Fueling innovation at the intersection of architecture, engineering, and building construction
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The Board of Directors expresses its gratitude to Frank X. DarConte, Managing Partner at Garrison Advisory, who served on the Board of Directors from the founding of the IDC Foundation until November 2018. We acknowledge and greatly appreciate his guidance and commitment in that formative period.

*Professional affiliations are for identification purposes only.
INTRODUCTION

For the IDC Foundation, 2018 was a milestone year. The Foundation awarded its first grants – a total of $7.3 million – to five institutions of higher education in Greater New York City. Those grants will advance research and the training of students in fields relating to architecture, engineering, and building construction. The grantmaking is focused on transforming these fields through innovative approaches to cross-sectoral collaboration, increased student access, and enhanced student experiences.

Both the funding and the inspiration for the Foundation come from the Institute of Design and Construction, which was similarly focused. From its location in downtown Brooklyn, the nonprofit technical college trained more than 30,000 students as architects, engineers, and other construction-related jobs between its founding in 1947 and its voluntary closing in 2015. The sale of its property enabled a grant from the Institute to endow the IDC Foundation.

In 2018, the Foundation awarded its initial round of grants to five institutions: Columbia University's Graduate School of Architecture, Planning and Preservation (GSAPP); New York Institute of Technology; NYU Tandon School of Engineering; Pratt Institute, and The Cooper Union for the Advancement of Science and Art. The Foundation also began the process of bringing together leaders of its grantee institutions to share insights and stimulate further opportunities for collaboration and innovation across these fields.

With these initiatives, the IDC Foundation adds a new dimension to the extraordinary legacy of the Institute of Design and Construction. The Foundation now serves as an ongoing catalyst for innovation, firmly grounded in the Institute's steadfast devotion to the highest-quality education combined with industry experience. This annual report for 2018 illuminates the transformational impact that the IDC Foundation's grantmaking is already having.

Photo Credit: The Cooper Union
The Institute of Design and Construction was founded in 1947 by Vito P. Battista, RA. Accredited by the New York State Board of Regents, it offered Associate degrees in Building Construction Technology and Architectural Design Technology as well as a variety of continuing and professional education courses. It constantly endeavored to provide the highest-quality education, grounded in industry experience without sacrificing personal attention to the student.

The purpose of the Institute was to serve the building construction industry by dedicating itself to programs of instruction that dealt with the real world of construction. Through that undertaking, the Institute prepared each student with a solid technical foundation as well as exposure to actual construction methodology and techniques in use by the industry. The experience gained at the Institute, in many cases, served as incentive for additional studies at four-year institutions.

Vito Battista was a first-generation Italian-American architect, who believed so passionately in providing others with the opportunity to have a better life through a career in architecture or building construction technologies that, while still in his 30s, he founded the Institute of Design and Construction. Born in Bari, Italy, he came to New York when he was three years old. As a teenager, he left high school to help his father run an ice business in the Bushwick section of Brooklyn. He then attended evening school before earning an architecture degree from Carnegie Institute of Technology, now Carnegie Mellon, and a Master’s degree in architecture from MIT.

A practicing architect, he went on to become president of the Brooklyn Society of Architects and the Brooklyn chapter of the American Institute of Architects. He also served in the New York State Legislature from 1969 to 1975 as a Republican in the heavily Democratic borough.

The IDC Foundation is the legacy of the Institute of Design and Construction, which provided educational programs in fields relating to architectural design and building construction until that same year. The Foundation’s funding was made possible by a grant from the Institute, following the sale of its property, to carry on philanthropically its educational mission to provide training in those fields and create new avenues for learning that improve and add to understanding of practices in them.

The IDC Foundation was founded in 2015 to continue the Institute’s mission of providing educational programs in architectural design and building construction. The Foundation’s funding was made possible by a grant from the Institute following the sale of its property.
GRANTMAKING ACTIVITIES IN 2018

The IDC Foundation provided grants totaling $7.3 million to educational institutions in 2018 in two phases: one to fund research and educational programs; the other to assist students at those institutions through scholarships, to increase access to education, and fellowships, to enhance educational experiences.

Grants for Research and Educational Programs

Grants totaling $6,700,000 were awarded to four educational institutions to support research and educational programs relevant to the architectural design and building construction industry.

Grants to Enhance Access and Educational Experiences

Grants totaling $630,000 were made to five institutions to help undergraduate and graduate students – in fields relating to architecture, engineering, and building construction – to pay for their education and to benefit from travel and other educational experiences.

All grant awards are made directly to educational institutions and not to individual students. Those institutions determine which students will receive scholarships, fellowships, and/or other awards. The IDC Foundation does not accept unsolicited proposals for funding from institutions.
WHAT THE GRANTS FOR RESEARCH AND EDUCATIONAL PROGRAMS HAVE MADE POSSIBLE

**New York Institute of Technology** – IDC Foundation funding will enable NYIT students in the School of Architecture and Design, College of Osteopathic Medicine, and School of Health Professions to explore connections between architecture and the fields of medicine and the health professions in order to research and create unconventional design solutions for a healthier built environment and a holistic approach to well-being. The funding will support academic activities and projects, as well as the development of two postgraduate academic programs based on interdisciplinary research. In addition, the grant will fund the IDC Foundation Endowed Chair of Digital Technologies in the School of Architecture and Design. It will also support NYIT's design and construction of the IDC Foundation Digital Fabrication Lab, which will feature a robotic matter design lab.

