NYC Builds Bio+ Presents:
A VIRTUAL TOUR OF:
HUDSON RESEARCH CENTER AND
125 WEST END AVENUE

Thursday, June 17, 2021 | 1:00 PM – 2:30 PM | Online Zoom Event
Introduction
Matthew R. Weir, Taconic Partners

State of the Market
Jonathan Schifrin, CBRE

Hudson Research Center
Chun Leung, Taconic Partners
Jeff Wallerstein, NYSCF

125 West End Avenue
Nate Bliss, Taconic Partners
Matthew Malone, Perkins&Will
Lauren Pavlat, JB&B

Wrap-up

Q&A
Taconic Partners: Welcome and Introductions

Matt Weir, Executive Vice President
Nate Bliss, Vice President
Chun Leung, Assistant Vice President
Founded in 1997

Vertically integrated owner, operator, and developer

Developed, redeveloped, and repositioned over 12m square feet of office, mixed-use, and retail space, and over 6,500 units of for-sale and multifamily housing

Deep expertise in operating and developing mission-critical and flagship facilities for telecom, data-center, life sciences, TAMI, and FIRE tenants, including:

Google NYC
111 Eighth Avenue

Apple Flagship
401 West 14th Street

Samsung Flagship
837 Washington Street

Hudson Research Center
619 West 54th Street
Life Sciences in NYC: Our Vision

Matt Weir
Executive Vice President
Taconic Partners
LIFE SCIENCES THRIVES HERE

New York is recognized as a world-class hub for biomedical research and technology development. A wide range of companies at all stages of growth are flourishing as a result of the city’s deep pool of scientific research, technology and business talent, venture capital and government funding.

#1
The country’s largest biotech workforce

9
Academic/medical institutions - the world’s largest concentration

2.5M+
SF life sciences space in NYC

$906M+
Life sciences venture capital funding (2020)

~ 2.28B
NIH funding to NYC (2020)

6
Incubators (164K SF incubator space)

31%
NYC life sciences employment growth since 2010

16,000
Record life sciences employment in NYC at year-end 2020
Taconic Partners: Life Sciences Initiatives

Hudson Research Center

125 West End Avenue

Other investments
State of the Market

Jonathan Schifrin
Senior Vice President
CBRE
NYC Life Sciences VC Funding

RECORD FUNDING AMOUNTS

- New York City growth in life sciences VC investment outpaced MA & CA by 6x in the last five years
- NYS #3 in life sciences VC investment Oct. 2019-Sept. 2020 - $2.3 billion - behind only MA & CA
- Ratio of private to public investment has increased substantially in the past decade - VC funding for every dollar of NIH funding went from 6 cents in 2013 and 13 cents in 2016 to 73 cents in 2020. Still far behind CA ($2.25) and MA ($1.88) with significant runway for growth.

NYC NIH Funding

NIH FUNDS

- The NYC Metro area received an all-time high $2.9 billion of NIH funding in 2020.
- The NIH funding gap between NYC & Boston/Cambridge contracted from $728 million in 2011 and $367 million in 2016 to just $22 million in 2020.
NYC LAB SUPPLY PIPELINE

+3.8M SF (+223%)
Hudson Research Center
619 West 54th St

Chun Leung
Assistant Vice President
Taconic Partners
Latest addition to Hudson Research Center:

- **Type:** Biomanufacturing company
- **Product:** Sustainable alternative to palm oil through microbiology brewing
- **Founded:** 2017
- **Investors:** Breakthrough Energy Ventures, lead investor in $20M Series A in 2020
- **Current location:** BioLabs New York @ 180 Varick Street
- **Size:** 19,000 sf
- **Status:** Space fit-out underway with move-in later this summer
Construction Progress
13K SF Available
Delivery: Fall 2021

C16 Biosciences
A tenant perspective

Jeff Wallerstein
Chief Financial & Operating Officer,
New York Stem Cell Foundation Research Institute
125 West End Avenue

Nate Bliss
Vice President
Taconic Partners
THE FINEST AUTOMOBILE SERVICE INSTITUTION IN THE WORLD

SERVICE CENTER
WEST END AVENUE FROM 65th TO 66th STREET
FROM HISTORY TO VISIONARY

In 1929 as the world faced an unprecedented financial crisis, Chrysler Corporation envisioned a brighter future. It committed to a 20th century vision for innovation by breaking ground on both its iconic 42nd Street headquarters and a seven-story service facility which stands on this site, at 125 West End Avenue, to this day.

