

Classroom Activity

10 Big Question: How do we unravel the causes of disease?

Foldit

Foldit is an online game in which every day humans contribute to important scientific research by trying to solve one of the hardest problems in biology: protein folding. By playing the game, you will be feeding back important information to scientists about how humans go about the task of predicting protein structure, so they can make protein-prediction software more effective. The eventual aim of the project is to have humans work on real proteins of interest, either on predicting their structure or designing them. The best part is you don't need to know anything about biology or proteins to play the game!

To start playing Foldit, you need to download the program:

[+] <http://fold.it/portal/>

Getting started

Follow the installation instructions and allow the program to complete any updates before you start to play. You will need to create a username and password, after which you can sign in.

Playing the game

It is a good idea to try and complete all of the tutorials before you start on the science puzzles, as you will gain a better understanding of the game mechanics. You will be guided through each level as you manipulate and rotate your protein strand on the screen to gain maximum points to move onto the next puzzle.

Once you feel confident enough you can move onto the science games and start to make a difference.

Play as an individual or work as a team through the puzzles and aim for the highest score possible. There is plenty of help on the Foldit webpage if you get stuck on a level.