Lance R. Collins
Joseph Silbert Dean of Engineering
October 20, 2017
The World’s Top Engineering Schools

Berkeley
Cornell
U. Michigan

Caltech
Georgia Tech
Purdue

Carnegie Mellon
U. Illinois
U. Texas-Austin
The World’s Top Engineering Schools
Cornell Engineering Differentiators

Creating a New Educational Paradigm

Leveraging Cornell Tech Campus

Expanding Bioengineering

Enhancing the Energy Institute
NEW EDUCATIONAL PARADIGM
Diversity

• Female percentage in Freshman class is 51% women
  – We are well above the national average (21%, according to ASEE)
  – The overall undergraduate engineering population is 47%

• URM percentage in Freshman class is 19%
  – Of particular note, African American population is 5.5% up from 3.8%. We were aggressive in recruiting, plus the gift from Robert F. Smith increased our visibility
Engineering in the 21st Century

Create, Lead, Disrupt, Invent

Cornell Engineering
Grounded in Rigorous Fundamentals
Putting classroom knowledge to the test
Cornell Experiential Programs
Learning By Doing

Project Teams

eHub/Kessler Fellows/Ph.D. Commercialization Fellows

Business Minor with the Dyson School

Engineering Leadership Program

Product Design and Manufacturing Institute
CORNELL TECH
Transforming a University and a City
Engineering, Technology and Entrepreneurship are the key economic drivers for the 21st century.
BIOENGINEERING
ENERGY
PATH FORWARD
Challenge

Columbia: Senior Hires

Penn: Increasing its Faculty Size by 1/3

Harvard: $400M Endowment for SEAS

Princeton: Investment in Engineering Faculty and Campus
Strategic Faculty Recruitment:
Professorships
Startups
$60M
PHILANTHROPY

CBE:
Smith Gift Stewardship $50M*

BME:
Meining Gift Stewardship $50M*

Strategic Faculty Recruitment:
Professorships
Startups
$60M

*Indicates gift received: These two recent naming gifts demand faculty growth which requires investment in facilities.
Strategic Faculty Recruitment:
Professorships
Startups
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Facilities Master Plan: 150M
Sustain and Improve National Facilities (CCMR, CHESS, CNF);
Expand Wet Laboratories Across College;
Modernize Teaching Spaces

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Smith Gift Stewardship
$50M*

BME:
Meinig Gift Stewardship
$50M*

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These two recent naming gifts demand faculty growth which requires investment in facilities.
### IMPACT | SPACE, ENGINEERING QUAD

- Minimal Additional Square Footage
- Significant Upgrade to All Space Typologies

#### NASF Change by Space Typology

<table>
<thead>
<tr>
<th>SPACE TYPE</th>
<th>EXISTING NASF (A)</th>
<th>NEW NASF (B)</th>
<th>DIFFERENCE NASF (B-A)</th>
<th>% CHANGE (B/A)</th>
</tr>
</thead>
<tbody>
<tr>
<td>RESEARCH</td>
<td>465,677</td>
<td>479,379</td>
<td>13,702</td>
<td>3%</td>
</tr>
<tr>
<td>OFFICE</td>
<td>197,996</td>
<td>181,466</td>
<td>-16,530</td>
<td>-8%</td>
</tr>
<tr>
<td>TEACHING</td>
<td>132,687</td>
<td>144,854</td>
<td>12,167</td>
<td>9%</td>
</tr>
<tr>
<td>LOUNGE/STUDY</td>
<td>42,480</td>
<td>44,009</td>
<td>1,529</td>
<td>4%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>838,840</td>
<td>849,708</td>
<td>10,868</td>
<td>1%</td>
</tr>
</tbody>
</table>

- Includes wet labs, hybrid labs, computational labs, specialty labs, researcher workstations, and associated data and storage.
- Includes faculty and staff offices, office support, and conference rooms.
- Includes teaching labs, classrooms, lecture rooms, seminars, and student project rooms.
- Includes library, student study areas, building lounges, dining areas.
ENGINEERING QUAD MASTER PLANS 2012 - FUTURE
PROPOSED HOLLISTER HALL | CAMPUS GATEWAY
Phase One Renovation – First Floor (shown) and Basement (flexible lab; teaching and project space)
NANCY E. and PETER C. MEINIG SCHOOL OF BIOMEDICAL ENGINEERING | COMSTOCK HALL, PHASE 2

Option 2: Extended 3rd floor addition

Option 1: 3rd and 4th floor addition along south side
Optimistic Future for Engineering

Strategic Plan

Cornell Tech

Resources

Commitment
Cornell Engineering

The Bright Future