The Promise of the Prairie:
A vision for the future of University research

Strategic Advocacy • Value Creation • Creativity and Innovation

University of Illinois
Urbana-Champaign • Chicago • Springfield
Presentation Outline

• Looking Back to See Forward
• 100 Days of Listening
• Trends in Research Funding
• Strategic Intent
• Intersections of Opportunity
The 21st Century Land-Grant Mission:

Economic Development

2000
Economic Development added as fourth pillar of the University of Illinois

2000
University of Illinois Research Park, LLC Incorporated in the State of Illinois

2000
Chet Gardner named Vice President for Economic Development and Corporate Relations

2001
David Chicoine named Vice President for Economic Development and Corporate Relations

2003
New name: Office of the VP-Technology and Economic Development

2004
IllinoisVENTURES GP Formed

2009
Both Chicago and Urbana Offices of Technology Management transferred to VPTED

2009
Avijit Ghosh named Vice President for Technology and Economic Development

2011
New Name: Office of the VP for Research

2011
Larry Schook named Interim Vice President
UIRP Historical Overview
UIRP Value Added: Students

Total Student Employment

<table>
<thead>
<tr>
<th>Year</th>
<th>Employment</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006</td>
<td>218</td>
</tr>
<tr>
<td>2007</td>
<td>263</td>
</tr>
<tr>
<td>2008</td>
<td>303.5</td>
</tr>
<tr>
<td>2009</td>
<td>363</td>
</tr>
<tr>
<td>2010</td>
<td>375</td>
</tr>
<tr>
<td>2011</td>
<td>351.5</td>
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</tbody>
</table>
Technology Management

Getting smarter: Increasing Revenues, Decreasing Costs

<table>
<thead>
<tr>
<th>Millions of Dollars</th>
<th>FY07</th>
<th>FY08</th>
<th>FY09</th>
<th>FY10</th>
<th>FY11</th>
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<tbody>
<tr>
<td>Revenue</td>
<td>8.8</td>
<td>8.7</td>
<td>15.7</td>
<td>15</td>
<td>19.1</td>
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<tr>
<td>Reimbursements</td>
<td>1.0</td>
<td>1.3</td>
<td>1.9</td>
<td>1.4</td>
<td>1.5</td>
</tr>
<tr>
<td>Patent Expenses</td>
<td>4.8</td>
<td>5.5</td>
<td>5.4</td>
<td>4.7</td>
<td>4.3</td>
</tr>
</tbody>
</table>
## Patenting Activity in Illinois

<table>
<thead>
<tr>
<th>Rank</th>
<th>Organization</th>
<th>Patents: 2005-2009</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>Motorola, Inc.</td>
<td>916</td>
</tr>
<tr>
<td>2</td>
<td>Caterpillar, Inc.</td>
<td>589</td>
</tr>
<tr>
<td>3</td>
<td>Illinois Tool Works</td>
<td>386</td>
</tr>
<tr>
<td>4</td>
<td>Lucent Technologies</td>
<td>302</td>
</tr>
<tr>
<td>5</td>
<td>UOP</td>
<td>231</td>
</tr>
<tr>
<td>6</td>
<td>University of Illinois</td>
<td>155</td>
</tr>
<tr>
<td>7</td>
<td>Honeywell International, Inc.</td>
<td>140</td>
</tr>
<tr>
<td>8</td>
<td>Abbott Laboratories</td>
<td>139</td>
</tr>
<tr>
<td>9</td>
<td>Molex Incorporated</td>
<td>117</td>
</tr>
<tr>
<td>10</td>
<td>Panduit Corporation</td>
<td>117</td>
</tr>
</tbody>
</table>

UI is only state academic institution in the top ten.
National Recognition!
Quantitative and Qualitative

EnterpriseWorks at the University of Illinois

Part of the University of Illinois’s Research Park, EnterpriseWorks hosts early-stage tech firms, and has had particular success with information and biotechnology companies. About 70 companies have had their start at EnterpriseWorks since the incubator opened its doors in 2003. If you’re looking to hobnob with the venture capital flash that only Silicon Valley can offer, this may not be the incubator for you. But for tech firms that need some time to get their business in order, a residency at EnterpriseWorks provides

10 Start-up Incubators to Watch

As in past years, Patent Docs used the IPO’s list of top patent holders to compile the top “biotech and pharma” companies and organizations receiving U.S. patents in 2010. This year’s list of 36 companies and organizations drops from 31 in 2006 to 47 in 2007 to 43 in 2008 before rebounding to 47 last year. Of interest, all of the universities included in the report also are featured in Zahn’s biotech organizations. The list includes the University of California (#8), MIT (#20), Stanford (#22), Wisconsin (#30), University of Texas (#41), University of Illinois (#42), University of Pennsylvania (#52), and Cornell (#53), Cleveland State University (#58), University of Michigan (#58), University of Washington (#64), etc.

