Collaborating with Corporate Partners

UNIVERSITY STARTUP DEVELOPMENT WEBINAR SERIES
SPEAKERS

Tony Stanco, JD, LL.M.
NCET2 Executive Director
Former U.S. Securities and Exchange Commission Senior Attorney

Vickie Scarborough, Ph.D.
NCET2 Corporate Startup Development Officer and
Former Program Director for the Global External Technology Team at Sherwin-Williams
BACKGROUND ON THE STARTUP DEVELOPMENT PROGRAM
Commercialization Model Timeline

- Congress seeks to understand commercialization of $B137 annual R&D in Fed Labs / Universities
- NCET2 Congressional Commercialization Summit – Corporate Sub-committee Formed
- First Model Proposed
- Model Vetting Roadshows: CA; PA; NY
- Congressional Briefs
- (Pilot) First Demo Day
- Second Demo Day
- Start-up Development Officers Pgm Announced
- IP2 Startup Pgm Announced
- 2015
- 2016
- 2017
Startup Development Program

• Congress funds $137 billion in federal funded research at universities and federal labs

• Excellent opportunity for researchers and entrepreneurs to build a university startup around that IP
  – Universities have programs to help you

• NCET2 Fortune 500 members and SDOs who will partner with university startups to help develop and fund those startups
Startup Development Program

- NCET2 Startup Development Officer will also help university entrepreneurs, faculty, researchers, and students create, develop and fund market aligned university startups (http://ncet2.org/sdo)
SDO SERVICES

• Early management teams of university entrepreneurs, graduating students, faculty, and researchers
  • Business plan
  • proof-of-concept
  • prototyping
  • early product development
  • SBIR, Angel, and VC funding
  
  — “Commercialization Experiments”
  • Get to work with Fortune 500 companies, angels, VCs, and serial entrepreneurs to help commercialize university and Federal Lab technologies
Benefits

• Startups/Entrepreneurs/Faculty/Researchers/Students
  – Access to professional SDO talent to help create, develop, and fund your startup

• Universities
  – Moving IP to market for significant market impacts
  – Graduating students into startups and working with Fortune 500 and SDOs
SPEAKERS

**Vickie Scarborough, Ph.D.**
NCET2 Corporate Startup Development Officer and Former Program Director for the Global External Technology Team at Sherwin-Williams
Collaborating with Corporate Partners
What do they want to know

Victoria Scarborough, Ph.D.
NCET2 Corporate Startup Development Officer
Benefits

• Universities
  – Moving IP to market for significant market impacts
  – Graduating students into startups and working with Fortune 500

• Fortune 500 Corporates
  – De-risked products and startups aligned to technology and business strategy needs for business units

• Angel and VC Investors
  – Better ROI with aligned exits and strategic partnerships with corporates

• Startups Development Officers (SDOs)
  – Working with faculty, researchers, students and universities to create $100million+ companies and products
Benefits

• Startups/Faculty/Researchers/Students
  – Access to professional SDO talent to help align IP and startups to IPO markets and corporate exits/strategic partnerships

• This webinar is about how corporate SDOs help connect you to corporates for strategic alliances, partnerships, sales, funding, and exits
Submit IP/Startup to NCET2

• Universities are asked to submit both non-licensed intellectual property (IP) and startup companies to be scored by our Corporate Selection Committee

• The highest scoring startup companies will be selected for development by SDOs

• The highest scoring IP can form the basis of a new startup company
NCET2 Corporate Member

- They provide info/tech needs for intake/search for IP and startups
- They score IP and startups submitted to NCET2
- They work with NCET2 Startup Development Officers (SDOs) to develop business plans and milestones for high-scoring startups and IP developed into startups
NCET2 Corporate SDO

- Experienced technical & business professionals
- Work as a liaison between university startup and corporate partner
- Provide both technical and business guidance as it relates to the needs of the corporate partner
# Commercialization Readiness Levels

