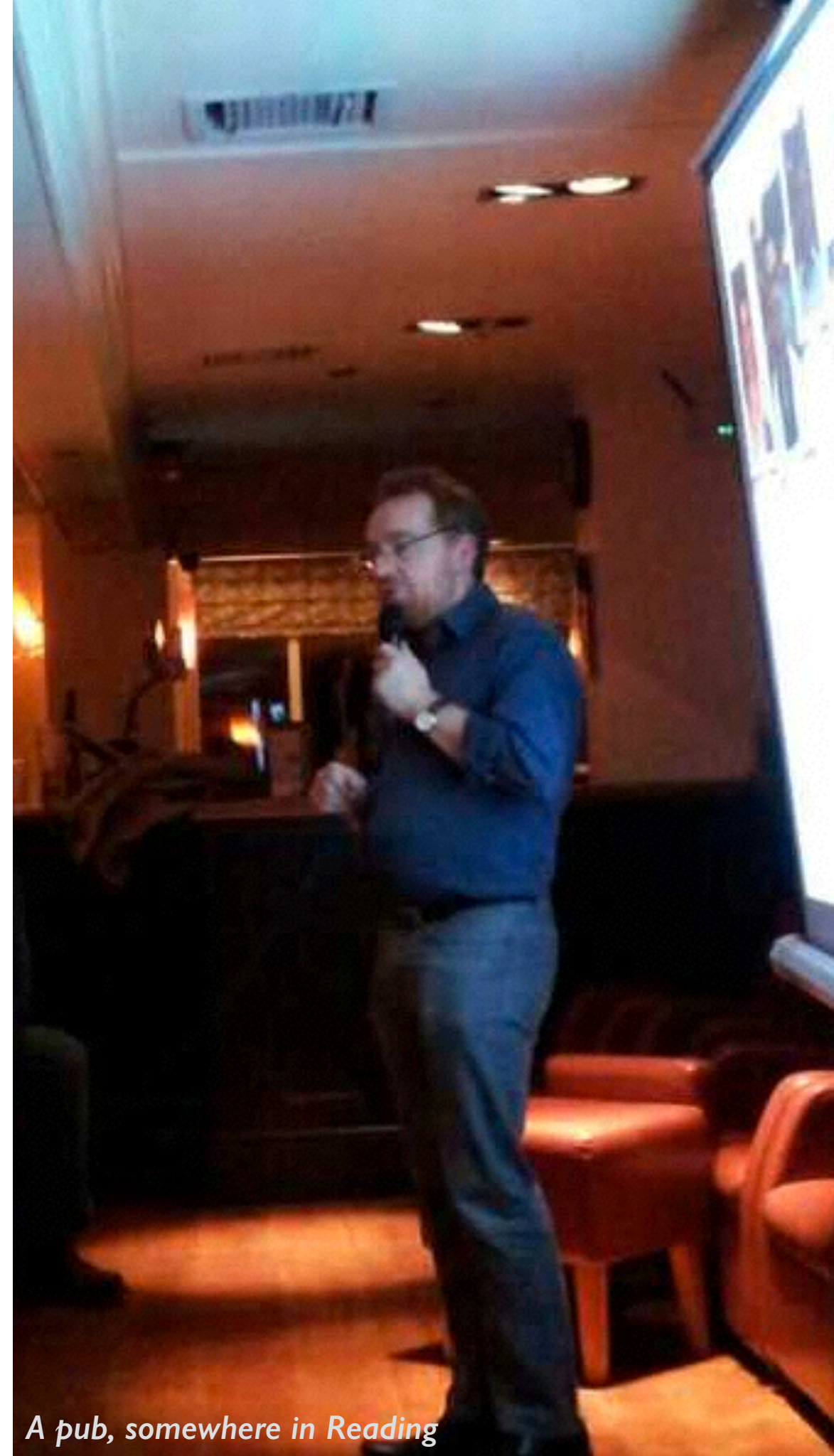
Rewards: a personal view

Scientific citizen - more than just a scientist

Public accountability

Understanding (& improving the business of science)

Find your own path



A pub, somewhere in Reading

Thank you

Nature Network

Matt Brown
Maxine Clarke
Lou Woodley

Occam's Typewriter/Corner

Jenny Rohn
Richard Grant
Henry Gee
Athene Donald
Austin Elliot
Steve Caplan
Steffi Suhr
Kristi Vogel
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