The purpose of the TechWeek is to honor individuals who are impacting the business and technology landscape companies to invent new computer programming languages. Theology leaders chosen through a review of nominations by the VENTURES and the

John Banta
Director, Illinois VENTURES

President of Corporate and Business Development. Prior to DigitalWork, Inc., John served as Vice President of Corporate Services for UBS PaineWebber (formerly Kidder Peabody), and as a member of the Board of Directors of the Investment Management Consultant’s Association.
100 Days of Listening
Conversations & Connections

- DCEO & Illinois Innovation Council
- Faculty Advisory Committee
- Governor Quinn
- Research Park CEO Roundtable; Baxter and Abbott
- Chancellors – Urbana, Chicago, & Springfield
- VCRs Urbana & Chicago
- Argonne & Fermi Labs
- Northwestern U & U of Chicago
- Mayor & City Manager - Champaign
- University Senates Conference
- Provosts - Urbana, Chicago, & Springfield
- Deans – Urbana & Chicago
- CEO Roundtable; Baxter and Abbott
- Provosts - Urbana, Chicago, & Springfield
Many Voices, One Message

- Time is now for change.
- Need to reach for greatness or the good ones will leave.
- Others do things when have financial difficulties!
- About time we had a presence in DC.
- Don’t forget about the arts and humanities.
- We should be dominating global innovation.
- UI needs to be easier for business to work with.
- No top down decisions!
- Engage the faculty!
- Stop the Balkan mentality between campuses!

Please make things happen! And faster!
Historical Research Trends

- Earmarks
- Reliance on Federal Grants
- Single PI Grants
- Campus Silos
UI Research Expenditures

Increase of $35M/year
NIH Funding By Grant Type

Single Investigator grants average $300K/year

Program/Center grants average $2M/year

(Adding $200M in 5 years is either 20 P/C or 150 grants Individual/yr)
Recruiting and Nurturing Talent

**Rainmaker** represents top 20 individuals for each Federal Agency of 3,000 potential PIs

Top 20 for each agency obtained approximately 50% of funding!

Shaded areas represent percent of total secured by “rainmakers”
Rainmakers and Funding

- < 3% of faculty are PIs of 50% of our research funding.
- Need to identify potential *Rainmakers* and provide professional development.
- However, *Rainmakers* are only effective if they have highly talented colleagues! All faculty need to be active scholars.
Research Trends Summary

• Single investigator grant funding will remain static or be reduced
• Program and center proposals are funded 10X over single investigator amounts
• Complexity of problems requiring multidisciplinary approaches will drive the funding of more program and center proposals

NEED TWO-PRONGED STRATEGY/SYSTEM- BOTH ARE CRITICAL!

• One that supports unit driven PI efforts
• One that supports “Rainmaker” multidisciplinary/campus activities (most likely in regional public/private partnerships)
Future Research Trends

- Program and Project Grants
- Public/Private Partnerships
- No More Federal Earmarks
- Federal Agency Priorities
- Strategic Research Priorities

Increasing complexity of problems to be addressed
Strategic Intent:
Provides clarity, focus & inspiration for realizing strategic aims

Unmet needs + Build on UI strengths + Create value = Action
INTERSECTIONS OF OPPORTUNITY
Lincoln’s Vision: Bold Actions in Challenging Times

1862
- Build Infrastructure
- Transcontinental Railroad

1862
- Engage with Community
- Morrill Act

1863
- Recognize Excellence
- National Academy of Sciences
Approaches to Address Trends

- Targeted Advocacy
- Value Creation
- Creativity & Innovation
Mission Ready: Criteria for Identifying Priorities

Developed in partnership with Office of Governmental Relations and Lewis-Burke Associates
Q3 2011 Priority Dashboard

- Hospital Management
- Diabetes, obesity, and cardiovascular research
- Student Aid
- Nutrition
- Outreach Clinics
- Health Disparities
- Public Policy
- Research
- Genomic Technology
- Computing
- Cost Policy
- Immigration
- Humanities
- Biomedical
- Argonne
- Agricultural Research
- Transportation
Creativity and Innovation: Defining the “What and How”

Operations

Infrastructure

People

Changing the Shape of University Research

Vice President for Research Faculty Advisory Committee

Don Chambers, UIC
George Crabtree, UIC
Diane Harris, UIUC
John Martin, UIS
Robin Mermelstein, UIC
Dennis Ruez, UIS
Taher A. Saif, UIUC
Matt Wheeler, UIUC
Our Vision: Bold Actions in Challenging Times

Ensuring access to the Arts and Humanities through technology

Promoting our Heroes and Rainmakers

Developing Health Innovation Park
NO BOUNDARIES:
This lack of boundaries, physical and mental...
opened up a whole new world for me

~ISABEL BEVIER, VISITING THE UNIVERSITY OF ILLINOIS IN 1900