Tech Campus Fall 2012 Update

Dan Huttenlocher
Dean and Vice Provost
Building a New Tech Culture

• Collaborative mix of academic leadership, commercial intent and societal good
• Infusing campus with entrepreneurial spirit
  – Tech companies and nonprofits on campus
• Matrix of interdisciplinary tech-oriented hubs and core technology fields
• Strong ties but also complementary to Ithaca
• Technion-Cornell Innovation Institute (TCII), a global partnership for a global city
Fueling the Information Economy

- Industrial age pipeline/funnel model of technology innovation breaking down
  - Research and product development in tech sector often parallel rather than sequential
  - New collaboration opportunities and imperatives

- Change in tech R&D towards deep customer engagement a great fit for NYC

- Cornell Tech focus on “information layer” of urban life and commerce
Academic Disciplines and Hubs

• Core tech sector disciplines: CS, IS, ECE, ORIE
  – One-year professional masters degrees
• Interdisciplinary hubs
  – Planned two-year dual MS degree with Technion
• All fused with business and entrepreneurship
  – Johnson School, courses and Accelerated MBA
  – Entrepreneurial Office, projects and practicums
• Enrollment driven by resident faculty size and student quality
Academic Programs

- Hands-on apprenticeship style learning
  - Projects supervised by faculty and industry mentor
  - Practicum Fridays for real-world ties and skills
- All students study mix of tech and business
- Broadly interdisciplinary — faculty regularly teach in multiple disciplines and hubs
- Full masters degree programs, doctoral students spend initial year in Ithaca
  - Programs for juniors/seniors (no degrees)
Technion-Cornell Innovation Institute

• A 50-50 academic partnership with the Technion
  – Half of TCII faculty from each institution
  – Separate self-supporting finances

• Key part of the campus
  – Responsible for delivering interdisciplinary hub-based dual degree masters programs
    • Approval of faculty at both universities (fields at Cornell)
    – Collaborative research projects focused on hubs

• Follow Cornell policies as part of campus
Faculty

• Mix of tenure-track faculty, instructors and researchers
  – Academic excellence and broader tech impact
• Tenure-track faculty appointed in an existing department or school (tenure home)
  – Teaching and research at Cornell Tech, service to both, salary paid by Cornell Tech
• Majority of faculty teaching in a program are field members based in NYC
Academic Planning

- Grad fields and departments in core disciplines
- Faculty Planning Committee
  - Co-chaired by R. Manohar and D. Shmoys
  - Dual degree sub-committees of Cornell and Technion faculty
    - Cornell leads C. Cardie, S. Henderson, K. Pratt
- CAPP recommendations on academic structures
- Executive Committee of academic leadership
  - Co-chaired by Collins and Huttenlocher
Ithaca Campus Impact

- Separate self-supporting campus finances
- High visibility
  - Indications of positive impact on gifts to Ithaca campus and on enrollment yield
  - Opportunity to leverage for overall reputation
  - Increased opportunity for corporate ties
- Potential for broadening and growing faculty in range of departments/schools, particularly core
- Requires careful planning to build close ties and maintain complementary focus
High Degree of Public Interest

**The New York Times**
Cornell’s High-Tech Campus Will Have a Temporary Home at Google

**The Seattle Times**
New York is vying to become global high-tech hub

**The Wall Street Journal**
In novel move, NYC campus gets US patent officer

**Newsweek**
Roosevelt Island: New York’s New Tech Hub

**Forbes**
Former Twitter CTO Throws Down with New York Tech Campus

**The Chronicle of Higher Education**
Computer Scientist Leaves UCLA for the Fledgling CornellNYC Tech
Unique Urban Location
Campus Planning Principles

• River-to-river experience
  – Develop views from center of site to both riverbanks
• Diverse collection of open spaces
• Close link between indoor and outdoor spaces
• North-south pedestrian spine
• Buildings optimized for use and performance
• Sustainable campus
  – Net-zero goal for first academic building
Draft Phase I Site Plan

1 ACADEMIC
2 CORPORATE CO-LOCATION
3 RESIDENTIAL
4 EXECUTIVE EDUCATION CENTER
5 CENTRAL UTILITY BUILDING

A MEADOW
B TREE NURSERY

MEADOW TREE NURSERY CENTRAL OPEN SPACE ENTRY PLAZA

TECH PLAZA RESIDENTIAL YARD

Cornell University
Timeline

• S’13 Beta semester – CS MEng at 111 Eighth Av
• F’13 2 or 3 masters programs
• S’14 demolition and construction at RI campus
• F’17 move to RI campus (Phase I)
  – Multiple degrees, 300+ students, 40+ faculty
  – 200K sf academic space, 300-800K total space
• F’37 full build
  – Approx. 2000 students, 250 faculty
  – Approx. 2M sf total space, 1/3+ academic use