**NYU Tandon School of Engineering** – NYU Tandon created the IDC Foundation Chair in Design & Construction in the Department of Civil & Urban Engineering, a position made possible by an endowment provided by the IDC Foundation and an additional $1 million commitment made by NYU. Dr. Michael Horodniceanu, PE, former president of MTA Capital Construction, was subsequently appointed to the position. Dr. Horodniceanu is now leading NYU's efforts to establish an industry-supported IDC Construction Innovation Hub. The Hub is envisioned to conduct impactful, world-class, research, educational, and outreach activities, guided by leaders from the architecture, engineering, and construction community, among others. Judy Cooper, former Senior Vice President and Director of Global Corporate Communications at Parsons Brinckerhoff, has been hired as the Hub’s Associate Director, a position made possible by the IDC Foundation.
Pratt Institute – IDC Foundation funding is enabling Pratt Institute to create a Design Lab that will seek to solve society’s most challenging and unsolved design and construction problems through integrated research across the disciplines of design, construction, and management in a full-scale prototyping research laboratory. The Design Lab will encourage innovation at the intersection of design and production technologies, addressing construction means, material use, and control of waste within larger environmental frameworks and educating students to creatively engage these issues. Students and faculty will develop new fabrication techniques for innovative solutions to pressing needs with a special focus on the utilization of low-cost materials, affordable housing, and high-performance, ecologically responsible, building assemblies.

The Cooper Union – IDC Foundation funding is creating the IDC Foundation Art, Architecture, Construction, and Engineering (AACE) Lab at The Cooper Union for the Advancement of Science and Art to serve as a catalyst for integration across disciplines. Building on existing cross-disciplinary initiatives at Cooper Union, each school’s strengths will be integrated around projects of “making” that create outcomes larger than the sum of the parts of individual disciplines. The shared Lab will create a unique opportunity for students and faculty to engage with each other, formally and informally, advancing a culture of hands-on collaboration in an animated setting, teeming with tools and designed to allow for the organic development of new ideas at the intersections of disciplines. Students will be introduced to the Lab in their first year through a shared workshop in the space.
Columbia University’s Graduate School of Architecture, Planning and Preservation

With support from the IDC Foundation, Columbia GSAPP offered travel opportunities for students participating in the following faculty-led research workshops held in a global location: Cuban Modern Architecture and Contemporary Preservation Challenges; Infrastructural Imaginaries in Scandinavia. “Life changing” is how several of the 12 students studying architecture in Cuba characterized the experience. It was the first visit to Cuba for all but one of the students, and that one said that it was as if he hadn’t been there before.

Eight students studied infrastructural systems at the forefront of global waste and energy practices in order to inform the complex issues of design and climate change in urban contexts of the future. Many of the students are continuing this line of research and thought in their design studies at Columbia.

New York Institute of Technology

Thirty students were awarded stipends to enable them to visit their thesis project sites in Venice, Rio de Janeiro, Mexico City/Oaxaca, and Scandinavia (Denmark, Finland, Norway, and Sweden).

Thirteen students received financial support for Summer Abroad travel to Spain.

Seven students were awarded stipends to attend the International Conference on Climate-Resilient Urban Design in Naples.

Four students received support to participate in a workshop to build a playscape at a high school in Los Angeles.
NYU Tandon School of Engineering

IDC Foundation funding supported the participation of three teams of students in national and regional competitions. The Tandon School’s Concrete Canoe team participated in the National Concrete Canoe Competition in San Diego in June, after winning the Concrete Canoe Metropolitan Student Conference. In San Diego, the team placed 5th in the women’s sprint race.

The Steel Bridge team traveled in June to the University of Illinois Urbana-Champaign to compete in the National Steel Bridge Competition, after winning the regional ASCE-AISC Student Competition. At the nationals, the team placed 9th in efficiency, 9th in lightness, and 9th in stiffness.

A Tandon team also participated in the 29th Annual Associated Schools of Construction Region 1 Student Competition in Albany, New York.

Pratt Institute

Five students received funding to study abroad in the Graduate Architecture and Urban Design program in Cuba. The course centers on New Architectural Contexts and tests models of architectural alteration, densification, and conservation through speculating on key sites in Havana.

In addition, four graduate students were provided stipends to enable them to attend the American Planning Association Conference in New Orleans. Two undergraduate students were granted funding towards their enrollment in the Spring 2019 Architecture study abroad program in Rome. One graduate student received funding to partake in a Spring 2019 class excursion to Spain, as part of their historic preservation coursework.

