

Dear Colleagues:

As I prepare to leave the presidency at the end of this month, I am writing from this office for the last time to share with you some of my concerns for the future of our own and other leading research universities; to describe my plans for addressing some of these issues as I return to the faculty; to invite your interest and engagement in these new initiatives; and to thank all of you who have given so much help and support to Anne and me over the last eight years.

First let me point to the challenges I see ahead for us as an institution and as people who have invested our lives in the furtherance of learning. I believe our country is at the brink of a profoundly important debate about the future of higher education in America. It is impossible to predict the outcome at this point. But clearly the extraordinarily productive partnership research universities have built with federal and state government is unlikely to continue on the same terms and conditions we have enjoyed since WWII.

Criticism of universities has been building for some time and comes from many directions. We are all familiar with its recent themes. The values of the academy are challenged from scholarly ethics, to affirmative action, to political correctness. Our commitment to teaching is questioned and so is our ability to teach well. Faculty tenure is under serious attack. The quality and relevance of scholarly research is doubted. Tuition is protested. I don't need to go on.

Until recently, this criticism of higher education has been diffuse and sporadic, but it is now gaining force and direction. Some of this may be the price of success. We would not warrant such scrutiny and questioning if our role in society had not become so significant. More and more citizens and politicians have a stake in what we do and how we do it. We are more publicly accountable now, and we have tried to address many of these issues being raised by our critics both internal and external.

We have made significant progress in addressing many of the issues being raised by our critics both inside and outside the academy during the past decade. We are improving undergraduate education; fostering interdisciplinary research and social importance; investing in technology to support teaching, research, and service; raising more than a billion dollars of private support, cutting costs and streamlining administration to free money for our basic mission; rebuilding our physical plant; improving our communication with significant constituents, and so on. Thanks to your efforts, we have come a great distance in the past decade to reinforce our foundation, refine our mission, and improve the quality of teaching, research, and service. We have ventured further and made some fundamental changes through such initiatives as the Michigan Mandate, the Michigan Agenda for Women, international initiatives, and technological infrastructure, all of which lay the groundwork for more far-reaching institutional change. We have used this time to rebuild our foundation and refocus our energies on those things most central to our purpose.

We will need this strength and stability in the years ahead. It will be a time during which, I am convinced, academia will face a more fundamental questioning. Make no mistake, the social compact that created and shaped research universities and bound us so closely to our society is up for re-negotiation. Politicians, pundits, and the public increasingly turn their attention to us. No question will be out of bounds: What is our purpose? What to teach, how to teach, how to deliver teaching? Who teaches under what terms? Who measures quality and what measures to apply? Who pays for education and research? Who benefits? Who controls and how? What

and how much public service is part of the mission? What are appropriate alliances, partnerships, sponsorships?

For a thousand years and more, change in universities has proceeded in slow, linear, incremental, evolutionary steps--improve, expand, contract, reform--but without altering the fundamental institutional mission, approach, or structure. We no longer can maintain this pace of change or contain its scope.

On the contrary, the world-wide shift to a knowledge-based society is transforming all our institutions. Every one of us in higher education is challenged to re-envision what we do and how we do it. We will need to question everything and to experiment with radical solutions. If we do not lead in re-inventing our mission and structures, we will see the role of universities marginalized, and our values compromised as the forces of change (and the multitude of competitors they generate) overtake us.

As the flagship of public higher education in America, Michigan has a responsibility to help show the way to change. Our voice must clearly be heard in the public forum of ideas.

This brings me to share with you my plans for the next few years. The time has come for me to trade rhetoric for action--a shift much more in keeping with my disposition and one for which my experience as president has prepared me.

With the title of *President Emeritus and University Professor of Science and Engineering*, I will have a University-wide faculty appointment that will allow me to teach and conduct research in any of our academic programs. Clearly, as well, Anne and I will continue to be involved in a variety of roles associated with institutional advancement such as fund-raising and government relations. However, in the months ahead, I have agreed to serve in several additional roles.

This summer I will be launching a small research institute aimed at exploring the future of higher education. This center, known as the Millennium Project, will draw together scholars and students both from our campus and beyond to explore various possible paradigms of the American university of the 21st Century (or better yet, the Third Millennium).

