

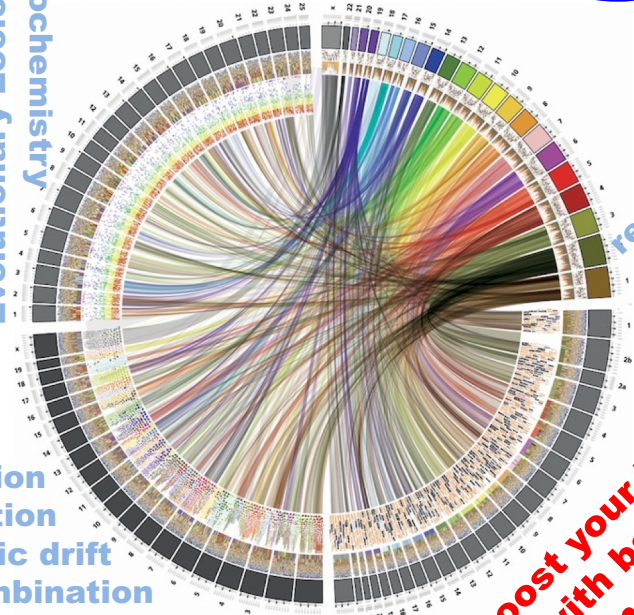
Simulation Evolutionary Systems Biology Modeling Intro

Learn concurrent programming Evolvix style

Simulation Evolutionary Systems Biology

Systems Biology

Modeling Intro
 Viruses
 Population genetics
 Endangered Species
 Biosystems curation
 Muller's ratchet
 Game theory



Mutation
 Selection
 Genetic drift
 Recombination
 Migration

Cancer
 mutators
 replicators

Models are the maps of modern biology.

boost your biology with basics in modeling or top it off in biodata science

evosybio-course.discovery.wisc.edu
 Course website: evosybio-course.discovery.wisc.edu

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 work with others in an interdisciplinary group
- Hone your problem-solving skills in an active-learning environment
- Learn the 5 W's of modeling: What system, Which parts, When actions occur, Where, & Why?
- Explore the predictive power of modeling in biology, draw boundaries, recognize limitations
- Learn how to use a modeling tool designed to be accessible and mathematically accurate
- Receive one-on-one help from an expert with 20+ years of modeling experience
- Learn how to write the grants needed to fund your scientific research instead of taking exams
- This course teaches Must Have Skills for the biology of the future, see syllabus on web

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

Evolutionary Systems Biology Modeling Intro
 3 Cred | by Laurence Loewe | Tue Lec 4-5:15pm Thu Lab 4-6pm
 Annual Genetics 546 'Evolutionary Systems Biology Modeling Introduction' since Fall 2018