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On the Cover: Outstanding Achievement winner Bahá'í House of Worship of South America, in Santiago, Chile; Photograph by Aryeh Kornfeld

# <mark>5</mark>112



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## WHAT'S HAPPENED TO THE LIGHTING AND SUSTAINABILITY CONVERSATION?



July is supposed to be restful and relaxing, as we as enter the heart of summer. Instead, this year, it has been unsettling. First, we had multiple 95-plus-degree days here in the nation's capital. High temperature days like that, the type that make us slaves to air conditioning, are becoming all too regular-the norm instead of the exception—as the planet warms. Then, on July 12, there was news that an iceberg the size of Delaware had broken off from what is known as the Larsen C Ice Shelf on the Antarctic Peninsula. This was coincidentally timed with my reading of "The Uninhabitable Earth" in New York magazine's July 10–23 issue, a brutally harsh reminder that the environment's undoing is already well underway.

So how does one stay optimistic about our planet's future when environmental legislation is under threat and the United States has relinquished its role as a leader on the topic of climate change? However naive it might sound, one small thing we can do is continue the discussion and to promote awareness about the issue. It's a small thing, and seemingly obvious, but it's necessary.

And with that in mind: What's happened to the lighting and sustainability conversation? Just a few years ago, this was a major thread in the discourse that designers were having on a regular basis. Now, with the lighting community having fully embraced LEDs—as spurred on by the incandescent phase-out outlined in the Energy Independence and Security Act of 2007—it seems as though the energy savings gained from the switch in technology has fooled people into thinking there's no more work to be done. Not the case! There is still plenty to do and we need to start doing it fast.

The American Institute of Architects has just released its 2016 summary of its 2030 Commitment, the national initiative that the organization launched in 2009 to provide a guide to help firms achieve carbon neutrality by 2030. While the design and building communities have made significant strides, the new report's takeaway is that the target goals are not being achieved fast enough. In the lighting community, the International Association of Lighting Designer's Energy & Sustainability Committee here in the U.S. and its more recently formed European Union Regulatory Affairs Working Group have done a tremendous amount of work to do date, as have the various energy committees of the Illuminating Engineering Society. The problem is that this is the work of a few and their progress is disseminated only sporadically to the lighting community at large.

We, as a community, must find a way to reignite the conversation and map out a plan that the entire industry can embrace. A sustainable future starts with acknowledging that this is still a major issue that needs to be addressed. The lighting community is about to enter its annual cycle of conferences, as well as launching the calls for seminar proposals for next year's conferences and trade shows. Let us renew the sustainability conversation in lighting terms we can all take ownership of and do our part as responsible stewards of our built and natural environments.

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#### BRUCE MUNRO AT THE NICHOLAS CONSERVATORY & GARDENS

In his latest exhibition, "Light" at the Nicholas Conservatory & Gardens in Rockford, Ill., British artist Bruce Munro is once again enchanting visitors with whimsical, fiber optic-illuminated forms made from recycled water bottles, glass spheres, and more. On view through Nov. 5, this eight-piece installation features two new site-specific pieces, *Sun* (shown) and *Don's Flamingos*. "The aim of these garden exhibitions is to get people who aren't necessarily familiar with a garden to visit and experience such a beautiful place to be," Munro said in a press statement. Although Munro originally designed *Sun* to be suspended from a single point in the conservatory building, its overall weight and size required that the orb rest on the floor, "as if rising on the horizon." —Katharine Keane *Read more at bitly/AL\_Nicholas*.

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# **RIGHT PERSON, RIGHT PLACE, RIGHT TIME**

Leaders from lighting design firms Electrolight, BOLD, and KGM Architectural Lighting discuss key factors in expanding their practices to new locations and markets.

#### text by Katharine Keane

For some lighting firms, expanding a business to a new city is the result of a change in personal circumstances: a key designer needs to relocate for family reasons or a prospective employee is unable to move to join the firm at their office. For others, the draw of potential work in a new location, or even on a new continent, provides an opportunity to cultivate additional contacts and grow a firm's portfolio.

Overall, building a lighting design practice requires many things: capital, vision, flexibility, and an entrepreneurial spirit. Below, leaders from three lighting design firms—Electrolight (which has been branded as 18 Degrees in London), Brian Orter Lighting Design (BOLD), and KGM Architectural Lighting—discuss the motivations, challenges, and benefits of expanding their practices to new cities and countries.

#### ELECTROLIGHT/18 DEGREES

Paul Beale founded Electrolight in 2004 in Melbourne, Australia, after noticing there were few lighting design professionals in the city, yet he was "always ambitious in wanting to expand the practice within Australia." Over the next eight years, Beale built a portfolio and reputation for quality work in Melbourne. After a short-lived effort to extend his offices to Sydney, however, Beale realized he was spending an inordinate amount time traveling between the two cities without much to show for it. "I was always an outsider to Sydney," Beale says. "It became clear to me that you need to be in the location where you have the office."

So Beale changed his approach. He turned to Donn Salisbury, an established and wellrespected lighting designer from Sydney with years of knowledge and a familiarity with the local market. "We had a status as the market leader in Melbourne [and] a beautiful portfolio of built work [that] I was able to bring into the partnership," Beale says. "Donn was able to bring his little black book of contacts, his integrity, and his local experience. The business has really



flourished since." Salisbury officially joined as the director of Electrolight's Sydney practice in 2012, and the studio has gone on to design dozens of hospitality, retail, and commercial spaces in Sydney.

Eventually, the Melbourne practice grew to include head of design Jess Perry and director Elisha Howard, who took over the day-to-day operations of the studio from Beale. "I kind of woke up one morning," Beale says, "and thought, well, if I've got someone really good running the Sydney office and some really good people running the Melbourne office, then what difference am I making?" Meanwhile, after 15 years in Australia, Beale and his family felt the pull of their native England, where aging parents and a familiar education system were reason enough to return. Also, professionally, the United Kingdom would provide a new business opportunity. "I just thought it would be a far greater challenge to go to London where no one knows me, to try and build a business from scratch there," Beale says. "The idea was that we would [also] be able to do genuinely international-scale projects."

