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## 2019 AIA Fellowship

Nominee Brian Kowalchuk

Organization HDR

Location Lawrenceville, New Jersey

Chapter AIA New Jersey; AIA Central New Jersey

### Category of Nomination

Object 1 - Design

### Summary Statement

Brian Kowalchuk distills complex programs into simple, elegant concepts that put people at the center. His technologically advanced architecture often defies convention as he designs to inspire connections that improve lives and foster extraordinary outcomes.

### Education

Bachelor of Architecture, New Jersey Institute of Technology, College of Architecture & Design, 1980

### Licensed in: New Jersey

### Employment

HDR Lawrenceville, New Jersey Global Director of Design, 2011 – present

Design Director and Senior Vice President, 2008 – 2011

CUH2A Lawrenceville, New Jersey Design Director, 2003 – 2008

Design Principal, 1996 – 2003

Senior Architectural Designer, 1992 – 1995

Michael Landau Associates Princeton, New Jersey Partner, 1990 – 1992

CUH2A Lawrenceville, New Jersey Principal Architect and Associate, 1989 – 1990

Principal Architect, 1986 – 1988

Senior Staff Architect, 1986

Staff Architect, 1984 – 1985

Short and Ford Architects Princeton, New Jersey Project Designer and Project Architect, 1980 – 1984



October 1, 2018

Mary P. Cox, FAIA  
Chair, Jury of Fellows  
The American Institute of Architects  
1735 New York Avenue, NW  
Washington, DC 20006-5292

Subject: Sponsor Letter for Brian Kowalchuk, AIA

Dear Ms. Cox and Members of the Jury,

It is a great pleasure and an honor to submit this letter of sponsorship and nomination for Brian Kowalchuk, AIA, for elevation to the College of Fellows. I have had the opportunity and pleasure to know and work continuously with Brian over the past eighteen years. I have admired his work and his abilities without reservation. As a project principal, when I have had clients demanding great design, demanding transformational workplaces, and demanding the highest quality projects delivered on-time and on budget, I have always relied on Brian; and he has always delivered. In fact, he has always exceeded expectations capturing a bold idea that embodies the client's vision.

Whether designing healthcare facilities, complex research environments or innovative academic workplaces, Brian has always challenged and rethought the standard approach. He expresses integrated design with thorough subject matter knowledge of how a building and its systems work while being mindful of place and resources. It does not matter whether the client is from industry, government or academia, it does not matter what continent or culture for which Brian designs; the results are always spectacular.

Beyond Brian's innate planning and design skills, I have witnessed his passion for meaningful design and his unrelenting work ethic inspire the young designers who work with him. I have seen Brian reinvigorate his more seasoned peers, whether designer, planner, interior designer or project architect. His efforts as design director have lifted the design quality of our entire firm.

Most importantly, for almost two decades, I have observed Brian mentoring young designers and architects. He has continuously made significant efforts to disseminate his knowledge to elevate the architectural profession to architects, engineers, contractors and owners through teaching, writing and speaking. I have admired Brian's record of accomplishment and know that he has had a far-reaching impact on both the architectural community and the world. Brian truly exemplifies the highest ideals of our profession, and I enthusiastically recommend and endorse his elevation to the American Institute of Architects College of Fellows, an honor he richly deserves.

Sincerely,

Jonathan Crane, FAIA  
*Senior Vice President, Director Translational Health Sciences*  
HDR Architecture, Inc.



## BRIAN KOWALCHUK

AIA, LEED AP

Global Director of Design

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*Brian Kowalchuk distills complex programs into simple, elegant concepts that put people at the center. His technologically advanced architecture often defies convention as he designs to inspire connections that improve lives and foster extraordinary outcomes.*

Brian Kowalchuk's portfolio speaks volumes: high-profile projects, world-renowned institutions, highly technical requirements, award-winning designs, locations around the world. He transforms complex programs into elegant architectural solutions, creating places and spaces where people are comfortable, connected, and inspired to produce extraordinary work. Brian has profoundly improved people's lives and advanced discovery through purposeful design. In recognition, he has received 19 AIA Awards, as well as seven prestigious Lab of the Year Awards from R&D Magazine, including three in the past five years.

### PEOPLE AT THE CENTER

For Brian, design begins and ends with the people who inhabit the spaces he designs. He just as carefully considers the scientist who spends long days sequencing genes as he does the college student on the way to class—imagining new ways to enrich their lives. He considers the elements essential to human life that often result in paradigm shifts.

At the Pirbright Institute, researchers' quality of life was dramatically improved when Brian turned the traditional layout of containment labs inside out, moving laboratories to the outside and people to the center of a radial plan, creating a comfortable, inspiring and livable environment within the containment barrier.

### RETHINK THE STANDARD APPROACH

Whether spaces for teaching, research, treatment, or running corporations, Brian formulates novel solutions that are individual to each project. He embraces the challenge of rethinking the standard approach, using a visioning process that brings people together from all levels of an organization and fosters consensus by breaking down barriers—oftentimes revealing surprising aspirations. He distills a project to its essence to form a simple, clear solution, from which he develops an iconic architectural expression.

For the Zayed Building for Personalized Cancer Care, Brian reinvented how research is conducted at MD Anderson. By designing for next-generation scientists, he enables modern transformational research within a building whose glass exterior embodies hope and the inspiration to “make cancer history.”

By rethinking conventional typologies, Brian constantly seeks to create vital connections among people, place and technology. He intentionally choreographs movement through space to encourage interaction and cultivate a sense of belonging. He builds engagement at many scales—a virtual reality cave

where hundreds gather to connect with each other and with thousands remotely; an artfully crafted niche along a well-traveled corridor where people serendipitously meet; a quiet corner with a framed view to outside, where a person can sit and quietly connect with their own thoughts.

At the Roslin Institute, members of the University of Edinburgh and the local community are welcomed to the ground-floor café at the edge of the central green. Upstairs, Brian created a circulation spine that is illuminated by four colorful light-wells and flanked by informal and formal gathering spaces and small niches for respite. The building symbolizes a new, modern chapter for an historic campus.

### CONTEXT & CULTURE

Brian's work spans the world; he has a high degree of sensitivity to cultural differences, even in societies that are largely closed to the western world. Observing the architectural vernacular of a place, his buildings respond specifically to the environment and culture in which they stand. This sensitivity plays out on both a large and small scale: for a headquarters building in the Middle East, Brian conceived an internal courtyard to function like a wind tower found in traditional Arabic architecture; inside, intimate spaces respect culturally appropriate standards of privacy.

In an increasingly global economy, he has mastered the ability to skillfully blend two different cultural aesthetics. By pairing a sleek exterior appropriate for a company's Swiss origins with gardens, colors and symbols that resonate with the Chinese researchers working there, he created a level of comfort they would not experience in a typical European setting. His resulting designs support and promote shared values and brand recognition on the international stage.

For more than 37 years, Brian has been a passionate advocate for bold, culturally sensitive and purposeful architecture. This unwavering commitment has most recently manifested in the transformation of a large architecture practice where, as its first Global Director of Design, Brian has infused creativity, innovation and design thinking into all corners of the practice—positively impacting the careers of hundreds of young professionals. Through his work on projects, his counsel to young designers and his speaking engagements, Brian builds unabashed enthusiasm for the profession—and for the tenet that design can unite people and add meaning and fulfillment to their work everywhere in the world.



## ACADEMIC

-  **The University of Edinburgh, The Roslin Institute**, Midlothian, Scotland, United Kingdom
-  **University of Maryland, Physical Sciences Building**, College Park, Maryland, USA
-  **University of Texas, MD Anderson, Sheikh Zayed Bin Sultan Al Nahyan Building for Personalized Cancer Care**, Houston, Texas, USA
-  **University of Maryland, Brendan Iribe Center for Computer Science and Innovation**, College Park, Maryland, USA

**Utah State University College of Agriculture, Agricultural Research Building**, Logan, Utah, USA

**Kings College London, Chemical Biology Building**, London, England, United Kingdom

**The Republic of Kazakhstan, Ministry of Education and Science, Astana University**, Astana, Kazakhstan

**Washington University School of Medicine, Clinical Science Research Building**, St. Louis, Missouri, USA

**Washington University School of Medicine, East McDonnell Specialized Research Facility**, St. Louis, Missouri, USA

**Georgia State University, Parker H. Petit Science Center**, Atlanta, Georgia, USA

**University of California, San Diego, Centralized Research Support Facility**, San Diego, California, USA

 **Howard University, Interdisciplinary Research Building**, Washington, DC, USA

**University of Illinois at Urbana-Champaign, Institute for Genomic Biology**, Urbana-Champaign, Illinois, USA

**University of Alabama at Birmingham, Shelby Interdisciplinary Biomedical Research Building**, Birmingham, Alabama, USA

 **Seoul National University, Biomedical Education Research Institute**, Seoul, Korea

**Nanjing University, College of Engineering and Applied Science**, Nanjing, China

**China Pharmaceutical University, Jiangning Campus Laboratory Building**, Nanjing, China

**Peking University, Life Science Research Center**, Beijing, China

**Helmholtz Diabetes Center, German Research Center for Environmental Health**, Munich, Germany

**University of Florida, Pathogen Research Facility**, Gainesville, Florida, USA

**Peking Union Medical College Hospital, Translational Research Center**, Beijing, China

**University Hospital Hamburg-Eppendorf, Hamburg Center for Translational Immunology, Research Building II**, Hamburg, Germany

## CORPORATE

 **Telecommunications Regulatory Authority, Headquarters Building**, Dubai, United Arab Emirates

 **Kolos Data Center**, Ballangen, Norway

**Pfizer Inc., Global Drug Discovery Headquarters**, Groton, Connecticut, USA

**Pfizer, Inc., Global Research and Development Headquarters**, New London, Connecticut, USA

**Pfizer, Ltd., Campus Gateway**, Sandwich, Kent, England

 **Pfizer Ltd., Developmental Research Facility**, Sandwich, Kent, United Kingdom

**DuBiotech, International Center of Excellence Laboratory Building**, Dubai, United Arab Emirates

**Huawei, Corporate Financial Headquarters Building**, Shenzhen, China

**AT&T, Research and Development Campus**, Middletown, New Jersey, USA

**China Resources Medication Group Limited, Daxing Biomedical Park Master Plan**, Beijing, China

**Unilever, Office of the Future**, Port Sunlight, England, United Kingdom

 **Procter & Gamble, World Headquarters Lobby Renovation**, Cincinnati, Ohio, USA

**Jackson Labs Research Facility**, Bar Harbor, Maine, USA

**Huawei Suzhou Technology Center**, Suzhou, China

**Rhone-Poulenc Rorer R&D Campus Headquarters**, Collegeville, Pennsylvania, USA

 **AstraZeneca, United States Business Center**, Wilmington, Delaware, USA

**Pepsico, Global Headquarters**, Purchase, New York, USA

 **Air Liquide Research and Technology Center**, Newark, Delaware, USA

**Telecommunications Regulatory Authority, Abu Dhabi**, United Arab Emirates

**Roche Shanghai Headquarters and Training Center**, Shanghai, China


**Wuxi Pharmatech, Toxicology Facility**, Suzhou, China

**SK Hynix America, Headquarters Master Plan**, San Jose, California, USA

## GOVERNMENT


 **The Plowright Building at Pirbright Institute**, Pirbright, Surrey, United Kingdom

 **DuBiotech, International Center of Excellence: Master Plan, Headquarters, Laboratory Building**, Dubai, United Arab Emirates

 **C.W. Young Center for Biodefense and Emerging Infectious Diseases Building 33, National Institute of Allergy and Infectious Diseases**, Bethesda, Maryland, USA

 **Abu Dhabi Ministry of the Interior Leadership Training Academy**, Abu Dhabi, United Arab Emirates

**U.S. Centers for Disease Control and Prevention, Emerging Infectious Diseases Lab Building 18**, Atlanta, Georgia, USA

 **U.S. Army Medical Research Institute of Infectious Diseases (USAMRIID), Replacement Facility**, Fort Detrick, Maryland, USA

**National Institutes of Health, Bayview Research Center, Johns Hopkins Bayview Campus**, Baltimore, Maryland, USA

**Communications Security Establishment Canada (CSEC), Long-Term Accommodation Project**, Ottawa, Ontario, Canada

**Dubai Police Forensics Lab**, Dubai, United Arab Emirates

**Dubai Police Headquarters**, Dubai, United Arab Emirates

**New Jersey Economic Development Authority, International Center for Public Health**, Newark, New Jersey, USA

**U.S. Centers for Disease Control and Prevention, NCID Laboratory Vivarium Facility Building 23**, Atlanta, Georgia, USA

