To: John T. Slattery, Associate Dean Academic Programs

The Graduate School

From: Nelson Fausto, Chair

Dan Bowen-Pope, Director, Graduate Programs

Department of Pathology

Re: Reply to Review Committee Report

We thank the members of the Department of Pathology Review Committee for their analysis and recommendations regarding the Graduate Program of the Department of Pathology. It was very valuable for us to have the opportunity to conduct a self-study for presentation to the Review Committee. In the self-study report we stated that the Program is in a transition phase. Among the major issues that should be addressed, we particularly emphasized the need for financial support for the Program (it receives support from the Graduate School for only one student) and the strengthening of formal course coverage in molecular mechanisms of disease. We are pleased that the Review Committee agreed with this basic assessment. We also thank the Review Committee for pointing out the strengths of the Department of Pathology, the exceptional quality of the faculty and the high level of funding of our research programs.

The criticisms and recommendations of the Review Committee can be grouped into 2 main categories: a) student issues including quality, admissions procedures and monitoring of progress and b) insufficient formal teaching from the faculty of the Program.

1. Student issues

The quality of many of our students, as measured by test scores or GPA, is not outstanding at admission. However, we feel that upon completion of the Graduate

Program, the level of the students is, on average, similar to that of students enrolled in other graduate programs in the School of Medicine. Also to be noted is that the Graduate Program attracts a significant number of students enrolled in the Medical Student Training Program (MD/PhD program). MSTP students have the highest qualifications among applicants to graduate programs in the School of Medicine.

On average, students in the Pathology Graduate Program are at a comparable level to similar programs at other schools. Nevertheless, the overall quality of the entering students can be improved by earlier interview and acceptance of top candidates. Until now, implementation of more effective recruitment procedures has been difficult because of the uncertainty of support for entering students. Beyond the one 9 month stipend/tuition slot provided by the Graduate School, our recruitment and further support has been entirely dependent on the availability of funds from training grants based in the Department and in some cases, individual research grants. Given these limitations it has been almost impossible to establish a pool of applicants and select students independently of their area of interest. Training grants are designed to support training in specific areas such as cardiovascular biology, aging, and environmental pathology and cannot be used to fund students whose research interests may not fit into these specific categories. In addition, training grants are not expected to support students doing first year rotations in different laboratories.

In our self-study report we indicated that a solution to most of the problems alluded above would be to have a stable source of support for first year students. We are probably correct in assuming that additional funds for student slots will not be made available by the Graduate School. This situation is regrettable but not surprising. To overcome these inherent difficulties, as mentioned in the self-study report, the Chair of the Department of Pathology has allocated an annual amount of \$150,000 to \$200,000 to support first year students, a measure to be implemented as of July 1, 2002. With this source of support, we can now advertise and recruit for positions

that are unrestricted as to subject area and can guarantee funding for first year students during their rotations.

Other important proposed actions being implemented:

- We have constituted a Graduate Program Committee composed of Drs. Bowen-Pope, Bornfeldt, Byers, Loeb, Murry, Parks, Stephens, Swisshelm and one graduate student representative. This Committee is charged with establishing the new Molecular Basis of Disease core course series (see below). In addition, on a yearly basis, the committee will: review applications and decide on admissions (January – March); review progress of every graduate student in the program (May/June) and address other issues/problems as they arise.
- We plan to nominate Tony Parks as Associate Director of the Graduate
 Program as soon as his appointment to the regular faculty and Graduate
 School is approved (he has been serving as Acting Assistant Professor and has done an outstanding job in teaching graduate students).
- We plan to strengthen the office support provided to the Graduate Program.

2. <u>Teaching issues</u>

We noted in our self-study report that the Graduate Program places heavier emphasis on mentoring in laboratory research than in formal classroom teaching. Nevertheless, we do agree that the department can and should create an improved core course in experimental and molecular pathology. In our self-study report we have proposed to create a course in the molecular mechanisms of disease specifically directed to graduate students. The topics to be covered and the quality

of the faculty involved should make this course attractive to graduate students enrolled in other graduate programs at the School of Medicine.

Other actions being implemented:

- We will delete from the roster faculty who have not been active in the Graduate Program and consolidate a core faculty group.
- We will establish criteria for adjunct appointments which are coupled with a Graduate School appointment, making the teaching of graduate student courses or proseminars one of the requirements for these appointments.

In summary, we are pleased with the quality of the students as they complete the Graduate Program while recognizing that we recruit from a mostly local pool of candidates whose grade point averages may not be stellar (with the exception of MSTP students who are from a highly competitive national pool of high-achieving students). We are also pleased with the flexibility of the Graduate Program and the employment success of our students who have chosen careers in academic centers, biotech companies and hospitals. We recognize certain organizational weakness of the program and the need for more formal instruction in disease mechanisms. We have proposed and implemented important changes in the financing, structure and curriculum and are in the process of implementing other measures which should greatly strengthen the Graduate Program of the Department of Pathology.

Finally, we would like to express our strong support for the idea of establishing an umbrella system for admission to Life Sciences graduate programs. Thank you for providing us with the opportunity to comment on the Review Committee report.