NYU-Poly & Invention, Innovation, and Entrepreneurship (I²E) in a Challenging Economic Environment

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- Invention, Innovation, and Entrepreneurship (I²E) and its potential to change the university

- The Alliance with NYU
  - Increased faculty interactions
  - Joint projects of increased dimension
  - Faculty hiring
  - Student body

- Potential for Economic and Workforce Development
The Concept of a University

Universities before 1810

Education (Faculty + Students)

University of Berlin, after 1810
Johns Hopkins University, 1870

Research
Education (Faculty/Students)

Late 20th Century Research University

Stanford University

Research
Education (Faculty/Students)

Tech Transfer
IP Comm.
The Vision for NYU:poly

A Research University with Tech Transfer and IP Commercialization as an Integral Part of the Mission of the University, connected through I²E
Institute of Technology with a Tech Belt
The CATT has been, is, and will continue to be a micro-cosmos of “research and education rooted in I²E”

• All CATs are meant to be “Translational Research Centers”
• All CATs are meant to create economic value
• All CATs are meant to contribute to high-tech Workforce Development

• This CATT facilitates the “test tube to bed side” transition
  ➢ Science breakthrough → engineering realization → technological application → product on the shelf in a ‘Radio Shack’
  ➢ Full-time Business Manager
  ➢ Industrial Partners of all sizes
  ➢ Stimulates and encourages spinning off new technologies & products
  ➢ Engages students in ‘translational research culture’

• This CATT has repaid NYS’s investment many times over (long-term: a cost-neutral proposition; actually much better)

• This CATT creates economic alternatives to the Financial Service Sector (Digital Media and Entertainment, Health Care, IT Networks, …)
• This CATT provides educational opportunities incl. retraining of sectors of the workforce that have become obsolete, entrepreneurial opportunities
The NYU – Poly Alliance

- **July 1, 2008:** NYU and Poly started a Consolidation Phase towards a Merger
- **In about 5 Years:** Poly will become NYU’s School of Engineering & Technology

**NYU Today:**
- It's big: >20,000 UGs, >40,000 students, 1,300 faculty; its Poly x 12-15!
- A major research university with 14 (very) independent Schools
- Arts & Sciences, Courant, Medical & Dental, Wagner, Stern, Law, Tisch
- No Engineering (not since 1973!!!)
- Limited IP Commercialization and Tech Transfer Strategy

Before July 1, 2008  →  Since July 1, 2008  →  About 2013

NYU  →  NYU-Poly  →  NYU

Poly

NYU
The NYU – Poly Alliance

**Increased Faculty Interactions:**
- Formal and informal
- NYU Provost Fund $5M (over 5 years) for collaborative seed grants
  - Round 1: 38 proposals requesting about $2.6M
- Funded joint projects: MRSEC, G4L Institute, promising IGERT proposal

**Joint Workshops to Stimulate Collaboration + Add New Dimension:**
- INSPIRE – Cybersecurity & Privacy
- Images & Imaging (Science, Engineering & Art)
- Wireless Technologies in Hospital Healthcare
- More to come (Biomaterials, Molecular Devices, …)

**Impact on Faculty Hires & Student Body:**
- Accelerate Poly’s ability to hire new faculty (25 over 4 years)
- Access to NYU’s national and international admissions apparatus
- Participation in NYU’s Global Initiatives, e.g Abu Dhabi
NYU-POLY, NYU, and the CATT

• The CATT is a valued cooperation partner for NYU Schools, in particular FAS, Courant, Stern, Law, Wagner, Medical School, Dental School, …

• The CATT has been instrumental in all 3 joint NYU – Poly Workshops; in all cases, the confluence of technology (CATT) with other aspects has added important new dimensionality to the topical areas + more to come

• In essence, what is technologically feasible is not always accepted by the end user (legal, economic, societal, policy aspects play a role)

• The CATT has also provided “technological beef” to several of NYU’s initiatives, which had been “soft” on technology and engineering, e.g., the CCPR, wireless hospital and health care, …

• The CATT through I²E has been a feeder of our BEST Incubator
• The BEST Incubator is the envy of NYU; the tail wags the dog
• The BEST Incubator is expanding, attracting from NYU Medical + Dental
The Institutional Importance of the CATT

• The CATT has been a pillar of research and educational strength at Poly for 26 years

• The CATT has continuously reinvented itself during that period to reflect the changing priorities in the Telecom and IT fields

• The CATT practiced I²E even before it became Poly’s mission

• The CATT will be a key player in Poly’s thrust of becoming NYU’s School of Technology and Engineering

• The CATT will be a key player in the institutionalization of research and education rooted in I²E and the cultivation of the concept of academic entrepreneurship

• The CATT will be a key player in the creation of alternative economic value and workforce development to Financial Services