A $20,000 grant from the Nuckolls Fund for Lighting Education creates a successful new interdisciplinary program.

SCHOLASTIC OPPORTUNITY LEADS TO BRIGHT FUTURES

BY VILMA BARR

"I never could have imagined the impact the funding provided by the Nuckolls Fund for Lighting Education would have on the Maryland Institute College of Art (MICA) and the Baltimore lighting design community," says Prof. Glenn Shrum. Since being awarded the $20,000 grant in 2004, 77 students representing a range of artistic concentrations have enrolled in the course.

In 2002, Shrum, who is a principal in Flux Studio, a Baltimore-based lighting design consultancy, was appointed as MICA's Lighting Expert-in-Residence. Two years later, he participated in the preparation of the successful proposal to fund a Lighting Concepts & Applications course that was selected by the board of directors of the Nuckolls Fund for Lighting Education.

Shrum notes that MICA, which became an IALD Education Trust-supported institution in 2004, has received a combined total of $52,000 from in-kind donations plus its own operating budget to support the lighting curricula.

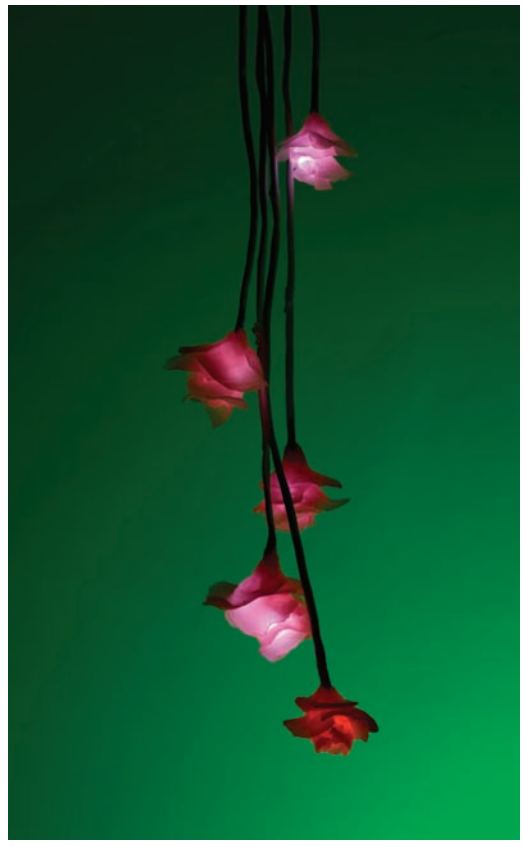
Founded in 1826 as the Maryland Institute for the Promotion of the Mechanic Arts, MICA is the oldest fully accredited, degree-granting art college in the country. It is located in the city's Bolton Hill section along Mount Royal Avenue, approximately 1.5 miles from downtown Baltimore.

Environmental Design department chair Peter Chomowicz points out that before the Nuckolls Fund grant, the department did not have a course devoted to lighting education for full-time students. "We had only minimal involvement with the local professional lighting community," he says. "Today, we take great pride in how lighting education has become a focal activity across our campus, uniting different departments with each other and the larger professional arena."

A catalyst for the growth of the appeal of the lighting program at MICA is the expanded lighting lab. Students and professionals can take advantage of opportunities for hands-on exercises, a state-of-the-art classroom, integrated video presentation capabilities, and seating for more than 50 people in the new space. "It has become the focus of interdisciplinary activity for MICA and the Baltimore lighting community, providing a location for IESNA lectures, board meetings, and vendor displays," Chomowicz states.

Creativity Required

The 15-week Luminous Object pilot course debuted in 2006-2007, the second of two lighting classes introduced. A total of 12 junior- and senior-level students were enrolled when the first class – Lighting Concepts



PHOTOS: DAN MEYERS

Ashley Scott's assignment was to devise a working prototype for a lighting fixture that employs the specific characteristics of a solid-state light source, resulting in the invention of a new technical/artistic solution. Her integration of electronic components as well as the illuminated and non-illuminated appearance of the object were factors in its design. Materials included wax, 12-gauge white wire, and white electrical tape. It is lit by 5mm cool white LEDs.

