

Digital Tools for Reproducible Research

Materials <https://bolibaugh.github.io/DigitalTools/> <https://osf.io/jrxyw/>

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Research increasingly reliant on computational and data skills...

“Some other time”

Too many options

Inefficient to learn on your own

Shaming?

Research increasingly reliant on computational and data skills...

“Some other time”

Reproducible workflows (including code)
save time once set up

“Too many options”

Learn the logic now, specialise later

Inefficient to learn on your own

True -- do it here

Shaming? Everyone started somewhere; very
few are experts

Week 5 [Reproducible research](#) 15 May 2019

Week 6 [Preregistration](#) 22 May 2019

Week 8 [Open data](#) 5 June 2019

Week 9 [Reproducible analyses, power analysis
and simulation](#) 12 June 2019

Week 10 [Writing a reproducible manuscript](#) 19
June 2019

01 Reproducible Research

Today

Getting to grips with OSF &
RStudio

Set up an OSF project for the
sessions to come

*Try out the base R console, and the
RStudio IDE

**If you know OSF & can quickly set
~~up~~ your project*

Tasks

1. Create an [account](#)
2. Create a new [project](#)
3. Add [components](#)
4. Add [files](#)
5. Add [collaborators](#)
6. Share your [project](#)
7. Keep track of [changes](#)

By the end of the today, you should have an OSF account with a project structured for the upcoming sessions.

If you are short on time and do not want to create the project manually, you can [template](#) the Demo Digital Tools project.

