

# SCIENCE & TECHNOLOGY



EYP



# ABOUT EYP

We're an integrated design firm specializing in higher education, government, healthcare, and science & technology. We begin every project by asking:

## What's Possible?

Let's shake the box, stretch your dreams, unpack ideas, and envision design in the context of something bigger. Because:

## We're Curious Too.

About you, where you're going, and what you imagine. Striving to create an environment of partnership and trust, we want to meet your needs and then go beyond what's expected. Bringing intuition and intellect to a creative process to uncover the possible in your project, let's push past the impossible and ask:

## What Can Design Do To...

- Serve our Fellow Citizens?
- Enhance Campus Culture?
- Provide Better Patient Care?
- Support Research and Development?



# SCIENCE & TECHNOLOGY

What can design do to promote collaborative research and development? Create loose fit and long life? Support speed to market to maximize your ROI?



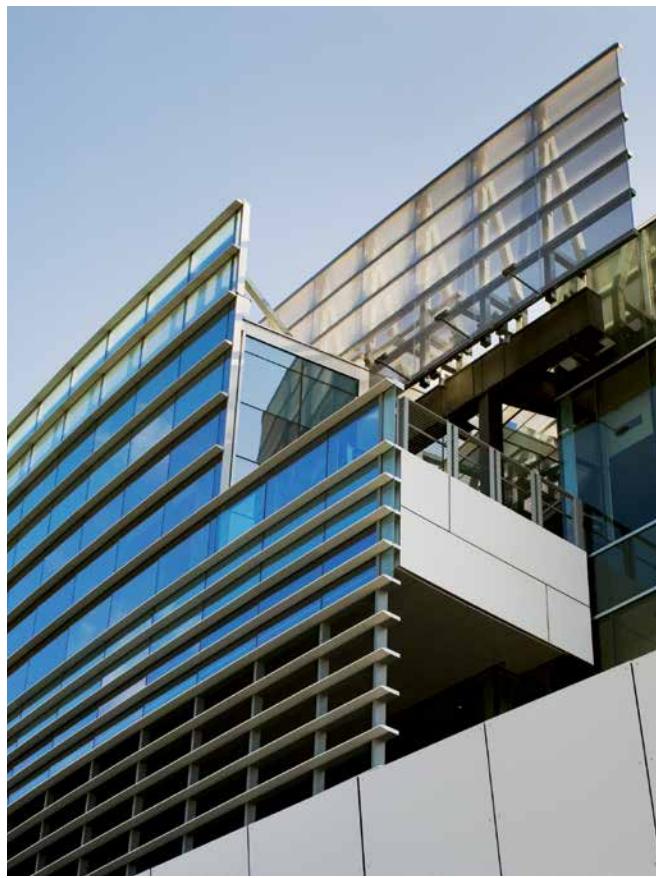
# LIFE SCIENCES

Designing facilities that enhance collaboration, efficiency, and quality outcomes, EYP helps clients accelerate the conversion of research discoveries into meaningful patient care.



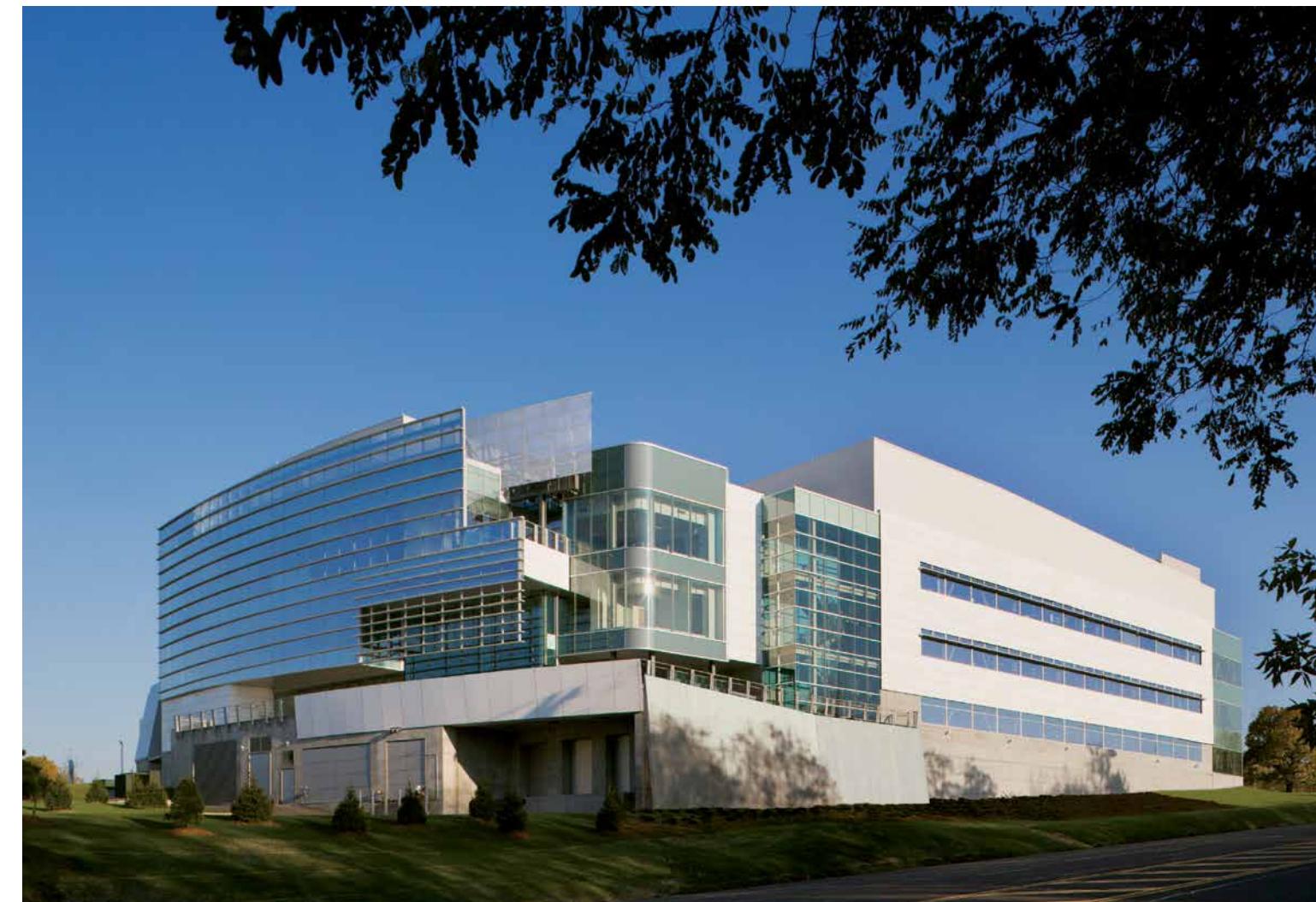
This flagship, multi-tenant lab/office building is the launchpad for a 93-acre biomedical research park.

This fast track project was delivered successfully as a result of a strong design & construction partnership to make early design decisions, separate bid packages, and control costs.



# UNIVERSITY AT ALBANY EAST CAMPUS BIOTECHNOLOGY PARK

Gen\*NY\*Sis Center for Excellence in Cancer Genomics, East Greenbush, NY



## At a Glance

- 125,000 GSF New Construction
- Programming & Planning, Architectural Design, and MEP Engineering
- Multi-tenant research building
- Life sciences park planning
- Academic & industry partnerships

The Ge\*NY\*Sis Center is designed to meet the needs of multiple tenants with varying business requirements. Supported functions include biomedical research, instrumentation support labs, core services with a high-sensitivity mass spectrometer, a transgenic barrier vivarium, as well as a conferencing center and administrative offices. Based on a survey of multiple stakeholder needs, the building is planned around a double-loaded corridor with labs on either side, support labs throughout the floor, and office neighborhoods. Modular, expandable labs are designed to allow for aggregation as scientific programs grow.

