Federal Research Funding

Friday, December 12, 2014
Brad Shelton, Interim Vice President for Research and Innovation

Board of Trustees of the University of Oregon
Agenda

• Context
• Ten years of UO sponsored research and innovation
• Samples of Success
• Looking to the future
• Innovation
Context - Disinvestment

Ten year trends in federal research spending

Overall U.S. research spending as a percent of GDP
Context - Competition

NIH grant application success rate

- RO1
- Research Projects
Ten Year Trends in Sponsored Awards — Proposals

Proposal Count

<table>
<thead>
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<th>Year</th>
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UO Sponsored Research FY 2005-2014

Ten Year Trends in Sponsored Awards — Awards

Awards

<table>
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<th>Year</th>
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Ten Year Trends in Sponsored Awards — F&A

Facilities & Administrative Recovery

- FY05: $15.8
- FY06: $17.3
- FY07: $16.8
- FY08: $18.4
- FY09: $19.2
- FY10: $19.8
- FY11: $21.1
- FY12: $20.8
- FY13: $18.9
- FY14: $20.4

$ Millions
UO Sponsored Research FY 2005-2014

Sources of Federal Awards

Federal Funding Awarded FY14 — Detail

- Dept. of Education: 32%
- Dept. of Health & Human Services: 40%
- National Science Foundation: 13%
- Dept. of Energy: 6%
- Dept of State: 3%
- Dept of Defense: 2%
- Dept of Transportation: 1%
- Other Federal Agencies: 3%
Samples of Success - META

NIH-funded center places UO on the leading edge of systems biology

• Microbial Ecology and Theory of Animals Center funded by a $10.3 million NIH grant
• One of 15 national systems biology centers, META puts UO in elite company
• Pioneering the field of host-microbe systems biology — unlocking the mysteries of genetics and disease through the study of animal-associated microbial communities
• Integrates 12 UO researchers from four institutes and four departments
Samples of Success - Humanities

NEH Summer Stipend Spells Success

- Since 1980, 43 University of Oregon faculty members have received Summer Stipend Awards
- The competitive program funds only 8 percent of the nearly 1,000 applications it receives
- Despite strict limits on submissions from NEH since 2005 UO received 7 awards in that time period
Samples of Success – Prevention Science

PSI leads the way in prevention-intervention research

• $3.5M Department of Education grant to develop family-centered interventions for students transitioning into elementary school

• 560 families with children entering kindergarten in 5 Portland schools participating in study

• Builds on successful PSI program for students transitioning into high school
Samples of Success – Geography

NSF-funded team brings computing power to bear on beetle infestation

• UO-led Interdisciplinary team received a $1.3M NSF award to build computational model to probe impact of forest governance and climate change on deadly insect infestations

• Project grew out of UO’s internally funded Incubating Interdisciplinary Initiatives (I3) award

• High-performance computer modeling will:
  • Inform forest management policies
  • Prevent future epidemics
  • Advance our understanding of natural and human systems
Future of UO Research

Current and emerging strengths

• Highly engaged faculty
• Highly relevant research strengths
• Robust culture of interdisciplinary research
Innovation FY 2005-2014

A Decade of Innovation Impact — Licensing Revenue

UO Licensing Revenue

$ Millions

Future of UO Innovation

Innovative partnerships

• RAIN – State-seeded initiative to accelerate new startups and build the regional innovation network

• RAINMaker fund to help kickstart the ideas of UO student entrepreneurs

• Colligan Challenge inspiring student teams to develop new interfaces

• Paving the way to future collaborations, discoveries & innovations