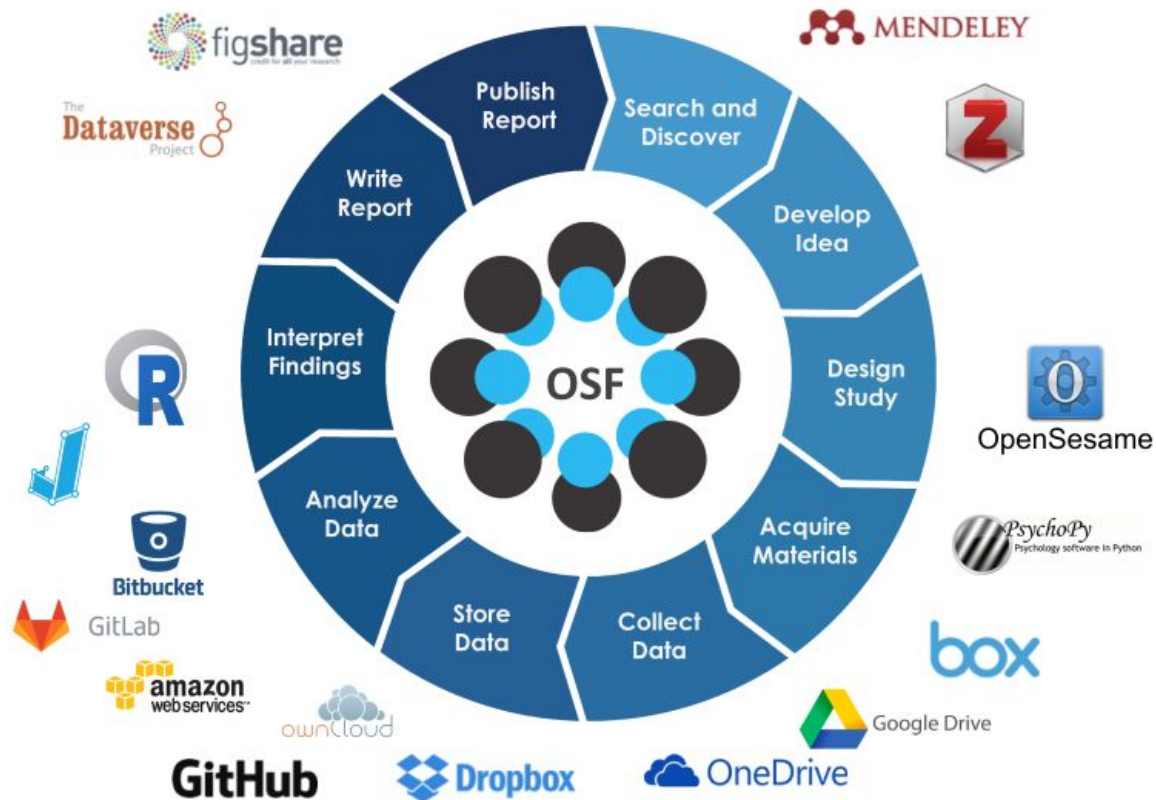
OSF

Free, open source research management and collaboration tool

Captures & manages the 'workflow' of a project

Facilitates reproducible research & open science by documenting:

- Designs
- Materials
- Analyses
- Datasets
- Manuscripts



What is on OSF?

