System Requirements

MAGIC Tool runs on any operating system with Sun Java installed (e.g. Windows, Mac OS X, Linux, Sun workstations). RAM requirements depend on the number and size of files you wish to analyze. 512 MB of RAM is minimal for analyzing full-size microarrays; 1 or 2 GB of RAM is desirable. The program itself is small, but the files it creates can be quite large.

Installing Java

If you intend to install MAGIC Tool on your computer, you will need the Sun version of Java.

a. On a PC, go to http://java.com, and click on "Get It Now". The correct version of the code should download and begin to install automatically. Complete installation instructions, with screen shots, are at http://java.com/en/download/help/win_auto.jsp .
b. On Mac, Java is already included. (OS X 10.2.6 or later is required.)

Installing MagicTool

1. Create a folder called magictool on your computer.
   a. On a PC, we recommend that you place this folder directly under the C: drive, or a folder within the C: drive that has no spaces or dots in its name. This specifically excludes, for example, the Desktop (which is under "Documents and Settings") or "Program Files."
   b. On a Mac, we recommend that you place this folder in any convenient place, but **avoid** folders that contain spaces or dots in their names.

2. Go to www.bio.davidson.edu/magic, and follow the links to download the software, or go directly to http://www.bio.davidson.edu/projects/magic/agreement.html.

3. Download a MAGIC Tool .jar file to the magictool folder you created in step (1).

4. Change the name of the .jar file to **MagicTool.jar** (exact spelling, including capitalization, is important).

5. On most operating systems, you can now run MAGIC Tool (limited to **small** sample files such as those available on MAGIC Tool web page) by simply double-clicking on the file MagicTool.jar. You will know it is starting when the magic wand waves across the MAGIC Tool logo on the screen. If the .jar file does not start the program, it may be because Java is not installed properly on your machine. Be sure you have completed the instructions for Installing Java before proceeding to step 5 or 6. You may need to update your version of Java if

you have not installed it recently.

6. (optional) Do this step if you are running on a workstation other than Windows or Mac, or if you are comfortable working with the command line and prefer not to do step 6. You can run MagicTool with extra memory in the following way:

   Navigate (using the cd command) to the folder MagicTool.jar is in. (On Windows machine, use the Command Prompt under All Programs, Accessories. On Mac OS X, use the Terminal application under Utilities.)

   When you are in the right folder, type
   java -jar -Xms200m -Xmx800m MagicTool.jar

   The numbers 200 and 800 in this command can be increased if you have available memory and are working with large files.

7. This step sets up a script so you can run MagicTool with extra memory. You need to do this step if you did not do step 5, or if you prefer to have a "double clickable" way to run Magic Tool. Running with extra memory is critical for working with large data files (e.g. full microarrays).
   a. On a PC:
      i. Download the file called Magic_launch.bat to the magictool folder.
      ii. Double click on Magic_launch.bat. This should cause a DOS command window to open, then MagicTool should start.
   b. On a Mac:
      i. Download the file called Magic_Launch.txt
      ii. Open Script Editor (this program is under the Applications, AppleScript folder).
      iii. In Script Editor, go to Open Script… under the File menu. Select the file Magic_Launch.txt. The text from the file should now appear in the lower window in Script Editor.
      iv. In Script Editor, go to Save As under the File menu, remove the .txt extension from the filename, select Application under the Format menu, and select the magictool folder as the destination.
      v. Open a finder window and open the magictool folder, but do not use favorites, shortcuts or the multicolumn finder display. (In other words, use View as Icons or View as List.) Double click on Magic_Launch, which should start MagicTool.