

**Files needed to run the simulation:**  
**BasicImmuneSimulator.jar**  
**RepastJ**  
**Java runtime environment (PC only)**

In order to run the simulation, it is necessary to download the Repast launcher.

There are tutorials and other sorts of information available for those who wish to create their own agent-based model on the Sourceforge main page, but the files needed to run the simulation may be obtained by clicking on "Download" at the left of the main page or by clicking the link above.

Using a PC:

Go to the Java website to obtain a free copy of the Java software, and download Java (at least the Java Runtime Environment), if it is not already on the PC to be used.

Then download RepastJ to run the Basic Immune Simulator.

Using a Mac:

A copy of JAVA is NOT needed. Simply, download the OS X version of Repast J.

Install the Repast J that is appropriate for your operating system by following the instructions provided on the Repast website for the downloads. Be sure to download the correct version of Repast J for your computer.

Download the Basic Immune Simulator file (BasicImmuneSimulator.jar) onto your computer.

Once the above steps have been completed, the simulation may be run as follows:

- Start Repast either by clicking on the icon or by finding the repastj.exe file within the repast directory and clicking on it. The Repast toolbar should appear.
- At the left edge of the toolbar there is an icon of a folder.
- Click on the folder and a "Load Model" pane appears.
- Scroll down in the Load Model pane and click on "Models" and then the "Add" button.
- A browser will appear. Use this browser to find the BasicImmuneSimulator.jar file, which can be found where ever it was downloaded.
- Click on the BasicImmuneSimulator.jar file and "Basic Immune Model" will appear under "Other Models".
- Click on the "Load" button, to make the Basic Immune Model graphical user interface (GUI) appear.
- Once "Basic Immune Model Settings" GUI appears, click on the "Parameters" tab to see the input parameter choices available for a simulation run, if the parameters are not already displayed.
- Choose the pathological challenge from the list in the GUI. Any other parameter may be changed to the user's discretion at this point as well.
- Click the Run button (triangle) on the Repast toolbar to start the simulation.

Note that data files from the simulation will be saved automatically to wherever the repastj.exe file is located.