## HEALTH

**Rush University Medical Center, Rush Center for Advanced Health Care**, Chicago, Illinois, USA

**Advocate Christ Medical Center, Outpatient Pavilion**, Chicago, Illinois, USA

**The Ohio State University Wexner Medical Center New Hospital**, Columbus, Ohio, USA

**University of Utah, Health Sciences Campus Transformation**, Salt Lake City, Utah, USA

**Children's Hospital of Soochow University**, Suzhou, China

**Pudong Hospital, Teaching and Research Building**, Shanghai, China

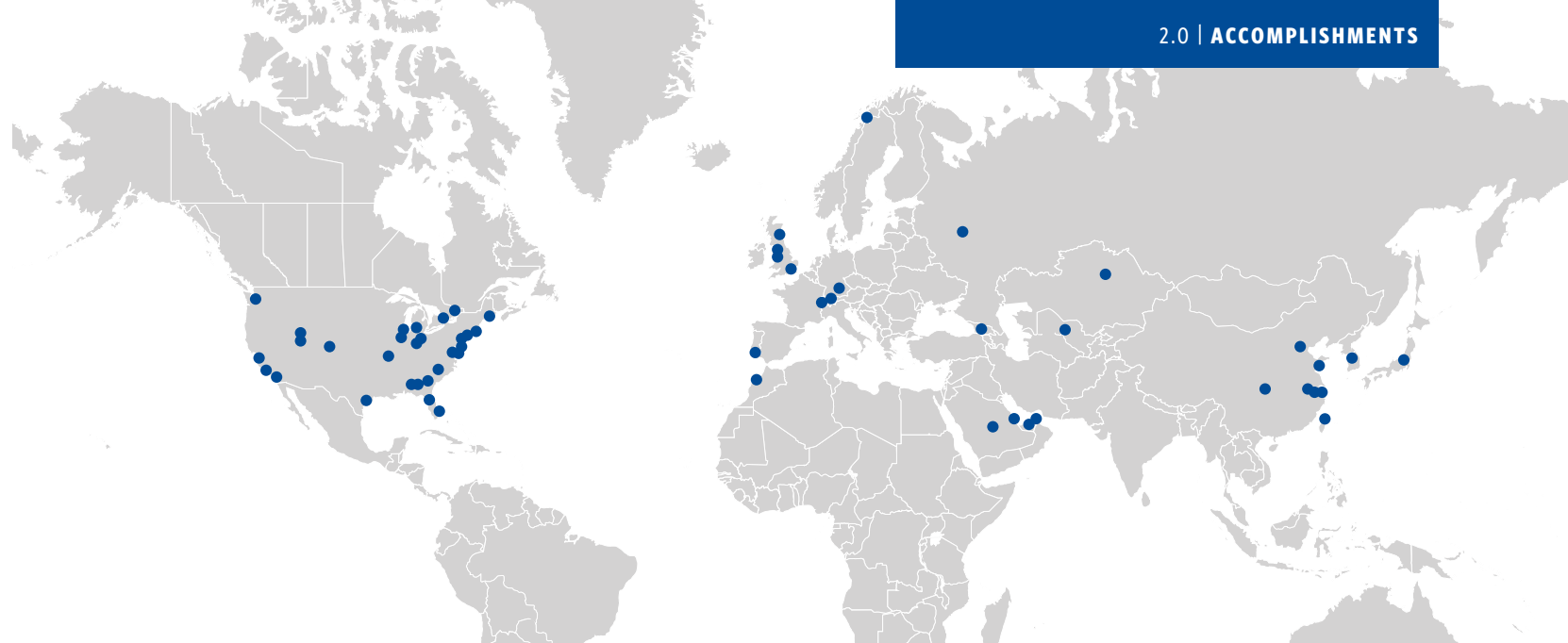
**Seoul National University Hospital, Advanced Treatment and Development Center**, Seoul, Korea

**Beijing International Medical Center Master Plan**, Beijing, China

 **Concord Cancer Hospital and Proton Therapy Center**, Shanghai, China

**Wanda Dalian Group, Qingdao International Hospital**, Qingdao, Shandong, China

**University of Utah, Rehabilitation Hospital**, Salt Lake City, Utah, USA





### University of Edinburgh, The Roslin Institute

Midlothian, Scotland, United Kingdom | 152,000 SF | Completed 2011 | BREEM Very Good

Brian re-energized this historic research institution with a new facility that inspires collaboration. His design, inspired by the double-helix structure of DNA, is an iconic symbol of the research conducted within. Natural ventilation, abundant daylight and inviting colors punctuate interior spaces.



2012 AIA New Jersey Honor Award, Built Category | 2014 Highly Commended, New Building: Research category, S-Lab Awards



### University of Maryland, Physical Sciences Building

College Park, Maryland, USA | 160,000 SF | Completed 2013 | LEED Gold

Introducing a contemporary twist to the Neo-Georgian campus vernacular, Brian designed this contemporary brick and glass building with an open-air courtyard and dramatic glass oculus that honors the studies of astronomy and the physical sciences. Transparent and open spaces welcome students and faculty in.



2014 AIA New Jersey Merit Award, Built



### University of Texas, MD Anderson, Sheikh Zayed Bin Sultan Al Nahyan Building for Personalized Cancer Care

Houston, Texas, USA | 626,000 SF | Completed 2014

Next-generation scientists, emerging technologies, and translational cancer research inspired Brian's design solution that reinterpreted the typical laboratory building hierarchy, allowing it to move from a departmental to an interdisciplinary structure. The building's prominence, identity and materiality purposely establish a new modern image for research, a cathedral for science that inspires hope.



2016 AIA New Jersey Honor Award, Built Category



### University of Maryland, Brendan Iribe Center for Computer Science and Innovation

College Park, Maryland, USA | 215,600 SF | Estimated Completion: December 2018

Brian envisioned this building as an inwardly and outwardly oriented center for work in virtual reality, augmented reality, computer vision, robotics and future computing platforms. With a prominent location between the residential and instructional parts of campus, his design bridges the traditional, neo-Georgian architecture of the campus and the building's role as an architectural symbol of the future of science. A gateway to the campus, the building's metal and glass connector blurs the line between inside and outside, making computer science accessible and welcoming.



2016 AIA New Jersey Merit Award, Unbuilt



### Utah State University College of Agriculture, Agricultural Research Building

Logan, Utah, USA | 125,000 SF | Completed 2012 | LEED Gold

This teaching and research building, which is deferential to the University's legacy, historic architecture and setting adjacent to the Rocky Mountains, is a gateway to the "Old Main" quadrangle. Brian designed its contemporary architecture, including massing and materiality, to integrate the old with the new. The rhythm and color palette of the southern glass façade is inspired by the agricultural plots in front. A four-story atrium penetrates the lab block at the center, connecting labs to offices and providing natural light deep into the laboratory floors. Its ground-floor café, visible from outside, draws faculty and students into the building.

\* Brian Kowalchuk was the lead designer for all of the projects listed in this section, responsible for the design and implementation of each project.



### **Kings College London, Chemical Biology Building**

London, England, United Kingdom | 215,000 SF | Completed 2011 (Concept Design)

Brian's concept design for this new building anchors the medical campus quadrangle and maximizes research and teaching space—accommodating the emerging trend towards topic-based interdisciplinary teaching and research. Designed with modular research suites containing flexible laboratories and write-up areas for biology and chemistry research on each floor, the design also includes a wide range of teaching spaces from small informal group areas to a formal 500-seat lecture hall.



### **Georgia State University, Parker H. Petit Science Center**

Atlanta, Georgia, USA | 300,000 SF | Completed 2010

In the spirit of creating an on-campus scientific community, Brian designed this first building of a multi-phased development to focus on user connection by creating numerous indoor and outdoor places for community interaction. Communicating spaces throughout the building connect the floors vertically. The building engages its surroundings, highlighting its role as an area amenity by becoming more transparent at street level to invite the community into the retail spaces that it houses.



### **University of California, San Diego, Centralized Research Support Facility**

San Diego, California, USA | 41,700 SF | Completed 2015 | LEED Gold

To maximize the potential of this site, the building's functional role needed to include a cage wash facility as well as office space. Brian's design challenge was to unite these two disparate programmatic components. He designed a two-story office block, cantilevered above the cage wash loading dock and expressed as a linear bar, with long translucent façades facing east and west. North and south façades have large, framed windows offering spectacular views. The design clearly expresses its function with simple, straightforward massing, a flexible structure, and appropriate contextual materials united in a cohesive and elegant expression of purpose.



### **Howard University, Interdisciplinary Research Building**

Washington, DC, USA | 81,000 SF | Completed 2015 | LEED Gold

An important piece of the University's Academic Renewal Program, this building serves as a catalyst to spur development. It houses the university's core science and research facilities, while also engaging the community with a public ground floor. To that end, Brian designed the transparent curtainwall, which allows people to glimpse research inside, while terra cotta panels on the façade connect to the campus's mostly brick buildings. Their ribbed texture mimics traditional African textiles to honor the institution's heritage as an African American university.



2016 AIA-DC Merit Award, Built |



2015 AIA NJ Honor Award, Built



### **Seoul National University Biomedical Education Research Institute**

Seoul, Korea | 190,500 SF | Completed 2009 (Concept Design)

This project includes a laboratory for technical research and teaching and a student center housing social functions. Brian designed the research component to contextually respond to the university's research grid. The student center respects the site's historical significance and a monument that commemorates it, which served as Brian's inspiration for the geometry, proportion and orientation of the center.



2010 AIA New Jersey Honor Award, Unbuilt

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### Nanjing University, College of Engineering and Applied Science

Nanjing, China | 654,600 SF | Completed 2015 (Master Plan)

For Nanjing University, one of the oldest and most prestigious institutions of higher learning in China, the new College of Engineering and Applied Science building strives to further its position as “best in science.” In addition to incorporating modular and flexible teaching labs, Brian’s design elevates the importance of gathering destinations. He incorporated seven diaphanous light tubes within multidisciplinary collaboration spaces to intentionally symbolize the connection between the terrestrial and the cosmos: the mission of the College.



### Peking University, Life Science Research Center

Beijing, China | 322,800 SF | Completed 2016

The new center, located on the main campus in Beijing, is intended to enhance the university’s stellar position in academic research. Brian was challenged to repurpose and renovate the Pacific Building, a former mixed-use office and retail facility, to expand research programs and further integrate the campus into the city. He was able to bridge the gap between basic research and clinical application by putting researchers, doctors and patients under a single roof. The orthogonal floor plan was carefully planned to allow for maximum efficiency, flexibility, collaboration and workflow.



### Helmholtz Diabetes Center, German Research Center for Environmental Health

Munich, Germany | 50,000 SF | Completed 2018

This four-story, multidisciplinary life science research center creates a unique structural, conceptual and architectural framework for the center’s translational research approach. Brian created clearly defined zones that begin with a welcoming main entrance on the south façade traveling northward. A communications area arranged along a light-flooded west-east circulation spine leads to special laboratories located in the core. Brian ensured that daylight would flood the laboratory areas through a spacious garden courtyard, which creates an incision in the building over all floors and a valuable working environment for researchers.



### Peking Union Medical College Hospital, Translational Research Center

Beijing, China | 779,000 SF | Completed 2017

Awarded through an international design competition, this new facility is located adjacent to the Forbidden City in Beijing. Brian imagined this cubic, symmetrical form that integrates into the historic city with a sunken garden wrapping both the front and back entrances and connecting to the metro station. Labs are vertically stacked around a central atrium, while curvilinear interior spaces are carefully designed to suggest pedestrian flow. Brian selected tactile materials such as wood, travertine and resin panel to bring a sense of tranquility to the healthcare environment and put people at ease.



### University Hospital Hamburg-Eppendorf, Hamburg Center for Translational Immunology, Research Building II

Hamburg, Germany | 320,000 SF | Estimated Completion 2022

To deliver the desired translational platform, Brian’s design includes two brick structures, each hosting lab and offices for focused work, connected by a living room for knowledge exchange and respite. The brick is a nod to historic Hamburg, but with a contemporary reinterpretation of perforated brick, metal framed windows and regularly distributed panels in different colors. Cut-out openings on the ground level connect the inside and outside.


*\* Brian Kowalchuk was the lead designer for all of the projects listed in this section, responsible for the design and implementation of each project.*



### Telecommunications Regulatory Authority Headquarters

Dubai, United Arab Emirates | 182,000 SF | Completed 2011 | LEED Silver

To deliver a building that visually expresses this client's mission, Brian drew inspiration from the local culture, but reimagined it in a contemporary architectural form. In a nod to the area's extreme climate, a double wall glass curtain wall blocks solar gain, while its orange and green hues celebrate the company's signature colors.


 2012 AIA New Jersey Merit Award, Built | 2009 AIA New Jersey Merit Award, Unbuilt



### Kolos Data Center

Ballangen, Norway | 6,450,000 SF | Estimated Completion 2021

Surrounded by mountains and integrated into the natural beauty of its environment, Brian's design takes cues from the site's spectacular landforms. He organized the building along a central spine, with forms arranged to mimic a glacier's movement. A spine creates a collision of landforms reinterpreted to become modular data halls that are secure, scalable, and connected.

 2017 AIA New Jersey Merit Award, Unbuilt Category



### Pfizer Inc., Flagship Drug Discovery Lab Building 220

Groton, Connecticut, USA | 574,000 SF | Completed 1999

Brian applied the discoveries gleaned from extensive programming sessions to introduce a new paradigm in work environments, one that shifted toward collaborative, multidisciplinary work environments. He collocated biology and chemistry labs in "research villages" designed to accommodate distinct differences in functional requirements while being flexible enough to combine functions if necessary.

