The report of the Department of Biology and the Chair’s response to it provide an excellent foundation for the review of the department’s achievements and goals. We thank the Chair, Dr. P.C. Tai, and the department for their efforts, and we especially commend the self-study committee and its chair, Dr. Teryl Frey, for the considerable thought, energy, and time that they devoted to this important endeavor.

The Dean’s Office enthusiastically acknowledges and amplifies the Biology Department’s report of its impressive record in instruction, research, and service. The many tables in the self-study tell part of the story about its scope and size. For example, the department has the largest undergraduate program (1600 majors) and one of the largest graduate programs (110 Ph.D. and 160 M.S. students), and its faculty has been awarded significant external funding ($16M in 2004) which constitutes 27% of the University’s total. Its faculty is recognized as international and national leaders in their respective disciplines who serve on review panels and edit and review for a broad spectrum of journals.

But counts alone do not fully capture the superb quality of the department’s accomplishments since its last program review. From the Dean’s Office perspective, the department is a truly exemplary program that is central to many of the College’s and University’s initiatives. For example, the department is the primary home for two of the university’s three funded interdisciplinary areas of focus, the Molecular Basis of Disease Program and the Brains and Behavioral Program, both of which draw together faculty and students from several departments. It provides key leadership in the college’s international strategic initiatives and international student recruitment efforts. It has initiated the innovative CollabTech to foster new biotechnology companies. It contributes to an array of science education efforts which include the nationally recognized Biobus program, collaborations with ZooAtlanta and Georgia Aquarium, and leadership of efforts for the appropriate reform of the state’s biology curriculum. It is the primary department for several important research centers: Center for Biotechnology & Drug Design, Center for Behavioral Neuroscience, Center for Neural Communication & Computation, Center for Brain Sciences & Health, Environmental Research Center, and the Viral Immunology Center.

The external review team’s visit provides the department and the Dean’s Office with an excellent opportunity to review the progress of the Department and to sharpen our vision for its future. To this end, we will focus here on the goals and objectives put forward by the department in its self study and leave decisions about new resources until the action plan is formulated during later steps in the program review process. The Dean’s Office is pleased with the direction that is plotted in the department’s goals and objectives and agrees with many of the recommendations in the report. In particular, we strongly support continuing to hire productive faculty, to provide additional support staff, and to enhance the graduate and undergraduate programs. We focus below on two major areas where we believe that further information and analysis would be useful as we plan for the department’s future. We hope that the external review team will be able to help us gain greater clarity concerning these matters.
1. The size, composition, and support of the faculty. Currently the faculty consists of 36 tenured or tenure-track faculty and 12 lecturers. For the past several years, the lack of space for research laboratories has shaped recruitment. Three years from now, this limitation will lessen significantly as two new buildings, a Science Teaching Laboratory Building and a Science Research Building, come on line. The addition of an Economic Development Incubator and other facilities to the new Science Park in the not so distant future will also likely provide new research spaces.

We fully endorse the department’s desire to increase the size of the research-active tenure-track faculty. Some of the new faculty positions within the Brains & Behavior program, the Molecular Basis of Disease Program, the Center for Behavioral Neuroscience, and the Eminent Scholar initiative (which seeks one Scholar in each of three areas: neuroscience, infectious disease, and bioinformatics) will likely reside in the department. Moreover, we expect that additional positions will be specified in the action plan that derives from this program review.

The prospective of increased hiring raises several questions on which we seek guidance of the External Review Committee. We would welcome advice on how we might be more successful recruiting faculty members from underrepresented groups. In addition, suggestions about how to balance hires across areas within the department would be helpful.

In addition to hiring faculty, we are committed to providing faculty with appropriate workloads, competitive compensation, and adequate staff support. The concerns expressed in the self study and chair’s response about the competing demands facing our most accomplished faculty are certainly valid. Given the nature of the department, the faculty are expected to maintain an externally funded research laboratory containing a blend of graduate, undergraduate, and postdoctoral trainees, in what amounts to a small business. This is combined with considerable responsibilities in the teaching and mentoring of students. It is therefore understandable that some faculty may be over-extended.

