

The Importance of science communication

Dr Djuke Veldhuis

Marie-Curie – COFUND Research Fellow
Aarhus University in Denmark

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Twitter: @DjukeVeldhuis

Email: djukev@aiaa.au.dk

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What is FameLab?

- International communications competition
- Aims to identify, train and mentor scientists and engineers with a flair for communicating with public audiences.
- Started in 2005 in the UK by Cheltenham Science Festival; partnership with British Council in 2007 sees competition going global; in 2012 NASA joins to run the competition in the USA.
- So far more than 5000 young scientists and engineers participating in over 25 different countries from Hong Kong to South Africa, USA to Egypt have taken part.

So what? (Why) should scientists communicate?

What do you think?





FameLab 2013 International Winner
Fergus McAuliffe (Ireland)

Why communicate



Nature.com – Soapbox Science blog – 27 Feb 2013
<http://tinyurl.com/Peer15>

- > Benefits for the researcher
- > From a university perspective
- > Benefits to public participants
- > Benefits to society
- > Benefits to policy makers

Public perceptions of Science

75% of the UK public agree that *"we ought to hear about potential new areas of science before they happen, not afterwards"*

75% believe academics should listen more to what ordinary people think

Over half believe that scientists pay insufficient attention to potential risks

In the UK **£800m** per year spent on widening participation projects



Why communicate Researcher perspective

"My public engagement activities have given me a new perspective and broader outlook to my own research work. For example, I have recently collaborated with a microbiologist, applying quantum mechanics to biology, which arose from new contacts."

Professor Jim Al-Khalili Prof. of Physics and Senior Media Fellow at The University of Surrey; presenter BBC Radio 4 - "The Life Scientific"; BBC 2 - "Horizon"; BBC 4 - "Atom"



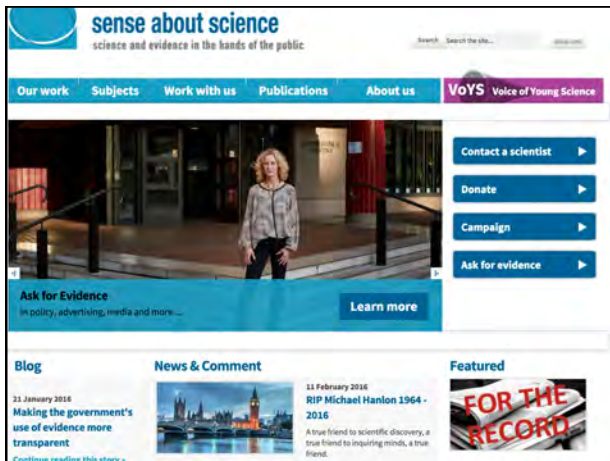
Why communicate

“Engaging the public ... can directly improve the **depth and quality** of that interpretation and feedback into new research questions which has added a **new dimension to my research**”

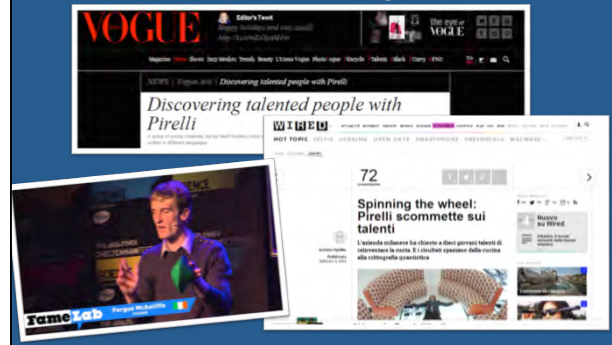
Professor Alan Winfield of The University of the West of England, Bristol. Leader of Walking with robots, a project that took the UK's intelligent robotics research to the public, reaching close to 80,000 people over three years

Why communicate Benefits for the researcher

- Ensures researchers stay ‘in tune’ to social and ethical issues
 - 75% of the UK public believe academics should listen more to what ordinary people think
 - Over 50% believe that scientists pay insufficient attention to potential risks
- Priceless feedback
- Raising your profile
- Better quality grant applications
- Developing skills
- National / global data collection – citizen science



