The Department of Biological Sciences is critical to the teaching and research mission of the College of Arts & Sciences and the University. As the Program Review Committee’s (PRC) final report indicates, the department makes many important contributions in these areas. Those are appreciated by the College and colleagues in other departments. At the same time, the PRC makes clear that the department’s record is disappointing given its size and the University’s investment in it. Areas of concern identified by the external reviewers and the PRC include planning, external funding and research productivity, contributions to science education, curriculum, and assessment.

Given the concerns identified by PRC, the principal challenge for the department is to develop a plan that results in progress on several fronts simultaneously. For example, the department cannot afford to put curricular issues on the backburner until it has addressed concerns about research productivity, or vice versa. Given the size and talents of the faculty and the department’s commitment to develop different categories of faculty workloads, I am confident that it can move forward on several fronts at once. If we are to create a richer environment for research and discharge our responsibilities to our students, we must do so.

In his response to the PRC’s report, Dr. Scott Rogers, the Department Chair, accepts the PRC’s recommendations and indicates that the department has already begun to develop policies to address them. I am heartened by the department’s positive response and its energy in addressing the challenges it faces. I am optimistic that this spirit will help the department move ahead.

While I accept the PRC’s findings and recommendations, I wish to elaborate on and modify several of them. I hope my comments will help the department as it undertakes the work ahead.

Given the rich opportunities for external funding in biological sciences, the size of the faculty, and the importance of external funding to the University’s future, it is imperative that the department develop a plan to increase external funding substantially during the next three or four years. As the external reviewers emphasize, this plan should include strategies for individual investigators to achieve higher levels of funding, including NIH R01 funding. *The plan should not only include strategies for achieving this goal, but benchmarks that the department seeks to reach and against which progress can be measured.*

A critical part of any strategy to increase success in research and external funding will be developing much tighter focus for research in the three broad areas the department has identified as its areas of emphasis. Both the external reviewers and the PRC note that developing tighter focus is vital to nurture strong research groups that can successfully compete for major funding. *While Dr. Rogers notes in his response to the PRC report that identifying true areas of focus will be challenging, it is critical to the future of the department. Dr. Heinz Bulmahn, Vice Provost for Research, and I will be happy to meet with Dr. Rogers and appropriate faculty to*
discuss this matter and provide feedback as the department develops the plan that it will submit in June 2005.

Developing a differential faculty workload policy is absolutely essential if the department is to enhance research productivity, develop a more contemporary curriculum, and assume a role in science education initiatives—all areas that are vital to its future. There is much to do, and the workload and allocation of effort of individual faculty members should reflect how they are best suited to contribute to the department’s complex mission. Of course, the department will want to assure that individuals are rewarded for important contributions, irrespective of what those might be. I am pleased that the department has already begun to develop a new workload policy. To assure development of a policy that is consistent with the spirit of program review, helps the department fulfill its mission in teaching and research, and is acceptable to the College, Dr. Rogers should submit a preliminary draft to the College for review and input or share the department’s ideas orally with me well in advance of the January 2005 deadline for formal submission of a workload policy. Development of an effective policy will proceed most smoothly if it is guided by discussions within the department and between the department and the College.

To help the department contribute to science education initiatives at BGSU, I will authorize hiring a tenure track faculty member in biology education during the 2004-05 recruiting cycle. I am pleased that the department has embraced this initiative and look forward to working with it to assure that we recruit an individual who is conducting rigorous empirical research on teaching and learning in the field.

Revision of the undergraduate curriculum is one of the critical tasks facing the department, and it must involve all members of the department. The task is a complex one, involving revision of courses and the curriculum for majors as well as redesign of general education courses for non-majors. Redesign of the courses for non-majors presents an opportunity to bring the department’s general education courses into close alignment with BG Perspective, our recently revamped general education program that emphasizes development of intellectual skills. The department’s courses for non-science majors should be redesigned to emphasize scientific method, the use of evidence, critical thinking, and other skills essential to the critical evaluation of claims about science, which students will see in the news, political campaigns, and daily life.

Developing contemporary, engaging science courses for non-majors is vital to our efforts to reform general education and educate scientifically literate graduates. To assist the Department of Biological Sciences—and other science departments—with this task, I will work with science department chairs to appoint a committee to review best practices in general education science courses, provide guidance to departments as they revamp their courses for non-majors, and to explore the possibility of creating new, interdisciplinary general education science courses.

While a final report on the department’s undergraduate curriculum is not due until June 2006, I encourage the department to devote considerable attention to this issue during the coming year. Curriculum revision is vitally important to our students, and we cannot afford to put it on
the backburner. Therefore, I expect that the interim report submitted in June 2005 will reflect a thorough review of best practices in this area and lay out alternatives that the department as a whole will consider during the 2005-06 academic year.

I am pleased that the department is taking assessment seriously and has begun discussions with Dr. Milt Hakel of the Student Achievement Assessment Committee about how it can move ahead in this area. I am somewhat concerned, however, that in his response to the PRC report, Dr. Rogers focuses on developing assessment techniques for specific courses (e.g., BIOL 101, 104, 204, 205). While these are important courses and student learning in them merits assessment, the department must engage in assessment of the undergraduate major as a whole. We need to know whether and to what extent majors are achieving the department’s learning outcomes and then use that information to make changes in the curriculum that assure greater success. Dr. Rogers and/or faculty responsible for developing the department’s assessment program should meet at least monthly with Dr. Elizabeth Cole to assure that appropriate progress is made as we approach the North Central Association’s review of our progress in assessment in March 2006.

Developing a new unit plan is vitally important if the department is to be successful in deploying its energies in ways that will enable it to realize its considerable potential. The new unit plan should build on the several plans being developed to enhance research and external funding, define sharply focused areas of research, create a new faculty workload policy, and build a contemporary curriculum. The group charged with developing the unit plan should therefore be well informed about developments in these areas and assure that the unit plan draws on them to create a realistic set of goals, timetables, and benchmarks for the department.

While the department has much to do in the coming years, I am confident that its faculty has the energy, expertise, and commitment to be successful. I look forward to working with Dr. Rogers and his colleagues to strengthen a vital area of the College.

Donald G. Nieman, Dean

Concurred:

John W. Folkins, Provost