

Installing MEGA5 bioinformatics software for use with Case It (on both Windows and Mac OSX)

Multiple alignment and tree-building using Case It can be accomplished in three ways, via the MAFFT or MABL web sites, or through the use of MEGA5.05* software. Although both PC and Mac versions of MEGA are available, you will be downloading the Windows version, even if you want to use MEGA5 on a Mac**.

*MEGA5: Molecular Evolutionary Genetics Analysis using Maximum Likelihood, Evolutionary Distance, and Maximum Parsimony Methods. Tamura K, Peterson D, Peterson N, Stecher G, Nei M, and Kumar S (2011) [Molecular Biology and Evolution](#) 28: 2731-2739.

**WINE 2.0.3 is used to run the Windows version of Case It on a Mac, so the Windows version of MEGA is also required since they are integrated.

The Case It download includes a folder called MEGA, which includes all necessary files to run MEGA except the MEGA executable file (MEGA5.05.exe). This file must be obtained from the MEGA web site, and placed inside the MEGA file of Case It. The procedure is explained below.

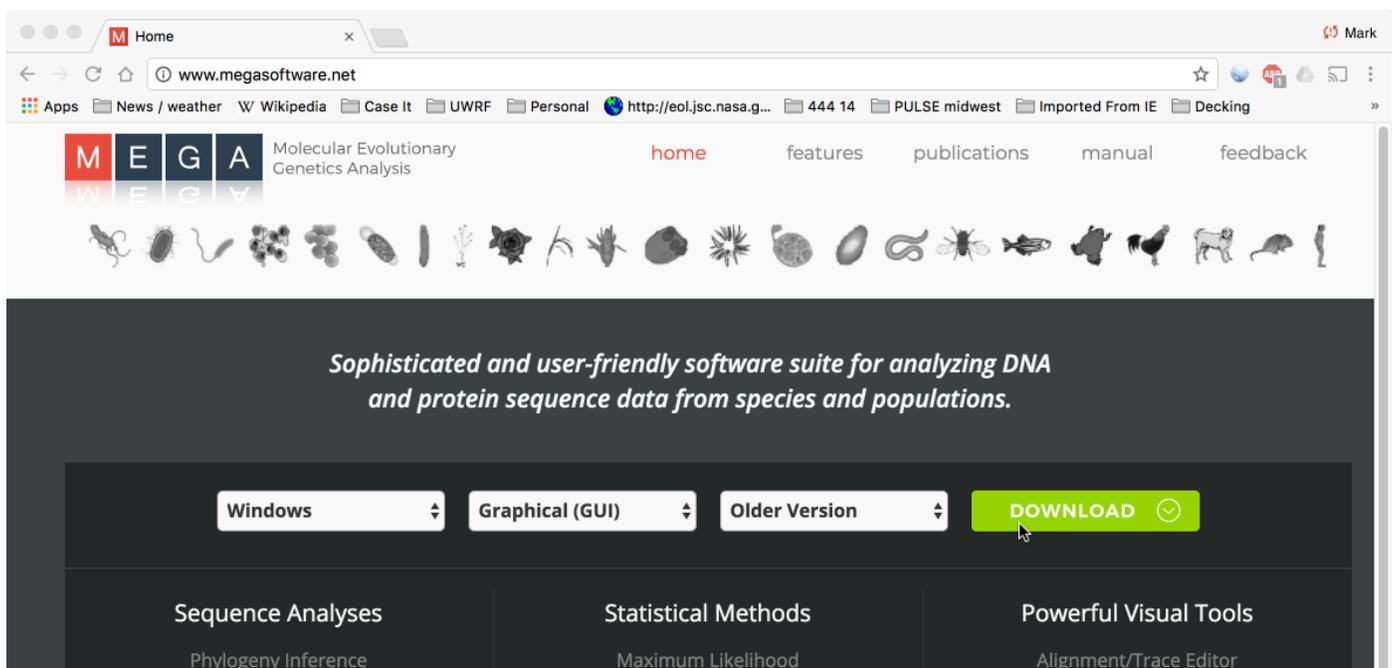
(1) If you are using Mac OSX, make sure that Wine 2.0.3, XQuartz 2.7.11 and Case It are installed before you do anything else (see the PDF document “[How to run Case It on both Windows and Mac OSX](#)”, inside the Case It download folder).
If you are using Windows on a PC, it is not necessary to install Wine, but you should install Case It before following the steps below.

