

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

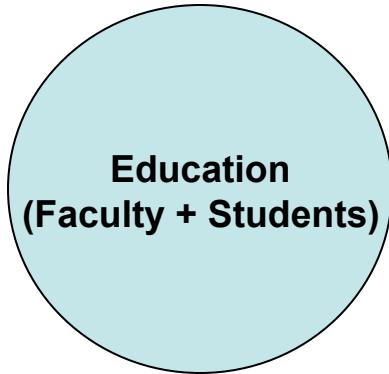
Kurt Becker

Associate Provost for Research & Technology Initiatives

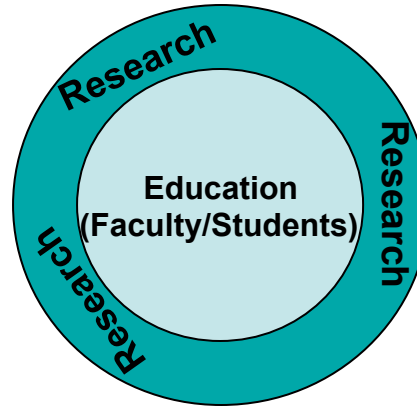
- **Invention, Innovation, and Entrepreneurship (I²E)
and its potential to change the university**
- **The Alliance with NYU**
 - **Increased faculty interactions**
 - **Joint projects of increased dimension**
 - **Faculty hiring**
 - **Student body**
- **Potential for Economic and Workforce Development**

The Concept of a University

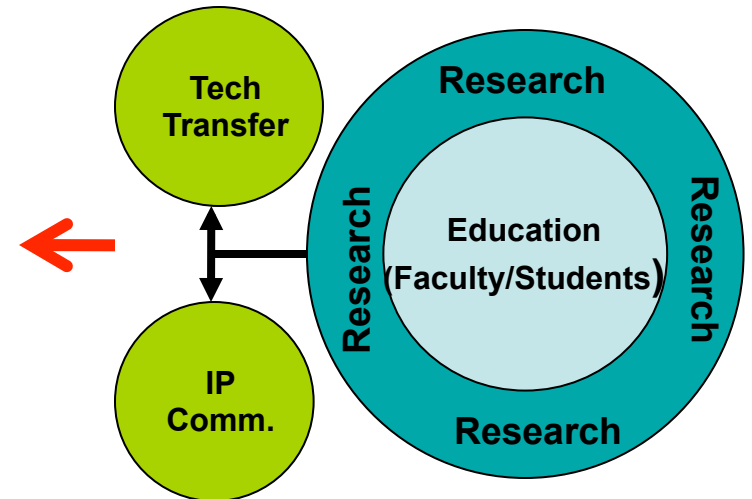
Universities before 1810



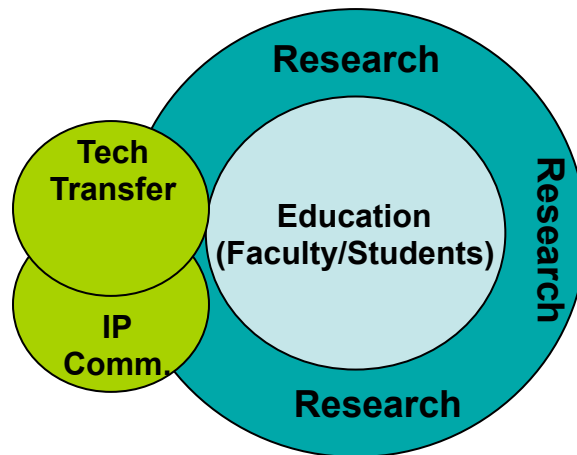
University of Berlin, after 1810
Johns Hopkins University, 1870



