Office of Technology Transfer
Overview
Cluster Hire Faculty Orientation
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Director
Impacts from NC State Technology Transfer

- 800 U.S. Patents (> 1,500 total)
- Top 10 in License Agreements with Industry Partners
- 270+ Products to Market
- 100+ Start-up Companies
- > $1.5B in Venture Capital Investment
- > 6,000 Jobs Created from Start-ups
NC State’s Office of Technology Transfer

Who, What, and Why

- **Who.** A team of customer service oriented professionals that have broad expertise in business development, patent law, and research.

- **What.** A service organization providing technology development and intellectual property support to NCSU employees.

- **Why.** Successful Technology Transfer:
  - Raises the visibility of University research, facilities and expertise
  - Creates new funding opportunities through strengthened ties with industry
  - Helps recruit and retain faculty interested in seeing their research translated into products
  - Stimulates economic development: new products, new companies, new jobs
  - Benefits the public
OTT Overview

- 6 Licensing Professionals
  - 2 reporting to the Associate Director for Life Sciences
  - 2 reporting to the Associate Director for Engineering and Physical Sciences
- Assistant Director, Venture Development
- Assistant Director, Business & Licensee Compliance
  - 2 Financial Managers
  - 1 Compliance Specialist
- Assistant Director, Operations & Strategy
  - 1 Patent Data Specialist
  - 1 Agreement and Invention Disclosure Specialist
- Agreements Manager (MTAs, CDAs, IIAs)
OTT Approach

- Customer Service focus
- A very robust approach to new invention assessment
  - Inventor meeting within 30 days, notice to inventor within 90 days
    - Outcomes: marketing, awaiting invention development, decline management
- Constant portfolio monitoring
  - Re-assessment at each stage of patenting, solicitation of market feedback, etc.
- Integration with the Innovation Ecosystem to support new technologies:
  - Chancellor’s Innovation Fund, College of Management’s Hi-TEC Program, Blackstone Entrepreneur’s Network, Small Business Technology Development Center (SBTDC), Center for Entrepreneurial Development, North Carolina Biotechnology Center, Entrepreneurship Initiative, etc.
University employees are required to assign rights to their inventions to NCSU.

Exceptions: outside the scope of employment and no university resources used.

Royalty Sharing:
- 50% to the Patent Trust Fund
- 40% to the Inventor(s)
- 5% to the Department(s)
- 5% to the College(s)
How Does OTT Decide What to Patent?

- All incoming Invention Disclosure Forms are assigned to a Licensing Professional for triage.

- During the triage process, the licensing professional meets with the inventor(s), reviews the potential applications of the technology, prior art/patentability issues, potential licensees and market opportunity.

- A formal presentation is made by the licensing professional to the licensing team and a strategy is agreed upon and reported back to the inventor(s).
$2.5M proof-of-concept fund to validate pre-commercial technology milestone to strengthen the licensing/commercial potential of intellectual property with significant commercial potential

Invention disclosure must be submitted to OTT prior to submitting a proposal (RFP issued annually)

4-7 awards annually, maximum $75K, plus extensive mentoring and project management support

17 projects funded to date – 2 startups launched, 5 commercial licenses, $2.8 M awarded in additional development funds
Chancellor’s Innovation Fund
Awarded Projects

2011
- Bed bug trap
- *Salmonella* vaccine for poultry
- Drug-impregnated nanotubes for wound healing
- UV-resistant nanocoatings

2012
- Better tests for *Norovirus*
- Safer cloud computing
- Lighter, stronger armor for soldiers
- Robotics that put a spring in your step
- Faster download speeds for smartphones
- More reliable access to cellular networks
- New psych tests for job applicants

2013
- Monitoring Your Sleep
- Predicting Canine Cancer Outcomes
- Treating Canine Allergies
- Improving RFID Systems
- Harnessing Plasma Growth
- Tracking Grad School Info
Chancellor’s Innovation Fund
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Customized support for each startup project

- Assist in business plan development, licensing and launch planning
- Leverage internal and external innovation ecosystems to provide
  - Assistance in finding commercialization funding
  - Talent and management
  - Strategic partners

Provide marketing opportunities to increase visibility and attract partners