

# Unlocking Collaboration in Influenza and Virology Research

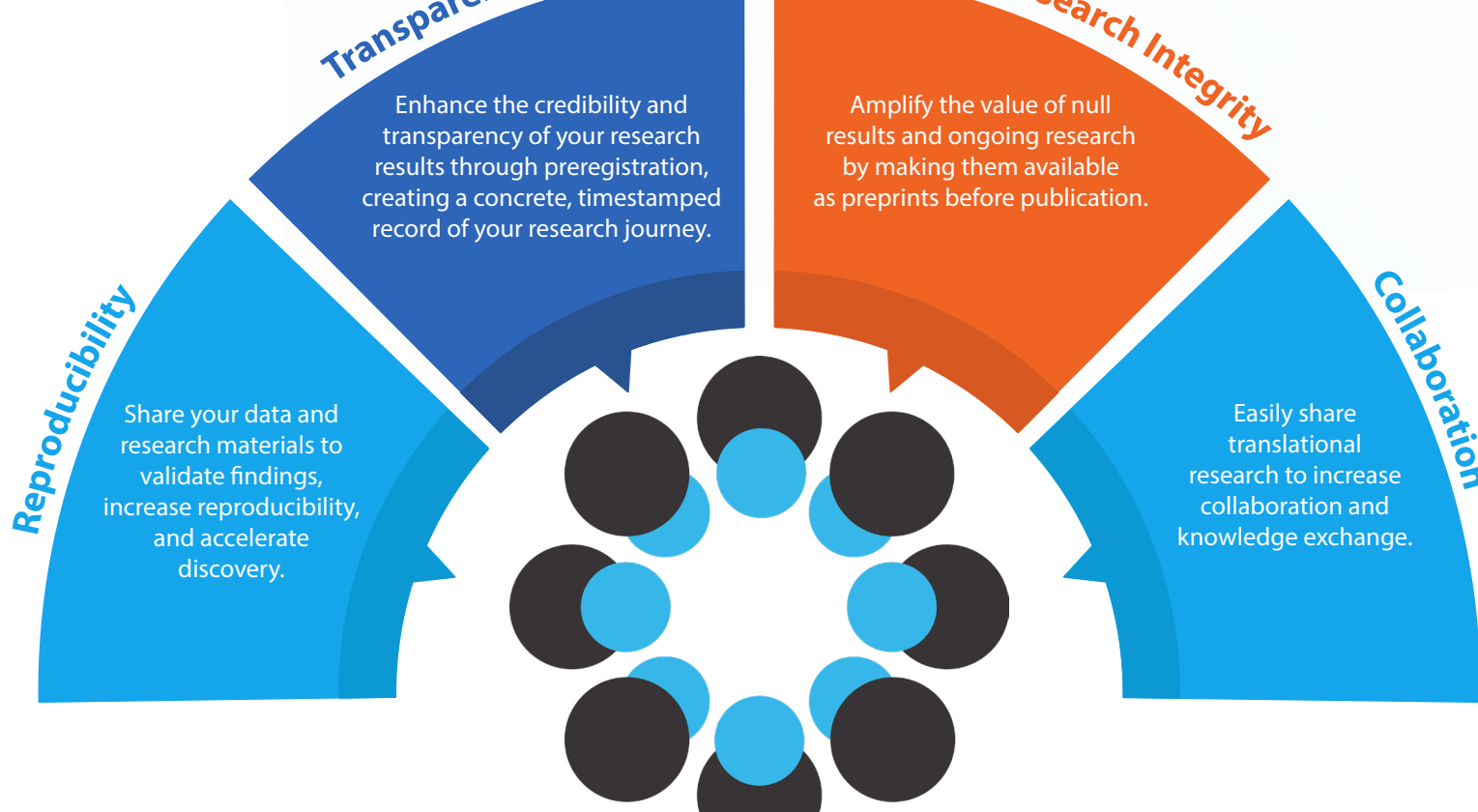
A Guide to Open Science and the Open Science Framework (OSF)



Discover how open science practices can accelerate progress in influenza research.

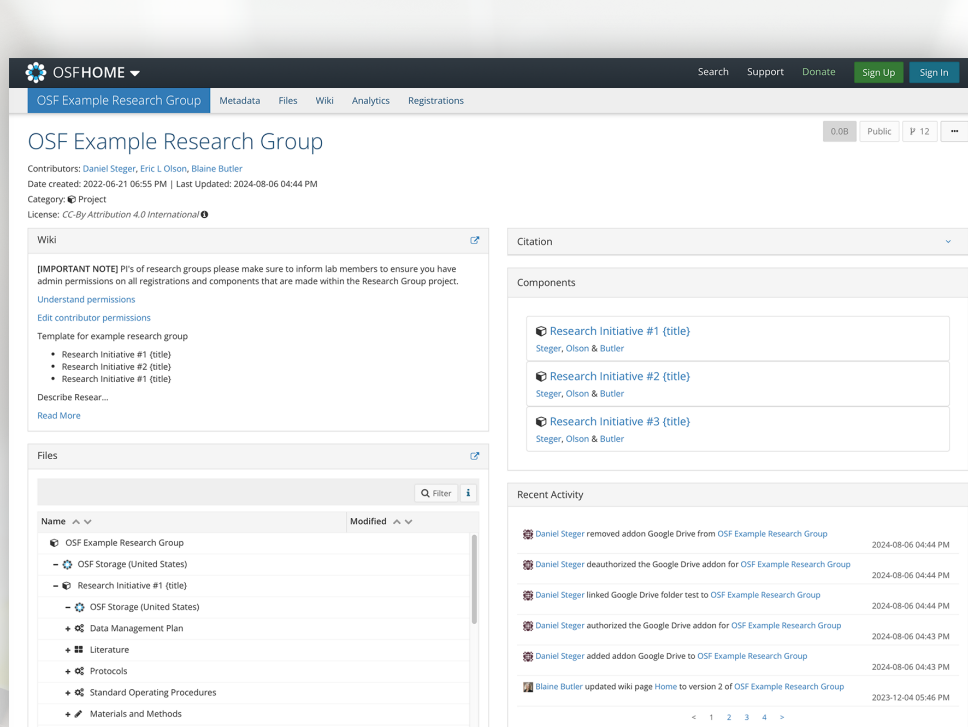
## Why Open Science?

