Metrics Report: BIOLOGY.

I. Program Overview
   a. General Departmental Overview

The Department of Biology at Emory University \(^1\) consists of 30 faculty members:
- 11 Professors
- 6 Assistant Professors
- 4 Associate Professors
- 9 Lecturers (5 Lecturers, 4 Senior Lecturers)

Additionally, the Biology Department has 31 Postdoctoral Fellows and 15 graduate students. The Graduate Division of Biological and Biomedical Sciences currently has over 300 Ph.D. students. Exact numbers of undergraduate majors and minors could not be found – however, Biological Sciences is reported to be one of the top three undergraduate majors at Emory\(^2\).

According to the departmental website, the four main research areas of interest are “Genetics, Cell and Developmental Biology, Neuroscience and Population Biology, and Ecology and Evolutionary Biology”. Other areas include teaching theory in undergraduate education (theory and practice of education - LB) and computer modeling (mathematics – QA). Much of the work done in this department is highly interdisciplinary; some faculty members share joint appointments with the department of Neuroscience and Behavioral Biology (NBB), which in itself is an interdisciplinary field of research. Many faculty members utilize a variety of research techniques to answer research questions, making an analysis of interests a bit complicated.

Using the call-number ranges employed in the NATC, here is the distribution of faculty research interests within the QH to QP call numbers\(^3\).

<table>
<thead>
<tr>
<th>Classification</th>
<th>Call Numbers</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Natural History</td>
<td>QH1-199</td>
<td>0</td>
</tr>
<tr>
<td>Vertebrate and Invertebrate</td>
<td>QL362-739</td>
<td>13</td>
</tr>
<tr>
<td>Microscopy</td>
<td>QH201-278</td>
<td>0</td>
</tr>
<tr>
<td>Ethology, Anatomy, Embryology</td>
<td>QL750-991</td>
<td>3</td>
</tr>
<tr>
<td>Biology General</td>
<td>QH301-705</td>
<td>18</td>
</tr>
<tr>
<td>Physiology General</td>
<td>QP1-348</td>
<td>2</td>
</tr>
<tr>
<td>Nervous System and the Senses</td>
<td>QP351-499</td>
<td>6</td>
</tr>
<tr>
<td>Botany General</td>
<td>QK 1-474</td>
<td>2</td>
</tr>
<tr>
<td>Animal Biochemistry</td>
<td>QK475 - 989</td>
<td>0</td>
</tr>
<tr>
<td>Experimental Pharmacology</td>
<td>QP901-981</td>
<td>2</td>
</tr>
<tr>
<td>Zoology General</td>
<td>QL1-355</td>
<td>0</td>
</tr>
</tbody>
</table>

\(^1\) [http://www.biology.emory.edu/](http://www.biology.emory.edu/) (viewed 5 May 2006)


\(^3\) Interdisciplinary interests falling outside the QH - QP classes are not tabulated here. Faculty members with multiple interests have been counted in multiple categories. QM, human anatomy, and QR, microbiology, have been excluded for purposes of brevity.
b. Degrees

The Biology Department offers degrees in Biology. The NBB program (Neurosciences and Behavioral Biology) is closely related to the Biology department, but offers a separate degree. The following degree plans are offered:

- **Minor: Science Culture and Society**
- **B.A.: Biology**
- **B.S.: Biology**
- **Ph.D.: run by Graduate Division of Biological and Biomedical Sciences**

BA and BS students with a 3.5 GPA may also elect to participate in honors during their senior year. Woodruff Library currently supports undergraduate Biology students, while the Health Sciences Library supports the Ph.D. students and faculty.

c. Faculty Survey Results

A survey was conducted in or around January 2003 to gauge future collection development priorities within the Biology department as perceived by the faculty members. Faculty members were when asked for “subject areas in which you need library collections to support your teaching and research interests,” from QH through QR. 20 faculty members responded to the survey. Among those respondents, the top choices selected were Genetics (15/20), Animal Behavior (12/20), Evolution (11/20), Biology, general (10/20), Invertebrates (10/20), and Physiology, general (9/20). These results reflect the faculty interest table above, and also reflect the library’s specific holdings, seen below.

Additionally, faculty members were asked where they “expect to find the materials that you need” to indicate general library preference for Woodruff Library (home to the undergraduate biology collection) vs. the Health Sciences Center Library (home to the biological studies graduate collection as well as the medical collection). 8 of those surveyed expected to find materials in the Health Sciences Library, while only 3 expected to find materials in Woodruff. 6 expected either library to have material, with 1 no vote, one preferring the Health Sciences Library and one using the Health Sciences Library for research purposes. These results indicate that more work may be necessary in the future to attract biology faculty (and, subsequently, their undergraduate students) to resources in Woodruff.

II. Rankings

9. Washington University in St. Louis (4-way tie)
12. Duke University (5-way tie)
19. University of Chicago (4-way tie)
24. University of North Carolina – Chapel Hill (4-way tie)
28. Northwestern (4-way tie)
Vanderbilt (4-way tie)

**32. Emory University (4-way tie)**

73. New York University (8-way tie)

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In the specialty rankings for the biological sciences, Washington University in St. Louis is in the Top Fifteen in Cell Biology (#9), Genetics (#6, 3-way tie), Immunology (#5, 2-way tie), Microbiology (#6), and Molecular Biology (#8, 2-way tie). Duke University is in the Top Fifteen in Cell Biology (#15), and Ecology/Evolutionary Biology (#5). University of Chicago is in the Top Fifteen in Ecology/Evolutionary Biology (#4), and Molecular Biology (#13, 3-way tie). Emory is not listed in any specialty rankings.