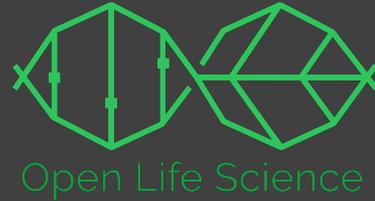


Exchanging Research Practices through Open Source Communities of Practice



Malvika Sharan (Pronouns: she/her)



The Turing Way

An Open Source guide on Data Science.

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

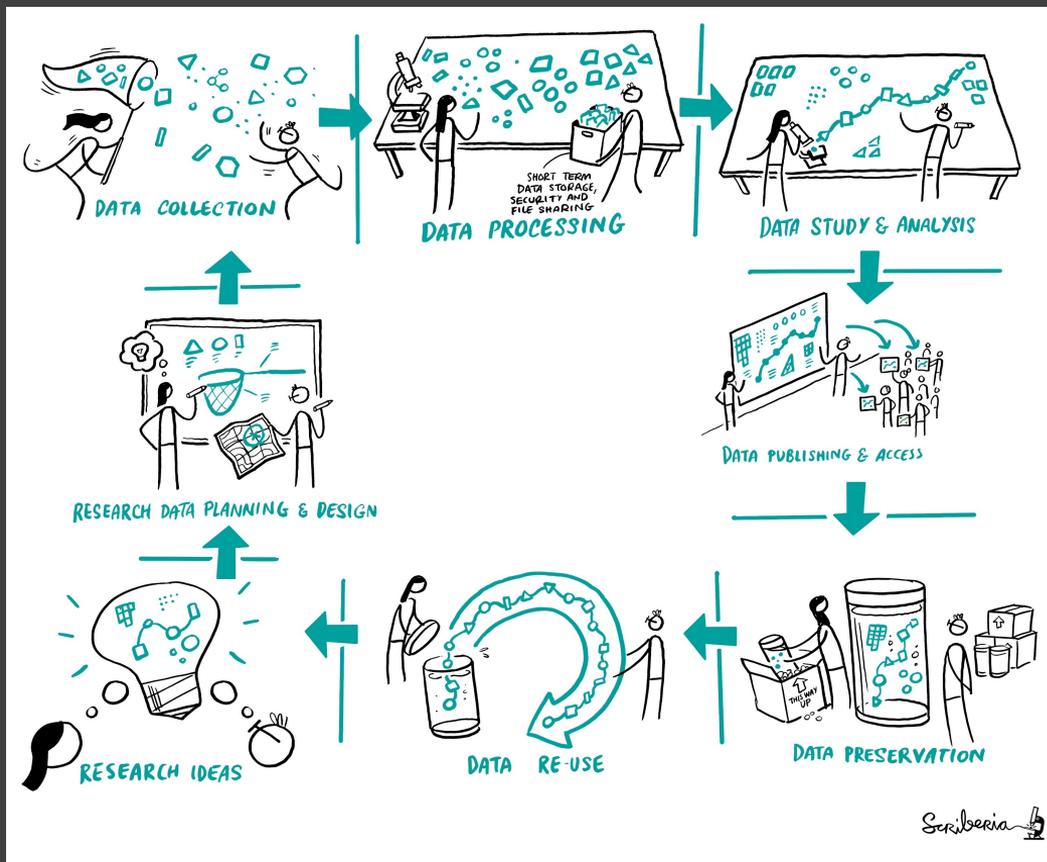
*Community-driven project, led by **Kirstie Whitaker and me**.
Thanks to all our contributors and users.*