## At a Glance

- 104,000 GSF New Construction
- Applied Research and Teaching
- Academic / Government / Private Industry Partnerships
- Training and Testing Facilities
- Incubator Spaces
- Campus Conferencing Center
- LEED Gold (anticipated)
- Speed to Market – Design-Build Project Delivery



The completion of the Mixed-Use Research Building is a strategic step to implement the framework plan for the University's Innovation Campus developed by EYP.

# NORTHEASTERN UNIVERSITY

Mixed-Use Research Building Innovation Campus, Burlington, MA



Reflecting Northeastern University's commitment to addressing issues of global security, the Mixed-Use Research Building serves as a scientific hub and cornerstone for the University's emerging Innovation Campus. The facility supports an array of academic, government, and private industry research partners collaborating on solutions to enhance the capacity of communities, critical systems, and infrastructure to withstand, respond to, and recover from man-made and natural catastrophes.

## At a Glance

- 10-year, 4-phase Master Plan
- Building addition & modernization
- 66,000 SF East Research Building
- 6,000 SF Bioinformatics Commons
- 220,000 SF Vivarium Expansion (adaptive reuse of warehouse)
- Master Planning, Architecture, Lab & Vivarium Planning, MEP/FP Engineering



Open and flexible lab wings offer clustered instrument zones (mini core labs) for ease of access and resource-sharing.

# THE JACKSON LABORATORY

Multiple Projects, Bar Harbor & Ellsworth, ME



At the forefront of discovering cures for human disease, The Jackson Laboratory's multi-phase master plan has guided the company's strategic campus growth. Developed with EYP, the plan has included important new facilities such as the East Research Building with flexible space for several research groups, and the world's most technically-advanced high barrier vivarium. EYP has provided comprehensive services for all of these projects including uniquely-designed mechanical systems for the sensitive animal environments.

## At a Glance

- 25,000 GSF
- Architecture, Lab Planning, Interior Design, Engineering
- Tenant Fit-out in Historic Building



Incorporating the highly sophisticated infrastructure required in the United Therapeutics lab proved to be a unique challenge. Given the rapid change of technology used in the company's research, systems requirements changed often during the planning and design process, increasing the project's complexity. Wherever possible, the design of systems and layout were maximized for flexibility and adaptability.

# UNITED THERAPEUTICS

Research Lab & Office Fit-Out, Manchester, NH



An industry pioneer developing transplant solutions for millions of people with end-stage lung disease, United Therapeutics now produces 3D printed lungs in a vintage Amoskeag Mill building. The EYP design team created a flexible, dynamic lab and office space for this high-tech company within the tight limitations of the historic structure. Only minor modifications to interior and exterior architecture were permitted, however despite technology-related challenges, an open workspace with views into the lab are achieved and future expansion can be accommodated.

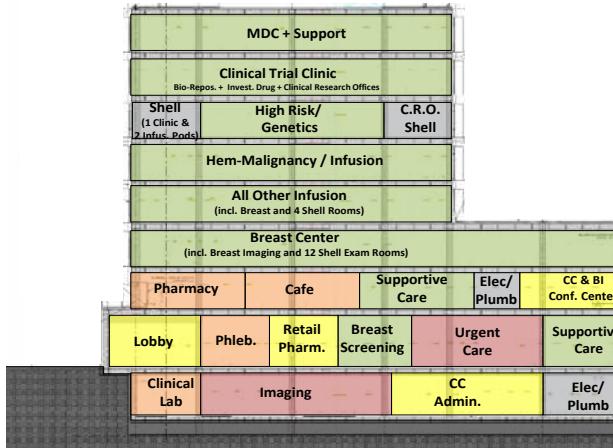
## At a Glance

- 300,000 SF (35,000 SF labs, 6,000 SF vivarium)
- 1,200-space parking garage
- Planning, Architecture, Interior Design, Lab & Vivarium Planning

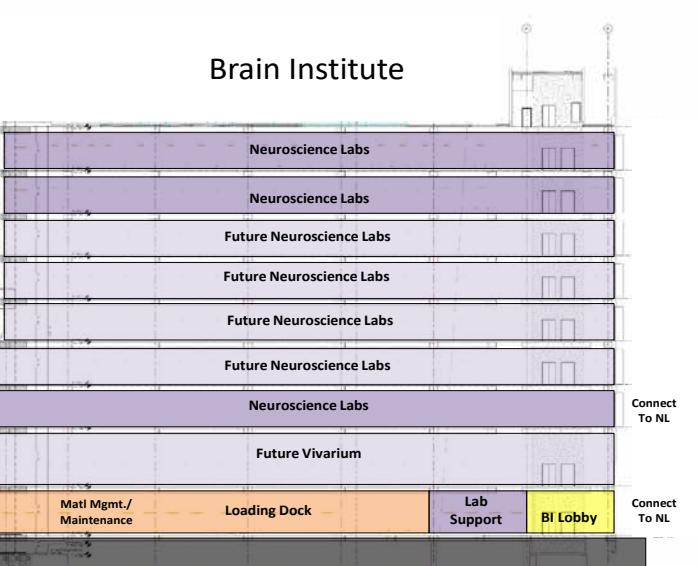
EYP is UTSW Medical Center's partner in the planning, design, and development of two 9-story towers on its North Campus in Dallas. The 300,000 sf Cancer Care Tower will open in 2020 and Phase I of the Brain Institute Research Tower is expected to open in 2022. The O'Donnell Brain Institute community includes 500+ doctors and researchers seeking discoveries to treat the brain, spine, nerve, and muscle disorders.



Cancer Center



Brain Institute



# UT SOUTHWESTERN MEDICAL CENTER

Peter O'Donnell Jr. Brain Institute Research Tower, Dallas, TX



Developing a versatile and cost-effective framework for the Research Tower is fundamental to accommodate the Institute's unique approach and broad array of research interests. Utilizing the latest imaging technologies and analyzing massive amounts of data, interdisciplinary collaboration and open innovation is core to UTSW's culture.

The traditional lab floor plan is composed of traditional wet labs with physiology suites integrated with a small vivarium. It is envisioned that this will be replicated on all floors, except the third floor which will house only wet labs. A public corridor on the third floor enables connectivity to other campus buildings.

## At a Glance

- 440,000 SF
- Planning, Programming, Architecture, Interior Design, Lab Planning & Design, and Medical Equipment Planning
- 2 GMP facilities to prepare clinical-grade radiopharmaceuticals
- Infrastructure to support lifecycle of discovery, development, testing, and validation of new drug or device
- Completed in association with KPF



The Translational Research Building, located within the densely developed Texas Medical Center, consists of research laboratories, laboratory support space, a facility for comparative medicine, office and administrative space, as well as specialty areas such as BSL-3 labs, electron microscopy, and MITIE™ — the Methodist Institute for Technology, Innovation, and Education. Since the building's completion, EYP has fit-out multiple floors of modular, flexible labs and a floor of open workspaces to foster collaboration and innovation among scientists of all disciplines.

