

# Icebreaker

If you could pick a title for your role - what would you be called?

Be as creative as you'd like.

Sign-in here:

<https://tinyurl.com/ymma95wn>





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## Research infrastructure roles: perspectives, paths and lived experiences

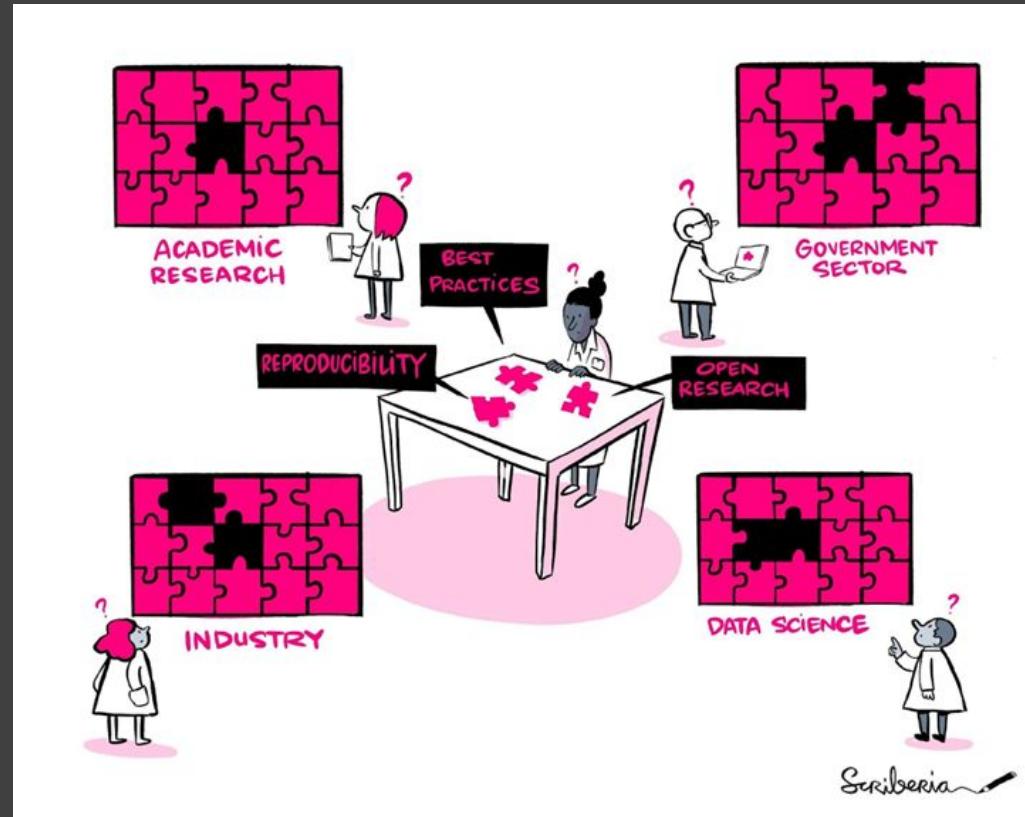
CW23: 3 May 2023

Alexandra Araujo Alvarez, Anne Lee Steele, Camila Rangel  
Smith, Emma Karoune, Hari Sood, & Malvika Sharan



