

Discovery Park: A Paradigm for Interdisciplinary Research

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Vice President for Research Emeritus

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Discovery Park Integrated Centers

**An ideal center will excel
in five dimensions...**

- ✓ Quality
- ✓ Economic development
- ✓ Interdisciplinary
- ✓ Leverage
- ✓ Leadership



**Burton D. Morgan Center
for Entrepreneurship**



**Birck Nanotechnology
Center**



**Bindley Bioscience
Center**



**Gerald D. and Edna E.
Mann Hall**



**Discovery Learning Research
Center – to open 2009**

President
France A. Córdoba

**Director Sponsored
Program Services (SPS)**

Vice President for Research
Richard O. Buckius



**OVPR/DP Business and
Sponsored Programs Office**

**Assoc. VPR for University
Research Administration**

**Sr. Assoc. VPR & Exec. Dir.
of Discovery Park**
Alan H. Rebar

**Assoc. VPR for Research
Development & Research
Support Infrastructure**



		
Founded	1961	2001
Purpose	Start-up companies	Interdisciplinary research
Location	Off-campus US 52 Highway	Main Campus State Street
# People	>3100 employees	~1000 faculty members
# Buildings	54	4 completed; 1 to be completed 11/2009
# Companies/ Centers	154 Companies	9 Centers
Area	725 acres	40 acres

DP and Other Internal Collaboration

- Purdue Research Foundation
- Information Technology at Purdue (ITaP)
- Public Relations – press and media
- Vice President for Research
- Business Affairs – Sponsored Program Services
- Corporate Relations
- Engagement
- Marketing and branding
- Government and State relations
- Fund Raising

Operating Principles

1. Infrastructure → innovation & creativity
2. Internal collaboration
3. Pick low-hanging fruit (short-term projects)
 - Enlivens concepts, demonstrates value, encourages partnerships
4. Leverage
 - Allows much larger projects, distributes risk
5. Responsiveness
 - Encourages partnerships, enables entrepreneurship and economic development

Core Centers

- ✓ Lilly Endowment support
- ✓ Institutional support
- ✓ Broad mission
- ✓ Synergism among centers

- Bindley Bioscience Center
- Birck Nanotechnology Center
- Burton D. Morgan Center for Entrepreneurship
- Discovery Learning Research Center
- Global Sustainability at Purdue
 - Center for the Environment
 - Energy Center
 - Purdue Climate Change Research Center
- Advanced Computational Center for Engineering and Sciences
 - Cyber Center
 - Computing Research Institute
 - Rosen Center for Advanced Computing
- Oncological Sciences Center
- Regenstrief Center for Healthcare Engineering

Discovery Park Infrastructure

- Administrative
 - Business team – SPS & Business Admin.
 - Project coordination
 - Web site integration
 - Special events
- Technical
 - Research Cores – partnership with academic units
 - Equipment and facilities