The Alan Turing Institute

The national institute
for data science and
artificial intelligence



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

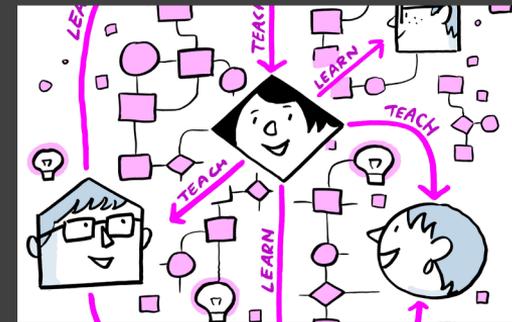
The Turing Way Guides



Reproducibility



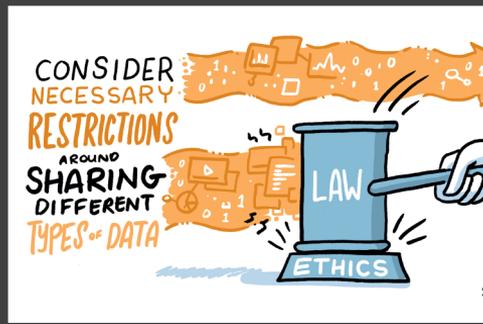
Project Design



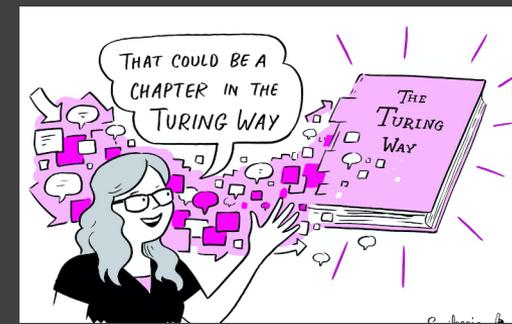
Communication



Collaboration



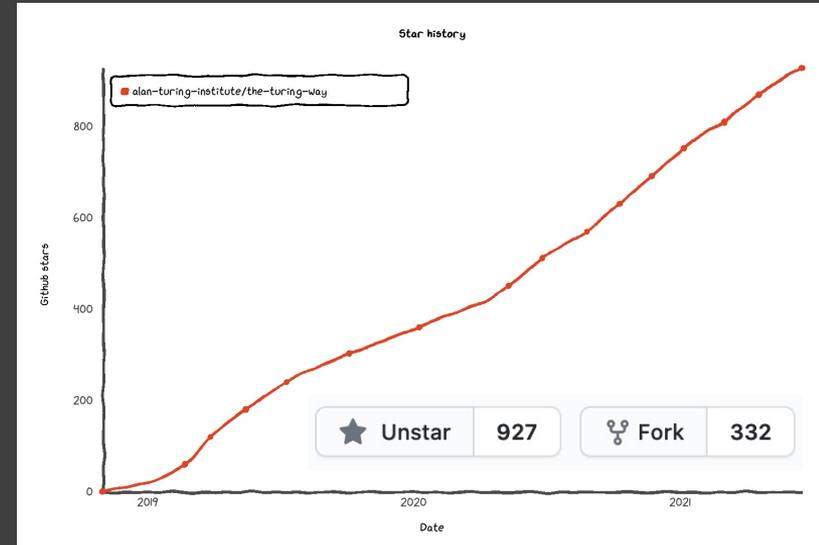
Ethical Research



Community Handbook

Project Status

- 2.5 years, >160 pages
- Community resources, events, guidance, templates, training
- 270 direct GitHub contributors and thousands of users
- Cited & reused by 30+ peer-reviewed articles & resources





Book:
the-turing-way.netlify.app/

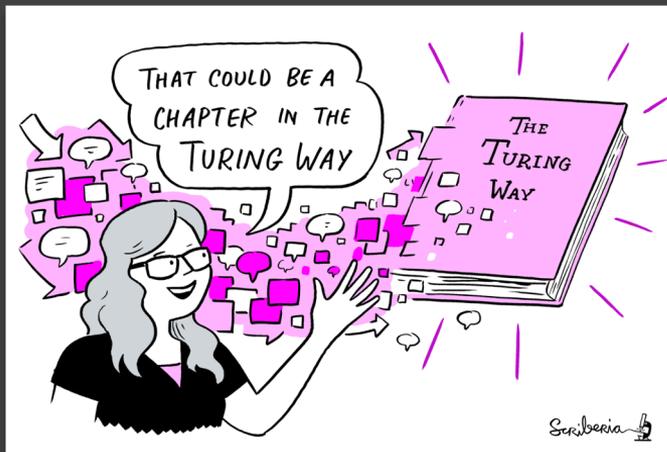
GitHub:
github.com/alan-turing-institute/the-turing-way