# Evolving research and data landscape

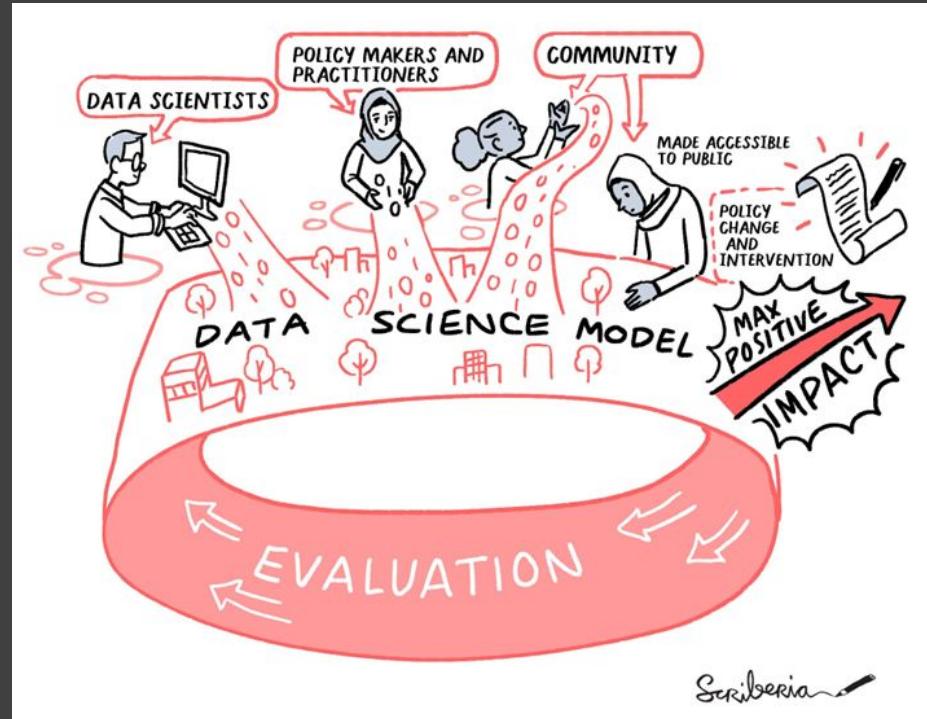
- Interdisciplinarity
- Widening Participation
- Commitment to EDIA
- Better research culture



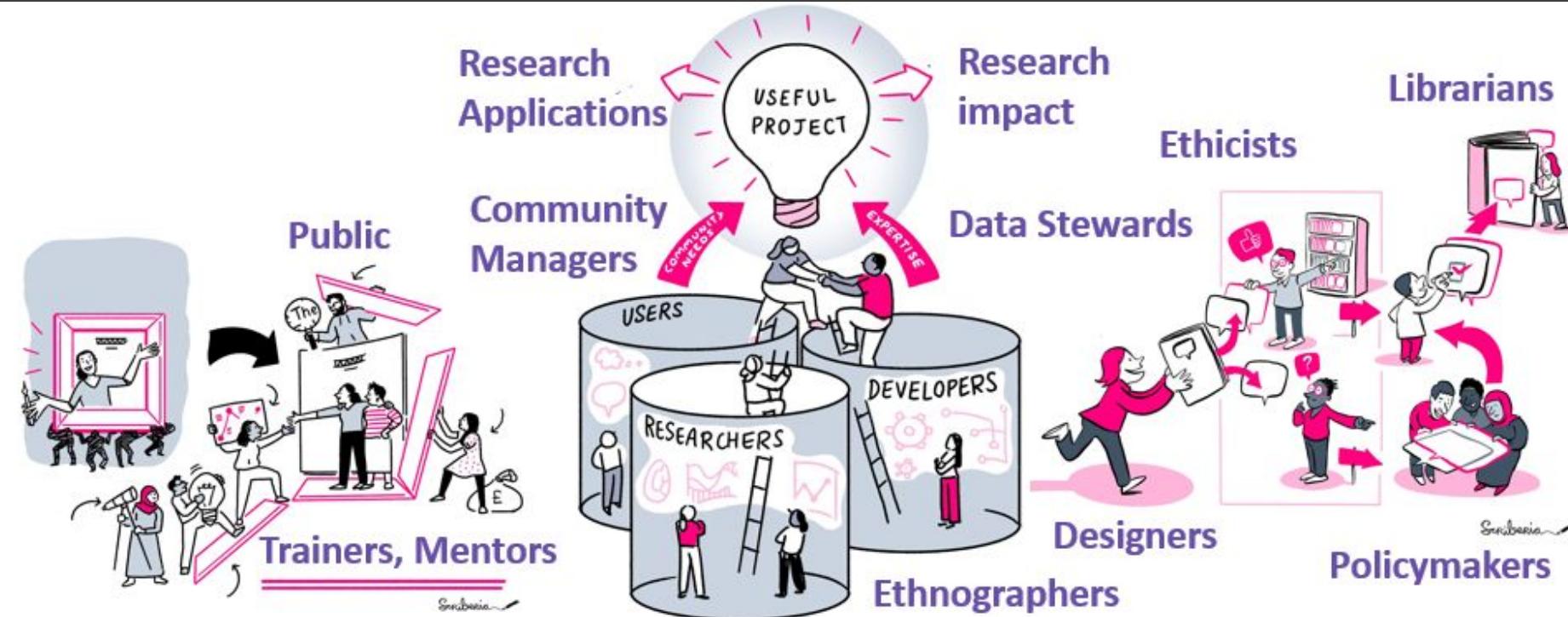
@malvikasharan, Presentation DOI:  
10.5281/zenodo.7620215

