Overview

The past year has been one of significant growth and change for university research programs. Building on our traditional research strengths, university faculty members, staff, and students are expanding the boundaries of the discovery mission of the university. The achievements of our administrative units as well as our university research institutes are summarized in the graphs and tables included in this report, which documents the astounding contributions on the part of our researchers during a time of continued economic uncertainty.

Externally sponsored research expenditures rose almost 10 percent last fiscal year, marking the 12th straight year of growth. In fact, since 1999, expenditures have grown by 177 percent, achieving an average annual growth rate of 8.9 percent. This expansion of the research enterprise has changed the landscape of our university, providing a platform for increased engagement with a wide variety of stakeholders, encompassing regional, national, and international collaborations and, most importantly, enriching the academic environment of our university for students and the faculty alike.

The sustained advancement of the research enterprise at Virginia Tech is a major component of the comprehensive university strategic planning process “Envisioning Virginia Tech,” initiated during the past year, continuing in the current year. This year has seen the establishment of a number of organizations and initiatives that provide a firm foundation for expansion of the Virginia Tech research portfolio. Notable among these was the grand opening of the Virginia Tech Carilion School of Medicine and Research Institute in May and a growing number of faculty and postdoctoral associates performing research within the institute. During the past year, we have also welcomed the new Institute for Creativity, Arts, and Technology – bringing to seven the university’s strategic institutes, which will channel resources and the university’s strength toward areas of national need.
June 2011 saw the opening of the Virginia Tech Research Center - Arlington, including a “Meet the Scientists” event during which federal program managers and industry were introduced to a range of research performed within our colleges, centers, and university institutes. The Virginia Tech Research Center - Arlington provides a hub for our university’s research presence in the heart of Arlington, Virginia, only a short walk from the offices of the National Science Foundation, Office of Naval Research, and other federal agencies. The building also offers conference space that will facilitate Virginia Tech’s position as a potential host for high-profile meetings, short courses, and workshops.

The hiring of Satish Kulkarni as director of energy research initiatives has also strengthened Virginia Tech’s research infrastructure. Dr. Kulkarni will provide energetic leadership, vision, and direction to the coordination of large-scale multidisciplinary and interdisciplinary research efforts across the university, strengthening relationships with government agencies and laboratories as well as partnerships with industry and the larger academic community.

At Virginia Tech, we also believe that research experiences are an integral part of the educational process, and to our mission to inculcate the spirit of innovation and creativity in our next generation of scholars and leaders. To this end, on July 1, 2011, Tomalei Vess began her tenure as the inaugural director of undergraduate research within the Division of Undergraduate Education. Through her position, Dr. Vess will foster the coordination, growth, and expansion of undergraduate research opportunities, making research opportunities at Virginia Tech even more accessible to undergraduate students.

This report also documents a number of enhancements to our operational models, designed to facilitate and streamline operations for researchers throughout the university. Many of these achievements resulted from an Organizational Advancement plan designed to create the best possible working environment for employees, so that we, in turn, can provide the highest level of service to the faculty, staff, and students of the university. This report also documents the development of systems designed to ensure compliance with new and increasingly complex federal and state requirements.

Finally, while the national debate on the federal budget caused a good deal of tension and uncertainty, the future of the Virginia Tech research enterprise remains bright. As always, our faculty, staff, and students’ support of the university’s discovery mission continues to provide new and better opportunities to Invent the Future.

Robert W. Walters
Vice President for Research