Institute Honors and Awards
Fellowship

THE AMERICAN INSTITUTE OF ARCHITECTS

2017 AIA Fellowship

Nominee	Patrick J. Burke III
Organization	Columbia University Medical Center
Location	New York, NY
Chapter	AIA New York Chapter

Category of Nomination

Category Four - Industry Organizations

Summary Statement

With sensitivity to design excellence, Patrick Burke has masterfully transformed Columbia University Medical Center's built environment, inspiring thousands of faculty, researchers, students, and clinicians to pursue the highest levels of knowledge and healing.

Education

06/1993 Princeton University, Princeton, New Jersey, Master of Architecture
06/1989 Columbia University, New York, New York, Bachelor of Arts, Art History

Licensed in: New York

Employment

2012-Present Assistant Vice President, Capital Project Management, Columbia University Medical Center, New York, New York (4 years)
2008–2012 Executive Director, Capital Project Management, Columbia University Medical Center, New York, New York (4 years)
2001-2008 Director, Design and Construction, Columbia University Medical Center, NY, New York (7 years)
1998-2001 Senior Associate, HLW International LLC, New York, New York (3 years)
1993-1998 Project Architect, The Hillier Group, Princeton, New Jersey (5 years)
1990-1991 Construction Manager, Spiniello Construction Co., Morristown, New Jersey (1 year)
1989-1990 Designer, Robert A. M. Stern Architects, New York, New York (1 year)
1980-1988 Construction Manager, Barnes Construction Co., Millington, New Jersey (8 years)

FXFOWLE

FXFOWLE ARCHITECTS, LLP 22 WEST 19 STREET | NEW YORK, NY 10011, USA | T +1.212.627.1700 | WWW.FXFOWLE.COM

10 October 2016

Ms. Mary Katherine Lanzillotta, FAIA
Chair, 2017 Jury of Fellows
The American Institute of Architects
1735 New York Ave., NW
Washington, DC 20006-5292

Re: Nomination of Patrick Burke Nomination to Fellowship

Dear Ms. Lanzillotta and Members of the Jury,

It is my great honor to sponsor Patrick Burke's candidacy for Fellowship in the American Institute of Architects. Patrick is an outstanding individual who has built an impressive career and been responsible for impacting the urban environment of a campus in a very challenging neighborhood of New York City.

I have known Patrick for over 25 years, beginning when he was a student intern under my supervision in 1991 at The Hillier Group. After completing architecture school, Patrick returned to Hillier in the Sci/Tech and Healthcare Studio where he began the journey that has led him to be one of the nation's leaders in the design and construction of medical laboratory, educational and clinical space.

While overseeing as many as 150 projects annually and a staff of more than 20 at Columbia University Medical Center, Patrick has championed many groundbreaking educational, R&D and Community Care buildings as well as campus master plans and community space. He has balanced the needs of the users, budgets, schedules, donors and administrators while always encouraging the architects and design teams working with him to do their best work.

Patrick's efforts have resulted in many groundbreaking structures, including most recently, the Vagelos Education Center designed by Diller, Scofidio + Renfro. Additionally, FXFOWLE is honored to be working with Patrick on the Columbia University School of Nursing, currently under construction. Both of these projects provide radically new visions for medical education facilities, incorporating state of the art technology and simulation labs.

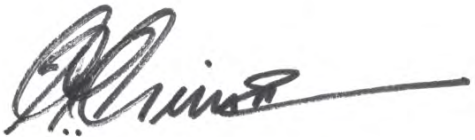
While individual buildings are the most visible evidence of Patrick's accomplishments, he has also looked beyond buildings to the city itself. He has worked to develop an urban campus on 168th Street anchored to the east by the School of Nursing and to the west by the Vagelos Education Center. In between, he is leading streetscape improvements and building renovations that embrace the street life and make connections to the community. On Haven Avenue, to the west, he is leading the de-mapping of the street to create a public square that will provide a welcome relief from automobile traffic and provide a new outdoor gathering space for the campus and greater local community.

Beyond his project responsibilities, Patrick has been a regular speaker at programs up and down the East Coast. His expertise in the application of technology and real estate issues related to medical facilities has been shared with a wide audience. As a result, Patrick has been recognized with numerous honors including, most recently, the Greater New York Constuction Users Council Individual of the Year.

Great design, built within budget and delivered on time with high degrees of technical proficiency, is not always easy to accomplish at large insitutions with many stakeholders having competing agendas. Patrick's consistent leadership has created the environment for high achievement in all respects.

Based on Patrick's consistent record of achievement, I enthusiastically support his elevation to Fellowship in The American Institute of Architects.

Sincerely,



Gerard F.X. Geier II, FAIA, FIIDA, LEED
Managing Partner

1. Summary

Patrick J. Burke III, AIA

Roy and Diana Vagelos Medical Education Center

With sensitivity to design excellence, Patrick Burke has masterfully transformed Columbia University Medical Center's built environment, inspiring thousands of faculty, researchers, students, and clinicians to pursue the highest levels of knowledge and healing.

An experienced and dedicated leader in the design and construction industry, Patrick Burke has spent decades overseeing the planning, design, and construction of large-scale, technically complex biomedical research facilities and other high-technology buildings. In his 15 year tenure leading planning, architecture, and construction at Columbia University Medical Center (CUMC), Burke has successfully delivered more than 2,000 projects with gross project budgets in excess of $900 million.

Burke works closely with CUMC administrators and end-users to bring the future of medical education to fruition. He has a unique ability to aggregate the interests and opinions of his diverse group of clients, including administrators, fundraisers, and clinicians, and align them with his design and construction team. He has established relationships with donors, involving them throughout the process — from design to the building dedication. The result is moving and passionate spaces that positively inspire faculty and students alike.

Burke's celebrated career reflects a deep enthusiasm for using architecture and infrastructure construction to advance clinical care, research, education, and strategic initiatives. At CUMC, he has worked closely with the administration to execute their vision for trailblazing simulation centers, where aspiring doctors and nurses can perfect the skills they will need in practice. In a highly urban environment, the adaptive reuse of existing buildings is necessary but requires exceptional dedication to incorporate state-of-the-art technologies or specialized HVAC systems. For example, the Allan Rosenfield Building for the Mailman School of Public Health houses a cyclotron, one of only a handful in the country in an academic context, which produces radioactive contrast dye in cutting-edge doses, allowing clinicians to better diagnose disease. Incorporating the cyclotron required significant accommodations, including a dedicated exhaust system that posed challenges during design and construction. An existing elevator shaft was repurposed to enclose the stacks from the basement to the 20th floor.

Burke ensures that CUMC's need for extensive technology in its classrooms, research facilities, and clinical spaces does not come at the cost of great design; nor does he sacrifice design when budget pressure mounts. He worked closely with Diller Scofidio + Renfro to preserve the most defining elements of the Roy and Diana Vagelos Education Center in the value engineering phase. His collaboration with world-renowned architects has created a distinctive campus, a destination for current and future healthcare leaders and distinguished researchers from around the world.

