RUNNING CASE IT ON MAC OPERATING SYSTEMS - revised 7/14/23

The purpose of the first step is to make sure that your web browser will **not** automatically open (unzip) the Case It download. You will then run a single line in the Terminal window of your Mac, to remove the zipped file from quarantine (Step 6). After that, the downloaded file can be unzipped, and the Case It app can be opened. *Click on links below to see screen shots of the procedure.*

IMPORTANT! If you are running antiviral software that automatically checks downloaded files, read this important information before continuing. Case It is safe to use, but the Mac version can generate "false positive" reports, preventing Case It from running on your computer unless antivirus software is temporarily disabled. Otherwise, critical files will be 'quarantined', preventing the software from opening.

---

1. If you are using **Safari**, open Preferences the via the Safari menu at the top-left corner of the desktop. Uncheck a box that says 'Open safe files after downloading'.

   If you are using **Firefox** or **Chrome**, you may be given the option of opening or saving the file after you click the download link in Step 2 below. If asked, make sure that the **Save** button is selected.

   *If you are using **Microsoft Edge**, the download will be saved by default. If using a different browser, make sure that the file is saved and not automatically opened after downloading.*

---

2. Click Case_It_v705_Mac.zip to download and save the zipped file (you may get this message - click 'Allow'). Look in your Downloads folder (accessed via a folder icon on the right-hand side of your Taskbar) to make sure that the downloaded file is there, labelled **Case_It_v705_Mac.zip**. ***Leave this file inside the Downloads folder, unopened**.***

   **If the file is named "Case_It_v705_Mac" instead of "Case_It_v705_Mac.zip", the file was automatically opened (unzipped) after downloading. If this happened, re-read Step 1 and re-download the file.

---

3. Next you need to open your **Terminal app**. The fastest way to do this is to type "Terminal" into **Spotlight** (accessed via the magnifying glass icon located at the top-right corner of your Desktop).

   Double-click on Terminal.app in the Spotlight search results to open the Terminal window.

---

4. Carefully Copy the line below and Paste it into the Terminal window, but do **not** hit Return yet.

   xattr -rd com.apple.quarantine ~/Downloads/Case_It_v705_Mac.zip

---

5. Make sure that there are no spaces at the end of the line, or any other extraneous characters in the line. If there are, use the **Delete** key or the **Backspace** key to remove them, or re-paste the line into the Terminal.

---

6. Hit the **Return** key. If you get this message, click OK. If no error message appears in the Terminal after hitting Return, it means the procedure was successful and the quarantine was removed. *If you get an error message in the Terminal that there is 'no such file', then check to make sure that **Case_It_v705_Mac.zip** is in your downloads folder (see Step 2). If the zipped file is in your Downloads folder and you still get a 'no such file' message, repeat Steps 4 - 6.*

7. Once the Terminal run is successful (no error message), move the **Case_It_v705_Mac.zip** file from the Download folder to your Desktop, and double-click or right-click to unzip it.

---

8. Open the unzipped folder and locate the executable file (Case It 7.0.5.exe). Either right-click on it and select **Open with Wine Crossover** from the pop-up contextual menu, or drag the Case It icon into the Wine Crossover icon.

    A message will appear asking to **install Rosetta**. Click install, and a message will appear asking permission to install Apple software. Type in your Mac's password, click **Install Software**, and wait until a message appears saying "Wine Crossover" would like to access files in your desktop folder. Click OK, then wait.

    *It may take up to 30 seconds for the program to open for the first time, and it will appear as if nothing is happening. After the splash screen of Case It appears, click the **Click here to begin** button to start the program.*

    NOTE: *If instead of a splash screen you get an error message that the 'file is corrupt and should be moved to the Trash', then you did not successfully run the line in Step 4 in the Terminal window to remove the quarantine from the downloaded file. If this happens, you'll need to repeat steps 1-7.*

    NOTE: *If an error message appears that a file is missing, or if a folder appears to be empty when you attempt to open files (DNA, protein, enzyme, etc), follow these steps: Close the program, move the entire Case it folder to the desktop, and restart the program. If the Case It folder is already on the desktop, **create a new folder on the desktop** and move the Case It folder inside it, then restart the program. This only has to be done once.*

---

9. For detailed instructions on running various procedures, see the Tutorials web page, or view procedures via the videos of Case it Mobile. The CRISPR exercise also provides step-by-step instructions for opening files, digesting DNA, and running gels, so Part 1 of that exercise is a good way to familiarize yourself with basic operation of the program.

    Case It v705 is necessary to run the mRNA exercise on development of mRNA vaccines.

    If you have any questions or issues with the software, please contact: mark.s.bergland@uwrf.edu

    Mark Bergland
    Professor of Biology, emeritus
    University of Wisconsin - River Falls