National Academy of Engineering Regional Meeting
April 18, 2012
Public Symposium Key Points Summary

Session I: Government-University-Industry Partnerships in Regional Innovation and Entrepreneurship: What Works and What Doesn't?

What <u>facilitates success</u> in G-U-I partnerships for venture creation?

People:

- Great leadership
- Spending time to learn about each other
- Ensuring the right people are in the right roles

Partnership:

- Sharing a strong value proposition
- Sharing compelling goals
- Agreeing on roles, contributions and expectations
- Agreeing on the decision-making structure/process
- Willingness to be unconventional

Operations:

- Knowing the consequences of inaction
- Willingness to compromise to create "wins"
- Iterating continually
- Using effective IP policies
- Addressing competitive markets

Success:

- Prioritizing broader impact over pure monetization
- Celebrating & publicizing successes

What <u>impedes success</u> in G-U-I partnerships for venture creation?

People:

- Poor and/or indecisive leadership
- Adversarial relationships and mistrust

Partnership:

- Cultures of inaction or fear of mistakes
- Letting lawyers make business decisions

Operation:

Not removing obstacles to success promptly
Overly cautious regulatory agencies
Demanding perfection over iterative successes
Allowing the bureaucracy to take over
Creating licensing terms that impede the licensee's success
Not appreciating that different licensing agreements are required for different technologies/stages/company types

Success:

Not understanding how each partner measures success

Session II: Educating Next Generation Innovators and Entrepreneurs: Expanding Beyond Business, Science and Engineering

- **Create an innovation and entrepreneurship ecosystem**

  Catalyze experiential education in innovation to develop the entrepreneurial skills needed initiate and sustain new ventures.

  Stimulate multi-disciplinary collaborations aimed at ultimate commercialization.

  Integrate government-university -industry networks for creating, mentoring, and investing in ventures.

  Value commercialization as educational and venture development experiences.

- **Embrace all student majors**

  The most successful educational models for innovation and entrepreneurship teach students from all major fields.

- **Embed entrepreneurship in regular classes**

  Offering entrepreneurship within regular classes remains the best vehicle to reach students because program requirements (degree and accreditation) leave little room for elective topics and the reach of entrepreneurship is ubiquitous.

- **Experiential learning is critical**

  Remove barriers and encourage experiential learning wherever possible including in formal classes, incubators and garages.

- **Failure provides important lessons**

  Whether they educate and encourage entrepreneurial interest, or discourage it, the lessons of failure are critical to learn.

- **Encourage unconventional, double-major programs and disciplines**

  To inspire creativity and seed out-of-the-box, unconventional approaches to solving problems, encourage broadly diverse program experiences.

- **Vision and passion for problem solving are mandatory**

  Because vision and passion are mandatory for problem solving, target students who have them, or help bring them out of others.

- **Use "sign and innovate" IP agreements**

  Reduce barriers to pursuing innovation by using standardize IP license terms through "sign and innovate" agreements.

- **Foster diversity among entrepreneurs**

  Though there is evidence that entrepreneurial activities/programs attract diverse people, the need for greater female participation, especially from engineering and sciences, remains strong.

- **Where you learn is important**

  Physical space influences behaviors – classrooms are not ideal spaces for innovation.

- **Recognize commercialization**

  Recognize commercial endeavors as a legitimate and valued responsibility of a university.