2001 Lab of the Year Award, High Honors



### Pfizer Inc., Global Research and Development Headquarters

New London, Connecticut, USA | 740,000 SF | Completed 2001

Previously spread over nine different sites, Brian's design for Pfizer's R+D headquarters consolidates functions in three six-story office buildings connected by two four-story connector buildings. He placed offices along a meandering path offering a variety of experiences along the way—including opportunities for casual interaction. Distinct team modules are basic building blocks that can be duplicated and combined to form research communities. A cafeteria, dining areas, and fitness center were strategically located in the connector buildings to foster interaction.



### Pfizer Ltd., Research and Development Headquarters & Campus Gateway

Sandwich, Kent, United Kingdom | 440,000 SF | Completed 2005

This multidisciplinary research facility provides an inspirational environment to promote excellence in pharmaceutical science. Brian arranged research teams in pods, while the flexible, modular design of labs and offices encourages exchange of information and ideas across disciplines. Each pod is connected by the knuckle to a hub designed to promote interaction, and laboratories are located along the exterior to provide natural light and views to the outside. Forming one side of the campus's entrance green, Brian shaped building acts as a front door for the European campus, creating a new "heart" and a physical symbol to inspire research and development efforts.

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**Rhone-Poulenc Rorer R&D Campus Headquarters**  
Collegeville, Pennsylvania, USA | 1,100,000 SF | Completed 1990

Rhone-Poulenc Rorer wanted to create a greenfield campus uniting the cultures of two recently merged organizations and 1,850 employees from three states. Brian intentionally designed massing, exterior architecture and building façades to introduce an inviting, human scale to the complex that would be shared by executives, scientists, product development researchers and a pilot plant. A radial circulation spine connects all functions and houses common-use spaces. An existing farmhouse was restored to become a global site for retreats and training.

1994 R&D Magazine's Lab of the Year, High Honors



**DuBiotech, International Center of Excellence: Master Plan, Headquarters, Laboratory Building**  
Dubai, United Arab Emirates | 740 Acres | Completed 2007 (Master Plan), 2017 (Headquarters), 2011 (Laboratory Building)

Envisioned as an international hub for the growing biotech industry, this project was comprised of a business headquarters, bio-research and manufacturing facilities, and a university. Brian's design for the headquarters comprises two 22-story towers connected by a floating three-story "jewel" component that links the towers and provides opportunities for shared support and intellectual exchange. The building's façade alludes to biotechnology research: the pattern of both the windows on the north and the louvers on the south mimics the images on a "southern blot," the method routinely used in molecular biology to sequence DNA.



AIA NJ Design and Sustainability Honor Award



**AT&T, Research and Development Campus**  
Middletown, New Jersey, USA | 1,000,000 SF | Completed 1998 (Master Plan)

Similar to a town planning effort for a community of 6,000-plus employees, Brian led efforts for this physical manifestation of a corporation that was, in essence, in the process of reinventing itself. Much of the 262-acre site was delineated as wetlands, which precluded development in many areas. In addition the site was located in a suburban area which required that the new headquarters fit into surrounding community framework. Brian envisioned a series of four 250,000-square-foot office buildings arranged in a linear fashion, stepping down and responding to the natural grades. A courtyard created between the four buildings was a unifying element.



**Unilever, Headquarters of the Future**  
Port Sunlight, England, United Kingdom | 21,500 SF | Completed 2006

To support its new branding theme of "Vitality," this multi-national consumer products corporation sought to develop a Lab and Office of the Future prototype that informs new ways of working principles. Brian led user group meetings and design for a new prototype plan that divides the bar from end to end into zones of heavy/specialized lab space, light/general lab area, and open office space, transitioning from solid, to porous, to open, with visual transparency and circulation around the interior perimeter of the building. The office areas provide effective space utilization by grouping open workstation areas, shared interaction zones with a variety of conference rooms and huddle areas, in a hierarchy from open to closed, formal to informal.



**Procter & Gamble World Headquarters Lobby Renovation**  
Cincinnati, Ohio, USA | 250,000 SF | Completed 2004

For the renovation of its Central Building lobby, Procter & Gamble desired a tangible symbol of its role as a forward-thinking, global organization. Brian introduced transparency to the new entrance structure, bringing light deep into the lobby and providing an immediate connection to the outside, physically evoking P&G's goal of "looking outward." The highly-articulated steel and glass canopy, supported by a series of high stainless steel fins, is a contemporary interpretation of P&G's traditional moon and stars motif.



2005 AIA Cincinnati Collaborative Merit Award, Excellence in Architectural Design

\* Brian Kowalchuk was the lead designer for all of the projects listed in this section, responsible for the design and implementation of each project.



**Huawei Suzhou Technology Center**  
Suzhou, China | 106 acres | Completed 2015 (Master Plan)

This master plan expresses Huawei's mission—to enrich life through communication—in physical form. Brian's design is derived from a square, developing variety and richness as it unwinds to form the wall of a podium, elevating the entire complex above ground, raising its prominence. The enormity of the endeavor is humanized through clarity of proportion and scale, and incorporates water, gardens, woods, courtyards, parklands and plazas to both symbolically and literally intertwine the natural with the built environment.

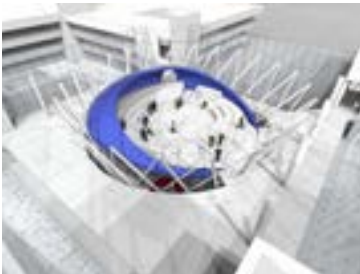


**AstraZeneca, United States Business Center**  
Wilmington, Delaware, USA | 1,600,000 SF | Completed 2003

Brian's design for this new facility focused on environmental responsibility through appropriate massing, opulent natural light, and the responsible selection and use of materials. Open office plans that stress the importance of team-based work and collaboration are connected by interior paths that provide a variety of experiences along the way—including informal hub areas with coffee and copy facilities—and are oriented to outdoor views.



1999 AIA NJ Silver Award, Unbuilt



**PepsiCo Global Headquarters**  
Purchase, New York, USA | 120,000 SF | Completed 2009 (Design)

The existing campus, composed of seven disparate buildings built in the 1960s, housed 1,400 employees. Brian designed an addition to the center of the campus to accommodate an additional 2,000 employees, connecting it on all levels to foster a unified brand image. In addition, he led the design of new workplace strategies for the expansion. By introducing concepts such as "loft layouts" and plug-and-play touchdown spaces, along with an occupancy plan based on teaming concepts instead of departmental structures, Brian was able to encourage new ways of working by fostering increased connections among people.



**Air Liquide, Research and Technology Center**  
Newark, Delaware, USA | 83,000 SF | Completed 2007

A dramatic new façade in front of an existing warehouse structure helps to evoke a dynamic motion which invites the visitor in while extending the building outward into the environment. Brian's plan introduced a series of transparent zones to showcase the company's work, while ensuring privacy and security to those areas where it was needed.



2007 AIA New Jersey, Merit Award, Built



**Telecommunications Regulatory Authority**  
Abu Dhabi, United Arab Emirates | 150,000 SF | Completed 2009

An expression of the forward-looking mission of the agency and designed to promote its innovative technologies, this building in Abu Dhabi is similar to the headquarters building Brian designed in Dubai, helping to establish a consistent, recognizable and memorable high-tech brand for the company. Brian designed the interior on an open-office plan, with secure areas sequestered on upper floors.

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### **Wuxi Pharmatech, Pre-clinical Toxicology Facility** Suzhou, China | 300,000 SF | Completed 2007

This new free-standing toxicology facility allows China's leading pharmaceutical outsourcing company to assist drug discovery initiatives for a full range of pre-clinical studies. Brian designed the building in alignment with principles of Feng Shui; interlocking zinc planes on the building's exterior reimagine the traditional balance between nature and science, as does the water feature at the base of the atrium. With two stories of vivaria and six stories of supporting laboratories and offices, the facility is flexible and adaptable to changing studies.



### **The Plowright Building at Pirbright Institute** Pirbright, Surrey, United Kingdom | 151,000 SF | Completed 2014

Seeking a way to improve the quality of life for researchers at this prestigious institution, Brian rethought the conventional containment laboratory typology. His innovative design placed researchers at the center of a radial plan that emanates from a light-filled, three-story atrium whose curtain wall defines the sealed containment boundary. Shared spaces for write-up or collaboration and a bright, open cafeteria within containment draw researchers out of isolated laboratories and foster inspiring collaborations and engagement.



2016 AIA New Jersey Merit Award, Built



### **Abu Dhabi Ministry of the Interior Leadership Training Academy** Abu Dhabi, United Arab Emirates | 915,000 SF | Completed 2013 (Concept Design)

This highly secure facility is woven into the landscape to create a sense of place in the open desert. Flanked by "learning" and "living" components, Brian juxtaposed the formality of grand ceremonial space to the curvilinear forms of essential, but less celebratory, pieces. From above, the campus appears to be composed of ribbons of sand dunes blown against a straight and strong retaining wall, a symbolic expression of the dichotomy between man and nature.



2013 AIA New Jersey Merit Award, Unbuilt



### **U.S. Centers for Disease Control and Prevention, Emerging Infectious Diseases Laboratory Building 18** Atlanta, Georgia, USA | 420,000 SF | Completed 2006

This facility, the largest in the world dedicated to human health, is open and bright, extremely flexible and contains the highest-level bio-safety laboratories in the world. Brian identified and celebrated points where the safety and security requirements of research could align with the type of open environment that can inspire creativity, ultimately uniting these seemingly contradictory components. His powerful iconic architecture recognizes the importance of the CDC's work while providing researchers, epidemiologists and diagnosticians places to gather, thus fostering casual exchanges that can eventually lead to scientific breakthroughs.

2006 R&D Magazine Lab of the Year, Special Mention



### **C.W. Young Center for Biodefense and Emerging Infectious Diseases Building 33, National Institute of Allergy and Infectious Diseases** Bethesda, Maryland, USA | 150,000 SF | Completed 2006

Brian sited this flagship building on the National Institutes of Health (NIH) campus to create a quad that has become one of the premier open spaces on the campus. It also provides a connection to other campus locations with the addition of a pathway that traverses a significant grade change, originally a physical barrier, but now transformed into an informal amphitheater.



2006 AIA Potomac Valley Design Citation Award

\* Brian Kowalchuk was the lead designer for all of the projects listed in this section, responsible for the design and implementation of each project.





### U.S. Army Medical Research Institute of Infectious Diseases (USAMRIID), Replacement Facility

Fort Detrick, Maryland, USA | 865,000 SF | Expected completion 2018

Brian conceived this building as a series of layers in a hierarchical order, from “open” to “porous” to “dense,” analogous to the microscopic air filters integral to its mechanical system design. Sited to take advantage of both natural light and views, the new facility establishes the boundary for an expansive campus green. Brian deployed exterior materials and a fenestration using superscaled patterns for the façades to visually reduce the facility’s giant scale and to contextually emulate building materials existing on the campus.



2007 AIA NJ Merit Award, Unbuilt, Design and Sustainability



### National Institutes of Health, Bayview Research Center, Johns Hopkins Bayview Campus

Baltimore, Maryland, USA | 570,000 SF | Completed 2007

This facility co-locates the National Institute on Aging and the National Institute on Drug Abuse. Brian was able to achieve a design that reflects each institute’s desire to maintain its own identity while delivering an environment that fosters the exchange of ideas through shared programs and amenities. He set the building on a plinth that contains two vivariums as well as the main entrance atrium, which leads to separate towers. Existing topography is exploited to create discreet access to the clinic and to the vivarium separate from the main entrance. Within the sky-lit entrance atrium is an inviting cafeteria, a high-tech media library, adaptable conference and training facilities, as well as a 150-seat auditorium.



### Communications Security Establishment Canada (CSEC), Long-Term Accommodation Project (LTAP)

Ottawa, Ontario, Canada | 775,000 SF | Completed 2014 | LEED Gold

Infusing humanity into technology in one of the most advanced critical-mission data facilities in the world, Brian conducted collaborative vision sessions and led the conceptual design process. Based on new ways of working, Brian designed the main building around a central hub containing shared spaces for collaboration and informal gathering. Taking advantage of the natural beauty of the site, the transparency of the design creates visual and spatial continuity between inside and outside while a curving and stylized triangular roof resembles a gently arched wing. The building’s ultra modern design celebrates the top Canadian minds in mathematics, linguistics, computer science and cryptology who work within.



### Dubai Police Forensics Lab

Dubai, United Arab Emirates | 323,000 SF | Completed 2016

One of the largest forensic laboratories in the world, Brian’s designed the five-story building with soaring winged roof canopies to include intuitively organized space through a three-winged radial design—with separate, secure entrances for forensics, training and research. The building creates a clear path of evidence flow to secure chain of custody, beginning with designated evidence drop-off.



### Dubai Police Headquarters

Dubai, United Arab Emirates | 600,000 SF | Completed 2008 (Design)

Brian designed this new government headquarters to rise from the ground as a stone monolith symbolizing the strength and permanence of the institution. The private program within erodes the stone exterior of the building to become the public face and new image representing the government. He used clear organization and separation of private and public functions to provide essential security. By including an atrium space in the center of the south face, Brian created an interactive amenity zone, with major circulation and extensive glazing that provides filtered daylight deep into seven of the eight floors.

\* Brian Kowalchuk was the lead designer for all of the projects listed in this section, responsible for the design and implementation of each project.



