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Dear Reader:

In our August/September 2000 issue, the cover story, "Dynamic Duo," which profiles Bruce Yarnell's lighting design of the Midwest Research Institute in Kansas City, MO, appeared with a printing error.

The photographs on pages 28 and 29 are *not* representative of Mr. Yarnell's lighting solution. Due to unfortunate and inadvertent errors during the pre-press and printing processes, the color plates were reversed, resulting in images that appear pink for spaces that are blue.

Architectural Lighting Magazine regrets the error, but is pleased to be able to reprint the article for your benefit—and to reflect Mr. Yarnell's work as it was originally created. We appreciate the generous support of our publishing vendors to correct this situation. We are proud to give our readers the quality they expect from Architectural Lighting Magazine.

Thank you for reading.

Best Regards,



Christina Trauthwein
Editor-in-Chief

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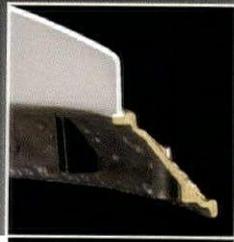
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OPENING SPREAD: SIGNLIGHT FIXTURES EQUIPPED WITH 3500K FLUORESCENT LAMPS ILLUMINATE A MASSIVE METAL SCRIM WALL, ACCENTUATING ITS TRANSPARENCY AND INVITING REFLECTION ON THE NATURE OF SCIENCE. SPIKES OF WHITE LIGHT ON THE KIMBALL BUILDING ECHO CLASSICAL COLUMNS ON THE NELSON-ATKINS MUSEUM OF ART ACROSS THE STREET. PHOTO ©MICHAEL SPILLERS

Although the independent, not-for-profit institute was established in 1944, the first building—the Kimball—at its Kansas City site was not constructed until 1955 and is located directly across from the Nelson-Atkins Museum of Art. The Spencer Building, named after its donor Kenneth A. Spencer, was added in 1972. Together, the two provide 207,000 sq. ft. of laboratory, office, information management and administrative support space. Applications of MRI's technologies and research range from candy-coating M&Ms to agent studies of the "Gulf War Syndrome" to the development of renewable energy strategies at the National Renewable Energy Laboratory, where over 700 of its 1,169 staff are stationed. Yet despite its prestige on the international stage of research and science, the facility enjoyed scarce recognition among the denizens of Kansas City.

Garcia likens the facility's recent "facelift" to the fashioning of a backdrop to the landscape, plazas and boulevards that cut between the MRI and the Nelson-Atkins. "We weren't constructing the building but renovating the facade," he explained. "We moved the entrance to the center—the space between the two buildings, thereby erecting this large backdrop to a stage setting much like the figure/ground relationships. The minimalist landscape, the campus and promenades become the figure with the architecture acting as the background; the pedestrian and vehicular traffic across the street are the audience."

Thus, for Garcia, the lighting question became: "How does one illuminate the backdrop to a stage?" The answer was supplied by the