# Research infrastructure roles

Research infrastructure roles provide **specialised skills, expertise and services** required for effectively carrying out **high-quality research**.



# Diversifying research roles



# Tools, Practices and Systems

- Trustworthy systems
- Transparent reporting
- Inclusive interoperable design
- Ethical integrity
- Respectful co-creation
- Leadership in open research



Home + Research + Research programmes

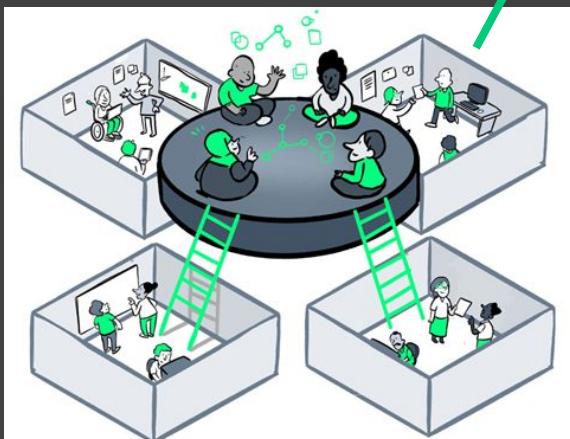
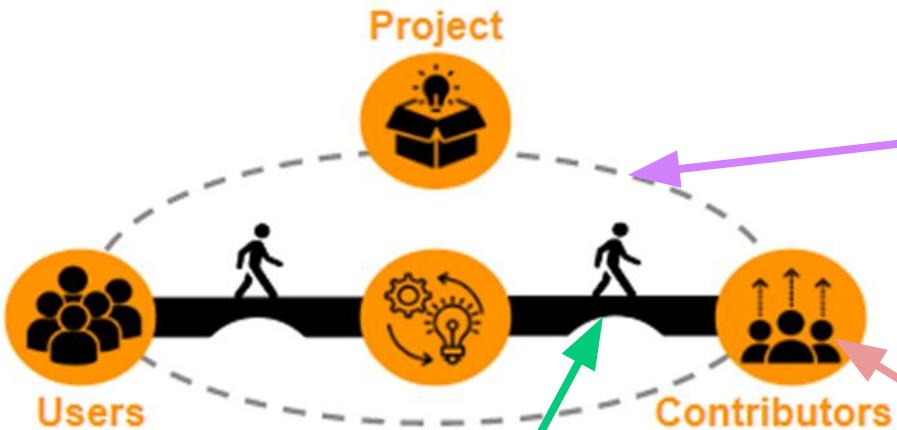
## Tools, practices and systems

Building open source infrastructure to empower a global, decentralised network of people who connect data with domain experts