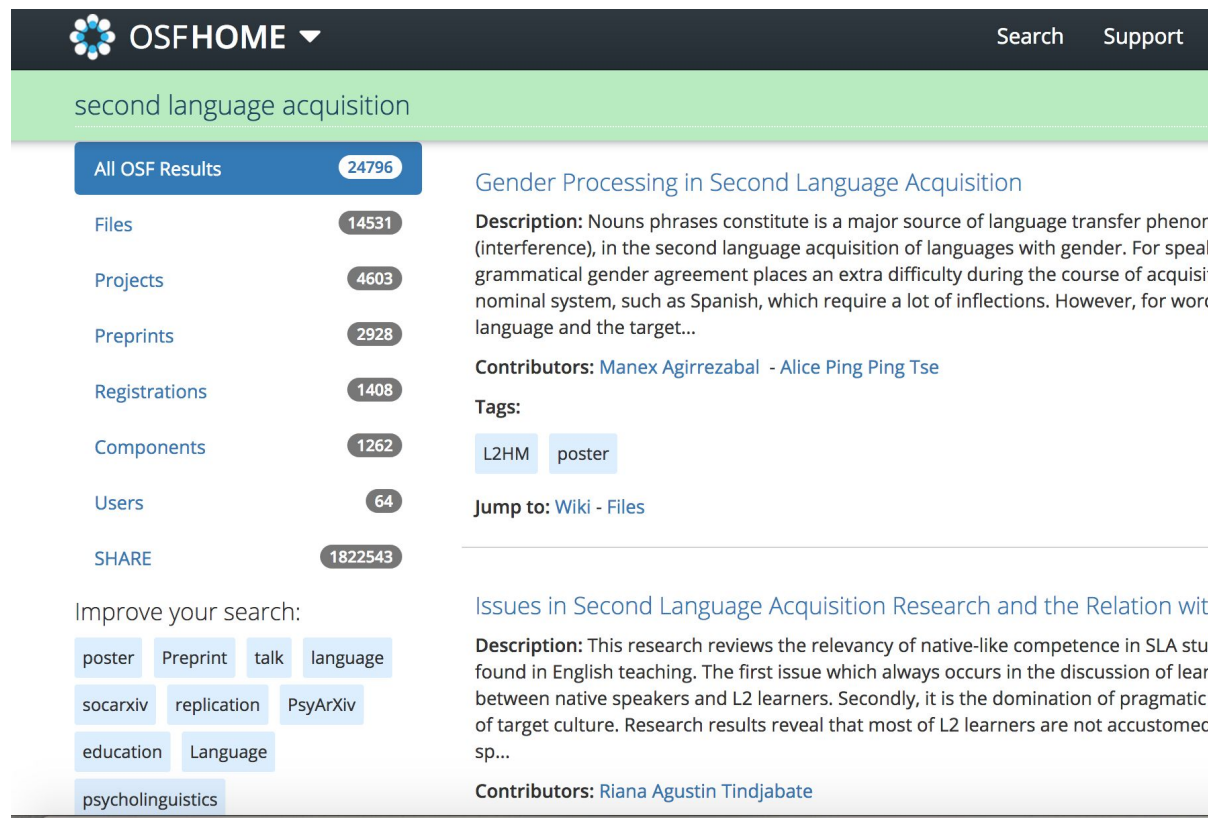
Visit <https://osf.io/>

Enter a search term relevant to your research in the search tab

Click on a project to explore it

Return to search results and select only registrations; choose one to explore

Return to search results and select preprints; choose one to explore



The screenshot shows the OSFHOME search results page for the query 'second language acquisition'. The page has a dark header with the OSFHOME logo and navigation links for Search and Support. Below the header, the search results are displayed in a light green bar. The results are organized into a table with columns for the search term, the number of results, and the number of preprints. The search term 'second language acquisition' has 24796 results and 14531 preprints. The results are listed in a table with columns for the search term, the number of results, and the number of preprints. The search term 'second language acquisition' has 24796 results and 14531 preprints. The results are listed in a table with columns for the search term, the number of results, and the number of preprints.

Search Term	Results	Preprints
second language acquisition	24796	14531

Gender Processing in Second Language Acquisition

Description: Nouns phrases constitute is a major source of language transfer phenon (interference), in the second language acquisition of languages with gender. For speak grammatical gender agreement places an extra difficulty during the course of acquisit nominal system, such as Spanish, which require a lot of inflections. However, for word language and the target...

Contributors: Manex Agirrezabal - Alice Ping Ping Tse

Tags: L2HM poster

Jump to: Wiki - Files

Issues in Second Language Acquisition Research and the Relation with

Description: This research reviews the relevancy of native-like competence in SLA stuc found in English teaching. The first issue which always occurs in the discussion of learn between native speakers and L2 learners. Secondly, it is the domination of pragmatic of target culture. Research results reveal that most of L2 learners are not accustomed sp...

Contributors: Riana Agustin Tindjabate



Creating an account

Visit <https://osf.io/register/>

provide an e-mail address and
password *or*


log in through your existing ORCID
account


**no institutional York accounts atm*

If you already have an OSF account, log
in, and go to our project page:
<https://osf.io/jrxyw/>

Create a free account

Sign up using:

 ORCID

 Institution

OR

Full name


Contact email

Confirm email

Password

☐ I have read and agree to the [Terms of Use](#) and [Privacy Policy](#).

☐ I'm not a robot


reCAPTCHA



Creating a new project

When you log into OSF, you will be brought to your Project Dashboard

Click on *Create a new project*

Call it **Digital Tools demo project***

Chose Storage (for GDPR, DE best)
-- NB you won't be able to change this later

You can copy the structure of existing projects by selecting them as template (see here for more)

***if you have a research project in mind for the brownbags, call it by that name**

Create new project ×

Title

Storage location

▼ More

Description

Template (optional)

Start typing to search your projects. Selecting project as template will duplicate its structure in the new project without importing the content of that project.



Adding components

Components are subsections of your project that have desirable properties: unique URLs, individual access permissions, unique DOIs

Click *Add Component*

Call it *Materials*

Chose *Storage* (Frankfurt)

Choose *Category*: Methods & measures

Add at least 3 more: *Data*,
Analyses, *Manuscripts*

If doing experimental work, you may copy the *Digital Tools Demo* structure.

Create new component

Title

Enter component title

Storage location

Germany - Frankfurt

☐ Add contributors from Demo Digital Tools project

Admins of Demo Digital Tools project will have read access to this component.

☐ Add tags from Demo Digital Tools project

License

This component will inherit the same license as Demo Digital Tools project. [Learn more.](#)

▼ More

Description

Enter component description

Category (for descriptive purposes)

☐ Uncategorized

Cancel

Create



Adding files

Add folders and files to components
(folders inherit all properties of component)

Create a word document, and save it with a meaningful title.

Add it to your manuscript component.

