

College of  
Design

# EMERGING

Spring 2008 • Vol. 2, No. 2

## DESIGN

and the Digital Revolution

Ralph Rapson

1914–2008

UNIVERSITY OF MINNESOTA

## IN MEMORIAM

# RALPH RAPSON:

SEPTEMBER 13, 1914-MARCH 29, 2008

Ralph Rapson, celebrated architect and head of the School of Architecture at the University of Minnesota from 1954 to 1984, died at his home on March 29. He was 93. One of the last of the second generation of modern architects in America still practicing, Rapson was at the drawing board the day he died.

As the architect of many important Twin Cities buildings, including the original Guthrie Theater (1963), the Philip W. Pillsbury House (1965), and Cedar Square West (now Riverside Plaza, 1973), Rapson had a national and international reputation, designing award-winning buildings across the United States as well as the American embassies in Stockholm and Copenhagen. He also designed single- and multi-family housing, churches, and institutional buildings, such as the Rarig Center for the Performing Arts (1972) on the Twin Cities campus and the Humanities Fine Arts Center (1973) on the Morris campus.



*"Working up to the day he died, Ralph did what he loved to do, and that may be one of the greatest lessons he could teach any of us."*

*Thomas Fisher, College of Design dean*

*I have had many great teachers in my life, but Ralph Rapson stands out from all of the others because of his powerfully insightful and generously shared crits of my modest design efforts. He was gifted in design, that many can see, but I believe his students saw another side as teacher that others may have never known.*

*Tom Mortenson, BArch '70*

the College of Design in 2006. Rapson Hall—home of the college's School of Architecture, Department of Landscape Architecture, and other units—is named in his honor. Rapson also helped establish the Ralph Rapson Traveling Fellowship, which enables University graduates and local architects to travel and continue their architectural studies.

In addition to heading the architecture school, he established the firm Ralph Rapson and Associates, Inc., in Minneapolis. His architect-son, Toby, who graduated from the University of Minnesota and is now the firm's president, eventually joined Rapson. Recent projects by the firm include the Minnesota Centennial Building, the Mixed Blood Theater, and the conservatory at the University of Minnesota's Landscape Arboretum.

### Memorial Service

A memorial service was held April 21 at the Wurtele Thrust Stage of the new Guthrie Theater. The stage is a recreation of the thrust stage that Rapson designed in the original Guthrie. A reception followed the service in the courtyard of Rapson Hall, the space in which he worked for 30 years.

Photos from the memorial service are posted on the CDes MEMO Web log, [http://blog.lib.umn.edu/cdescomm/cdes\\_memo/2008/03/ralph\\_rapson\\_september\\_13\\_1914.html](http://blog.lib.umn.edu/cdescomm/cdes_memo/2008/03/ralph_rapson_september_13_1914.html).

Rapson's achievements as an educator included ushering in a new era of modern design at the University of Minnesota, a dramatic departure from the Beaux Arts tradition that had formerly characterized architectural education at the University. Rapson's vision of an integrated approach to design led him to establish the program in landscape architecture and to advocate bringing all of the design disciplines into one unit, something that the University achieved with

# College of Design

## EMERGING →

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UNIVERSITY OF MINNESOTA  
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# DEAN FISHER

## COMPUTER-AIDED MIND

Visit the College of Design and you'll see computers everywhere: students working wirelessly on their laptops, faculty PowerPointing their way through lectures, and staff engaged in all sorts of electronic efforts. Likewise, you will see the future of computing in our labs, from body scanners helping us to create custom clothing, to head-mounted goggles allowing us to enter into virtual designs and manipulate them in real time.

Less visible, but no less important, are the conceptual changes that have come with computers. The human mind evolved, in part, as a result of our toolmaking, and that process appears ongoing in this era of powerful computer tools. Evidence of this computer-aided mind exists everywhere in our college, especially among our students. They may not look much different from students of a generation ago, but they seem completely different in the way they get information, communicate with each other, and think about the world that they will one day help create.

For example, in an honors seminar I am coteaching, an undergraduate senior mentioned that she had checked out a University library book for the first time, after nearly four years in school. When I asked her how she had done her schoolwork before, without books, she lifted up her laptop and smiled. Such stories would have made faculty members shudder not too long ago, but with the exponential rise of reliable information on the Web, coupled with electronic library resources like digital journals and Google books, it no longer seems implausible that a high-achieving senior might no longer need to take out a book.

The real computer revolution, however, may lie not in how students study, but in how they think. Walk around our halls and you will see students making presentations of work that defies definition. You will see architecture students studying material and structure through clothing, product design classes learning from biologists, interior



design students drawing from environmental psychology (via our homegrown research database, InformedDesign), housing and retail students diving into cultural studies, and design communication students looking at landscape-scale graphics. And all of this work now gets presented in ways that would have taken teams of people weeks to prepare in the past.

Although faculty members have long discussed the value of such interdisciplinary work, the computer has enabled it in ways unimaginable just a few decades ago. Moreover, students today expect to study and learn in this manner, with the Web serving not only as an information source for students, but also as a metaphor for how they now see the world. This has begun to transform our teaching and research, and it will eventually alter the ways in which our students practice. But it has certainly placed disciplines such as ours at the very center of the intellectual life of our times. The computer-aided mind most closely resembles that of designers and environmental analysts, constantly making creative leaps and lateral connections. And applying that way of thinking may be the most important skill our students acquire.

Thomas Fisher  
Dean

**Cover image and page 9:**  
A miniature model of Marc Swackhamer and Blair Satterfield's Feedback House was produced by Ben Thorne using a pinhole camera. More on Swackhamer on page 15.

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# AROUND THE COLLEGE

## FELDMAN TO SPEAK AT CDes COMMENCEMENT

*The new director of the Minneapolis Institute of Arts will address the class of 2008*

The second College of Design commencement takes place May 17 at 3 p.m. in Northrop Auditorium. Last year 250 undergraduate and graduate/professional students participated, and a similar number are expected this year. **Kaywin Feldman**, the new director of the **Minneapolis Institute of Arts**, will be our commencement speaker, and University President Robert Bruininks will be attending. Feldman's husband, Jim Lutz, is a professor of architecture at the University of Memphis.



Photo courtesy of MIA.

## EMERGING NO LONGER *New CDes identity in the works*

The College of Design has been working since February with Minneapolis design firm Spunk Design Machine to create a new visual identity for the college. When complete this summer, the identity will convey that the college attracts curious minds who want to make a difference in the world and that our education provides knowledge crucial to solving society's needs while helping students find and amplify their own design voices.

Jeff Johnson, president and creative director of Spunk, employs seven energetic young designers, including Steve Marth (BS Graphic Design, '04).

By next fall, you will see a completely new look for the college's Web pages and publications. Even the name of this publication will change! Have an idea for a new name? Please send it to [cdescomm@umn.edu](mailto:cdescomm@umn.edu).

## ABANDON YOUR THREADS

*40th annual senior fashion show*

The College of Design's apparel design department presented the 40th annual senior fashion show on February 2 at the McNamara Alumni Center. This year's show, entitled "Abandon Your Threads," showcased a fully conceptualized line by each of the 17 individuals graduating from the clothing design program. A standing exhibition of work from the sophomore and junior



classes was featured as well. A wide variety of design was showcased, including wedding gowns, post-apocalyptic men's wear, and—one of fashion's biggest buzz words—sustainable clothing.



*Far left: decoration on a wedding dress designed by Jessica Penny. Center left: lion coat, back view, by Kathryn Troutman. Near left: "Anika" by Wesley Martin.*

## SACRED SITES

*A symposium on architecture, ethics, and spiritual geography*

The **School of Architecture** hosted “Sacred Sites | Sacred Sights,” the first international symposium on architecture, ethics, and spiritual geography. The symposium and exhibition, which took place April 4–6, 2008, examined the role of the sacred as place and perception. **Ozayr Saloojee** (Arch) and **Virajita Singh** (CSBR) served as the symposium’s co-organizers.



*In addition to featuring scholarly papers, a second conference track brought together community elders and other members of the Dakota community who have worked to preserve sacred spaces against great odds. The day’s events were opened by traditional spiritual ceremonies and included speakers from Midwestern Lakota communities and the Mi’kmaq in Nova Scotia, including Albert Marshall (right).*

## CONSPICUOUS COLLECTION

What—and how much—do you consume in an entire month? Students in **Daniel Jasper’s** (Graphic Design) senior seminar and capstone experience found out by keeping a record of their consumption habits.

The patterns of the records revealed something important about the way the students live, the way they consume, and what this said about them individually.

**Arrow** by **Mattie Winistorfer** made of food-on-the-go, especially bagels and PowerBars.

**Gina Daily** made a smile from the wrappers of candy and snacks that made her happy.

The students analyzed their patterns and encapsulated this in a physical form that could be communicated. The result was an exhibition in McNeal Hall entitled “Conspicuous Collection.”



**Recently married Ben Skudlarek** and his wife found they buy a lot of food—especially packaged and frozen foods—at Super Target. He made a bottomless Target shopping cart from the remains of the packaging.

# SOLAR DECATHLON 2009

## U of M to claim its place in the sun

**By Judy Woodward**

What's new under the sun? Students and faculty from the College of Design hope the answer will be beauty and functionality as they begin work on the University of Minnesota's entry in the prestigious Solar Decathlon.

The University was chosen by the U.S. Department of Energy as one of 20 finalists to compete in the 2009 Solar Decathlon, a contest to build and operate a house whose heating, cooling, and electricity are fully solar-powered. It's the first time a Minnesota team has been chosen to participate in the biennial contest begun in 2002.

The final product will be no bigger than 850 square-feet and will become part of an International Solar Village exhibit on the National Mall in Washington, D.C., in the fall of 2009.

In the coming year, students from the College of Design, Institute of Technology, and the Construction Management Program of the College of Continuing Education will cooperate in all phases of the design, construction, and promotion of what they're calling the Minnesota Pioneer House.

Many of those involved think that the University's cross-disciplinary approach was the key to being chosen for the competition. Daniel Handeen, a research fellow at CDes's Center for Sustainable Building Research, is assistant project manager for the decathlon. "The U offered diversity and strength of resources to this project," he said. "There is such broad-based research in so many areas at the U."