### **New Jersey Economic Development Authority, International Center for Public Health**

Newark, New Jersey, USA | 190,000 SF | Completed 2002

Committed to translational research, this facility provides recognizable identities for three independent organizations while integrating vital, shared facilities. A landmark building in an ambitious urban revitalization program, Brian's design for the entrance plaza defines the image for the ICPH, while the transparent stairway acts as a beacon. Slicing between the two masonry wings, the dynamic glass lobby connects shared public spaces. His choice of materials — especially the red brick and limestone — responds directly to the context, and quietly refers to the historical structures that formerly occupied the site. Cascading low brick walls and brick walkways further help to define a pedestrian scale.

2003 R&D Magazine Lab of the Year Special Mention



### **Rush University Medical Center, Rush Center for Advanced Health Care**

Chicago, Illinois, USA | 500,000 SF | Expected completion 2020

This new ambulatory care complex is located on a tight urban site in the city of Chicago, bordered by a major expressway and several communities. With RUMC's relationship to the surrounding community in mind, Brian designed a solution that celebrates its new image, with an organic shape that addresses new translational health methodologies, and which is welcoming to patients and respectful of adjacent structures.



### **Advocate Christ Medical Center, Outpatient Pavilion**

Oak Lawn, Illinois, USA | 330,000 SF | Completed 2014

Located on the south side of the campus, this was the first major construction project for a campus in need of revitalization and a new gateway. Tectonically, Brian designed the building to be comprised of three components clad in precast concrete, metal panels, and high-performance reflective glazing respectively. The massing and materiality recalls the dominant materials of the existing campus while the new composition of materials sets the stage for a more contemporary architectural language on the campus.



### **The Ohio State University Wexner Medical Center New Hospital**

Columbus, Ohio, USA | 2.1 million SF | Expected completion 2021

This 28-story inpatient tower will be an icon, not only for The Ohio State University medical campus, but for the city of Columbus, serving both its functional needs as a hospital, and also as a beacon to the community. With a plan punctuated with organizational clarity, Brian's design for the unique tower and its modulating façade connect these two brands—inside and out—creating a unique patient experience that embraces a “home to hospitality.”



### **University of Utah: Health Sciences Campus Transformation & Rehabilitation Hospital**

Salt Lake City, Utah, USA | 620,000 SF (Master Plan); 150,000 SF (Hospital) | Expected completion 2017 (Master Plan); 2022 (Hospital)

Brian led master planning and conceptual design for this new campus “heart,” which includes three new buildings: a medical education and discovery building, rehabilitation hospital, and ambulatory care facility. The complex relationships among the buildings and the site underscore the importance of an integrated and coordinated design. Brian designed the form of the new hospital to extend out on either side of the main entry to frame views of the mountains to create a more personal and intimate space, with opportunities for rehabilitation through transitions from patient rooms to gyms and eventually to outdoor spaces on campus.

*\* Brian Kowalchuk was the lead designer for all of the projects listed in this section, responsible for the design and implementation of each project.*



### Children's Hospital of Soochow University

Jiangsu, China | 1,200,000 SF | Completed 2015

Brian's design of this new hospital was inspired by the body's natural way of growing and healing: cell division. Its form is derived to imagine the telophase stage of cell division, and creates an overall building shape that is flexible and efficient, enabling both complex and routine patient-care, research and educational opportunities. The curvilinear forms of the architecture and the sensitive use of color and texture make the facility welcoming and approachable. The hospital connects to the city's verdant heritage to transform the institutional image traditionally associated with children's hospitals in China.



### Concord Cancer Hospital and Proton Therapy Center

Shanghai, China | 1,276,700 SF | Expected completion 2018

Brian's design of this facility balances the technicalities of the program with an organic spirit to form a tight-knit community atmosphere, integrating both the natural environment and cutting edge technology. He created a transition between the building's strong architectural language and softer natural spaces to promote a positive, contemplative experience. The horizontality of the lower levels frames the large exterior courtyard, but also emphasizes it as a primary gathering space. The interior design translates the language and proportions of the exterior to a more human scale.



2017 AIA NJ Merit Award, Unbuilt



### Seoul National University Hospital, Advanced Treatment and Development Center

Seoul, Korea | 452,000 SF | Completed 2010 (Design)

Located along the edge of the Seoul National University campus and the Heywha Arts District, the center's sloping site appeared as a void in the urban fabric. As such, Brian's design for this center of healing took as its overarching theme the concept of a "Ribbon of Care." Its curving form contrasts with three modular bars housing patient beds and other private spaces. Weaving among the active caregiving elements, the ribbon unfurls at its lower end as the main entrance for outpatient care and as a gateway for the surrounding community.



### Beijing International Medical Center Master Plan

Beijing, China | 5.8 Square Miles (Phases 1 and 2) | Completed 2012 (Master Plan)

Brian's conceptual design for a new medical city, the largest in the world, will help establish a private healthcare system developed to complement the existing public hospital system. While planned to meet the best practices for international care, Brian incorporated five parks on the site, each that will organize its personality around one of five elements—wood, earth, water, fire and metal—to honor traditional Chinese healing practices. Brian ordered the parks in a sequence which highlights the evolutionary and dynamic roles the five elements play in nature and especially in the healing process.



### Pudong Hospital, Teaching and Research Building

Shanghai, China | 93,000 SF | Expected completion 2018

Awarded through an international design competition, this building's organization and massing creates a unified, balanced composition of forms. Brian designed its geometric arrangement to respond to the site configuration; forms are layered from north to south while elongating the east-west axis to provide optimal solar exposure. Materials for the exterior (terra cotta tiles, precast concrete panels, metal window framework) reinforce the crisp and clean lines of the architectural concept, while complementing the regional vernacular. They also serve to make a statement about the building's status as the place where the next generation of medicine is to be found.

\* Brian Kowalchuk was the lead designer for all of the projects listed in this section, responsible for the design and implementation of each project.



## SECTION 2.1 CURRICULUM VITAE



In 1989, Brian was honored to present his design for the Rhone-Poulenc Rorer headquarters and laboratory design to Jonas Salk, famed medical researcher and virologist, who was serving as a consultant to the company for the building project.

“Why do we do what we do? We’re architects, engineers, planners, but really, we’re artists. Innovators. What we do changes lives. It inspires people. It matters. Everyone who works here is working for the chance to make a difference.”

-Brian Kowalchuk

“Why a Design Philosophy Is Good Business”, *Aspici Blog*, August 2, 2012

### PROFESSIONAL EXPERIENCE

From the beginning of Brian’s career, much of his work—especially during his initial years at CUH2A—examined how innovative design serves to foster discovery and promote dynamic intellectual exchange.

This work inspired Brian to develop an innovative methodology to distill the essence of a client’s complex functional and technological requirements and to align his design strategy with the organization’s over-arching vision. His signature design process was instrumental in propelling Brian’s career forward. After a short two-year period away from CUH2A, Brian returned as a Senior Architectural Designer and fine-tuned this process, creating a powerful tool for collaboration, consensus building, and the successful completion of well-functioning and elegant architecture around the world. Promotions to Design Principal and then Design Director followed.

In 2008, CUH2A merged with HDR offering Brian opportunities to evolve his portfolio into the health field. He continued to expand his perspective, building on his underlying commitment to create physical environments that enrich lives and promote the humanistic principles he so strongly values.

Recognizing Brian’s talent for advancing a culture of design, in 2010 he was named the firm’s first-ever Global Director of Design. Brian now leads design for the entire architecture firm, working with regional design directors, local design principals and a staff of more than 1,200 architects to ensure that every project the firm designs adheres to HDR’s design philosophy and design standards.

Under his tenure, Brian has elevated HDR from a service-expertise to a design-expertise AE practice. Working to enable design teams around the globe to strive for innovation, he nurtures creativity to embed the firm’s design philosophy and approach into HDR’s culture.

#### HDR

Lawrenceville, New Jersey

- **Global Director of Design**, 2010 - present
- **Design Director and Senior Vice President**, 2008 - 2010

#### CUH2A

Lawrenceville, New Jersey

- **Design Director**, 2003 - 2008
- **Design Principal**, 1996 - 2003
- **Senior Architectural Designer**, 1992 - 1995

#### Michael Landau Associates

Princeton, New Jersey

- **Partner**, 1990 - 1992

#### CUH2A

Lawrenceville, New Jersey

- **Principal Architect and Associate**, 1989 - 1990
- **Principal Architect**, 1986 - 1988
- **Senior Staff Architect**, 1986
- **Staff Architect**, 1984 - 1985

#### Short and Ford Architects

Princeton, New Jersey

- **Project Designer and Project Architect**, 1980 - 1984

### EDUCATION

Bachelor of Architecture

New Jersey Institute of Technology, College of Architecture & Design, 1980

The American Academy of Continuing Medical Education; Facilities Design, Upgrade & Expansion Conference; Arab Health, April 2008

### REGISTRATIONS & AFFILIATIONS

AIA Member

LEED Accredited Professional

Registered Architect, New Jersey, United States

Member, Dean’s Council, New Jersey Institute of Technology, College of Architecture & Design

### JURIES

Laboratory of the Year, R&D Magazine, 2008 and 2011

New Jersey Institute of Technology, College of Architecture & Design, Design Review, Multiple Years

## SECTION 2.1 SPEAKING ENGAGEMENTS

**How Technology Districts Are Transforming Business, Research and the Humanities,** 2018 Association of University Research Parks International Conference, College Park, Maryland, October 25, 2018

**Keynote: Technology's Transformation of Lab Design: There's No Such Thing as "Future Proofing,"** Lab Design Conference, Philadelphia, Pennsylvania, April 24, 2018

**The DNA of Next Generation Lab Design,** International Lab Design Conference, co-presented with Urs Klipfel, Madrid, Spain, September 20, 2017

**Risk Assessment Drives a New High Standard for Containment Facility Design,** Tradeline: Facility Strategies for Animal Research and Biocontainment, Boston, Massachusetts, October 2015

**International Lab Design: Think Global, Act Local,** Laborrunde, Buch, Germany, April 2015

**Virtual Can Co-Exist with Context,** University of Maryland Architectural Lecture, College Park, Maryland, 2015

**Design for Art, Culture & Science: Translational Health Sciences in China,** Design & Health China International Symposium & Exhibition, Beijing, China, October 2014

**Innovative Design of Lab Animal Facilities,** International Forum on Laboratory Animal Science & Technology, Beijing, China, October 2013

**Research Collaboration: Space Models from Around the World: Which Is Right for Your Organization?,** Tradeline International Conference for Research Facilities, Scottsdale, Arizona, April 2012

**Globalization of Ideas-Fact or Fiction?,** New York Arts Club, New York, New York, 2012

**New Paradigms—Translational Health Science Facilities + Organizations,** Translational Health Sciences Colloquium IV, MD Anderson Cancer Center, Houston, Texas, January 2012

**Architecture, Culture and Branding,** College of Architecture and Urban Planning at Huazhong University of Science and Technology, Wuhan, China, October 2011

**The Business of Translation,** Translational Health Sciences Colloquium III, Boston, Massachusetts, April 7, 2011

**Connecting to the Community,** Translational Health Sciences Colloquium II, San Francisco, California, January 20, 2011

**Trends and Issues in the Design of Primate Facilities,** Shanghai Lab Animal Commission Authority, Shanghai, China, January 2011

**New Concepts and Trends for Design,** 11th Annual East China Conference of Laboratory Animal Science, Yantai, China, co-presented with Yong Sun, September 2010

**Trends in Global Architectural Design and in Planning of Science and Technology Parks,** GPA Conference, Taipei, Taiwan, co-presented with Yong Sun, August 4, 2010

**Facilities as a Catalyst for Change,** Translational Health Sciences Colloquium I, London, England, April 6, 2010

**Stimulus Response,** American School and University, March 2010

**Globalization and Local Essences: Modern Developments in Dubai and Abu Dhabi,** Panel Presentation, American Institute of Architects New York Chapter Conference, New York, NY, July 8, 2009



**Science Parks Master Planning,** International Association of Science Parks (IASP), co-presented with Rachel Park, HDR, Research Triangle Park, North Carolina, June 2009

**Sustainability and Dubai,** National Arts Club of New York, New York, NY, April 2009

**Creating Real Linkages between Research, Clinical Care and Education: What Works?,** Tradeline Academic Medical Centers Conference, co-presented with Jon Crane, HDR, and Susan Lipka, MD Anderson, San Francisco, California, October 2008

**Science Parks,** Pharma and Bio Middle East, Dubai, United Arab Emirates, April 2008

**Creative Buildings for Creative People,** Chinese University Science Park, Fudan University, Shanghai, China, August 2007

**Trends and Issues in the Design of Animal Facilities,** Beijing Administrative Offices of Laboratory Animals, Beijing, China, July 2007

**Maximizing the Value of a Global Knowledge Base,** United Kingdom Science Parks Association (UKSPA), co-presented with Rachel Park, Edinburgh, Scotland, February 2007

**Four Models for Getting Greater Science-Building Adaptability and Long-Term Viability,** Tradeline Academic, co-presented with Richard Barocca and Jim James, University of Alabama at Birmingham, San Diego, California, October 2006

**Selling Science Parks to First Class Customers,** International Association of Science Parks, Helsinki, Finland, July 2006

