



# *Interdisciplinary Disease Ecology Across Scales*

## UNIVERSITY OF GEORGIA

### IDEAS Program Requirements

*Numbers in parentheses are the hours of course credit.*

#### A. Course Requirements

- ECOL(BIOL) 4150/6150 – Population Biology of Infectious Diseases (4)
- ECOL(IDIS) 8510 – Fundamentals of Disease Biology (4)
- ECOL 8530 – Interdisciplinary Problem Solving in Infectious Disease Ecology (3)
- ECOL 8540 – Computational Workshop, 2 modules required (4 total)
- GRSC 8550 – Responsible Conduct in Research (1)
- Journal Club –2 IDEAS program-approved courses (2-4), *examples*:
  - o IDIS 8240: Vector-borne Diseases in a Changing World (2)
  - o IDIS 8260: Global Perspectives on Tropical & Emerging Infectious Diseases (1)
  - o IDIS 8050: Special Topics in Ecology and Evolution of Infectious Diseases (1)
  - o IDIS 8540: Special Topics in Bacterial Pathogenesis (1)
  - o IDIS 8550: Special Topics in Immunology (1)
  - o IDIS 8250: Special Topics in Parasitology (1)
  - o IDIS 8590: Special Topics on Diseases Intervention (1)
  - o POPH 8230: Special Topics in Population Health (2)
  - o POPH 8580: Current Topics in Wildlife Health (1)
- Students will complete at least one relevant 8000-level course in **Technical Studies** (e.g. bioinformatics, statistics, mathematical modeling). The IDEAS office can provide a list of suggested courses.

#### B. Dissertation Research

Each trainee will conduct dissertation research focus on an infectious-disease related problem. Dissertation research should be guided by a pair of co-mentors with expertise from different scales of biological organization (e.g. cellular, molecular, organismal, population, community, ecosystem).

#### C. Professional Development

- *Internship* – Trainees will complete a semester-long internship (fall, spring, or summer) working with partners in government, non-governmental, business or international entities. This experience provides trainees with the skills to translate their research activities on campus to real world problems.
- *Communications Workshop* – Science communication workshops are held annually, in partnership with the UGA Grady College and the Center for Health Risk and Communication. Each one-day workshop provides training in science communications targeting popular, media, or decision-making audiences. There are three revolving topics and students are expected to attend at least two different workshops during their tenure in the program.