# HOUSTON METHODIST RESEARCH INSTITUTE

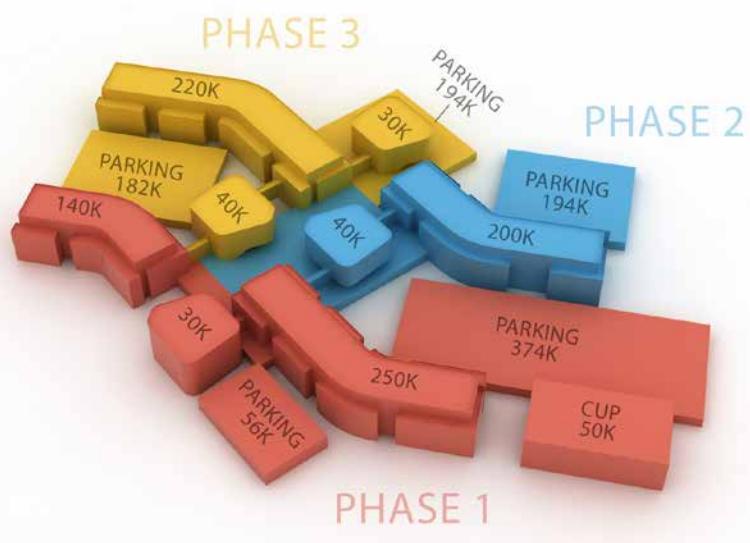
Translational Research Building, Houston, TX



Equipped with the world's most advanced technology, the focus of work in this 12-story, 440,000-square-foot facility is to cure diseases through innovative translational research, with the ultimate goal of changing the future of medicine. Research programs include diabetes, infectious diseases, cancer, neuroscience, nanomedicine, stem cell, proteomics, transplantation biology, computational biology, and more.

## At a Glance

- 1,000,000 GSF R&D space plan
- 1,000,000 GSF Parking, materials handling, and services plan
- Phase 1: 200,000-300,000 GSF new construction
- Life sciences campus planning



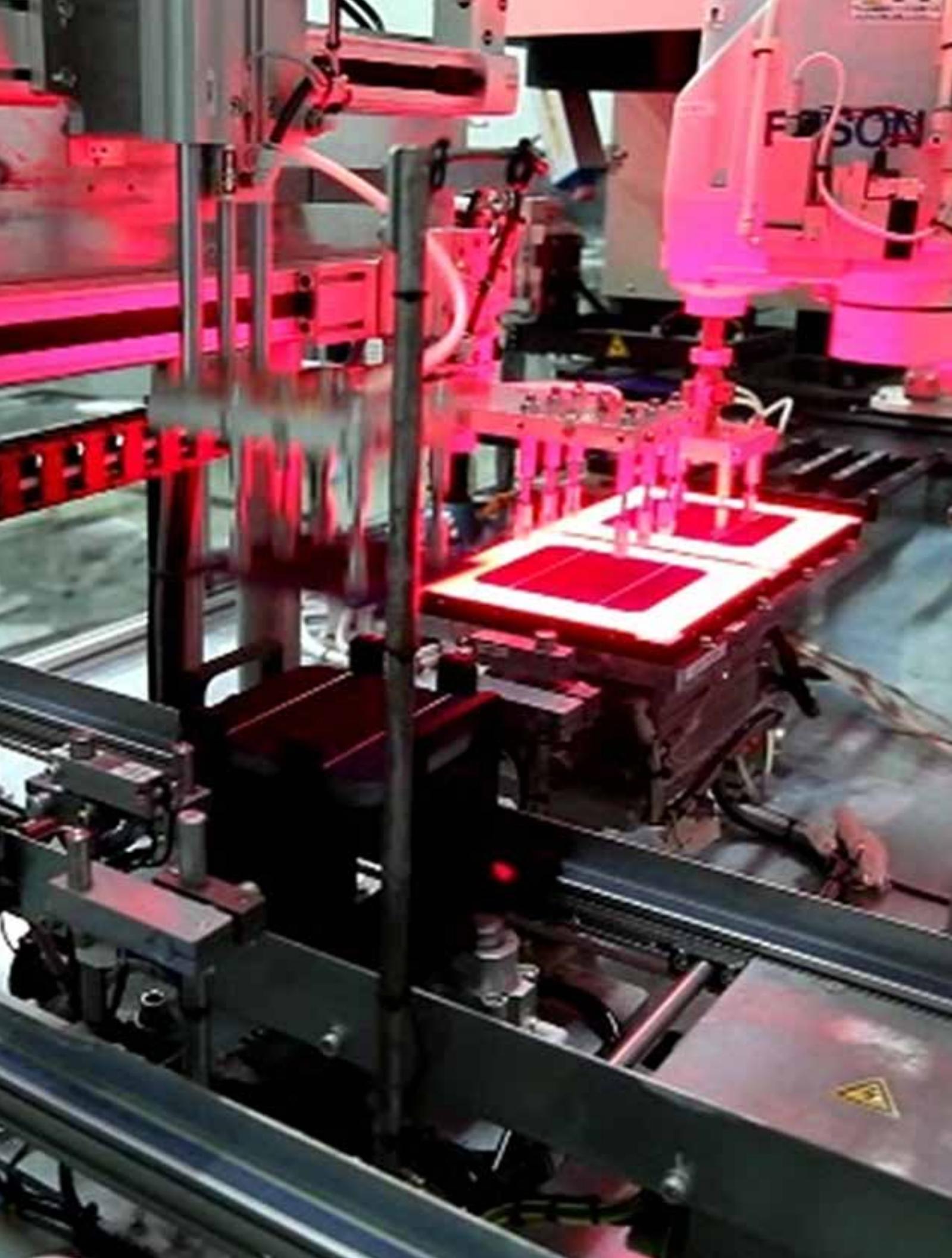
# REGENERON PHARMACEUTICALS

Facilities & Real Estate Master Plan, Tarrytown, NY



EYP developed a 35-acre multi-phase R&D campus plan for Regeneron in Tarrytown, NY. The company has an extensive pipeline of investigational product candidates that are progressing through all stages of human clinical trials.

During an intensive nine-week planning process, the EYP team and Regeneron developed a new campus concept that met desired expectations and approval by the town. The 1M SF campus includes: corporate HQ, lab R&D space, vivarium, parking, a new central utility building, and amenities, corporate headquarters, laboratory research and development space, vivarium, parking, a new central utility building, and amenities such as café, fitness, outdoor courtyards, and daycare.



# ADVANCED TECHNOLOGY

We are the trusted partner of choice to design secure facilities for the R&D and production of next generation technologies.