Project-Based Centers

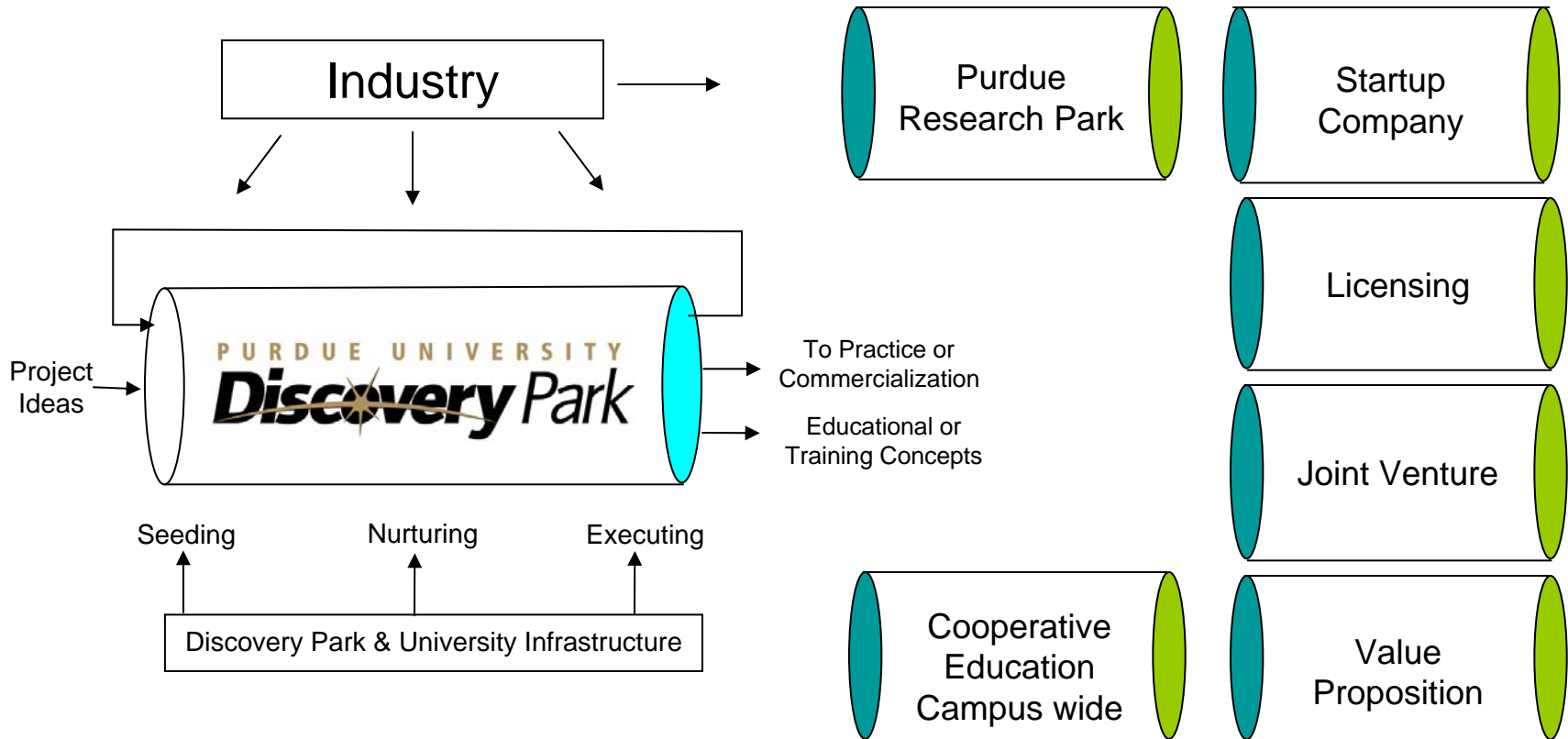
- √ Interdisciplinary in nature
- √ Sponsored programs
- √ Affiliated with a core center
- √ Often opportunistic

NSF Network for Computational Nanotechnology (NCN)
Purdue Visualization and Analytics Center (PURVAC)
NEXTRANS (U.S. Dept. of Transportation Region 5 Transportation Center)
Center for Catalytic Design (CCD)
Center for Prediction of Reliability, Integrity and Survivability of Microsystems (PRISM)
Center for Direct Catalytic Conversion of Biomass to Biofuels (C3Bio)
Center for Global Research and Intervention in Infectious Diseases (C-GRIID)
Center for Authentic Science Practice in Education (CASPiE)
Indiana Clinical and Translational Science Institute (CTSI)