(2) Create a folder on your desktop called “MEGA5 installation”. Right-click on your desktop to create this folder.



(3) Open your web browser to <http://www.megasoftware.net/>, and the screen shown below will appear.

(4) Select **Windows** and **Older Version** before clicking the **Download** button. Do this even if you are using Mac OSX.



- (5) Check the appropriate boxes for your situation, then select version **5.0 (GUI for Windows)**, circled in red below, and click the **Download** button at the bottom of the web page. Do this even if you are using Mac OSX.

Note: Other versions of MEGA on this download page will not work properly with Case It, so be sure to download the one circled in red below.

Previous Versions of MEGA

MEGA is provided FREE for use in research and education. By downloading MEGA, you are agreeing not to redistribute the MEGA software and associated materials partially or fully in any form.

To download MEGA, please fill in the information requested below about how and where MEGA is used. This anonymous information is important for obtaining funding support for the maintenance and further development of MEGA.

Country *

I am a ...

(check one or more)*

Researcher

Instructor

Student

Professor

Other

What kind of institution is ?

(check one or more)*

University/College

Research Institute

Industry

Government

Other

Which version would you like to download?

6.0 (GUI for Windows)

6.0 (CC for Windows)

5.2 (GUI for Windows)

5.1 (GUI for Windows)

5.0 (GUI for Windows)

Download this version →

4.1 (GUI for Windows)

3.1 (GUI for Windows)

1.0 (GUI for DOS)

6.0 (GUI for Mac OS X)

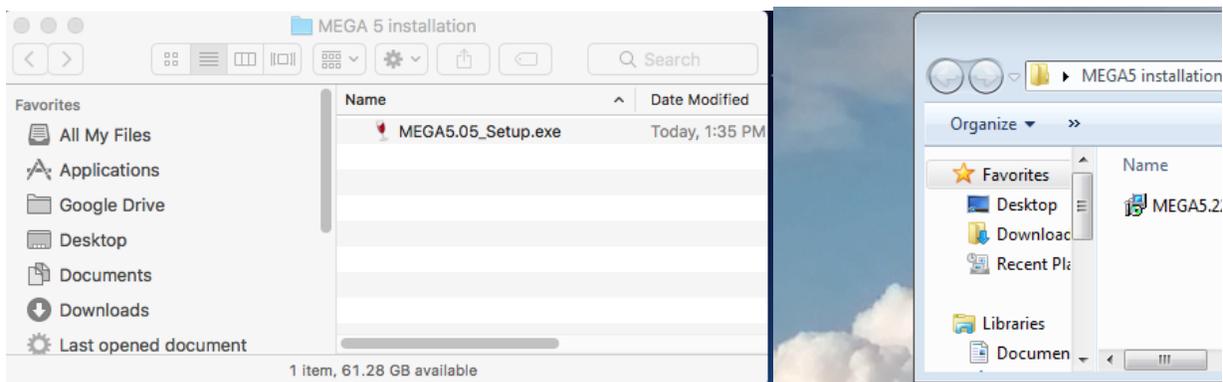
5.2 (GUI for Mac OS X)

5.1 (GUI for Mac OS X)

5.0 (GUI for Mac OS X)