**Vision and Vitality of Science Parks,** International Association of Science Parks, Helsinki, Finland, June 2006

**How to Balance High-End Design with Business and Functional Realities,** Tradeline Research Buildings, St. Petersburg, Florida, 2005

**High Profile Architecture in Lab Design,** Panelist, Lab Design Conference, Boston, Massachusetts, September 2004

**Integrated Vivarium Process Design,** Animal Facility Design Colloquium, co-presented with Marc Ferrer, Freeport, Maine, June 2004



## SECTION 2.2 AIA AWARDS

### 2017

#### **AIA New Jersey Merit Award, Unbuilt Category**

Kolos Data Center, Ballangen, Norway

#### **AIA New Jersey Merit Award, Unbuilt Category**

Concord Medical Cancer Hospital & Proton Therapy Center, Shanghai, China

### 2016

#### **AIA New Jersey Honor Award, Built Category**

University of Texas MD Anderson Zayed Building for Personalized Cancer Care, Houston, Texas, USA

#### **AIA New Jersey Merit Award, Built**

The Pirbright Institute  
Pirbright, Surrey, United Kingdom

#### **AIA New Jersey Merit Award, Unbuilt Category**

Brendan Iribe Center for Computer Science and Innovation, University of Maryland, College Park, Maryland, USA

#### **AIA DC Merit in Architecture Award**

Howard University, Interdisciplinary Science Building, Washington, DC, USA

### 2015

#### **AIA New Jersey Honor Award, Built**

Howard University, Interdisciplinary Science Building, Washington, DC, USA

### 2014

#### **AIA New Jersey Merit Award, Built: Open Category**

Physical Sciences Complex, University of Maryland, College Park, Maryland, USA

### 2013

#### **AIA New Jersey Merit Award, Unbuilt**

The Leadership Training Academy, Abu Dhabi, United Arab Emirates

### 2012

#### **AIA New Jersey Merit Award, Built**

Telecommunications Regulatory Authority Headquarters  
Dubai, United Arab Emirates

#### **AIA New Jersey Merit Award, Built**

The Roslin Institute, University of Edinburgh, Edinburgh, Scotland, United Kingdom

### 2010

#### **AIA New Jersey Honor Award, Unbuilt**

Biomedical Educational Research Institute, Seoul National University Medical Center, Seoul, Korea

### 2009

#### **AIA New Jersey Merit Award, Unbuilt**

Telecommunications Regulatory Authority Headquarters, Dubai, United Arab Emirates

### 2007

#### **AIA New Jersey Merit Award, Unbuilt Category, Design and Sustainability**

United States Army Medical Research Institute for Infectious Diseases (USAMRIID) Replacement Facility, Fort Detrick, Maryland, USA

#### **AIA New Jersey, Merit Award, Built**

Air Liquide, Delaware Research and Technology Centre, Newark, Delaware, USA

### 2006

#### **AIA Maryland/AIA Potomac Valley, Design Citation Award**

C.W. Young Center for Biodefense and Emerging Infectious Diseases Building 33, National Institutes of Health, Bethesda, Maryland, USA

#### **AIA New Jersey Design and Sustainability Honor Award**

Headquarters Complex, Dubai Biotechnology and Research Park, Dubai, United Arab Emirates

### 2005

#### **AIA Cincinnati Collaborative Merit Award, Excellence in Architectural Design**

Proctor & Gamble Central Building Lobby Renovation, Cincinnati, Ohio, USA

### 1999

#### **AIA New Jersey, Silver Award, Excellence in Architecture, Unbuilt**

AstraZeneca, United States Business Center, Wilmington, Delaware, USA





## SECTION 2.2 NATIONAL AND INTERNATIONAL AWARDS



### 2018

**Architizer+ Jury Award, Commercial Unbuilt**  
Ballangen, Norway

**Illumination Award of Excellence, IES Philadelphia**  
Huawei Corporate Financial Center Building, Shenzhen, China

### 2016

**R&D Magazine, Lab of the Year, Special Mention**  
University of Texas MD Anderson Zayed Building for Personalized Cancer Care, Houston, Texas, USA

**Top 10 Healthcare Projects, 4th Place, China Hospital Construction and Equipment Magazine/Architecture Technique**  
Children's Hospital of Soochow University, Suzhou, Jiangsu Province, China

**Top 10 Healthcare Projects, 8th Place, China Hospital Construction and Equipment Magazine/Architecture Technique**  
Concord Cancer Center & Proton Therapy Center, Shanghai, China

### 2015

**R&D Magazine, Lab of the Year, Special Mention**  
The Pirbright Institute, Surrey, United Kingdom

**Building Design + Construction, Team Platinum Award**  
The Pirbright Institute, Surrey, United Kingdom

### 2014

**Engineering News-Record, Mid-Atlantic, Award of Merit, Higher Education/ Research Category**  
Physical Sciences Complex, University of Maryland, College Park, Maryland, USA

**S-Labs Awards, Highly Commended: New Building, Research Category**  
The Roslin Institute, University of Edinburgh, Edinburgh, Scotland

**British Construction Industry, Judge's Special Award**  
The Pirbright Institute, Surrey, United Kingdom

### 2013

**Interiors and Sources Magazine, Selected: Top Ten LEED Projects**  
Agriculture Sciences Building, Utah State University, Logan, Utah, USA

### 2011

**Luban Prize, People's Republic of China and China Construction Industry Association (CCIA) Ministry of Housing and Urban-Rural Development**  
Wuxi Pharmatech Pre-clinical Toxicology Facility, Suzhou, China

**GCC Commercial Project of the Year**  
Telecommunications Regulatory Authority Headquarters, Dubai, United Arab Emirates

**National Capital Chapter: 2011 Canadian Award for Innovation and Excellence in Infrastructure Development**  
Communications Security Establishment Canada (CSEC) Long-Term Accommodation Project, Ottawa, Ontario, Canada

### 2010

**New Jersey Business & Industry Association, New Good Neighbor Award**  
Technology Center Building IV, New Brunswick, New Jersey

**Silver Project Leadership Award**  
University of Florida, Pathogens Research Facility, Gainesville, Florida, USA

### 2008

**American Society of Landscape Architects (ASLA) New Jersey, Honor Award**  
Pfizer Inc., Global Research and Development Headquarters, New London, Connecticut, USA

**Illuminating Engineering Society of North America, Philadelphia Section Award**  
Air Liquide Research and Technology Center, Newark, Delaware, USA

### 2007

**Building Magazine, Citation of Excellence, New Construction**  
Air Liquide Research and Technology Center, Newark, Delaware

**National Institutes of Health, Directors Award**  
C.W. Young Center for Biodefense and Emerging Infectious Diseases Building 33, National Institute of Allergy and Infectious Diseases (NIAID), Bethesda, Maryland, USA



## NATIONAL AND INTERNATIONAL AWARDS (CONTINUED)

### **Precast/Prestressed Concrete Institute, Design Excellence Award**

C.W. Young Center for Biodefense and Emerging Infectious Diseases Building 33, National Institute of Allergy and Infectious Diseases (NIAID), Bethesda, Maryland, USA

### **Building Congress & Exchange of Metropolitan Baltimore, Craftsmanship Award for Extensive Plumbing Work**

National Institutes of Health, Bayview Research Center, Johns Hopkins Bayview Campus, Baltimore, Maryland, USA

### **Building Congress & Exchange of Metropolitan Baltimore, Craftsmanship Award for Extensive HVAC**

National Institutes of Health, Bayview Research Center, Johns Hopkins Bayview Campus, Baltimore, Maryland, USA

### **ASLA - NJ|ASLA - American Society of Landscape Architects, New Jersey Chapter**

Georgia Institute of Technology, Molecular Science & Engineering Building (MS&E), Atlanta, Georgia, USA

### **Brick Southeast Design Awards, Honor Award**

Georgia Institute of Technology, Molecular Science & Engineering Building (MS&E), Atlanta, Georgia, USA

### **Networked Controls Leadership Awards, Honorable Mention: New Construction**

Georgia Institute of Technology, Molecular Science & Engineering Building (MS&E), Atlanta, Georgia, USA

## 2006

### **R&D Magazine, Lab of the Year, Special Mention**

U.S. Centers for Disease Control and Prevention, Emerging Infectious Diseases Laboratory (B18), Atlanta, Georgia, USA

### **Southeast Construction Magazine, Best Healthcare**

U.S. Centers for Disease Control and Prevention, Emerging Infectious Diseases Laboratory (B18), Atlanta, Georgia, USA

## 2003

### **R&D Magazine, Lab of the Year, Special Mention**

New Jersey Economic Development Authority, International Center for Public Health, Newark, New Jersey, USA

## 2002

### **American School & University Magazine, Outstanding Building**

New Jersey Economic Development Authority, International Center of Public Health, Newark, New Jersey, US

### **Illuminating Engineering Society of North America, International Illumination Design Award, Honorable Mention**

Pfizer Inc., Flagship Drug Discovery Laboratory Building 220, Groton, Connecticut, USA

### **Illuminating Engineering Society of North America, International Illumination Design Award, Section Award**

Pfizer Inc., Flagship Drug Discovery Laboratory Building 220, Groton, Connecticut, USA

### **International Masonry Institute, New Jersey Chapter, Gold Trowel Award: Best of Industrial/Research Category**

New Jersey Economic Development Authority, International Center of Public Health, Newark, New Jersey, USA

## 2001

### **R&D Magazine, Laboratory of the Year High Honors**

Drug Discovery Laboratory, Pfizer Inc., Groton, Connecticut, USA

## 1999

### **New Jersey Business & Industry Association, New Good Neighbor Award**

AT&T, Research and Development Campus, Middletown, New Jersey, USA

## 1994

### **R&D Magazine, Laboratory of the Year , High Honors**

Rhone-Poulenc Rorer, R & D Campus Headquarters, Collegeville, Pennsylvania, USA

## 1986

### **R&D Magazine, Laboratory of the Year**

Nabisco Brands, Inc., Robert M. Schaeberle Technology Center, East Hanover, New Jersey, USA

## SECTION 2.3 PUBLICATIONS

### BOOKS FEATURING BRIAN KOWALCHUK'S WORK

**"Innovations in Office Design: The Critical Influence Approach to Effective Work Environments,"** by Diane Stegmeier, John Wiley & Sons, February 2008

### ARTICLES + BLOGS AUTHORED BY BRIAN KOWALCHUK

**"The Evolution of Our Design Leadership,"** Aspici Blog, September 3, 2015

**"The Importance of Design,"** Aspici Blog, February 19, 2015

**"Why a Design Philosophy is Good Business,"** Aspici Blog, August 2, 2012

**"Green Technologies and Practices: The Science behind Design Solutions,"** Journal of Corporate Real Estate, by Brian Kowalchuk and Rachel Park, Autumn 2010

### SELECTED ARTICLES FEATURING BRIAN KOWALCHUK

**"Culture of Caring,"** Metropolis, October 1, 2012

**"From Dubai to Perking: National Research Facility Trends in a Global Arena,"** Tradeline, July 17, 2012

**"Common Needs, Custom Solutions,"** Interiors and Sources, February 2012

**"Creating a Science Community,"** Arabian Business, December 16, 2007

**"Making Capital Projects work for Biotech,"** BioExecutive International, June 2006

**"Pfizer Reaches Across the Thames for More Space,"** New York Times, February 22, 1998

### SELECTED ARTICLES ABOUT BRIAN KOWALCHUK'S WORK

**"OSU Wexner Medical Center Chooses HDR for New Hospital Tower,"** Healthcare Facilities Today, September 26, 2017

**"The Kolos Data Center in Norway Mimics a Glacier's Movement,"** Design Boom, August 22, 2017

**"Plans Unveiled to Construct the World's Largest and Most Secure Data Center in Northern Norway,"** ArchDaily, August 16, 2017

**"World's Largest Data Center to be Built in Arctic Circle,"** CNBC, August 15, 2017

**"Kolos Plans Data Center in Arctic Norway to Tap Renewable Power,"** Bloomberg Technology, August 14, 2017

**"Tech Hub: HDR Designs New Home for Groundbreaking Research in Computer Sciences,"** Civil + Structural Engineer Magazine, November 2016

**"A Beacon for Healthcare,"** Laboratory Design, November 8, 2016

**"Product+InPlacement: Zayed Building for Personalized Cancer Care,"** Interiors & Sources, June 30, 2016

**"The Pirbright Institute's Plowright Building Transforms the High Containment Lab by Inverting Traditional Models,"** Tradeline, May 18, 2016

**"Lab of Year Honors Awarded to HDR-designed Zayed Building for Personalized Cancer Care,"** Office Insight, April 20, 2016

**"Outside the Box,"** Interiors & Sources, April 1, 2016

**"Breaking Down Silos in Academic Cancer Research,"** Healthcare Design Magazine, November 12, 2015

**"A Window to Containment Facility Design,"** Laboratory Design, June 8, 2015

**"Breaking Out of the Box: Pirbright Institute's Radical Approach to Biocontainment Facility Design,"** Building Design + Construction, January 29, 2015





**PUBLICATIONS (CONTINUED)**

**“The Science Behind Success as Pirbright is Crowned Top at BCI Awards,”** Architects Data File, October 10, 2014

**“Visionary Appeals for Funding to Advance Extraordinary Building with Charitable Purpose,”** The Globe and Mail, Thursday, November 15, 2012