**Dr Kirstie Whitaker**  
Director of the  
programme

## Strategic and technical support for stakeholder engagement and participation

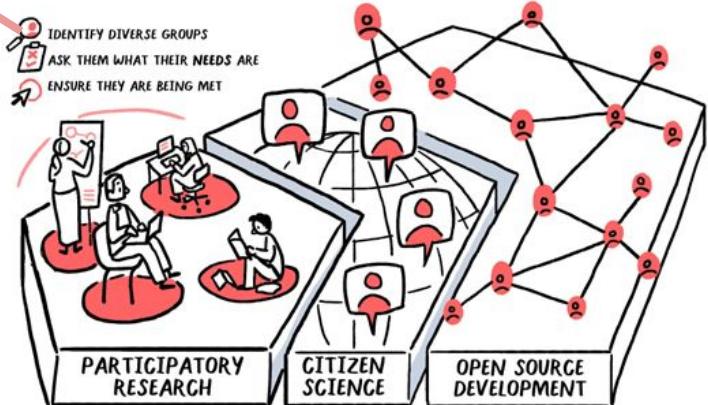


## Research Community Management

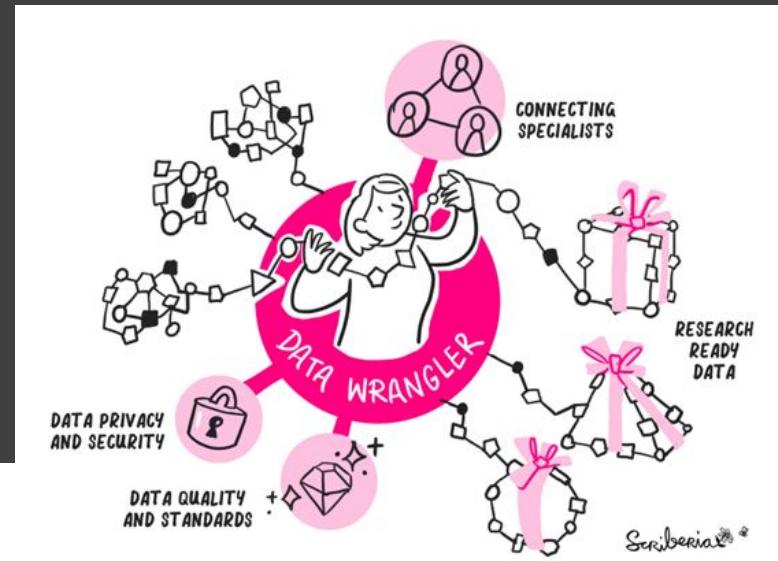
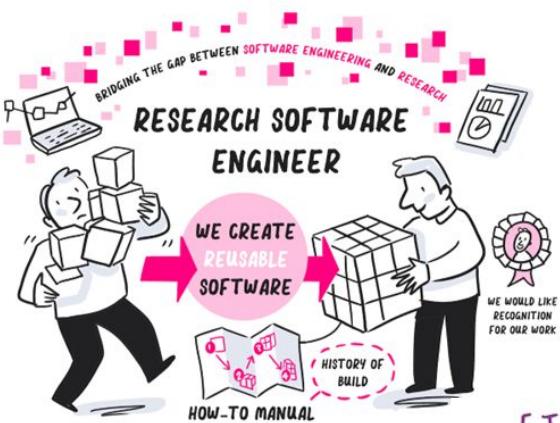
## Research Applications



## Participatory Citizen Science



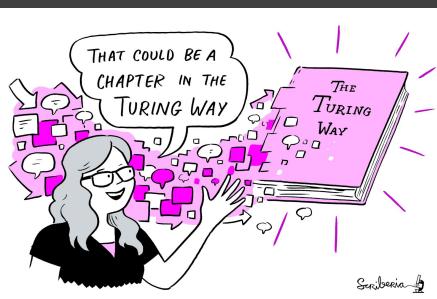
# Also at Turing



# The Turing Way

## An Open Source guide on Data Science

We involve and support a diverse community to make data science reproducible, ethical, collaborative and inclusive for everyone



A book



A global community



An open-source project



A culture of collaboration

# Guide for Reproducible Research

Guide for Reproducible Research	^
Overview	▼
Open Research	▼
Version Control	▼
Licensing	▼
Research Data Management	▼
Reproducible Environments	▼
BinderHub	▼
Code quality	▼
Code Testing	▼
Code Reviewing Process	▼
Continuous Integration	▼
Reproducible Research with Make	▼
Research Compendia	
Credit for Reproducible Research	
Risk Assessment	▼
Case Studies	▼



