IMPERIAL

"I have kidnapped your goldfish"

Beyond OpenResearch: Embedding Reliability Through Team Science, Public Involvement and Co-Creation

Dr Hamid Khan
Open Research Manager, Imperial College London
Local Network Lead, UK Reproducibility Network
18 June 2026

The three key questions

- What really matters in research?
- What practices and behaviours enable high-quality research?
- How can we recognise and incentivise quality?



Guidance on Publication Lists

Imperial is a signatory to DORA (Declaration on Research Assessment), which mandates that in hiring and promotion decisions, the scientific content of a paper, not the JIF (Journal Impact Factor), is what matters. More information on DORA is available at https://sfdora.org/

Academic promotions criteria, Appendix 9: Guidance on how DORA is implemented in practice is limited

A conceptual pivot...

- Are we asking the wrong question about "quality"?
- Reproducible research can be "reproducibly bad".
- Reliability:
  - Valid
  - Trustworthy
  - Contextually grounded
  - Legitimate
  - Bear decision-making weight

Research professionals

Public, clinical and end-user involvement

Our approach

- Multi-year, Library-led research culture project supported by Research England's 'Enhancing Research Culture' fund

- Facilitated "citizens' assembly"-style workshops on scoping and planning, mixed-methods engagement activities

- Participants included:
  - researchers
  - professional and technical staff
  - research culture experts
  - members of the public



- Widening participation strengthened rigour and contextual relevance
- Library as motivated convenor and expert contributor

IMPERIAL

Phase 3

A proof-of-concept for embedding reliability in research data:

- Quality by Design
- Team Science
- Recognition and assessment

From co-creation to proof -of-concept

- Lifecycle-integrated training
- A train-the-trainer approach
- Bespoke 1:1 mentoring
- Development of:
  - data management plans
  - standard operating procedures
- Collaborative model for reliability peer review

BOR: Embedding Reliability in Research Data

What makes the programme distinctive:

- grounded in co-creation in collaborative core sessions
- shaped by real lab practices and barriers (identifying specific quality-critical factors at key milestones)
- combines cohort learning with tailored support via 1:1s
- designed to build leadership capacity within research teams through a train-the-trainer approach

Proof-of-concept programme design

Onboarding session
4 March

Core Session 1: Research data management and the FAIR principles
16 March

Core Session 2: Reproducibility by Design
15 April

April-June: Bespoke 1-to-1 with each participant

Core Session 3: Co-creating an approach to recognition and assessment
4 June

Core Session 4: Co-creating an approach to data peer review
22 June (Bristol)

Closing session
17 July

"Invisible work"

Much of the work that enables quality is not recognised



Team Science

Motivations:

- Quality-enabling work happens at the level of the lab or group, not just individual projects.
- Strategic priority at the MRC Laboratory of Medical Sciences.