**“HDR to Design Nanjing University’s Applied Science Building in China,”** DesignBuild Network.com, July 2012

**“HDR to Design College for Nanjing University,”** Middle East Architect, July 22, 2012

**“College of Engineering and Applied Sciences Building for Nanjing University,”** ArchDaily, July 2012

**“HDR Announces University Masterplan,”** World Architecture News, July 2012

**“A Window to Containment Facility Design,”** Laboratory Design, June 2015

**“Case Study: TRA Headquarters,”** Middle East Architect, August 10, 2011

**“New Facility Puts Roslin Institute at Forefront of World-Class Research,”** The Scotsman, June 29, 2011

**“HDR Completes Roslin Institute in Edinburgh,”** The Architects’ Journal, February 21, 2011

**“HDR Completes Sleek and Colourful Bioscience Research Facility in Edinburgh,”** World Architecture News, February 2011

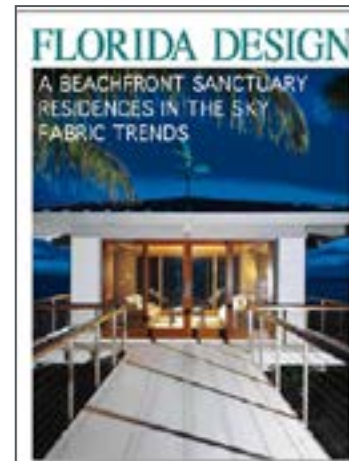
**“The Roslin Institute Building,”** OpenBuildings, January 2011

**“UAB’s New Research Building Design for Long-Term Viability,”** Tradeline, February 20, 2007

**“Building 18 Emerging Infectious Diseases Laboratory,”** Tradeline Report, September 2006

**“A Beachfront Sanctuary,”** Florida Design Magazine, Spring 2004

**“Prescription Plan,”** Architectural Lighting, October/November 2001



## SECTION 3.0 EXHIBITS LIST

### 3.1

University of Edinburgh  
**The Roslin Institute**  
*Edinburgh, Scotland, United Kingdom*

Photography: © Chris Humphreys Photography Ltd.

### 3.2

University of Maryland  
**Physical Sciences Building**  
*College Park, Maryland, USA*

Photography: © Ron Blunt

### 3.3

**Telecommunications Regulatory Authority  
Headquarters Building**  
*Dubai, United Arab Emirates*

Photography: © Oliver Jackson

### 3.4

**Kolos Data Center**  
*Ballangen, Norway*

### 3.5

University of Texas, MD Anderson  
**Sheikh Zayed Bin Sultan Al Nahyan Building for  
Personalized Cancer Care**  
*Houston, Texas, USA*

Photography: © Mark Herboth Photography LLC

### 3.6

**Pfizer Global Drug Discovery Headquarters**  
*Groton, Connecticut, USA*

Photography: © Hedrich Blessing

### 3.7

**Air Liquide Research and Technology Center**  
*Newark, Delaware, USA*

Photography: © Don Pearse Photographers, Inc.

### 3.8

Biotechnology & Biological Sciences  
Research Council  
**The Plowright Building at Pirbright Institute**  
*Pirbright, Surrey, United Kingdom*

Photography: © James Brittain  
Photography: © Dan Schwalm, HDR

### 3.9

**Huawei Corporate Financial  
Headquarters Building**  
*Shenzhen, China*

Photography: © Paul Dingman

### 3.10

**Cultivating a Culture of Design Excellence**

## EXHIBIT 3.1

### UNIVERSITY OF EDINBURGH THE ROSLIN INSTITUTE

Midlothian, Scotland, United Kingdom

To re-energize an historic research institution and create a new emblem and image for its campus, Brian created a truly collaborative environment in a structure inspired by the double-helix structure of DNA they study.

Parallel strands—one housing labs and the other housing offices—curve in opposite directions, connected by a double-height glass circulation spine that also functions as a “collaboration zone” with comfortable, informal gathering spaces for group and individual work. Brightly colored fins representing genetic markers run through the center, which is illuminated by four colorful light wells with connecting stairs.

Brian devised a highly efficient design by viewing the functionality of the facility holistically rather than abiding by the conventions of area or bench-space per scientist. The resulting generously proportioned open labs and offices allow more scientists to work within the space comfortably and collaboratively.

The thinness and delicacy of the building allowed for abundant sunlight and natural ventilation. In fact, 60 percent of the building is naturally ventilated, employing operable windows including clerestory windows—previously unheard of in a laboratory building.

**“We now have an iconic building that is instantly recognizable.”**

-Professor David Hume  
Director, The Roslin Institute

#### Size

152,000 SF

#### Architect of Record

HDR

#### Role

Lead Designer:  
Visioning, SD through CA

#### Completion

2011

#### Awards

2014 Highly Commended, New Building:  
Research category, S-Lab Awards

2012 AIA New Jersey Merit Award, Built  
Category

#### Publications

“New Facility Puts Roslin Institute at Forefront  
of World-Class Research,” The Scotsman,  
June 29, 2011

“HDR Completes Roslin Institute in Edinburgh,”  
The Architects’ Journal, February 21, 2011

“HDR Completes Sleek and Colourful  
Bioscience Research Facility in Edinburgh,”  
World Architecture News, February 2011

“The Roslin Institute Building,” OpenBuildings,  
January 2011

#### BREAMM Very Good

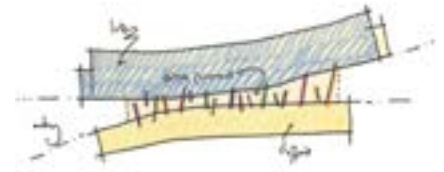
#### DECLARATION OF RESPONSIBILITY

*I have personal knowledge that the  
nominee served as lead designer for  
the project listed above.*

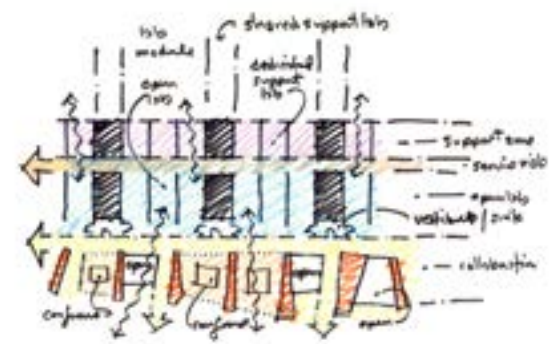
Thomas Smith, AIA  
Design Director, Education|Science|Tech, HDR



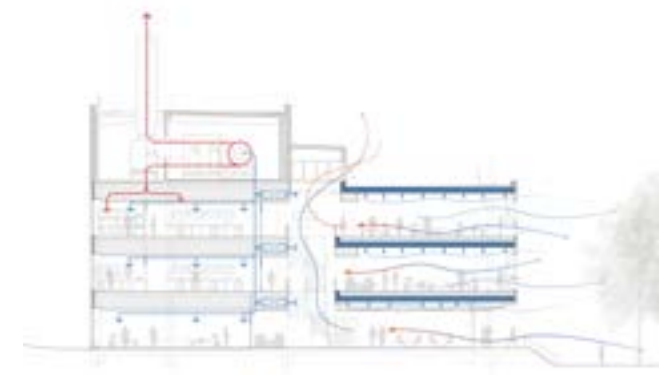




Site Plan



Typical Floor Plan



Mechanical Ventilation  
Passive/Active Ventilation  
Natural Ventilation



## EXHIBIT 3.2

### UNIVERSITY OF MARYLAND PHYSICAL SCIENCES BUILDING

College Park, Maryland, USA

#### Size

160,000 SF

#### Architect of Record

HDR

#### Role

Lead Designer

#### Completion

2013

#### Awards

2014 AIA New Jersey Merit Award

2014 Award of Merit, Higher Education/  
Research Category, Engineering News-Record,  
Mid-Atlantic

#### LEED Gold Certification



**“What you find is that the students love being in this building—and I love being in a building that’s full of students.”**

-Jordan Goodman  
Distinguished Professor,  
University of Maryland

#### DECLARATION OF RESPONSIBILITY

*I have personal knowledge that the nominee served as lead designer for the project listed above.*

Thomas M. McMullen  
Sr. Vice President Academic Affairs & Provost

The University of Maryland desired that all future buildings on campus would conform to the existing Neo-Georgian vernacular. Brian was able to respond to that criteria with a contemporary brick and glass building that gracefully responds to the existing vernacular—but an unexpected architectural design feature embodies the discovery that takes place within.

Solid brick ends connect the existing physics building and anchor the central glass component, which is elevated to preserve a vital pedestrian path. It is here where he created the element of surprise: an elliptical open-air courtyard, a “negative space” that fosters interaction. Clad

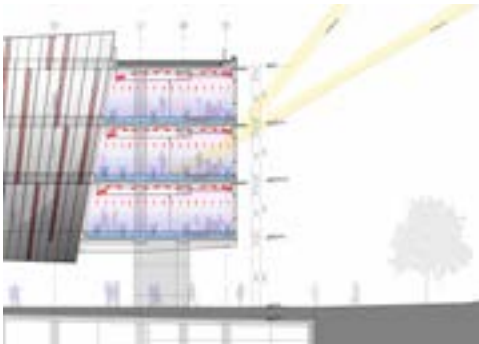
in individually cut clear and red glass panels, the dramatic elliptical form speaks to the juxtaposition between the study of astronomy and physical sciences. By creating a super basement for labs and placing collaborative offices on the second floor, he was able to transform the ground floor into an inviting passageway for the thousands of students who walk by the building each day. The oculus allows students to experience the wonder of the science being studied within the building’s walls.

Inside the building, the glass ellipse energizes a shared space, where astronomers connect with theorists. By night, the illuminated oculus

has a distinctive, high-tech appearance—an instant landmark. Specialty labs lie below grade, covering an area three times the building’s footprint, using the earth to minimize vibration for disciplines such as nanoscale research.

Transparent and open space encourages interaction among faculty members and students and across the academic community. Activities on the ground floor are visible from the courtyard, including gatherings of faculty and students in the café for the daily Physics Tea.

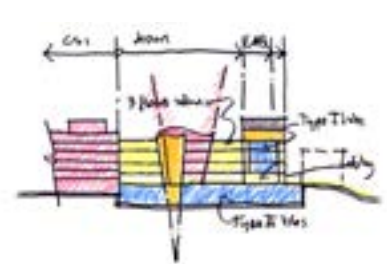




Site Plan



Typical Floor Plan





## EXHIBIT 3.3

### TELECOMMUNICATIONS REGULATORY AUTHORITY (TRA) HEADQUARTERS BUILDING

Dubai, United Arab Emirates

This new building unites TRA functions in a single, iconic facility that expresses both its brand and provides a visual expression of its function: the receipt and transmission of information. Rooted in tradition but infused with advanced technology, Brian designed the building to reflect the agency's role in Dubai's transition to a knowledge-based economy. He drew inspiration from aspects of the local culture and climate, but expressed these concepts through contemporary architecture and technological innovation.

Brian inverted the traditional placement of functional elements to adapt to Dubai's extreme climate: the "core" functions of the elevator and stair towers occupy the east and west sides of the building, blocking the sun's harshest rays. The building's center is thus freed to be a shaded interior courtyard, an oasis of light and air inspired by the wind towers of traditional Arabic architecture, with operable windows from flanking spaces into the atrium.

Sleek and modern, the external skin cloaking the building projects a rational pattern of transparent and translucent energy efficient glass in the company's signature colors of orange and green, creating a play of light and shadow. The glass curtain wall is double-wall construction with crystalline film used to block solar gain. Each façade is further "solar-tuned" to respond to its specific microclimate and orientation. The prominent façade is striking, even in the glittering environment of Dubai.