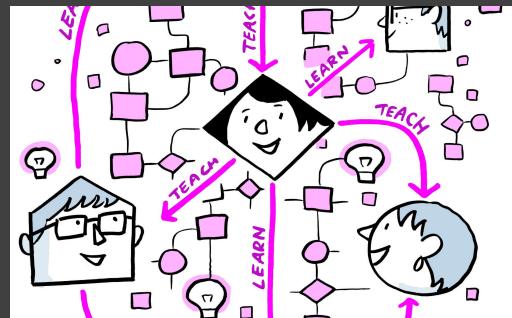
# *The Turing Way* Guides



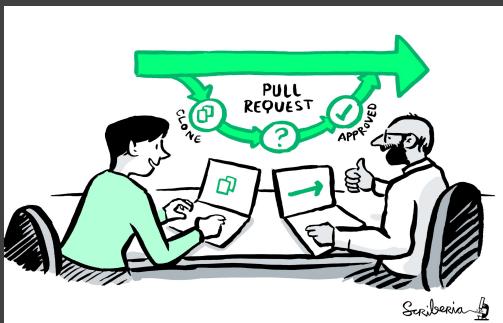
Reproducibility



Project design



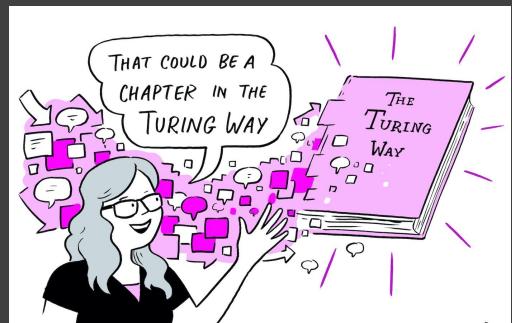
Communication



Collaboration



Ethical research



Community handbook

## Research Infrastructure Roles

### Community Managers

#### Overview

#### Data Stewards Overview

#### Data Steward Personal Story

#### Data Wrangler Overview

#### Research Software Engineers Overview

#### Research Software Engineering Personal Story

#### Research Application Manager Overview

#### Research Infrastructure Developer Overview

### Guide for Collaboration

Getting Started With GitHub

Maintainers and Reviewers on GitHub

Organising Meetings

Organising Online Coworking Calls

Organising Conferences

Chairing Events

Participating in Events

Informal Coffee Chats

Tools for Facilitating Collaboration

Managing a New Community and Team

Team Manual

Leadership in Data Science

Research Infrastructure Roles

Remote Collaboration

Shared Ownership in Open Source Projects

Sustainability of Open Source Projects

# Guide for Collaboration

*This guide covers topics related to effective and inclusive collaboration.*

Data science is defined by its interdisciplinarity. Our work can only reach its highest potential if there are diverse teams of people involved in designing and delivering the research or product.



Fig. 91 There is more to collaboration than we see. *The Turing Way* project illustration by Scriberia.  
Used under a CC-BY 4.0 licence. DOI: 10.5281/zenodo.3332807.

There are many different skills required to work well in groups with a wide range of expertise. In this

# Skills Policy Award Project - 'Professionalising traditional and infrastructure roles in data science'

Goals are:

- Curate & centralised definitions, role descriptors and skills lists
- Research community management paper
- Work with policy experts to bring findings to policy makers

See our Github repo for more info:

[https://github.com/alan-turing-institute/  
professionalising-data-science-roles](https://github.com/alan-turing-institute/professionalising-data-science-roles)

Or get in touch with Emma  
(ekaroune@turing.ac.uk)



Policy paper

## National Data Strategy

Updated 9 December 2020



### Data skills

There is no widely agreed definition of data skills. In this document we use the term broadly to cover the full range of basic, technical, governance and other skills – including project management, governance and problem solving – needed by practitioners to maximise the usefulness of data.