Twitter:
twitter.com/turingway

Email:
theturingway@gmail.com

CC-BY 4.0, *The Turing Way*

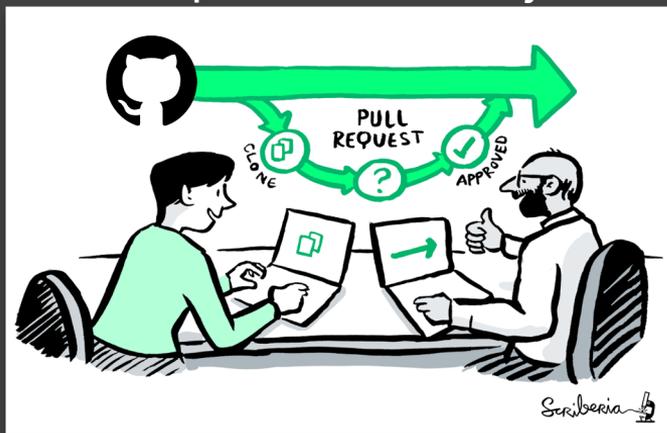
A Book



A Community



An Open Source Project



A Culture of Collaboration



Terminology

- Open Source
- Community of Practice (CoP)
- Exchanging Research Practices



An **open source** project

- Everyone can freely read, reuse, distribute, modify and advance.
- **Framework for collaboration, peer production and project sustainability.**



Community

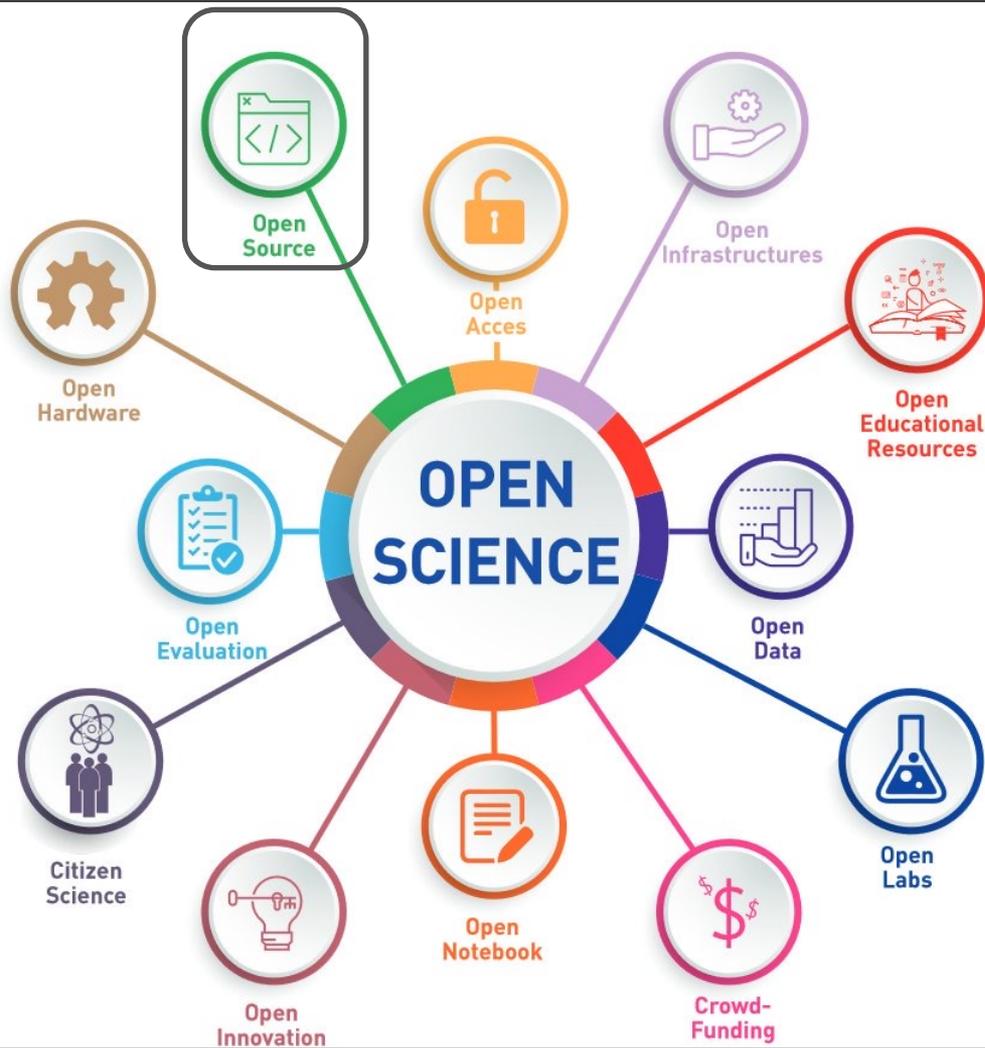
A social unit of people who share common values and mission.

