

Annual Report of Research Activity

Office of the Vice President for Research | Fiscal Year 2011

PENNSTATE





“The spirit of the age proclaims the necessity of scientific research in every department.” —Evan Pugh, 1864

PUGH, A VISIONARY PIONEER IN THE LAND-GRANT EDUCATION MOVEMENT,
WAS FOUNDING PRESIDENT OF THE PENNSYLVANIA STATE UNIVERSITY.

THE PAGES THAT FOLLOW HIGHLIGHT THE DIMENSIONS OF RESEARCH AND DISCOVERY AT PENN STATE. As you study the charts and graphs, I hope you'll keep in mind a number of themes that underlie the University's efforts to extend the frontiers of knowledge:

—Penn State has the expertise, infrastructure, and willingness to work with our partners in the public and private sectors to solve problems in health and medicine, energy and the environment, water, food, transportation, housing, and many other areas that are **relevant** to bettering the human condition.

—The University has experienced, on average, a \$33 million annual increase in total R&D expenditures over the last decade—a growth rate that demonstrates our institution is **competitive** in seeking resources that support its research mission.

—The diverse nature of research at Penn State shows that our portfolio is **balanced**. Notice the variety of funding sources that support research at our institution, and how academic units across the University engage in research and development activities.

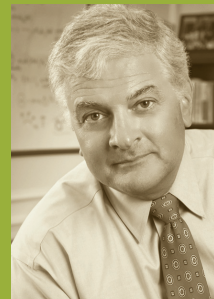
—While summary data may not reveal it, an **interdisciplinary** approach to research is perhaps our greatest strength, and the characteristic that most distinguishes Penn State from other universities. We have moved steadily away from funding discipline-specific research and toward nurturing task-specific faculty groups that more accurately mirror complex, real-world problems.

Our research informs our graduate education, making the quality of that learning experience second to none—a fact recognized by advanced-degree candidates the world over. Research is an integral part of who we are at Penn State, and what we do.

Henry C. "Hank" Foley

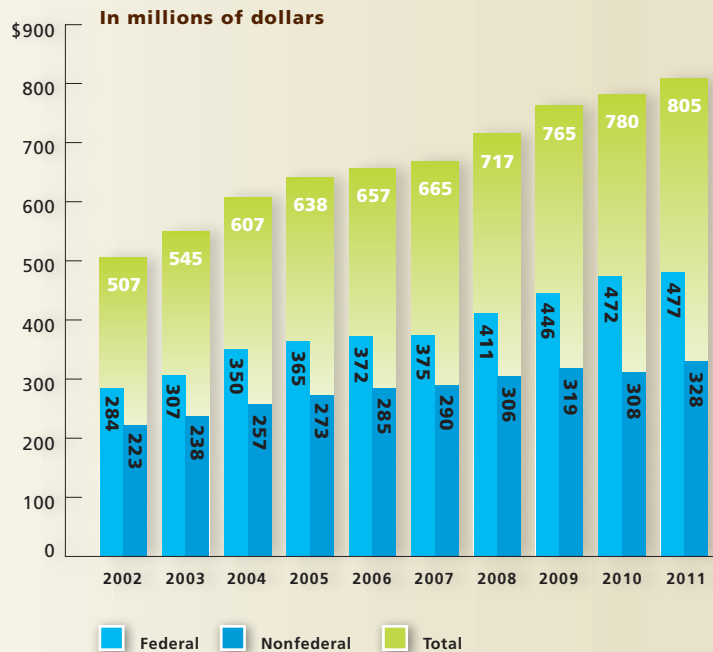
Henry C. Foley
Vice President for Research
and Dean of the Graduate School

To learn more about Penn State
research, visit research.psu.edu



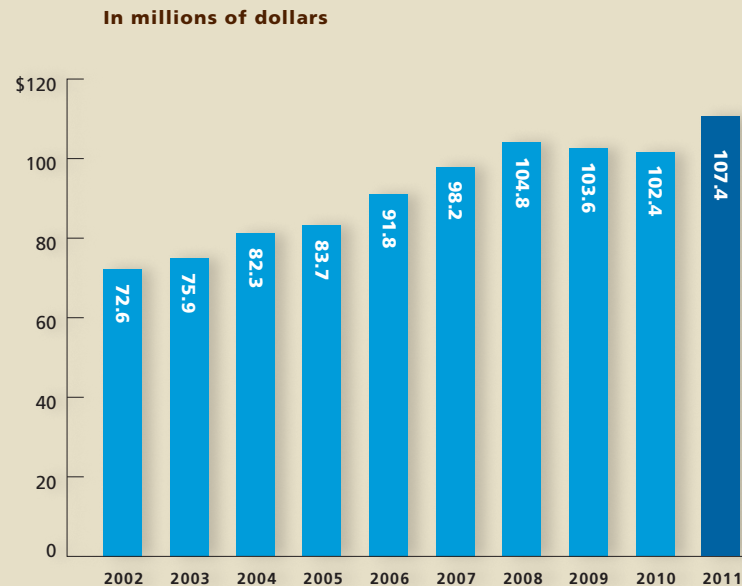
Total Research Expenditures, 2002–2011 (Federal and Nonfederal)

