The Magazine of the Mizzou Alumni Association

Innovation Deficit Defined

Panelists discuss insufficient funding for university research.



On the occasion of its 175th anniversary, MU welcomed the Association of Public and Land-Grant Universities President Peter McPherson, right, and the American Council on Education Presidential Adviser for Leadership Kevin Reilly.

Story by Dale Smith Photos by Kyle Spradley Published Sept. 19, 2014 he United States is in danger of losing its competitive economic edge among nations, warned two leading educators Wednesday at a panel discussion about the ripple effects of insufficient funding for university research.

Panelists <u>Kevin Reilly</u>, presidential adviser for leadership and leadership programs for the <u>American</u> <u>Council on Education</u>, and <u>M. Peter McPherson</u>, president of the <u>Association of Public and Land-grant</u> <u>Universities</u>, spoke to a crowd as part of MU's weeklong 175th anniversary celebration. Moderating was <u>Hank Foley</u>, executive vice president of academic affairs for the <u>University of Missouri System</u>.

A new report from the <u>American</u> <u>Academy of Arts and Sciences</u> cites recent data that the United States has dropped to 10th place among nations in the <u>Organization for</u> <u>Economic Co-operation and</u> <u>Development for investment in</u> research and development as a percentage of gross domestic product (GDP). This is a key feature of the so-called innovation deficit. Falling short of investing 3 percent of GDP in research and development, as the U.S. has of late, will mean losing ground to



Henry C. "Hank" Foley, MU executive vice president of academic affairs for the University of Missouri System, hosted the panel in Stotler Lounge in the Memorial Union Sept. 18, 2014.

other nations, several of which are ramping up such

investments to stimulate economic growth McPherson said.

Public land-grant universities, McPherson said, must provide access to education, grant degrees, conduct research and solve societal problems. Since World War II, he said, at least 50 percent of U.S. economic growth has come from research, particularly from universities. "Sixty percent of federal dollars for research are received by public universities," he said. "People don't realize what a big player we are. If [public land-grant universities] could not play this role, the country's economic future would look very different."

Reilly credited extension programs at land-grant universities for their key role in building agricultural productivity by providing university-generated research to farmers. In contrast, he said that universities generally could do more to transform labbased innovation into marketable products. "We're not as good as we should be at commercializing intellectual property and returning profits to investors."

The discussion also covered how universities need to innovate in the classroom. McPherson said land-grant universities must find new ways of helping students get a college education inexpensively. Nationwide, he said, "lamentable" tuition increases "almost dollar for dollar reflect cuts in state appropriations." Tuition increases are unsustainable, so universities must invent ways of reducing educational costs while maintaining quality. For instance, students regularly take courses that don't count toward graduation, and freshmen often take 13 credits per semester instead of 15. Averaging 15 hours a semester adds up to graduation in four years.

Reilly said universities should innovate in teaching, as well, pointing to modern ways of collecting and analyzing data that could customize students' education in ways that help them succeed and graduate. "We are not doing enough of that," he said. "I like to think of the gaming industry. They get kids playing games, and they really want to solve the problem of getting to the next level. They get there by repeatedly failing. They go back time and time again until they get to the next level. Wouldn't it be great if we could take that paradigm and put it into the way we teach remedial math. One of the next big waves has to be in the way we deliver knowledge, skills and learning to students."

Topics: <u>News</u>, <u>Research</u>, <u>Web Exclusives</u> Tags: <u>175 Years</u>

Published by MIZZOU magazine, 109 Reynolds Alumni Center, Columbia, MO 65211 | Phone: 573-882-5916 | Email: <u>mizzou@missouri.edu</u>

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