

The goal of the mid-term project is to provide you with the opportunity to fully investigate and explore one of the *NetLogo* demo simulations provided in the Models Library and then to share what you have learned with the rest of the class. You may investigate any simulation not discussed or reviewed in class, biological or otherwise, *as long as the system it models has an emergent property or behavior*. To successfully complete this project you must do the following:

1. Thoroughly explore your system and its behavior through the model.
2. Research your system in the primary literature (journals) and prepare a write-up (2-5 pages) that synthesizes what you have learned. Potential lines of investigation include, but are not limited to, the following:
  - a. Is this truly an emergent system? Are there other viable explanations for the phenomenon?
  - b. Is this a good model? What are its strengths? Weaknesses? What other models for the system exist? Which is better?
  - c. How does this system exemplify emergence?
  - d. What novel insight did the use of the cellular automata model give to our understanding of the workings of this system?
3. Present the results of your investigation to the class in a power point presentation (no more than 10 minutes in length).