Expenditures totaled an all-time high of \$805 million, with federal support leading the way at \$477 million.



Industry-Sponsored Research, 2002–2011

Penn State has long ranked among the nation's top universities in industry-sponsored research, and typically partners with more than 400 companies annually.



Expenditures from Federal Agencies

1 **Department of Defense \$163,804,000**

2 **Department of Health and Human Services \$129,138,000**

3 **National Science Foundation \$60,164,000**

4 **USDA \$22,378,000**

5 **NASA \$16,906,000**

6 **DOE \$23,788,000**

7 **Education \$11,007,000**

8 **Other \$49,901,000**

Transportation \$5,517,000

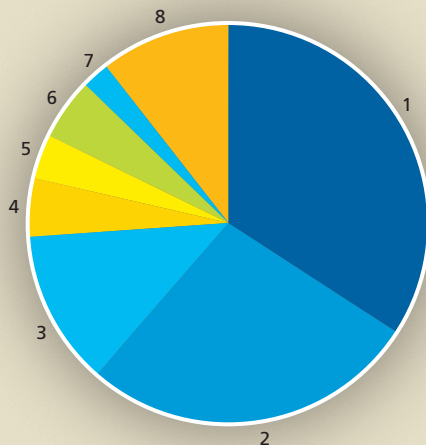
Commerce \$1,885,000

Interior \$1,658,000

EPA \$1,029,000

Other Federal \$39,812,000

Total \$477,086,000



Expenditures by Performing Unit

1 **Defense-Related Research Units \$174,253,000**

Applied Research Lab \$142,253,000

Electro-Optics Center \$32,000,000

2 **Engineering \$113,885,000**

3 **Agricultural Sciences \$101,186,000**

4 **Medicine \$99,863,000**

5 **Eberly College of Science \$102,494,000**

6 **Earth and Mineral Sciences \$75,482,000**

7 **Health and Human Development \$47,803,000**

8 **Liberal Arts \$32,267,000**

9 **Education \$22,641,000**

10 **Information Sciences and Technology \$11,003,000**

11 **Other \$15,741,000**

Altoona College \$1,056,000

Behrend College \$3,992,000

Berks College \$164,000

Capital College \$3,786,000

Great Valley \$309,000

Penn College \$3,626,000