Burke was central to the development of CUMC's strategic capital plan. He worked closely with senior administrators to align programming needs with available real estate, devising creative solutions and prioritizing projects in the multi-phase process.

From the heavy construction work Burke did early in his career, he learned how to achieve completion in a cost-effective way. As a result, Burke goes to great lengths to adhere to the often aggressive schedules for individual projects. He made weekly trips to the casting plant where the façade GFRC stones for the Vagelos Education Center were being made in order to exert necessary pressure for their on-time delivery. In the wake of Hurricane Sandy, he responded to the urgency of an expiring lease and the need to see patients by working closely with his construction managers to keep workers on site to complete ColumbiaDoctors Midtown.

Through his leadership, Burke has advanced the creation of modern, high-tech environments, undoubtedly establishing a groundbreaking platform to train thousands of future health professionals and advocates.

2. Accomplishments

Patrick J. Burke III, AIA

Roy and Diana Vagelos Medical Education Center

Overview

In his 15 years at Columbia University Medical Center, Patrick Burke has overseen more than 2,000 projects totalling more than $900 million in construction, the greatest period of physical growth in the institution's history. He has shaped the campus of this preeminent medical facility, which draws students, patients, physicians, and researchers from all over the world. Columbia University Medical Center includes four professional schools:

- College of Physicians & Surgeons
- School of Nursing
- Mailman School of Public Health
- College of Dental Medicine

In addition to the Washington Heights campus, Burke oversees a network of off-site locations for specialty practices, allowing clinical revenue to increase by an average of 12% for each of the last three years. Burke works closely with administrators, educators, and even donors to develop projects that fulfill CUMC's mission to provide global leadership in scientific research, health and medical education, and patient care.

Medical Education

Medical education is at the core of Columbia University Medical Center's mission. When Dr. Lee Goldman became the executive vice president for Health and Biomedical Sciences and dean of the Faculties of Health Sciences and Medicine, the highest office at CUMC, he had a vision for training health professionals and researchers that integrated the latest technologies to simulate the techniques and procedures they will encounter in practice. Burke has been highly successful in implementing a commitment to design excellence and insuring that the medical center builds inspiring spaces for students, faculty, and researchers.

Roy and Diana Vagelos Education Center

New 100,000 sq. ft. cutting-edge teaching, education, anatomy, clinical skills and simulation facility for medical and graduate education.

This project was the result of an international design competition and has already been published in more than 200 publications.

The south elevation is highly expressive of the interior study cascade with an interconnecting stair up and down the entire 14 story building.

Burke led the project throughout, from the design competition to town halls to high level board and donor interface.

Completed 2016
Architect: Diller Scofidio + Renfro, Gensler

Irving Cancer Research Center

New 300,000 sq. ft. state-of-the-art research building. The 14-story building includes new research laboratories, the Avon Foundation Breast Imaging Center, ABSL-3 Biocontainment Facility, conference facility, and three stories of below-ground parking.

Burke led the construction of the core and shell, and then worked with the scientists to oversee all aspects of the design and construction of the entire interior.

Completed: 2007
Architect: Davis Brody Bond

Allan Rosenfield Building, Mailman School of Public Health

Complete renovation and repurposing of former 185,000 sq. ft. New York State Psychiatric Institute & Hospital. Project included all new infrastructure, and floor-by-floor on-going renovations for dry research, education space, auditorium and public health research laboratories.

Burke oversaw the full implementation of the vertical infrastructure, the complete restoration of the deteriorating 1928 façade, and the floor-by-floor fit outs.

Architecture firms include: Stonehill & Taylor, Mitchell Giurgola Architects, HLW International, Mancini Duffy, Integrated Design Group, Diller Scofidio + Renfro, Einhorn Yaffee Prescott

Medical Education

Hammer Teaching and Learning Center

39,000 sq. ft. adaptive reuse of the health sciences library. This interior renovation repurposed two floors of library stacks and created state-of-the-art classrooms as well as spaces for individual and small group study. The extensive integration of technology served as a beta testing environment for the Vagelos Education Center.

Burke was the executive director of the project and led design and construction, including student and faculty focus groups.

Completed: 2008

Architect: Mitchell Giurgola Architects

The Knowledge Center at the Augustus C. Long Health Sciences Library

Adaptive reuse of 16,000 sq. ft. of the library for an ultramodern education technology center. The facility includes advanced interactive learning tools for group and research use.

Burke provided executive direction for the project as Assistant Vice President for Capital Projects, overseeing the budget, schedule, and staffing.

Completed: 2016

Architect: Mitchell Giurgola Architects

Columbia University School of Nursing Building

New 83,000 sq. ft. vibrant teaching and education facility currently under construction. It includes a 12,000 sq. ft. high tech simulation facility with four operatories. The project also includes a below ground parking area with 183 spaces.

Burke provided executive direction for the project as Assistant Vice President for Capital Projects, overseeing the design competition, budget, schedule, and staffing.

Completion: Est. April 2017

Architect: CO|FXFOWLE

Anesthesia Center for Education, Research, and Evaluation, Columbia Presbyterian Building

New 3,000 sq. ft. simulation center for clinical anesthesia training. The facility includes two new operatories, control suite, and conference space.

As Assistant Vice President for Capital Projects, Burke interfaced on design, technology, and implementation.

Completed: 2015

Architect: Jeffrey Berman

Healthcare Facilities

In addition to medical education spaces, CUMC has facilities where its faculty practice as well as clinics that serve the community. ColumbiaDoctors provides primary care and specialty practices at a network of satellite locations, including its flagship in midtown Manhattan.

ColumbiaDoctors Midtown revenue has grown by 12% on average annually for each of the last 3 years. Correspondingly, visit volume has increased by 11% on average annually for the last 3 years.

ColumbiaDoctors Midtown New York, N.Y.

New 125,000 sq. ft. multi-specialty ambulatory clinical care facility, which includes primary care as well as an 18,000 sq. ft. radiology center (including MRI, CT, X-ray, ultra-sound).

Burke provided executive direction for the project as Assistant Vice President for Capital Projects, overseeing the budget, schedule, and staffing.

Completed: 2013

Architect: Perkins+Will

ColumbiaDoctors Tarrytown, N.Y.

New 22,000 sq. ft. multi-specialty ambulatory clinical care facility with 8,000 sq. ft. radiology center (including MRI, CT, X-ray).

Burke provided executive direction for the project as Assistant Vice President for Capital Projects, overseeing the budget, schedule, and staffing.

Completed: 2015

Architect: Array Architects

Morton A. Kreitchman PET Imaging Center, Allan Rosenfield Building

New 27,000 sq. ft. state-of-the-art clinical and research imaging facility with four PET/CT scanners. Project included two cyclotrons for research imaging protocols and 8,000 sq. ft. research laboratories. The renovation added pneumatic tubes for distribution of radioactive pharmaceutical doses.

Burke served as executive director with direct oversight of design and implementation of this highly technical project.

