Intended Learning Outcomes (ILOs)

- **What?**
  - Define what we mean by science communication

- **Why?**
  - Explain why science communication is important for both our CPD and the public

- **How?**
  - List the different types of science communication and ways in which we can get involved
  - List the skills that we can develop to become successful science communicators and incorporate science communication into our roles
What is science communication?

Describes measures to disseminate scientific information, research, ideas or breakthroughs to a non-specialist audience in an accessible and understandable way.
Why communicate our science?

- **Public Awareness**
  - Science and health literacy
  - Trust in scientific research
  - Trust between patient and caregiver

- **Public Engagement / Patient & Public Involvement (PPI)**
  - Recruitment to clinical trials

- **Political and funding support**
  - Communicate findings to stakeholders

- **Establishing partnerships**
  - Partner with charitable organisations to ensure research aligns with patient needs
  - Ensuring the patient voice is heard
  - Develop research projects with charities from the start
Developing Skillset

- Communicate complex, scientific information accessibly
- Verbal communication
- Presenting in different media
- Co-ordination & organisation
- Proactivity & tenacity
- Willingness to learn new skills
- Channelling enthusiasm and passion for your subject
Audience

- General public
  - Age groups
  - Community groups
  - Patients / lay committee members
  - Patient families
- Peers / Colleagues / Other scientists or healthcare professionals
  - Nationally
  - Internationally
- Policy makers
- Stakeholders
Social Media

Science Communication

Adapted from image by Claire Fearon
Science Communication

Social Media
- YouTube
- TikTok
- Facebook
- Instagram
- LinkedIn

Outreach
Charities
Marketing & Publicity

Adapted from image by Claire Fearon
Charities

- Funding obligations
- Marketing & publicity
  - Financial support
  - Shared agendas
- Connection to the patient voice
Science Communication

Social Media
- YouTube
- TikTok
- Facebook
- Instagram
- LinkedIn

Outreach
- Charities

Marketing & Publicity

Exhibitions
- Museum events
- Competitions
- Interactive displays

Activities

Adapted from image by Claire Fearon
Exhibitions

Three Minute Thesis Competition (3MT)
‘I feel it in my bones!’
Science Communication

Social Media
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- LinkedIn

Outreach
Charities
Marketing & Publicity

Exhibitions
- Museum events
- Interactive displays

Activities
Competition

Science Communication

Writing & Publishing
- Popular Science Books
- Blogs
- Multimedia videos
- Magazines
- Animation
- Print or online newspapers

Street Science
- Word of mouth
- Sign language
- Plays
- Busking
- Festivals
- Street performances
- Art
- Dance

Adapted from image by Claire Fearon
Science Writing & Publishing

‘Journey of a QUOD Sample: Donating to Transplant Research’ Video

PCER Fund
Public Partnership Groups
Top Tips for Writing

- Write in bullet points the key plot points of your story
  - Short, catchy, entertaining **title**
  - **Beginning** (context/background/introduction)
  - **Middle** (problem that you are trying to solve)
  - **End** (what happened and where do you go from here)

- Remove technical jargon unless it can be explained clearly and concisely

- Be creative

- Remember your audience!
Science Communication

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Outreach
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Charities

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- Activities

Science Communication

Writing & Publishing
- Popular Science Books
- Blogs
- Multimedia videos
- Print or online newspapers
- Animation

Broadcasting
- News & Journalism
- Children's TV/Media
- Broadcasting
- Radio
- TV Documentaries
- Podcasts

Children's TV/Media

Street Science
- Word of mouth
- Sign language
- Art
- Dance
- Plays
- Festivals
- Street performances
- Busking

Interactive displays
- Competitions
- Museum events

Adapted from image by Claire Fearon
Broadcasting
Broadcasting - Podcasts

**Presenter** – what questions would you ask? What do you think the audience is most interested in hearing about?

**Scientist** – what information are you going to communicate to the public? How will you word your response(s)?
Top Tips for Presenting

- Make eye contact
- Hand gestures and posture
- Prompt cards and notes
- Projection
- Interact with the audience
  - Direct
  - Indirect
- ‘Practice makes perfect’
- Tell a good story!
Science Communication

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Marketing & Publicity
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- Interactive displays
- Competitions

Activities
- Street Science
- Word of mouth
- Sign language

Interactive displays
- Exhibitions

Museum events
- Exhibitions

Activities
- Exhibitions

Interactive displays
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Word of mouth
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- Festivals
- Street performances

Art
- Street Science

Dance
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Plays
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- Broadcasting

Broadcasting
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Radio
- Children’s TV/Media

TV Documentaries
- Children’s TV/Media

Assemblies
- Outreach

Career Days
- Outreach

Workshops
- Outreach

Schools & Community Groups
- Outreach

Resources
- Outreach

Summer schools/programmes
- Outreach

Adapted from image by Claire Fearon
Schools & Community Groups

STEM Ambassadors

The Brilliant Club

Universify Education

Science Oxford
<table>
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<tr>
<th>Resources</th>
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<tr>
<td>- Animate Your Science</td>
<td>- I’m a Scientist</td>
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<td>- Oxford Sparks</td>
<td>- I’m an Engineer</td>
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<td>- Science Oxford</td>
<td>- The Naked Scientists</td>
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<td>- Oxford Medical Illustration</td>
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Any questions?

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“Not only is it important to ask questions and find the answers, as a scientist I felt obligated to communicate with the world what we were learning”

– Stephen Hawking
References

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