The Cooper Union

With support from the IDC Foundation, The Irwin S. Chanin School of Architecture challenged its third-year students to research, contemplate, and respond to the housing crisis that impacted Puerto Rico after the destruction of recent hurricanes, Irma and Maria. Eighteen students collaborated with the University of Puerto Rico to observe and study the landscape, housing, and culture of the island. They were tasked to design housing that included strategies to mitigate the impact of storms past and future, and their works were then exhibited at the Arthur A. Houghton Jr. Gallery.

With IDC Foundation support, four students from the Albert Nerken School of Engineering participated during the 2018 summer semester in an eight-week Heated Garden Project at the Agricultural University of Iceland. The students conducted research on geothermal heated ground agriculture, while also exploring Icelandic landmarks and culture.
"Your gift changed my future and put me on the academic and professional path towards my career goals and dreams."

"Your support serves as a source of encouragement, and I believe we will one day pay it forward."

Columbia University’s Graduate School of Architecture, Planning and Preservation

Three graduate students received scholarships supported by the IDC Foundation. All three students are pursuing master’s degrees in architecture; one is also pursuing a master’s in urban planning, and another expects to start a master’s in real estate development. While at Columbia GSAPP, all three have recently completed the Columbia GSAPP Housing Studio, a central feature of the architecture program’s core academic sequence. These students have explored housing as a social, formal, and political site of inquiry and have developed innovative designs for urban housing in the Bronx.

NYU Tandon School of Engineering

A scholarship has been awarded to a first-year PhD student, and other students are being evaluated to receive scholarship support. The PhD student is working on a project titled Mobile Projective Augment Reality (AR) for Construction Safety and Collaborative Construction Robotics and is preparing a first demonstration application of the method to enable construction workers to see utility pipes inside walls using their naked eyes (without any special goggles or helmets).

New York Institute of Technology

Seven graduate students received scholarships to pursue master’s degrees in architecture or in architecture, urban & regional design, or to work in specialized areas of research with a designated faculty member. Five graduate or undergraduate students received scholarships for financial need. Three graduate students pursuing master’s degrees in architecture received scholarships for exceptional portfolio submissions. Nine undergraduate students received merit scholarships for academic excellence.

Pratt Institute

Twenty-four students who demonstrated both financial need and academic merit were carefully selected to receive scholarships. They include seven graduate students in the planning department, seven undergraduate students in construction management, and 10 undergraduate architecture students.

The Cooper Union

For many students, scholarship support is necessary to achieve their educational pursuits and realize their fullest potential. As one student noted, “I come from a single-parent home and would have been unable to continue my education here.” Nineteen students received scholarships with support from the IDC Foundation: 10 in civil engineering and nine in architecture.
CONVENING OF GRANTEE INSTITUTIONS

In 2018, the IDC Foundation began the process of convening leaders of its grantee institutions to share insights and stimulate further opportunities for collaboration and innovation. The Foundation brought those leaders together for a dinner in October 2018, where they had an opportunity to meet, talk informally, and then share insights into the potential for innovation at the intersection of architecture, engineering, and building construction. Below are photographs from that event.

L: (l-r) Jelena Kovacevic, Dean, NYU Tandon School of Engineering; Laura Sparks, President, The Cooper Union; Raymond R. Savino, President, Board of Directors, IDC Foundation
R: (l-r) Carol Loewenson, Board Member, IDC Foundation; Frances Bronet, President, Pratt Institute; Thomas Hanrahan, Dean, School of Architecture, Pratt Institute

L: (l-r) Magued Iskander, Chair, Civil & Urban Engineering Department, NYU Tandon School of Engineering; Michael Horodniceanu, IDC Chair and Industry Professor, NYU Tandon School of Engineering; Vincent Battista, Former President, Institute of Design and Construction; Elizabeth Battista, Board Member, IDC Foundation
R: (l-r) Junius Gonzales, Provost, New York Institute of Technology; Frank Fortino, Board Member, IDC Foundation; Christian Pongratz, Interim Dean, School of Interdisciplinary Studies & Education, New York Institute of Technology

L: (l-r) Nader Tehrani, Dean, The Irwin S. Chanin School of Architecture, The Cooper Union; Malo Hutson, Director of the Urban Planning PhD Program, Columbia University’s Graduate School of Architecture, Planning and Preservation; Mike Essl, Dean, School of Art, The Cooper Union
R: (l-r) Anita Raja, Associate Dean of Research and Graduate Programs, The Albert Nerken School of Engineering, The Cooper Union; Elizabeth O’Donnell, Associate Dean, The Irwin S. Chanin School of Architecture, The Cooper Union; Thomas Hanrahan, Dean, School of Architecture, Pratt Institute; Cassim Shepard, Assistant Director for Research and Grant Projects, Columbia University’s Graduate School of Architecture, Planning and Preservation

L: (l-r) Frank X. DarConte, Former Board Member, IDC Foundation; Maria Perbellini, Dean, School of Architecture and Design, New York Institute of Technology