The College, in concert with the faculty, has developed policies for workload assignment, purchase of release time, and professional leaves that provide a framework for the discussion of this problem. Our workload policy provides considerable flexibility that we think can and should be used when a chair concludes that a faculty member needs time to focus on specific research projects, including bridging between grants, or has taken on unusually demanding commitments, especially in the area of service. Two aspects of this policy should prove especially helpful in guiding annual discussions in a way that might relieve some of the strain. First, the workload policy’s goal “is to provide guidelines for the equitable distribution of faculty work” which includes “a rich blend of research, non-course instruction, and service in addition to typical course-related effort.” Thus it is important to look across a broad span of activities to discern what each faculty member is contributing and what, relative to other faculty, constitutes a fair load. Second, the primary site for shaping individual workloads is within the department. As the policy states, “the responsibility for applying this policy lies with the Chair or Director, who is best able to take into account the department’s diverse activities and available resources.” Given the enormous growth in programs and the mounting pressures to sustain external funding, it is certainly appropriate for the chair to request adjustments to specific workload assignments. In addition, the Professional Leave Policy, which this year has provided sustained time to two senior researchers in Biology, may be a helpful tool in addressing workload concerns.
Adjusting specific faculty workloads, as important as this may be, is only one strategy for addressing concerns related to overworking and growing pressures. Another important strategy is to withdraw energy and effort from some current activities. One activity that might be downsized is the department’s current investment in its non-thesis M.S. program. We note that it is larger than comparison departments, and a smaller and more targeted M.S. program might free resources for the growth of current and new doctoral programs. A second strategy is to shift some work from faculty to newly hired staff. Thus we find particularly compelling the department’s well reasoned requests to hire more support staff to assist in administrative functions associated with research enterprise, including grants production and management, compliance with federal regulations in safety and animal care, and to hire more research technical staff to run core facilities, major equipment, and faculty research projects. A third strategy is to develop new ways to provide increased compensation for accomplished faculty at a time when the state has appropriated far too little for raises and benefits. We thank the department leadership for their constructive role in developing new models, such as the recently approved fund for salary incentives, which should help address some of the current concerns. We would greatly appreciate the external reviewers’ suggestions related to additional ways to provide support for productive faculty.

2. Program development. We applaud the suggestions in the self study about the department’s plans related to curriculum development. Given its major role in undergraduate education, the department’s leadership in university-wide discussions related retention and graduation rates is essential. Moreover, we are pleased to endorse the department’s suggestions that it develop additional interdisciplinary programs including new doctoral degrees or concentrations in areas such as neuroscience and new cooperative curricular programs with other Colleges, including with College of Business, Law, and Health & Human Sciences, which might include interdisciplinary work in biotechnology and business, intellectual property and entrepreneurship, health care management, and patent law. We seek suggestions about how best to structure such programs, such as whether they reside within existing departmental structures (as is currently done in the Bioinformatics program) or by establishing multi-departmental degree programs that reside outside of departments (as is currently done at the bachelor’s level with our B.I.S. interdisciplinary studies degrees).

Besides these two major issues, other issues that we seek input from the External Committee are the following:

1. Funding for graduate students: The Biology Department is competing nationally for resources, including for doctoral students. To be more successful at this, we have to provide nationally competitive stipends for these students. The Molecular Basis for Disease and the Brains & Behavior Programs and the Center for Behavioral Neuroscience have provided stipends of up to $22,000, but these fund less than 20% of the 110 doctoral students in Biology. We ask for advice on what are competitive rates for our nationally competitive programs, and how can we fund at this level?

2. Space and Resources: We need to insure that Biology programs have the space and resources necessary space to fulfill their missions. Our current space in the science buildings is used to
virtually full capacity, thus restricting expansion of our research and teaching programs. The Science Park will provide important resources for development of our programs, but it will not open until 3 years from now. Thus, we need to consider this issue of space and resources in two parts: what to do before Science Park opens; and how to accommodate our plans after the Science Park opens? An important consideration is that the growth of our programs now and anticipated in next 3 years probably make necessary adjustments in space allocations in the Science Teaching and Research Buildings for the many programs under Biology.

The Dean’s Office again thanks the Department of Biology for its thorough review. We also look forward to the external reviewers’ visit and to working with the Department on an action plan that will make many of their goals achievable in the next five years.

Lauren B. Adamson, Dean 12/19/05  Charles Derby, Associate Dean 12/19/05