The Biology Department at Hamilton has as its mission the enabling of all students, whatever their background, interests, and aspirations, to advance their understanding of the biological sciences through their participation in challenging classes and the research programs of individual faculty. We help students gain the knowledge and skills required for pursuing a lifetime of learning whether as a professional within the biological sciences or as a concerned citizen in a rapidly changing society.

Following an introduction to biology, either a two-semester survey or an accelerated one-semester course, the curriculum provides depth in a wide variety of subdisciplines (see faculty areas of expertise below). The Department supports four concentrations at Hamilton through the courses and collaborative research offered by its faculty: Biology, Biochemistry/Molecular Biology, Neuroscience, and Environmental Studies. During the senior year, all majors become actively engaged in research directly with a faculty member through the senior thesis program.

**Faculty**


David A. Gapp, Ph.D.—Boston University. Endocrinology. Comparative endocrinology of gastro-entero-pancreatic hormonal peptides in reptiles.


Herman K. Lehman, Ph.D.—Florida State University. Cell Biology/Neurobiology. Developmental regulation of neuropeptides and neurotransmitter systems.


**Facilities**

The Biology Department has now moved completely into Hamilton’s spectacular, new, state-of-the-art Science Center, with well-designed teaching, learning, and studying spaces. Our laboratories contain essential equipment for education and research in contemporary biology, including both transmission and scanning electron microscopes, imaging workstations, radioisotope laboratory, scintillation and gamma counters, bioinformatics computing facility, nine-room greenhouse, environmental chambers, and numerous standard lab instruments. In addition, Hamilton is well situated to take advantage of a variety of habitats for field studies.

**Students**

<table>
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<tr>
<th>No. majors</th>
<th>Biology</th>
<th>Bioc./Mol.Biol.</th>
<th>Neuroscience</th>
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<td>Class of 2007</td>
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<td>Class of 2009</td>
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**Recent student research projects**

Relationship between trophic ecology and radular wear patterns in four rocky intertidal snails *Octopamine* sensitivity and synaptogenesis in the common and lateral oviducts of *Manduca sexta* *Behavioral ecology of the Frosted Elfin butterfly* *Role of differential cell proliferation in perforation and rupture of pharyngeal closing plates in chick embryos* *A phylogenetic analysis of the class Scaphopoda (Mollusca) using molecular techniques* *Insect octopamine transporters* *Photosynthetic responses to light exhibited by three Aster species* *Gastrointestinal peptides in the stomach and intestine of the American alligator* *Characterization of amino acid permeases in yeast* *Antiestrogenic mechanisms of alphafetoprotein peptides in breast cancer* *Influence of magnetite on iron reduction rates by iron reducing bacteria* *Plant chemical defense and herbivory of local plants*

**Life after Hamilton**

In recent years, biology graduates have gone from Hamilton to a variety of professions as well as to:

**Graduate School:**

**Medical School:**
Rochester, Dartmouth, Albert Einstein, Temple, Boston University, Albany Medical College, Universities of Vermont, Connecticut, and Massachusetts, and SUNY Medical Centers

**Dental School:**
Tufts, SUNY Buffalo, Universities of Maryland, Connecticut

**Veterinary School:**
Cornell, Tufts, Univ. of Pennsylvania

**Employment:**
pharmaceutical companies, high school teaching, environmental education, and many more

For further information write or call:

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