Benefits for the researcher FameLab winner – Fergus McAuliffe



Why communicate

Benefits to public participants

- Influence – value of having views seriously considered
- Learning – new interest, knowledge and skills
- Increased confidence in using scientific information
- Social interaction and personal satisfaction
- Greater trust in public policy making



Why communicate

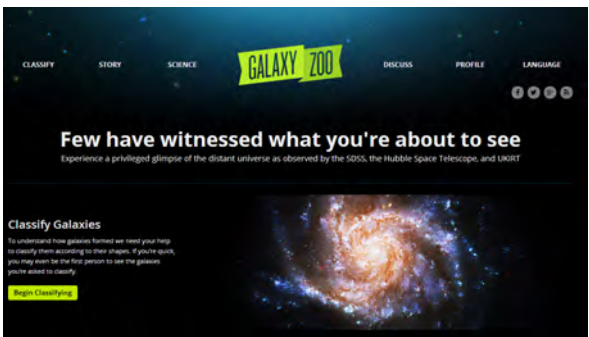
Benefits to society

- Public engagement helps to **maximise the flow of knowledge** between higher education institutions & societies
- It **contributes to social justice and corporate responsibility**
- It helps build trust and mutual understanding
e.g. *In the UK over 75% of the public agree that “we ought to hear about potential new areas of science before they happen, not afterwards”*
- It generates unforeseen outcomes, stimulates creativity and innovation
 - Fresh perspectives
 - Challenging questions
 - Lateral insights



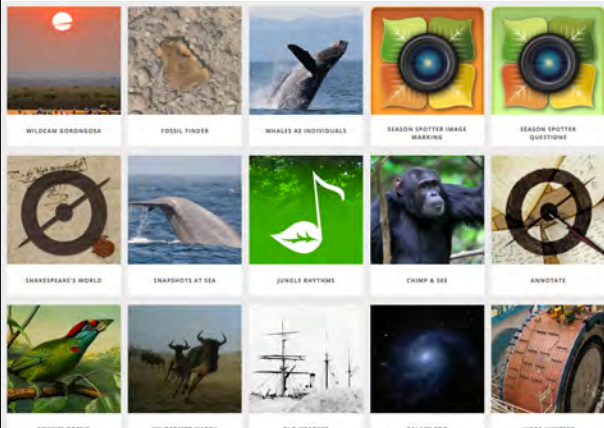
Citizen Science – Galaxy Zoo

Need to classify **one million galaxies**? No problem ... with 250,000 amateurs!



Classify Galaxies
To understand how galaxies formed we need your help to classify them according to their shapes. If you're lucky, you may even be the first person to see the galaxy you're about to classify.

[Begin Classifying](#)



WILDCAM BORNHOLESA	FOSSIL FINDER	WHALES AS INDIVIDUALS	SEASON SPOTTER IMAGE MARKING	SEASON SPOTTER QUESTIONING
SHAKESPEARE'S WORLD	SNAPSHOTS AT SEA	JUNGLE RHYTHMS	CHIMP & SEE	ANNOTATE
SCIENCE BOSSIP	WILDBEEST WATCH	OLD WEATHER	GALAXY ZOO	HIGGS HUNTERS

Why communicate

How / resources:

- (Inter)national Science Associations
- Media Fellowships
- FameLab, Pint of Science, Bright Club, Science Show Off
- Institute of Physics, STEMNET, RSC, RAEng, Royal Society
- Science Festivals – e.g. World Science Festival, Science Slam Festival, UNESCO ciencia & cultura programme
- University communication / public engagement teams
- Popular science magazines e.g. *New Scientist*, *Scientific American*
- Social media and blogs
- Science Media Centre ...

Tomorrow– Flash talk training

Aims:

- “I understand why being involved in public engagement alongside my research can benefit my research and wider society”
- “I’ve a better idea of science communications opportunities I might pursue and / or involve my students with.”
- “I understand how to help my institution, students, research group find resources for being involved in public engagement.”