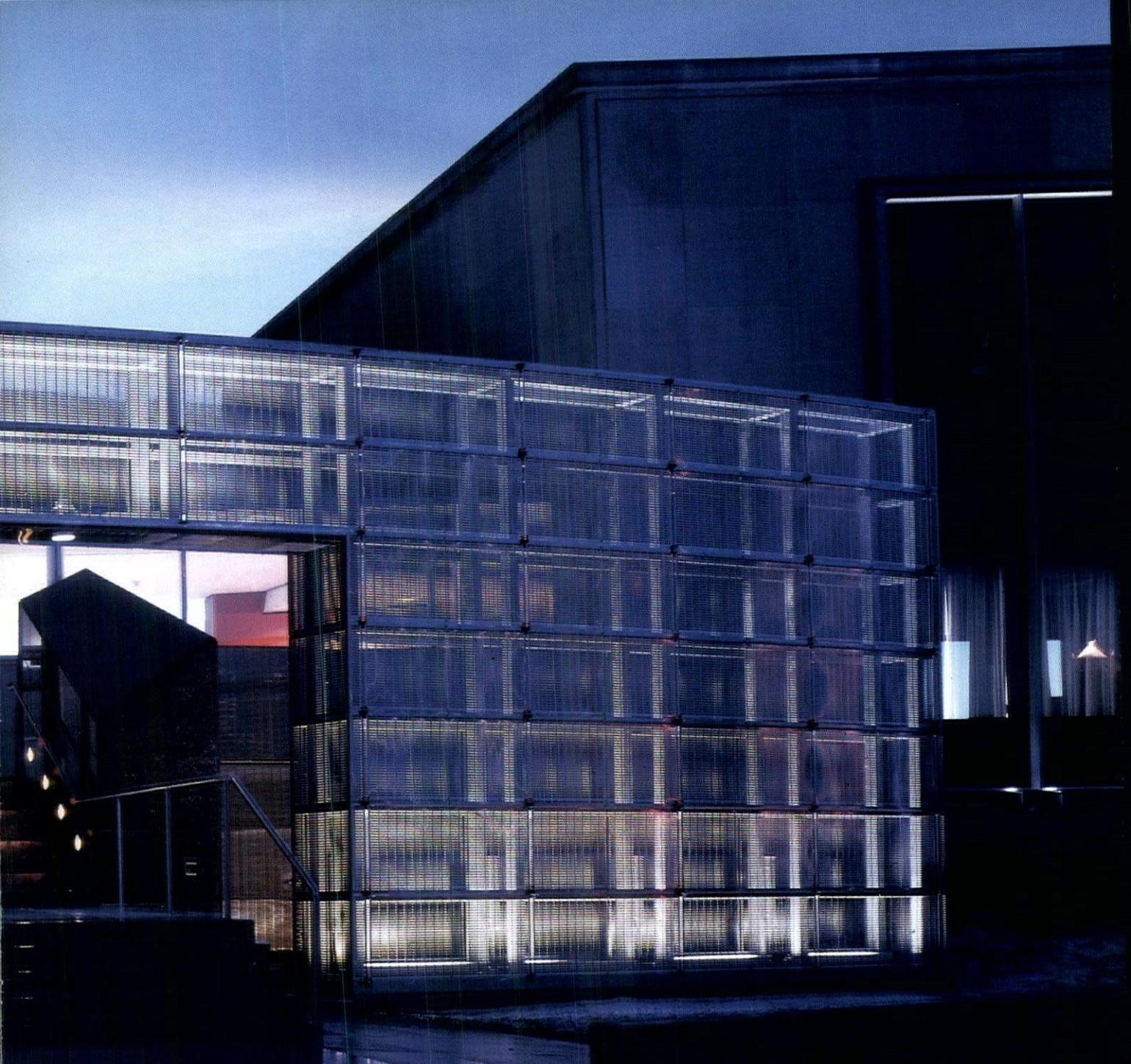
lighting design team at Yarnell Associates: With white-light elegance and washes of soft lavender. "We wanted to give the MRI a new freshness at night," said Yarnell, "so they wouldn't be just two more buildings along a major boulevard but rather something that's beautiful to look at." In addition to molding a new identity for the Institute, the solution, a delicate layering of light and color, also responds to the site's proximity to the boulevard and its visual length.

VIOLET TENDENCIES

For Yarnell, the Kimball's position facing the art museum acted as a key driver in the lighting design. "The Nelson is a Neo-Classical art gallery fronted by columns," said Yarnell. "So we wanted to treat the building, though a modern structure, in a very classical way." Vertical mullions spanning the facade of the Kimball building are illuminated by twin custom MR16 uplights mounted to the base of each aluminum fin. With one per side, the uplights transform the mullions into sleek spikes of white light that mimic the columns on the museum. Visible during the day, the custom fixtures are equipped with discreet cylinders designed to blend in with the fins.