# SUNY POLYTECHNIC INSTITUTE

ZEN (Zero-Energy Nanotechnology) Building, Albany, NY

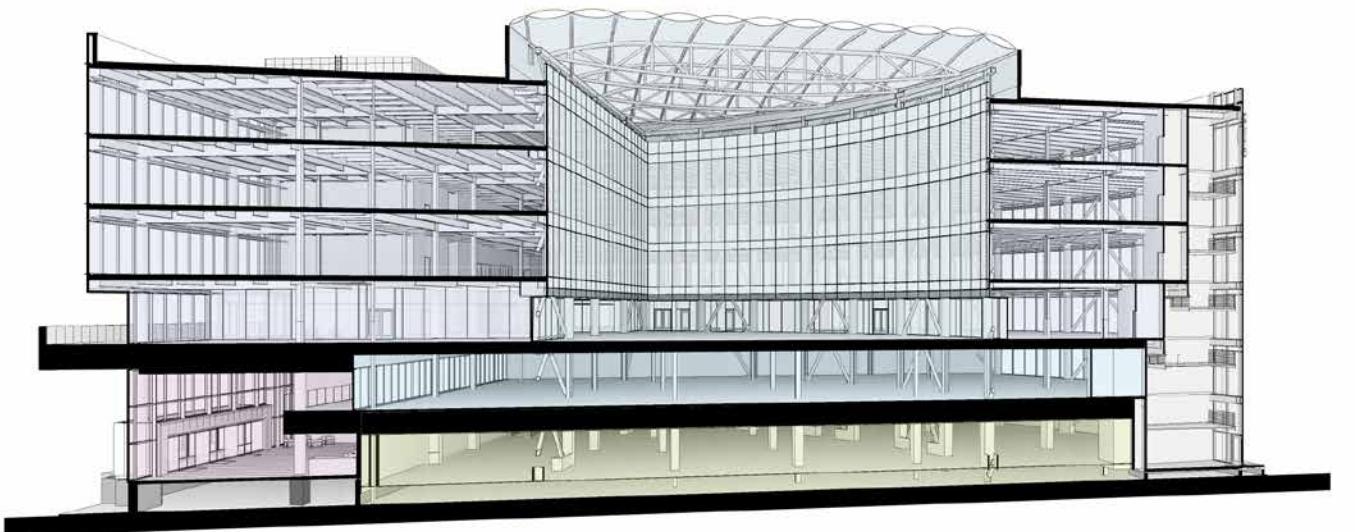
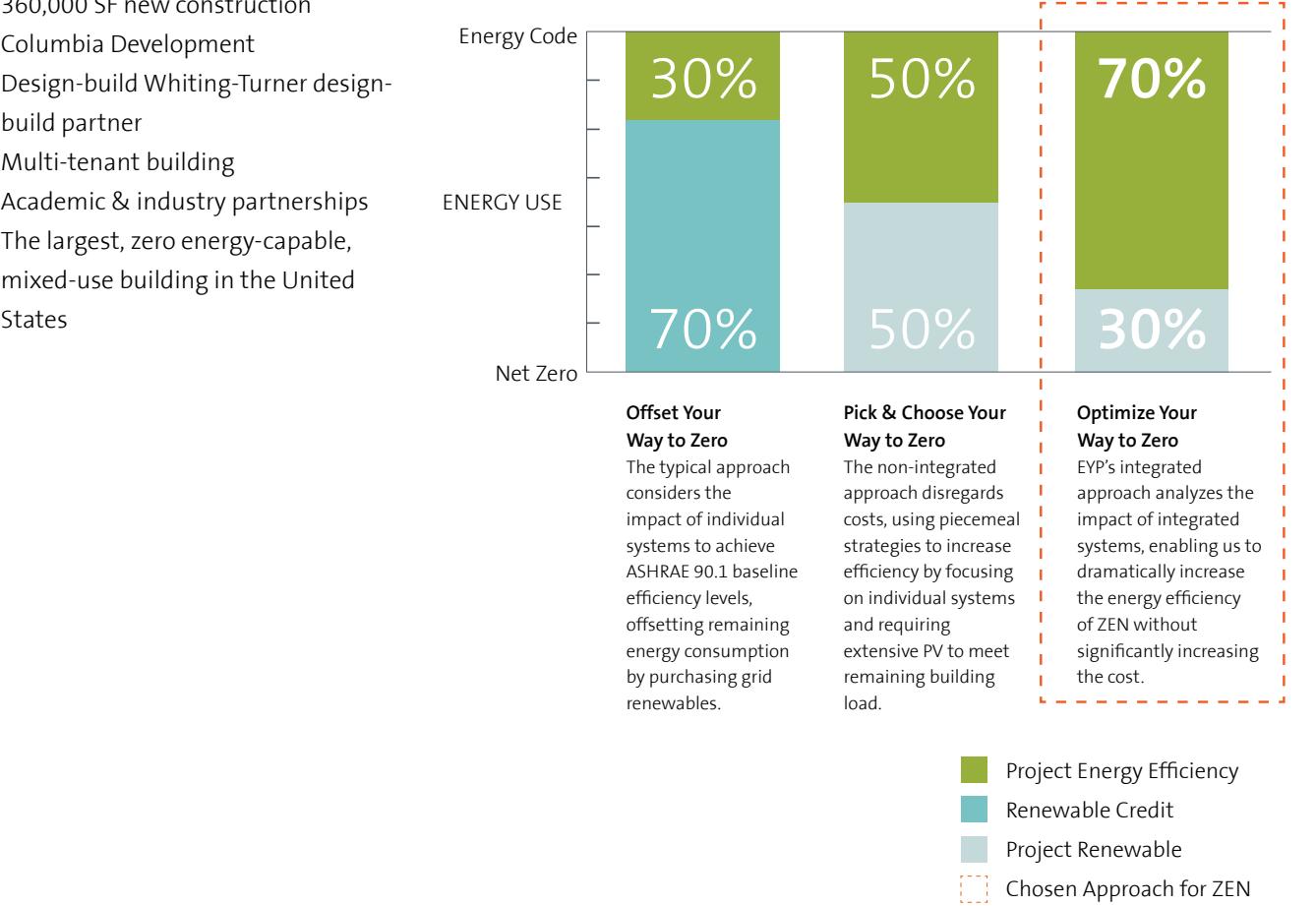


The ZEN building supports a wide range of R&D activities and includes office space for research partners in business and industry, as well as teaching and flexible research spaces for faculty and students. Beneath an ultra-light ETFE roof system, formal and informal collaboration and social spaces create a dynamic 10,000 GSF community hub.