Completed: 2007

Architect: Stonehill & Taylor

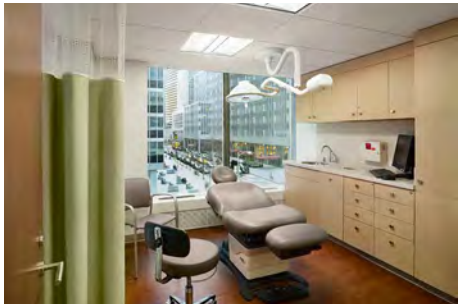
Healthcare Facilities

In addition to medical education spaces, CUMC has satellite facilities where ColumbiaDoctors provides specialty and tertiary care, including the 125,000 sq. ft. flagship in midtown Manhattan. In addition to exam and meeting space, the locations include radiology and procedure space. Often, these spaces must balance the need to create clinical environments that are warm, professional and comforting, while embracing cutting-edge technical modalities for imaging. In every project, Burke recognizes the human condition and the importance of aligning the appropriate architectural firm with the appropriate design challenge.

College of Dental Medicine Oral Implant Operatory Vanderbilt Clinic

Completed: 2012

Architect: Tapert Architecture PC



ColumbiaDoctors Midtown Dermatology Suite

Completed: 2013

Architect: Perkins+Will

ColumbiaDoctors | Primary Care Nurse Practitioner Group

Completed: 2016

Architect: Integrated Design Group

College of Dental Medicine Vanderbilt Clinic

Completed 2014

Architect: Tapert Architecture PC

Irving Center for Translational Research

Completed: 2001

Architect: Davis Brody Bond

ColumbiaDoctors Tarrytown, N.Y.

Completed: 2016

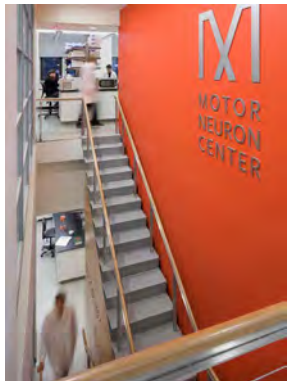
Architect: Array Architects

Biomedical Research

Biomedical research at Columbia University Medical Center is ranked 14th nationally in NIH funded sponsorship. Burke has been at the forefront of developing cutting-edge laboratories throughout the medical center, many of which are adaptive reuses of earlier spaces. Building upon his years of designing research facilities as an architect, Burke applied his expertise to guiding the planning, design and construction of hundreds of laboratory projects. These projects positively impact biomedical research as they create the high-technology platforms for the most advanced research. Burke provided executive oversight for the design, planning, and construction for the projects shown here.

Institute for Cancer Genetics
Irving Cancer Research Building

14,000 sq. ft. new fit-out for cancer genetics research.
Architect: Mitchell Giurgola Architects



Motor Neuron Center
College of Physicians and Surgeons Building

10,000 sq. ft. total gut renovation for motor neuron biology research (SMA, ALS; Lou Gehrig's disease)
Architect: Mitchell Giurgola Architects

Carroll Laboratories for Orthopedic Surgery
William Black Building

7,000 sq. ft. total gut renovation for orthopedic research.
Architect: Mitchell Giurgola Architects

Columbia Center for Translational Immunology
William Black Building

7,000 sq. ft. total gut renovation for bone marrow transplantation and transplantation immunology research.
Architect: Francis Cauffman

Taub Institute on Alzheimer's Disease, College of Physicians and Surgeons Building

10,000 sq. ft. total gut renovation for alzheimer's, parkinson's and other age-related research.
Architect: HLW International

Center for Craniofacial Regeneration
Vanderbilt Clinic

4,000 sq. ft. total gut renovation for new cleanroom and regenerative technologies.
Architect: Don Tapert

Campus and Community

In addition to upholding the highest standards for medical education and clinical care facilities, Burke must consider how to a create a destination campus that is welcoming to students, researchers, and physicians. In the urban environment of Manhattan, it is also important to be a good neighbor to the community in Washington Heights. Interior spaces are created for casual study and collaboration, with thoughtful attention to natural light and appropriate finishes. Exterior spaces, ranging from improving the streetscape to plans for an extensive pedestrian plaza benefit the entire community.

Haven Square

A long-term project, still in the review and approvals process, to transform a section of Haven Avenue for conversion into a community based pedestrian plaza. In 2016, a series of three one-day plaza festivals were held on the temporarily closed street in order to test community support for the project.

Status: In approvals and review

Architect: FXFOWLE

Campus Greenscape

Master plan initiative to transform sidewalks around campus into identifying and unifying feature through granite curbing, paver stones, enhanced trees, and planting beds.

Status: In construction

Landscape Architect: SCAPE

Alumni Auditorium, College of Physicians and Surgeons Building

Transforming a 1963 solid masonry auditorium at the heart of campus into a new glass-enclosed beacon for the center of campus. Architecture is commensurate with other new buildings on campus: open, inviting, and transformative.

Status: In design

Architecture firms: FXFOWLE, Ewing Cole Architects

Prior Work

Burke gained extensive knowledge with the design and construction of complex technical buildings during the early years of his career. In less than 10 years, Burke was being invited to speak at conferences on the design of technical facilities.

Avon Products
Global R&D Center

Suffern, N.Y.

Senior Associate
HLW International
1998-2001

Burke joined HLW International as an Associate and quickly rose through the ranks. He was Project Manager on a new, 225,000 sq. ft. research & development facility for this international beauty products company. As Project Manager, Burke worked closely with senior management at Avon Products for site selection, programming and the early design phases. This was an important project for Burke, as he was gaining notoriety as a research facility design architect and was trusted with senior client interaction.

Schering Plough
Biomedical Research Facility

Kenilworth, N.J.

Senior Associate
HLW International
1998-2001

While working at HLW International as a Senior Associate, Burke worked on this 100,000 sq. ft. expansion project that utilized new ventilated caging technologies for immuno-compromised and pathogen-free species. Burke acted as Project Architect and Project Manager on the Beta facility. The was an important project for Burke, as he was gaining important technical expertise and developing an understanding for the basic translational relationship between science and clinical therapeutics.

Marion Merrell Dow
World Headquarters

Kansas City, Mo.

Project Architect
The Hillier Group
1993-1997

Following graduate school at Princeton University, Burke joined The Hillier Group and relocated to Kansas City. Burke was an ambitious junior architect; he worked on the construction of a 765,000 sq. ft. foot world headquarters for an international pharmaceutical company, having specific responsibility for the auditorium. This was an important project for Burke, as he got early experience on a major, fast-track, design-build project, spending considerable time in the field and working closely as a designer and construction liason.