A second layer of pale violet light envelops the entire building to underscore the vertical white accents and create elegant drama. Its source, 250W floodlights fitted with special rose-indigo glass filters are hidden in a low, curving concrete wall situated directly in front of the building facade. On the restrained application of color, Yarnell remarked, "The use of color is very faddish these days and often overdone with brilliant and saturated hues; we wanted a touch of color for an updated and fresh look." The design team chose lavender because it communicates a quality of formality shared by the "columns" of white light and complements the site's geographics. "I keep returning to this point," Yarnell said, "but my first reaction to the project was that this building is so important because of its location in facing the





Until last year, the Midwest Research Institute (MRI) assumed a rather quiet existence on the grassy sidelines of Kansas City, MO's Volker Boulevard. Perched no more than 90 ft. away from the busy street, its two long, sprawling structures—each 1½-stories high—boasted a nondescript, 50s-style architecture that revealed little of the high-tech and often high-profile pursuits that have decorated the MRI's 56-year history. "They're such a world-renowned institute but their buildings were outdated and have been there forever," said lighting designer Bruce Yarnell, principal of Yarnell Associates, Architectural Lighting Design. "You could drive by and not notice them or realize that anything special was happening inside." Last year's collaboration between Yarnell and architect Rafael Garcia of Rafael Associates aimed to resuscitate the MRI from local anonymity by giving it a physical presence commensurate with its impressive track record and competitiveness in an age of diminishing research dollars.

RIGHT: THE GLASS ENTRY VESTIBULE
GLOWS WITH THE COMBINATION OF
PAR30 BURIAL UPLIGHTS CONCEALED
IN THE FLOOR AND PAR30 METAL
HALIDE DOWNLIGHTS RECESSED IN
THE CEILING.

OPPOSITE: TILTED GLASS PANELS
BACKLIGHTED BY 3500K T8 SIGNLIGHT
UPLIGHTS AND BLUE COLD CATHODE
COVELIGHTING INFUSE THE LOBBY
WITH A SENSE OF SCIENTIFIC PURPOSE.

PHOTOS ©MATT MCFARLAND

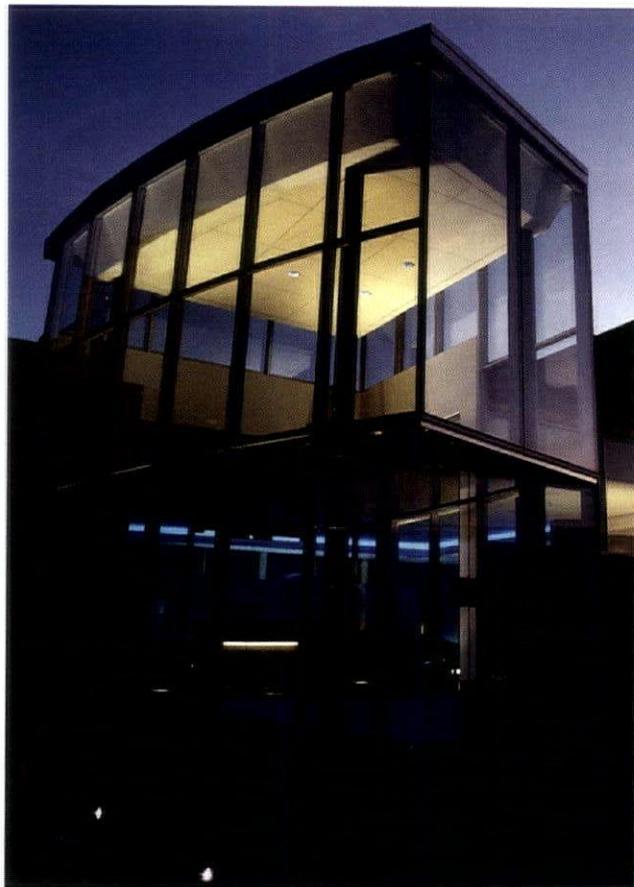
Nelson-Atkins Gallery of Art.”

To reduce the length of the complex visually, a different approach was used to light the Spencer structure and parking lot. Yarnell elected not to illuminate the facade but instead uplighted the trees that dominate the left side of the complex; he explained, “We wanted to minimize the emphasis on the second building.” Lamped with 5200K metal halide sources, the tree uplights punctuate the landscape and work with the parking lot fixtures to draw one’s attention away from the building.

