

BOSTON AREA CHAPTERREAL ESTATE DEVELOPMENTS IN LIFE SCIENCES

Panelists:

- · Jim Busam, Gilbane Construction
- Peter Cramer M+W Group
- Travis McCready, Mass. Life Science Center
- · Phani Sukhavasi, Vertex Pharmaceuticals

Hosted by Jacobs March 15, 2018

AGENDA 1. JACOBS' TOURS 2. HANCOCK TOWER HISTORY 3. REAL ESTATE DEVELOPMENTS 4. CASE STUDY

THEMES DRIVERS & TRENDS TYPES OF LIFE SCIENCE FACILITIES DELIVERY MODELS VERTEX CASE STUDY

Drivers & Trends

- Growing Need for Capacity
- · Location, Location (availability)
- Developer Capability
- · Brownfield or Greenfield Development
- Regulatory & Permitting Concerns
- Infrastructure (State, Region, City, Site & Building)
- · Schedule & Scope Change
- Workplace Amenities
- Culture



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Types of Life Science Facilities

- · Research & Development
- Pilot Scale Labs
- Manufacturing (cGMP, etc.)
- Warehousing (cGMP, etc.)
- Office Space
- Support (Amenities, etc.)
- Metrics
 - Costs/SF (location impact)
 - Lease Rates/Types (location impact)
 - Design Standards



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Ownership & Construction Delivery Models

- OWNERSHIP:
 - · Land Lease/Building Lease
 - · Land Lease/Own Building
 - · Own Both
- DESIGN/CONSTRUCTION:
 - · Traditional, Design-Bid-Build
 - EPCM
 - Design-Build
 - Design Assist
 - Construction Manager @ Risk
 - · Integrated Project Delivery



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Case Study

· Vertex Pharmaceutical



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