

# **UIDP26 Academy Workshop Emerging Models of Innovation** San Jose, California April 17, 2018

### **Background**

Corporations and universities have a shared interest in fostering the creation of successful innovations that address major societal needs and challenges. Corporations are presently being transformed by new technology development, and increasingly fast paces of technology development; universities are increasingly interested in solving applied, "real world" problems as well as show material benefit to local, statewide and national communities and economies.

Today, innovative success is highly episodic and most efforts at university-industry "tech-transfer" show modest success. Improved performance could have a major positive impact on society.

### We address the following:

- What have we learned in the last five to ten years about the most advanced and promising models for successful value creation?
- ► How can the value of research be maximized by improving the mechanisms that connect research and industry?
- How can companies and universities work together to jointly optimize the research and innovation ecosystem?

## Agenda

- 8:00 8:15Welcome and overview of event – Tony Boccanfuso (UIDP)
- 8:15 8:45Overview/analysis of current approaches, including pre-workshop membership survey results - Tony Boccanfuso (UIDP)

Over the last several years, companies and universities have implemented novel approaches to how they seek to work together to support their research and innovation programs. An overview of these approaches includes:

- Co-location
- Collaboration metrics

- Economic development/workforce development
- Engagement of international university/industry teams and global markets
- Investors financing R&D directly
- Master agreements
- Pre-negotiated and template agreements
- Progressive IP/commercialization models (e.g., tech fees, public dedication)
- Research parks/innovation spaces
- Researcher exchanges
- Students as catalysts and connectors
- "Triple helix" (university-industry-government) collaborations
- Venture philanthropy (e.g., Research Acceleration and Innovation Network established by FasterCures)

#### 8:45 - 9:15University perspective – Kari Roth (Ohio State University)

Ohio State has developed an innovation partnership model that builds on its research foundation to evolve the university's culture and mission to include the translation of knowledge and assets to solve the world's most pressing problems in the 21st century. By creating unique innovation partnerships with the private sector, Ohio State is creating and delivering value for its students, staff, faculty, and external collaborators through long-term, mutually beneficial relationships. A recent, successful case study will be presented demonstrating Ohio State's working model for connecting research and industry, creating value, and working collaboratively in a distinctive innovation ecosystem.

#### 9:15 - 9:45Company perspective – Brad Roberts (Xinova)

The past decade has seen a shifting of value in intellectual property, resulting in a much more sustained focus on solutions vs. patents and commercialization vs. portfolio creation. Solutions in response to commercial problems and opportunities take on many time scales, and fast iteration is critical when corporate timelines frequently are based on quarterly numbers. Bringing that context to universities and traditional research models is a space where Xinova seeks to build bridges, between corporate needs and university environments accustomed to multi-vear grant cycles, with fruitful participation in an innovation ecosystem.

9:45 – 10:00 Government perspective – Barry Johnson (NSF)

Government plays an important role in the conduct and funding of research, and the development of new technologies that improve the human condition. This session will provide an overview of efforts by the National Science Foundation to disrupt current approaches to public/private partnerships through new initiatives such as the NSF Big Ideas and the INTERN program.

10:00 - 10:15 Break

10:15 – 10:45 Lessons learned from around the globe – Vivek Wadhwa (Carnegie Mellon University)

> Vivek Wadhwa is based in Silicon Valley and researches exponentially advancing technologies that are soon going to change our world. These advances-in fields such as robotics, artificial intelligence, computing, synthetic biology, 3D printing, medicine, and nanomaterials-are making it possible for small teams to do what was once possible only for governments and large corporations to do: solve the grand challenges in education, water, food, shelter, health, and security. This session will provide his insights into emerging models of innovation from throughout the world and the lessons that can be learned.

#### 10:45 – 11:30 Discussion with all facilitators and attendees

How can companies and universities work together to jointly optimize the research and innovation ecosystem? - discussion led by Pramod Khargonekar (UC-Irvine) and Chris Ramming (VMware)

The discussion leaders will share and solicit experiences from academia, government and industry and what can be done in today's environment to extract the greatest amount of benefit.

Consideration of next steps.