For **Windows and Mac users**, please go to

https://biostat.app.vumc.org/wiki/Main/PowerSampleSize#Windows
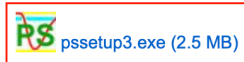
Downloading and Installing the PS Software

The PS program runs on the Microsoft Windows operating systems (Windows XP and later). We have also installed the program on Linux and Macintosh computers using a program called Wine that facilitates running Windows software on other operating systems.

Windows

PS pssetup3.exe (2.5 MB)

Download pssetup3.exe. After downloading to your computer, run pssetup3.exe (please read the instructions below for Mac users).

For **Mac users**, please follow the steps to install WINE^{HQ} to mimic the Windows installation process on your Mac.

PLEASE NOTE
On the PS software website, PlayOnMac is introduced to run pssetup3.exe. However, PlayOnMac may not support your recent or current MacOS version. We strongly recommend installing WINE^{HQ} directly instead of PlayOnMac (and XQuartz).

Step 1 Open the Terminal on your Mac

Do *one of the following* on your Mac: (a) or (b)

(a) Click the Launchpad icon in the Dock, type Terminal in the search field, then click Terminal.
(b) Open the /Applications/Utilities folder in the Finder, then double-click Terminal.
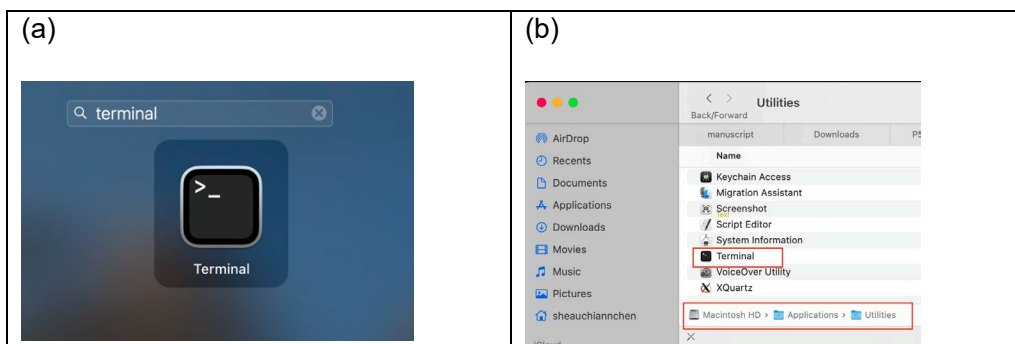
Step 1.1 Check if Homebrew is installed. Please type the command line after prompt ($ or %) in Mac Terminal.

```
brew --version
```

(a) You can check the brew version if you have installed it. Please go to **Step 2**.

```
[SheauChiannsMBP:~ sheauchiannchen$ brew --version
 Homebrew 4.1.14-37-gde575da
 Homebrew/homebrew-core (git revision 15ef748a60; last commit 2021-03-03)
```

(b) Homebrew should be installed if it shows "command not found." Please finish Step 1.2 to Step 1.4

```
[chiann@SheauChiannsAir ~ % brew --version
 zsh: command not found: brew
```

Step 1.2 Install Homebrew on Terminal if you see "command not found: brew ."Type the following command line (after prompt). It may take 1 minute to install Homebrew.

```
/bin/bash -c "$(curl -fsSL https://raw.githubusercontent.com/Homebrew/install/HEAD/install.sh)"
```
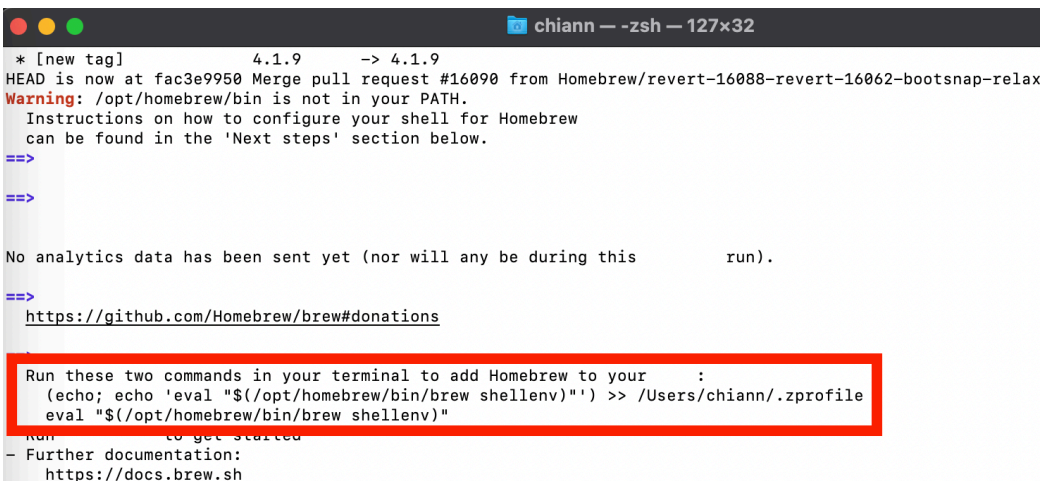
Example:


```
chiann — -zsh — 127×32
[chiann@SheauChiannsAir ~ % /bin/bash -c "$(curl -fsSL https://raw.githubusercontent.com/Homebrew/install/HEAD/install.sh)"
```