Adjunct Assistant Professor Lucas Alm of the School of Architecture is the faculty adviser and design/build manager for the student-run project. He noted that the University's entry will strive for a made-in-Minnesota quality, especially when it comes to adapting solar solutions to the notorious extremes of the region's climate. "People have been struggling with hot summers and cold winters," he pointed out. "Often you can design toward one and the other will suffer. But we're thinking holistically [for this project]."

For Jonee Kulman Brigham, coprincipal investigator of the solar decathlon project and research coordinator with the Center for Sustainable Building Research, one of the chief goals of the project is getting out the message of sustainability. "I would like to see it...point the way forward to inspire and motivate public interest in solar housing," she said.



**Lucas Alm (right) is teaching topics courses to architecture students resulting in the design, development, and construction of the architectural aspects of the solar house.**

Minnesotans will get plenty of chances to look the house over. Plans call for it to be displayed on campus and at the State Fairgrounds before it's transported to Washington.

Meanwhile there's work to be done by the nearly 25 College of Design students involved in the project. For architecture grad student Shengyin Xu, who leads the architectural design team, the cross-disciplinary approach intensifies the educational value of the project. "We have to be able to synthesize these different viewpoints...[but] the...benefit is the convergence of all these disciplines and academic fields in a project that...produces something real."

Hands-on education, an enhanced profile for solar energy, and a demonstration of the University's capacity to synthesize effective technology with elegant design—the Solar Decathlon has something for everyone. But there's one other important benefit that can't be overlooked.

"I'm looking forward to fun," said Handeen. "Solving problems in the moment. Relying on each other's creativity. Making the decathlon a joyful process."

Learn more about the Solar Decathlon at [www.solardecathlon.org/](http://www.solardecathlon.org/) and [www.sua.umn.edu/groups/directory/show.php?id=2102](http://www.sua.umn.edu/groups/directory/show.php?id=2102).



**CDes mentors for the U of M Solar Decathlon team: Jonee Kulman Brigham, CSBR; Lucas Alm, architecture; and Daniel Handeen, CSBR.**



**At the Solar Decathlon kick-off event Feb. 7 in Rapson Hall courtyard: Ann Johnson, PE, principal investigator for the Solar Decathlon, is faculty director of the U's construction management degree program.**

# JACK OF GIS

*On April 2, the Regents of the University of Minnesota conferred upon Jack Dangermond the degree of doctor of science, honoris causa. The College of Design was one of four colleges that jointly sponsored the honorary doctorate, in recognition of Dangermond's pioneering work in the development of global information system (GIS) software as a tool for improving the human condition through environmental conservation, urban planning, and, most importantly, education.*

**By Adam Regn Arvidson, ASLA**

"You never really know," said Professor Emeritus Roger Martin, "what's going to happen with your students. Example: Jack Dangermond." Martin is referring to the man whom many consider the father of commercial geographic information systems (GIS). Dangermond spent just a single year at the University of Minnesota, but he considers it a critical one. It was here, he said, that his design thinking and scientific thinking began to come

together—a merger that is at the core of his subsequent 38 years of professional activity.

Dangermond, with his wife, Laura, is the founder of Environmental Systems Research Institute, Inc., (ESRI) a company whose computer software products (including ArcGIS) have revolutionized the way geographic data is utilized and communicated. GIS, put simply, is a database of geographic features visualized on maps. It allows users to analyze spatial relationships, model various geographic



**Jack Dangermond**

Photo courtesy of ESRI.

processes, and then display the results graphically. Dangermond's powerful tool is used by more than 240,000 public entities and private companies for activities as diverse as determining distribution routes, planning mining and logging activities, and designing urban areas and open-space networks. From its humble beginnings as a consulting firm, ESRI has grown into a software giant, regularly grossing sales in the hundreds of millions of dollars.

"Jack really was the first graduate of the landscape architecture program," remembered Martin, the program's founder. Dangermond came to the University in 1967, already in possession of an environmental science degree from California State Polytechnic

*Dangermond's powerful tool is used by more than 200,000 public entities and private companies for activities as diverse as determining distribution routes, planning mining and logging activities, and designing development areas and open-space networks.*

University, Pomona. While officially enrolled in the Institute of Technology's architecture program (before there was a College of Design), he worked with Martin to design a customized course of landscape architectural study that would also expose him to urban design, planning, and the sciences, specifically geography.

He took on a major project that proposed a comprehensive open-space network centered on the Mississippi River in the Twin Cities. He spent a year mapping the region, without the aid of computers, and performed analyses using overlay methods being pioneered by landscape architect Ian McHarg. During the course of his study, Dangermond met John Borchert, a geography professor who was studying systems and processes—such as transportation networks, settlement patterns, and shopping trends—rather than physical landscape attributes. Borchert's work was a major contribution to what has become known as quantitative geography: the analysis of human and natural systems using mathematical methods and computers.

Dangermond already had an interest in geography, having undertaken computer-based research of shopping patterns in Southern California while an undergraduate, so Borchert's work resonated with him. Moreover, it exposed him to a scientific approach to landscape analysis, something inherent in his ESRI software. Dangermond began to see that acquiring and utilizing accurate geographic data could better inform large-scale design and that the use of computers could help enormously.

After earning his master's at the University, Dangermond left Minnesota for Harvard University, where he earned a master of landscape architecture degree, and where he further extended his work into computer mapping and spatial analysis. After that he started his company with a simple mission: to facilitate more thoughtful, rational planning.

Although his organization has created a ubiquitous new tool for designers, planners, and policy makers—a tool he has liberally donated to nonprofits, governments, and schools—Dangermond is not about to rest on his laurels. "Over the past 25 years," he said, "design professionals have become able to model geography. Then, they get out the yellow tracing paper and begin the design process." The problem with that, he explained, is that GIS remains primarily a descriptive technology—as its name suggests, informational. Currently, it is difficult to interact with the system from a design standpoint. In many cases, GIS is used merely to generate maps of basic information.

"We are now developing sketching tools," said Dangermond, "to allow environmental designers to draw with the GIS maps." Though he admitted this has been more technologically difficult to create than previous ESRI offerings, his team is working hard to connect the design world and the science world around one platform—something he calls a geographic information and design system.


Having a complete information system for geographic analysis and design will provide a more integrated approach and allow testing of different design strategies while at the same time evaluating the consequences of these strategies.

"For example, in open pit mining, landscape architects are often asked to design plans that fix up the landscape after mining is done," said Dangermond. "This new approach will enable landscape architects to participate in the design along with mining engineers and other interests, using a common science database that supports all aspects of the mining operations." This is landscape architecture on a grand scale, and it requires the application of a geographic approach to design, something Dangermond puzzled through for a year back in 1968 with the Mississippi River project.

"My interest is in bringing design and geographic science together," he said. "And if you trace that interest back, it goes right to John Borchert and Roger Martin."



**Robert McMaster, U of M dean of undergraduate education, and Jack Dangermond discussed GIS with students at Coffman Union earlier in the day Dangermond received his honorary doctorate.**



# DESIGN and the Digital Revolution

Photos by Scott Cohen

Computers have profoundly changed design and the construction, fabrication, and consumption of designed products and environments, making them more affordable, efficient, and accessible. At the same time, this digital revolution has led to an integration of design, production, and distribution in ways never seen before, resulting in the blurring of once-clear boundaries between designers and fabricators and producers and consumers.

The College of Design has some of the country's leading research under way looking at how computers will alter everything from the clothes we wear to stores we patronize to the buildings we inhabit to the landscapes we traverse. We are also leaders in integrating this technology into our teaching, delivering knowledge to the larger world. On the following pages we profile faculty members who are at the forefront of the design digital revolution.



*Lee Anderson displays the headset that can guide the wearer through a house that has yet to be built.*

## LEE ANDERSON

### USING 3D MODELING TO TOUR VIRTUAL BUILDINGS

Lee Anderson seems affable, but he could make you walk off of a roof.

That is, the associate professor in the School of Architecture works with virtual reality through the Digital Design Consortium (DDC), an interdisciplinary unit that Anderson helped create in 2004. Anderson's focus is three-dimensional (3D) modeling, and through his work he can guide someone through a house that has yet to be built, through a commercial building that is still in design, or even across a roof and down into a garden below.

For Anderson, digital design encompasses most of the tools he uses in his research, and often in his teaching. "Digital design is a constellation of tools that assumes a 3D model will plug into various possibilities," Anderson said. "We can use these tools for structural analysis, energy analysis, to explore day lighting, and more."

The Digital Design Center began with the vision of Ted and Linda Johnson. Ted Johnson began his undergraduate work in

architecture, then switched to computer science. He never lost his fascination for combining these two disciplines. Currently, DDC faculty—Anderson, Renée Cheng, and Marc Swackhamer, from architecture, and associate professors Victoria Interrante and Gary Meyer of the Department of Computer Science and Engineering—work together to develop new tools and uses for cutting-edge technology. "It's a privilege to work together with colleagues in such an interesting program," Anderson said.

Within the DDC, the focus is on exploring new ways to make building design more efficient, gaining enough knowledge early in the process to save money and eliminate delays later on. Some of the work requires complex computational design, such as estimating precise curves and calculating hyperbolic paraboloid roofs (saddle-shaped roofs). Despite the complexity of the tools and equations involved in his work, Anderson sees his research as just a walk in the park.

"We can create animations to see walkways from a birds-eye



view or as if you were walking along the path," Anderson said enthusiastically. "There's a whole galaxy of possibilities."

What's next in the world of digital design? Anderson said that building information management (BIM) systems will become more commonplace. BIM systems will include not only structural details, but also information on each design element. For a window, the BIM system could provide details such as the window manufacturer, the installation cost, and the color of the surrounding walls. "BIM systems could come down in price over the next 5 to 10 years," Anderson stated, "and we'll see a tighter connection between manufacturers and BIM users."

