

[PRESIDENT'S PERSPECTIVE

Research and scholarship as a public good

We live in a knowledge-based society. As the *Economist* recently noted: “Intellectual capital drives the knowledge economy.” Universities, particularly research universities, that focus on scholarship and research are key drivers of change in society by the contributions made through discovery, knowledge creation, and the translation of that knowledge to practical application.

Scholarship and research produced by higher education institutions advance new understanding in a civilized society, based upon reason and rationality rather than personal beliefs or emotions. As we know from economic history, a driver of gross domestic product (GDP) is research discovery, which has a direct relationship between job growth and GDP. Unfortunately, the United States has dropped in overall research and development as a percentage of GDP as its investment in research has declined, at the same time that other countries have increased substantially their research productivity.*

Given the close relationship between scholarship and research and economic development and job growth, it is clear that the United States as a society and each of our states cannot enjoy the benefits of the research, unless we make appropriate investments. In many respects, our country has turned from an investment society that values and respects basic and applied scholarship and research to a consumption society. This is all the more lamentable when we consider that in a recent Pew Survey, 79 percent of the public surveyed said that science has made their lives easier.

It is not an overstatement today to say that the United States needs a new strategy centered on job growth. In many ways, we are at a point of reflection in this country where “new frontiers of the mind are before us,” as President Franklin Roosevelt wrote in 1944: “if they are pioneered with the same vision, boldness, and the drive with which we have waged this war we can create a fuller and more fruitful employment and a fuller and more fruitful life.”** The quickest way to accomplish this objective is to appreciate the public good associated with the scholarship and research that comes from our leading institutions of higher education as they spur breakthrough discoveries that can lead to new intellectual property, economic development, and job creation.

This past fall the University of Vermont hosted its

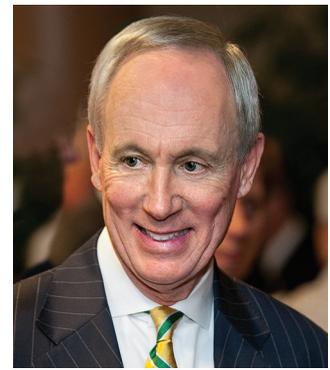
second annual Summit for the Vermont Legislature, a commitment to partnering with the state in presenting a summit focusing on a single pressing topic and a big idea. This fall's topic was “actionable science and research” centered on climate change research.

Early in the discussion it became clear that multiple disciplines and their research components needed to be understood before one could fully begin to appreciate the climate challenges and change that are present. These summits provided the opportunity and ability to build and forge new understandings among our faculty and our public leaders about new scholarship and research. As Vermont's flagship research and land-grant institution of higher education, the university is well positioned to assist the legislature in its understanding of important topics as it carries out its public responsibility to advance the economic and societal well-being of the state.

At UVM, we have deep and strong scholarship and research expertise in many areas, including biomedical research and health care; complex systems and big data analysis; agriculture, life sciences, and food systems; sustainability and the environment; and how our brains interact with our environment in determining behavior. Hundreds of research projects go on every day at the university that are supported, in part, by nearly \$130 million dollars, on average, of outside research grants, largely funded by the national agencies.

Our researchers are well known for studies on the impacts of climate change on lake and watershed dynamics, food systems adaptation to climate change, impacts of climate change on transportation infrastructure, as well as climate change policies and governance, forest and carbon sequestration, and importantly for Vermont, knowledge on smart grids and renewable energy. One of the key conclusions drawn from this fall's summit is the need to invest in education and research that leads to new knowledge and understanding that allow us to tackle challenges, seize opportunities, and solve problems that will make our societies even better places to live and thrive.

While these research projects, mentioned above, start as ideas in the mind of our faculty and researchers,



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* ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT (OECD), -MAIN SCIENCE AND TECHNOLOGY INDICATORS (VOL. 2013, NO.2, PARIS OECD PUBLISHING, 2014), CITED IN AMERICAN ACADEMY OF ARTS AND SCIENCES, RESTORING THE FOUNDATION P. 1, 13 (2014).
** AMERICAN ACADEMY OF ARTS AND SCIENCES, RESTORING THE FOUNDATION P. 6 (2014) CITING: [HTTPS://WWW.NSF.GOV/OD/LPA/NSF50/VBUSH1945.HTM](https://www.nsf.gov/od/lpa/nsf50/vbush1945.htm)

[CLASS NOTES

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LAUREN DOBAY '13

"You learn to do the best with what you have and you learn how to do it with grace."