Enter your computer password if needed.

Step 1.3 Instructions on configuring your shell for Homebrew (if you see a warning on the screen). Please find the information marked in red below on your Terminal screen. Copy two commands **from your Terminal** and run it.


```
chiann — -zsh — 127×32
 * [new tag]              4.1.9      -> 4.1.9
HEAD is now at fac3e9950 Merge pull request #16090 from Homebrew/revert-16088-revert-16062-bootsnap-relax
Warning: /opt/homebrew/bin is not in your PATH.
  Instructions on how to configure your shell for Homebrew
  can be found in the 'Next steps' section below.
==>

==>

No analytics data has been sent yet (nor will any be during this        run).

==>
  https://github.com/Homebrew/brew#donations

  Run these two commands in your terminal to add Homebrew to your      :
    (echo; echo 'eval "$(/opt/homebrew/bin/brew shellenv)"') >> /Users/chiann/.zprofile
    eval "$(/opt/homebrew/bin/brew shellenv)"
  Run             to get started
- Further documentation:
    https://docs.brew.sh
```

Please use **your command lines** and do not use mine.

```
(echo; echo 'eval "$(/opt/homebrew/bin/brew shellenv)"') >> /Users/chiann/.zprofile
eval "$(/opt/homebrew/bin/brew shellenv)"
```

```
● ● ●                          🖥 chiann — -zsh — 127×5
chiann@SheauChiannsAir ~ % (echo; echo 'eval "$(/opt/homebrew/bin/brew shellenv)"') >> /Users/chiann/.zprofile
chiann@SheauChiannsAir ~ % eval "$(/opt/homebrew/bin/brew shellenv)"
```

Step 1.4 Use the command line in **Step1.1** to check again

```
● ● ●
chiann@SheauChiannsAir ~ % which brew
/opt/homebrew/bin/brew
chiann@SheauChiannsAir ~ % brew --version
Homebrew 4.1.14
```

If you cannot install Homebrew successfully, please visit https://docs.brew.sh/Installation for your macOS or contact Sheau-Chiann Chen (sheau-chiann.chen.1@vumc.org).

macOS requirements for Homebrew installation in this instruction

- A 64-bit Intel CPU or Apple Silicon CPU [1]
- macOS Monterey (12) (or higher) [2]
- Command Line Tools (CLT) for Xcode (from xcode-select -- installor **https://developer.apple.com/download/all/**) or **Xcode** [3]
- The Bourne-again shell for installation (i.e. bash)

Step 2 Install WINE[HQ] from the command line on Terminal.

