Project Management Skills

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About

When I first started as a predoc, I did not know just how important project management would be in facilitating academic research. I created this document initially as a private record of the skills I have learned, so I could easily refer back to it. I am continually adding to this document as I learn more. I hope it can be helpful to other predocs and anyone with a job involving project management!

- DaiGianna Williams

Getting Started

Project Folder

When starting a new project, create an organized **project folder** to keep track of all the project components. The entire folder can be shared with everyone working on the project. However, certain subfolders with sensitive information should only be shared with those working on that aspect of the project, such as IRB documents, specific protocols etc.

For each non-self explanatory folder, include a **_readme** at the top of the folder that outlines what the files in the documents are, how they are used, and how they relate to the broader project.

For a long project, this is an example of the folder structure:

Project Name

- **Admin**
  - Authorized Staff List
- **IRB and Data Use Agreements**
  - All versions of the IRB documents and drafts
- **J-PAL**
  - Grant proposal documents
  - Letters of support
- **Literature**
  - Background literature related to the study
- **Meetings and Notes**
  - Recordings
    - MP4 files of previous meetings
  - Meeting Notes
- **Study Design**
  - _ReadMe
  - Feedback survey
  - Power calculations
  - Protocol
- **Presentations**
- **Project Manual**
- **Prior Evaluations**

Project Manual

For long projects, create a **Project Manual** to keep everything organized. The project manual also serves as a simple reference for new members of the project to quickly get familiarized. Simpler projects can be managed with a simple **_readme** in the main folder.

Here is an example of the format of a project manual, with the information that is useful to include:

```
Introduction
    ● IRB number
    ● Last updated date
    ● Author
Table of Contents
Key study contacts
    ● Name, contact information, position and brief description
      on role in project
Key project resources
    ● Google drive link, Slack invite link, for instance
Project Overview
    ● Timeline of dates of project milestones and what was
      accomplished
    ● Context (summary of background literature)
    ● Budgets and Expenses
    ● Principal Research Questions
Project Management
    ● Technology and tools (e.g. software, websites)
Meetings
    ● Purpose of meetings, primary and optional attendees,
      date/time, zoom link & notes link
Project Log
    ● List of decisions/changes made
```

Project Log

The project log is a running list of the important decisions made during the project that don't necessarily warrant their own section in the broader project manual. The project log should be in reverse chronological order, and divided by year, so that it is easier to reference if needed.

While there is not a specific set criteria regarding what should go in the project log, here are some examples:

- **Staff changes** (e.g. onboarding, offboarding, role changes, new clearances or permissions)
- **Study design changes** (e.g. changing sample size, extending/shortening experiment, edits to research instruments such as surveys, evaluations)
- **Amendments/changes related to IRB**
- **Changes to Memorandum of Understanding or Data Use Agreements**
- **Grant decisions** (e.g. applying for one, submitting an application, when it was received)

- **Access changes** (When staff was granted access/removed access from certain tools, buildings, datasets etc.)
- **Technology/platform additions or changes** (e.g. Switching from google drive to dropbox, transferring files from one computer to another)
- **Creation of new documents** (ex. Project memos, protocol
- **Anything that generally seems important**

Here is an example of a project log:

2026	**May 15**	• Research Intern #1 not working on project from MM/DD - MM/DD
	May 11	• Research Assistant #1 became University Affiliate
	May 8	• IRB approved XYZ change • IRB restriction confirmed
	May 6	• Financial Update from University • Research Assistant #3' began offboarding (Brief details of process)

Updating the Project Log

At the beginning of a project, the project log will likely have to be updated more frequently as new processes are being established and adjusted. It is good practice to update the log more frequently at this stage, perhaps once a week.

As the project progresses, updating the log every 2-4 weeks might be best, depending on how often developments occur.

It is important to not fill the project log with superfluous information. If there hasn't been an important development in the past 2-4 weeks, there's no need to update the project log.

Meetings

Setting Up Meetings

Be clear about meeting title, date, frequency, duration, time zone to whoever schedules them/in your invite. If there is a change in the date/time or other detail, update the invite accordingly. For each meeting that's set up, create an invite so it is on everyone's calendar, even if it isn't a virtual meeting. It is good to include a link to the corresponding meeting note/agenda in the meeting invite.