Today as the world faces an unprecedented health crisis, these industrial roots are the touchstone of a vision for a better tomorrow. The legacy of this industrial past is bringing forth a center of 21st century innovation; what the world needs now and for the future – a place for hope and healing.
For research and discovery, therapeutic advancements, digital health, and enhancing the quality of life, **125 West End Avenue** offers:

- 400,000 SF of state-of-the-art, purpose-built lab and office spaces
- Unique amenities include: Helix collaboration and amenity spaces, conference center, and roof terrace overlooking the Hudson River
- Robust loading on multiple levels
- Building-within-building opportunities with exclusive lobbies
- Delivering early 2023
Reach all of Manhattan in 30 minutes or less.

- Pivotal location at 66th Street, a 5 minute walk to Lincoln Center
- Easy access to West Side Highway
- Direct access via 65th Street, Central Park Transverse to East Side
- A C B D at Columbus Circle, 1 2 3 at 72nd Street
- 10 minute walk to Columbus Circle, 10 minute walk to 72nd Street
- Proximity to two subway stations with direct connection to commuter rail lines
- Walking distance to Hudson Research Center and Mt. Sinai West Campus
- Dynamic, convenient West Side neighborhood
- Central to workforce in NJ, Westchester and LI
- 30 minute drive to NJ, 40 minute drive to Westchester, 50 minute drive to LI
HEALTHIER FUTURES BEGIN WITH
SPACE TO DISCOVER AND INNOVATE

A top-to-bottom capital improvement program has been conceived and inspired by the world’s leading research and development centers.

- Complete renovation catering to R&D specifications
- New high performance façade
- New main lobby
- Unique building amenities - including internal Helix collaboration space
- New robust infrastructure, with redundancy and resiliency designed into key building systems
- Multiple configurations for building-within-a-building with private entry
- Drive-in, direct loading on multiple levels
- Environmental sustainability and wellness building features
**ROBUST INFRASTRUCTURE FOR LABS, ENGINEERING & COMPUTING SPACE**

- **Built in 1929**
- **High-performance Curtain wall façade**
- **13’3” – 16’ Slab height**
- **24’-33’ on Center column spacing**
- **150-250 lbs/SF floor load**
- **7 Elevators: 6 passenger 1 freight**
- **100% Outside Air**
  - No air recirculation centrally at the air handlers for lab/office floors
- **7,400 SF Roof Deck**

### Structure
- Reinforced concrete

### Sprinkler
- Fully sprinklered

### Fire Safety
- Class E

### Loading
- Multiple off street loading points (West 66th St or West End Ave)
- Private loading on 2nd floor off private loading ramp

### Electrical
- Designed to supply 10W/SF lab, 5W/SF office with additional capacity available at cost

### Emergency Generator
- Base building generator - 1,000kW, 480/277V
- Tenant generator - 1,000kW 120/208V at 3W/SF (optional)

### Fume Hoods
- Vertical pathways with grating are available for tenant’s fume hoods
- Central fume hood exhaust system located on roof
- Cannon type with N+1 configuration

### Acid Neutralization System
- 2,000 gallon capacity

### HVAC
- Dedicated outside air system (DOAS) provides up to 8 air changes per hour for labs (1.33 CFM/SF); 2 air changes per hour for the offices (0.33 CFM/SF).
- General exhaust, chilled water and hot water taps are available for tenant use available at the core walls.
- Process condenser water for supplemental use available for tenant to tap.
- System is designed for active chilled beams in the laboratory spaces and DOAS air terminal units or chilled beams in the office spaces.
STACKING PLAN

54,000 RSF floorplates and multiple loading access points provide maximum flexibility for **single or multiple floor users**.