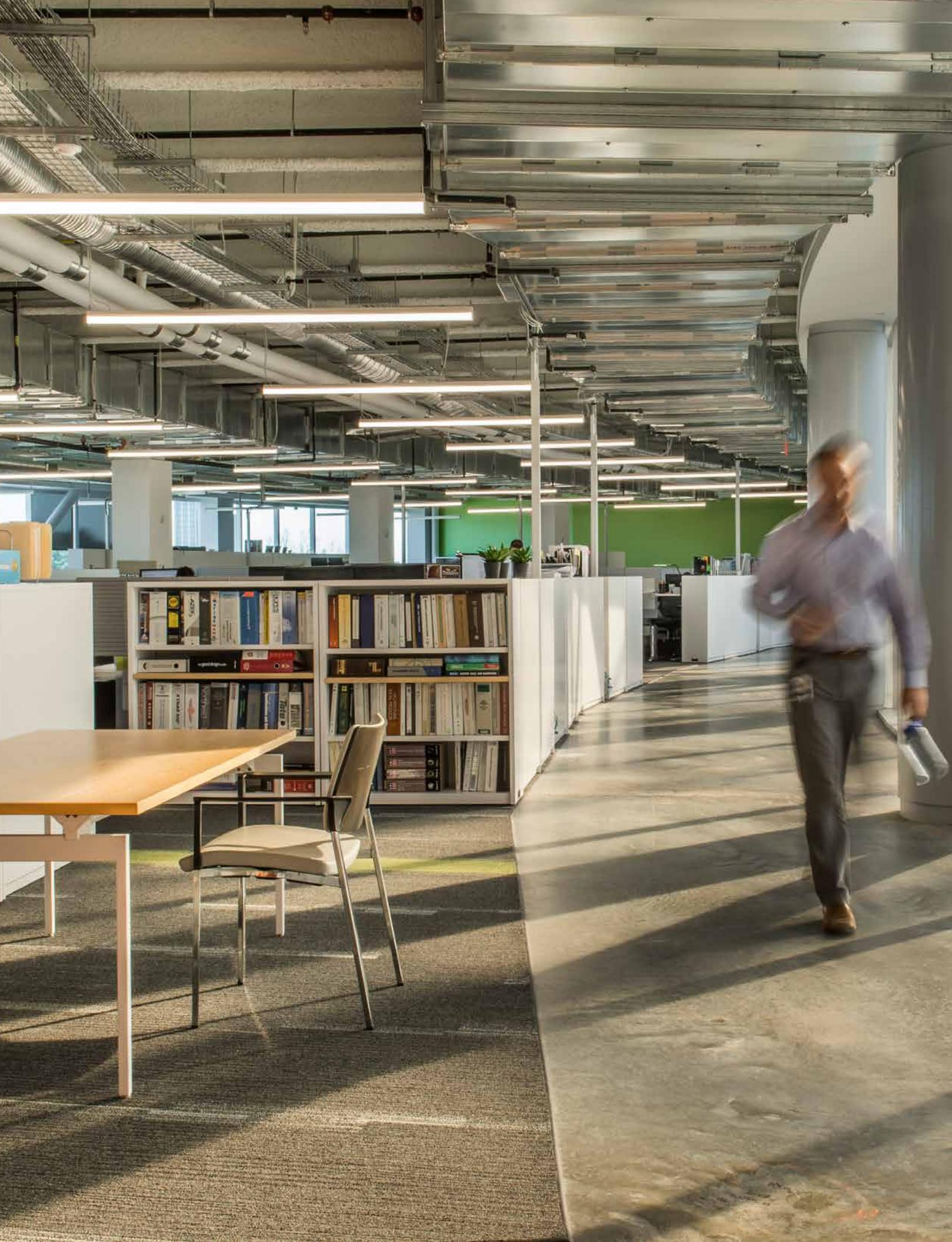
## At a Glance

- 360,000 SF new construction
- Columbia Development
- Design-build Whiting-Turner design-build partner
- Multi-tenant building
- Academic & industry partnerships
- The largest, zero energy-capable, mixed-use building in the United States

## The ZEN Solution



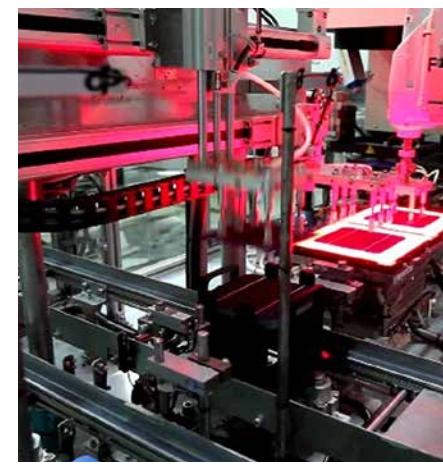
The integration of complex high performance building systems into this massive structure demonstrates that net zero is achievable on a large scale. Data continuously collected from the building's sophisticated management system provides information to monitor occupant comfort in all spaces, including the ability to react to weather conditions and occupancy.



## At a Glance

- 1.2M SF new construction
- Master Planning, Architecture, Engineering, Program Management
- Cafeteria, Conference & Training

At more than 1.2 million SF, the largest solar manufacturing facility of its kind in the Western Hemisphere.



# TESLA

Riverbend Solar Panel Manufacturing Facility, Buffalo, NY



Working closely with SUNY Poly, Tesla, and Developer/Manager LPCiminelli , the EYP team played an integral role in this campus development project from its inception. At this expansive facility called Gigafactory, Tesla manufactures solar panels as well as electric charging stations for its Supercharger network.

## At a Glance

- 1.2M SF new construction
- Master Planning, Architecture, Engineering, Program Management
- Cafeteria, Conference & Training



Specialized design features of the 500,000 SF facility support heavy manufacturing tools and mitigate vibration concerns during semiconductor fabrication.

# SUNY POLYTECHNIC INSTITUTE

Nanofab Xtension (NFX), Albany, NY



Working closely with SUNY Poly, Tesla, and Developer/Manager LPCiminelli , the EYP team played an integral role in this campus development project from its inception. At this expansive facility called Gigafactory, Tesla manufactures solar panels as well as electric charging stations for its Supercharger network.

## At a Glance

- 32,000 SF New Construction
- Multi-tenant Research Facility
- Academic & Industry Partnerships
- Class 1,000 semiconductor fabrication lab



The new high-tech facility provides a new face for the expanding RIT campus. Shared by the different teams, the various clean rooms and laboratories create a multi-disciplined, collaborative research environment and also provide opportunity for joint research with industry partners. A Class 1000 semiconductor fabrication lab has been optimized with the addition of support operations such as material analysis and characterization. The new labs were designed with future flexibility in mind, allowing them to be converted to clean rooms as demand requires. Additionally, advanced research is now supported in remote sensing, nano-lithography, and microsystems.



# ROCHESTER INSTITUTE OF TECHNOLOGY

IT Collaboratory, Rochester, NY



Funded by the New York State Office of Science, Technology and Academic Research (NYSTAR), an IT Collaboratory was designed by EYP on the Rochester Institute of Technology campus. The 32,000 SF addition to RIT's Microelectronics Building provides shared research laboratories, equipment, and support spaces to RIT, University of Buffalo's Institute for Lasers, Photonics, and Biophotonics, as well as Alfred University.

# MODERNIZATION & REPOSITIONING

With a national reputation for expertise in historic renovations, our modernization approach transforms buildings, visibly and invisibly, unlocking a capital asset's potential to serve client needs today and into the future.





# GENERAL ELECTRIC

Renewable Energy Headquarters, Schenectady, NY



The reinvention of Building 53 as a dynamic global headquarters and R&D center for renewable energy embodies GE innovation. Adaptive use of the 100-year-old structure demonstrates GE's commitment to celebrating its legacy, living its sustainable energy brand, and cultivating an inspiring, creative workplace.