Speaking Engagements

2016 Speaker, Higher Education Facilities Forum, Hollywood, Fla., "Innovation & The Academic Mission; How Technology is Shaping the Way We Educate, Learn, and Build"

Speaker, Bisnow, New York, N.Y. "State of New York Healthcare: How Expansion, Consolidation, and Development are Changing the Game"

2015 Speaker, National Healthcare Expansion Series, Philadelphia, Pa., "The Challenges of Health System Real Estate"

Speaker, Next Generation Healthcare Facilities Summit, Boston, Mass., "Case Study: Columbia University Medical Center Capital Plan: Project Implementation, Evaluation, Future Initiatives & ROI Objectives"

2014 Speaker, National Healthcare Real Estate Summit, Philadelphia, Pa., "Future of Health System and Hospital Facilities"

Speaker, New York City Healthcare Master Builders Forum, "Leading Healthcare, Real Estate, Design, and Construction Professionals Share Their Strategic Vision for Building Best-in-Class Medical Centers"

2013 Speaker, Tradeline International Conference in Animal Research Facilities, Washington D.C., "Columbia's Multi-Year Strategic Campus Plan for Vivarium Modernization"

2012 Speaker, Engineering News-Record, New York, N.Y., "The Pulse: A Closer Look at the Growing Healthcare Construction Market"

2011 Speaker, Tradeline International Conference in Research Facilities, Washington, D.C., "High Value Facility Renovation & Renewal Strategies for Today's Science Mission"

Speaker, Deloitte Healthcare Facilities Executive Roundtable, New York, N.Y., "Emerging Strategies: Managing Hospital Construction Projects and the New Realities of Construction Risk."

Speaker, SMPS, Society for Marketing Professional Services, New York, N.Y., "Healthcare Market Boom: Is Your Firm Well-Positioned?"

2004 Reviewer, NIH NCRR Scientific and Technical Review Board on G20 Biomedical and Behavioral Research Facilities, Bethesda, Md.

Professional Experience

Columbia University Medical Center, New York, N.Y.

2012-Present Assistant Vice President for Capital Project Management
2008-2012 Executive Director of Capital Project Management
2001-2008 Director of Design and Construction

HLW International, New York, N.Y.

1998-2001 Senior Associate

The Hillier Group, Princeton, N.J., and Kansas City, Mo.

1993-1997 Project Architect

Princeton University, Princeton, N.J.

1997 Visiting Critic
1995 Instructor of Architecture and Urban Planning, Housing Design Studio
1992 Assistant Instructor of Architecture

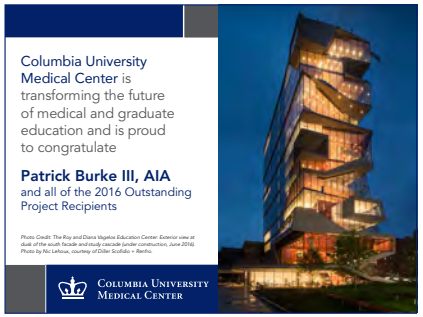
Education

Princeton University, Princeton, N.J.

1993 Master of Architecture

Columbia University, New York, N.Y.

1989 Bachelor of Arts, Art History



Recognition

2016 Individual of the Year, Greater New York Construction User Council, Chairman's Reception

2014 New Medical and Graduate Education Building, Concrete Industry Board's 53rd Annual Roger H. Corbetta Award

2012 Honoree, Special Olympics, New York's 13th Annual New York Real Estate & Construction Gala

2010 LEED Gold, Allan Rosenfield Building, Mailman School of Public Health, floors 11, 12, and 13

Awards for Projects

Roy and Diana Vagelos Education Center

2016 Architizer A+ Awards, Architecture + Engineering, Finalist

Architizer A+ Awards, Institutional Unbuilt, Finalist

2015 Excellence in Structural Engineering, National Council of Structural Engineers Association

SEAoNY Excellence in Structural Engineering Awards, Structural Engineers Association of New York

American Concrete Institute, Strategic Development Council, Award for Innovative Design

2014 53rd Annual Roger H. Corbetta Awards, Concrete Industry Board

2013 AIA New York Project Merit Award

Haven Parking Garage

2014 Concrete Award, International Concrete Repair Institute

ColumbiaDoctors Midtown

2013 Best of Category, Ambulatory Care Centers, International Interior Design Association (IIDA)

Select Publications

ARCHITECTURAL DIGEST

"Diller Scofidio + Renfro Unveils New Columbia University Medical Building," *Architectural Digest*, July 27, 2016.

"Roy and Diana Vagelos Education Center review – a theatrical medical school," *The Guardian*, August 3, 2016.

"The Credo of DS+R's New Columbia Med-School Building: First, Do No Harm to the Neighborhood," *New York Magazine*, August 17, 2016.

"Roy and Diana Vagelos Education Center / Diller Scofidio + Renfro," *ArchDaily*, August 24, 2016.

ARCHITECT

"Columbia University Roy and Diana Vagelos Education Center," *ARCHITECT Magazine*, August 1, 2016.

"Inside Columbia University's Cascading New Medical Building," *Curbed NY*, July 27, 2016.

"CUMC Prepares To Open New Medical Education Building," *Healthcare Design*, June 13, 2016.

"Columbia University Medical Center Dedicates Vagelos Education Center," *Tradeline*, June 29, 2016.

"ColumbiaDoctors unveils new medical offices in Tarrytown; 20,000 s/f facility offers advanced specialty care," *New York Real Estate Journal*, May 3, 2016.

nyrej

"Columbia University School of Nursing To Build New Simulation Center," *Healthcare Design*, April 27, 2015.

"Medical Campus Sets a High-Tech Infusion," *Wall Street Journal*, May 20, 2014.

"Columbia University nursing school project pegged at $34M," *The Real Deal: New York City Real Estate News*, March 25, 2014.

"FX Fowle and CO Architects Team up for Columbia School: Hello Nurse!" *Architect's Newspaper*, November 13, 2013.

NEW YORK

"CO|FXFOWLE designs 65,000 s/f projected LEED Silver bldg. for Columbia Univ. School of Nursing," *New York Real Estate Journal*, November 2013.

"Columbia University School of Nursing / CO|FXFOWLE," *ArchDaily*, November 3, 2013.

"Photo Tour: ColumbiaDoctors Midtown," *Healthcare Design Magazine*. October 4, 2013.

"Medical center to construct new Nursing School building," *Columbia Spectator*, October 25, 2013.

contract
inspiring commercial design solutions

"CO Architects, FX Fowle Sign on for Columbia University Nursing School," *Contract Design*, October 25, 2013.

"Columbia University's New Nursing School Will Look Like This," *Curbed*, October 24, 2013.

"Columbia to Start Construction of New Nursing School Building in Late 2014," *The Uptown Collective*, October 28, 2013.

Select Publications

"In the News: A Circulation Ribbon Ties Programs Together," *Oculus*, November 6, 2013.

"Columbia nursing students will get their tuition's worth from this state of the art building," *New York Business Journal*, October 25, 2013.

"Columbia University and Karim Rashid bring downtown cool to uptown," *New York Daily News*, October 24, 2013.

"Columbia University Medical Center, Medical and Graduate Education Building, New York City, Lab Design News September 17, 2013.

"7 Visionary Projects," By David Dick-Agnew, Tim McKeough and Elizabeth Pagliacolo," *Azure Magazine*, April 22, 2013.