So in 2017, Electrolight launched a sister practice, 18 Degrees, in London with local designer Christopher Knowlton as director. The new firm is dedicated to the "intersection of technology and aesthetics." While the practices—which includes a San Francisco office of Electrolight, lead by Claudio Ramos, which opened in 2015—all maintain individual portfolios, they often collaborate on large projects and Beale has worked hard to ensure there is a "common philosophical tradition across the company." While communicating across three continents does have its challenges, maintaining parity in IT systems and processes ensures seamless transitions for times when projects are passed between offices.

"We all want the same things," Beale says. "We may go about achieving a goal differently in Australia, compared to San Francisco, compared to London. But fundamentally, we all want to make a difference in lighting."

#### BOLD

For BOLD founder Brian Orter, multiple factors facilitated the expansion of his New York-based firm to the West Coast, but he came to the decision, in part, after observing a gap in the market. Orter found that there were too few lighting design firms for West Coast projects in need of good lighting design, and decided BOLD could make a true impact. "There are a couple of really good [firms], but

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not too many," Orter says. Despite receiving requests for proposals for projects on the West Coast, Orter realized that many of them end up without lighting designers—with architects or manufacturer representatives doing much of the work instead. "Our biggest competition was [often] no lighting designer at all," Orter says. "I was just tired of losing projects because we didn't have people there."

But having a capable and effective staff on the ground required an understanding of the West Coast talent pool from which to populate a studio in Los Angeles. "I wanted to get people who grew up west of the Mississippi—in California or Seattle—who had that different association with nature and Asian influences and the automotive culture," Orter says. "I wouldn't have done it if I didn't know of a few people that I could work with prior."

What ultimately made Orter's Los Angeles expansion possible was his confidence in the day-to-day manager of the office back in New York—principal Charlie Dumais. "When I leave New York, I leave knowing that they're smarter than me. I know they are perfectly capable," Orter says. "I credit Charlie for a lot of that."

With Dumais holding down the fort back east, Orter opened the Los Angeles branch of BOLD in 2015. To ensure parity of company systems, standards, and culture, one of his New York employees opted to relocate to help bring the ethos of the original office to the new West Coast location. Orter also trains all new employees at the New York office, he says, so that everyone is "comfortable enough to pick up the phone and say, 'Hey, I need some help!' or 'Can we delegate this?' or 'What's your opinion of this?'"

As for the workload, the firm is organized into three studios—two in the New York office and one in Los Angeles—which are responsible for specific projects and clients. While these clearly defined branches ensure that no work falls between the cracks, communication and collaboration between the teams are critical for large-scale projects. "Sometimes we have projects where the design team is in New York, but the projects may be in Los Angeles or Las Vegas and there might be a handoff to the L.A. studio," Dumais says. "We'll keep them in the loop throughout, so that when they take over, they're really informed."

#### KGM ARCHITECTURAL LIGHTING

For Los Angeles-based KGM Architectural Lighting, the decision to expand to the already saturated New York market in 2012 largely reflected the firm's desire to retain their



youngest partner, Martin van Koolbergen. A New Jersey native, van Koolbergen had spent 12 years on the West Coast. But when firm leaders realized van Koolbergen's desire to move closer to his family, they took a leap of faith. "Martin was already our youngest partner and he had great potential," says KGM partner and CEO Michael Gehring. "[We knew] we'd rather be with him than without him, so it was worth the risk to try opening a New York office."

To do so successfully would require deliberate logistics and conservative fiscal planning to both protect the Los Angeles practice and adequately support van Koolbergen in New York. "We wound up starting the office by renting two desks from an architect I knew," van Koolbergen says of minimizing up-front costs. In addition to attending networking events and functions to learn more about the New York market, van Koolbergen also spent considerable time maintaining his remaining Los Angeles projects and clients. To avoid duplicative administrative infrastructure costs, the New York office still relies on the Los Angeles–based IT



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#### "When I leave New York, I leave knowing that they're smarter than me. I know they are perfectly capable."

-Brian Orter

and marketing departments for things like computer support and proposals. Though this can be challenging, especially when a computer crashes at 3 a.m. PST, it saves money and provides parallel systems and protocols for all employees to follow. "I've learned a great deal about IT, I'll tell you that," van Koolbergen jokes.

Since officially launching the studio five years ago, the New York practice has grown conservatively, by van Koolbergen's estimation, adding one person per year as their portfolio has expanded. And while the internet and technology have undoubtedly improved communication in our ever-shrinking world—for lighting designers, location and proximity can still play a key role in winning work. "He's got a number of clients that are based in New York that we would have never had if we didn't have a New York office," Gehring says.

With the New York office up and running, KGM is currently in a trial phase on a small Atlanta office run by senior associate Patrick McCollough, who also needed to relocate to be closer to family. Ultimately, Gehring takes the decision to expand and boils it down to three factors: "We need the right person, the right place, and the right time," he says. "If we don't have those three, it's not going to work."

#### LOOKING AHEAD

Deciding if and when to expand to new markets is an issue that can only be addressed by individual firms. But in an industry seeking to grow its workforce, lighting design practices need to think creatively about how they invest in their employees and business plans. •



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1. an inspiring or animating action or influence 2. a divine influence directly and immediately exerted upon the mind or soul. 3. a Control System™ iOS® App which enables control of B-K Lighting's Bluetooth® Wireless Technology featuring BKSSL® Power of C™ with Color Tuning Technology Denali Series™ floodlights. [see B-K Lighting]





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fourteenth annual

# ARCHITECTURE

#### text by Elizabeth Donoff

The importance of lighting design and the expertise that lighting designers bring to projects has never been more evident than in this year's group of AL Light & Architecture Design Awards winners: 14 projects selected from an international pool of 159 entries, the largest number of entries the awards program has received in its 14-year history.