## At a Glance

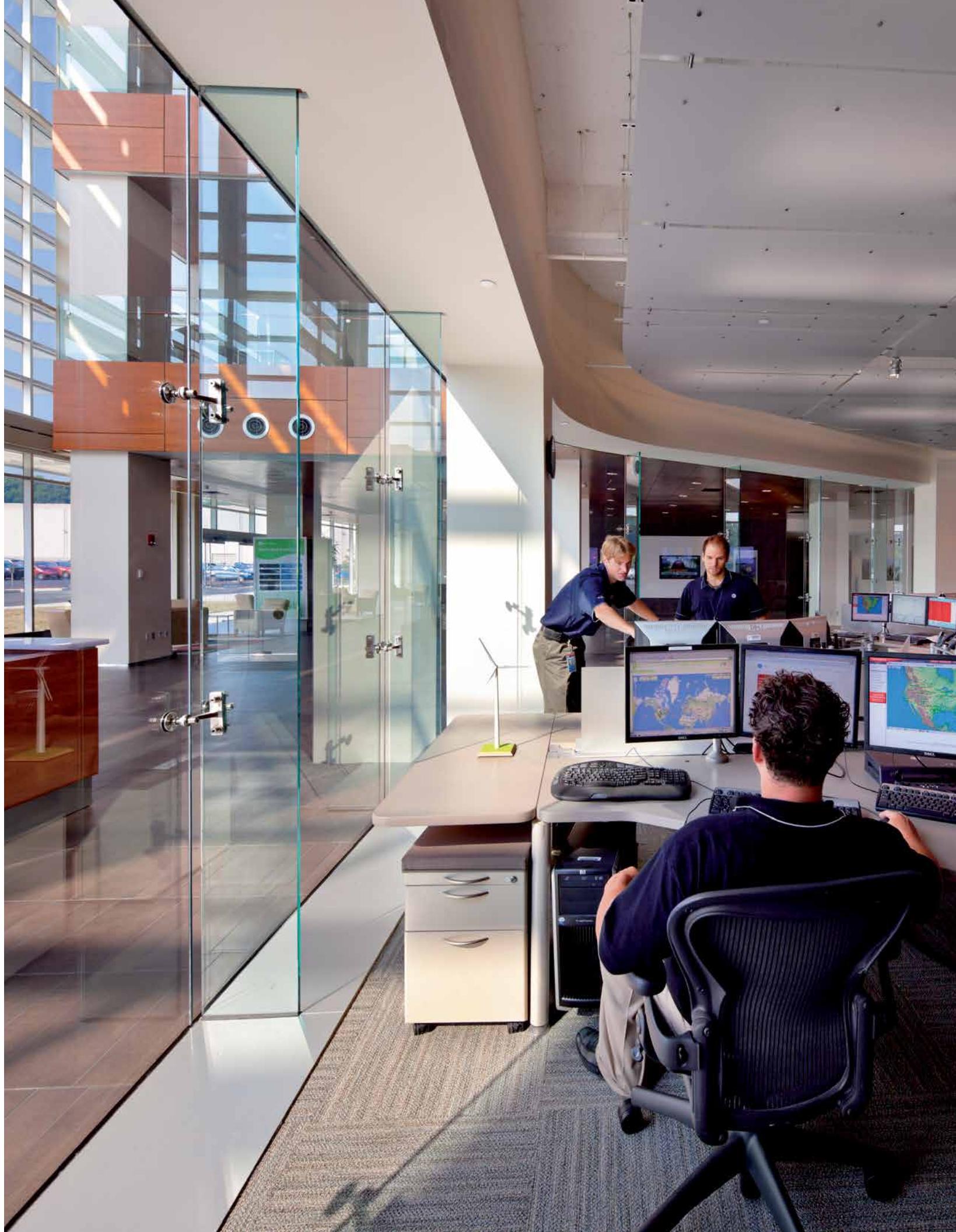
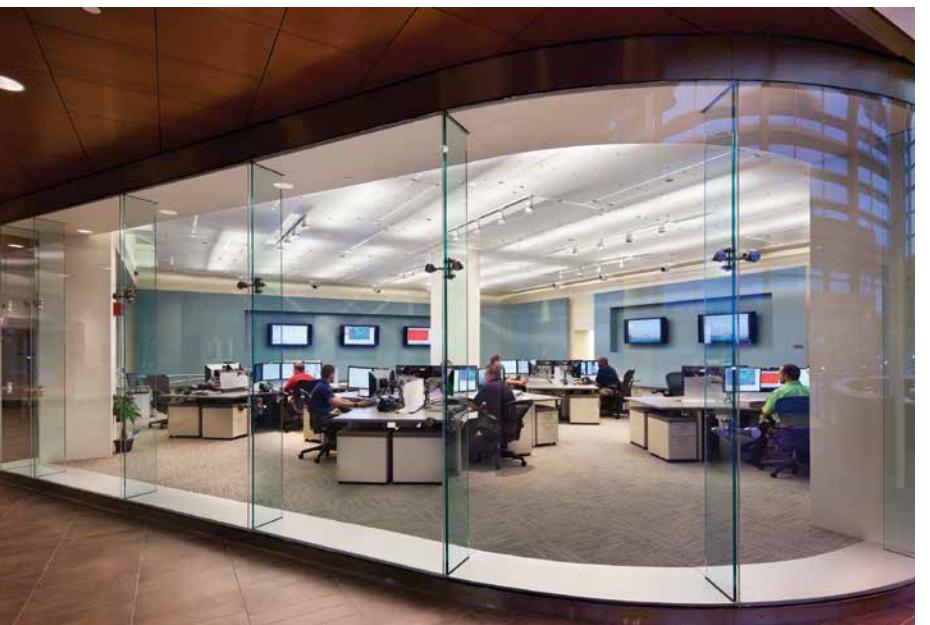
- LEED Silver certified
- 205,000 GSF modernization
- Architecture, MEP & structural engineering, building performance services



A repositioned,  
100-year industrial  
building showcases  
global leadership in  
energy resources.

Energy modeling informed a design  
with a new, more efficient building  
envelope that uses 25% less energy  
than a comparable ASHRAE 90.1-2004  
baseline building.

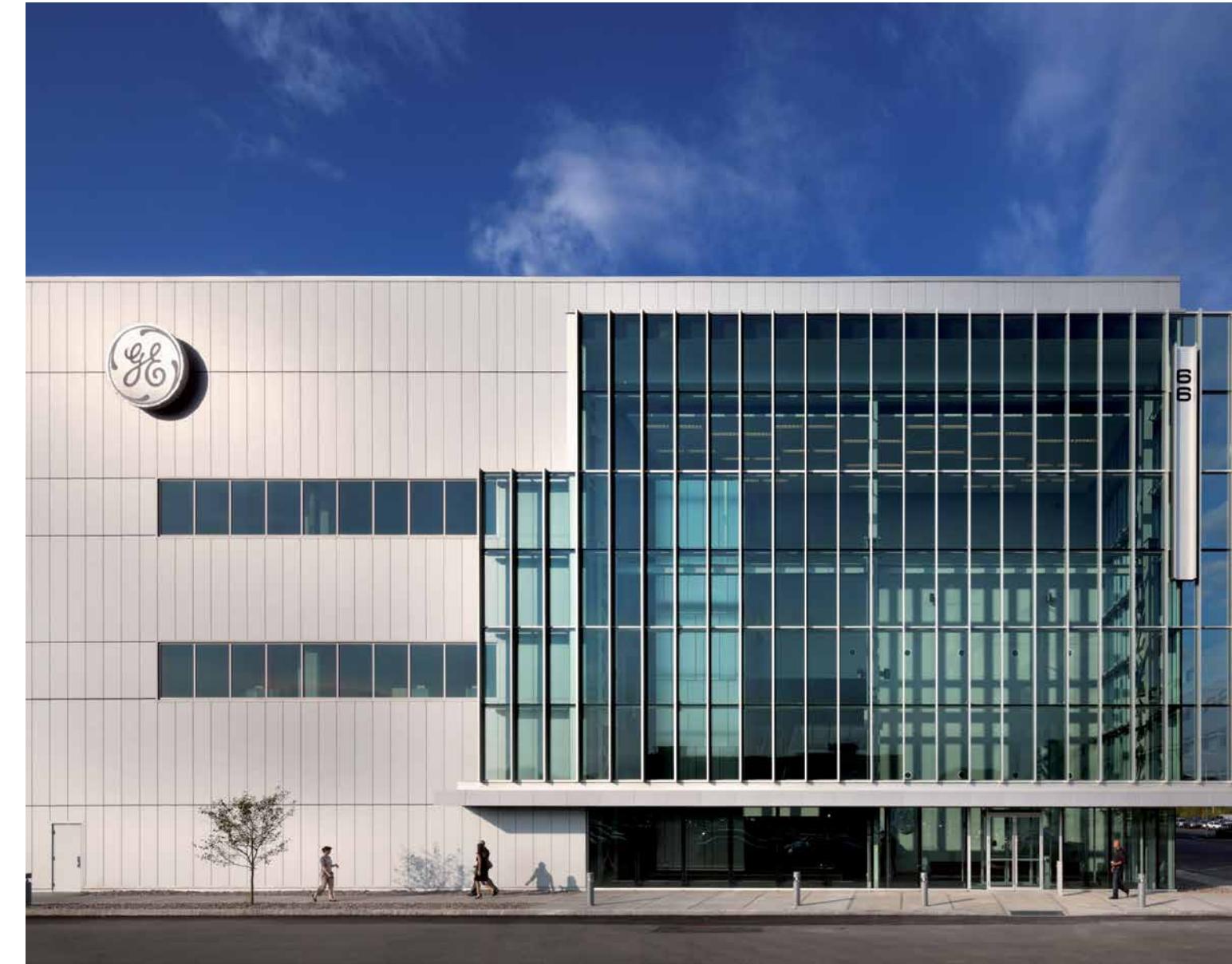
A dramatic atrium enhances the visitor  
experience with a scaled wind turbine  
and visible monitoring center that  
tracks global wind energy 24/7.