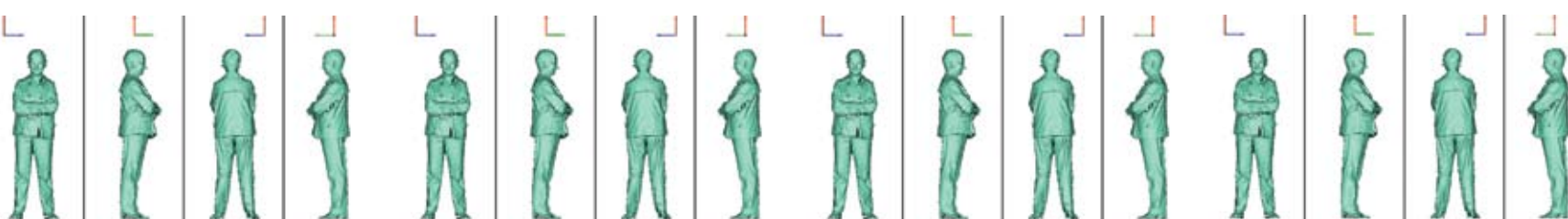
In addition to his research, Anderson teaches two computer-assisted design (CAD) courses and Design in the Digital Age. He introduces students to all aspects of digital design and how societal changes influence design. He also teaches virtual reality and video editing and animation courses in Norway each year. He received his undergraduate degree from Sophia University in Tokyo and a master of architecture degree from the University of Minnesota.

He'll gladly talk about digital design and his work with the DDC. But just be careful if he takes you up to a virtual roof.

—Lori-Anne Williams

*Anderson's focus is three-dimensional (3D) modeling, and through his work he can guide someone through a house that has yet to be built, through a commercial building that is still in design, or even across a roof and down into a garden below.*

- ▶ A 2001 gift from Linda (BA economics '79, MBA '82) and Ted Johnson (BS computer science '82) created the Digital Design Consortium (DDC). The DDC is a unique collaboration involving faculty from two disparate fields: architecture and computer science. It is one of only a few efforts in the academic world to bring together specialists who have backgrounds in both design and information technology.
- ▶ Ted, who serves on the College of Design Advisory Board, was recently back on campus and introduced his fellow advisory board members to the DDC. Ted noted that the impetus for his and Linda's gift was the need for digital visualization and design tools in architecture that would allow for flexibility, iteration, and change.
- ▶ DDC research addresses the entire architectural design process at many scales, including acquiring data about the construction site, designing the building that will be at the site, and selecting the materials that will be used to fabricate the structure.
- ▶ Current DDC research includes developing new techniques to simulate and visualize the color and appearance of architectural surface finishes, exploring the Large Area Virtual Design Environment, and studying the physical interaction of one's body with the design environment and its effect on design and the design process.



# KAREN LaBAT

## USING A VERY EXPENSIVE TAPE MEASURE

Used to be, when a researcher or industry professional needed a large amount of data about the shape of the human body, it would take at least an hour to measure one person by hand—and endless hours to retrieve data from enough subjects for a large-scale study. Then there was the issue of translating reams of two-dimensional data into use for a three-dimensional (3D) form.

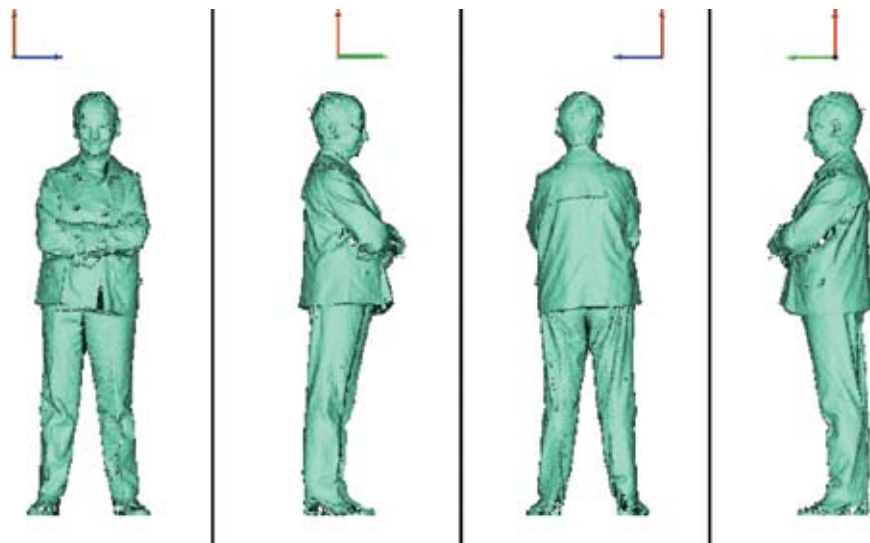
But ever since the Department of Design, Housing, and Apparel got its hands on a body scanner, it takes 11 seconds to get that same information from one person. The technology quickly captures thousands of data points and creates 3D images of the human body. Apparel experts can then use this information to develop more accurate sizing systems, try out patterns, and design clothing.

“We talk about the scanner being a very expensive tape measure,” said Karen LaBat, director of the college’s Human Dimensioning Laboratory and a professor of apparel design. “But it’s really changed the way we’re collecting information and developing new ways to use it.”

The scanner, which was initially funded by the National Science Foundation, opened doors for the University to conduct cutting-edge research and change the way apparel is designed. In one project, apparel professors teamed with physiologists and psychologists in the University’s Laboratory for Health and Human Performance in Extreme Environments to develop underclothes for NASA astronauts. Called a liquid cooling ventilation garment, this wearable technology keeps astronauts cool in their bulky space suits.

Researchers also have used the scanner to design clothing for women with osteoporosis, who often develop an altered posture. Additionally, they have applied information from 3D body scans to create more accurate clothing patterns and apparel for obese women, who have completely different body shapes than petite and average women.

The Human Dimensioning Lab also has a motion capture system, another piece of technology that is in the early phases of making a significant impact on the design of work apparel. Researchers from five universities, including the University of Minnesota, are creating better protective clothing for pesticide applicators, whose protective garments tend to be large and constraining. The only partner with a motion capture system, the University is using the equipment to film people and their movements. Eventually researchers will apply the



data to design and test new products that improve workers’ ability to stretch, bend, and move on the job.

By saving time, taking away human error, and opening avenues for new ways to fabricate apparel, technology has vastly changed the way designers create the clothes and equipment we wear for work and play.

**3D images of Karen LaBat taken in the body scanner in the Human Dimensioning Lab.**

—Suzy Frisch



# LUCY DUNNE

BRIDGING THE GAP BETWEEN APPAREL AND COMPUTING INDUSTRIES

Lucy Dunne's work lies at the intersection of technology and apparel, where she develops ways for technology to expand and augment the function of clothing. Whether it's helping clothes perform better at their current job description—keeping us warm, protecting us from injury—or taking on new responsibilities such as watching over our health or monitoring body processes, Dunne is seeking to break new ground in the apparel industry.

She joins the College of Design this summer as an assistant professor of wearable technology and apparel design, helping to put the University of Minnesota at the forefront of a nascent industry. Dunne brings a background that is both low- and high-tech. She holds bachelor's and master's degrees from Cornell University in textiles and apparel design, as well as a Ph.D. in computer science from Ireland's University College Dublin.

*She sees enormous potential for more highly functioning clothes, such as apparel that can monitor a heart patient's condition or give athletes data about their performance*

Though many people have been working on creating wearable technology for years, a wide gap still remains between the computing and apparel industries. The obstacles are vast, including getting the scientists and the clothing designers to integrate their design processes, manufacturing, and markets to jointly develop wearable technology. Dunne hopes her teaching and research serves as a bridge between the two fields.

She sees enormous potential for more highly functioning clothes, such as apparel that can monitor a heart patient's condition or give athletes data about their performance. Another line of wearable technology could include devices that serve us better, such as apparel linked to your home's thermostat. When you are too warm, your clothes could notify the device. Or a cell phone might sense your surroundings and perform functions based on that information, vibrating instead of ringing, or sending a call to voicemail when you're in the middle of a presentation.

"The possibilities are somewhat endless. We all wear clothing, and we wear it in a huge range of activities and situations," she said. "It's a very new and under-explored field." With the addition of Dunne to the clothing design faculty, the University may very well make wearable technology as ubiquitous as blue jeans.

—Suzy Frisch



**Above—**  
**Pulse gown:**  
graphic inset  
pulses with  
wearer's  
heartbeat.

**Right—**  
**Massage**  
**shirt:** small  
motors  
apply a light  
shoulder and  
back massage.



**Far right:** Alert gown displays  
the wearer's level of attention  
using galvanic skin response  
technology.





# DAVID PITT

## PLANNING LAND USE AS IF NATURE AND COMMUNITY MATTERED

Maps show points in space—highway exits or your house. For David Pitt, professor of landscape architecture, they do all that and more—from showing the geology to showing people’s thoughts and feelings.

Pitt, who focuses on integrating perceptions of landscape into design, planning, and management, uses Geographic Information Systems (GIS), along with two other digital tools, to telescope in and out of landscapes and help decision makers figure out optimal solutions for the future of such areas as the St. Croix National Scenic Riverway.



In this project, Pitt and a group of graduate students generated maps that pulled out scientific data such as slope and geology along the riverbanks. But he also made maps that show how

*Using digital simulation, Pitt digitally produced photos of the different types of possible landscapes, from the pristine to the fully developed. Then he gathered reactions from the 300 or so people who live, work, and recreate in the valley.*

people feel about what they see. Using digital simulation, Pitt digitally produced photos of the different types of possible landscapes, from the pristine to the fully developed. Then he gathered reactions from the 300 or so people who live, work, and recreate in the valley.

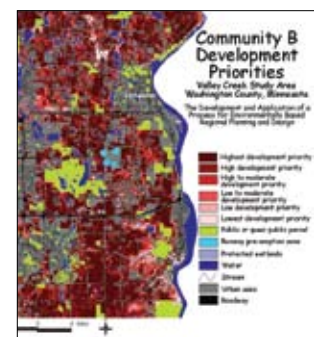
Before the advent of such digital simulation, “the capacity to simulate virtual images of change is something we used to dream about,” Pitt said. “We did drawings, but photos have the ring of virtual reality.”

With GIS, Pitt can generate a model of scientific value, with the numbers to back it up. And using psychometric technology, he can offer hard numbers for the soft data of perceptions. Then he can use GIS to integrate the myriad pieces, hard and soft.