Using paper plates (for the centers only), Gwen Ferrari invented this Akari-style residential floor lamp, inspired by Noguchi. It is lamped with a 20-watt, self-ballasted compact fluorescent.

and Applications – was offered. "This year, the enrollment for the course was interdisciplinary, offering students the opportunity to investigate light as a creative and expressive medium," Shrum remarks. Lighting lab equipment was expanded to include basic electronics for working with LED circuitry.

Students worked individually, and also in groups, to design and implement their proposals for full-scale lighting exercises. "The assignments for the Lighting Concepts and Applications course became more open-ended," Shrum indicates.

The student works were inspired by both natural and manufactured elements. "They had to consider their projects as designs in a visual environment," he points out. Some of the concepts explored by the students included ceiling and wall-mounted fixtures as well as free-standing pieces.

• Ashley Scott formed her graceful, internally lit white LEDs from flowers made of colored candle wax. Powered by a nine-volt battery, each is designed to be modular.

• Gwen Ferrari was inspired by the Akari technique originated by designer Isamu Noguchi in the 1950s when he first utilized mulberry paper and bamboo to create a lighting fixture. "Akari means lightness as illumination, which Noguchi viewed as light in the sense of weightlessness," Shrum explains. Ferrari's basic material was paper plates, which create a stylized flower image when illuminated from underneath.

• Huei-Ting Wu's table lamp communicates a feeling of nature. A sculptural laser-cut tree is in silhouette within a brown-tinted acrylic enclosure, painted white inside, and set on an opaque base that contains the lamp.

• Korean-born Karam Jo created a spatial investigation in model form that incorporated interlocking tree trunks

PHOTO: DAN MEYERS

Designed by Huei-Ting Wu, this adaptation of an existing lighting fixture was inspired by a traditional Japanese table lamp. Wu was interested in using man-made materials to create an object with a natural character. It measures 16" high x 10" wide x 10" deep and is composed of sanded clear acrylic, tinted laser-cut acrylic panels, and stained plywood. A 20-watt, self-ballasted compact fluorescent provides the illumination.

PHOTO: DAN MEYERS

From Alexandra Ebright comes this adaptation of an existing light. It utilizes 10mm cool white LEDs and measures 30" diameter x 18" high. Designed to serve as a residential pendant, it is made from acrylic rod and tubes plus wire.

that form an organic medieval cathedral-like vault.

• Michael Reynolds, a fine arts major, fabricated a motorized cone-within-a-cone fitted with LED strips. "Mike decided to pursue a career in lighting," Shrum reports. "He is currently working at SESCO Lighting in Florida."

A graduate technical assistantship position was established to support electronics issues associated with the Luminous Object course. Within the MICA community, Shrum developed interdisciplinary connections with the departments of Interactive Media, Curatorial Studies, and Fibers undergraduate

WHAT IS THE NUCKOLLS FUND?

The Nuckolls Fund for Lighting Education is an endowment fund in support of college-level programs that inspire students with an understanding of light in architecture.

James L. Nuckolls occupies a singular place in the history of architectural lighting, combining a career as a lighting designer with that of an educator and champion of lighting education. He spread the message of the importance of lighting as an integral component of architecture and interior design across the U.S. to design professionals and students alike.

After graduation from Carnegie Mellon University, Nuckolls worked briefly under the legendary Stanley McCandless at Century Lighting. He became an early practitioner in the developing field of architectural lighting, and was subsequently involved in lighting design partnerships with Donald Gersztoff, William Warfel, Jeffrey Milham, Carroll Cline, and Francesca Bettridge. At the same time, Nuckolls worked tirelessly to promote architectural lighting as a discipline, urging recognition of the relationship between lighting, architecture, and interior design.