### Accelerate Discovery and Collaboration



## What is the Open Science Framework?

### Introducing the Open Science Framework (OSF)



OSF is a free open-source software platform that facilitates collaboration in scientific research.

- ◆ **Collaboration:** OSF provides a flexible space for research planning, lab notebooks, data management, and more.
- ◆ **Organization and Integration:** OSF connects the research ecosystem, allowing you to store and organize project components (including data, protocols, code, and documents), integrate external tools, and easily share protocols, data, and findings.
- ◆ **Research Sharing:** When you're ready, share all or part of a project publicly for broad dissemination. Add a license to permit others to copy, distribute, and use your materials while allowing you to retain copyright.
- ◆ **Increased Efficiency and Engagement:** Post your work, solicit feedback, and tag categories for greater discovery and engagement.
- ◆ **Expand Your Impact:** DOIs from BioArXiv or other preprint services can be connected as research outputs on your OSF registration.

For more information, see: [Getting Started for Research Groups](#)

## Getting Started with OSF

### Your OSF Toolkit: How to Get Started

- 1. Sign Up**  
Create a free OSF account.
- 2. Document Research Plans**  
Use preregistrations to describe your analysis plans, and connect your research outcomes to illustrate your research story.
- 3. Start a Project**  
Share descriptions and materials related to each research activity. Upload a wide variety of project materials in almost any file format — including documents, code, and more.
- 4. Collaborate**  
Work privately or share publicly.
- 5. Publish Preprints**  
Gain early feedback and visibility while being indexed in Google Scholar and beyond.
- 6. Archive Data**  
Generate a Digital Object Identifier (DOI) for your project and preserve your datasets, code, and supplements for easy and persistent discovery.
- 7. Describe**  
Apply critical metadata to your work, and create relationships between your papers, data, and analysis plans.
- 8. Link Tools**  
Integrate with GitHub, Zotero, Figshare, Google Drive, Dropbox and more.

Discover resources curated to support influenza and virology researchers: [Watch Projects Overview](#)

## What is preregistration?

Preregistration is the process of documenting your research plan at the start of your study. Publicly sharing your plan upfront increases credibility and reduces the risk of bias and selective reporting.

On the OSF, you can embargo your preregistration, which temporarily hides the details of your study from public view. This allows you to share your research plan with the community, ensuring transparency and credibility, while protecting your idea or results from being "scooped" by someone else.

Learn more: [Addressing Fear of Scooping on OSF Preregistrations](#)

## Success Stories

### Real Impact: Open Science in Action

Here's how influenza researchers are using open science practices and the OSF to enhance their work in influenza and virology research.

**Qiqi Yang, Princeton University:** "In the field of infectious disease ecology and evolution, the impacts and implications often need to be timely, for example, to respond to a recent or ongoing epidemic/pandemic. I learned to read and publish preprints during the COVID-19 pandemic – as we have seen, preprints were critical in the timely discussion and collaboration of our scientific community. Through Open Science Framework, I also learned to use repositories for my projects."

**Sriam Vijendran, Iowa State University:** "As a Bioinformatics Research Student/PhD candidate, I feel it is important to understand data collection and curation to contribute towards standardizing datasets, formats, and open access for research institutions. One of the many focuses of my research is the open, decentralized, and distributed data access between research institutions to enable vaccine design and epidemiology research."

**Walter Harrington, St. Jude Children's Research Hospital:** "I would like to learn how to be more transparent and open the world of science, both to specialists who discourage negative or less than exciting results, and to the general public who might not understand how science moves forward through hypothesis testing and getting negative results. This latter point is crucially important in public health, as we have seen during the COVID pandemic..."

Explore Resources: [cos.io/flu-lab](#)

## Increase Your Research Impact

### Accelerate Discovery with Open Science

- Articles that link to data stored in a repository receive up to 25% more citations than articles that do not ([Colavizza et al., 2020](#)).
- Preprints bring increased attention and citations to your work ([Fu & Hughey, 2019](#)).
- Sharing your data and code can enable quicker error detection and reduce duplicated efforts, leading to a stronger scientific record ([Goldacre et al., 2019](#)).

## Stay Ahead with Preprints and Open Data

- ◆ **Career Advancement:** Preprints demonstrate productivity on job and grant applications.
- ◆ **Accelerate Research Disclosure:** Preprints help establish "priority of discovery" by allowing researchers to more quickly disclose findings and validate the accuracy, quality, and importance of their work ([Vale & Hyman, 2016](#)).
- ◆ **Seamless Integration:** Connect existing preprints on servers like bioRxiv to your OSF projects and registrations, ensuring a comprehensive view of your research activity across platforms.

OSF can increase the visibility, reach, and impact of influenza research through preregistrations, preprints, and open data sharing.

Explore OSF tools and start your open science journey: [cos.io/flu-lab](#)