Equally important for Pitt is passing along this kind of decision support system to the new generation of landscape architects and urban planners. He likes to subtitle the course he teaches with the Humphrey Institute’s Richard Bolan and Carissa Schively Slotterback as “land-use planning as if nature and community values really mattered.”

The implications of the digital revolution are tremendous, Pitt said. Instead of a few stakeholders charging full speed ahead, often discovering the unintended consequences only after it’s too late, everyone now can weigh in on possibilities played out to their logical conclusion. Instead of people feeling opposed to each other, “it opens up the decision-making process, makes it more transparent, and increases the potential for it to be collaborative and participatory,” Pitt said.

—Judy Arginteanu



**Using green infrastructure to identify development priorities in the Washington County landscape. Top illustration shows lowest development priority and the bottom shows the highest development priority for the same community.**



# MARC SWACKHAMER

*BRINGING ECOLOGY, BIOLOGY, AND AESTHETICS INTO AFFORDABLE HOUSING*



Marc Swackhamer isn't a household name, but he's a big name in houses—digitally designed houses. Swackhamer, an assistant professor in the School of Architecture, is gaining recognition for his work in alternative fabrication and building techniques and their effects on low-cost housing and construction.

Swackhamer's work with design partner Blair Satterfield has been featured, for example, at the Weisman Art Museum as part of the Home-House Project (2006) traveling exhibit, sponsored by the Southeastern Center for Contemporary Art. He and

Satterfield won the environments category of *ID Magazine's* 2007 Annual Design Review for their "Drape Wall + House," and Drift House, a design for transient housing shelter won national honors from the Association of Collegiate Schools of Architecture (ACSA), and was exhibited in New York, Pittsburgh, and Chicago.

**Right, a detail of the Drift House design for transient housing shelter, which won national honors from the Association of Collegiate Schools of Architecture (ACSA), and was exhibited in New York, Pittsburgh, and Chicago.**

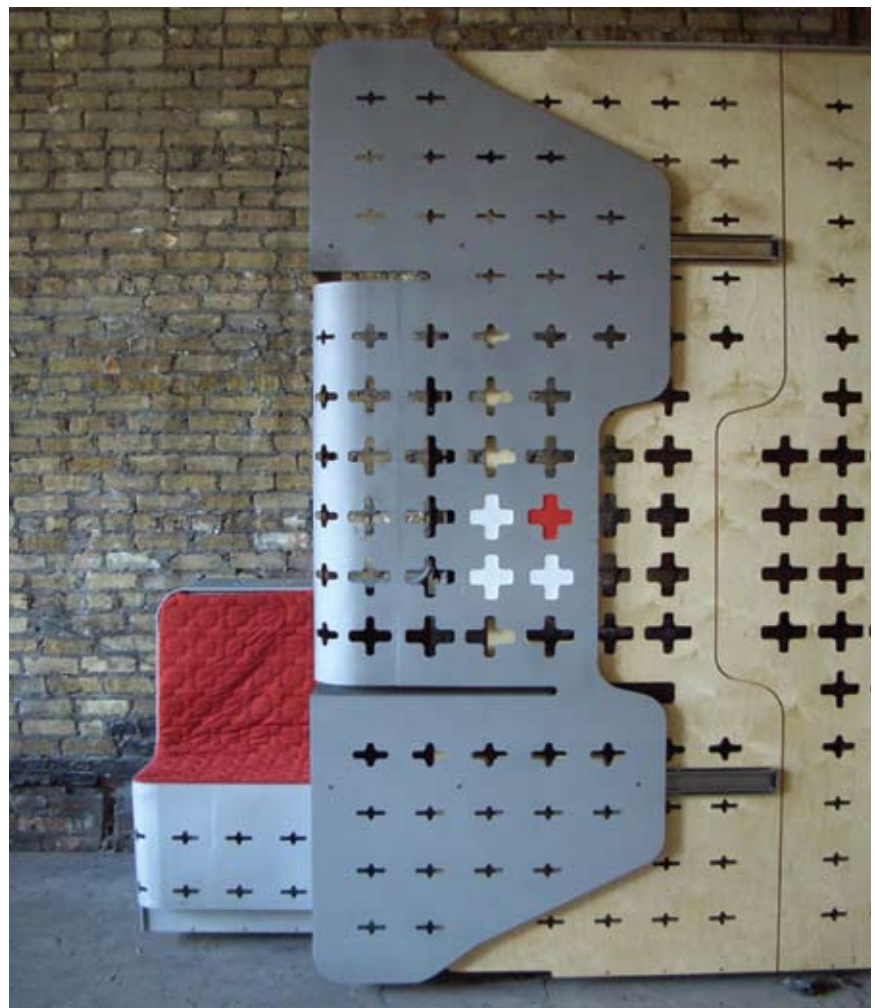
As a researcher, Swackhamer explores the relationship between performance and ornament as specifically developed through digital production and fabrication techniques. He regularly takes students on tours of fabrication shops, and has created a "DigiFab Map" of the Twin Cities with the Design Institute's Janet Abrams. The publication includes a knowledge map, an essay, and a booklet all focusing on digital fabrication shops that provide services such as laser cutting, routing, and three-dimensional printing. (The map is available at Rapson Hall.)

As part of his outreach service, Swackhamer will chair the Association for Computer-Aided Design (ACADIA) Conference in Minneapolis October 16–19. This year's conference theme is "Silicon & Skin" (<http://www.acadia.org/acadia2008/>). The theme aligns

with Swackhamer's work in biomimicry, a method that seeks sustainable solutions by emulating nature's patterns and strategies, such as a solar cell inspired by a leaf. Much of Swackhamer's work revolves around adapting to the surrounding environment. "This is collaborative and interdisciplinary work," said Swackhamer, "with input from engineers, biologists, and every field of design."

Amidst all of his work, Swackhamer's heart is in the homes he creates. He hopes to see more of his designs constructed, and will continue to seek new ways to bring together ecology, biology, and aesthetics in affordable housing for our cities.

—Lori-Anne Williams





# MARY VOGEL

## CHANGING LANDSCAPES WITH DIGITAL TOOLS

As codirector of the Center for Changing Landscapes, Mary Vogel is used to building bridges. The center, which she directs with Alan Ek, head of the Department of Forest Resources in the College of Food, Agriculture, and Natural Resource Sciences, has an ambitious and far-reaching mandate: combining research across disciplines and integrating design skills, scientific knowledge, and GIS capability;

With those objectives in mind, the Center for Changing Landscapes works with state and community officials and citizens to create useful designs to inform decision making. “The digital tools that have become available in recent years have made that work even more useful,” Vogel said.

Geographic Information Systems (GIS) has been a huge boon, particularly because of the cross-scale nature of the center’s work, which focuses on the site, district, and region both individually and as a synergistic whole. Even as the center’s work seeks to support regional vitality and identity, “the compelling things are at the site scale,” she said. By integrating all three scales, decision makers can see those connections and make more powerful, informed decisions.

Another advantage is simply the range of information GIS makes available. Before, getting accurate, up-to-date physical data—essential to good design decisions—had been problematic. “In the old days,” said Vogel, “we were lucky to get a good map from the state highway department.”

Now, designers can take all kinds of GIS information and incorporate it so the design grows almost organically from the cultural and natural characteristics of the site. For a community trail network in New Ulm, for instance, designers worked from a framework of the city’s physical site on three terraces along the Minnesota River. The trail features different kinds of trees that express the ecology of each terrace environment, as the city rises from the riverbanks to the prairie upland. GIS also revealed three different kinds of stone—Kasota stone, granite, and quartzite—in the river valley, so signature elements for the Minnesota River State Trail were designed to reflect this geology by using the appropriate stone in its naturally occurring area.

And perhaps paradoxically, digital media have allowed more widespread and effective use of drawings, a signature of the center. “Working in this digital age, we can scan and manipulate drawings,” Vogel said, to present different design alternatives, without going through the laborious and expensive process of hand drawing the entire image again.

Vogel is using digital methods as an outreach tool for the West Side Circulator Project, an innovative bus service that connects kids and after-school services in the St. Paul neighborhood. The center is using that quintessential digital communication mode—the community organization’s blog—to further involve stakeholders. Making information accessible will help link the larger community to the project’s community-inspired site designs.

—Judy Arginteanu



**The city of New Ulm’s landform is depicted to express the character of each of its three terraces. Community and site designs highlight and interpret this terrace landscape.**

**Upper Terrace**  
 –Agriculture  
 –New Housing  
 –Valley Views

**Middle Terrace**  
 –Urban Grid  
 –Historical Site  
 –Civic Centers

**Lower Terrace**  
 –River Industry & Transportation  
 –River History





# TASOULLA HADJIYANNI

## THE SOCIAL DIMENSIONS OF SECURITY SCHEMES

How do you feel when you notice a surveillance camera—comforted that you are safe or fearful that big brother is observing and monitoring your actions?

Surveillance systems, especially in the post-9/11 era, evoke both negative feelings (fear, being controlled, loss of privacy, a sense of discrimination, and cultural or gender insensitivity) and positive feelings (a sense of well-being). Tasoulla Hadjiyanni, assistant professor of interior design, and graduate student Jain Kwon, in partnership with Professor Nikos Papanikolopoulos from the Department of Computer Science, are exploring how to improve the design of electronic surveillance systems that involve cameras. They are engaging and accounting for the sensitivities of those being watched—the social dimension of security schemes.

With digital forms of communication and connection, the people involved in surveillance do not need to be in the same room to be connected; they could even be in different parts of the world, Hadjiyanni explained. “The overall question is, what role can the design fields play in devising security schemes, at a time when social relations are so greatly constructed through digital and electronic means, such as electronic surveillance?” she asked.

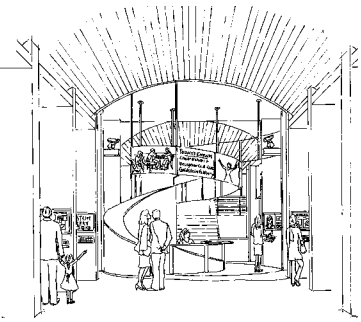
While interior design education has long included security as part of its body of knowledge, electronic surveillance systems are often treated as “add-ons, underestimated as equipment hanging from walls or hidden behind security guards’ desks,” Hadjiyanni said, primarily because they fall under the realm of engineers.