<table>
<thead>
<tr>
<th>CRL</th>
<th>Technical Milestones</th>
<th>Business Milestones</th>
<th>Funding Milestones</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>Research Validated</td>
<td>Opportunity Validated; corp. license if applicable</td>
<td>Public Research Grants</td>
</tr>
<tr>
<td>1</td>
<td>Startup and Technology development plan</td>
<td>Startup created, management team. IP licenses, Legal issues settled</td>
<td>Public / Private</td>
</tr>
<tr>
<td>2</td>
<td>Market and Technical feasibility established</td>
<td>Business plan validated at level 1 (accelerator) and level 2 (CCC)</td>
<td>Public: SBIR / STTR Ph 1; other public sources / University Mentor-Angels</td>
</tr>
<tr>
<td>3</td>
<td>“Works-Like” laboratory Proof of Concept</td>
<td>Key corporate advisors in hand; pharma target validated</td>
<td>Public; Ph 2 SBIR / STTR, other / University Mentor-Angels</td>
</tr>
<tr>
<td>4</td>
<td>“Works-like” operational Prototype</td>
<td>Commercialization plan updated incl. competitive update; tech landscape; preclinical validation and safety profile</td>
<td>Public; Ph 2 SBIR / STTR, other / University Mentor-Angels</td>
</tr>
<tr>
<td>5</td>
<td>Operational Product Development and Launch</td>
<td>Funding for manufacturing/organizational development; human clinical validation</td>
<td>Public; Ph 2B SBIR / STTR, other; Angel. Pharma: corp./VC/Angel</td>
</tr>
<tr>
<td>6</td>
<td>Sales/Service / support/Scaling</td>
<td>SSGNA in place $0-1 million Revenues</td>
<td>Angel / VC / Corp</td>
</tr>
<tr>
<td>7</td>
<td>Sales/Service / support/Scaling</td>
<td>$1-5 million Revenues</td>
<td>Angel - VC / Corp</td>
</tr>
<tr>
<td>8</td>
<td>Sales/Service / support/Scaling</td>
<td>$5-10 million Revenues</td>
<td>VC / Corp</td>
</tr>
<tr>
<td>9</td>
<td>Sales/Service / support/Scaling</td>
<td>$10-100 million Revenues</td>
<td>VC/Corp</td>
</tr>
<tr>
<td>10</td>
<td>Sales/Service / support/Scaling</td>
<td>&gt;$100 million Revenues</td>
<td>Exit / IPO</td>
</tr>
</tbody>
</table>

- Confidential and Proprietary - Do Not Share or Distribute without Prior Written Authorization - (c) July 2017
Bridging the Knowledge Gap

The SDO’s job is to help the startup understand how to best provide for the needs of the corporate partner.

So what does a startup company need to understand when collaborating with a large corporate partner?
Small to Big

• Working with larger companies can present small university startup companies with a unique set of challenges
  – Fear of size difference
  – Not knowing who to talk to
  – Slow v fast pace of project completion
  – Monetary differences
  – Resource allocation
Finding Corporate Partners

• Identify what you believe to be the best market opportunity for your technology
• Who are the key corporate players in this market?
• What markets does their business address?
• How do they go to market?
• Conduct due diligence on each opportunity
Fundamental Questions

• Startups must be prepared to answer some key questions from corporates
• A successful collaboration typically depends on how well you can answer these questions
• Do not assume you really know the technical direction of the corporate partner
• Do not advise/tell them how to conduct their business
What do they want to know?

People

• Who are you and how are you staffed?
• It is essential to have a person primarily rooted in the technology, others to do work in the lab, and—most importantly—a leader who has experience in business.
• Know that academic and business backgrounds respectively represent two distinct skill sets, but each must be strong for long-term survival.
What do they want to know?

**Funding**

- How are you funded and for how long?
  - Typical SBIR funding is a good signal to large companies that you have been reviewed and have a good team in place to get through proof-of-concept

- Do you expect money from them?
  - How much? And for what?