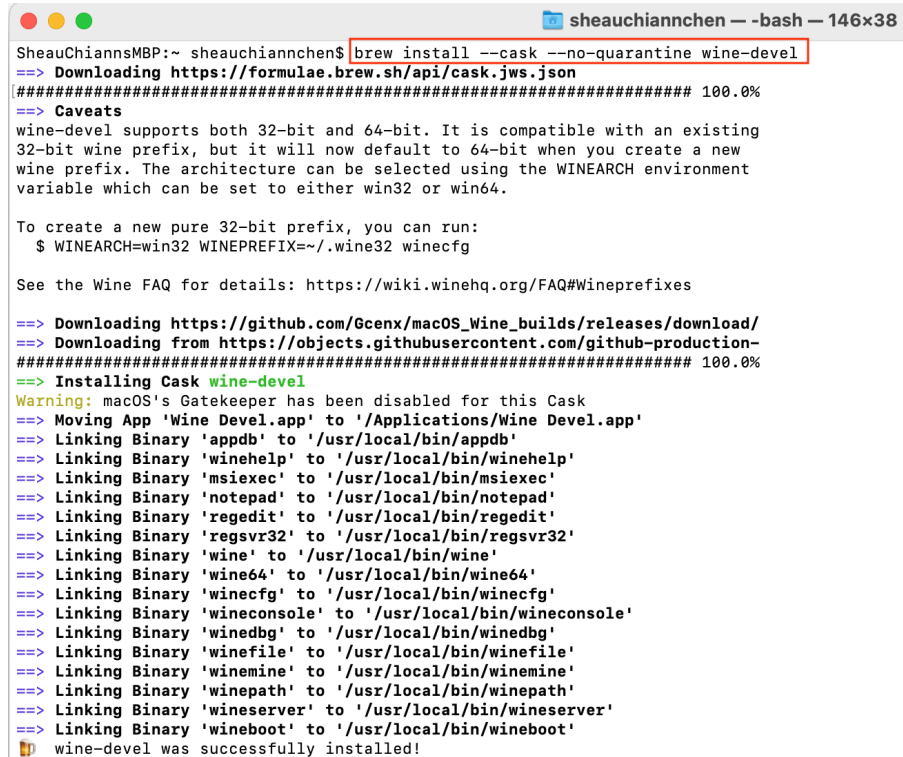(1) Please type the following command and hit a return.

```
brew tap homebrew/cask-versions
```

Here is what you would see in your Terminal.

```
● ● ●                          🖥 sheauchiannchen — -bash — 146×38
SheauChiannsMBP:~ sheauchiannchen$ brew tap homebrew/cask-versions    Type your command after $
==> Downloading https://ghcr.io/v2/homebrew/portable-ruby/portable-ruby/blobs/sha256:61029cec31c
67a
################################################################## 100.0%
==> Pouring portable-ruby-2.6.10_1.el_capitan.bottle.tar.gz
==> Tapping homebrew/cask-versions
Cloning into '/usr/local/Homebrew/Library/Taps/homebrew/homebrew-cask-versions'...
remote: Enumerating objects: 265019, done.
remote: Counting objects: 100% (2305/2305), done.
remote: Compressing objects: 100% (234/234), done.
remote: Total 265019 (delta 2123), reused 2201 (delta 2071), pack-reused 262714
Receiving objects: 100% (265019/265019), 66.50 MiB | 30.02 MiB/s, done.
Resolving deltas: 100% (184099/184099), done.
Tapped 243 casks (276 files, 74.0MB).
```

(2) Please type the following command and hit a return. You will see the message "wine-devel was successfully installed!

```
brew install --cask --no-quarantine wine-devel
```
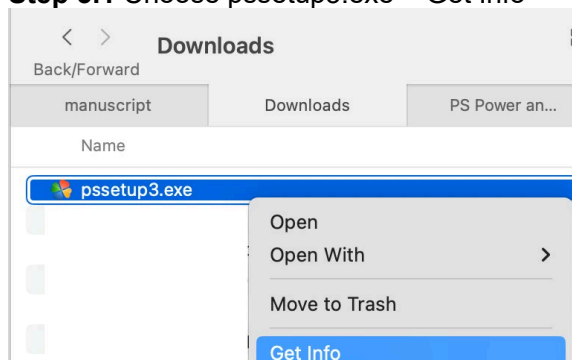

for viewing more wine packages (optional)