This year, the program bestows three Outstanding Achievements, nine Commendable Achievements, one Best Use of Daylighting, and one Special Citation. This iteration's jury (see page 46), as with all of the juries in past years, continues to be highly selective in choosing the best of the best in lighting design.

There is no shortage of excellent work being done by lighting design firms. This year's projects display a particular agility and deftness in their design responses, each showcasing technical skill coupled with artistic inventiveness as well as, perhaps most importantly, an awareness about light and its ability to be the defining element that completes a project. •

# DESIGN

# 2017 AWARDS AWARDS

## Bahá'í House of Worship of South America

Entrant: Limarí Lighting Design

The Bahá'í House of Worship of South America in Santiago, Chile, is the eighth temple in the world to be constructed for this small religious community whose mission is to unify the world's religions. Designed by Hariri Pontarini Architects as a singular object representing a "flower of light," the structure is comprised of nine castglass petals. The irregular-shaped voids in between become vertical skylights, while the interior face of the petals are lined with translucent white marble. During the day, the temple rests like a natural landform; geometric shadows inside change with the moving sun. At night, light emanates from the apertures between the structural petals and through the translucent material, creating an ethereal effect.

Local firm Limarí Lighting Design was charged with lighting the uniquely shaped building to showcase the transparency of the exterior while creating a warm, intimate interior for meditation and prayer. To celebrate the material palette of wood, marble, bronze, and glass, the team emphasized the placement and design of the illuminated features. To achieve the building's glowing exterior, Limarí fitted custom bronze housings with 35W 2700K dimmable LEDs into the structural members that connect the windows with the upper portion of the marble panels.

Indirect 3W 2700K dimmable luminaires with an elliptical lens are placed behind seating areas to highlight the irregular form and materiality of the petals. This creates a voluminous effect-a spatial quality typical of houses of worship. Despite the 98-foot-high (30-meterhigh) ceiling, the gathering areas have a more intimate feel due to the candle-like 75W halogen floor lamps located among the benches, one of two custom-designed decorative luminaries by the firm. The others are cylindrical, bronze 5.4W 2700K LED pendants that light the stairway and a reading area. These two decorative fixtures give the space a human scale and contribute to the overall warmth of the space. -Katharine Keane





#### JURY COMMENTS

Stunning.  $\bullet$  The evenness of the illumination of the petals is impressive.  $\bullet$  The lighting connects the building to the ground.

#### DETAILS

Project: Bahá'í House of Worship of South America, Santiago, Chile • Client: Asamblea Espiritual Nacional de los Bahá'ís de Chile • Architect: Hariri Pontarini Architects, Toronto • Lighting Designer: Limarí Lighting Design, Santiago, Chile • Lighting Team Members: Pascal Chautard, Cristina Fahrenkrog, Francisca Nicoletti, Raúl Osses, Felipe Osses, Magdalena Roa, Carolina Roese • Photographer: Justin Ford (this image) and Aryeh Kornfeld • Project Size: 26,000 square feet • Project Cost: \$30 million • Lighting Cost: \$135,000 • Watts per Square Foot: 0.606 • Code Compliance: Not Applicable • Manufacturers: DGA, Janmar, Lutron

# DESIGN AWARDS AWARDS

## Chicago Riverwalk

Entrant: Schuler Shook

The Chicago River plays an integral role in the history and continued development of its city. Originally, a marshy stream, the river was tamed and transformed into an "engineered channel" during Chicago's industrial revolution at the turn of the century. Over the past decade, however, the city has looked to redefine the waterway "for the ecological, recreational, and economic benefit of the city."

The Chicago Riverwalk project has been a multi-year, multi-phase, multi-team development. The site is at water level, and spans from "lower Wacker Drive, extending from Michigan Avenue west to Lake Street." Work began on Phase One in 2009, and Phase Three was completed last year. The project is made up of five different themed spaces, or "rooms": the Marina Plaza, the Cove, the River Theatre, the Water Plaza, and the Jetty. One of the main challenges of the project was that the design team had to work within a tight "permit-mandated 25-foot build out area" to allow for pedestrian zones

and to coordinate with a series of underbridge areas. (There are approximately 175 drawbridges along the 156-mile-long waterway.)

Also of critical import was the need to respond to the river's annual flood cycle, in which the water can swell to nearly 7 feet above normal. As a result, all luminaires needed to be "robust, rated for submersible applications, low maintenance, low glare, and well integrated into the architecture." The city also wanted to limit the number of fixture types to keep budget and energy use in check.

Throughout the Riverwalk, walking paths are lit with 3000K linear LED fixtures so people feel comfortable and safe. Illuminated handrails incorporate 3000K IP68-rated LED tape light with a frosted lens to diffuse the source, and pedestrian bridges linking the different areas use linear LED fixtures that provide an average of 1.8 footcandles. Overall, the project successfully extends the city's public space and allows people to enjoy the unique setting. —Elizabeth Donoff





#### JURY COMMENTS

Lovely. • Nicely done. • The lighting allows each space to have a distinctive look and feel, yet weaves the entire project together.