"Alumni Couple Gives $20-Million to Columbia U. Med Center," *The Chronicle of Philanthropy*, March 25, 2013.

"2013 AIA New York Design Awards," *ArchDaily*, March 13, 2013.

"ColumbiaDoctors has its midtown debut," *Crain's Health Care Pulse*, January 24, 2013.

"Architecture: Building Teamwork at Columbia Medical Center," *Washington Post*, August 9, 2012.

"Diller Scofidio + Renfro Design New Columbia," *Contract Design*, July 12, 2012.

"Diller Scofidio + Renfro: New Columbia University Medical Center," *DETAIL.de | Architektur-Portal*, July 8, 2012.

"Columbia's Medical Education Building Sets Stage for Advancement," *New York Daily News*, July 5, 2012.

"Diller Scofidio + Renfro Unveils New Columbia University Medical Building," *ArchDaily*, July 3, 2012.

"Columbia University Reveals Plans for Daring New Medical Education Tower," *World Architecture News*, June 29, 2012.

"Shop Talk: If You Build It, Will They Come?" *The Chronicle of Higher Education*, June 28, 2012.

"Columbia Unveils an Unorthodox Med School Building," *The New York Times*, June 26, 2012.

"Diller Scofidio + Renfro diseña el nuevo Edificio de Medicina para la Universidad de Columbia," *Plataforma Arquitectura*, July 4, 2012.

"A Facelift for Doctor's Alma Mater," *Wall Street Journal*, September 27, 2010.

3. Exhibits

Patrick J. Burke III, AIA

Table of Contents

1. Roy and Diana Vagelos Education Center

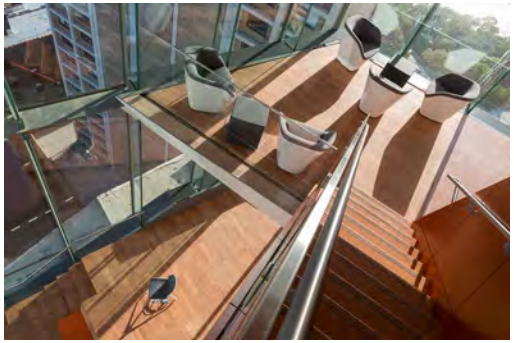
The Roy and Diana Vagelos Education Center, the newest addition to CUMC's campus, is a new, state-of-the-art medical and graduate education building. Designed by Diller Scofidio + Renfro, in collaboration with Gensler as executive architect, the Vagelos Education Center is a 100,000-square-foot, 14-story glass tower that incorporates technologically advanced classrooms, collaboration spaces, and a modern simulation center to reflect how medicine is taught, learned, and practiced in the 21st century. The design seeks to reshape the look and feel of the medical center, and to create spaces that facilitate the development of skills essential for modern medical practice. The technology in these spaces are transforming the way that medicine is taught.

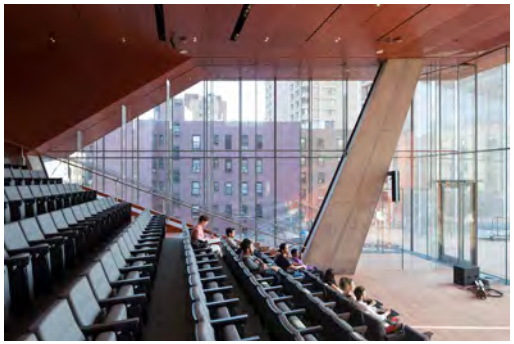
The design for the building was chosen through a design competition in 2009. Burke worked closely with the donor for the project, Roy Vagelos, former CEO of Merck, who was active in choosing the winner of the competition and remained involved throughout the project. Through a challenging value engineering process, Burke remained true to the features that had distinguished the design in the competition. In order to meet the completion date, Burke made weekly trips to the casting plant upstate in order to monitor the production of GFRC stones for the façade and ensure the project was completed on time.

Design Firm: Diller Scofidio + Renfro; **Firm of Record:** Gensler
Completion Date: 2016
Role: Executive oversight of design and construction process
Select Recognition:
"Diller Scofidio + Renfro Unveils New Columbia University Medical Building," *Architectural Digest*, July 27, 2016.
"Columbia University Roy and Diana Vagelos Education Center," *ARCHITECT Magazine*, August 1, 2016.
Excellence in Structural Engineering, National Council of Structural Engineers Association, 2015
AIA New York Project Merit Award, 2013

I have personal knowledge that the nominee is largely responsible for the direction of the above project.