New Initiatives

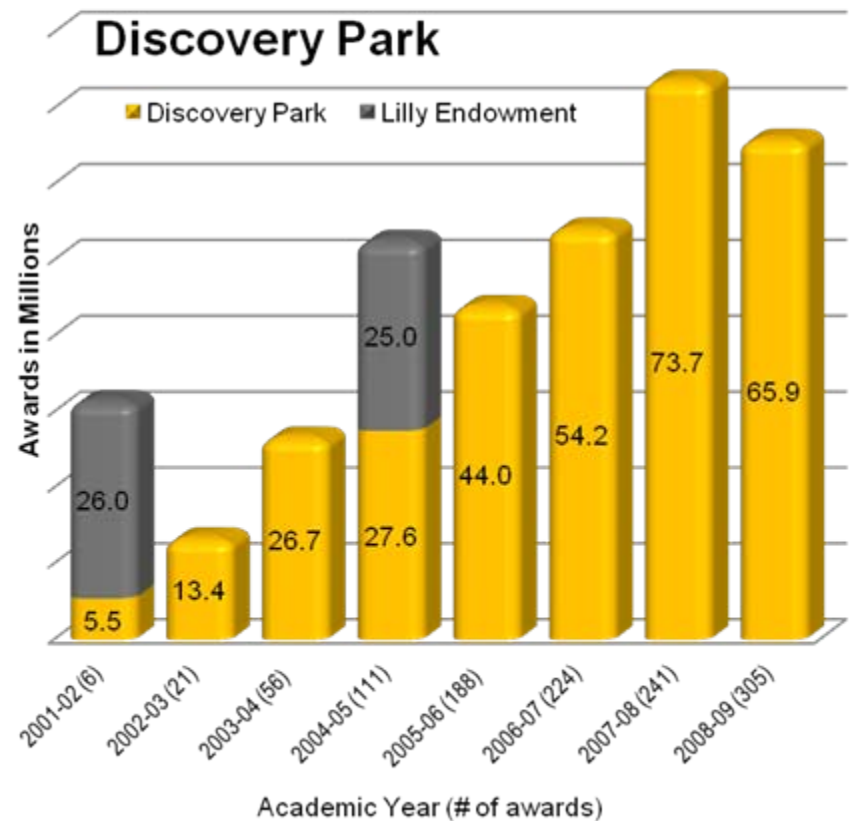
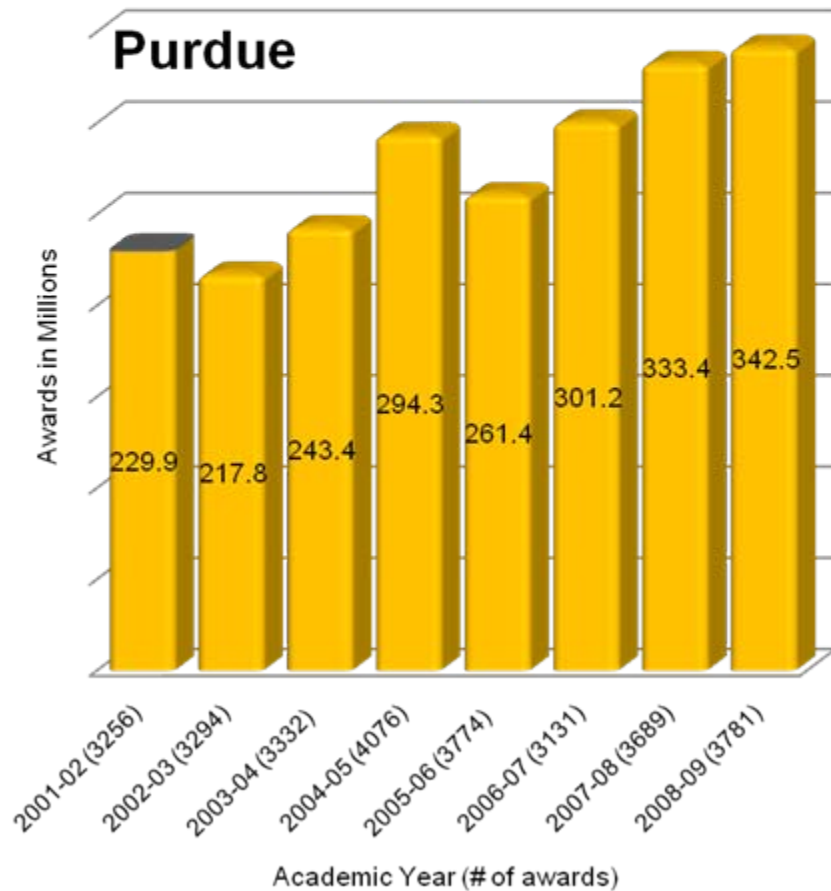
- Center for Analytical Instrumentation Development (CAID)
- Purdue Initiative for Defense Innovation

An Engine for Indiana's Economy



Discovery Park is designed to rapidly integrate Purdue with outside partners.

Accomplishment: Sponsored Awards* (\$M)



*Support in collaboration with Development is included. In addition, activity for awards to participating colleges/schools is included.

DP Accomplishment: Value Added Since August 2001

Equipment	\$26,995,706
Office/Support Space	Approx. 71,000 sq. ft.*
Laboratory Space	Approx. 114,000 sq. ft.*

* Includes space in DLC building currently under construction

Funds from DP to Academic Units*

Start-Up Contributions	\$6,174,000
Cost Shares	1,606,576
Equipment Grants	1,393,430
Seeds Grants	4,835,887
Miscellaneous (e.g., summer grad support)	618,365
TOTAL	\$14,628,258

*As of 9/31/08. The total does not include costs of symposia, workshops, director salaries, administrative & business support for grant submissions, business plan competitions, Innovation Realization Laboratory/Technology Commercialization Laboratory, New Ventures Laboratory, CERIAS, EPICS Entrepreneurship Initiative, endowed Directorships, DP Lectures Series, and other miscellaneous activities such as support of DP Research Cores in both personnel and equipment.

Seeding and Nurturing Start-up Companies

1. Endocyte
2. Griffin Analytical Technologies
3. 2K Corporation
4. Biovitesse Inc.
5. Tienta Sciences
6. Indigo BioSystems
7. Prosolia
8. PriProTex*
9. Quadraspec, Inc.
10. Data Tracking Solutions
11. Theme Work Analytics**
12. Brogan Pharmaceuticals
13. Advanced Radiotherapeutic Solutions*
14. VEM Smart Systems, LLC
15. M4 Corporation
16. MagSense Life Sciences
17. MatrixBio, LLC
18. Prima Specialty Vectors
19. Stormfront Productions**
20. Kylin Therapeutics, Inc.
21. Identity Alliance (now TrustBearer Labs)**
22. Cytometry for Life**
23. AIGalCo**
24. National Institute of Pharmaceutical Technology
25. Moerae Matrix, Inc.
26. Intelliphase, Inc.
27. Imaginestics, Inc.
28. NanoG LLC
29. Green Tech America, Inc.
30. Intelimmune