#### DETAILS

Project: Chicago Riverwalk (Phase 2 and 3) • Client: Chicago Department of Transportation • Architect: Ross Barney Architects, Chicago • Landscape Architect: Sasaki, Watertown, Mass. • Lighting Designer: Schuler Shook, Chicago • Lighting Team Members: Jim Baney, Giulio Pedota • Photographers: Kate Joyce, Christian Phillips • Project Size: 90,000 square feet • Project Cost: \$100 million • Lighting Cost: Withheld • Watts per Square Foot: 0.22 • Energy Code Compliance: Chicago Energy Code • Manufacturers: Acuity Brands/ Hydrel and Winona Lighting, Bega, ETC, LED Linear, KW Industries, Kenall Manufacturing, Philips, MCI Group, Rosco

# DESIGN AWARDS AWARDS

## Hyundai Capital Convention Hall

Entrant: KGM Architectural Lighting

The Hyundai Capital Convention Hall in Seoul, South Korea, is a multipurpose space used for presentations, training, the showing of videos, and other special events. Completed in September 2016 by the London office of global architecture firm Gensler, the project was conceived as a flexible envelope "to provide a modern, dynamic-looking space," with multiple layers of illumination.

KGM Architectural Lighting developed a lighting scheme that enhances the "clean aesthetic" of the space and enables flexibility of use—all without visible light sources. To achieve the desired aesthetic and ambiance, the team selected DALI-dimmable 4000K LED fixtures with fade-to-black drivers to provide "a highly adaptable and adjustable dimming system accommodating the various lighting needs" of the conference center.

A 6W-per-foot LED knifeedge cove fixture illuminates the perimeter of a recessed

projection screen at the front of the auditorium while 23W LED downlights paired with 16W-perfoot fixtures concealed in the recurring ceiling coves taper in length toward the back of the hall to give a sense of forced perspective and depth. KGM developed mock-ups for cove and luminaire placement to determine the best layout prior to installation. Elsewhere, linear 10W-per-foot LED wall grazers highlight the texture of the felt side walls and a recessed 5W-per-foot LED strip outlines the stage floor. An adjacent black box screening room is illuminated by 15W downlights with accents at the bench risers to enhance the minimalist but powerful design.

Although there were no specific governing lighting codes given the international location, the project does meet California Title 24 requirements. The end result is coordinated layers of illumination that create an adaptable, yet striking, environment for this convention hall. —K.K.



#### JURY COMMENTS

The light makes the space. • Beautifully detailed. • Artful.

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#### DETAILS

TINK

 Project: Hyundai Capital Convention Hall, Seoul, South Korea • Client: Hyundai Capital Services and Hyundai Card Co. • Architect: Gensler, London office • Lighting Designer: KGM Architectural Lighting, Los Angeles • Lighting Team Members: Martin van Koolbergen, Moritz Hammer, Charlotte Cantillon
• Photographer: Nacása & Partners • Project Size: 6,250 square feet • Project and Lighting Costs: Withheld • Watts per Square Foot: 1.1 • Code Compliance: Not Applicable (although meets Title 24 requirements) • Manufacturers: iGuzzini, LED Linear, Philips Color Kinetics, Zumtobel



## Wintrust Financial Corporation

Entrant: Schuler Shook

Completed by Chicago architecture firm Graham, Anderson, Probst & White in 1924, the Neoclassical banking hall on South LaSalle Street has housed a number of financial institutions. In 2014, the Wintrust Financial Corp. assumed occupancy and called for a complete restoration and renovation.

Chicago-based lighting design firm Schuler Shook was charged with "revealing the beauty and grandeur" of the historic structure. The firm set out to balance the illumination levels in the grand banking hall, which suffered from overly lit ceilings, uneven illumination of a mural, and a "dark and unwelcoming" area that housed the lobby and bank tellers. The delicacy of the ceiling also required reducing the number of downlights "without compromising lighting levels or uniformity."

To celebrate the grandeur of the hall and its 54-foot-high ceilings, pairs of narrow-distribution 3000K LED uplights accentuate the architectural details of the Ionic columns while concealed linear asymmetric LED covelights uniformly illuminate both the murals and the ornate coffered ceiling. Lamps in existing torchieres were replaced to improve color consistency. In the adjacent open offices, historic chandeliers were refurbished to provide uplighting, while 4-inch-aperture recessed downlights were clustered between the chandeliers to illuminate workstations below. -K.K.

#### JURY COMMENTS

The lighting enhances the richness of the space yet shows great restraint in creating a hierarchy of illumination. • Magnificent.

#### DETAILS

Project: Wintrust Financial Corporation, Chicago • Client: Wintrust Financial Corp., Rosemont, Ill. • Architect: VOA/ Stantec, Chicago • Lighting Designer: Schuler Shook, Chicago • Lighting Team Members: Jim Baney, Emily Klingensmith, Kim Dai • Photographer: Tom Harris • Project Size: 67,000 square feet • Project Cost: Approx. \$10 million • Lighting Cost: Not Available • Watts per Square Foot: 1.28 • Code Compliance: IECC 2012 • Manufacturers: Aculux, Archistoric Products, EcoSense, Erco, Indy Lighting, The Lighting Quotient/ Elliptipar, Vode Lighting

Commendable Achievement • INTERIOR LIGHTING


The majesty of the project is impressive. • It's a very considered approach. • Judicious use of illumination.

### DETAILS

Project: Strasbourg Cathedral, Strasbourg, France • Client: City of Strasbourg, France • Lighting Designer: Jean-Yves Soëtinck, L'Acte Lumière, Strasbourg, France • Electrical Engineer: Lollier Ingénierie, Mittelschaeffolsheim, France • Conservation Architect: L'Atelier d'Architecture JCBA, Strasbourg, France • Photographers: Xavier Boymond, Olivier Hannauer Cappiello, Mélanie Lhomme • Project Size: 64,583 square feet • Project Cost: approx. \$2.27 million • Lighting Cost: approx. \$1.5 million • Watts per Square Foot/Code Compliance: Not Applicable • Manufacturers: Lumenpulse, Louss, Insta, Radiant, We-ef

# Strasbourg Cathedral

Entrant: L'Acte Lumière

Originally completed in 1439, the Strasbourg Cathedral is considered a masterpiece of Gothic architecture and is an icon of the Alsatian city. Reaching a height of 466 feet, the cathedral's sculptural sandstone design is largely attributed to 13th-century German architect Erwin von Steinbach. The resulting views of the cathedral give the impression of "balanced, quiet, chiseled light" that celebrates the site's history and spirituality.