Other Commonwealth Campuses \$2,627,000

International Programs \$181,000

12 **Other Schools and Colleges \$8,171,000**

Arts and Architecture \$819,000

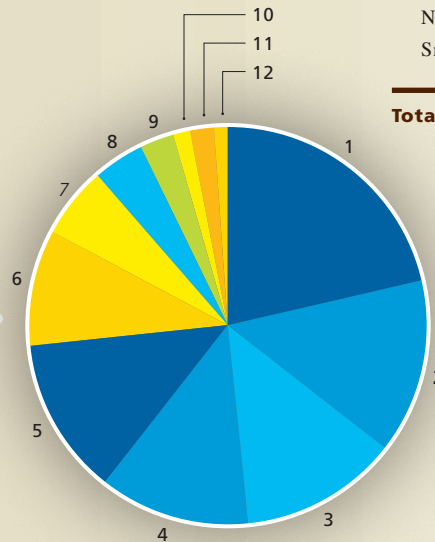
Communications \$368,000

Dickinson School of Law \$215,000

Nursing \$2,044,000

Smeal College of Business \$4,725,000

Total \$804,789,000



Sources of Research Funding

1 Federal \$477,086,000

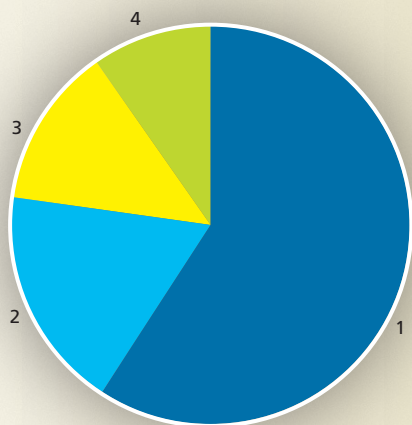
2 University \$142,351,000

3 Industry and other \$107,373,000

4 Commonwealth of Pennsylvania
\$77,979,000

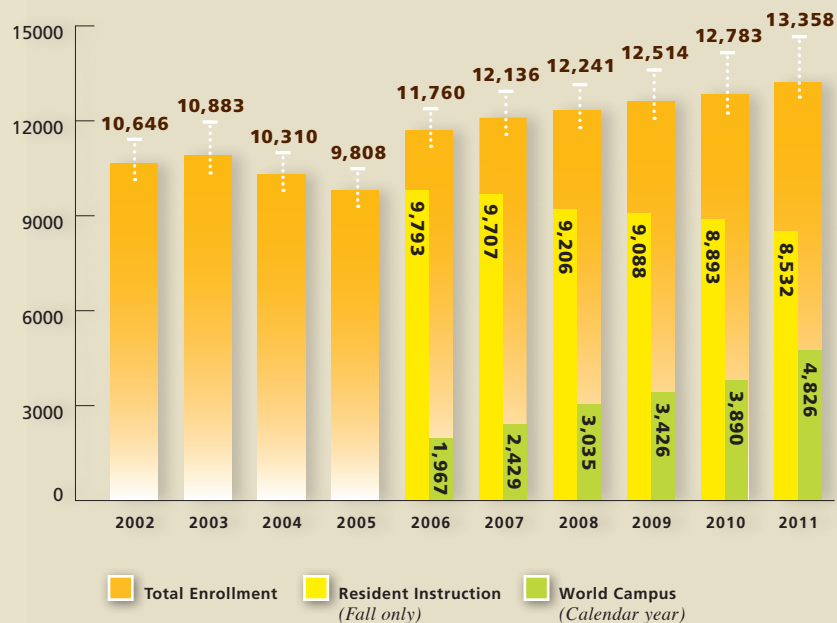
Total \$804,789,000

Penn State's diverse research initiatives reflect a wide range of funding sources.



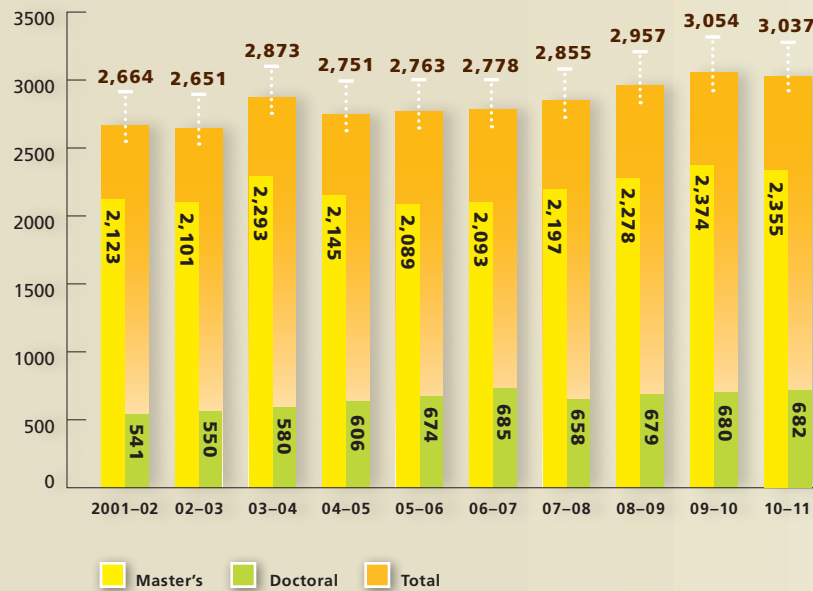
Total Graduate Student Enrollment (Resident Instruction and World Campus)

The University remains a popular choice for graduate education, with resident instruction supplemented in recent years by Penn State World Campus offerings.



Graduate Degrees Conferred

Over the past ten years, Penn State has conferred more than 28,000 graduate degrees, including more than 6,300 doctoral degrees.



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about Penn State's world-
class research enterprise
by e-mail every two weeks:**

<http://goo.gl/39Nfo>

This report was produced by the
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and University Marketing.



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and the diversity of its workforce. U.Ed. RES 12-19