While the Millennium Project will explore a number of quite different and radical visions of future universities, it will not simply be a thinktank. Rather it will be an experimental laboratory. It is our intent to use the center to develop working models or prototypes of future university paradigms. Like the famous Lockheed Skunkworks, every so often the hanger doors of the Millennium Project will slide back and something really weird will be wheeled out and flow away.

The Millennium Project will be located in the extraordinary environment provided by our new Media Union, a state-of-the-art facility exploring the impact of information technology on the creative disciplines. To quote the prospectus for this complex:

"Our new Media Union merges the creative aspects of disciplines across the entire campus, ranging from art, psychology, and architecture, to engineering, philosophy and biology. Inventive scholars will come together with powerful resources, entering a free-wheeling space where extraordinary people can do exceptional things. Michigan's portal to the rest of the world, the Media Union

will reach out to the huge storehouses of information growing daily on the Web, while drawing national and international scholars and students into our campus conversations. New information technology will create a "virtual" community of thinkers, allowing face-to-face dialogue and collaboration across thousands of miles."

Or, as put more succinctly by Dean Paul Boylan, "We are creating an environment where students and faculty can dream and then act on their dreams."

In response to a request by the executive officers and the North Campus deans, I have agreed to serve as well as "chief scientist"...or perhaps more appropriately "executive producer" of the Media Union. (Some have even suggested "The Wizard of MU" as a more apt title...) While others will provide the ongoing direction for the technical support and operation of the facility, it will be my role, joined by my colleagues in the Millennium Project, to provide much of the intellectual momentum for this exciting new resource.

Furthermore, I have also agreed to work closely with Doug Van Houweling and his colleagues on a number of projects associated with our growing efforts in academic outreach. These include the development of so-called "virtual" or cyberspace universities at the state, national , and international level; exploring new methods for the delivery of educational services such as multimedia; and designing and launching a major new academy for the education of future academic leaders.

My colleagues and I in these programs encourage you to take part in some of our initiatives. We hope to offer you a platform and a fault-tolerant environment for the testing of creative innovations for preserving, creating, and delivering knowledge. We hope to be a catalyst for change by enabling you to ask any question, try any method, challenge any institutional rigidity. I can't predict where this adventure will take us; I can promise an exciting journey.

Of course, as a University faculty member, I also intend to resume my career as a teaching and a scholar. While 15 years as an academic administrator have taken their toll on my mental skills as a theoretical physicist--not to mention destroying a significant fraction of my mental RAM--I do intend to resume some of my old interests in fields such as statistical physics, nuclear systems analysis, and computer simulation. However, my experience as a member and chair of the National Science Board has provided an important perspective of the evolution of science in America, and I intend to develop and teach a course on this subject in the year ahead. I will also be leading a research seminar on strategic issues in higher education as a component of the Millennium Project in the Fall Term. Finally, I have been so outspoken about my belief that the classroom form of pedagogy characterizing education during the 20th Century is becoming obsolete that I feel obliged to develop and demonstrate some alternatives for undergraduates.

On a professional level, I will continue to be actively involved in national science policy through the National Science Board, the National Academies, and other national bodies. I will remain active in a broad array of groups and projects concerned with higher education. And, hopefully, my writing activity will resume its level prior to my sentencing to academic administration.

I am intensely proud of what we have accomplished together during the past eight years. Michigan today is more intellectually productive, richer culturally, more efficient, and more

fiscally sound that it has ever been. This gives us a solid and secure foundation to build the University's future as the leading university in America as the world.

It is my great good fortune now to turn over the reigns of leadership of the University to my friend and colleague, Homer Neal. I know Michigan will flourish under his leadership. My experience assures me that he has a great wealth of talent, good will, and dedication to draw from in our faculty, students, staff, and Regents as well as the unstinting support of Michigan's citizens and our extended alumni family. Michigan is truly blessed by its people and their tradition of excellence.

Finally, I want to thank you all once again. Anne and I have been honored to serve this University that we love so deeply. We are more grateful than I can ever say for all your help and support in these years. We remain fiercely loyal and dedicated to Michigan. We look forward to working with you in the future and to continuing to do everything in our power to keep ours one of the finest universities in the world.

Go Blue!

Sincerely,