Despite the structure's UNESCO World Heritage Site status, (which requires approval from various government and local authorities for upkeep and modernization projects) the recent restoration of the cathedral by local firm L'Atelier d'Architecture JCBA with lighting design firm L'Acte Lumière took only four years from planning to completion. Finalized in October, the team was asked to comprehensively illuminate the historic structure without drilling any holes into the exterior stone blocks. To do so, Jean-Yves Soëtinck, founder of Strasbourg, France-based L'Acte Lumière, developed a plan to install 600 LED projectors using clamping sleeves, collars, and fixture corsets, and drilling into masonry joints only when needed. Though the team determined a color temperature of 2700K was best to draw out the brown, yellow, red, and purple tones in the stone, the color temperature of the individual luminaires varies slightly based on their placement throughout the project "to enhance the architecture, intricate layers of masonry, and sculptures." -K.K.

# Barneys New York Downtown Flagship

Entrant: Cooley Monato Studio

A sculptural, spiral staircase surrounded by a glass-walled atrium is the focal point of the Barneys New York Downtown Flagship designed by local firms Steven Harris Architects and Lalire March Architects. Completed in February 2016, the contemporary store spans multiple levels—all illuminated exclusively by LEDs.

Challenged by existing architectural conditions that included large floor expanses, irregular column grids, and low ceiling heights, New York–based lighting design firm Cooley Monato Studio approached each display area as a distinct entity while aiming to create "cohesive, spacious, and dynamic" spaces. The designers opted to use recessed and regressed fixtures, as well as those with beveled trims, so that apertures "practically disappear from view."

With the goal of celebratingnot upstaging—the architectural feature that is the spiral stair, the team embedded flexible LED tape into handrail coves to act as a visual wayfinding cue and decorative "ribbon of light." Accent lighting within the stair treads "softly enhance contours" of the structure. Illuminated ceiling coves nicknamed "amoebas" provide ambient lighting while lit accessory shelves highlight products on display. Thin, stem-mounted adjustable accent luminaires showcase fine jewelry, while trackheads illuminate surrounding perimeter wall niches. -K.K



### JURY COMMENTS

Everything you would expect to find in a high-end retail setting. • A well-balanced use of illumination.

#### DETAILS

Project: Barneys New York Downtown Flagship, New York • Client: Barneys New York • Architects: Steven Harris Architects and Lalire March Architects, New York • Interiors: Reese Roberts + Partners, New York • Lighting Designer: Cooley Monato Studio, New York • Lighting Team Members: Emily Monato, YuSun Hwang, Carol Castillo-Kuberski • Photographer: Scott Frances • Project Size: 52,425 square feet • Project and Lighting Costs: Withheld • Watts per Square Foot: 1.91 • Code Compliance: 2014 New York Energy Conservation Construction Code (ASHRAE 90.1-2010) • Manufacturers: Acuity Brands/Aculux, Amerlux, Eklipse Architectural Lighting, Feelux, GE Lighting, LED Linear, Loupi Lighting Systems, MP Lighting, Optolum



Lighting is integrated with the architecture. • Clear use of light to define public and private spaces.

#### DETAILS

Project: Edmunds.com, Santa Monica, Calif. • Client: Edmunds.com • Architect: M + M Creative Studio, Las Vegas • Lighting Designer: Architecture & Light, San Francisco • Lighting Team Members: Darrell Hawthorne, Ling Li • Photographer: Benny Chan/Fotoworks • Project Size: 133,000 square feet • Project and Lighting Costs: Withheld • Watts per Square Foot: 0.72 • Code Compliance: Title 24 • Manufacturers: ACDC, Acuity Brands/Lithonia Lighting and Peerless, Axis Lighting, Bega, Beta-Calco, B-K Lighting, Cooledge, Delray, EcoSense, Edge Lighting, Flos, Fluxwerx, iGuzzini, Intense, LF Illumination, Lindsley Lighting, LiteLab, LED Linear, Lighting Soraa, Tech Lighting, Tom Dixon

## Edmunds.com

Entrant: Architecture & Light

When Edmunds.com, a car-data company, first approached the design team, the company knew exactly what it was looking for: a sleek, open, contemporary workspace for its 600-person mobile workforce based at the company's two-level, 133,000-square-foot Santa Monica, Calif., headquarters. The brief challenged the team to design a scheme for an inclusive, easyto-maintain, energy-efficient workspace that enjoys a gentle bright interior.

Lighting firm Architecture & Light met the challenge by implementing a scheme with multiple layers of light. To start, direct/indirect LED pendants provide 40 to 50 footcandles for the open office space. LED wall slots and downlights create an ambient lighting layer. A curved cove, fitted with LED lamps, serves as the illuminating "glue" that connects different spaces to one another and acts as a wayfinding device.

All of the luminaries, with the exception of a few specialty fixtures, use LED sources with a color temperature range of 3000K to 5700K, and with a CRI of 90-plus. Achieving a contrast ratio of less than 2:1 in the open workspaces and conference rooms not only enabled the project to achieve a glare-free design but also created a power density of just 0.72 watts per square foot, successfully surpassing the project's energy goals. —**Ayda Ayoubi** 



# Diane L. Max Health Center, Planned Parenthood

Entrant: Cline Bettridge Bernstein Lighting Design

Architecture and light play a transformative role for Planned Parenthood's new Diane L. Max Health Center in Queens, N.Y. Housed in a former storage warehouse, the building has been reconfigured to fit into the surrounding urban context.

Cline Bettridge Bernstein Lighting Design (CBBLD) was asked by Stephen Yablon Architecture to create a modern lighting scheme that would have a "bright and welcoming" feel. CBBLD devised a plan that uses natural light as a primary source coupled with electric light—both in terms of finishes and color temperature.

