Conveying Science through Flash Talks

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PEER conference, Arusha, Tanzania
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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.
An example:

FameLab 2013 International Winner
Fergus McAuliffe (Ireland)
So what? (Why) should scientists communicate?

What do you think?
The first street in London
Why communicate
University perspective

• It helps universities adapt to a changing world
  – Accountability and transparency
  – Trust and license to practice
  – Relevance
  – Responsiveness
• It enriches the institutions research and learning
• It strengthens and enriches the university’s brand and identity
• Increases public appreciation and support for higher education and research

Source: National co-ordinating centre for public engagement.
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
Why communicate
Benefits for the researcher

• It enriches students and researcher's experience – develops employability and skills

“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 an Engineering and Physical Sciences Research Council (EPSRC) Senior Media Fellow at The University of Surrey

Source: Research Councils UK.
Why communicate
Benefits for the researcher

- Ensures researchers stay ‘in tune’ to social and ethical issues e.g.
  - 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

Cell biologist Dr Kelly BéruBé of Cardiff University, whose research focuses on pollutant-induced lung disease, has seen how public engagement activities have improved both her personal skills and opened up doors for influence.

In 2009 an instant profile boost came from her contribution to a Cheltenham Science Festival panel discussion which resulted in over 50 worldwide media items on the research and later that year was invited House of Lords to speak to MPs and Peers about the use of human tissue in clinical drug trials, to push for a regulatory requirement of drug testing in human tissues.
Why communicate
Benefits for the researcher

• Priceless feedback

“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

• Raising your profile

• Better quality grant applications

• Developing skills

Developing my public engagement skills has helped me in briefing the courts on stabbing incidents. Professor Sarah Hainsworth of The University of Leicester

• National / global data collection – citizen science
We needed to classify **one million galaxies** -- So we have managed to attract around 250,000 amateurs to become involved. By using their own computers with a specially designed software interface they could watch, research and contribute their findings". **Dr Chris Lintott – University of Oxford, United Kingdom**
Changing cultures: reaching audiences, open source publishing & broader engagement

How journals like Nature, Cell and Science are damaging science
The incentives offered by top journals distort science, just as big bonuses distort banking

Randy Schekman
The Guardian, Monday 9 December 2013 19.30 GMT
Jump to comments (278)

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

Benefits for the researcher
FameLab winner – Fergus McAuliffe
Why communicate

In summary:

- Skills development
- Career enhancement
- Enhancing your research quality and its impact
- New research perspectives
- Higher personal and institutional profile
- Influence and networking opportunities
- Forming new collaborations and partnerships
- Enjoyment and personal reward
- Additional funding
- Increasing awareness of the value of research to society
- Increasing student recruitment
- Inspiring the next generation of researchers

www.rcuk.ac.uk
Today – Flash talk training

Aims:

• “I understand why being involved in public engagement alongside my research can benefit my research and wiser 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/be involved in public engagement.”
Today – Flash talks
Training:

• Activity 1 - **This is me! Communication without words**
  - Who are you and what do you do? Something surprising... **NOW**

----------------------Move into break out groups----------------------

• Activity 2 – **Pass the box**
  – Goal – Body language and the importance of non-verbal communication and expressing sensations as well as using facial expressions.

• Activity 3 – **Speed dating / fast track story making**
  - Goal – Critical listening & improvisation. An opportunity to get instant and accurate feedback from your peers, allowing you to make quick adjustments.

- Activity 4 – **Flash talk practice sessions**
Today – Flash talks
Judging criteria

3 Minutes – No PowerPoint – only the props you carry on stage

- **Content**: needs to be factually correct and scientifically sound, but also well-chosen for a lay audience (not too obscure but not patronisingly simplified) and well structured as a “story”.

- **Clarity**: as well as being understood, the subject should be put in context. Is this well-established knowledge, an exciting new piece of research, or a controversial theory?

- **Charisma**: do they make you want to watch and listen to them? Did the time fly by and were you sorry they had to stop?
Flash talks – score sheets

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Response to Judges Questions:
This week: come and talk to me about

• FameLab International -
• Scientists and social media / blogging – See e.g. “A scientist guide to social media” http://tinyurl.com/kwgzknr
• Public engagement opportunities / Resources See e.g. “Top Tips” http://tinyurl.com/lrld9ye
• Presentation techniques
• Science journalism
Today – Flash talks
Training

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