Notetaking

Follow this template for taking notes:

Meeting Title
Key Documents and Links

<u>Date</u>

Agenda - What should be discussed in the meeting

To Do

- Person 1
    - Actionable steps
- Person 2
    - Actionable steps

Topic

- Notes

Key documents and links are the resources that the team references often. It is helpful to place it at the top of the notes, so it is quickly accessible during meetings.

At the beginning of the meeting, send the link to the notes to the attendees in the Zoom chat/the chat of whichever video conferencing platform is being used. You may have to resend this link if a new person joins the meeting.

At the end of each meeting, **send the list of action items to the attendees**. A day or two before the next meeting, send the agenda for the upcoming meeting. The agenda is usually just following up on the previous meeting's tasks. Ask if anyone has any agenda items to add.

The document tabs should be the dates. After a long period of time, you can move the older notes into a different **archive tab** separate from the main view. For instance, if meetings go on from 2025 to 2027, when 2025 ends, you can create a new 2025 archive tab and move all the notes there, and do the same process when 2026 ends.

Holidays and Vacations

If there is a crucial decision that needs to be made or action that needs to be taken that coincides with a major holiday or a key staff member's vacation, it is important to reschedule the meeting before the holiday/vacation, so a plan can be established. If the decision can be postponed until after the holiday/vacation, that is great. Otherwise, there may be unnecessary project lags.

Task Tracking

It is good to establish a method of task tracking for the team. One of the most important criteria of a task tracking system is that it must be relatively simple for the team to use. If it is too complex, or doesn't integrate well with the team's previous tools, it may be used infrequently or not at all.

Spreadsheet Based Tracking

A spreadsheet can be used to track tasks. This method is best if there aren't too many subtasks or deadlines that must be monitored. Here is an example of a spreadsheet based task tracking system, with a corresponding timeline to give an overview of task durations:

Task	Owner	Status	Start date	End date	Notes/Links to key documents
Project Area 1					
Task 1	Name	Blocked	5/20/2026	8/20/2026	
Project Area 2					
Task 1	Name	In progress			
Project Area 3					
Task 1	Name	Completed			
Task 2	Name	Not started			
Project Area 4					
Task 1	Name	Blocked			
Task 2	Name	In progress			
Task 3	Name	Completed			

Timeline								
	2026							
	May	June	July	August	September	October	November	December
Project Area 1								
Task 1								
Project Area 2								
Task 1								
Project Area 3								
Task 1								
Task 2								
Project Area 4								
Task 1								
Task 2								
Task 3								

Task Tracking Applications

Task Management applications like Asana, Jira, AirTable and many others, can be used to track various project elements. Since these tools were specifically created for task tracking, they come with a variety of helpful features such as the ability to create subtasks, integration with other platforms like Slack, and send status updates.

Ending a Project

Offboarding

When a person is leaving the project, it is important to streamline the process, and make it easier for whoever remains to take over their tasks. Here are some key tasks that must be completed during offboarding:

Data Access and Permissions

- Emails Important emails related to the project that only they received should be forwarded to the head of the project, and deleted from their inbox.
- Server/Repository Access Permissions to shared drives (e.g. Google Drive, Dropbox, Box) repositories (e.g. GitHub, GitLab), documents stored in cloud based applications (e.g. OverLeaf) should be removed.
- Software/Tools Their email/user account should be removed from internal tools like Slack, Asana, AirTable, Qualtrics etc.
- Shared Credentials Login credentials for project-specific accounts where a single account was shared with the team should be handed over to the project head, if they don't already have access.

Physical Access & Hardware

- Hardware Project-specific laptops, monitors, keys, or institutional badges should be returned

Code and Data

- ReadMe Ensure that whatever code they wrote has a clear and comprehensible readme. Additionally, the readme (or some other document) should include the software versions, coding environments used and libraries.
- Local Files Push all remaining project data and scripts to the team's repository.

Task Transition

- Pending Tasks If the team member is leaving before they are able to complete a task, they should provide the team a clear overview of what the status of the remaining tasks are, and a brief description of the next steps.

IRB/Data Compliance

- IRB Amendments The team member must be removed from the project's IRB.
- Data Compliance The team member must also be removed from any Data Use Agreements they were included in.