For reception and the waiting areas, 26W 3500K downlights complement the natural light that enters the building from the new windows. Free-form ceiling popups with neutral-white linear LED sources define the seating areas below. The same 3500K downlights are used in the corridors, where the walls and stairs are painted blue to define vertical circulation.

Fixed-color—magenta, orange, and amber—covelighting serves as wayfinding, aiding visitors in their transition from public to private spaces. Skylights in the windowless patient recovery area, along with a decorative wall sconce, provide a residential feel. Overall, the color selection and composition was carefully chosen to have a calming effect creating a comfortable and friendly environment for patients and staff. —E.D.

### JURY COMMENTS

The simplicity is beautiful. • The lighting design is done skillfully and thoughtfully. • There is a creative humbleness to this design that is refreshing.

#### DETAILS

Project: Diane L. Max Health Queens, N.Y. • Client: Planned Parenthood New York City • Architect: Stephen Yablon Architecture, New York • Lighting Designer: Cline Bettridge Bernstein Lighting Design, New York • Lighting Team Members: Francesca Bettridge, Marty Salzberg, Renata Gallo • Photographer: Michael Moran Photography • Project Size: 14,400 square feet • Project Cost: \$9 million • Lighting Cost: Withheld • Watts per Square Foot/Code Compliance: ASHRAE 90.1 • Manufacturers: Acuity Brands/Lithonia Lighting, Artemide, iLight Technologies, Lucifer Lighting, Lutron, Philips Lightolier



Unique solution. • Made use of a specific lamp and its technology. • Clearly thought about the controls.

### DETAILS

Project: R/GA Office, New York • Client: R/GA, New York • Architect: Foster + Partners, New York office • Lighting Designer: Tillotson Design Associates, New York • Lighting Team Members: Suzan Tillotson, Ellen Sears, Dagmara Nowak • Photographer: John Muggenborg • Project Size: 134,000 square feet • Project and Lighting Costs: Withheld • Watts per Square Foot: 0.99 • Code Compliance: IECC 2012 • Manufacturers: Gammalux, Ketra, LED Linear, LiteLab, Selux, USAI

# R/GA Office

Entrant: Tillotson Design Associates

In January 2016, New York advertising agency R/GA relocated its headquarters to a Foster + Partners-designed office space on West 33rd Street. The project brief called for a flexible design for "fostering ideas and growth while promoting a sense of technological advancement and innovation" while embracing the building's exposed waffle-slab ceiling.

After assessing existing light levels and light quality, as well as how staff members would be collaborating and communicating, local lighting design firm Tillotson Design Associates developed a strategy to bundle approximately 10,500 surface-mounted, tunable PAR<sub>3</sub>8 LED lamps into groups of four, which created "a raw and industrial luminaire mindful of both project schedule and budgetary limitations." This inventive lighting strategy is uniform throughout the office and provides a cohesive industrial look to match exposed sprinklers, HVAC, and plumbing systems.

The lighting design promotes an atmosphere of innovation and specialization. A wireless DMX control system is programmed to adjust the lighting throughout the day in order to match the employees' circadian rhythmswith the fixtures starting at 2700K in the morning, cooling to 4000K at midday, and returning to 3000K in the evening. Employees can override the system for special events, and they can locally adjust their individual workspaces with color, indicate the occupancy of a meeting room, or match the lighting above individual workrooms and huddle spaces. -K.K.

# The Tower of Sparkle

Entrant: Pfarré Lighting Design

On Jan. 20, the city of Munich held its biannual "Long Night of Architecture," where the public is invited to visit architectural offices, tour new buildings, and attend talks and other events related to architecture and design.

In preparation for the event, as well as long-term marketing efforts, local firm Pfarré Lighting Design had been approached by Steidle Architekten to design a temporary lighting installation for its Highrise One office project. The 17-story structure—it's a 12-story tower that sits on top of five lower levels—was close to completion when Pfarré's team developed a concept to dramatically transform the tower portion into a sparkling volume that could be seen from all over the city.

Using the building shell as an exterior envelope to house the volume of light, the design employs 48 disco spheres, four per floor at each corner, with each sphere measuring 40 centimeters (15.74 inches) in diameter. The suspended spheres are front lit using a tripodbased theatrical lighting projector with a 19-degree beam spread. The result is a tower filled with effervescent light, as the sphere's mirrors project a pattern of small circles that mimic the feel of luminous bubbles.

Still images only convey a glimpse of this inventive design. The project is best seen and understood by watching a video, which you can view at *bit.ly/17ALDA\_Sparkle.* —A.A.



### JURY COMMENTS

Inventive way to use a space that is under construction and unoccupied. • Gorgeous. • Fun.

### DETAILS

Project: The Tower of Sparkle, Munich • Client: Reiss & Co. Real Estate, Munich • Architect: Steidle Architekten, Munich • Lighting Designer: Pfarré Lighting Design, Munich • Lighting Team Members: Gerd Pfarré, Dominik Buhl, Georg Veit • Photographer: Andreas Focke • Videographer/Filmmaker: Felix Hentschel • Project Size: 75,000 square feet • Project Cost: €42,000 (\$48,563) • Watts per Square Foot: 2.08 • Code Compliance: Not Applicable • Manufacturers: Electronic Theater Controls (ETC)



Beautiful. • The multiple design elements create a sense of movement.
Creates a fantastic setting for public engagement.