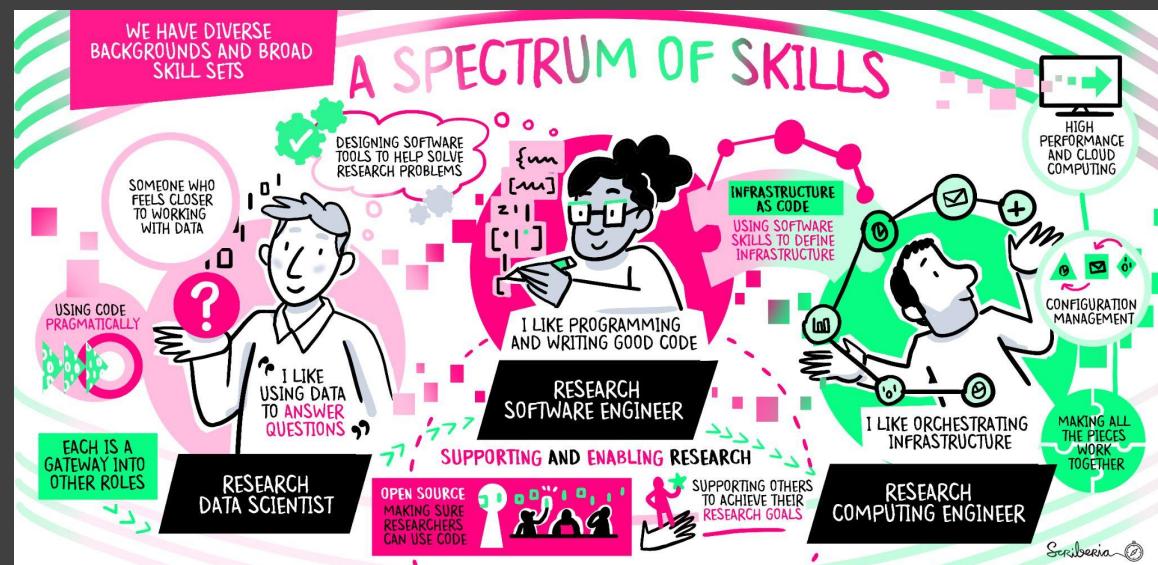
<https://www.gov.uk/government/publications/uk-national-data-strategy/national-data-strategy>

# Examples of research infrastructure roles at Turing

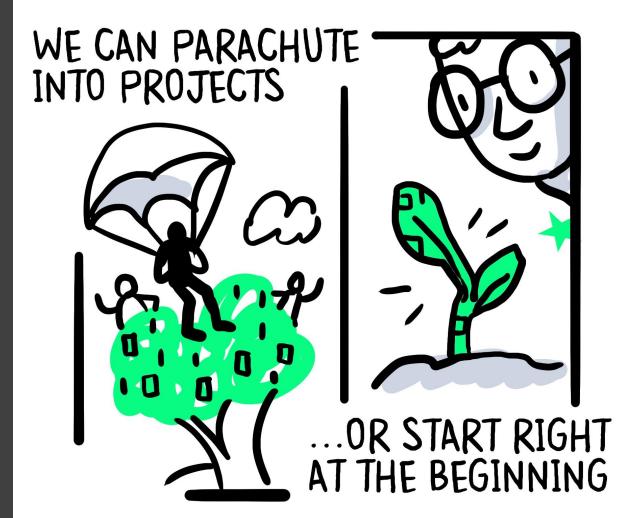


# Camila Rangel Smith

- PhD and postdoc in Experimental Particle Physics + couple of years working as Data Scientist in the private sector.
- Research Data Scientist at **Research Engineering Group (REG)** at the Turing since 2018, Senior Research Data Scientist since 2021.
- Worked in +10 projects since joining the Turing.



# REG: ways of working



# REG values



# Alexandra Araujo Alvarez

## Research Project Manager, The Turing Way

- Involved in research since 2021
- Aim: Facilitate that every aspect of the project is done on time and within budget.

