

# Open Project Management

from an “open” perspective

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Lecture 6

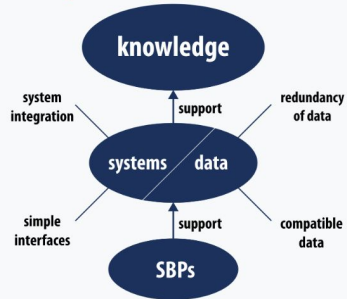
All content



# Great Interest in Making Working Open Part of a Skillset

**FAIR** (findable, accessible, interoperable, reproducible) standards

**incf** enabling open and FAIR neuroscience



Entrepreneurship from Home



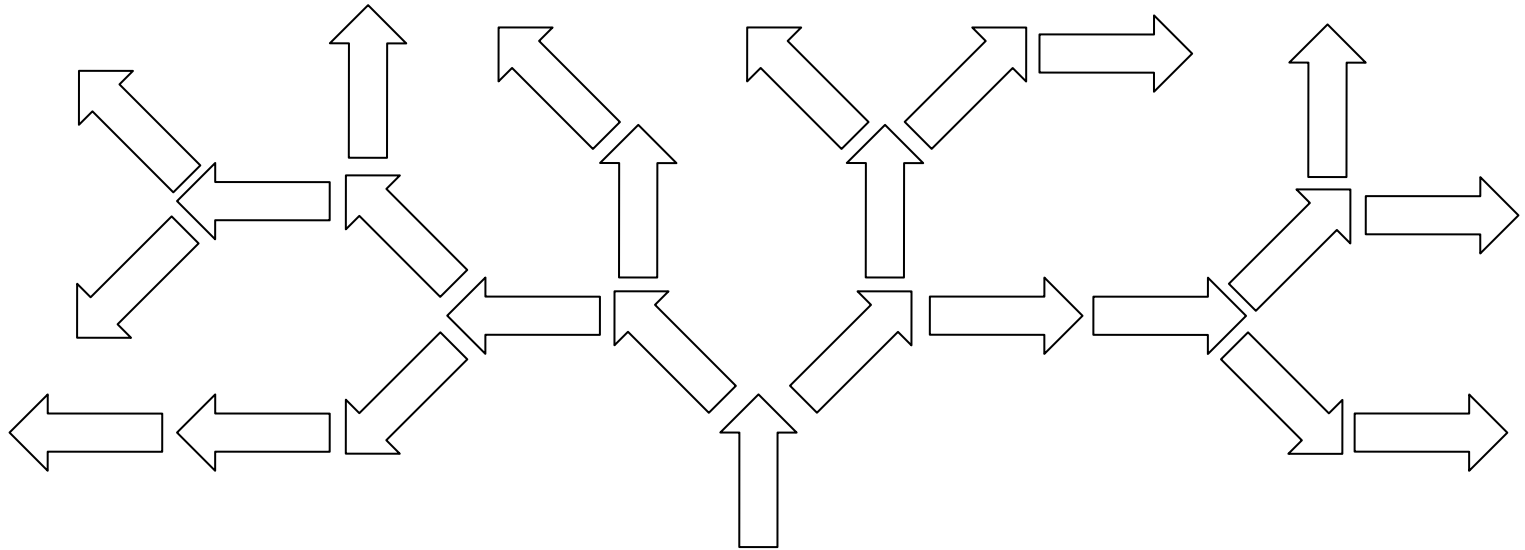
**Open Government Initiative**  
(White House)



**Neuromatch Academy**  
virtual summer school for  
Neuroscience and Deep  
Learning

# Open Project Management

## Review Unit 1



# Working Open: Introduction

An introduction\* to the tools, systems, and processes of open source, open access, and open working as applied to a host of domains (open x,y,z).

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## **Five pillars of open working**

(freely available source, copyleft licensing, free distribution/remix, tech neutral, versions).

**Distinct productivity model** (vs. proprietary).

**Project genealogies** (forks beget forks).

## **Role of social capital**

(trust, positive social attention, innovation, reciprocity, altruism).

# Working Open: Collaboration

## Collaboration in the abstract

- Project-outcome-process.
- Workflow vs. roadmap.
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## Collaboration in practice

- Distributed collaboration and its challenges (geography, workstyles, differential skills).
- Managing distributed research groups (Orthogonal Research and Educational Lab, Active Inference Institute).



# Working Open: Collaboration (con't)

## Collaboration in practice (con't)

- Notetaking, video, and tool coordination.
- Interdisciplinary, facilitation, and flexibility (reconfigure).

# Working Open: Git and Version-control Tools

## Conventions of version-control

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## Functions of version-control

- Tracking contributions and document changes.
- Organization (into repositories and directories).
- Traceability (diffs, history, contributor activity, linked to issues).
- Cloning and releases (technology-neutral distribution).

# Working Open: Governance

## Technology mediated

- Authority control.
- Argumentation.
- First principles (Wikipedia example).

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## Policy creation

- Conduct and statements of values.
- Organization-wide specific aims.
- Disruptive force of new technologies.

# Working Open: Governance (con't)

## Organization-wide specific aims

- Community standards.
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- Technology stacks.

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## Organization-wide specific aims

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## Disruptive force of new technologies

- New tools (generative models, video conferencing, Github).
- New rules and legal regimes (new licenses and community standards).
- Opportunities for new project directions (modifies roadmap).

# Working Open: Licensing and Open Data

## Different licensing regimes

- Software licenses.
- Content creation licenses.
- Specialized licenses (generative models – CreativeML, open hardware – CERN).



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## Working Open with Data

- Transparency vs. security (stakeholder relations, formal data strategy).
- Standards (FAIR, GDPR).
- Formats (csv, json, Markup documents, etc).

# Working Open: Elements for Docs

## Technology Stack

- Markup languages (Markdown, HTML, LaTeX).
- Version-control (Git and other methods).
- Coordinating process-oriented tools (programming languages, platforms).

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## Docs and Pipeline for Docs

- How to implement.
- Documentation as representations of community organization and interest.
- Pros and cons of Markdown and other methods.

# Questions?

## Quiz #1

<https://github.com/OREL-group/Project-Management/blob/main/Quiz%201/README.md>