Engineering Research Partnerships for the New Decade

Why University-Industry Partnerships Matter

2011 Engineering Research Council Annual Conference
March 5, 2011
Washington, DC
You've built your company based on productive relationships with customers, partners, and employees. So whether you're raising capital, making an acquisition or seeking private equity, you deserve an investment bank as committed to long-term relationships as you are.

As an independent financial services firm, Stephens is free to focus on what really counts: enduring relationships based on trust, integrity and a commitment to creating value. This focus has kept Stephens financially strong and independent from our founding in the Great Depression through the recent financial crisis.

To learn more, watch "Independence: The Stephens Story," a brief documentary film at stephens.com/relationships

Transactions build fees.

RELATIONSHIPS BUILD VALUE.

Partnering strategies work beyond R&D and commercialization
Opening thought

By engaging the university, we are working with one of the top people in the world in addressing our problems.

Rusty Ross—Sr. Technical Leader (March 2010)
The many faces in university-industry engagement

University
- Researcher
- Research Admin
- Tech Transfer
- Legal Counsel
- Foundation Relations
- Department Chair
- Deans Office
- Senior Research Officer
- Provost
- President’s Office

Industry
- Researcher
- Legal Counsel
- Business Unit
- Central University Office
- Leadership

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How do you get to this??????

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Why Partner?
Some Facts

➤ Industry funding typically represents 5-10% of a university’s R&D portfolio

➤ Companies spend 1-3% (on average) of R&D $$ externally* (but necessarily at universities)

➤ NSF survey shows that 60% of all successful small firms have a strategic business partner and 40% have strong ties to university researchers

➤ Economic Development Angle – especially important to public universities

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How To Partner?
Guiding Principles for U-I Partnerships

- Support the mission of each partner
- Focus on fostering appropriate, long term partnerships
- Seek to streamline negotiations to ensure timely conduct of the research and the development of research findings
Growing Pipeline via Open Innovation*

Open innovation at different stages with different partners

* Open Innovation - Henry Chesbrough

 Courtesy of Randy Guschl
Criteria for University Partnerships

- Curriculum/ranking/faculty strength
- Geography
- Influence of successful alumni
- Demographics including diversity
- Success in recruiting
- Success in research collaboration
Some Collaborations/Partnerships/Deals/Activities Representing Open Innovation

- Acquisition of IP and/or technology
- Acquisition of another company
- In-license
- Freedom-to-operate
- Further development
- Could mean access to improvements
- Cross-license
- Option agreement
- Evaluation agreement
- Joint development agreement (JDA)
- Contract research
- Sponsored research agreement (University)
- Membership in University Centers (some government funded, e.g. MRSEC, ERC)
- CRADA (Government Lab)
- Goali (Grant Opportunities for Academic Liaison with Industry)
- Unrestricted grants
- Consulting
- Internships
- Equity investments
- Donations (IP and/or hard assets)

Courtesy of Randy Guschl
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Typical Steps in “Going Outside”

- Consider Outside Collaborator
- Define/Communicate “The Need”
- Partnering Options
- Selection, Site Visits
- Negotiating and Dealmaking
- Funding Execution
- Delivering Results / Success

Courtesy of Randy Guschl
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- Consider outside collaborator
- Define/communicate “The Need”
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- Selection, site visits
- Negotiating and dealmaking
- Funding execution
- Delivering results / success
- Using a Third Party
- Developing/using External Networks

Funds/IP/Travel?  
Hardest Part!  
Beyond the obvious  
Other factors, MA  
Corp. grants/leveraging  
Liaison roles, Web conf.  
IP issues  

Courtesy of Randy Guschl

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Takeaways....

Inside the university

- Be clear and consistent in how you treat and value industry linkages and contracts – *may mean addressing T&P and definitely COI*

- Care about what matters – *understand university and researcher positions/perspectives on IP*

- University structure – *what do people at top think and what administrators make decisions*

- Work to develop strategic partners – *date less*

- It takes work and commitment – *you can play in this area but do you want to go (and make investment) to get to the next level*

- Faculty interests are not necessarily the universities – *not going to change, just work with it*

- Don’t fixate on master agreements – *these are oversold as the answer*
Takeaways....

Outside the university

- Companies are not monolithic – you are always dealing with people with their own currencies
- Companies are constantly changing – build broad coalition and don’t rely upon one person
- Industry funding is almost always more competitive to get than federal money – a question of spending out vs. competing forces
- Industry funding is typically smaller than a standard NSF grant - $50-$100K is the median from my experiences
- Global 1000s are totally different than SMEs – determine pain/investment level in dealing with them. Can you leverage state/regional support.
Closing Thoughts

For what shall it profit a man, if he shall gain the whole world, and lose his own soul?

Mark 8:36
Who we are ...what we do
A diverse and broad membership
UIDP Strategic Partners
Relationship with Other Associations

Partner as appropriate

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UIDP Mission

Enhance the environment for University-Industry research collaborations and promote US competitiveness

How we do this

Projects and Demonstrations

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Successful projects & demonstrations are at heart of what UIDP seeks to accomplish on behalf of its members.
Next Meeting

April 4-6, 2011
Pfizer Global
R&D Facility
La Jolla, CA

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Contact Information

Anthony M. Boccanfuso, Ph.D.
The National Academies
UIDP Executive Director

tony@uidp.net
803.413.5646

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