400,000 SF
North & South vehicular access
Private entrance at ground level
Loading dock access

54,000 SF
ceiling height 15’9

54,000 SF
ceiling height 13’3

54,000 SF
ceiling height 13’3

54,000 SF
ceiling height 13’3

54,000 SF
ceiling height 15’9

54,000 SF
ceiling height 13’6

43,000 SF
ceiling height 13’6

35,000 SF
ceiling height 16’
A beehive of activity, 125 West End Avenue embraces an ecosystem of innovation.

Wet and dry labs, engineering zones, conference centers, informal pods and event space, all are designed to engage community and propel collaboration.
A distinguishing feature of 125 West End Avenue is the reimagining of the original automotive Helix into a place for collaboration and inspiration.
Spontaneous collaborations are sparked by a generous new lobby. Both tenants and guests greet each day with a renewed focus on research and technological advancement.
Level 2 | Option 2
50/50 Lab/Office (clinical diagnostic lab) + Drive-in Loading

54,000 SF

AREA LEGEND
- Bathrooms
- Lab
- Lab Support
- Loading
- Office/Amenity

TENANT PROGRAM COUNT
- Conference: 4
- Workstations: 36 @ 5'
- Office/Huddle: 14
- Open Huddle: 2
- Lab Benches: 135 @ 5'
- Fumehoods: 6
- Lab Support Rooms: 7
- Exam Rooms: 4
Level 3-7 | Option 1
50/50 Lab/Office

54,000 SF

AREA LEGEND
- Bathrooms
- Lab
- Lab Support
- Office/Amenity

TENANT PROGRAM COUNT
- Conference: 4
- Workstations: 138 @ 5'
- Office/Huddle: 24
- Open Huddle: 12
- Lab Benches: 142 @ 5'
- Fumehods: 12
- Lab Support Rooms: 10

Stack Key

West End Avenue
West 66th Street
Private Loading Ramp
Level 3-7  |  Option 3
100% Lab

54,000 SF

AREA LEGEND
- Bathrooms
- Lab
- Lab Support
- Office/Amenity

TENANT PROGRAM COUNT
- Conference: 3
- Lab Benches: 302 @ 5'
- Fumehoods: 18
- Lab Support Rooms: 20
Roof

- River views
- Lush landscaping
- Multiple seating areas + collaborative space
Glowing sunsets and river views provide a welcome respite from the day’s deep thoughts.
125 West End Avenue: Design

Matthew Malone
Principal, Science & Technology
Perkins + Will
Design Intent
Spontaneous collaborations are sparked by a generous new lobby. Both tenants and guests greet each day with a renewed focus on research and technological advancement.
125 West End Avenue: Engineering

Lauren Pavlat
Associate
Jaros, Baum & Bolles
Reduce Energy, Recycle Energy, Electrify HVAC Equipment

- Typical Design
- Energy Reduction Strategies
- Energy Recovery Strategies
- Electrification
**Reduce** Energy Use
- High performance envelope
- Next generation HVAC systems – DOAS and smart BMS controls

**Recycle** Energy
- Nothing wasted: Heat recovery through air handlers and water systems

**Electrify**: Carbon free
- No fossil fuel use
- Advanced heat pump technology
- Purchase “green” power
Heat released from cooling tower is a waste of energy.
CONDENSER WATER CHILLER PLANT DESIGN

No heat is released from cooling tower so no energy is wasted.

Heat from chiller plant returned to lab for reheat instead of cooling tower.

Heat from lab to chiller plant.

© Perkins&Vau. 2021
Heat Generation

Steam 57%
CW Recovery 43%

Space Heat of Rejection

Heat Lost

Heat Removed

Internal Gains

Energy Wheel
Heat Recovery: 62% Efficient

Heat In

Heat Supplied

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Wrap-up

Matt Weir
Executive Vice President
Taconic Partners