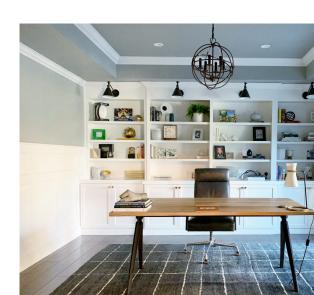
Mac Workflow for Tracking Daily Research Progress

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1 Introduction

2 Mac Workflow for Tracking Daily Research Progress

This workflow **organizes**, **records**, **and automates** progress tracking while integrating ChatGPT for **dictation and summarization**.

2.1 1. Folder Structure

Create a structured directory for all research projects:

mkdir -p ~/prj/research_update ~/prj/{X1,X2,X3,X4,X5,X6,X7,X8,X9,X10}

Each project folder contains: - notes.md \rightarrow Running log of project progress

- references.bib \rightarrow Citation management
- data/ \rightarrow Datasets and related files
- coding/ \rightarrow Analysis and code
- figures/ → Graphs and visualizations tables/ → Tables and data summaries project_title_with_investigator_name/
- \rightarrow Empty file to facilitate fzf search $\texttt{archive} \rightarrow$ Storage directory for non-current files

2.2 2. Daily Logging System

- Centralized daily log: ~/prj/daily_log.md
- Uses **ChatGPT summaries** for dictated notes. ### Review Recent Updates

summ # Custom script for 'rg \$current_dir ~/prj/daily_log.md. and format'

2.2.1 Automated Entry Creation

To append a new daily entry:

rsc # custom script to build a starting prompt for LLM written to clipboard.

2.3 3. Daily Logging Process

- Paste prompt from clipboard into ChatGPT
- Start the dictation.
- When done, send the extended prompt to ChatGPT for summarization.
- Iterate with ChatGPT until the summary is satisfactory.
- Copy the summary to the clipboard
- Run the ru script to append the summary to the daily log.

This script contains the following code along the date and project name:

echo "\$(pbpaste)" >> ~/prj/research_update/daily_log.md

2.4 3. Dictation & Summarization via ChatGPT

2.4.1 Dictate Notes to ChatGPT

- Use Mac's Dictation Feature:
 - Enable by pressing ctrl (control key) twice.
 - Dictate notes for each project.
 - Suggested prompt: prompt="I'm about to dictate research experiment notes.
 - When I'm done, provide a concise summary that includes:

- 1. The date and time of dictation (\$current_time).
- 2. The name of the current research project directory (\$current_dir).
- 3. Each line of the summary should begin with "\$current_dir:" so that it can be extracted using grep.

 The notes start here: "

```sh #!/bin/bash

# Get current date and time
current\_time=\$(date +"%Y-%m-%d %H:%M:%S")

# Get the current directory name
current\_dir=\$(basename "\$PWD")

# Define the prompt with explicit instructions
prompt="I'm about to dictate research experiment notes.
When I'm done, provide a concise summary that includes:

- 1. The date and time of dictation (\$current\_time).
- 2. The name of the current research project directory (\$current\_dir).
- 3. Each line of the summary should begin with "scurrent\_dir:\" so that it can be extracted us The notes start here: "

# Copy the prompt to clipboard (MacOS pbcopy)
echo -n "\$prompt" | pbcopy

# Notify the user echo "Research prompt copied to clipboard. Paste it into ChatGPT when ready."

# 2.5 Run a shell script ru (research update) to add the clipboard content to the daily log

```
#!/bin/bash

Get the current directory name
current_dir=$(basename "$PWD")

Get the current date and time
current_time=$(date +"%Y-%m-%d %H:%M:%S")

Get the clipboard content (MacOS pbpaste)
clipboard_content=$(pbpaste)

Echo the output

echo "$clipboard_content" >> ~/prj/research_update/daily_log.md
echo "" >> ~/prj/research_update/daily_log.md

Confirm success
echo "Update for $current_dir appended to daily_log.md in ~/prj/research_update"
```

## 2.6 4. Version Control (Git)

To track changes and ensure backups:

```
cd ~/Documents/ResearchLog
git init
git add daily_log.md
git commit -m "Daily log update $(date +'%Y-%m-%d')"
git push origin main
```

#### 2.6.1 Automate Git Commit

Add this to crontab for daily commits:

```
0 23 * * * cd ~/prj/research_update && git add . && git commit -m "Daily log $(date)" && git property (Runs at 11 PM daily.)
```

### 2.7 5. Searching & Reviewing

#### 2.7.1 Find past notes by project:

```
#!/bin/bash

Get the current directory name
current_dir=$(basename "$PWD")

rg $current_dir ~/prj/research_update/daily_log.md | cut -c6-
(Creates a readable summary document.)
```

#### 2.8 6. Syncing Across Devices

- Use iCloud Drive, Dropbox, or GitHub for remote access.
- Optionally, use rsync for local backups:

  rsync -av ~/Documents/ResearchLog ~/iCloudDrive/ResearchBackup/

# 2.9 Summary of the Workflow

- 1. Review old notes.
- 2. Prep prompt for the specific directory.
- 3. Dictate notes via Mac's built-in dictation feature.
- 4. ChatGPT summarizes and formats them.
- 5. Paste/append summary into daily\_log.md.
- 6. Git commits and syncs logs every day.
- 7. Easily search, review, and convert logs to PDFs.

Would this workflow fit your needs? Let me know if you need refinements!