—Lauren Dobay on her senior-year study abroad experience working as a nurse in a hospital in rural Kamuli, Uganda. That life-changing experience has inspired her to help support a program that opens study abroad opportunities to more students in the College of Nursing and Health Sciences.

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Crawford of Chittenden County Superior Court in Burlington, Vermont.

Send your news to—
Troy McNamara
Troy.mcnamara4@gmail.com

12 Send your news to—
Patrick Dowd
patrickdowd2012@gmail.com

13 Margo Adams from Rutland, Vermont was hired as a manufacturing quality engineer with GE Aviation. Andrew Dougherty graduated from Arizona State University with his Master's in Accountancy and successfully passed all parts of the CPA exam. He is now working for Ernst & Young in San Jose, California. Rebeka April Foley writes, "After moving to Paris following graduation, I opened my own video production services company where I organize shoots for foreign film crews who come to France. As an American in Paris, I am fascinated by cultural exchange and have an affinity for working in an international environment."

Send your news to—
Katharine Hawes
katharine.hawes2@gmail.com

Madelaine White
mswhite1991@gmail.com

14 Kellee Jackson has joined the staff of the Consortium for Older Adult Wellness (COAW) in the Lakewood, Colorado, office. Kellee is a bilingual program coordinator for COAW and will oversee programming for rural health centers and organizations in Colorado as well as bilingual programs offered in Spanish across the state. She has a background in community health outreach and previously worked with a health self-management outreach organization for migrant dairy farmers in Vermont and with an exercise rehabilitation project with cancer patients. Send your news to—
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ultimately they lead to many measurable successes at UVM, including in the last three years 111 new invention disclosures, 52 new patent filings, 17 new patent licenses, and a total of 36 new start-ups, several resulting in 139 patent licenses in force.

The new knowledge and discoveries that flow from these research projects drive creativity, innovation, and competition. In our globally-connected world, this gives the United States a competitive advantage in economic development and job growth. The externally funded research also supports Vermont's economy directly through staff employment and core land grant and entrepreneurial interactions.

We also know that there is a direct, inextricable link between the accomplishments of the faculty and staff in producing path-breaking scholarship and research and the size, scope, and quality of graduate education at the university. It is for this reason that a significant focus in the university's Strategic Action Plan is on the growth and quality of UVM's graduate programs. As we are successful in accomplishing this goal, through a careful review of our present graduate programs and identification of new programs that capitalize on our strengths, we are optimistic that UVM's scholarship and research accomplishments will continue to advance and be seen as an important part of advancing the public good.

In conclusion, often forgotten in society today is the value of the scholarship and research coming out of higher education in the United States. In addition to the private good that results, the public is greatly benefitted through new discoveries, new knowledge, new innovation, and applying that knowledge to advance our civil society. The links between these accomplishments and jobs creation and economic development are clear: as the economy benefits, so too does society with increased opportunities for all. Knowledge creation and the sharing of that knowledge is an important role that research universities play through their scholarly communications. Although it may seem that we live in a highly charged digital and technological age, other scholarship and research of a more qualitative nature play an equally important role in our universities, and at UVM. As Earl Lewis, president of the Mellon Foundation, recently observed, "The work of the arts and humanities in advancing knowledge, discourse, and intercultural understanding [is] critical to flourishing inclusive, and creative societies." And as ever, the offerings of science and technology also must be examined through the lens of the humanities and society. At UVM, we continue to build a culture that supports and integrates impactful scholarship and research from all disciplines to advance the public good.

—Tom Sullivan
In the Fall 2014 issue of the Vermont Quarterly, available at uvm.edu/vq, President Sullivan wrote "On The Value of a Liberal Education."