Community of Practice

A social unit of people who share common values and mission – who want to gain knowledge and expertise through informal interaction

Open Source Community of Practice

A social unit of people who share common values and mission – who want to gain knowledge and expertise through informal interaction – using open source framework for collaboration, peer production and project sustainability.

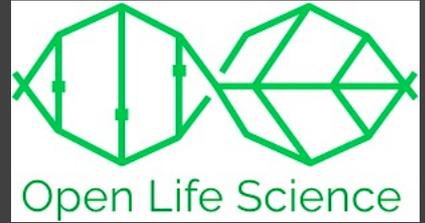


Toward a UNESCO Recommendation on Open Science: Canadian Commission for UNESCO By Ella Chan, Dick Bourgeois-Doyle, Michael Donaldson, and Eleanor Haine-BennettOttawa, Canada, April 2020



EVOLVING TOWARDS AN ERA OF OPEN SCIENCE

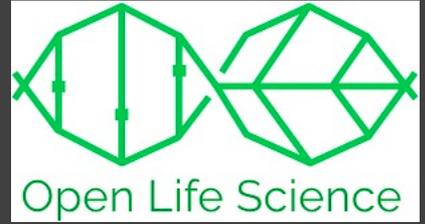
Open Life Science



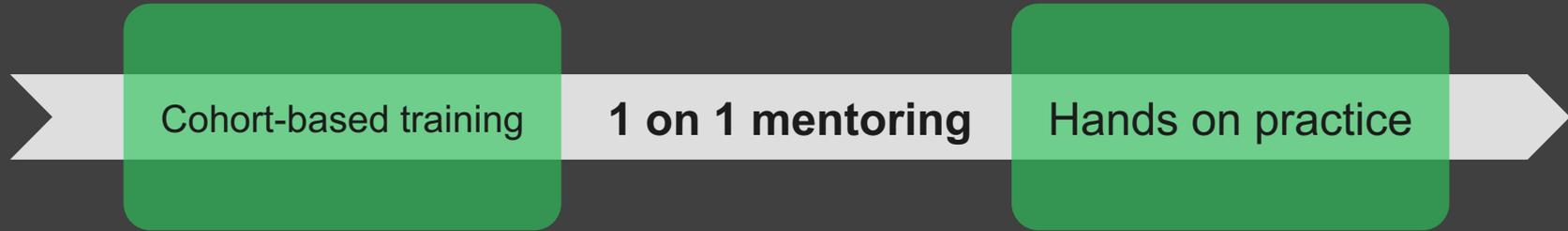
A mentoring and training program that enables people, whether newcomers or long-time practitioners, to become **Open Science ambassadors**.