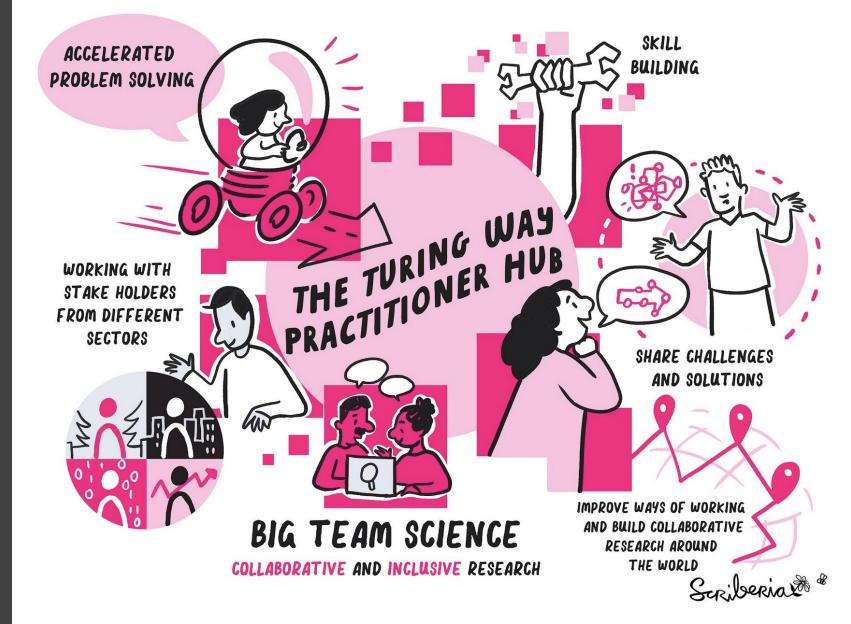
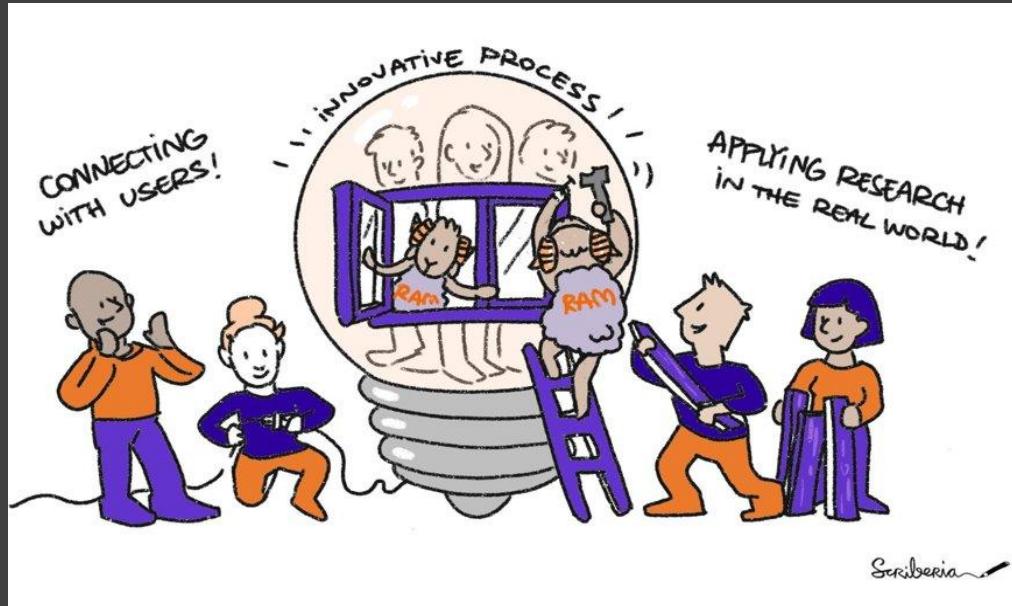


Image from The Turing Way Practitioners Hub Partners slide deck,  
CC-BY 4.0 image by The Turing Way community and Scriberia. DOI: [10.5281/zenodo.3332807](https://doi.org/10.5281/zenodo.3332807)

# Hari Sood

## Goal:

To enhance the **real-world impact** of research outputs by engaging external stakeholders and adapting outputs for real-world use.