- Are there any obligations to venture capital groups or other funders?
What do they want to know?

*Intellectual Property*

- What is the status of your IP
- Are there other countries covered besides the US?
- Who owns the IP - you or the university?
- If owned by someone else, what technology verticals are covered
What do they want to know?  
**IP Weight**

- Does your IP represent an addition to existing technology?
- Does it raise the bar to another level?
- Does your IP represent a true, new to the world, breakthrough?
  - Breakthrough technology typically needs a longer ramp-up time to commercialization
What do they want to know?

IP Relevance

• How much current IP exists in this technology space?
• Too much may leave you little room to find differentiation
• Too little could present more risk that needs long-term research
What do they want to know?

**Timelines**

- Where are you in your technology roadmap?
- Do you have samples to share?
- Do you have a prototype system?
- What data has been developed?
- How much data is yet to be developed?
What do they want to know?

Competition

• How do others address this technology need?
• Are there other more viable options available to solve the need?
• How are you different?
• How are you the same?
• Are you price comparable?
What do they want to know?  

Culture

- Does your corporate culture match theirs?
- Flexibility is key

“Culture eats strategy for breakfast”
What do they want to know?

Differentiation

• Will your technology differentiate you from others?
• Is it disruptive to the momentum of others in the field?
• Knowing your corporate partner is the key to answering this question
Development of Milestones and Funding Support

• Market aligned startups from University Startups Demo Day with significant Fortune 500 interest invited into Startup Development Program

• Startup Development Officers will work with startups, universities and corporates to formulate development path for 2-5 years with specific semi-annual milestones and provide funding support from SBIR, angels, VCs and corporate sources
Small Business/Start-ups

• Good source for interesting new technologies
• Developed on a faster pace
• May be very naïve about what corporates really need
  – Homework, homework, homework!
• Speed differences are a stressor
• You must have patience
Big Business

- Every large business has its own set of unique questions it must answer for itself before beginning a partnership
  - It’s a SLOW process
  - Lots of stakeholders
  - Budget cycles can be critical
  - No Patience, Cautious, & Risk Averse
  - Don’t communicate enough
  - May regard start-ups as riskier partners

- Understanding how your answers may help the corporate partner is essential to a successful relationship
  - Homework
Bottom Line

- Develop a business case agreeable to ALL key stakeholders
- Clearly articulate expectations for both parties
- Create milestones for progress that include options to go forward
- Under what conditions will the relationship be terminated (when are we done?)
Technical Areas of Interest

**Pharma & Medical**
- Biotechnology
- Medical Devices
- Pharmaceuticals
- Veterinary medicine
- Genomics
- Antibody technologies

**Advanced Manufacturing**
- Materials
- Nanotechnology
- Semiconductors
- Sensors
- Aerospace
- Engineering & Chemistry
- 3D Printing

**Clean Tech & Chemicals**
- Agri-bio/ Agriculture
- Water
- Energy & Storage
- Environmental Sustainability
- Infrastructure
- Alternative Fuels
- Solar

**Information & Communication**
- Artificial Intelligence
- AR & VR- Reality
  - IoT
- Big Data
- Defense

**Consumer Platforms**
- Consumer Products, Retailing & Services
- Cosmetics
- Food & Nutrition
- Personal Care
Engage with NCET2 and the SDOs

1. Submit your IP or startups to NCET2
   • The SDOs and Corporates can review your IP or startup to determine if you are a good candidate for the Startup Development Program
   • Email us at startupdevelopment@ncet2.org to request a copy of the sample Application Forms (so you can prepare the information)
   • Formally accepting new submissions in November

2. Become an NCET2 SDO
   • Open to: Ex-Corporates in Open Innovation/Venture Capital, Serial Entrepreneurs, Active Angel Investors
   • Send your CV and with a short note about wanting to know more about being an SDO to startupdevelopment@ncet2.org