**Plus six
start-ups by
Interns for
Indiana
program
students**



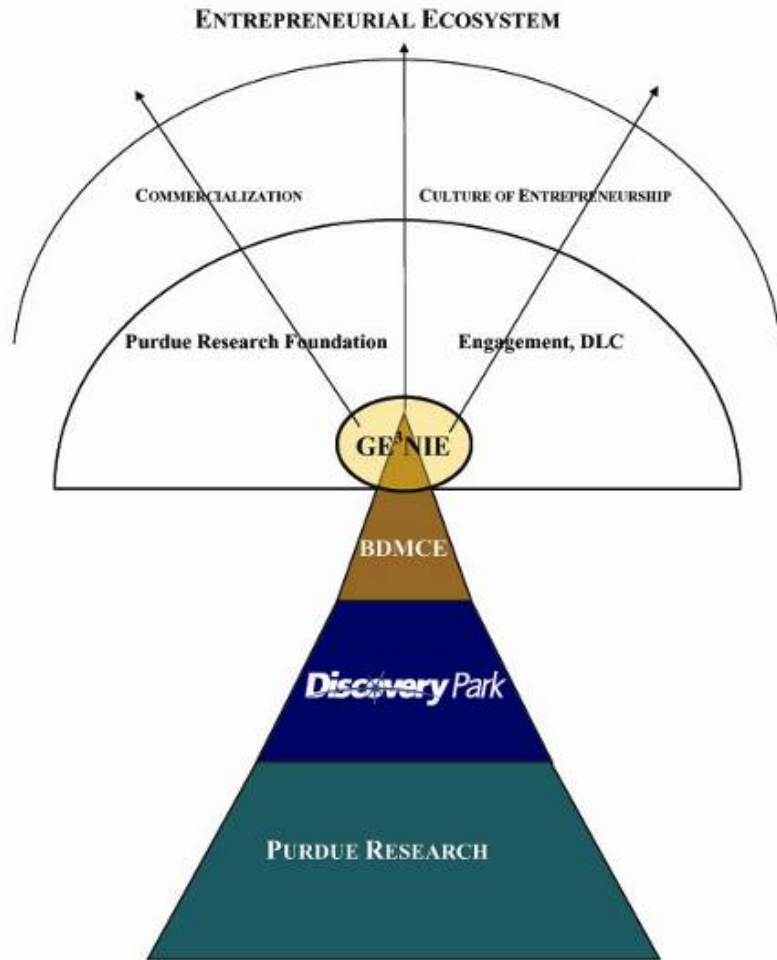
* Details of licensing are being worked out

** Non Purdue Technology

Strategic Plan October 2003

In 2006, Discovery Park had:

<ul style="list-style-type: none"> • 5 new interdisciplinary research buildings 	<ul style="list-style-type: none"> ✓ 5 new interdisciplinary research buildings
<ul style="list-style-type: none"> • 3000 students in entrepreneurial activity 	<ul style="list-style-type: none"> ✓ 3000 students in entrepreneurial activity
<ul style="list-style-type: none"> • 500 faculty involved in interdisciplinary research 	<ul style="list-style-type: none"> ✓ 1000 faculty involved in interdisciplinary research
<ul style="list-style-type: none"> • \$25 million/year in sponsored research funding 	<ul style="list-style-type: none"> ✓ \$44 million/year in sponsored research funding
<ul style="list-style-type: none"> • 8 new start-up companies 	<ul style="list-style-type: none"> ✓ 20 new start-up companies facilitated in cooperation w/Purdue Research Fdn.
<ul style="list-style-type: none"> • 20 corporate partners 	<ul style="list-style-type: none"> ✓ 20 corporate partners



Generating Entrepreneurs, Entrepreneurial Ecosystems, and Networks for Indiana's Economy

...in partnership with

- the Purdue Research Foundation
- the Purdue Office of Engagement
- and other organizations/institutions

...will develop and implement a series of programs

- to enhance IP commercialization
- to promote a culture of entrepreneurship throughout the state

The outcome will be an Indiana
Entrepreneurial Ecosystem.

National and International Partnerships

- Australia
- China
- India
- Israel
- Puerto Rico
- Korea



Signing of Memorandum of Understanding between Purdue University and the Department of Science and Technology, Government of India

- Energy crisis
- Global warming
- Healthcare delivery
- Homeland security
- Learning

It **IS** happening here!!



For information on Discovery Park:
<http://www.purdue.edu/discoverypark>
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