Design solutions show how cameras and video monitors can be used as connecting mechanisms—connecting people to other people and people to their environments. For example, for her undergraduate thesis, interior design student Jane Strom designed an entrance lobby for a new home for the Goldstein Museum of Design. The security cameras for the lobby capture images of visitors and project them onto screens surrounding the reception desk. Computer monitors are then used to secure the building as well as engage the viewer through interactive opportunities to photograph themselves and post their pictures on the screen, share their impressions of the museum collections, and even get to know other patrons and the facility.

Hadjiyanni presented the results of her National Science Foundation-funded research at both the Environmental Design Association’s meeting (EDRA) last May and the Interior Design Educator’s Council (IDEC) in March. She hopes to publish the present findings in the *Journal of Interior Design*. In the meantime, she started interviewing architects, interior designers, and engineers to better understand the parameters they consider in designing surveillance schemes.

If security systems are considered in the early stages of the design process, opportunities for “creative and conceptual solutions” arise, Hadjiyanni said. By reconceiving cameras, designers can participate in current debates that set the ground for rethinking what crime, threat, and fear mean. Responding to this challenge, they can help bring the humanity of their constituents back into the picture, balancing the security needs with the potential to make connections.

—Laura Weber



**Interior design student Jane Strom’s design for an entrance lobby for a new home of the Goldstein Museum of Design.**



# LAURA MUSACCHIO

## USING GIS TO INFLUENCE EMERGING URBAN LANDSCAPES

“Every little bit helps” could be Laura Musacchio’s mantra.

Musacchio, associate professor of landscape architecture, champions small parks and other often overlooked green spaces—like remnant habitats, vacant lots, wetlands, and stream corridors. Not only are there lots of them, but they also have an impact that belies their size—thanks in large part to Geographic Information Systems (GIS), which is an important tool for mapping these places.

“GIS is an important part of what I do,” she said. Because her research focuses on sustainable design and ecological cities, she is interested in new ideas regarding what nature is about, how parks change and why, and particularly in re-greening cities. “GIS can help identify potential areas to do that,” Musacchio said, and show how these small green spaces are influencing emerging new landscapes in the city.

GIS also allows her to integrate complex sets of information that in the past would have been too difficult to analyze. So beyond simply identifying the myriad green spaces dotting the urban landscape, she can now start addressing intersecting issues, such as whether a green space—beyond the obvious grass and trees—is truly green in terms of factors like supporting biodiversity. “What I’m trying to do with GIS is to flesh out in a more practical, applied way how sustainability can be measured and integrated into the design process.”

Musacchio also finds digital simulation technology a valuable tool to help show people what alternative nature—or even natures—can be. “People need different types of nature to help with their well-being, because we have different needs,” she said.

In the classroom, Musacchio emphasizes her role of educating the next generation of practitioners across various disciplines, both design and scientific. What students are excited about now, she said, is learning the differences between conventional urban landscapes and the kinds of alternative landscapes that can be designed and brought to visibility through digital imaging.

“These alternative landscapes are what landscape architects are designing a lot lately, like green roofs, greenways, and restoration projects,” she said. “They get inspired as their education transforms how they think about nature,” and they in turn can teach the public with these digital tools at their disposal, helping them answer questions, explore issues, and not only find out what’s there now, but also ask the question “What if?”

—Judy Arginteanu



**Musacchio uses GIS to identify potential sites to re-green cities, such as this wetland park she photographed in Chicago.**

# BRAD HOKANSON

## CREATING WITH DIGITAL TOOLS IN THE INTERACTIVE MEDIA CURRICULUM

Brad Hokanson, associate professor of graphic design, makes broad and deep use of digital tools in all his classes, including creative problem solving, but most especially in his interactive media courses.

Students create animations using Flash, Adobe's interactive content production software. (See student work examples at <https://wiki.umn.edu/view/DesignFlash/>.) One of the more interesting Flash-based projects Hokanson's students work on is the creation of interactive mysteries. Small teams of students create storyboards and then produce complete mystery stories in the Flash environment. Examples of these interactive mysteries are available at <http://hokanson.cdes.umn.edu/5341/mysteryExamples.html>.



Hokanson uses the University-supported Wiki environment extensively. A Wiki is a Web-based collaborative writing environment. "I'm running most of my classes through a Wiki," said Hokanson. "Students can comment and can add their Flash work directly into the Wiki." Wiki can be edited from anywhere, is interactive, and—because it doesn't require a separate interface—is easy for students to learn quickly. He publishes his class notes on the Wiki, and the students add their notes and actual work to the collaborative environment.

Hokanson's students worked this semester in Second Life, an online virtual community, using borrowed real estate within the virtual environment—in order to host events in Second Life, or to display the artifacts you create, you've got to be a land owner. And land in Second Life costs real-world dollars. So Hokanson is borrowing land in an initial test to see what can be done, educationally, within a virtual environment. He's also set up Facebook pages for his classes. Facebook is a wildly popular online social networking environment that (mostly young) people use to share information, photographs, and videos.

Hokanson learned just how popular Facebook is with students last May when he took a group of students to Argentina and tried to get them to use Skype, a computer-based voice over Internet protocol (VOIP) software program that uses the Internet to make telephone calls. "Half of the students refused!" Hokanson said. Instead, they preferred to use Facebook as a group-interactive experience. The students were using Facebook to make dinner arrangements instead of using Skype to call each other.

—Michael Fraase

## DIGITAL CONTENT LIBRARY: THE 21ST-CENTURY SLIDE LIBRARY

It's 2 a.m. and you need an image of an Eames chair for a presentation. Where do you go?

The Digital Content Library (DCL), a resource collaboratively built and shared by the College of Design (CDes) and the College of Liberal Arts (CLA), can help. The DCL enables users to search thousands of items from any Web browser across design and liberal arts disciplines, collections, and content type—image, audio, and video.

The DCL Web site ([www.dcl.umn.edu](http://www.dcl.umn.edu)) provides a single-page portal for searching multiple collections simultaneously or just a single collection. CDes collections represent the three academic departments: architecture; design, housing, and apparel; and landscape architecture. Titles and keywords are hot-linked so users can click on the words to initiate a new search returning images, video, or audio. Among the 20 liberal arts disciplines available are art history, geography, and theater arts and dance.

Thumbnail images and descriptions are available to the public, as are some larger images, depending upon collection rights and copyright. All larger images, along with audio and video, are available only to University faculty, staff, and students. Images can be used under the Fair Use provision of U.S. copyright law.

The project was initiated by the collection directors, Jodie Walz (CDes) and Rebecca Moss (CLA). Staff members from both collections played key roles in designing and implementing the online resource. The DCL collaboration has grown exponentially since its launch in August 2006, and the directors hope to expand services to all University of Minnesota campuses.

"The College of Design and the College of Liberal Arts have proven that by working together across disciplines we can create an innovative product that is greater than the sum of its parts," said Walz. "In the spirit of collaboration in the digital age a community was born, in addition to a new paradigm of collection management and development that, we hope, can be replicated at other universities."



Jodie Walz, CDes collection manager, Digital Content Library

# architecture

By **Renée Cheng**, head

Imagine sketching your dream home, or a concert hall, or a new office building. As you draw, every line becomes more than a line; the rectangle that defines the window knows how much the window costs, its energy efficiency, even where the other windows are. If you move it an inch to the left, all the other windows you've drawn know it's been moved, too.

It's not imagination. **Building Information Modeling** or BIM, the latest generation of building and design software, is a reality. And while many universities are just starting to teach

*As you draw, every line becomes more than a line; the rectangle that defines the window knows how much the window costs, its energy efficiency, even where the other windows are. If you move it an inch to the left, all the other windows you've drawn know it's been moved, too.*

it, the University of Minnesota School of Architecture has been working with it in some form since 2002, and in a concerted manner since 2005.

BIM has the potential to be a leap from previous programs, which helped speed the design process but didn't necessarily change it. BIM encourages the integration of elements such as materials with energy analyses and other data. In this way, students learn how quantitative feedback can make the design process richer and more informed. Representation becomes three-dimensional,

The School of Architecture won one of six **2008 education honor awards** from the **American Institute of Architects** (AIA). "An Incomplete Curriculum for Transformation," directed by architecture faculty Ritu Bhatt, Renée Cheng, John Comazzi, Ozayr Saloojee, and Marc Swackhamer, explores an "evolving curricular structure" that builds on tradition, embraces challenges, and expects change. The award was presented at the national AIA Convention in Boston, May 14–17, 2008.

and the data, formerly in the form of tables of numbers, is much more intuitive. The result is a model that allows students to see massing, plans, quantities, and energy behavior so they can envision many aspects of their designs. This type of design process can result in buildings that are reactive, more attuned to their settings, perhaps even more interactive with its users and more effective in energy usage.

The software clearly offers advantages for practice, providing accurate information on costs and construction. Although theoretically more information is better, a plethora of data can be overwhelming for students. The question then becomes how to carefully integrate BIM in the studio, by asking students to apply it in focused exercises and tutorials developed for specific design exercises. Most important is educating students to use BIM with a considered, thoughtful approach. To that end, the School of Architecture is committed to making a connection between digital and analog; for example, using hand sketches and models alternating with digital media. BIM continues the school's legacy of innovative, yet grounded, work.

Besides BIM, another even more futuristic scenario is taking place in the School of Architecture. Students don a headset or body suit, step into a room and step into a virtual space, generated through photos or three-dimensional models. Though only used in special classes, **virtual reality** is a true reality at the University, thanks to a collaboration between the computer science department and the School of Architecture. It's one of the few in the nation with such set-ups. [See page 10.]

Twenty-first-century students are highly attuned to the possibilities of many visualization technologies and are fluent in mixing them with analog techniques, which has created enormous opportunities; digital media allow us to test more quickly and with fewer physical limits than traditional tools. It has also, however, brought challenges at the most basic level. The risk with powerful new technologies is that they don't always deliver on all they promise, or, riskier still, become an end in themselves, rather than simply another means for rigorous exploration. In the School of Architecture we remain committed to ensuring that such technologies, whatever the media, always serve our fundamental goal of good design.