*Community-driven project, led by Yo Yehudi, Bérénice Batut, Emmy Tsang and me.
Thanks to mentors, experts and cohort members*

Program Structure



16-week long mentorship and cohort-based training

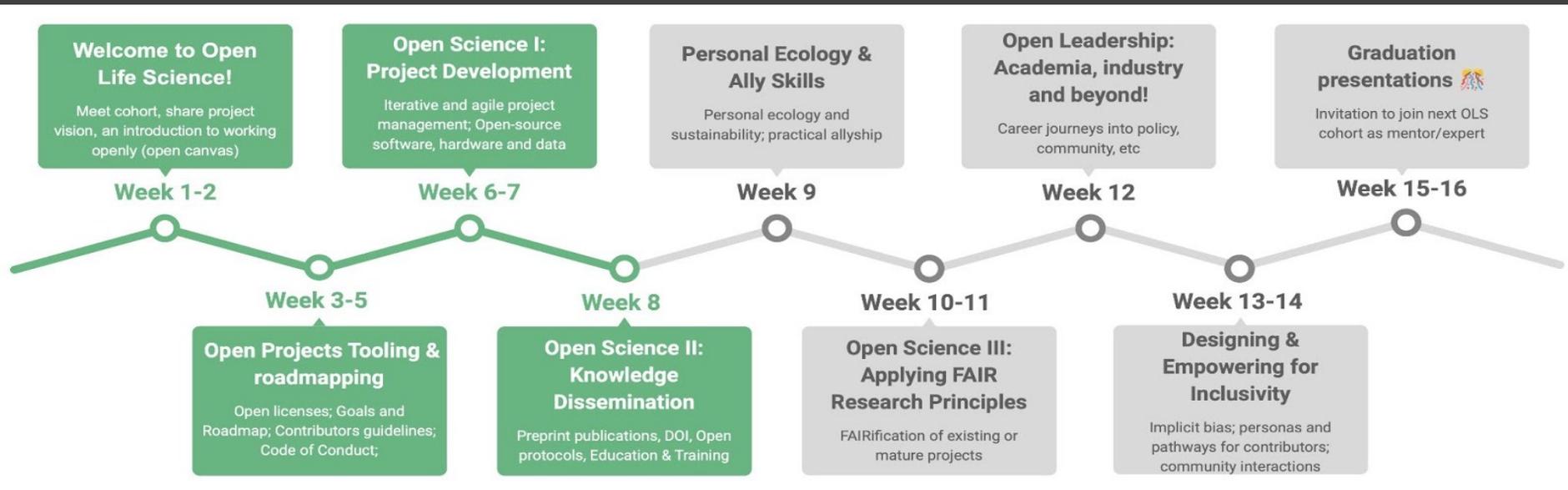


openlifesci



openlifesci.org

Program Structure



openlifesci



openlifesci.org

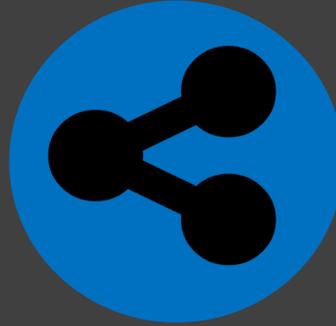
Open leadership is a set of practices and skills people can use and build projects that allows them to collaborate within inclusive communities.

Design for Collaboration



Understanding

Your work is clear, authentic and widely accessible



Sharing

Your work can be adapted, reproduced, and built upon



Participation & Inclusion

Creates a shared ownership that inspires contributions

Project Status

- 3 Cohorts, 91 different projects
- 257 volunteers as project leads, mentors, experts, supporters
- 6 continents, 45 countries with diverse social-cultural contexts
- 17 partnering organisations including *The Turing Way*