In his 20 years at the Parsons School of Design in New York City, where he was active through the 1980s, Nuckolls succeeded in making lighting a separate required course for all undergraduate environmental design students. He introduced lighting design to the school's continuing education program and initiated the first Master of Fine Arts in Lighting Design program. He was one of the founders of the International Association of Lighting Designers (IALD), and was its president for two years. His 1976 book, *Interior Lighting for Environmental Designers*, was a widely used text in lighting and interior design courses across the country.

In 1988, a group of colleagues led by Lesley Wheel established a memorial educational fund, The Nuckolls Fund for Lighting Education, Inc. One year later, it initiated the program of providing financial support to schools in North America to develop and expand courses and curricula in architectural lighting design and recognize outstanding work in lighting by students and educators. A growing endowment, created by contributions from across the lighting industry, has distributed $555,000 in 19 years in grants of $20,000 to colleges and universities, and awards at $10,000 and $5,000 to individuals.

Educational institutions that have received Nuckolls Fund grants include Boston Architectural College; Art Center College of Design in Pasadena, Calif.; Texas A&M University; University of Washington; Maryland Institute College of Art in Baltimore; Virginia Tech School of Architecture + Design; University of Oklahoma College of Architecture; and Ball State University in Muncie, Indiana.

Grants and awards are presented at an annual Lightfair International luncheon. Information about submissions for next year's awards – due on February 2 – is posted on the Fund's Web site (nuckollsfund.org).

PHOTO: DAN MEYERS

This Akari-inspired pendant, by Alexandra Ebright, measures 9" diameter x 28" high and is comprised of recycled corrugated cardboard and wire. It is lamped with a 60-watt, clear BT17 halogen.

programs. Graduate students from the Master of Arts in Digital Art and the Fine Arts in Studio programs also were accepted into the lighting course.

"Our goal is to develop a lighting curriculum that is relevant to MICA's diverse art and design community," Shrum says. "We've gained momentum in the curriculum by providing opportunities for students who have a variety of interests and skills. They investigate their ideas through the medium of light."

Reaching Out

During the ensuing academic year, MICA and the IES Maryland Section organized and co-sponsored two public events held on campus. Selected student projects were displayed and a reception was held for the students to meet and network with practicing lighting professionals.

Over the four-year grant period, student work was reviewed and critiqued by guest critics. Field trips to New York City, Philadelphia, and Pittsburgh gave students the chance to view exhibits and projects created by renowned lighting designers James Turrell, Paul Gregory, and Ingo Maurer.

"We have been fortunate to partner with enlightened corporate sponsors," Shrum affirms. Additional financial support was provided by Zumtobel USA and local lighting representative Chesapeake Lighting Associates. Wolfgang Egger, president of Zumtobel USA, visited the class to discuss lighting industry issues from a manufacturer's perspective. As part of the final 2007-08 grant period, MICA sponsored an LED product showcase that included Shrum's presentation: *LED Facts and Fiction*.

Shaping the Future

According to Chomowicz, the Nuckolls Fund seed money planted four years ago is now maturing, bearing fruit and helping to ensure and sustain the program. "During this period, we have observed the transformative power of light. Our students graduate with a solid foundation in the technical and aesthetic qualities of light. They also have the tools to make informed, professional decisions within their chosen careers, but also to meaningfully contribute to the advancement of lighting technology," he states.

"The Fund's mission to advance the understanding of light's critical role in society and educate the future leaders of light design is doing nothing less than changing lives," he stresses. "Prof. Shrum's hard work has firmly established a lighting curriculum and made our laboratory a visible presence in the Baltimore area. As we expand the curriculum, we hope to better integrate engineering, sustainability, public health, and medical research into our lighting courses and research projects."

This fall, Shrum and a group of MICA students are working with 3M's radiant light film as part of a collaborative effort for a work to be presented in MICA's new experimental theater.

"We're working on a public installation that will demonstrate the ability for this material to be used in a variety of lighting installations," Shrum remarks. "It's been a great opportunity for our students to investigate light and we are producing some beautiful effects." ■