**Renée Cheng**

Photo by Peter Rad

# landscape architecture



John Koepke

**By John Koepke, head**

We at the Department of Landscape Architecture have always embraced technology cautiously. There are many benefits of integrating digital tools into a design curriculum, but there are also pitfalls, namely that technology might be used as a crutch, rather than as a helping hand. Our educational goal has always been to help students find their own design voices by building their fundamental design skills. Some technology can aid in this process, and some can overshadow it. We regularly offer seminar classes on a variety of current tools, such as HydroCAD, AutoCAD, InDesign, PowerPoint, Photoshop, Google SketchUp, Geographic Information Systems (GIS), and GIS-based support systems design: a means of facilitating effective public involvement and decision making.

But we don't want technology to take the place of creativity. It is critically important that we let design drive decisions on how to use technology, rather than making the computer a glorified clip-art tool or allowing features of a particular program to limit our designs. The core belief of the department, to use a music analogy, is not to teach students to play a particular instrument, but to help them learn how to bring together notes into a total composition. We feel that once someone knows how to write songs, they can write them for (and with) any instrument they choose.

That said, it seems there are exciting advances in technology almost every month, and the department will be incorporating several into the studios in the near future.

## FROM DEAN FISHER

I'm pleased to announce that Lance Neckar has accepted the position as head of the Department of Landscape Architecture, effective June 9, 2008. Neckar's strong leadership, great energy, and ample administrative experience, previously as the associate dean in CALA and most recently as the interim director of the Metropolitan Design Center, will prove invaluable as the department moves forward on the strategic vision it has begun to develop this past year.

I also want to thank, publicly, the terrific work that John Koepke has done as the head of landscape architecture over the last 13 years. Koepke has led the department in a period of considerable growth and change, with a wonderful calmness, steadiness, and fair-mindedness that has made him such an effective leader. He will be on an administrative leave next academic year, giving him an opportunity to advance his research and to prepare for his return to the faculty. Please join me in both congratulating Lance and thanking John for their dedication to the greater good of the department!

In architecture, for example, **Building Information Modeling (BIM)** has become an almost necessary step in the design process, especially for LEED certifications. The building site plays a critical role in several BIM factors, such as passive solar heat gain, cooling through natural shade and air currents, and water consumption. For this reason, BIM is likely to become necessary knowledge for landscape architects, and the landscape architecture department is working on ways to instruct students in this technology.

*It is critically important that we let design drive decisions on how to use technology, rather than making the computer a glorified clip-art tool or allowing features of a particular program to limit our designs.*

Significant improvements in **virtual reality** have changed the face of video games and the movies. Why not landscape architecture? Some college faculty, including Lee Anderson, Mark Swackhammer, and Renée Cheng, are experimenting with designing and evaluating designs at the Virtual Reality Lab in Walter Library through their research with the Digital Design Consortium. We hope our students will have the opportunity to try out this cutting-edge tool. The college is exploring the installation of a test unit in Rapson Hall, where students could literally walk through their designs.

We in landscape architecture feel that BIM and virtual reality are ways to bring additional resources to the wider profession of landscape architecture, both by experimenting with and refining the technologies for landscape applications, and by graduating students adept at their use. Both of these upcoming technologies will stimulate advancement, not just in design communication, but also in design itself. As it has for more than 40 years, the department will continue to teach the notes, then encourage experimentation with different instruments. We hope our landscape architecture students fall in love, not with the technology, but with the design.

# design, housing, and apparel

**By Becky Yust, head**

Computers certainly have reshaped the landscape for teaching, research, and applying what we learn to the real world, from the way designers conceptualize rooms to how they create clothes or communicate visually. Despite these massive changes since the dawn of the digital age, one thing has remained constant: the need for people with creative minds and critical thinking skills, who can generate ideas and bring them to life.

For the five disciplines in the Department of Design, Housing, and Apparel—**graphic design, clothing design, retail merchandising, interior design, and housing studies**—computers definitely have made some aspects of our work easier and more efficient. The interior designer who is working on schemes for a space can try out different approaches more quickly by using computer programs. Someone studying apparel sizing can use computer technology to more rapidly and effectively gather data on human shapes in our Human Dimensioning Lab.

*Technology is a tool—and a very handy one—for engaging in the creative process, fleshing out ideas, teaching, and conducting and communicating research.*

Computers also offer new opportunities for data analysis and research presentations. Take a project initiated by Associate Professor Jeff Crump in **housing studies**. In an analysis of subprime lending patterns, he mapped the spatial distribution of subprime loans and then overlaid foreclosure information using the layering capabilities of a Geographic Information Systems (GIS). This research illustrated the prevalence of foreclosures in communities of color in a highly visual format, research that would have been much more arduous and slow without technology. Sauman Chu, an associate professor in **graphic design**, is investigating individuals' attention to design and navigation elements of news stories on the Web by using eye-tracking technology. Her results will provide guidelines for Web site designers to determine which news story features best engage, inform, and involve their intended users.

In the field of **retail merchandising**, what used to be a painstaking process of gathering sales and market data by hand to make future projections about trends, now can happen more quickly with database programs. These software tools help students think on a macro level and easily show them the impact of buyers' decisions when extrapolated to millions of dollars of merchandise.

While computers have dramatically changed the way we teach many of our courses, some things have stayed the same. In **graphic design**, which has been broadly altered by the digital world, students still learn drawing fundamentals by hand and mix acrylic paint to study the properties and apply the theories of color perception. These students, who have used computers from a very young age, enjoy the tactile nature of manual design processes. To them the computer is just one additional medium for imparting a message or illustrating an idea.

Overall, technology has made the biggest impact in design, housing, and apparel by giving students and professors a faster way to accumulate information and put ideas on paper. Technology is a tool—and a very handy one—for engaging in the creative process, fleshing out ideas, teaching, and conducting and communicating research. But we still need the people behind the computers to think creatively, to understand and interpret the needs of individuals, to identify the problems, and to critique their own work and the work of others. The end result is knowledge that seeks to improve the human experience.



**Becky Yust**

## AWARDS

**Bill Conway** (Arch) was part of a collaborative project that received a 2008 AIA national honor award for regional and urban design. Entitled "Visioning Rail Transit in Northwest Arkansas: Lifestyles and Ecologies," the project included architects and faculty members from the University of Arkansas and Washington University in St. Louis. The award was presented at the national AIA Convention in Boston, May 14–17, 2008.

**William Angell** (Housing Studies) was presented with a dean's award from the Minnesota Extension Service as a distinguished extension campus-based faculty member. Angell received the award for his exemplary work in the field of indoor air quality.

The **Center for Changing Landscapes** has received the Minnesota Chapter of the American Society of Landscape Architects (MASLA) award of excellence for the center's work on the Minnesota River State Trail. The award of excellence is the highest award given. It was presented at the MASLA annual awards dinner April 18, 2008, at the Como Park Zoo Visitors Center.

**Denise A. Guerin** (Interior Design) has been awarded the 2007 American Society of Interior Designers (ASID) Distinguished Educator Award. Guerin's award is for her significant contribution to defining and documenting the interior design profession's body of knowledge, her coordination of the only searchable database of research on design and human behavior (InformeDesign), her work with legal regulation of interior design practice, and her research on sustainable design.

**Caren Martin** (Interior Design) has received the Interior Design

Educators Council Presidential Award for her significant contributions to the interior design profession. The award was presented at the council's international conference in Montreal on March 8, 2008. Martin's Rebuttal to the Institute for Justice's "Designing Cartels: How Industry Insiders Cut Out Competition" was cited in the nomination and will be published by the *Journal of Interior Design*, May 2008 (Vol. 33, Issue 3).

## APPOINTMENTS

**Lucy Dunne** will join the faculty as an assistant professor in clothing design/wearable technology fall semester 2008. Dunne has a PhD in computer science from University College Dublin and an MA in apparel design from Cornell University. (See profile, page 13.)

**Jean McElvain** (BS costume design '94, MArch '02) has been appointed assistant curator for the **Goldstein Museum of Design**. McElvain is a PhD candidate with an apparel emphasis and has an MArch and a BS in costume design, both from the U of M. She has five years of professional experience with Twin Cities architects and experience as a Goldstein Museum graduate assistant. McElvain will be responsible for developing learning opportunities with the museum's collection, working with faculty and scholars to research and develop a comprehensive collections plan, working with guest curators on exhibition development, and enriching the museum's community outreach.

**Eunice Haugen** has been appointed to the new position of registrar and materials library coordinator for the **Goldstein Museum of Design**. Haugen served as registrar and exhibition coordinator for the Minnesota

Museum of American Art for 17 years. Haugen will be responsible for managing collections storage and the database, coordinating exhibition installations in McNeal Hall, and developing the foundation for a future college materials library.

**Hye-Young Kim** will join the faculty of the retail merchandising program fall semester 2008. Kim is currently an assistant professor at Washington State University. She received her PhD in retail and consumer sciences with a minor in statistics from the University of Tennessee.

**Laura Musacchio** (Landscape Arch) has been invited to join the editorial board of the international scientific journal *Landscape Ecology*, where she will serve as a coordinating editor for manuscript reviews.



**Laura Musacchio**

**Kate Solomonson**

**Kate Solomonson** (Arch) will lead the design and architecture collaborative portion of Quadrant, a program formed under a \$672,000 Andrew W. Mellon Foundation award to the University of Minnesota Press and the Institute for Advanced Study. "Interdisciplinarity has become intensely important in higher education in general," Solomonson told *The Chronicle of Higher Education*. "I look at the Quadrant project as an opportunity to think about what it actually means."

**Juanjuan Wu** will join the faculty of the retail merchandising program fall semester 2008. Wu is an assistant professor at State

University of New York–Oneonta. Her PhD is from the University of Minnesota (2005), and her master's is from China Textile University.

## GRANTS

**Jonee Brigham** (Center for Sustainable Building Research—CSBR), was awarded a grant by the Green Institute to provide guideline review and tool development for the Minnesota Green New Homes Program.