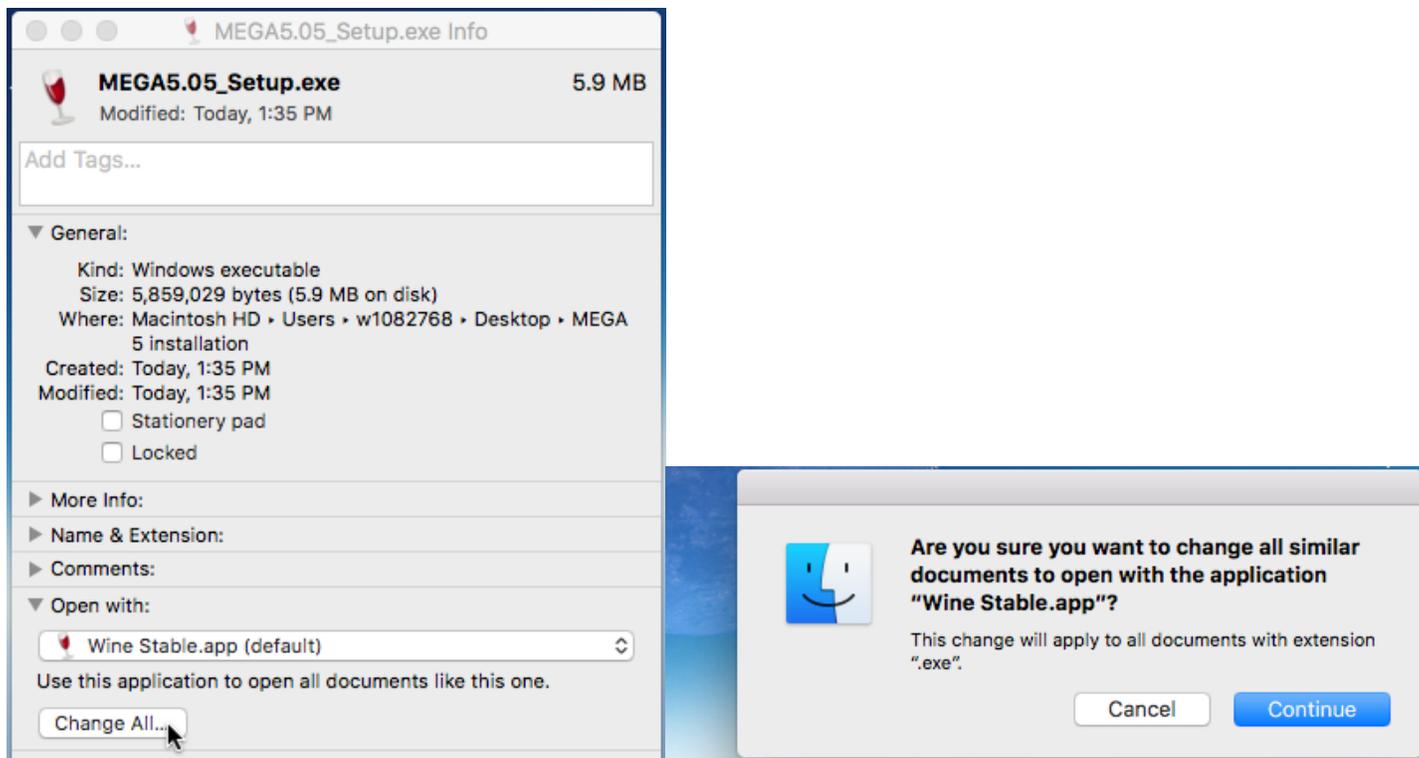
DOWNLOAD

- (6) You will be asked where to save the installer. Save the installer inside the **MEGA 5 installation** folder you created in Step 2, shown below in a Mac OSX window (left) or in a Windows window (right).

