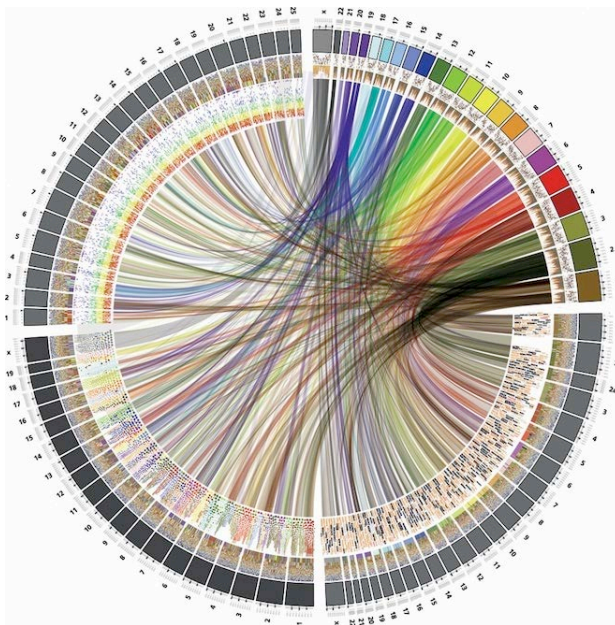


# Simulation Evolution Systems Biology

Fall  
2016

Antibiotics Resistance

mutating replicators  
Cancer



Models  
are the  
maps of  
modern  
biology.

Learn to  
read them.

This course is about the bigger picture. About making connections. About making models. *Molecules in cells. Individuals in ecosystems. Evolution of cancer cells. Long-term evolution.*

**You name it. You model it. You map it.**

Evolve your science skills by mapping your favorite part of biology.

**In this course you will:**

- Pick your own research topic and interdisciplinary group
- Hone your problem-solving skills in an active-learning environment
- Explore the predictive power and limits of biological modeling
- Learn to use an accessible but mathematically precise modeling tool
- Receive one-on-one help from an expert with 15+ years of modeling experience
- Learn how to write the grants needed to fund your scientific research
- **Never take a single exam!**

**Prerequisite:** Only an interest in interdisciplinary approaches to modeling in biology.

**Open Enrollment:** Undergrads and grad students from any field related to Biology, Medicine, Chemistry, Physics, Math, Stats, Comp Sci, and Engineering are welcome!

**Questions? Email: [loewe@wisc.edu](mailto:loewe@wisc.edu)**

## The Evolutionary Systems Biology Course

**Genetics 677-Sec11 | Class #: 55619 (Genetics) | Cross-listed: 55810 (Medical Genetics)**

3 Cred | Tue Lect 3:30-4:45pm • Thu Lab 3:30-5:30pm | by Laurence Loewe