(3) (Optional) You can type which Wine to find the location you installed

```
SheauChiannsMBP:~ sheauchiannchen$ which wine
/usr/local/bin/wine
```
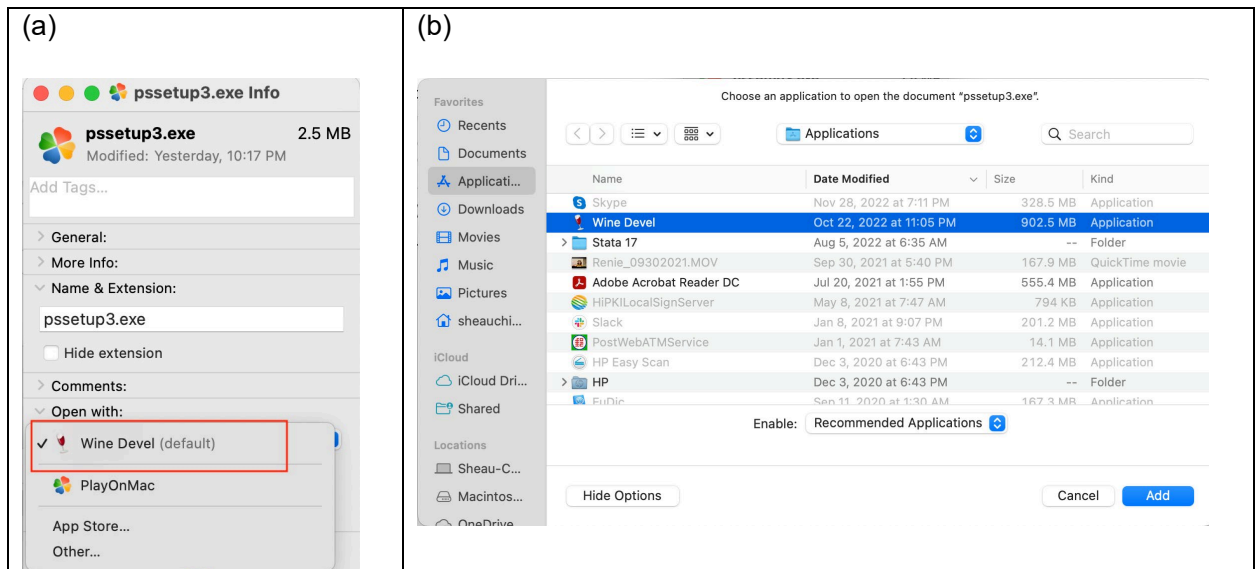
(4) You can type "exit" to logout your Terminal and close it.

Step 3 set up pssetup3.exe to open with Wine.

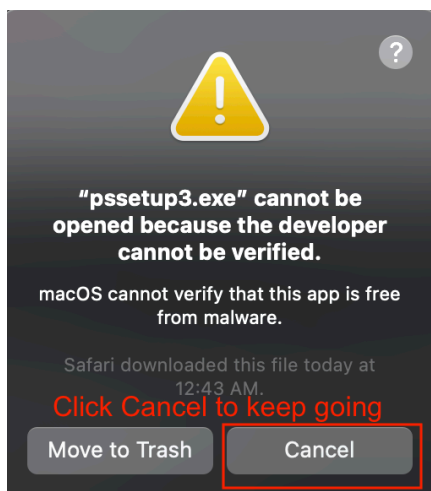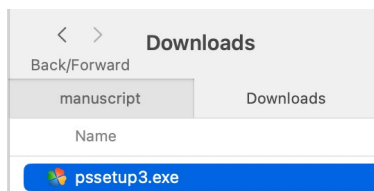**Step 3.1** Choose pssetup3.exe > Get Info

Step 3.2 Select (a) "Wine Devel" or (b) Click "Other…." If you did not see "Wine Devel" on the list. Click "Change All…"
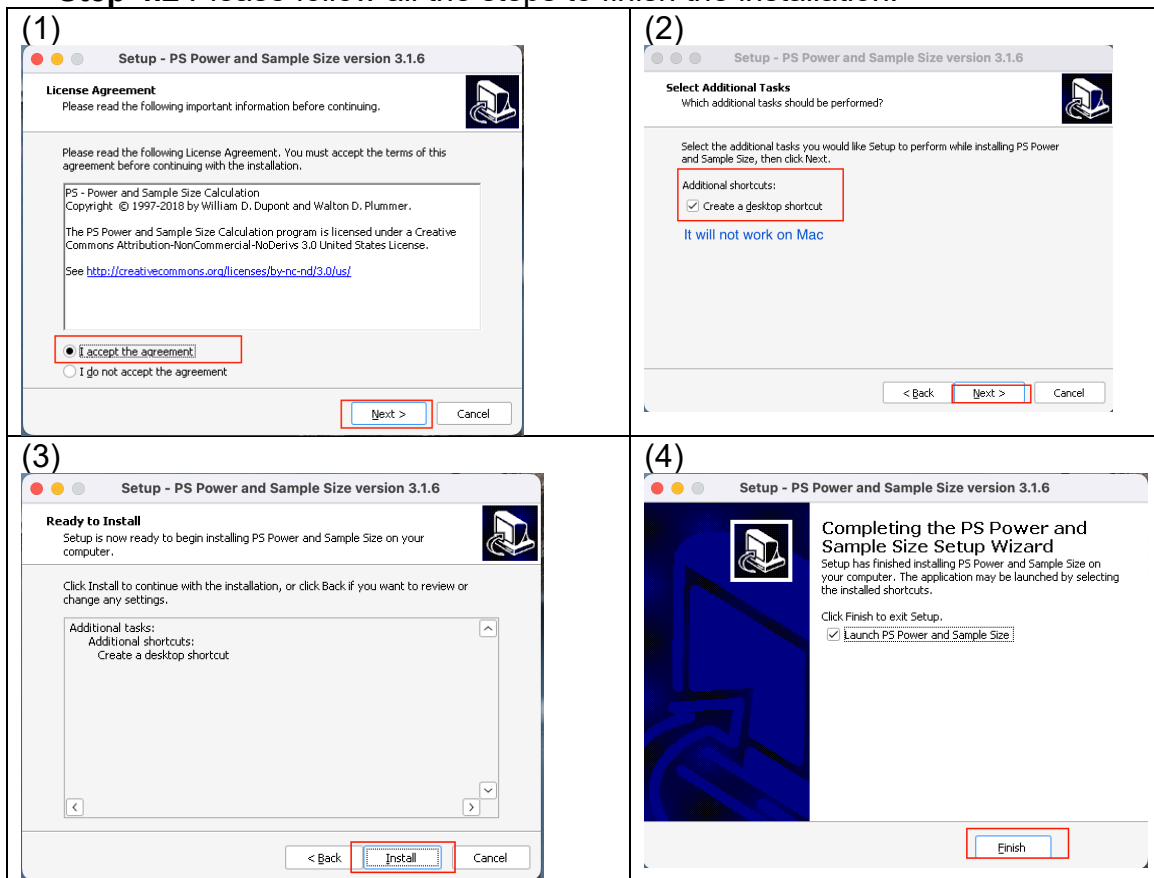
(a)