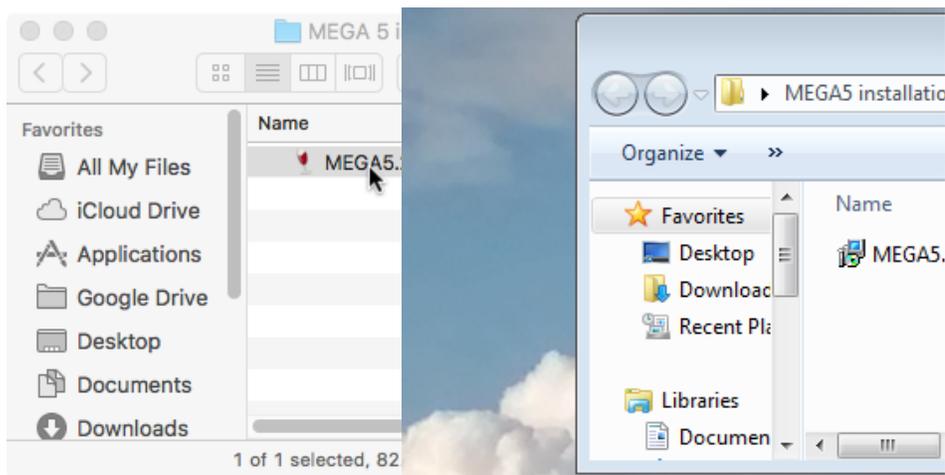


- (7) If you are using Windows, you can skip step 7 and go directly to Step 8.

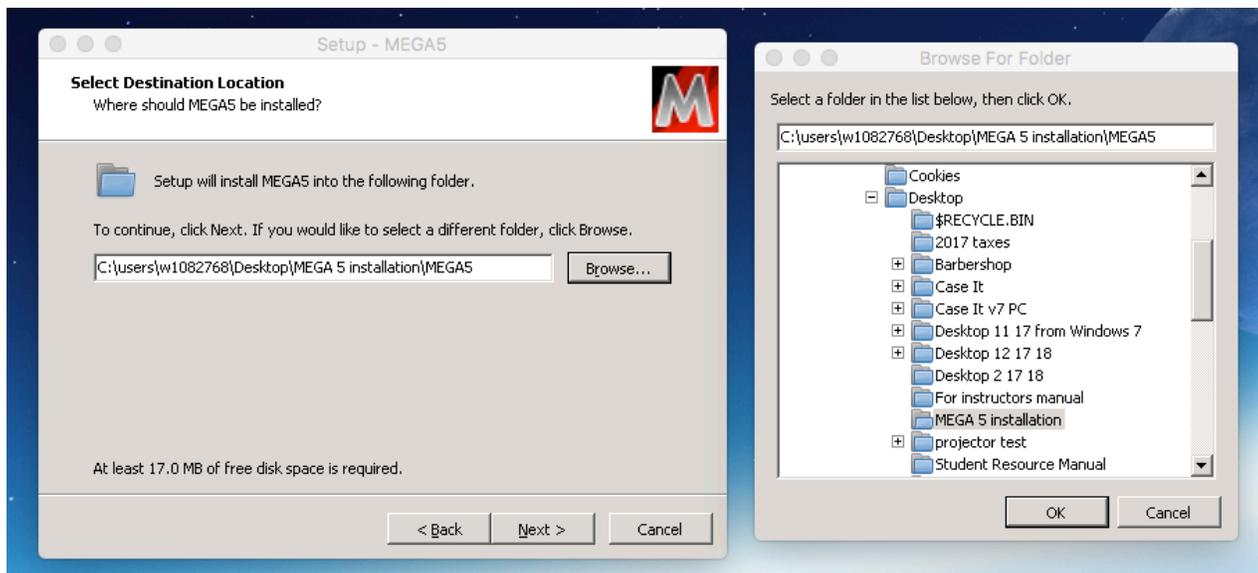
If you are using Mac OSX and there is no wine glass icon to the right of the installer name, **right-click** on the installer and select **Get Info**. Find where it says **Open with:** and make sure that **Wine Stable.app** appears as shown below, and click the **Change All...** button. When asked if you are sure you want to do this, click **Continue** as shown in the graphic below, at right. This will ensure that all .exe (Windows executable) files on your Mac open in Wine, including Case It and MEGA5.