#### DETAILS

Project: Impulse, Montreal • Client: Partenariat du Quartier des Spectacles de Montréal • Architect: Lateral Office, Toronto • Structural Design: EGP Group, Montreal • Lighting Designer: CS Design, Montreal • Lighting Team Members: Conor Sam Anne-Marie Paquette • Sound Artist: Mitchell Akiyama • Mechanical Design and Fabrication: Generique Design Montreal • Electronic Design and Fabrication: Robocut Studio, Montreal • Photographer: Étienne de Massy • Project Size: 324 square feet • Project Cost: Approx. \$223,000 • Watts per Square Foot: 7.65 • Code Compliance: Canadian National Electrical Code • Manufacturer: Natech, Mean Well

# Impulse

Entrant: CS Design

Impulse, a temporary installation of 30 illuminated seesaws and nine accompanying light projections, was originally on view from November 2015 through January 2016 as part of the city of Montreal's annual winter celebration called Luminothérapie. The competitionwinning scheme was a collaboration between Toronto-based Lateral Office and Montreal-based firms CS Design and EGP Group.

The interactive project, set up on the Place des Festivals, sought to create a space for "urban play." The seesaws (designed in two lengths: 18 feet and 24 feet) are made of a clear polycarbonate tube, a light diffuser, and an aluminum extrusion profile in which LED strips and speakers are fitted. The seesaws were programmed to react to motion generated by a person, and then respond by emitting sound and light. While at rest, the seesaws are illuminated but less than when they are in motion. When visitors sit on the seesaw, the system is activated and produces a randomized sound sequence and more light. Through this dynamic interchange of light and sound, activated by the everchanging flow of visitors, the design team transformed the Place des Festivals into a lively public space.

Montreal hasn't been the only city to benefit from this public lightwork. The brief called for projects to incorporate a modular design so they could be reassembled for other events in other cities around the world. —A.A.



# German Ivory Museum

Entrant: Licht Kunst Licht

The extensive ivory collection of Count Franz Graf zu Erbach-Erbach has been on view in Erbach, Germany, for decades, and this past fall, a portion was relocated to the city's Erbach Palace. Designed by Sichau & Walter Architekten, the new exhibition is showcased in a set of "galleries" that take the form of a walkway that wraps around exhibit cases set against an anthracite-colored backdrop. The deep-red walkway meanders like a ribbon through clusters of specially designed frosted-glass cases that contain the ivory sculptures.

Licht Kunst Licht was asked to create a lighting scheme to showcase the setting and highlight the collection. The designers concealed LED edge lighting in the frosted bottom third of the glass cases, which makes the carvings inside appear shrouded in mist. Each display is then lit from above using miniature 3000K 14- and 30-degree LED spotlights for glare-free accent lighting. The walkway is illuminated using concealed LED strips to emphasize the exhibit's ambiguous sense of ground and ceiling plane.

The exhibition includes a variety of display treatments, including a room of closets transformed into edge-lit showcases reminiscent of more traditional museums. The exhibition ends with three elephant and mammoth tusks, illuminated using small LED projectors mounted to the ceiling, that remind visitors of the controversial nature of the collection. —A.A.

### JURY COMMENTS

The cases are an unusual treatment and add to the unique presentation of the collection. • Exquisite. • Stunning.

### DETAILS

Project: German Ivory Museum, Erbach, Germany • Client: Administration of National Palaces and Gardens of Hesse, Germany • Architect: Sichau & Walter Architekten, Fulda, Germany • Lighting Designer: Licht Kunst Licht, Berlin and Bonn, Germany • Lighting Team Members: Andreas Schulz, Till Armbrüster, Felix Beier, Stephanie Grosse-Brockhoff • Photographer: Sichau & Walter Architekten • Project Size: 4,850 square feet • Project Cost: \$1.39 million • Lighting Cost: \$62,000 • Watts per Square Foot: 0.51 • Code Compliance: Not Applicable • Manufacturers: LED Linear, XAL



Strategic use of daylighting to enhance the space. • Expertly done and well thought out.

#### DETAILS

Project: Baylor University Paul L. Foster Campus for Business and Innovation, Waco, Texas • Client: Baylor University, Waco • Architect: Overland Partners, San Antonio • Lighting Designer: Lam Partners, Cambridge, Mass. • Lighting Team Members: Paul Zaferiou, Justin Brown, Kera Lagios • Photographer: Paul Bardagjy • Project Size: 285,000 square feet • Project Cost: \$99 million • Lighting Cost: \$2.3 million • Watts per Square Foot: 0.59 • Code Compliance: Not Applicable • Manufacturers: Acuity Brands/Juno, Amerlux, Architectural Lighting Works (ALW), Axis Lighting, Cole Lighting, Erco, Fluxwerx, Lumenpulse, Neidhardt/ALW, Philips Color Kinetics, Philips Lightolier, Prudential Lighting

# Baylor University Paul L. Foster Campus for Business and Innovation

Entrant: Lam Partners

Daylighting a four-story atrium seems a reasonable lighting approach for any project, except when the project is located in Texas where heat gain, glare, and thermal comfort are all serious problems. But that is exactly what the Paul L. Foster Campus for Business and Innovation at Baylor University does.

A collaboration between the university, architects Overland Partners, and lighting design firm Lam Partners, the goal was to provide as much natural light in the building throughout the year as possible without causing discomfort. The architects originally envisioned a north-facing, sawtooth, monitor-style roof. Although that would have been effective, Lam encouraged the team to explore a more dynamic solution.

Early sun-path studies showed a site flooded with light. The roof that Overland designed moved the entire team in the direction of a grid system. This allowed for deep light wells that Lam shaped using parametric software to respond to the sun's varying angles, which cut out most of the unwanted daylight. To control the rest, a light scoop was added above each skylight. A recessed linear uplight provides "a contrasting accent to each volume at night." These skylight modules are positioned throughout the atrium as needed creating a technically sophisticated daylighting response that also functions as a sculptural element. -E.D.