🔴 🟡 🟢	🎨 pssetup3.exe Info	

pssetup3.exe 2.5 MB
Modified: Yesterday, 10:17 PM

Add Tags…

> General:
> More Info:
> Name & Extension:

pssetup3.exe

☐ Hide extension

> Comments:
> Open with:

✓ 🍷 Wine Devel (default)

🎨 PlayOnMac

App Store…
Other…

(b)

Choose an application to open the document "pssetup3.exe".

Applications

Q Search

Name	Date Modified	Size	Kind
Skype	Nov 28, 2022 at 7:11 PM	328.5 MB	Application
Wine Devel	Oct 22, 2022 at 11:05 PM	902.5 MB	Application
Stata 17	Aug 5, 2022 at 6:35 AM	--	Folder
Renie_09302021.MOV	Sep 30, 2021 at 5:40 PM	167.9 MB	QuickTime movie
Adobe Acrobat Reader DC	Jul 20, 2021 at 1:55 PM	555.4 MB	Application
HiPKILocalSignServer	May 8, 2021 at 7:47 AM	794 KB	Application
Slack	Jan 8, 2021 at 9:07 PM	201.2 MB	Application
PostWebATMService	Jan 1, 2021 at 7:43 AM	14.1 MB	Application
HP Easy Scan	Dec 3, 2020 at 6:43 PM	212.4 MB	Application
HP	Dec 3, 2020 at 6:43 PM	--	Folder
EuDic	Sep 11, 2020 at 1:30 AM	167.3 MB	Application

Favorites
- Recents
- Documents
- Applicati…
- Downloads
- Movies
- Music
- Pictures
- sheauchi…

iCloud
- iCloud Dri…
- Shared

Locations
- Sheau-C…
- Macintos…
- OneDrive

Enable: Recommended Applications

Hide Options   Cancel   **Add**

Step 4 Install PS software

Step 4.1 Double click pssetup3.exe to install PS software

< >
Downloads
Back/Forward

manuscript	Downloads

Name

🎨 **pssetup3.exe**

⚠️

"pssetup3.exe" cannot be opened because the developer cannot be verified.

macOS cannot verify that this app is free from malware.

Safari downloaded this file today at 12:43 AM.

Click Cancel to keep going

Move to Trash   Cancel

Step 4.2 Please follow all the steps to finish the installation.
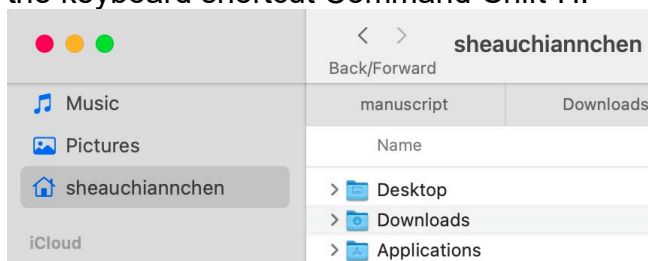
(1)	(2)
(3)	(4)

Congratulations! You can click continue to work with PS software.
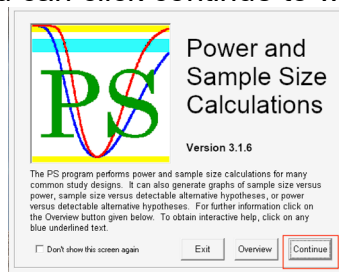
Step 5 Create a desktop shortcut to avoid redoing **Step 4** every time.