Either: (1) drag file from your computer to the “OSF Storage” icon underneath the component, or (2) click on the “OSF Storage” item and use the “Upload” button

Files

Click on a storage provider or drag and drop to upload

Upload

Create Folder

Download as zip

Filter

Name ^ v	Modified ^ v
Manuscript	
– OSF Storage (Germany - Frankfurt)	



Adding collaborators

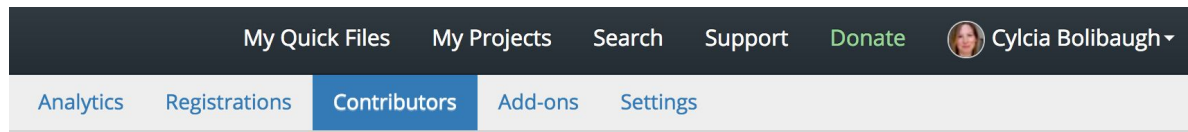
Add contributors to your projects

Click on the “Contributors” tab, and “Add” to search for OSF accounts to add as contributors

Select level of permission

Search for one of your neighbours and add them



You can also add “unregistered” collaborators (those w/o an OSF account). They will get an email notification that they’ve been added to a project



The screenshot shows the top navigation bar of the OSF interface. The 'Contributors' tab is selected and highlighted in blue. Other tabs include 'Analytics', 'Registrations', 'Add-ons', and 'Settings'. The top right of the page shows the user's profile: 'Cylcia Bolibaugh' with a dropdown arrow.

Contributors [+ Add](#)

Drag and drop contributors to change listing order.

Name		Permissions ?	Bibliographic Contributor ?	
	Cylcia Bolibaugh	Administrator	<input checked="" type="checkbox"/>	

Click on ? to find out about Bibliographic Contributors -- you may want to add a contributor for administrative purposes (e.g. in case the main administrator leaves the project) who does not appear in citations



Sharing your project

Different options for sharing

1. Make your project **public**:
can be read by anyone and is indexed by major search engines. Each project, component, and file receives URL, citation and DOI
Click on Make Public box, & choose components to make public
2. Share **parts** of your project **privately** (e.g. with reviewers)
Click “...” on project, and click “Add” under “View-only links”, then give a name to link and select components

Create a new link to share your project

Link name

Optional link name (e.g., For peer review, Sharing data, Share project)

- ☐ **Anonymize** contributor list for this link (e.g., for blind peer review).
Ensure the wiki pages, files, registration forms and add-ons do not contain identifying information.

Which components would you like to associate with this link? Anyone with the private link can view—but not edit—the components associated with the link.

☒ Manuscript (current component)

[Select all](#)

[De-select all](#)

Cancel

Create

Generate a view only link for your manuscript and email it to someone sitting near you.