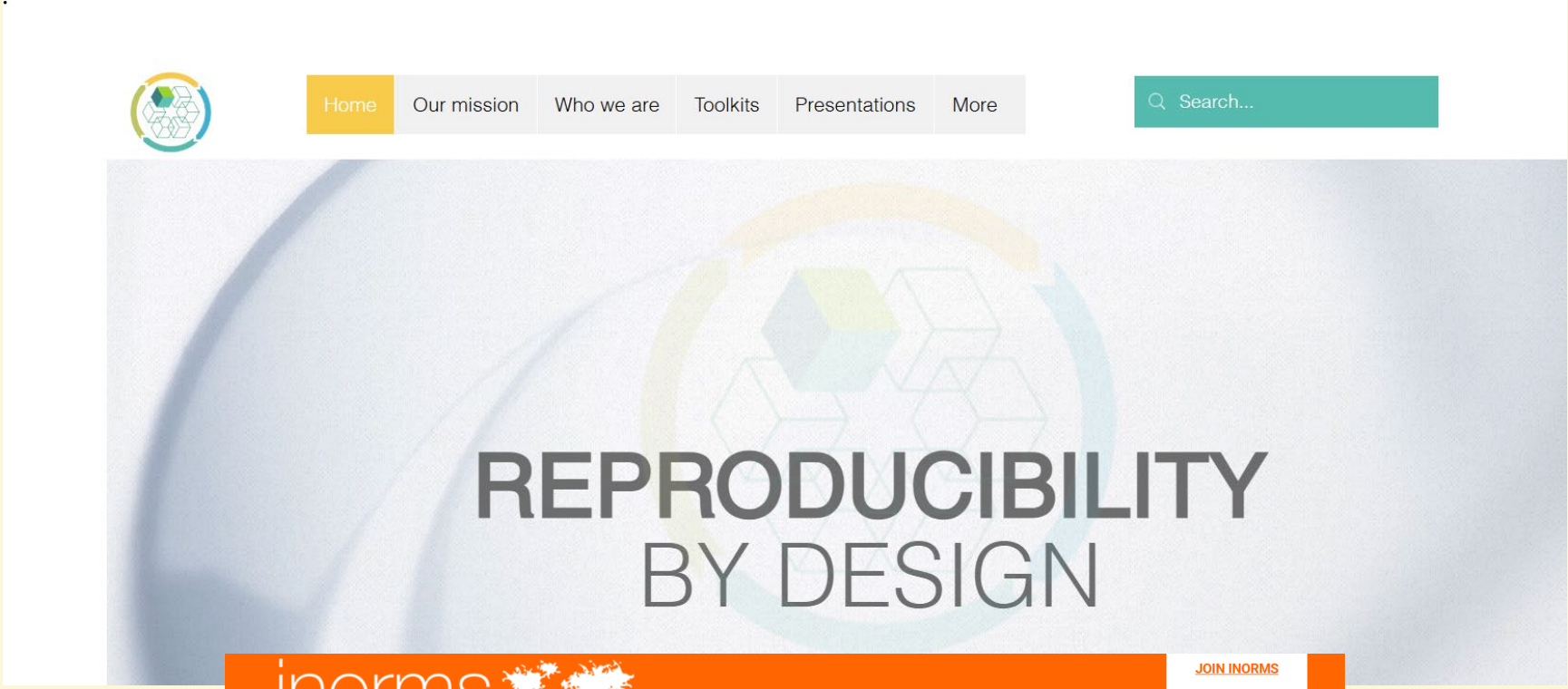




Fiona Booth

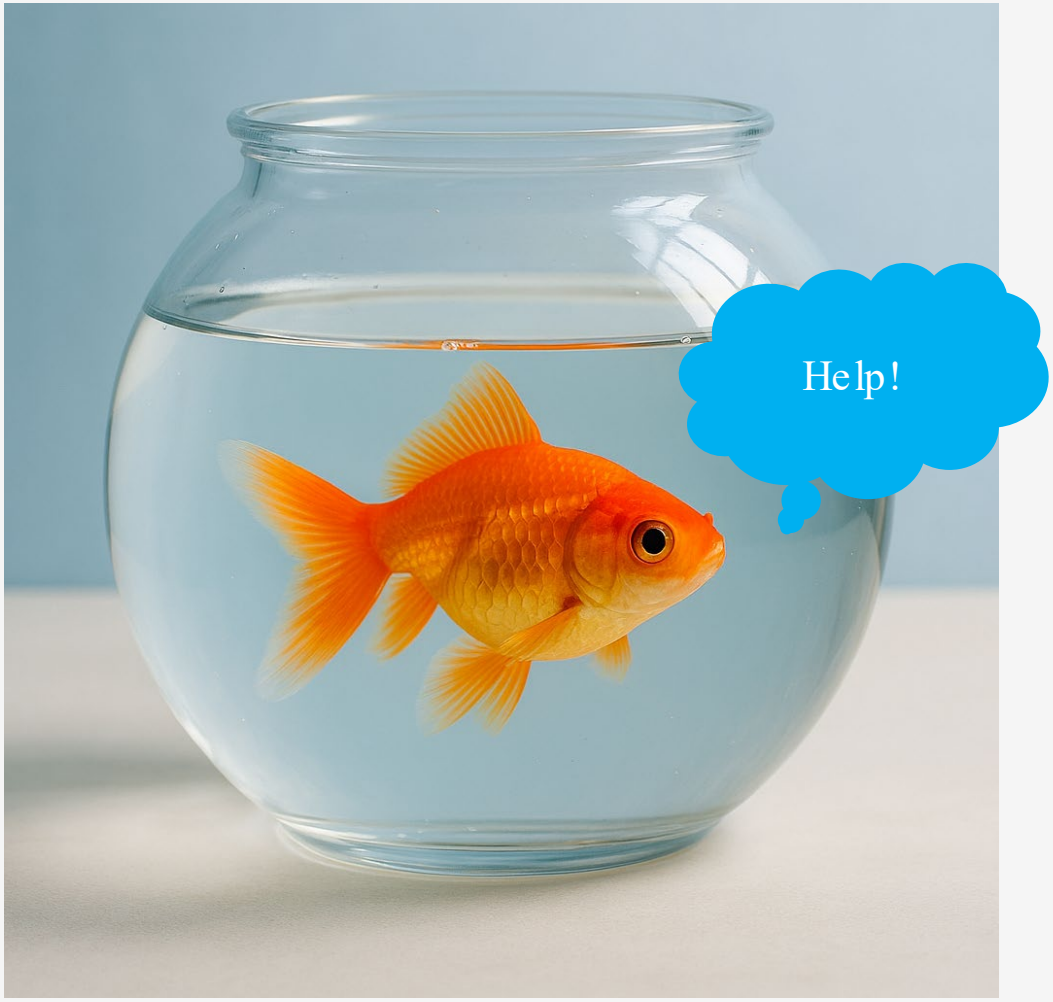
Lizzie Gadd




Home
Our mission
Who we are
Toolkits
Presentations
More
Search...
REPRODUCIBILITY
BY DESIGN


inorms
JOIN INORMS
HOME
ABOUT
INORMS CONGRESS
ACTIVITIES
MEMBERSHIP
CONTACT
SCOPE Framework for Research Evaluation
The SCOPE framework for research evaluation is a five-stage model for evaluating responsibly. It is a practical step-by-step process designed to help research managers, or anyone involved in conducting research evaluations, in planning new evaluations as well as check existing evaluations. SCOPE is an acronym, where S stands for START with what you value, C for CONTEXT considerations, O for OPTIONS for evaluating, P for PROBE deeply, and E for EVALUATE your evaluation.
S
C
O
P
E
START WITH WHAT YOU VALUE
CONTEXT CONSIDERATIONS
OPTIONS FOR EVALUATING
PROBE DEEPLY
EVALUATE YOUR EVALUATION

I have kidnapped your goldfish...



Co-created Team Science definition (LMS-specific)

We used the SCOPE Framework to start developing an evaluation approach that defines and recognises the Team Science approach that enables transparency and reliability.

"Team Science is a collective and collaborative approach to research that is enabled by knowledge-sharing, training, diversity and recognition."

Proof-of-concept outcomes

Demonstrate and evaluate:

- Feasibility
- Longitudinal and comparative insight
- How to inform institutional strategy
- How to inform future policy and practice

Role of the academic library



Key lessons

- Co-creation to define what quality means in practice
- Involve professional and public expertise early for legitimacy and impact
- Shift from "reproducibility" to "reliability" enabled treatment as a practical issue centred on transparency and decision-making robustness (Repro by D)
- Connect training to recognition and incentives concurrently (SCOPE)
- Library as a convenor and strategic partner in institutional research change
- PI engagement remains a challenge

IMPERIAL

Thank you

How do we enable reliability and ensure that enabling work is visible and valued?

Dr Hamid Khan
hamid.khan@imperial.ac.uk
ORCiD: 0000-0002-4587-7717