Step 5.1 Go to your home folder. To find your home folder, open Finder and use the keyboard shortcut Command-Shift-H.

Step 5.2 Press <mark>Command + Shift + .</mark> (the period key). This will show hidden files in the folder.

Step 5.3 After hidden files are shown in your home folder, you will see ".wine" folder under your home. Go to .wine/drive_c/Program Files(x86)/PS Power and Sample Size/
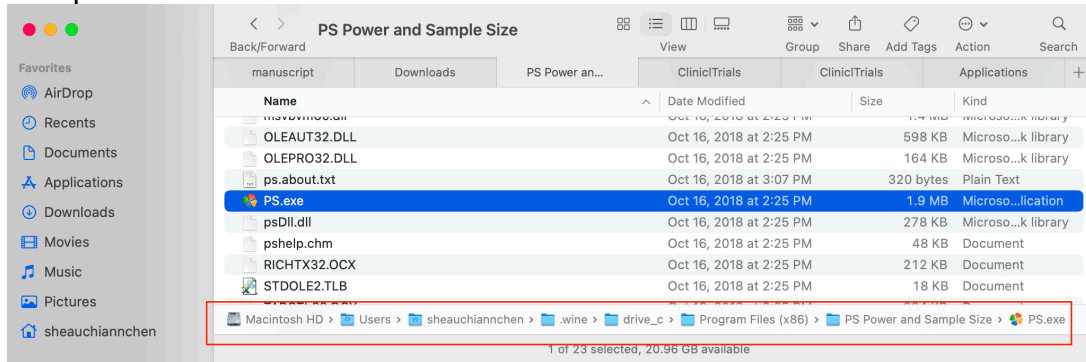
Step 5.4 Select the "PS.exe", then choose File > Make Alias (or right-click). (1) You can create a PS.exe alias for PS.exe, then (2) drag "PS.exe alias" to the desktop. Click "PS.exe alias" for the use of PS software.
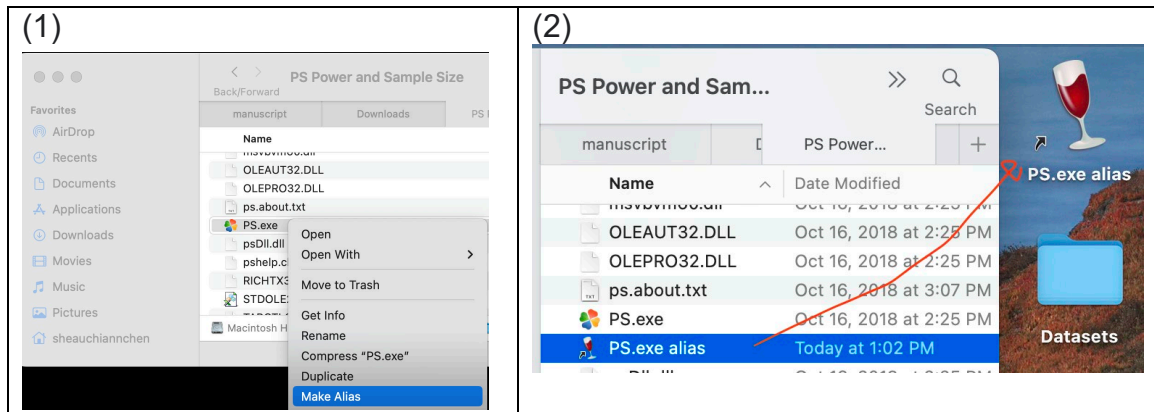
Step 5.5 (Importantly) Go back to your home folder. To **hide the files again**, press Command + Shift + . again, in case we accidentally delete the important stuff.

MacOS Information about the laptop that I tried to install successfully
Laptop 1
MacBook Pro
Processor 2.3 GHz Dual-Core Intel Core i5
macOS Ventura 13.6

Laptop 2
MacBook Air
Chip Apple M1
macOS Ventura 13.4.1