Madeline Burke-Vigeland AIA
Principal, Gensler

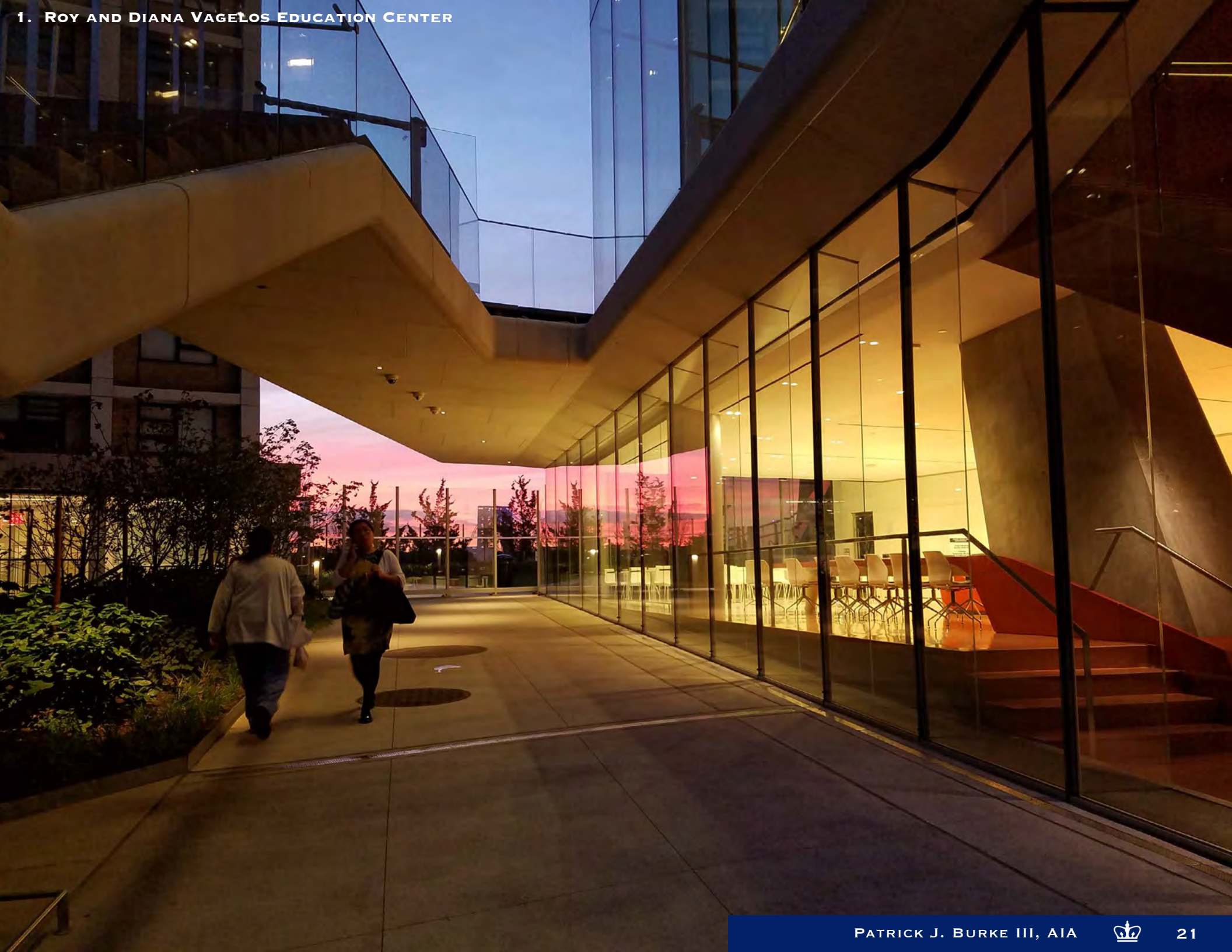




Deftly balancing reality and simulation, dialogue and image, science and art, the Vagelos Center is joyous and life-affirming, qualities all too often absent today in architecture and medicine.

- Architect's Newspaper, October 5, 2016

1. Roy and Diana Vagelos Education Center



2. Irving Cancer Research Center

The Irving Cancer Research Center (ICRC), part of the Audubon Research and Technology Park, fulfills Columbia's 1985 master plan to create a special district for laboratories next to the medical center. The building adds approximately 300,000 square feet of space for basic science, disease-specific, and population-based cancer research programs, as well as a breast screening facility, computational biology, classrooms, data center, and below-grade parking. In addition, it houses the Avon Foundation Breast Imaging Center, a clinic open to the public.

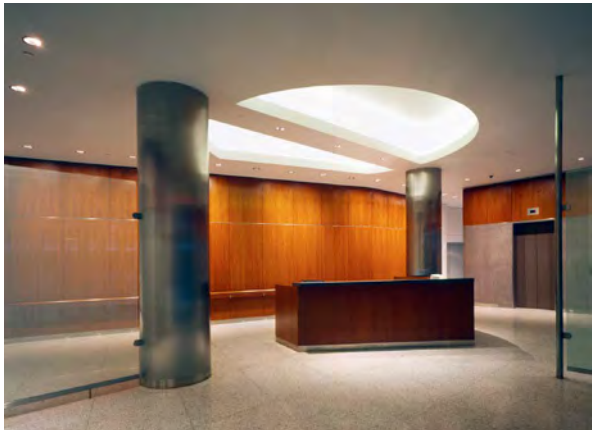
Because there was uncertainty about what programs would be located in the building, the ICRC was designed based on a conceptual lab floor plan to develop the core and shell, and a robust MEP infrastructure was incorporated to support future lab programs. As the program was finalized and with funding in place, the laboratories were fit out, floor-by-floor, to accommodate specific research requirements. The laboratories line the perimeter to take advantage of natural light and views, with the core of each floor having specialized support and shared common facilities.

The project encountered a major problem during construction, when it was discovered that the reshoring had been pulled out too early, and concrete creep had caused all the floors to deflect. On all 14 floors, the column bays between the supports had to be filled with concrete.

Firm of Record: Davis Brody Bond
Completed: 2007
Role: Executive oversight of construction of core and shell, and full oversight of design and construction process for the floor-by-floor fitouts

I have personal knowledge that the nominee is largely responsible for the direction of the above project.

Will Paxson AIA
Partner, Davis Brody Bond, LLP



The architecture of the Irving Cancer Research Center embodies and supports the best, highly integrated cancer research. The proximity of wet laboratories, bioinformatics, animal facilities and sophisticated small animal imaging creates the ideal relationships to encourage our scientists to work and collaborate at the highest levels.

- Stephen G. Emerson, M.D., Ph.D., Director of the Herbert Irving Comprehensive Cancer Center

3. Allan Rosenfield Building, Mailman School of Public Health

This immense undertaking created a new home for the Mailman School of Public Health through the adaptive reuse and expansion of the 185,000 sq. ft. former New York State Psychiatric Institute & Hospital. The entire interior and exterior were renovated, including an all new infrastructure.

The building was renovated floor-by-floor for dry research, education space, an auditorium, and public health research laboratories. The building is also home to BSL3 Bio-containment labs, a Pediatric Dental Clinic for the community, and the Morton A. Kreitchman PET Center and research labs that include two cyclotrons. This facilty is a revolutionary platform for early cancer detection.

Accommodating technology in a renovation project is a challenge that Burke regularly faces. This 1928 building required all new infrastructure, as well as a new floor to house the mechanical systems. The cyclotrons, housed in the basement and first floor, required a dedicated radiation exhaust system that runs through a former elevator shaft for the full height of the building. Despite these difficulties, the project came in under budget.

Firms of Record: Stonehill & Taylor, Mitchell Giurgola Architects, HLW International, Mancini Duffy, Integrated Design Group
Completed: Phased construction, 2001-2011
Role: Executive oversight of design and construction process

I have personal knowledge that the nominee is largely responsible for the direction of the above project.

Barry Erenberg, Principal
Integrated Design Group

The building houses one of only a handful of cyclotrons, above, in the country. The cyclotron raises the level of patient care since it can produce a customized FDG, the contrast solution used to detect cancers in imaging. The clinician manipulates the sterile solution using robotics, right. A pneumatic tube then immediately delivers the solution to the imaging suite, top right. These FDG solutions have such a brief half life that a delay in delivery would descrease their efficacy.

4. Columbia University School of Nursing Building

This new seven-story building provides a modern teaching and education facility for one of the oldest nursing schools in the nation. The interior features a network of flexible, technologically advanced spaces that accommodate various styles of teaching and learning, as well as casual open areas. Clinicians and nurse researchers will work in close proximity for a mutual broadening of perspectives, and it will host forums for visiting scholars from around the world to interact with students and faculty.

Like the Vagelos Education Center, the design of the School of Nursing Building is driven by the integration of technology toward the betterment of patient care. A highlight of the building will be a state-of-the art simulation center to help students master complex clinical techniques in a safe, educational environment. The simulation center, which will occupy nearly two floors, provides a variety of model health-care settings, such as a mock in-patient room, exam room, critical care unit, and an operating room. Three clinical teaching skills labs contain a total of six beds, and 14 exam tables give students the opportunity to perfect clinical procedures on lifelike mannequins.

The design for the project had to be reevaluated after bids came back over budget. Burke worked closely with the architect, construction manager, and the dean of the school of nursing to prioritize features.