#### Size

182,000 SF

#### Architect of Record

Kling Consult, Dubai

#### Design Firm

CUH2A

#### Role

Lead Designer:  
Visioning, SD through CA

#### Completion

2011

#### Awards

2012 New Jersey AIA  
Merit Award (Built)

2009 New Jersey AIA  
Merit Award (Unbuilt)

#### Publications

"Case Study: TRA Headquarters," Middle East  
Architect, August 10, 2011

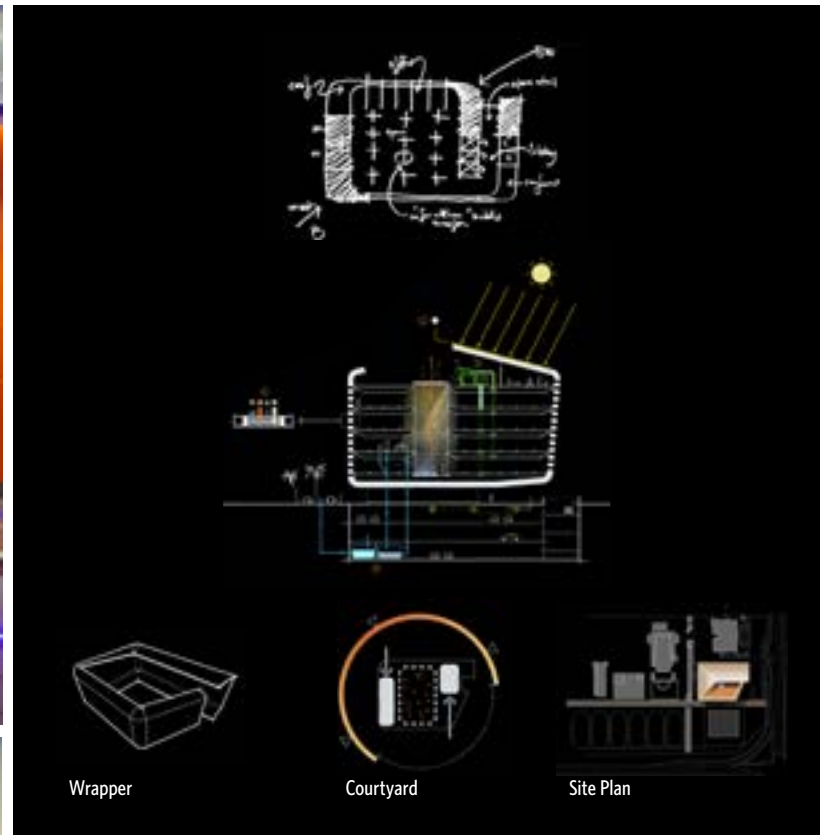
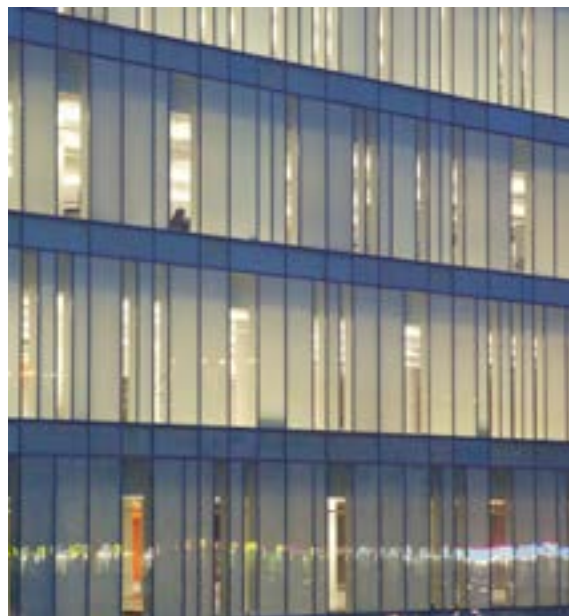
#### LEED Silver Certification

#### DECLARATION OF RESPONSIBILITY

*I have personal knowledge that the  
nominee served as lead designer for  
the project listed above.*

Scott Butler, PE, LEED AP  
Chief Operating Officer, EYP  
Former President, CUH2A







## EXHIBIT 3.4

### KOLOS DATA CENTER

*Ballangen, Norway*

#### Size

6,450,000 SF

#### Architect of Record

HDR

#### Role

Lead Designer

#### Completion

Anticipated 2021

#### Awards

2017 AIA New Jersey Merit Award, Unbuilt

2018 Architizer+ Jury Award, Unbuilt  
Commercial

#### Select Publications

"The Kolos Data Center in Norway Mimics a Glacier's Movement," *Design Boom*, August 22, 2017

"Plans Unveiled to Construct the World's Largest and Most Secure Data Center in Northern Norway," *ArchDaily*, August 16, 2017

"World's Largest Data Center to be Built in Arctic Circle," *CNBC*, August 15, 2017

"Kolos Plans Data Center in Arctic Norway to Tap Renewable Power," *Bloomberg Technology*, August 14, 2017

Located north of the Arctic Circle, this four-story data center was designed as the largest and most energy efficient in the world, well-positioned to take advantage of Norway's abundant hydropower, cool climate, and large technical workforce, as well as access to international high-performance fiber.

Brian was inspired by the spectacular landforms of alluvial fans, mountains and glaciers that define the site, in a fjord surrounded by mountains. Organized along a central spine, the building forms are arranged to mimic a glacier's movement as it displaces swaths of land. At the base, the spine creates a collision of landforms reinterpreted to become modular data halls

that are secure, scalable and connected. At the terminus on the water, the central spine emerges as a public element clad in copper, a reference to the area's copper mining history. This architectural gesture articulates the entrance to the data center while acting as an inviting gateway to the public waterfront promenade—a physical expression of the company's commitment to the small fishing village of Ballangen and to the tenets of sustainable social change.

The massive facility will service the rapidly growing global data market, routing high-speed traffic to nearby continental Europe and as far off as the United States' East Coast.

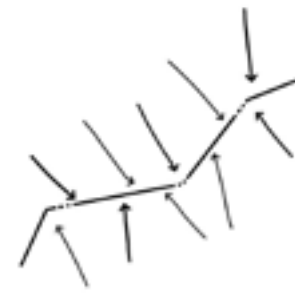


#### DECLARATION OF RESPONSIBILITY

*I have personal knowledge that the nominee served as lead designer for the project listed above.*

Steve Riojas, AIA  
Global Director, Education|Science|Tech, HDR





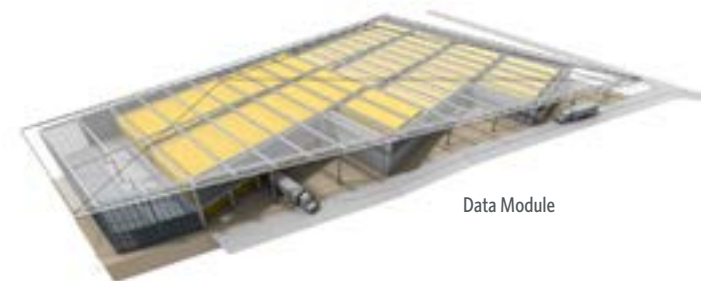
Energy



Connection



- Public Entry
- Administrative Complex
- Phase 1
- Public Storage Site
- Circulation Space
- Data Center Modules
- Plaza
- Service Entry



Data Module

## EXHIBIT 3.5

UNIVERSITY OF TEXAS, MD ANDERSON

### SHEIKH ZAYED BIN SULTAN AL NAHYAN BUILDING FOR PERSONALIZED CANCER CARE

Houston, Texas, USA

In creating the Zayed Building for Personalized Cancer Care, Brian brought to fruition MD Anderson's reorganization from a departmental to an interdisciplinary translational organizational structure. Beyond catalyzing the change to a translational campus, the building also serves as the symbolic and physical manifestation of MD Anderson's commitment to excellence, an explosion of light, shadow, view and form on a campus punctuated with solid, conventional structures.

Brian's design puts people at the center, creating a light-filled, interactive, highly adaptable workspace that is both uplifting and inspiring. In a reinterpretation of traditional research facilities, separate laboratory and office towers lie in a pin-wheel configuration held together by a central, shared interaction zone. Both laboratories and offices are modular and can be reconfigured to adapt to future needs and changing trends in research. The central hub, linked vertically by an open communicating stair, brings lab and office workers together organically to use a variety of gathering and work spaces for independent or collaborative work.

Clad in a fully glass enclosure, natural light illuminates the entire building and creates transparencies among the components. In the Houston skyline, the Zayed Building shines as a prominent crystal cathedral, with its towers of glass that rise to the heavens, symbolizing hope in patient care and cancer research.

#### Size

626,000 SF

#### Architect of Record

HDR

#### Role:

Lead Designer:  
Visioning, SD through CA

#### Completion

2014

#### Awards

2016 R&D Magazine Lab of the Year Award  
Special Recognition for Design

2016 AIA New Jersey Honor Award, Built  
Category

#### Publications

"Lab of Year Honors Awarded to HDR-  
designed Zayed Building for Personalized  
Cancer Care," Office Insight, April 20, 2016

**"When you're coming into a lab to do research, you want to be energized by the work. When you walk into this lab, there are no walls, only big open spaces. That sets the tone for the rest of the day. You feel like the sky's the limit here."**

-Anirban Maitra, MBBS  
Director, Sheikh Ahmed Bin Zayed Nahyan  
Center for Pancreatic Cancer Research

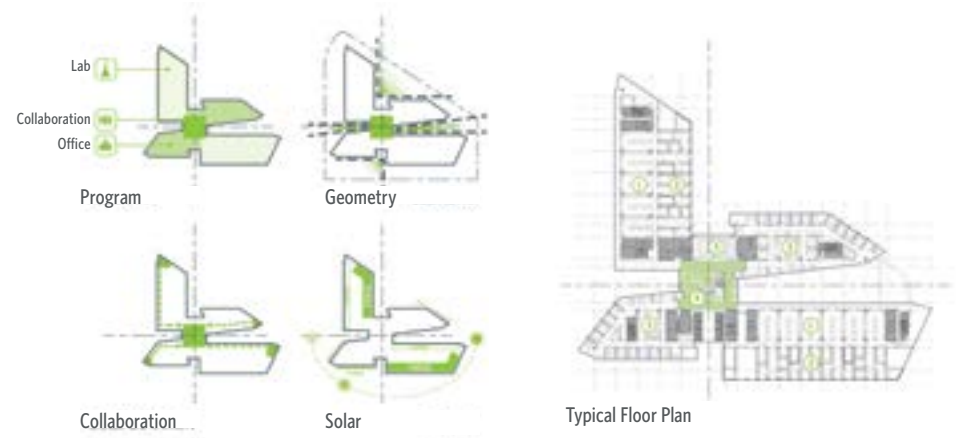
#### DECLARATION OF RESPONSIBILITY

*I have personal knowledge that the nominee served as lead designer for the project listed above.*

Jon Crane, FAIA  
Director of Translational Health Sciences, HDR









## EXHIBIT 3.6

PFIZER INC.

### GLOBAL DRUG DISCOVERY HEADQUARTERS

Groton, Connecticut, USA

In the late 1990s, under the leadership of a new forward-looking president of research, Pfizer embarked on a paradigm shift towards collaborative, multidisciplinary work environments in an effort to encourage engagement and increase productivity. Additionally, Pfizer desired a building that visually and operationally reinforced its commitment to the research of life-saving pharmaceuticals.

Brian rethought the organization of space to support this vision, providing an innovative, dynamic framework to foster fluid connections across disciplines. He introduced the concept of “research villages”—flexible, modular and co-located laboratories for both chemistry and biology. He embraced organic, curvilinear forms, and placed the villages so that they radiated from a central atrium that housed shared spaces such as a lecture hall, café, and library, thus fostering collaboration at all levels. Bridges further enhance connectivity among research villages and to other facilities on campus. Ahead of its time in many ways, the research library became a symbol of a new focus on learning and communicating through technology.

The atrium also serves as the new main entrance for the entire Central Research Campus and Visitors’ Center, and was designed and choreographed to put science on display and serve as welcome center for living and learning, a place where people want to be.

**“[Kowalchuk’s buildings] reflect an expanded view of the role that buildings can play not just in the aesthetic and functional arena, but also as a reflection of the values of the sponsor and as a source of productivity gains by what they enliven and enable.”**

-George M. Milne, Jr.

#### Size

574,000 SF

#### Architect of Record

CUH2A

#### Role

Lead Designer:  
Visioning, SD through CA

#### Completion

1999

#### Awards

Illuminating Engineering Society of North America, Honorable Mention, 2002  
2001 R&D Magazine Lab of the Year Award, High Honors

#### DECLARATION OF RESPONSIBILITY

*I have personal knowledge that the nominee served as lead designer for the project listed above.*

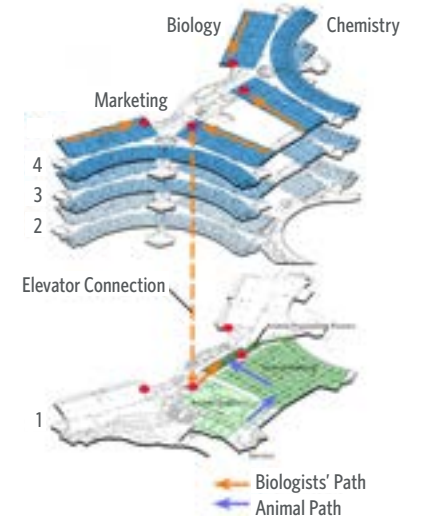
George M. Milne, Jr.  
Executive Vice President (retired), Pfizer, Inc.







Organizational Clarity



## EXHIBIT 3.7

### AIR LIQUIDE RESEARCH AND TECHNOLOGY CENTER

Newark, Delaware, USA

#### Size

83,000 SF

#### Architect of Record

Bernardon Haber Holloway Architects PC

#### Design Firm

CUH2A

#### Role

Lead Designer: SD through CA

#### Completion

2007

#### Awards

2008 AIA-DC Merit Award, Built

2007 Citation of Excellence, Buildings Magazine New Construction Awards



**“This is a very dynamic building. The massing of the expansion provides a welcome addition to the ubiquitous rectangular block. The way the addition presents itself to the public is very exciting... A bio-retention area is a welcome landscape solution to integrate indoors and out.”**

#### Jury Comments

2007 Buildings Magazine  
New Construction Awards

#### DECLARATION OF RESPONSIBILITY

*I have personal knowledge that the nominee served as lead designer for the project listed above.*

Scott Butler, PE, LEED AP  
Chief Operating Officer, EYP  
Former President, CUH2A

Air Liquide, a global company known for innovation in the industrial and medical gases business, selected a site for its new R&D laboratory and office facility which featured an existing structure, thus highlighting one of its own core values: sustainable design and development.

