## HARVARD UNIVERSITY

OFFICE OF THE PRESIDENT

Massachusetts Hall Cambridge, Massachusetts 02138 (617) 495-1502

July 14, 2006

## Dear Colleagues:

I am pleased to forward, for your interest and comment, the preliminary report of the University Planning Committee for Science and Engineering (UPCSE), entitled *Enhancing Science and Engineering at Harvard.* The committee includes two dozen faculty members from the Faculties of Arts and Sciences, Medicine, and Public Health, selected by their Deans. It is co-chaired by Andrew Murray (Molecular and Cellular Biology, FAS), Christopher Stubbs (Physics and Astronomy, FAS), and Christopher T. Walsh (Biological Chemistry and Molecular Pharmacology, HMS). The UPCSE was charged in January 2006 to advise on the future of science across Harvard, including the eventual extended campus in Allston. The preliminary report is intended to stimulate discussion throughout the Harvard community, in anticipation of a final report expected to be delivered to the President and Fellows in December 2006.

Over the past decades, Harvard faculty members have made many significant contributions to science and technology and have educated many current leaders. For all our continuing success, we recognize that the world is changing rapidly. As our new century unfolds, we can expect the pace of scientific and technological discovery to accelerate and its impact on our lives to grow. While there is much that remains to be accomplished within the traditional scientific disciplines, new approaches based on collaboration, often across disciplinary boundaries, have taken on new significance in the sciences and engineering. Core facilities and computational infrastructure have emerged as requirements to support many individual labs and collaborative endeavors yet are so costly as to be beyond the means of individual departments or even schools. Harvard's highly decentralized structure has nurtured highly successful individual labs, but runs the risk of creating barriers to collaborative research, to matching doctoral students with ideal mentors, and to the effective sharing of infrastructure. While the prospect of extending our campus into Allston has elicited compelling proposals for cross-disciplinary science and engineering, our decentralized structure has raised difficult questions about how scientific endeavors in Allston, and indeed more generally, should be governed to help our overall enterprise flourish.

At the heart of the preliminary report of the UPCSE are proposals to lower barriers to collaboration, to facilitate cross-disciplinary efforts, to enhance the teaching of our undergraduate, graduate, and professional students, and to engage faculty and deans from the FAS, HMS, and HSPH, as well as leaders from the affiliated hospitals, in the governance of our scientific endeavors including, but not limited to Allston. In addition, the report encourages Harvard to be bold, so that it can lead in the century

Page 2 of 2 July 14, 2006

just begun as it has led in the century just past. Harvard will need to invest ambitiously in science and engineering in the coming years, and to consider how best to nourish new fields while sustaining its traditional strengths, many of which lie firmly within the boundaries of existing departments. The proposed investments in shared facilities should serve to strengthen all of science and engineering, not only new initiatives. Notably, the report recommends a markedly broader role for faculty members in the planning of these significant efforts through the development of a University-wide committee comprised of faculty members and Deans.

The proposed faculty growth would not only enable Harvard to excel in emerging disciplines and interdisciplinary fields, but also give us an important opportunity to diversify our faculty. The kinds of proposals described for Allston would help not only in expanding our scientific horizons, but also in providing space in which University-based and hospital-based scientists can interact to more rapidly translate discoveries into useful medical interventions. The emphasis on new approaches to education would benefit our students at all levels of training.

Given our shared ambitions for Harvard, and given the challenges of a rapidly changing world, it is critical that we consider the proposed reforms carefully. Despite our continued success, we must be clear-eyed as we face the future. While we should not embrace change simply for its own sake, we must proceed with a spirited willingness to embrace changes that will help us maximize our future potential. Our faculty colleagues have worked diligently over the past six months and have consulted widely. The release of this preliminary report for discussion now provides an opportunity for us to look at the report as a whole and to continue to make constructive suggestions. We have a shared responsibility for achieving the right result. I urge you to read the report and to participate in the discussions that will occur this fall and culminate in the production of the final report.

Sincerely,

Derek Bok