University of Iowa
Technology Transfer & Commercialization

http://research.uiowa.edu/uirf/

UI innovations in the Marketplace
The transfer of embryonic technologies and innovations born from university research to the marketplace via a suitable commercial partner
What is “Transferred”

“Intellectual Property”

Intellectual property (IP) refers to creations of the mind:

- inventions (patents)
- trademarks
- copyrights
Commercialization Process

- Invention Disclosure
- Screening & Evaluation
- In-depth Commercial Assessment
- Marketing
- Licensing

U.S. Patenting

U.S. Foreign Patenting
How It Works

Inventor Process

1. Contact the UIRF
2. Invention Disclosure
3. Ongoing Dialogue
4. Patenting
5. Involvement in Licensing or Spinout Companies
6. Income Sharing
Why Do Universities Engage in this Activity?

• It’s required

• Bayh Dole act passed in 1978
  – Federal law that confers intellectual property ownership rights to Universities, and creates the obligation to act on that IP
  – Universities that receive federal funding are required to pursue technology transfer opportunities
“...the goal of expeditious and wide dissemination of discoveries and inventions places ... technology transfer squarely within the research university’s core mission of discovery, learning, and the promotion of social well-being”

Source:
The National Academies: Managing University Intellectual Property in the Public Interest
http://www.nap.edu/catalog/13001.html
Universities Are Embracing this Activity

• Technology transfer is a critical vehicle for creating
  – Social good
  – Discretionary University funds
  – Competitiveness in grants and faculty recruiting
What’s Been Produced?

In the U.S.\textsuperscript{1}

8000 new products, 153 new drugs

7000 new companies and 279,000 new jobs

600 new companies in 2010

$187 \text{ bil} to the US GDP between ‘99-’07

\textsuperscript{1} The New England Journal of Medicine February 2011, and Patent, Trademark & Copyright Dec 2010
How Are We Doing at UI?

Dozens of products on the market
13 drugs manufactured using a UI invention
19 new companies based on UI technologies
Ranked 16\textsuperscript{th} for licensing income in ‘09

UIRF Annual reports
http://research.uiowa.edu/uirf/pages/board/annual-report.html
Drs. Hohl and Wiemer’s Cancer Therapeutics

- Compounds for cancer and osteoporosis
- Startup company Terpenoid Therapeutics
- Raised $3M in equity and grant financing in ‘10
• Porcine models for drug discovery
• Startup company *Exemplar Genetics*
• Facilities and process approval in ‘09
Dr. Mark Stinski’s Gene Sequence for Therapeutic Protein Manufacture

- $165M UI income over patent life
- 120 licenses for research or manufacturing
- 13 drugs

Dr. Mark Stinski, Distinguished Professor of Microbial Virology, Carver College of Medicine
Critical Challenges - Commercialization Funding -

Federal funding
R&D: $49B
Commercialization: $2.4B

For every $1 of research, ~ $10 are needed to bring a product to market
New Commercialization Funding - Iowa -

GIVF Seed Grant Program

GIVF Seed Grant Guidelines

Online Submission Opens: Monday, August 2, 2010

Deadline: Monday, September 30, 2010

Access UIRIS to submit an application

Objective

The Iowa Centers for Enterprise (ICE), in conjunction with the Office of the Vice President for Research (OVPR), is pleased to announce seed funding that is designed to expand the commercialization of UI technology. The seed fund program is supported by Iowa Economic Development appropriations to the Board of Regents under the "Grow Iowa Values Fund" (GIVF).
U.S. Commerce Department, NIH, NSF Announce "i6 Challenge" to Bring Innovative Ideas to Market

Applicants sought for six $1 million prize for concepts that accelerate tech commercialization via www.eda.gov/i6

WASHINGTON — The U.S. Department of Commerce's Office of Innovation and Entrepreneurship and Economic Development Administration (EDA) today announced a new $12 million innovation competition, in partnership with the National Institutes of Health (NIH) and the National Science Foundation (NSF). EDA will award up to $1 million to each of six teams around the country with the most innovative ideas to drive technology commercialization and entrepreneurship. NIH and NSF will award a total of up to $6 million in additional funding to NIH or NSF Small Business Innovation Research grantees associated with winning teams.
• Innovation and technology transfer are critical for the vitality of the University, for the state of Iowa, and for the U.S.

• Key steps for the UI to ensure this vitality include
  – Creating a larger source of commercialization funding
  – Creating a larger set of engaged faculty
  – Expanding the market reach of UI technology transfer from human health into software, physical sciences, and engineering
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