

University of Iowa Technology Transfer & Commercialization

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

 THE UNIVERSITY OF IOWA

UIRF

UNIVERSITY OF IOWA
RESEARCH FOUNDATION
VENTURES AND LICENSING

UI innovations in the Marketplace



What is Technology Transfer & Commercialization?

The transfer of embryonic technologies and innovations born from university research to the marketplace via a suitable commercial partner

What is “Transferred”

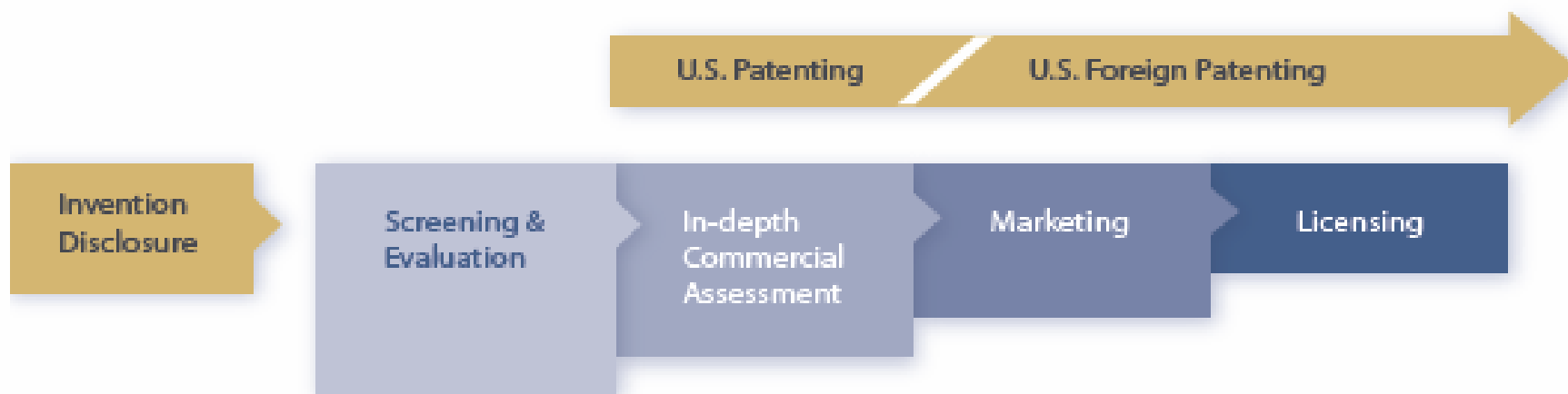
“Intellectual Property”

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

- inventions (patents)
- trademarks
- copyrights

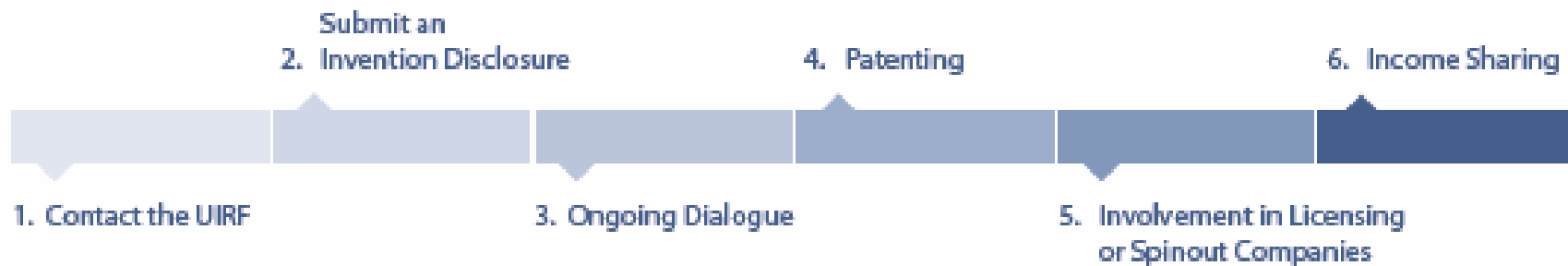
How It Works

Commercialization Process



How It Works

Inventor Process



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

How Does this Fit with the University Mission?

“...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.¹

8000 new products, 153 new drugs

7000 new companies and 279,000 new jobs

600 new companies in 2010

\$187 bil to the US GDP between '99-'07

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 16th 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



August 31, 2010

Openings for Chemist and Biology Positions

Terpenoid Therapeutics Inc.



Dr. David Wiemer, Chair Department of Chemistry;
Dr. Raymond J. Hohl, Professor of Internal Medicine
and Pharmacology, Holden Family Chair, Associate
Director Holden Comprehensive Cancer Center;
founders of Terpenoid Therapeutics, Inc.

Dr. Mike Welsh's Animal Models for Disease

- Porcine models for drug discovery
- Startup company *Exemplar Genetics*
- Facilities and process approval in '09

Exemplar Genetics Inc.



Dr. Michael Welsh, Professor of Medicine and Molecular Physiology and Biophysics; Carver Biomedical Chair in Internal Medicine; Howard Hughes Medical Institute Investigator; Founder, Exemplar Genetics

EXEMPLAR
GENETICS 



**CFTR^{-/-} and
CFTR F508del/F508del
PIGS NOW AVAILABLE!**

[Click Here](#) for more information

Dr. Mark Stinski's Gene Sequence for Therapeutic Protein Manufacture

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

Cytomegalovirus Promoter



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*

fyi News for Faculty and Staff

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The Big Story

Perlmutter's P&T
Confidential offers tips on tenure 03/23

Campus Voices

Quote...Endquote 04/05

Get to Know...

Bill Dawkins, University Housing and Dining 04/04

Coming Up

Quote...Endquote

BY UNIVERSITY RELATIONS- PUBLISHED: 04/05/2011
POSTED IN: CAMPUS VOICES

(Editor's note: Clicking on the publication name and date will take readers to the complete article.)

"It's so underfunded."

Pamela York, executive director of the University of Iowa Research Foundation. York is referring to research to move products to the marketplace. The costly expanse between concept and product is referred to as "the Valley of Death," as creating drugs, devices, and materials comes with an exorbitant price tag. (*Omaha World-Herald*, April 3)

New Commercialization Funding - Iowa -

RESEARCH

● Research ● UI

Grow Iowa Values Fund (GIVF) Seed Grant Program

Office of the VP for Research

Funding and Development

Division of Sponsored Programs

Research Development Services

Grant Development Network

Find Funding

University Funding Sources

Proposal Preparation

Training

eResearch

Policies and Compliance

Research Across Campus

Economic Development / Technology Transfer

GIVF SEED GRANT GUIDELINES

ONLINE SUBMISSION OPENS: Monday, August 2, 2010

DEADLINE: Monday, September 30, 2010

Access [UIRIS](#) to submit an application

[Objective](#) / [Awards](#) / [Timeline](#) / [Project Timeline](#) / [Evaluation Criteria](#) / [Application Review Committee](#) / [PI Eligibility](#) / [Eligible Expenses](#) / [Budget](#) / [Guidelines](#) / [Format](#) / [DEO Endorsement](#) / [Project Reporting](#) / [Deadlines](#)

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).

Resources For:

New Commercialization Funding - Federal -



U.S. Department of Health and Human Services

NIH News National Institutes of Health

[NIH Office of the Director \(OD\)](#)

For Immediate Release
Monday, May 3, 2010

Contacts:
EDA: [John Atwood](#), 202-482-4085
NSF: [Joshua Chamot](#), 703-292-7730
NIH: [Calvin Jackson](#), 301-594-8750

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.

Current & Future Directions

- 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 to software, physical sciences, and engineering

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