Centerpiece to the renovation, a metal scrim wall measuring 110 ft. long, 20 ft. high and 3 ft. deep combines with architectural touches of water and stone to invite contemplation on the nature and progress of science. “Because they’re scientists at MRI, we wanted to take what we considered to be the basic roots of science—the natural elements of water, rock and fire—and build a sense of synergy at the entry,” said Garcia. Lighting the wall, asymmetric throw signlight fixtures equipped with 3500K fluorescent lamps and mounted inside the metal structure heighten the transparency of the scrim, while a bridge formed of mini-floodlights with biax lamps and downlights fitted with parabolic reflectors continues the flow of light over and under the entrance archway. “We wanted this glowing element that you walk through before you enter the building,” said Garcia, “That it’s not solid was important: You can see through it and wonder what’s behind science, what’s the next discovery.” The transparent scrim is further enriched by streaks of colored light reflected off a water trough at the base of the wall. Edgelit and point-source fiber optics line the trough and via a color wheel, gradually shift through a range of colors. The water feature is continued up the steps and paired with a black granite wall studded with glowing steplights fitted with 20W low-voltage sources. The stone and water rise above a narrow strip of grass and rocks lighted by black mini-bollards affectionately dubbed “Darth Vader” by members of the lighting design team.

MYSTERY SCIENCE

At the top of the stairs, a glass entry vestibule—newly installed to join the two buildings and break up the monotonous, horizontal expanse—appears to emanate a mysterious glow. To produce the effect,



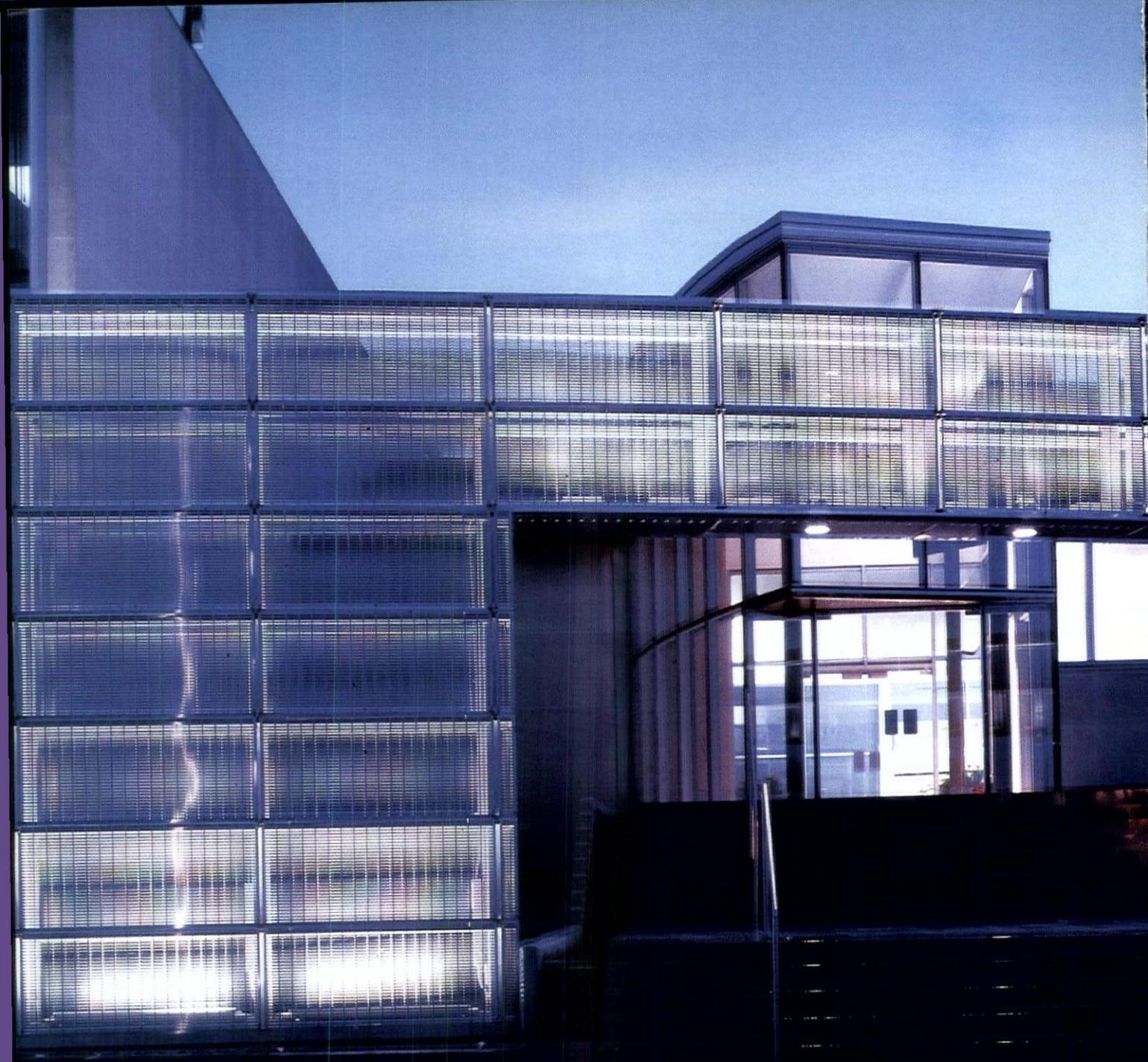
PAR30 burial uplights are hidden in the floor and supplemented by PAR30 metal halide downlights recessed in the ceiling. “We knew that the lobby foyer would be visible from the street and wanted to have a lot of light on the ceiling from an unknown location,” Yarnell said. “The uplights are built into the floor and illuminate the smooth ceiling, so you walk right between them when you enter space.”

