



Overcoming Barriers to Cross-disciplinary Research

X-Net Workshop
06 July 2022



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Programme

- 13:00 Welcome and introductions
- 13:30 Defining common barriers
- 14:35 Break
- 14:45 Finding solutions - case studies
- 15:30 Action Learning Sets & reflections
- 16:00 Further resources and End



Workshop outcomes

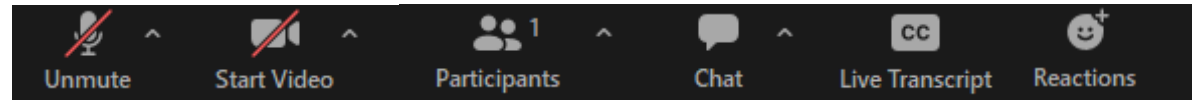
This workshop will become part of the X-Net Roadmap

- It will feed into recommendations to funders and institutions.
- Any contributions today will be quotable, but not attributable.

Workshop etiquette

- Please remain
 - Respectful & Considerate
 - Confidential (no names please)

- Zoom interaction



- It will not be recorded, but transcription will be enabled

Introductions

Independently: On Padlet, choose one picture that most represents how you feel about inter and cross-disciplinary research.

<https://padlet.com/ewoollen/1xjfo4qiynegz4lv>

In groups: Introduce yourselves and discuss what picture you chose and why.



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Defining common barriers



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Common themes to barriers




Defining common barriers

- **In groups** – in Padlet, list what the common barriers are within each theme

<https://padlet.com/ewoolen/zazkbko5n78jz07o>

- **Plenary** – Discuss outcomes
 - Are there any themes missing?

Defining common barriers

- **Back in groups** – for each theme, chose the top 3 barriers your group thinks are the most important (click on the  icon)
- **Plenary** – Discuss and agree outcomes
 - Are they common for all?

Break!



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Finding solutions



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Finding solutions

Case Study 1

Dr. Vanessa Smer Barreto,
Cross-Disciplinary Post-
Doctoral Fellow at the Institute
of Genetics and Cancer, The
University of Edinburgh.



<https://homepages.inf.ed.ac.uk/doyarzun/people/vanessa/>

Case Study 2

Dr. Linus Schumacher,
Chancellors Fellow at the
Centre for Regenerative
Medicine, The University of
Edinburgh.



<https://www.ed.ac.uk/profile/linus-schumacher>



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Action learning sets & reflections



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Action Learning Sets

Present the
problem

Open
questioning
(not solving)

Action

Keep it safe & confidential

One thing to make a change

- Please tell us in this padlet.....
 - **One action** you will take as a result of this workshop
 - **One change** that is needed to better enable inter and cross-disciplinary research (please be specific)

<https://padlet.com/ewoollen/589vahdan1ktbs99>

- Consider sharing your experience with X-Net
 - <https://x-net.bio/>

Further resources

Experiences from biomedicine

- Knapp B, Bardenet R, Bernabeu MO, Bordas R, Bruna M, Calderhead B, et al. (2015) Ten Simple Rules for a Successful Cross-Disciplinary Collaboration. *PLoS Comput Biol*, 11(4): e1004214. <https://doi.org/10.1371/journal.pcbi.1004214>
- Ponting C. P. (2020) Genetics Needs Non-geneticists. *Trends in genetics*, 36(9), 629–630. <https://doi.org/10.1016/j.tig.2020.06.015>

Further resources

Key guides and toolkits

- A series of **short guides** to interdisciplinary research - <https://www.wiki.ed.ac.uk/display/ISSTIInterdisciplinary/Interdisciplinary+Briefing+Notes>
- **SHAPE-ID toolkit** (Shaping interdisciplinary practices in Europe) – tools and resources for interdisciplinary research (particularly between AHSS and STEM subjects). <https://www.shapeidtoolkit.eu/>
- For UoE researchers see also new resource for ID research <https://uoe.sharepoint.com/sites/InterdisciplinaryResearch>

Further resources

For career progression

- Lyall, C. (2019) Being an Interdisciplinary Academic: How Institutions Shape University Careers. *Palgrave Pivot*. <https://doi.org/10.1007/978-3-030-18659-3>
- Woollen, E. (2019) Interdisciplinary Research: making the most of the opportunities and navigating the challenges for early career researchers, *IAD University of Edinburgh*. Available at <https://edin.ac/2OQ5zRT>
- Interdisciplinary conversations, *IAD University of Edinburgh* – series of interviews with interdisciplinary researchers discussing all manner of interdisciplinary issues. Available at <https://blogs.ed.ac.uk/iad4researchers/category/uncategorized/interdisciplinary-conversations/>

Further resources

For collaborations

- Bennett et al. (2018) Collaboration and Team Science: A Field Guide (2nd ed). *National Cancer Institute, US Department of Health & Human Services*. Available at <https://www.cancer.gov/about-nci/organization/crs/research-initiatives/team-science-field-guide/collaboration-team-science-guide.pdf>
- Gadlin, H. & Jessar, K., Pre-empting Discord: Prenuptial Agreements for Scientists, *NIH Ombudsman*. Available at <https://ori.hhs.gov/preempting-discord-prenuptial-agreements-scientists>
- Lyall, C., Bruce, A., Tait, J., & Meagher, L. (2011) Interdisciplinary Research Journeys: Practical Strategies for Capturing Creativity. *London: Bloomsbury Academic*. Available at: <http://dx.doi.org/10.5040/9781849661782> **In particular chapters 3 & 4**
- Confusion in collaboration, *IAD University of Edinburgh*. A set of questions to help researchers reduce confusion in collaborations. Available at <https://edin.ac/3yFR5eG>



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Slides available here
<https://edin.ac/3yHuGhi>



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Thank you!



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