# GENERAL ELECTRIC

Advanced Battery Manufacturing Facility, Schenectady, NY



Once a turbine factory with dirt floors, EYP transformed Building 66 into a striking example of the company's forward-thinking concepts of sustainability and discovery which now tests and produces high-efficiency batteries for hybrid locomotives and electric vehicles.

## At a Glance

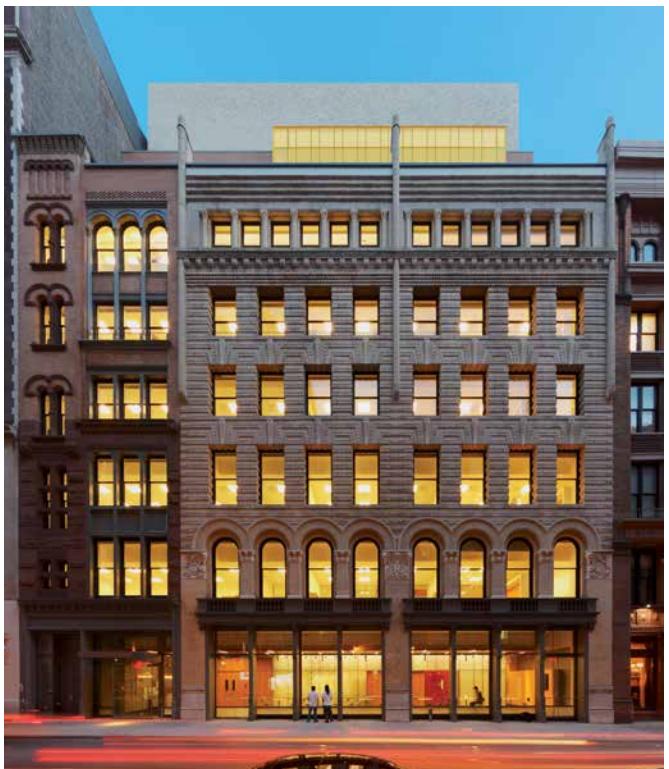
- 45,000 SF modernization
- Architecture, Engineering

With a creative and cost-effective solution to adapting the building envelope, 45,000 SF of the 200,000 SF 1960s structure was redesigned to feature a contemporary, high-tech aesthetic that also increased energy efficiency.



## At a Glance

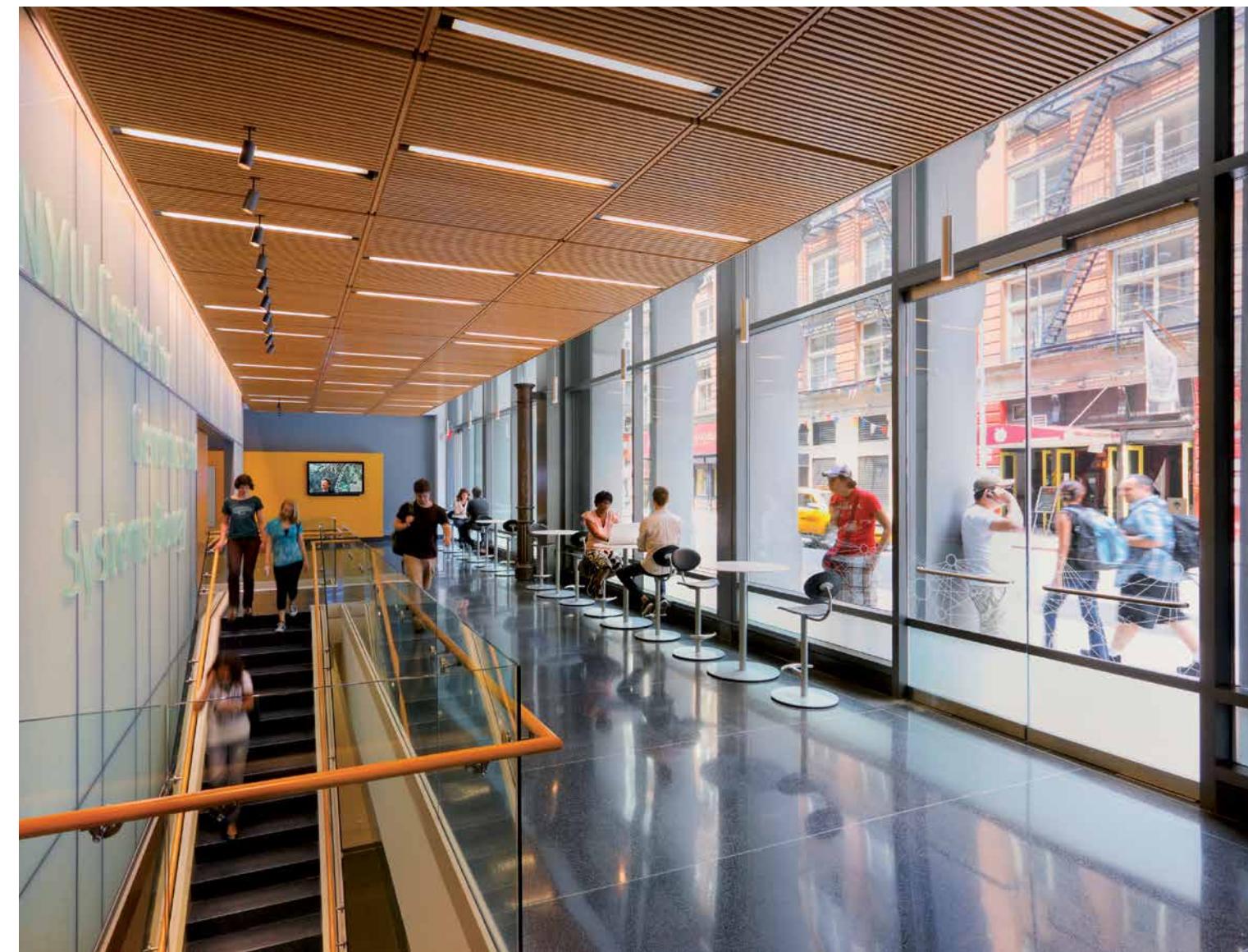
- 49,000 SF Center for Genomics & Systems Biology
- 71,000 SF Biomedical Chemistry Institute
- Programming & Planning, Architecture, Lab Planning
- Completed in association with Ennead



A world-class research facility is created behind three historic facades, enabling an otherwise new building to blend into the fabric of Greenwich Village.

# NEW YORK UNIVERSITY

Historic Building Repositioning (Center for Genomics and Systems Biology, Biomedical Chemistry Institute), New York, NY



This bold design preserves historic character while reinventing the site with a modern facility for twenty-first century research. Three existing, six-story, 100-year old facades are integrated into a new life sciences research complex beyond that consists of ten stories of vertical lab communities.

At the street level, an active and visible commons draws interest, while throughout the building, open, loft-like communicating stairs promote interaction between faculty and students. Shared amenities between floors and ease of access foster cross-disciplinary collaboration.