In the lobby, lighting enhances the contrasts in materials and emphasizes the technological focus of the MRI. Frosted glass panels, acting as screens that separate the reception area from staff corridors, are tilted and backlit by signlight uplights fitted with 3500K T8 fluorescents and mounted at floor level. Above, cold cathode cove lighting reinforces the atmosphere of science and technology by bathing the space in cool blue light. Low-voltage MR16 accent lights recessed in the ceiling illuminate the glass surface of the reception desk, and low-voltage linear lighting tucked in a reveal outline a contour in its base. A series of 26W triple-tube compact fluorescent downlights adds general lighting.

By creating an understated lighting design for the MRI, Yarnell and his colleagues were able to overcome restrictions placed by the closeness of the buildings to Volker Boulevard and avoid distracting vehicular traffic. And yet, according to Garcia, its subtlety may in fact be the key to the Institute’s newly found recognition among the local community. “If we had installed bright lighting, people would have just talked about the building or nothing at all,” he commented. “How it’s lighted contributes to the drama and taps into the next level of emotion. That’s a level that people aren’t usually exposed to.” While some outside of Kansas City may forever argue that the MRI will never enjoy the popularity of those chocolate pellets that it helped to popularize—yes, the ones that “melt in your mouth and not in your hands”—its beauty and luminous grace have not gone unnoticed. This year, the MRI was honored with the Paul Waterbury Memorial Award of Excellence for Outdoor Lighting. ■

DETAILS

- **PROJECT** Midwest Research Institute
- **LOCATION** Kansas City, MO
- **OWNER** Midwest Research Institute
- **ARCHITECT** Rafael Associates—Rafael Garcia
- **LIGHTING DESIGNER** Yarnell Associates, Architectural Lighting Design—Bruce Yarnell, LC, IALD and Mark Hershman, IALD
- **PHOTOGRAPHER** Michael Spillers; Matt McFarland
- **LIGHTING MANUFACTURERS** Edison Price; Greenlee; Ardee; National Cathode; Columbia; Kramer; G.E. Lighting; Kim Lighting; Rosco; Bega; Fiberstars; Venture Lighting



Dynamic Duo

AN AWARD-WINNING LIGHTING DESIGN REJUVENATES A PAIR OF
“MILD-MANNERED” BUILDINGS AT THIS PRESTIGIOUS RESEARCH INSTITUTE

BY ALICE LIAO, ASSOCIATE EDITOR