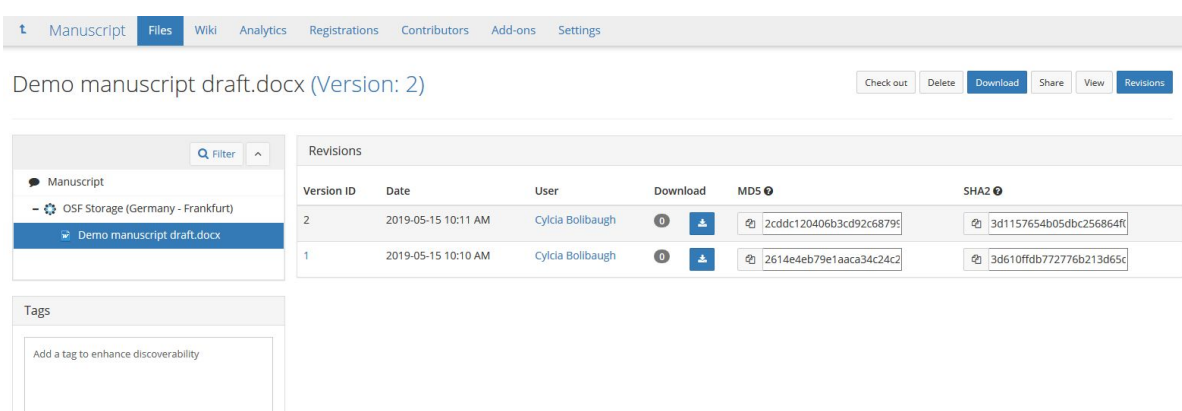
Keeping track of changes

OSF has built in version control

Click on a file to gain access to all file-related OSF actions.

You can edit plain text files like the R scripts directly through OSF via the “Edit” button on the file view page









For all other file types, inc. audio, video, word processor., edit locally and then re-upload the new version to the same location, using the same file name.



The screenshot displays the OSF interface for a file named "Demo manuscript draft.docx". At the top, a navigation bar includes links for Manuscript, Files, Wiki, Analytics, Registrations, Contributors, Add-ons, and Settings. Below this, the file name is shown with a "(Version: 2)" indicator. To the right of the file name are buttons for "Check out", "Delete", "Download", "Share", "View", and "Revisions".

On the left side, there is a sidebar with a "Filter" button and a list of files. The file "Demo manuscript draft.docx" is selected. Below the file list is a "Tags" section with a text input field labeled "Add a tag to enhance discoverability".

The main content area shows a "Revisions" table with the following data:

Version ID	Date	User	Download	MDS	SHA2
2	2019-05-15 10:11 AM	Cylcia Bolibaugh	 	 2cddc120406b3cd92c6879e	 3d1157654b05dbc256864ft
1	2019-05-15 10:10 AM	Cylcia Bolibaugh	 	 2614e4eb79e1aaca34c24c2	 3d610ffdb772776b213d65c

Edit the word document you uploaded to the manuscript component by adding some content. Save locally, and reupload to see what happens.



Templating a project

You may wish to copy the structure of an existing project rather than create it from scratch

Create a new project and search for the project you wish to copy in the Template box

You may wish to template the demo project here: <https://osf.io/jrxyw/>

Create new project

Title

Demo Digital Tools Project v.2

Storage location

Germany - Frankfurt

▼ More

Description

Enter project description

Template (optional)

Start typing to search your projects. Selecting project as template will duplicate its structure in the new project without importing the content of that project.

Demo Digital Tools project

Cancel

Create



Resources

OSF guides

Sullivan, I., DeHaven, A., & Mellor, D.
(2019). Open and reproducible research
on Open Science Framework. *Current
Protocols Essential Laboratory
Techniques*, e32. doi: [10.1002/cpet.32](https://doi.org/10.1002/cpet.32)

OSF Guides

Having trouble or don't know where to start? These articles will walk you through how to navigate and use the OSF.

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OSF Guides / Recent Updates

Recent Updates

Updated on: May 14, 2019

Withdraw a Registration

Manual Registrations

Updated on: May 14, 2019

Create a View-only Link for a Registration

You can share the contents of private projects with non-contributors by creating View-Only Links. These links can also be anonymized to remove identifying information, useful in blinded peer review.

Manual Links and Forks

[Permissions](#) [Privacy](#) [sharing](#) [view-only](#)

Updated on: May 14, 2019

Affiliate a Registration with an Institution

Manual OSF Institutions

[affiliate](#) [Institutions](#) [Registrations](#)

Updated on: May 14, 2019



R console and RStudio IDE

If you already familiar with OSF, set up a project to use for the rest of the sessions, and then work through Section 1 in the following tutorial:

<https://psyteachr.github.io/msc-data-skills/intro.htm>

Follow-up

Preparation for Week 6

Select either: (1) one of your own (completed or planned) empirical research studies, or (2) an empirical paper that interests you.

Read/familiarise yourself sufficiently with the study so that you can pre-register a new study/replication in the next session.
