Penn State

- $800+ million in annual Research Funding since 2011
- 62nd in Licensing Income
- Why aren’t we more like Stanford?
- A major opportunity to be transformative
Thematic Areas

• Creating a Culture of Entrepreneurship
• Promoting Patents, Licensing and Start-ups
• Investing in Innovation
• Economic Development (UP and CCs)
• Embedding Student Career Success in the Curriculum and Advising
• Advancing Career Readiness through the Career Center
Creating a Culture of Entrepreneurship

- Open Smeal College of Business to other majors
  - Value for any/every degree if matches student interests
- Penn State Intercollege Entrepreneurship Minor – 7 clusters
  - Engaging, mindset, new ventures
- College of Business Certificate program (proposed - any major)
- E-SHIP and CEDE in Engineering
- Farrell Center for Corporate Innovation & Entrepreneurship
- Business-Liberal Arts minor
- Entrepreneurship in Law (proposed)
Creating a Culture of Entrepreneurship

• “Every great inventor needs a great entrepreneur to take a product to market.”
• Allow a chemist to be a chemist
• Hire professors of practice with experience in developing products and building companies (every college)
• New educational opportunities for students
• Penn State examples (Arts and Architecture; Law School)
• Budget request from Commonwealth of PA
Creating a Culture of Entrepreneurship

- Create successful partnerships between inventors and potential entrepreneurs within the university
- Fund projects that connect faculty/students from different areas (e.g. business and materials)
- Some examples – Health Challenge Sci IP Intern, tech transfer liaison
Creating a Culture of Entrepreneurship

• Create a student entrepreneurship program and student innovation foundation that enables student entrepreneurship
• Natural barriers
• Foundation support that green-lights student companies
• *Penn State: no foundation, but student support for entrepreneurship in some colleges*
Creating a Culture of Entrepreneurship

- Develop a reward structure for faculty/staff for entrepreneurial activities and success
- Promote greater media coverage of our successes
- *Penn State – part of annual performance reviews*
Promoting Patents, Licensing, Start-ups

- Expand upon IP fairs that attract investors/partners
- Incentivize translation of ideas into products and services: competitions with financial rewards that identify/support potential licenses, new processes and start-up companies
- Penn State: some internal college competitions (engineering, agriculture, IST)
- Fund for Innovation
- Ben Franklin IP fairs
Promoting Patents, Licensing, Start-ups

• Provide the Office of Technology Management with the resources/processes to actively promote patents, licensing and start-ups
• **Penn State: AVP for Research and Technology Transfer; Ben Franklin Technology Center; Commercialization**
• New hires proposed
• **Budget request from the Commonwealth**
Promoting Patents, Licensing, Start-ups

• Create a Penn State-branded platform designed to attract angel investors and venture capital
• Format that meets investor expectations
• Cascade of groups
  • Local
  • Alumni (enhancing relations/opportunities)
  • Broader world
• *Ben Franklin partnership; Sci Biotech Board*
Promoting Patents, Licensing, Start-ups

• Create a variety of transitional spaces for start-ups: from a desk in an environment with mentors (start-up, legal, financial, investors) to space that enables different levels of growth with appropriate lease costs

• CBICC, New Leaf (limited mentoring, time) and Innovation Park ($30+ per square foot)
Promoting Patents, Licensing, Start-ups

• Develop external enterprises in partnership with communities or as stand-alone entities capable of attracting product development funding from the federal government
• Set up a corporation designed to attract small business funding
Investing in Innovation

• Identify/fund areas that have economic potential, particularly if they have the added benefit of stimulating economic development at any campus
• Identify/fund areas that will create market growth and career opportunities for students
• High level of corporate funding; hiring
• Penn State Small Business Development Center
• Budget request from the Commonwealth
Economic Development (UP and CCs)

- Participate at a high level in economic development councils and chambers; community visioning
- *Penn State: almost universal desire across PA*
Economic Development (UP and CCs)

• Incubate start-up companies and help recruit companies based on PSU intellectual property and workforce creation
• Target areas of growth in alignment with potential by region
• *Promoting and challenging the State, Chambers, etc. to enable our participation and partnership*
Economic Development (UP and CCs)

• Help transform the region as a destination/community that attracts businesses
Embedding Student Career Success in the Curriculum and Advising

• National discussion: need only two metrics to judge a university – jobs and $$
• Difficult to predict the job market
• American consumer: we don’t tell our students what they are allowed to study
• Lessons from the Soviets
• Not everyone is in it just for the money
Embedding Student Career Success in the Curriculum and Advising

- List job titles by degree level, types of employers and national salary/employment data on every major
- Focus specifically on identifying the success record of our graduates as the strongest indicator of student career success
- Requirements by ABET
Embedding Student Career Success in the Curriculum and Advising

• Help ensure that elements of career success are embedded in our curricula (experiential learning, critical thinking and communication skills)

• Nearly every business magazine survey places Penn State at or near the top in starting salaries or cites Penn State as the place to recruit
Embedding Student Career Success in the Curriculum and Advising

- Help students make meaningful choices through a map of the knowledge, skills and abilities that occupations require and ensure that we align these with various degree programs
- *Penn State: very common, but universal?*
Embedding Student Career Success in the Curriculum and Advising

- Connect students deliberately to opportunities for economic development created through Penn State IP
- Teach at the cutting-edge and promote economic development at that same cutting-edge
- Career training
- Advance and combine World Campus corporate partnerships with resident instruction and internships
Advancing Career Readiness through the Career Center

- Promote strong programming for interviewing, resume building, career guidance, partnerships with alumni, to take career success to a higher level.

- *Penn State: highly ranked Career Center - No. 1 by Princeton Review*
Objective: Create a powerful path that enables PSU to be recognized as a driver of economic development and student career success

Many existing elements (many missed in this presentation)

Goal to fill the gaps and create a comprehensive program

Change in direction in appropriation funding request
Questions?