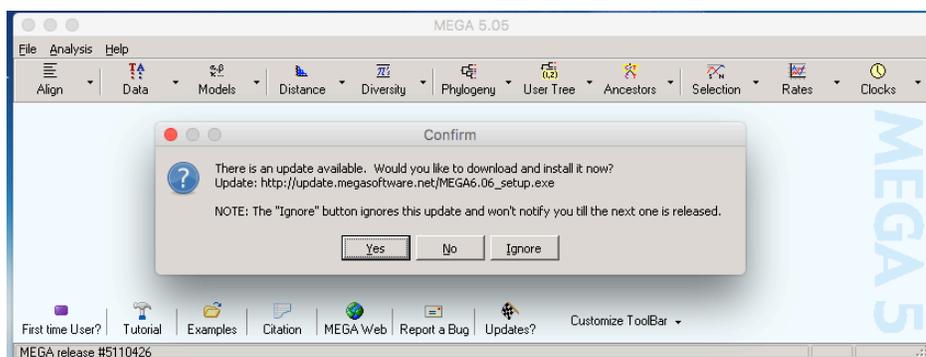
- (8) Double-click on the **MEGA5.05_Setup.exe** file, either inside the folder on your Mac OSX desktop or inside the folder on your Windows desktop, depending on which computer operating system you are using.



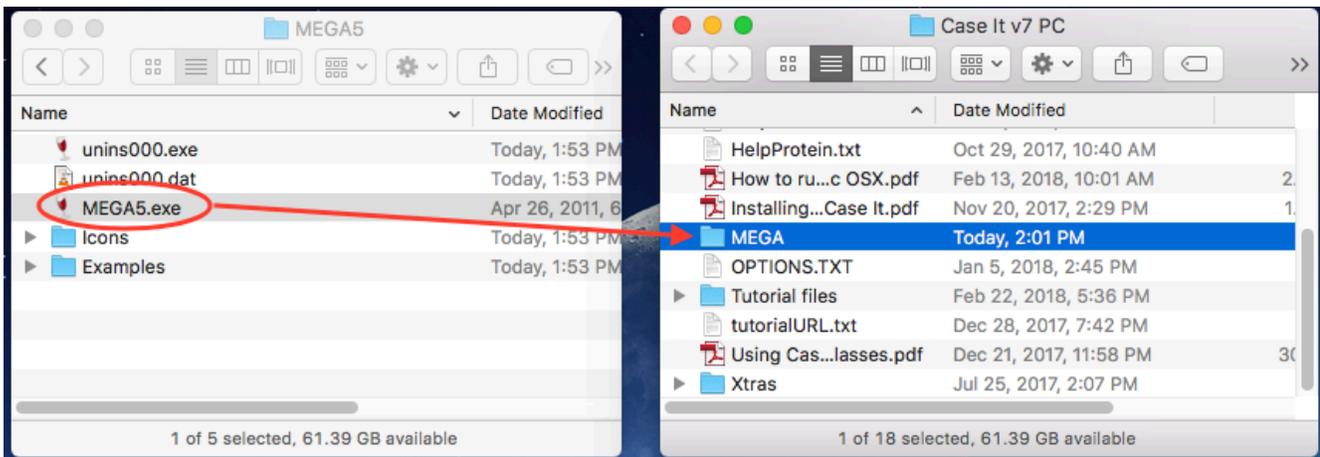
- (9) On the second screen of the installation process, you will be asked where you want to install MEGA5 (below left). Browse to find the **MEGA 5 installation** folder you created earlier, and click **OK**. (Note that your desktop contents will appear different from what appears below, except for the appearance of the MEGA 5 installation folder.)



- (10) After it is installed, MEGA5 may automatically open with the message below. Click **Ignore**, because you don't want to use a later version of MEGA.



- (11) Once the installation process is finished, a folder called **MEGA5** will appear inside your **MEGA5 installation** folder. **Drag the MEGA5.exe** file from the MEGA5 folder and put it inside the **MEGA** folder which is inside the **Case It v7 PC** folder. You should only drag the executable file (the one circled at left).



- (12) Once the MEGA5.exe file is inside the MEGA folder of Case It, then Case It will automatically open MEGA for the display of multiple alignment and phylogenetic trees, as shown below for one scenario of the HIV case. For details of how to run this and similar analyses, see the document [Tutorial - Bioinformatics](#), found inside the Case It folder.