Open Life Science

Sharing

Connecting

Empowering



@openlifesci

@turingway

Email: team@openlifesci.org

A mentoring & training program for Open Science Ambassadors

Special call under: **OLS-4 for Turing**



1:1 mentoring



Training calls on Open Science

Talks from experts

Break out discussions



Training for mentors

OLS-3 period: February to May 2021

Apply individually or in team to join the cohort

Visit our website: openlifesci.org

OLS-4 Timeline

Application period

15 June - 15 July 2021

OLS-4 Q&A Webinars

Week of 5 July 2021

Cohort announcement

mid-August 2021

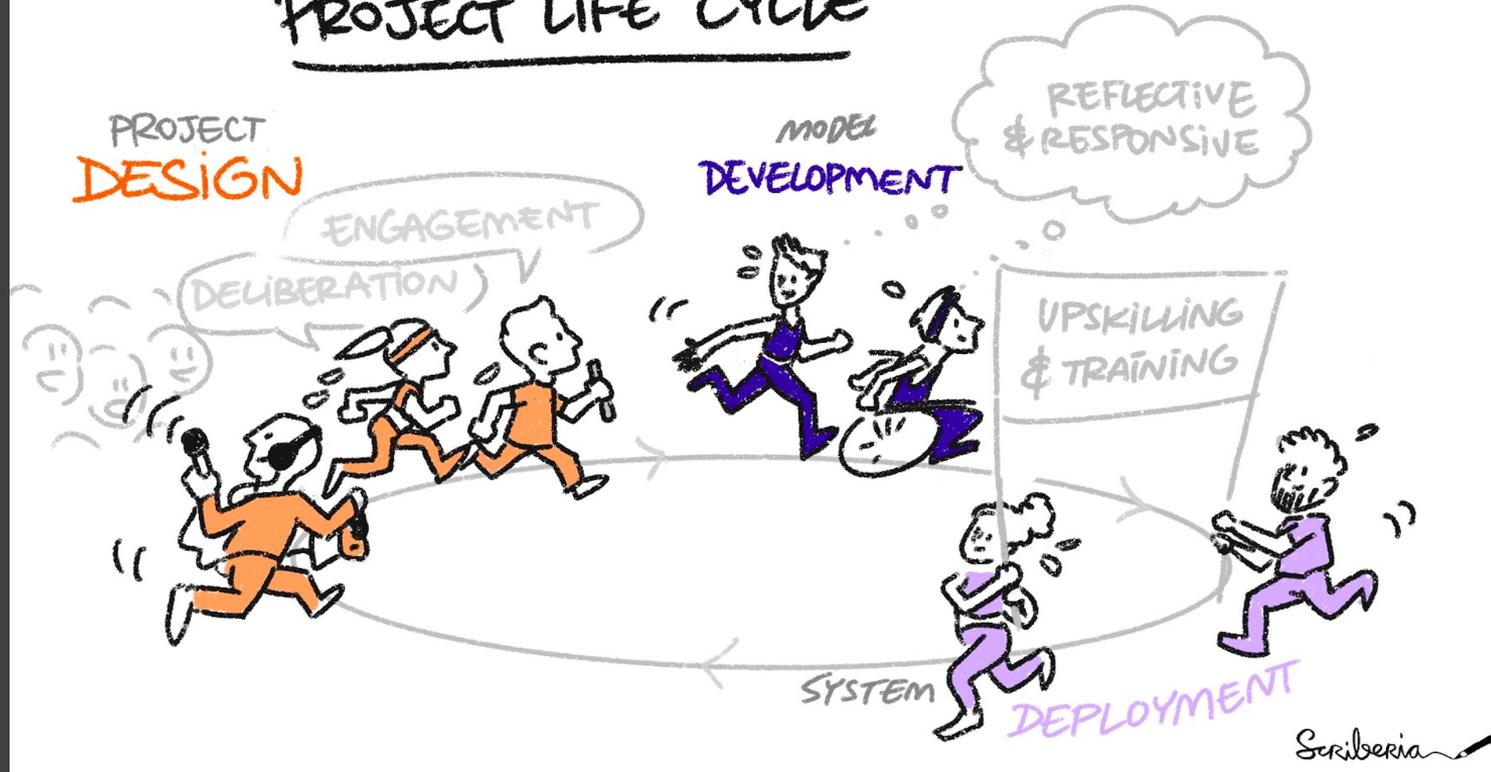
OLS-4 Cohort begins

mid-September 2021

OLS-4 Cohort ends

January 2022

PROJECT LIFE CYCLE



Acknowledgements:

The Turing Way community & collaborators

- Kirstie Whitaker, The Alan Turing Institutes
- **Book:** the-turing-way.netlify.com
- **Ways to connect:** bit.ly/turingway

Open Life Science community & collaborators

- **Website:** openlifesci.org
- **OLS-4 Webinars:** June 30 and July 9, 2021

CC-BY artwork by Scriberia for The Turing Way:
doi.org/10.5281/zenodo.3332807