# Hari Sood

## Why do RAMs exist?



Accelerate **adoption** of research outputs



Enhancing **pathways to innovation**



Increasing **participation & diversity** among users of research assets



Boosting **efficiency of the ecosystem**

# Emma Karoune

# Research Community Manager

PhD in Archaeobotany

Interest and expertise in Open Research and community building

Came to work at Turing in Jan 2021 as research community manager on DECOVID

Now work across the Health programme



# Emma Karoune

# Research Community Manager

## Embed open research practices

- Reproducible workflows
- Inclusive practices

## Ensure shared understanding

- Document project goals, roadmap & processes
- Maintain GitHub archives

## Facilitate stakeholder engagement & collaboration

- Stakeholder mapping
- Coworking/collaboration cafes

## Provide technical support & domain expertise

- Data publishing - FAIR archiving of data and writing data papers

## Co-create, maintain & communicate project resources

- Internal comms - Slack, newsletters

## Amplify & champion learnings & achievements

- External comms - blogs, social media, conference talks
- Translation

# Now we'd like to learn about your experience! (~20 min)

- In groups (about four people), you will discuss a question about your journey in research infrastructure
- Begin with intros!
  - What title did you want to be called?
  - What is your title now?
- Discuss your assigned question
- Feel free to tackle another question if you finished with your assigned one
- Don't forget to document your progress in the shared document

# **Breakout room discussions**

## **Group 1: Journey to research infrastructure role**

If you already hold a formalised research infrastructure role, please share how you got your role recognised/formalised?

## **Group 2: Career progression**

What career pathways for progress look like for research infrastructure roles in your organisation?

## **Group 3: Types of roles in a project**

In your project teams, what types of research infrastructure roles do your team members take?

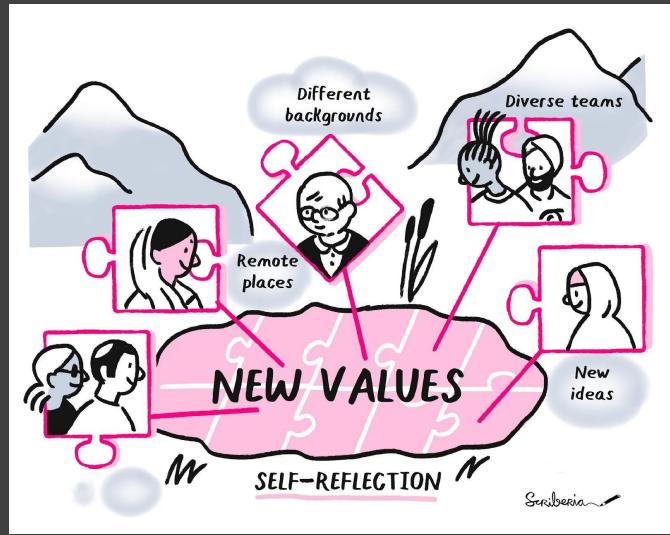
## **Group 4: Wider recognition**

How do you feel research infrastructure roles are recognised within your institute/in the research landscape?

# Connect with The Turing Way Community

- *Translation co-working:* Tuesday (16:00 UTC)
- *Collaboration Cafes*
  - 1<sup>st</sup> & 3<sup>rd</sup> Wednesdays (14:00 UTC)
- *Outreachy* 
- *Book Dash: May and November yearly*

*Your contribution is important - we record and acknowledge in the README file and in the book.*



*the-turing-way.start.page*

# Fireside Chat

Join us for our May  
Fireside Chat!

5 May

14:00 - 15:30 UTC+1

*Register on Eventbrite:*  
[https://tinyurl.com/ttw-  
may-2023](https://tinyurl.com/ttw-may-2023)

## Implementing open science at scale

5 May, 14:00 - 15:30 UTC+1 – Register on [Eventbrite](#)



**Alex Mendonça**

Online Submission & Preprints  
Coordinator  
SciELO



**Chelle Gentemann**

Program Scientist for Transform  
to Open Science  
NASA



**Ana Persic**

Programme Specialist at the  
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**Steve Crawford**

Senior Program Executive for  
Scientific Data & Computing  
NASA



**Nokuthula Mchunu**

Deputy Director  
Africa Open Science Platform



**Malvika Sharan**

Senior Researcher  
The Alan Turing Institute



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# Feedback



Help us to improve this workshop!

<https://forms.gle/qaJtpBLDE4Jy9L2r7>

## Acknowledgements:

- The Turing Way team, Kirstie Whitaker, Malvika Sharan, Anne Lee Steele, Alexandra Araujo Alvarez
- *The Turing Way* community, contributors & collaborators
- Book: [the-turing-way.netlify.com](https://the-turing-way.netlify.com)
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