**John Carmody** (CSBR) received funding from St. Paul to help make the city's development policies more environmentally friendly.

**Bill Angell** (Housing Studies) received funding from the Minnesota Department of Health to offer state training programs to help mitigate radon risks.

**Marilyn Bruin** (Housing Studies) received two awards from the Minnesota Housing Finance Agency. The first provides funding to continue the RentWise tenant training program, and the second provides outreach to Latino households in south central and southeast Minnesota.

The **Metropolitan Design Center** received a grant from the McKnight Foundation to apply architectural and landscape architectural perspectives to metropolitan and community programs and projects.

**Virajita Singh** (CSBR) received a grant from the Yackel Foundation for a seminar titled "Village Ecology: Constructing the Sacred in Vrindavan India."

**Richard Strong** (CSBR) received funding from Concordia College, Moorhead, to develop a campus sustainability plan for the college.

**Mary Vogel** (Center for Changing Landscapes) has received a grant from the McKnight Foundation to provide designs for the city's circulator buses that transport youth to after-school programs in the west side and east side St. Paul neighborhoods. She also has received a grant from Marshall to develop a citywide pedestrian and bikeway plan.

## PUBLICATIONS

**Jeff Crump** (Housing Studies) chaired the state legislature's foreclosure data committee. The final committee report is now available.

**Tom Fisher** (dean) shared an excerpt of his forthcoming book, *Architectural Design and Ethics: Tools for Survival*, in the January–February '08 issue of *Architecture Minnesota*. The book will be published in May 2008 by Elsevier/The Architectural Press. Fisher has several other recent publications. He listed his top architecture picks for the Twin Cities in *Minneapolis.org's* "Insider guide: Tom Fisher." In an op-ed piece for the *Hartford Courant*, Fisher draws parallels between a modern outlet mall—Wrentham Village outside of Boston, which Fisher refers to as a village-in-a-vacuum—and fashion trends. Finally, in *The Chronicle Review*, Fisher discusses a new book he coedited, *Designing for Designers: Lessons Learned from Schools of Architecture* (Fairchild Books, 2007). He writes that many architecture students learn the best practices of their discipline in some of the worst buildings on their campuses.

**Tom Fisher** (dean) and **Nancy Miller** (Center for World Heritage Studies) each had articles in the

November–December 2007 issue of *Architecture Minnesota*. In "A Tale of Two Bridges," Fisher writes about how "the I-35W bridge and the Guthrie Theater's 'endless bridge' reveal a shift in how we invest in our urban public spaces." Miller, in an article entitled "On the Right Track," profiles a studio course led by **William Conway** (Arch) that examines the impact a light-rail line would have on northwest Arkansas.



**Mary Vogel** **Brad Hokanson**

**Brad Hokanson** (Graphic Design) has written an article on his creativity research entitled "By Measure: Creativity in Design." It was published in the October 2007 issue of the *Journal of Industry and Higher Education*. Hokanson also has published "The Virtue of Paper: Drawing as a Means to Innovation in Instructional Design," a chapter in a book entitled *The Handbook of Visual Languages for Instructional Design: Theories and Practices* (Hershey: IGI-Global, 2007). Finally, Hokanson and MFA graduate **Bert Fraher** have published "Narrative Structure, Myth, and Cognition in Instructional Design" in the January 2008 issue of *Educational Technology*.

**Kim Johnson** (Retail Merchandising) has coauthored two journal articles published in *Clothing and Textiles Research Journal*: "The U.S. Apparel Industry: Futuring with Undergraduate Apparel Majors," October 2007, and "Dress and Human Behavior: A Review and Critique," Jan. 2008.

**Steven McCarthy** (Graphic Design) profiles his Commercial Rhetoric Art Project in the winter

2008 issue of *AIGA Issues* in an article entitled "Killing Me Softly with Great Graphic Design: the Commercial Rhetoric Art Project."

**Caren Martin** (Interior Design) is the author of *Interior Design from Practice to Profession: A History of the Profession* (2007). Published by the American Society of Interior Designers (ASID), the 56-page booklet covers the definition of interior design today, a historical view of the development of interior design as a profession, and interior design in the 21st century.

The University of Minnesota Press has published **Kristine F. Miller's** (Landscape Arch) *Designs on the Public: The Private Lives of New York's Public Spaces*. In the book, Miller examines how design influences six of New York's most important public spaces, including Times Square, Trump Tower, the IBM Atrium, and Federal Plaza.

**Nancy Miller** (Center for World Heritage Studies) has a four-part package of articles in the January/February 2008 issue of *Architecture Minnesota*. The package, entitled "Hallowed Ground," focuses on the architecture of St. John's Abbey and University in Collegeville, Minnesota. In the same issue, Miller's "Material Matters" examines the use of concrete to create rich textures and visually compelling surfaces.

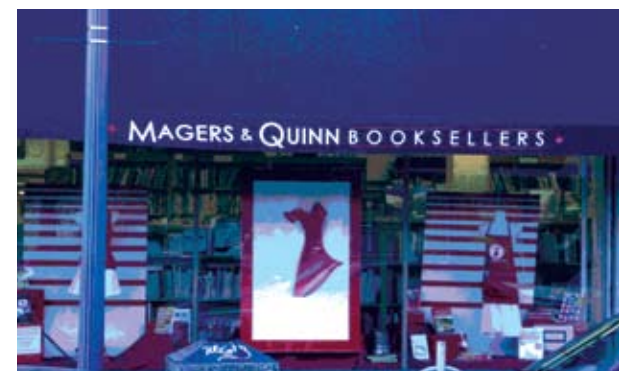
## EXHIBITIONS AND PRESENTATIONS

The **College of Design** partnered with the U.S. Green Building Council, Mississippi Headwaters Chapter, to present a forum on local green initiatives. The forum was held on November 27, 2007.

Three **College of Design** posters were accepted for the University of Minnesota's Quality Fair, which showcases quality improvement

connected to the University's Strategic Positioning Action Strategies. They are "CDesk: The design, engineering, manufacture, and marketing of a unique furnishing solution" by **Kevin Groenke** (W. L. Hall Workshop), "The Digital Content Library" by **Jodie Walz** (Digital Collections + Archives), and "Greening the College of Design—2007–08," by **Virajita Singh** (CSBR). Additionally, the Quality Fair accepted a best practices written summary by **Janet Abrams** (Design Institute) titled "Digifab: A guide to digital fabrication processes and facilities."

**Retail merchandising** students teamed up with the Uptown Business Association to decorate store windows for the month of February, a collaborative project with the American Heart Association's (AHA) "Go Red for Women" heart health awareness campaign. Under the direction of instructor **Jaeha Lee**, the students used one red dress per window combined with the store's own merchandise to attract customers and work toward AHA's goal of



wiping out heart disease—the number one killer of women.

"**Three Faculty Art Exhibition**" March 10–April 25 at the Architecture and Landscape Hall featured ceramic works by **Janet Abrams** (Design Institute), drawings by **Ozayr**



**Go Red for Women storefronts in Uptown Minneapolis.**



Emigre magazine, part of the Goldstein Museum of Design's graphic design collection

**Saloojee** (Arch), and stereotomy studies by **Benjamin Ibarra-Sevilla** (Arch).

**John Carmody** (CSBR) discusses research proving that awnings reduce home energy use in media footage available through the Professional Awning Manufacturers Association (PAMA).

**Jeff Crump** (Housing Studies) was a guest on Minnesota Public Radio's "Midmorning" show February 14, 2008. The topics were foreclosures and subprime lending, plus current federal and state initiatives to address the housing crisis.

**Gertrude Esteros** (head, Department of Design, 1949–79) is featured in *Minnesota's Greatest Generation*, a film series sponsored by the Minnesota Historical Society and local libraries.

**Tom Fisher** (dean) lectured at the University of New Mexico on January 25, 2008, as part of its School of Architecture and Planning spring lecture series. Fisher's topic was "Architectural Design and Ethics: Tools for Survival." Fisher was also a featured speaker at "Good Design Makes a Difference" on March 25, 2008, an event that kicked off the sixth season of the American Institute of Architects Minnesota and *StarTribune* Home of the Month program.

**Tom Fisher** (dean) and **John Koepke** (Landscape Arch) served as cochairs of the administrators conference, "Preparing for the Inconvenient Truth," of the Association of Collegiate Schools of Architecture and Council of Educators in Landscape Architecture. Will Steger, polar explorer, and J. Drake Hamilton, science policy director for Fresh Energy, were keynote speakers for this event, which took place on November 1, 2007, in Minneapolis. Speakers included **Kyle Brown** (Landscape Arch); **Renée Cheng** (Arch); **John Carmody** (CSBR),

**John Dwyer** (Arch), **Fisher, Mary Guzowski** (Arch), **Koepke, Laura Musacchio** (Landscape Arch), **Ozayr Saloojee** (Arch), **Marc Swackhamer** (Arch), and **Robert Sykes** (Landscape Arch).

**Steven McCarthy** (Graphic Design) gave an illustrated presentation on works from the **Goldstein Museum of Design** graphic design collection. Centered around the concept of design authorship—in which designers' roles are expanded from professional service providers to socially, culturally, and politically engaged communication initiators—the collection spans 70 years of innovation.



**Tom Fisher** **Lance Neckar**

**Lance Neckar** (Landscape Arch) discussed his research and new methods in urban planning at the Wells Event Center in Ramsey in February 2008. Neckar's address was part of the University of Minnesota Alumni Association's yearlong, statewide speakers tour.

**Lance Neckar** (Landscape Arch) and **John Carmody** (CSBR) participated in a *Conversations on Sustainability* seminar on November 29, 2007, at Coffman Union. The seminar investigated the consequences of urban living on our environment and what role cities and citizens have in achieving broader sustainability.

