

Christopher S. Putman

Mechanical Option

Integrated Sciences Building

Northeast USA



Project Team

Owner | Information not for Publication
Architect | Diamond + Schmitt Architects, Inc.
Associate Architect | H2L2 Architects & Planners, LLC
General Contractor | Turner Construction Company
MEP Engineer | Crossey Engineering, Ltd.
MEP Engineer | Spotts, Stevens, & McCoy, Inc.
Structural Engineer | Halcrow Yolles Ltd.
Associate Structural Engineer | Keast & Hood Co.
Civil/Landscape | Stantec Consulting Services, Inc.



Mechanical

- (9) Variable Air Volume Air Handler Units
- Heat Recovery Loops with Estimated 29% Energy Savings
- (2) 620-ton Electric Centrifugal Chillers
- (2) 620-ton Induced Draft Single Cell Cooling Towers
- 200psi Campus Steam for Heating & Humidification
- (2) 250-gallon Domestic Hot Water Tanks
- Penthouse Level Reverse Osmosis, Multiple-Purification purified water tank
- Laboratory piping systems for CO₂, Natural Gas, & Liquid Nitrogen

Project Information

Size | 133,847 Square Feet
5 Stories Above Grade
6th-Level Mechanical Penthouse
Partial Basement
Occupancy | Educational & Research Laboratory
Construction Cost | \$52.1 million
Construction Schedule | October 2009-July 2011
Delivery Method | Design-Bid-Build

Architecture

- LEED Gold Certification
- 4-Story Bio Wall Air Filtration feature
- 240-Seat Auditorium
- Cutting edge Laboratories & Science Classrooms
- Ground Floor Café
- Recycled Stone Exterior Cladding

Structure

- 83 Reinforced Concrete Columns
- 83 Underground Reinforced Concrete Caissons
- Concrete Shear Walls providing Lateral Support
- Filigree Slab Floor System with Integrated Beams
- Structural Steel Roof & Penthouse Framing
- Elevated Structural Steel Auditorium Sloped Floor

Lighting & Electrical

- 13.2 kV Supplied from Campus Switchgear
- 2500 kVA Main Transformer stepdown to 480Y/277V
- 600 kW, 480V, 3-Phase Diesel Generator
- 5000A, 480Y/277V Main Switchboard
- T8 Linear Fluorescent Lighting
- Dimmable Lighting Controls & Occupancy Sensors
- 59 Lighting Fixture Types