Firm of Record: CO|FXFOWLE **Status:** Under Construction
Role: Executive oversight of design and construction process
Select Recognition:
"Columbia University School of Nursing To Build New Simulation Center," *Healthcare Design*, April 27, 2015.
"CO|FXFOWLE designs 65,000 s/f projected LEED Silver bldg. for Columbia Univ. School of Nursing," *New York Real Estate Journal*, November 2013.
"CO Architects, FX Fowle Sign on for Columbia University Nursing School," *Contract Design*, October 25, 2013.

I have personal knowledge that the nominee is largely responsible for the direction of the above project.

Dr. Bobbie Berkowitz
Dean of School of Nursing, Columbia University Medical Center

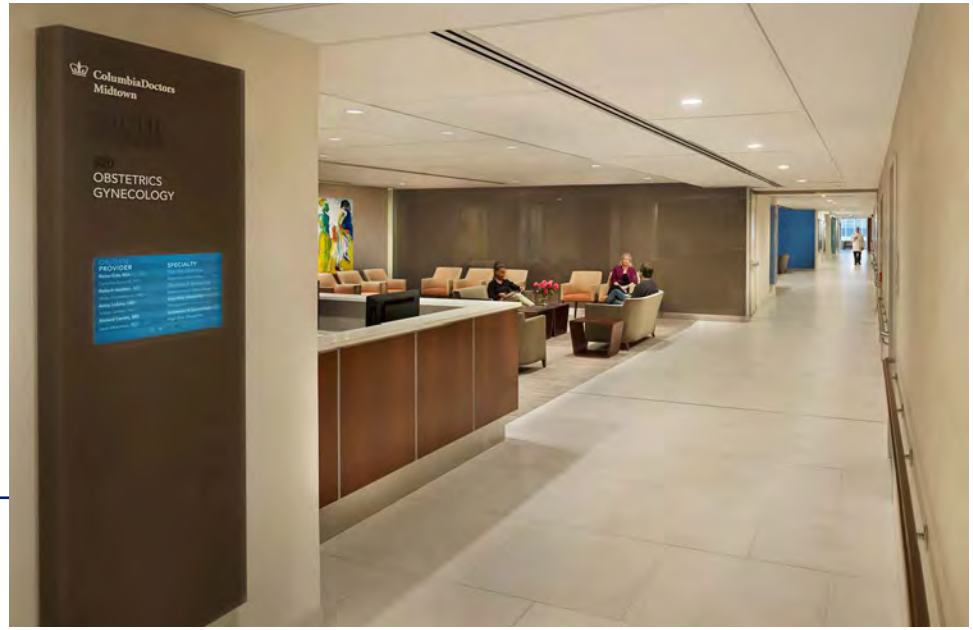
5. ColumbiaDoctors Midtown

This ambulatory care facility in a prime midtown location was a transformative project for ColumbiaDoctors. It accommodates 225 physicians, dentists, and nurse practitioners in 14 specialties. In addition to more than 125 exam rooms, patients can receive a full range of procedures on site, including endoscopy, skin treatments, ultrasound, and cardiac stress tests. There are fully equipped physical therapy, occupational therapy, and sports therapy facilities. The 18,000 sq. ft. imaging suite has a full range of diagnostic imaging services, including X-Ray, PET/CT and MRI, mammography, and fluoroscopy.

The expansion of ColumbiaDoctors has raised the level of service that CUMC can provide to patients. Not only does it bring services to the communities where its patients live, it conveniently provides a wide range of services that were previously only available in hospitals, and it serves as an important conduit for patients to the hospital. The space is laid out with thoughtful adjacencies, making it more convenient for patients and facilitating collaboration among physicians.

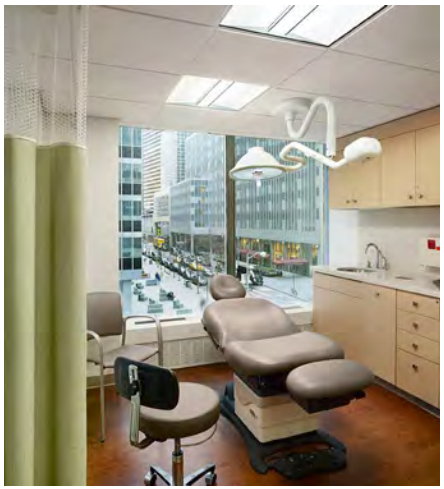
With an expiring lease and the need for ColumbiaDoctors to avoid an interruption in service, it was vital to adhere to the aggressive ten month schedule, even when construction was halted after Hurricane Sandy. Burke pushed, when needed, to keep the project on track, even visiting the millwork facility to accelerate production.

Firm of Record: Perkins+Will **Completed**: 2013
Role: Lease negotiation and sxecutive oversight of design and construction
Select Recognition:
"Photo Tour: ColumbiaDoctors Midtown," *Healthcare Design Magazine*, October 4, 2013.
"ColumbiaDoctors has its midtown debut," *Crain's Health Care Pulse*, January 24, 2013.
Best of Category, Ambulatory Care Centers, International Interior Design Association (IIDA), 2013



I have personal knowledge that the nominee is largely responsible for the direction of the above project.

Robin Worley, Sr., Director, Practice Operations,
Columbia University Medical Center