Brian created a dramatic new brand image that visually expresses the company’s embrace of technology—a goal he was able to accomplish on a tight budget. His design included the creation of a 23,000-square-foot addition to stand as a dramatic new main façade in front of the existing

60,000 SF one-story warehouse structure. Considering stewardship of both materials and financial resources, the existing building structure was reused, including foundations, steel superstructure, and deck. Kowalchuk minimized the addition’s footprint by incorporating an equipment mezzanine within the high-bay structure that stands independent of the existing steel framing to meet seismic code restrictions.

A soaring canopy adds drama to the new front entrance, reaching out toward approaching visitors. This gesture helps to evoke a dynamic motion which invites the visitor in while

extending the building outward into the environment. The plan is layered as a series of transparent zones originating from the north-facing curtain wall filtering through the flexible, modular offices and culminating within the denser engineering laboratories.

This layout showcases the multiple projects with which Air Liquide is involved while maintaining a high level of privacy and security for those areas which demand it. In contrast, the strong transparency of the design maximizes natural lighting and promotes interaction between employees.







## EXHIBIT 3.8

### BIOTECHNOLOGY AND BIOLOGICAL SCIENCES RESEARCH CENTRE THE PLOWRIGHT BUILDING AT PIRBRIGHT INSTITUTE

Pirbright, Surrey, United Kingdom

For this government institution, Brian turned the conventional design of containment laboratories inside out. Seeking a way to put researchers at the center of his design—versus the virus that they study—he reimagined the windowless spaces of typical containment labs and subsequently greatly improved their daily lives. His simple and intuitive design placed researchers at the center of a radial plan that emanates from a light-filled, three-story atrium, whose curtain wall defines the sealed containment boundary. Shared spaces for write-up or collaboration within containment draw researchers out of isolated laboratories. A bright and open cafeteria on the second floor offers seating on both sides of containment, allowing researchers to interact, collaborate, and learn from each other. These innovations slashed the time that researchers spent showering—previously 30 to 40 percent of their days—making them more efficient, effective, and fulfilled.

Brian cited the new facility to create an entirely new entrance sequence to the Institute's campus, and to take advantage of the expansive views to a forested ravine to the south. Further, exterior materials were selected for their strong visual impact to reinforce the revolutionary nature of this facility—and in particular, to move away from conventional, sterile containment environments. The use of wood timber paneling, multi-colored window casings, transparent glass panels, and a carefully detailed metal brise-soleil were all selected to create a place that enhances researchers' lives, and helps to brand the Pirbright Institute as a new, vibrant place to work.

#### Size

151,000 SF

#### Architect of Record

HDR

#### Role

Lead Designer: Visioning, SD through CA

#### Completion

2014

#### Awards

2016 AIA New Jersey Merit Award

2015 R&D Magazine, Laboratory of the Year, Special Mention Award

2015 Building Design + Construction, Building Team Platinum Award

2014 British Construction Industry, Judge's Special Award

#### Publications

"The Pirbright Institute's Plowright Building Transforms the High Containment Lab by Inverting Traditional Models," *Tradeline*, May 18, 2016

"Breaking Out of the Box: Pirbright Institute's Radical Approach to Biocontainment Facility Design," *Building Design + Construction*, January 29, 2015

"The Science Behind Success as Pirbright is Crowned Top at BCI Awards," *Architects Data File*, October 10, 2014

#### DECLARATION OF RESPONSIBILITY

*I have personal knowledge that the nominee served as lead designer for the project listed above.*

Dr. Michael Johnson  
Director of Capability, The Pirbright Institute





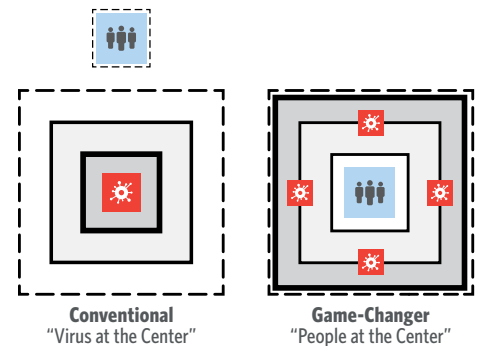
First-ever Windows in Category 4 Laboratory



Local Wood Timber



Collaboration Hub





## EXHIBIT 3.9

### HUAWEI

## CORPORATE FINANCIAL HEADQUARTERS BUILDING

Shenzhen, China

For this Chinese multinational, the world's largest telecommunications equipment manufacturer, Brian transformed an existing 1990's building into the global center of Huawei's financial system.

In a radical departure from modern glass and steel office buildings, Huawei's chairman sought a design that reinterpreted classical ideals in order to portray the strength, wealth, and power of the corporation. Brian developed an architectural vocabulary that speaks to detail and tradition, capturing the classical spirit and emotion without being slavish.

Both inside and outside, Brian expresses a simplicity of form that is rooted in three basic principles: beauty, strength and stability. The exterior was elegantly clad in stone, establishing a strong, classically ordered identity for the building, with a simplicity of form and detail that projects confidence. A new, larger entrance was relocated to the center of the building, establishing a formal processional sequence.

Brian took the most prominent original interior feature, the central "open air" atrium, and divided it into three layers to create an elegance of scale and address more contemporary functions: the lower atrium for gathering, a new conference center floor for interaction and the upper atrium "sky garden" for respite.

#### Size

533,675 SF renovation;  
130,650 SF expansion

#### Architect of Record

Shenzhen A+E Design CO., Ltd (LDI)

#### Design Firm

HDR

#### Role

Lead Designer

#### Completion

2017



The existing building, prior to renovation, lacked proportion and grace.

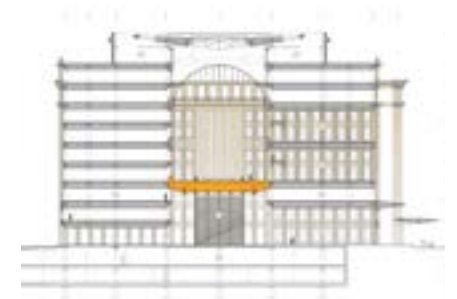
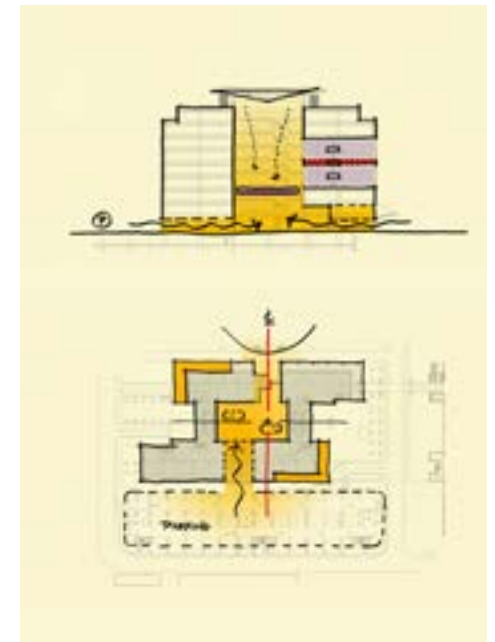
#### DECLARATION OF RESPONSIBILITY

*I have personal knowledge that the nominee served as lead designer for the project listed above.*

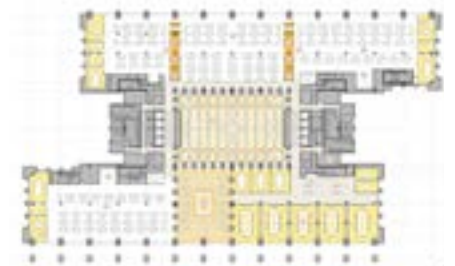
Mr. Bu Yinghui  
Design Director, Huawei Technologies, Co., Ltd.







Section



Typical Floor Plan



### EXHIBIT 3.10

## CULTIVATING A CULTURE OF DESIGN EXCELLENCE

Under Brian Kowalchuk’s leadership as the firm’s first global director of design, HDR has undergone a thoughtful and deliberate transformation, an evolution from a technically-driven firm to one that embraces the full spectrum of value-added design. This new focus on design—and the critical need to design to the highest level of excellence to overcome a decades-old reputation—aligned with Brian’s unwavering belief in the tenet that architects are artists and innovators, that their work should be a force of good throughout the world. A highly visual storyteller, he is especially well-known for his penchant for communicating ideas through sketches and diagrams.

He also championed the idea of a unifying design philosophy as a common foundation to reinforce the firm’s ethos:

- Physically capture a bold idea or concept
- Express integrated design
- Embody the client’s vision
- Rethink the standard approach
- Support stewardship of mind, place and resources

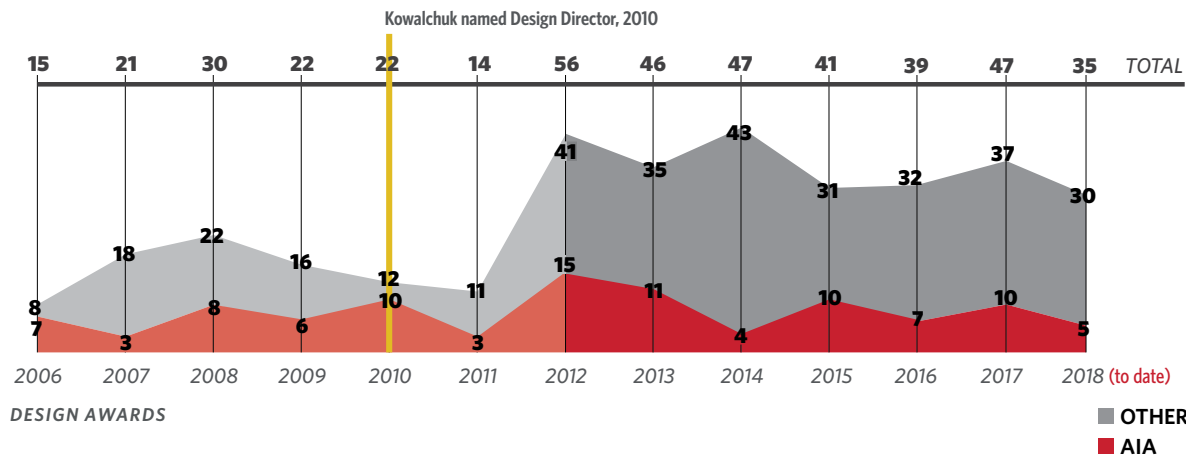


Throughout his career, Brian has constantly embraced opportunities to mentor younger staff as well as provide opportunities for learning and dialogue. But it has been in his role as global director of design for HDR that he has been able to directly influence the growth and development of so many younger professionals. One of his first decisions was to create a design leadership infrastructure at all levels and in all geographies of the firm. This reorganization defined new, more robust career paths for architecture professionals, providing leadership opportunities at levels that didn’t exist before, and helping improve talent acquisition and retention at entry, mid and senior levels.

Brian guides this highly visible design leadership team, which is charged with infusing creativity, innovation and design thinking into all corners and levels of the Architecture practice, acting as design ambassadors and mentors. Brian tapped designers who are passionate about the organization’s Design Philosophy in leadership positions to keep the firm on the right track.

And, as the firm has expanded its core of business beyond the borders of the United States, Brian cast a global perspective to the design leadership structure, ensuring growth opportunities for design colleagues in Canada, Germany, Australia, China and the Middle East.

As evidence of the success of this reorganization and elevated commitment to design excellence is the consistently high level of design awards received from the AIA as well as other prestigious organizations, including the Australian Institute of Architects since Brian assumed the role of Global Director of Design in January 2010.



#### DECLARATION OF RESPONSIBILITY

*I have personal knowledge that the nominee has permeated a culture of design excellence throughout the organization, changing the trajectory of this global architecture practice.*

Doug Wignall, FAIA  
President, HDR

## REFERENCES

**Pam Rew, FAIA**

Partner  
KSS Architects  
Princeton, New Jersey  
*Professional colleague*

**Michael Farewell, FAIA**

Partner  
Farewell Architects  
Princeton, New Jersey  
*Professional colleague*

**David Cronrath, AIA**

Associate Provost and Dean, School of  
Architecture, Planning and Preservation  
University of Maryland  
College Park, Maryland  
*Client, colleague and past juror for  
HDR's Opacity design review*

**Christiane Glanzmann, AIA**

Senior Project Manager, Diagnostics  
Capital Investment & Real Estate  
Roche  
Tucson, Arizona  
*Professional colleague and former client*

**Douglas S. Wignall, FAIA**

President  
HDR  
Omaha, Nebraska  
*Professional colleague and president of  
HDR's Architecture practice*

**George M. Milne, Jr., Ph.D.**

Venture Partner  
Radius Ventures, LLC  
Boca Raton, Florida  
*Former client while at Pfizer*

**Leslie Gartner, FAIA**

Senior Vice President  
WSP USA  
Atlanta, Georgia  
*Professional colleague*

**James Cramer, Hon. AIA**

Design Intelligence Editor, Chairman Emeritus  
and Founder, Design Futures Council  
Former Executive Vice President, American  
Institute of Architects  
Atlanta, Georgia  
*Advisor to HDR; jury chair of HDR's Opacity  
Design Review*

**Edgar A. Lampert**

Vice Chairman  
The Georgetown Company  
New York, New York  
*Client*

**Bea Riemschneider**

Editorial Director and Conference Chair,  
Science Group  
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