Biomedical and synthetic chemistry labs are arranged to maximize research efficiency and enhance occupant safety. MEP systems were precisely designed to accommodate the energy-intensive equipment as well as a phased, occupied renovation. Research, office, support, and common areas are thoughtfully arranged to facilitate workflow and encourage interaction.



The vertical communities foster cross-disciplinary collaboration between emerging scientific fields in a technologically-sophisticated laboratory environment.





# UNIVERSITY OF PENNSYLVANIA PERELMAN SCHOOL OF MEDICINE

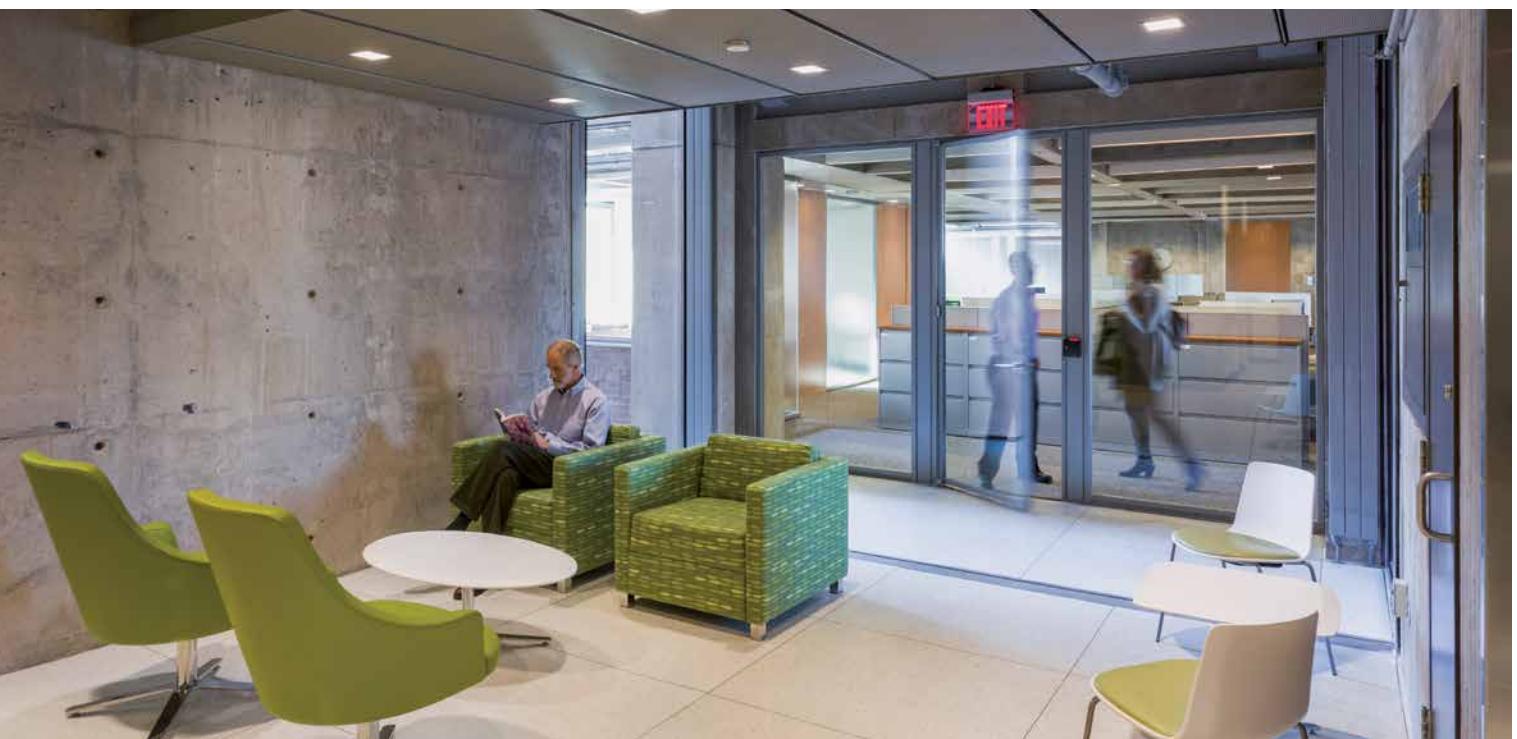
Richards Medical Research Laboratories, Philadelphia, PA



EYP master planned the modernization of the Richards Medical Research Complex, designed by Louis Kahn, including transforming the wet-lab research facility with heavy HVAC requirements, into a program of computational research spaces over a multi-phased, occupied renovation. As a National Historic Landmark, new MEP systems and exterior wall components were designed to guidelines and integrated with care, ensuring the stability, performance and longevity of the building without loss of the building's unique architectural character.

## At a Glance

- 1965 original building
- 107,000 GSF modernization
- Master Planning, Architecture, and Engineering
- Historic Preservation
- Repurposed wet biomedical bench research labs to dry computational medical research labs
- Improved energy performance and occupant comfort with Integrated new engineering systems, replaced and preserved existing exterior walls, introduced chilled-beam cooling



Thoughtful planning and modernization expertise reinvented the rigid nine-block planning grid as an open, collaborative environment for team-based research while improving energy performance. Multiple design room-layouts and test fits were explored to optimize room configurations and workflow. Primary users in the building include the Center for Cognitive Neuroscience and Center for Functional Neuroimaging.



## Awards & Honors

**Preservation Achievement Grand Jury Award**  
*Preservation Alliance for Greater Philadelphia*

**Architectural Excellence Design Award**  
*AIA Tri-States*

**Design Award**  
*AIA Philadelphia*



# SPEED TO MARKET

We understand the need to listen carefully and respond quickly. Our team will test ideas and present creative design solutions with cost estimates, potential risks, and a realistic delivery timeline. Our teams are nimble and client-focused, driven to work as a collaborative teammate to reach a collective goal. Speed to tenant occupancy and income generation will be top of mind throughout a project.

## Flexibility

Particularly in the life sciences industry, tenant requirements change frequently as science evolves and companies grow. To meet these fluid demands, a successful facility must be designed with flexibility in mind – in its leased spaces, systems infrastructure, and shareable resources. EYP understands these dynamic conditions and with a holistic approach to architecture and engineering design, will present solutions that consider short and long-term benefits as well as costs.

## Quality + Cost Efficient Design

In a highly competitive market for talent, a real estate asset needs to hit the mark with factors such as: access to transportation, amenities, urban “cool factor”, and personalized service. The design stakes are high but must be affordable and delivered within a set timeframe. EYP is adept at providing a range of design options with supporting data to guide clients in effective decision-making at the right times throughout a project. With clarity in communication and experience, we will assist in weighing the potential impacts of different choices.

## Ability to Listen

It is especially critical to work with a design partner who listens carefully and advocates for the owner's best interests to achieve the project goals. EYP's design approach focuses on understanding the highest project priorities, acknowledging concerns, and respectfully challenging ideas to reach the optimal solution.

## Integrity + Partnership

Demonstrating a positive, collaborative attitude with a commitment to reliability, hard work, and respect are foundations of the EYP culture and all essential elements of a successful project. In a high-stress, fast-paced environment, a collective project team that communicates well and enjoys working together is positioned to support each other and be in alignment throughout the project.

## Responsiveness

Tenant transactions can occur quickly, requiring fast turnaround of test fits and design options with costs and schedules. Design solutions need to reflect creativity and innovation that will appeal to prospective tenants at attractive rents, which often means an interactive design process in a short time period. EYP's depth of resources and expertise across multiple industries can enable this responsiveness nationally.

# WHAT'S POSSIBLE?

eypae.com