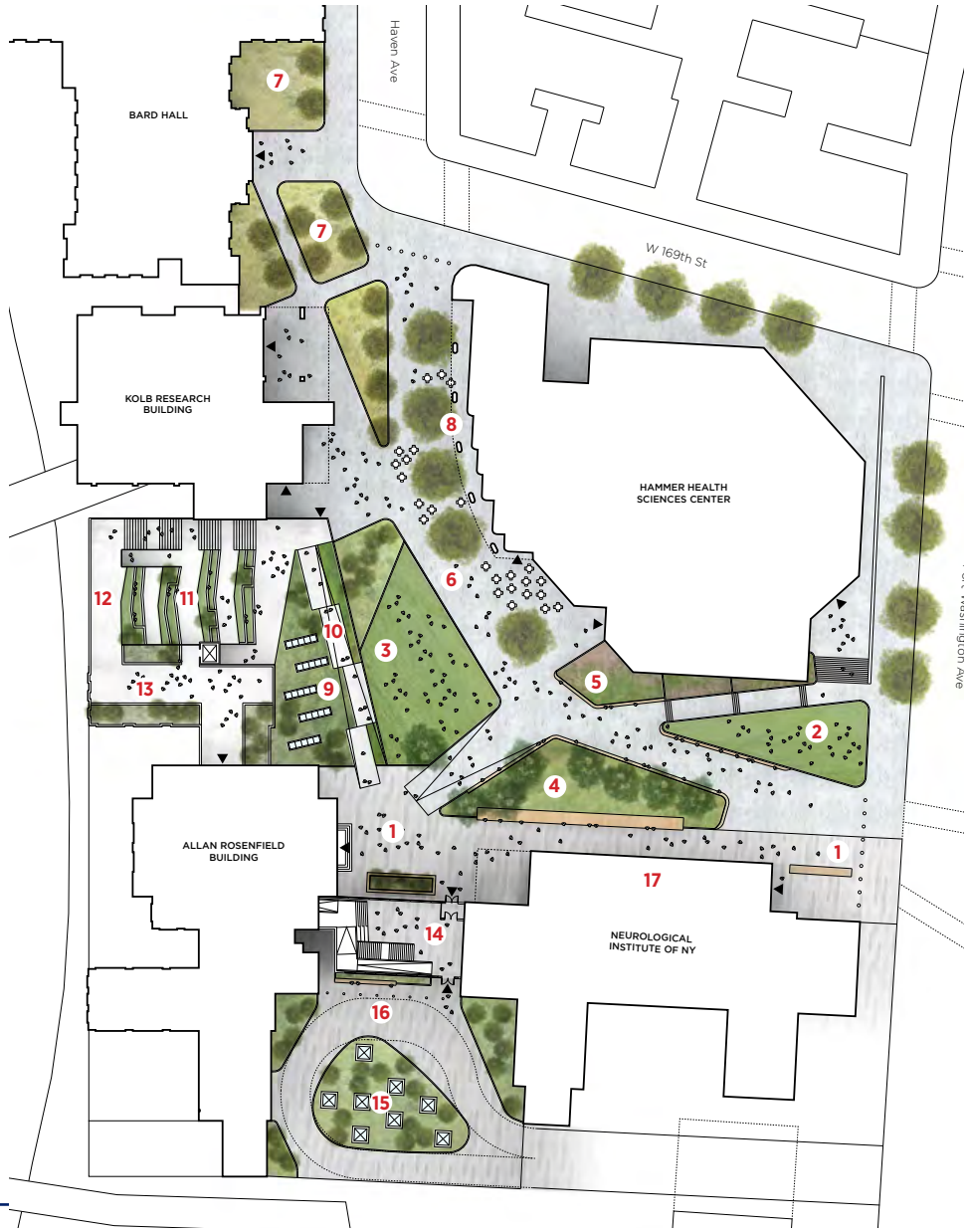


6. Haven Square

Located between 168th and 169th streets, Haven Square creates a 70,000 sq. ft. pedestrian plaza, a green space within the urban context of Washington Heights. Here, at the natural center of activity on CUMC's campus, Haven Square serves not only the Columbia community but the surrounding neighborhood, while fulfilling Columbia's broader initiative to beautify and improve the campus experience. A central promenade flanked by islands with a variety of plantings provides direct and welcoming access to the adjacent buildings.

This project requires the involvement of numerous entities, including the Departments of Transportation, Parks, and Environmental Protection. For this defining initiative for Columbia University Medical Center, collaboration and consensus amongst a range of stakeholders, governmental agencies, and community members is critical. To test the community's receptiveness to the square, Burke's team organized three one-day, free plaza festivals—two in the summer, one in the fall—that featured various cultural, health, and wellness activities, as well as local vendors, for the medical center and Washington Heights communities to enjoy. The fall one-day closure was attended by more than 5,000 people.

Firms of Record: FXFOWLE; Quennell Rothschild, Landscape Architects
Status: In city review and approvals process
Role: Executive oversight of design competition, consensus building, and managing the review and approvals process



HAVEN GREEN - SITE PLAN

I have personal knowledge that the nominee is largely responsible for the direction of the above project.

Ross A. Frommer Deputy Vice President,
Government & Community Affairs
Columbia University Medical Center


TUESDAY, JUNE 14, 2016 | 11:00 A.M. TO 3:00 P.M.
HAVEN AVE. BETWEEN FORT WASHINGTON AND 169TH STREET
SUMMER
HAVEN
OPEN TO ALL
Summer in Washington Heights kicks off with Summer Haven, a FREE One Day Plaza festival that showcases local culture and promotes health and wellness in the community.
For more information, please contact gca@cumc.columbia.edu

7. Hammer Teaching & Learning Center

In this renovation and adaptive re-use project, two floors of the Hammer Health Sciences Center were converted from library stack space into classrooms and education facilities. This 45,000 sq. ft. project doubled the classroom space and centralized education functions at CUMC.

The Teaching and Learning Center includes 24-hour study lounges, group study rooms, and individual study carrels. Fifteen new classrooms and a renovated library reading room are also available as study space when not in use. Spaces throughout the building are designed to foster collaboration, from the delta shaped tables to integrated laptops for each student in the largest classrooms. The welcoming building was recently host to a student-organized Fine Art Exhibition, which featured work from students, faculty, and staff.

The Hammer Teaching and Learning Center served as a Beta project for the integration of technology into the Vagelos Education Center. During the planning of this project, a new curriculum was being developed for the medical school, and it was clear that new technology had an increasing importance in educating future doctors. For example, monitors were placed at various angles throughout classrooms so that students could sit in small, collaborative groups, but still be able to view a presentation.

Firm of Record: Mitchell Giurgola Architects
Completed: 2009
Role: Executive oversight of design and construction process

I have personal knowledge that the nominee is largely responsible for the direction of the above project.

James R. Braddock AIA, Partner
Mitchell Giurgola Architects

8. ColumbiaDoctors, Tarrytown, N.Y.

This 22,000 sq. ft. renovation represented a nine-fold increase in the square footage for this satellite office, making it the second largest location after the midtown Manhattan office. The renovation accommodates an expansion in the current practice of Orthopedics and Rehabilitation to offer Radiology, Medicine, Cardiology, Neurology, Surgery, Otolaryngology and Ophthalmology. The office features an expansive, 10,000 sq. ft. radiology facility, one of the most comprehensive outside a hospital anywhere in the region, with CT, MRI, X-ray, ultrasound, and interventional radiology.

Firm of Record: Array Architects
Completed: 2016
Role: Lease negotiation, executive oversight of design and construction process
Select Recognition:
"ColumbiaDoctors unveils new medical offices in Tarrytown; 20,000 s/f facility offers advanced specialty care," *New York Real Estate Journal*, May 3, 2016.

I have personal knowledge that the nominee is largely responsible for the direction of the above project.

Rosalie Long, RN, MBA
Chief Operating Officer, ColumbiaDoctors

Photography Credits

1 Roy and Diana Vagelos Education Center
Images courtesy of Iwan Baan Photography B.V.,
Nic Lehoux, Jenny Gorman, Diller Scofidio + Renfro,
Patrick J. Burke

2 Irving Cancer Research Center
Images courtesy of Wade Zimmerman

3. Allan Rosenfield Building,
Mailman School of Public Health
Images courtesy of Stonehill & Taylor,
Columbia University Mailman School of Public Health

4. Columbia University School of Nursing Building
Images courtesy of Columbia University Medical Center,
CO|FXFOWLE

5. ColumbiaDoctors Midtown
Images courtesy of Halkin Mason Photography

6. Haven Square
Images courtesy of FXFOWLE, ESU Events,
Columbia University Medical Center

7. Hammer Teaching & Learning Center
Images courtesy of Albert Vecerka / Esto

8. ColumbiaDoctors, Tarrytown N.Y.
Images courtesy of Halkin Mason Photography

4. References

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