# Stephen A. Levin Building, University of Pennsylvania

Entrant: SmithGroupJJR

A main component of the design for the Stephen A. Levin Building at the University of Pennsylvania is the scrim on its southern-facing façade. Home to the departments of biology and psychology, the building is intended to foster interdisciplinary collaboration between the students and faculty members of those disciplines. The scrim's "biomorphic" patterns also advertise to the campus at large the study of neural and behavioral sciences within.

Daylighting analysis determined that shading density and the scrim pattern aids in modulating the amount of daylight that enters the building, helping to create "visually comfortable environments." It also allowed the architects and lighting designers at SmithGroupJJR to balance the use of "electric daylight harvesting with mechanical solar load reduction." Electric lighting isn't needed during the day and solar gain is reduced by 50 percent.

At night, the building transforms and the "brightness hierarchy established during the day" is reversed. Interior lighting illuminates the façade, a glow from within from LED wallwashers and 4-inch-aperture downlights in the corridor behind the scrim, which give the building a sense of depth and allows it to be read from a distance. —E.D.

### JURY COMMENTS

The use of the scrim to diffuse the natural light entering the building is nicely done. • The scrim pattern adds visual interest and has a distinct daytime and nighttime appearance.

#### DETAILS

Project: Stephen A. Levin Building, the University of Pennsylvania, Philadelphia • Client: The University of Pennsylvania, Philadelphia • Architect and Lighting Designer: SmithGroupJIR, Detroit • Lighting Team Members: Matt Alleman, Leland Curtis • Photographer: Alan Karchmer • Project Size: 77,000 square feet • Project Cost: \$68.6 million • Lighting Cost: \$1.025 million • Watts per Square Foot: 0.7 • Code Compliance: ASHRAE 90.1-2007 • Manufacturers: a-Light, Bartco Lighting, EcoSense, Finelite, Hubbell Lighting/Litecontrol, Hubbell Lighting/Prescolite, Kreon, LED Linear, Philips Color Kinetics, We-ef, XAL, Zumtobel





### Kelly Roberts

LEED AP BD+C Senior Associate, WALD Studio, *New York* 

Roberts draws on her background in theatrical design to create inviting and engaging spaces. She is responsible for managing WALD Studio's workflow, production documents, controls, and energy code compliance—across the United States and overseas. She has experience with a wide range of projects, including high-end residential, upscale retail, and boutique hospitality. She is also a leader in the New York and national groups of Women in Lighting + Design (WILD), and recently participated in judging on the IES Illumination Awards.

### Gregory Hoss

AIA, NCARB Principal and President, David M. Schwarz Architects, *Woshington, D.C.* 

Hoss has been with David M. Schwarz Architects since 1997 and has been a registered architect since 1994. He is a graduate of the Catholic University of America-where he earned a dual degree in architecture and civil engineeringand now serves on the School of Architecture and Planning's Design Council and its Development Board. He is a member of both the American Institute of Architects and the District of Columbia Building Industry Association. His portfolio includes performing arts centers, stadiums, and academic campuses.

### Rhomney Forbes-Grav

IALD, IES, LC Principal, Lightbrigade Architectural Lighting Design *Toronto* 

Forbes-Gray has been a practicing architectural lighting designer for 28 years, a line of work that was a natural extension of her theatrical lighting beginnings and her degree in theatrical lighting design from York University. She is a recipient of the IES Toronto section's GG Cousins Award and has been on the Toronto IES board of directors for the past 22 years. Lightbrigade's work has received more than 20 international illumination design awards, including the IES Illumination Award of Excellence and the GE Edison Award of Merit.

### Ronald Kurtz

IALD, IES, LEED AP Associate and Senior Lighting Designer, Randy Burkett Lighting Design, *St. Louis* 

Kurtz has been with Randy Burkett Lighting Design since 1990. His project portfolio, for which he has won a number of lighting awards, includes the design of large public spaces, hospitality and conference facilities, offices, and exterior landscapes. A member of the IALD, he is currently serving on the organization's board of directors as treasurer. Also involved in the IES on both a local and national level, he participates on the Energy Management Committee and was a member of ASHRAE 90.1 Energy Standards Committee from 2001 to 2011.

Eli Meir Kaplan

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### ONE-ON-ONE



# **DAVID GHATAN**

Once you have a certain amount of experience, you have enough context with lighting to know how it will or will not react to something; that's the fun of it."

At the youthful age of 38, David Ghatan, president of CM Kling + Associates, is a seasoned designer who has been practicing for 18 years. An interest in theater, developed in high school, paid his way through college—a multidisciplinary degree in design from George Washington University in Washington, D.C.—by building sets for local productions during summer breaks. Wanting to make a change, Ghatan then started to look into architectural lighting and called firms in the area, including CM Kling + Associates. The rest, as they say, is history. He started as an intern at Candace (Candy) Kling's office in the spring of 1999. When his mentor Kling suddenly passed away in 2013, Ghatan assumed leadership of the firm. It's a lot of responsibility, but not something he shies away from. Case in point, later this year he will become president of the International Association of Lighting Designers—one of the youngest the organization has ever had.

#### What fascinates you about light?

How this single discipline can be so poetic and at the same time be so scientifically grounded with facts.

### Is there a text that has influenced your thinking about light?

Jean Rosenthal's *The Magic of Light*. She was a Broadway producer and Candy's mentor. The book is about stage lighting, but its not a how-to; it's more of a how to train your thinking.

## How do you balance the responsibilities of running a business and being a designer?

Design is what drives me. I'm still designing and I want to be doing that, the trick is that I can't

get to do it all anymore. It's about hiring people you trust and working with them so that you can still have oversight.

### How has the practice of lighting design changed since you first started working?

At the design level, I think it's very much the same: We're still working with the architecture, trying to coalesce around concepts and introduce lighting applications. Where it has changed is that we have started to take responsibility for our work; to own what we are doing.

How do you explain a lighting designer's work? Storytelling. •

interview by Elizabeth Donoff photo by Eli Meir Kaplan





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