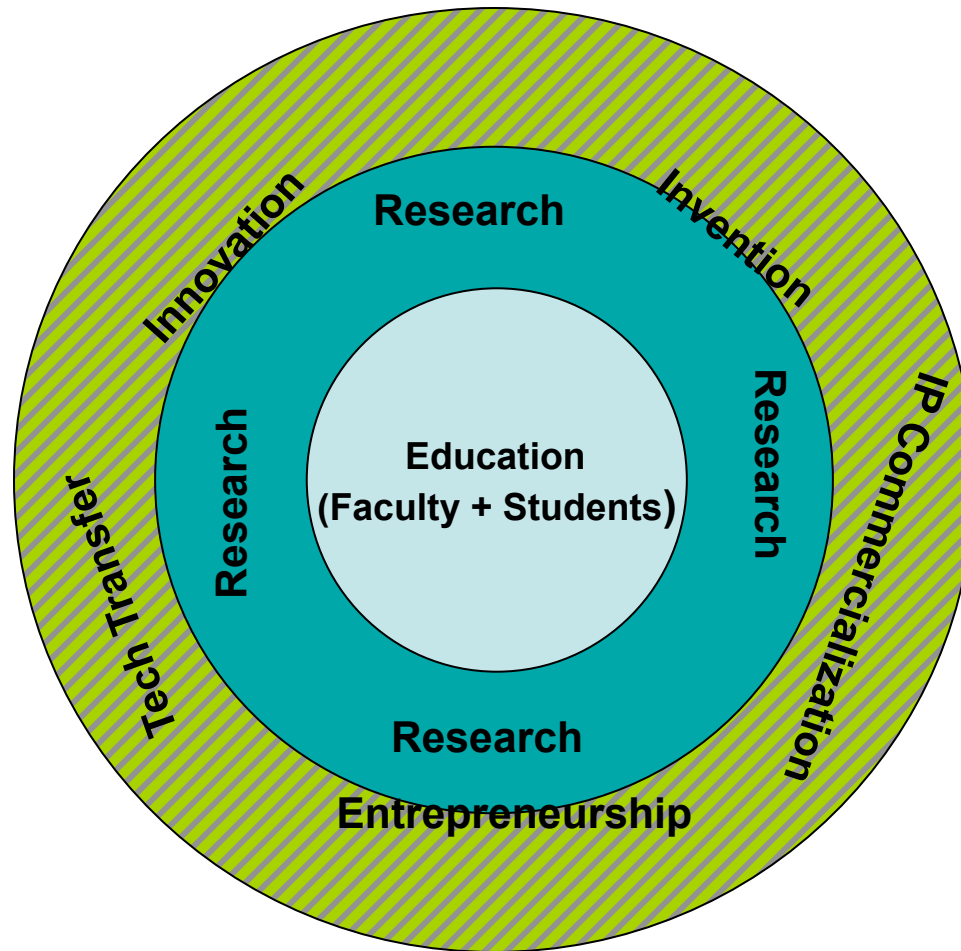
Late 20th Century
Research University



Stanford University

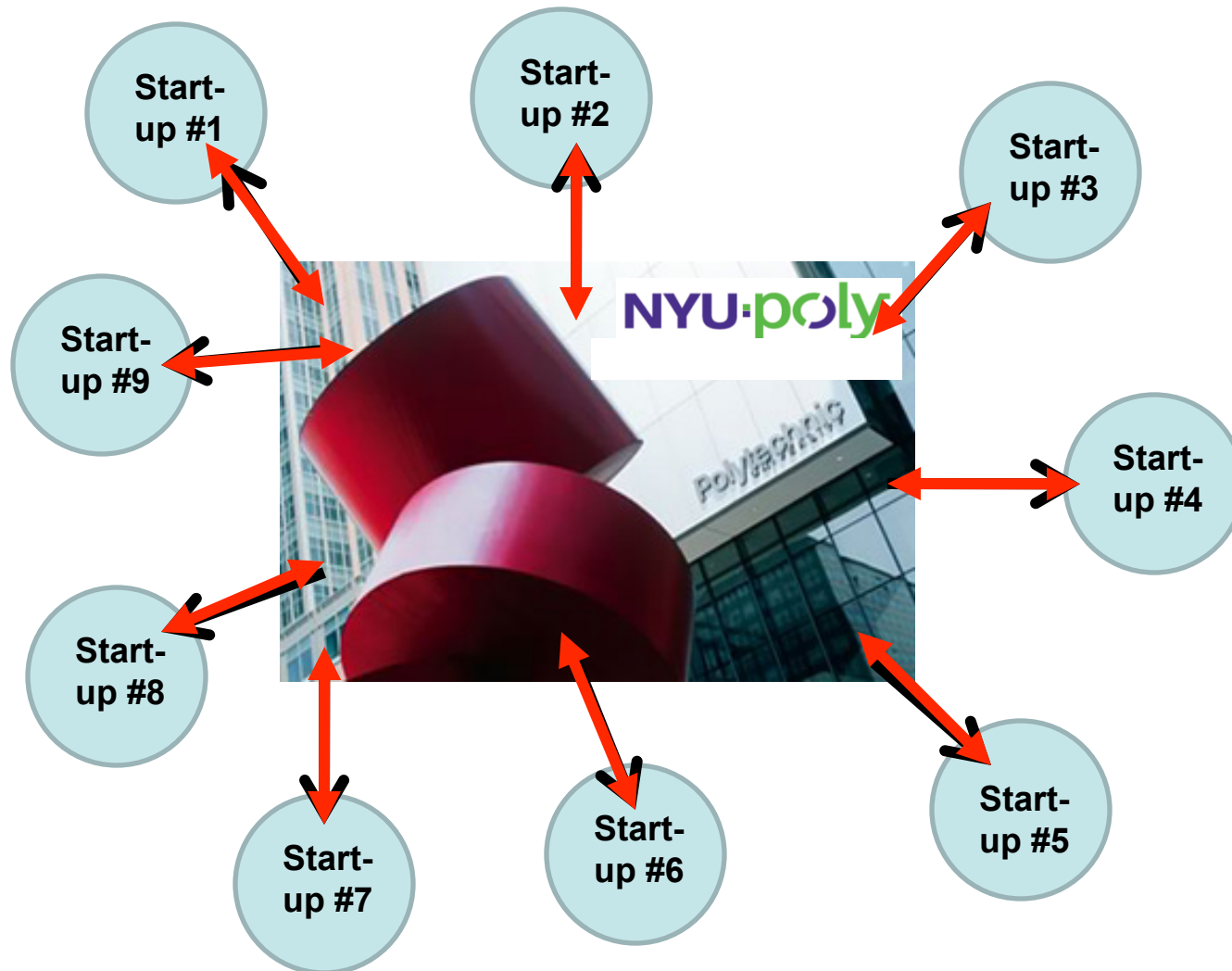


The Vision for NYU·poly



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



Research and Education rooted in I²E

The new NYU-POLY and the CATT

The CATT has been, is, and will continue to be a micro-cosmos of “research and education rooted in I²E”

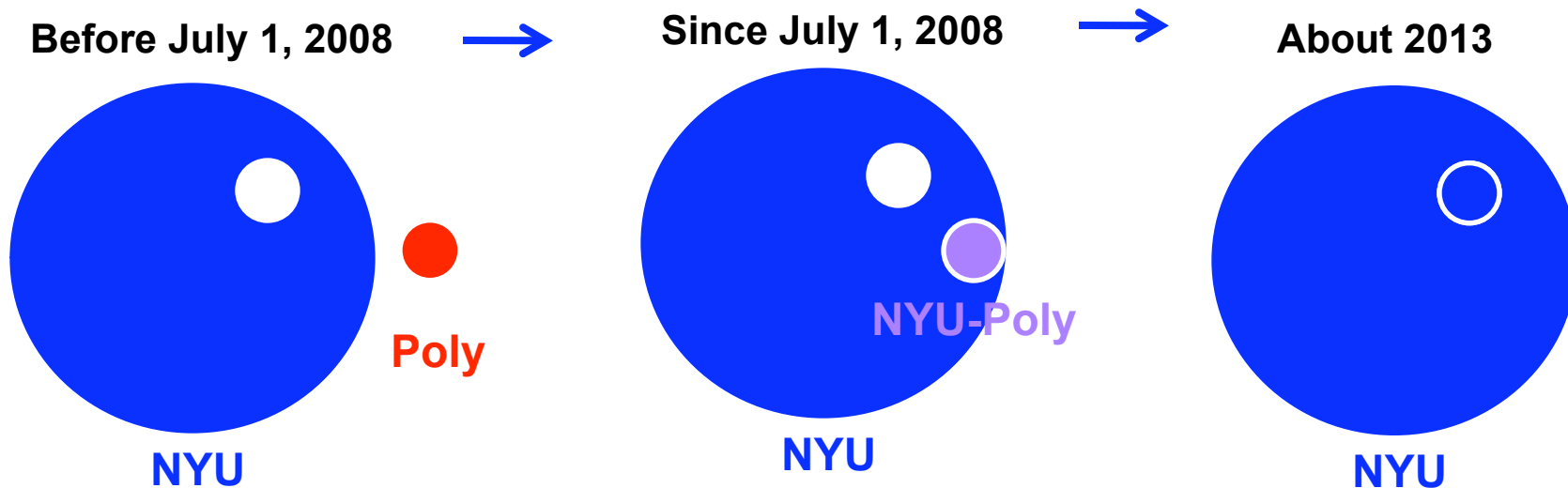
- All CATs are meant to be “Translational Research Centers”
- All CATs are meant to create economic value
- All CATs are meant to contribute to high-tech Workforce Development
- **This CATT facilitates the “test tube to bed side” transition**
 - Science breakthrough → engineering realization → technological 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:

- Its 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



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**

- **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