## STUDENTS

The fall 2007 **senior graphic design exhibition** took place on December 15, 2007, at the Ivy Arts Building in Minneapolis's Seward neighborhood. Seniors showing work included **Christina Adams, Nicholas Andreoli, Sheila Bruggeman, Kit Casey, John Dahl, Freda Duong, Christina DiMeo, Dave Hagen, Ashley Hay, Elizabeth Homer, Christine Lavarda, Jessica Lee Moore, Laura Lewis, Yao Lin, Trinh Mai, Lisa Poola, Kari Sivula, Sergey Trubetsky, Meagan VanBurkleo, and James Walz.**

Clothing design students **Gregory Clark, Abby McDonough, and Kevin Kolodziej** received second place for their project "Chef-X" in the 2007 Safety Products Student Design Challenge, sponsored by the Safety and Protective Products Division of the Industrial Fabrics Association International. The project appeared in the High Tech Fashion Show Welcome Reception on October 3, 2007.

Clothing design student **Wesley Martin**, student chair for this year's senior fashion show, was interviewed February 2, 2008, on a segment of FM107's "Shopgirls" program.

Final-year graduate students of **Lance Neckar's** (Landscape Arch) and **John Comazzi's** (Arch) studios showcased their design ideas for Ford's St. Paul assembly plant on December 12, 2007. The designs featured options such as alternative energy and fuels research and development, environmental education facilities, transit infrastructure, urban farming, and cultural and leisure landscapes.

Two housing studies graduate students presented their research at the second annual housing studies alumni gala on November 9, 2007.

**Kim Skobba** discussed housing careers of low income individuals in urban communities and how receiving housing assistance influences their housing career paths; **Marilou Cheple** discussed external panel-exterior thermal and moisture management systems as a way to build energy efficient housing for low income families. The event was sponsored by the Housing Organization of University Students (H.O.U.S.) and the CDes Alumni Office.

Architecture student **Sarah Wolbert** received a President's Student Leadership and Service Award. The award was presented at the President's Award Banquet on May 5, 2008, in Coffman Union.

## ALUMNI

**C. Colston Burrell's** (MLA '95) book *Perennial Combinations: Stunning Combinations That Make Your Garden Look Fantastic Right from the Start* (Rodale Books, 1999) has been issued in paperback. Burrell is a garden designer, writer, photographer, and the owner of Native Landscape Design and Restoration, located near Charlottesville, Virginia.

**John Carlson** (BS Housing Studies '07) recently accepted a position with Opus North Corporation. A member of the Opus Group, Opus North is a full-service design-build development firm headquartered in Chicago, serving the north central United States with an emphasis on office, industrial, retail, multifamily, government, and institutional projects.

**Amy Michielle Freeman** (BS Retail Merchandising '98) recently celebrated her fifth year in business as founder and lead designer for Soho Exchange, Inc., which offers apparel and costume design, wardrobe styling, and an online marketplace. Freeman's S.H.E. line

uses recycled materials like billboard vinyl and fur to create custom boots, rain hats, coats, and bags.

**Trenton Frick** (BArch '97, MArch '02) has taken a position with RNL, an international architecture, interiors, landscape, planning, and engineering firm in Denver, Colorado.

The University's **Undergraduate Research Opportunities Program** (UROPP) offers financial awards each semester to full-time undergraduates for research, scholarly, or creative projects undertaken in partnership with a faculty member outside of their regular course work. The spring 2008 UROPP recipients are

**Daniel Carlson**, Architecture BDA  
"To Whom Does It Concern"  
Faculty sponsor: **Leslie Van Duzer**

**Andrea Erickson**, Graphic Design  
"A Synergy of Design and Video"  
Faculty sponsor: **Brad Hokanson**

**Michael Janicki**, Architecture BS  
"A Case Study on Sustainable Suburban Infill Development"  
Faculty sponsor: **Lance Neckar**

**Alicia Liebel**, Architecture BA  
"Affordable Housing Initiatives: How Cultural Considerations Can Inform Design Innovation"  
Faculty sponsor: **Tasoulla Hadjiyanni**

**Shannon Meza**, Housing Studies  
"Affordable Housing and Development and Employer Involvement Survey"  
Faculty sponsor: **Ann Ziebarth**

**Micheal Michalak**, Architecture BDA  
"Photorealistic Imagery for Enhanced Perception in Virtual Reality"  
Faculty sponsor: **Lee Anderson**

**Melissa Norton**, Architecture BDA  
"Using Virtual Reality to Simulate Building Construction"  
Faculty sponsor: **Lee Anderson**

**Dane Steinlicht**, Architecture BDA  
"The Ice Museum: Built to Last"  
Faculty sponsor: **William Weber**

**Joel Goodman** (BArch '66) presented his article "Architectural Active Solar Energy Reflector Collector Studies" at the Solar 2008 ASES Conference in San Diego, California, in May 2008.

**Karie Johnson** (BArch '94), director of virtual construction for Adolphson & Peterson Construction, was selected as one of 40 "architectural/engineering/construction-industry superstars" in *Building Design + Construction's* third annual "40 Under 40" recognition program. She and 39 other young professionals from across the United States were chosen from 275 entrants and are featured in the January 2008 issue of the magazine.

**Cynthia Kemper** (BA Interior Design '75) was named the director of strategic development for Davis Partnership Architects, the oldest and one of the largest architecture, landscape architecture, interior design, and planning firms in Colorado.

Architectural writer and historian **Jane King Hession** (MArch '95) has coauthored *Frank Lloyd Wright in New York*, examining the period from 1954 to 1959. In 1999, King Hession coauthored *Ralph Rapson: Sixty Years of Modern Design*.

**Kevin Knudson** (BS Interior Design '86) accepted a position as workplace and communication strategist for Perkins+Will, Minneapolis. Knudson has served as a consultant or employee at Perkins+Will for 20 years.

**Scott Myller's** (BArch '93) residential project on 80 acres in Northwest Colorado was featured in the October 2007 issue of *Architectural Digest*. Myller is the founding partner of West Elevation Architects, Inc., in Steamboat Springs, Colorado.

**Patricia Olson** (BArch '83) has recently taken a position as a senior architect at Arizona State University.

**Patrick Redmond** (DHA MA '90) served as a member of AIGA Minnesota's 30th Anniversary Celebration Committee, an event that took place November 9, 2007, in Minneapolis.

**Oliver Smith** (BS Housing Studies '06) has accepted a position as a neighborhood preservation specialist in the Code Enforcement and Public Health Division for Brooklyn Park, Minnesota.

Boston's art and architecture are explored in the *AIA Guide to Boston: Contemporary Landmarks, Urban Design, Parks, and Historic Buildings and Neighborhoods* by **Michael Southworth** (BArch '65) and Susan Southworth. The book was published by Globe Pequot Press in March 2008.

**Mark Swenson** (BED '71, MArch '73) has been elected to the College of Fellows of the American Institute of Architects.

**Kevin Knudson** (B.S. Interior Design '86) accepted a position as workplace and communication strategist for Perkins+Will, Minneapolis. Knudson has served as a consultant or employee to Perkins+Will for 20 years.

## DEATHS

**Felix A. Ampah**, part-time instructor in the graphic design program, died on February 26, 2008. Ampah taught drawing classes for more than 10 years. He also owned an illustration and design studio, Alto Ampah, as well as Ampah Gallery.

**Sebastian Isola Kola-Bankole** (BArch '58) of Lagos, Nigeria, died January 5, 2007. After graduation, Kola-Bankole settled in Muscatine, Iowa, where he worked for Stanley Engineering. He returned to Nigeria in October 1960, where he worked for the Federal Ministry of Works

and Ekwueme & Associates, both in Lagos. From 1970 to 1989, he was principal partner of Kola-Bankole & Associates. Some of his primary works include the Stanley Engineering-Presidential Executive Mansion (Monrovia, Republic of Liberia), the Johnson Wax offices and factory (1978–82), and the Commerce House (Lagos, 1983). Kola-Bankole was part of the first generation of Nigerian architects and played an active role in his profession. He was named a fellow by the Nigerian Institute of Architects, served as a founding member of the Nigerian Institute of Architects, and received the Aga Khan for Architecture Award from the Kingdom of Jordan in 1980.



**Sebastian Isola Kola-Bankole**

**Eleanor Kron** (BS '39 CHE-Related Art) died in January 2008, just short of her 90th birthday. She was a supporter of the Goldstein Museum of Design.

**Brian F. Schroder** died on January 6, 2008. Schroder studied architecture at the University from 1974 to 1981. He had a lifelong passion for architecture and design, most recently reflected through his employment at the BKV Group.

**ALUMNI**  
SEND  
YOUR NEWS TO  
[cdescomm@umn.edu](mailto:cdescomm@umn.edu).

# DONORS' GIFTS PROVIDE SUSTAINED SUPPORT



**Jan Sickbert**  
Director of Development

A number of alumni and friends have made significant gifts to the college to establish endowments, which are permanent funds that support students through scholarships, fellowships, or other programs. In many cases these gifts are matched by University programs, doubling their impact. Thank you, donors!

## **FREDERICK BENTZ, BArch '48, MINNEAPOLIS**

A \$100,000 gift, which will be matched by the University's 21st-Century Fund, will establish a fellowship to support professional degree students in architecture. Bentz, a fellow of the American Institute of Architects, received the AIA Minnesota Gold Medal in 1996. He took advantage of the provision in the Pension Protection Act of 2006, which allowed donors aged 70-½ years or older to realize special tax savings while making contributions to the University. This provision may continue if Congress renews the Pension Protection Act. Frederick and Ann Bentz also have a studio space in their name in Rapson Hall, and Ann has supported the Minnesota Landscape Arboretum with a gift for the Ravine Bridge.

## **BWBR, ST. PAUL**

The architecture firm BWBR has established an endowment to support professional degree architecture students through a \$25,000 pledge, which will be matched through the University's 21st-Century Fund. Steve Patrick, BArch '76, is CEO of BWBR and serves as AIA Minnesota president in 2008.

## **STANLEY MOE, BArch '36, LOS ANGELES**

Stanley added to the Moe Scholarship Fund with an \$88,000 gift. The fund benefits professional degree students in architecture. Moe, a 1936 BArch grad, held leadership positions in the firm Daniel Mann Johnson and Mendenhall, and Doris Moe, who died in 2000, was a 1937 BArch grad.

## **BILL, BArch '61, AND**

## **ELIZABETH PEDERSEN, NEW YORK**

Bill and Elizabeth have added to the fellowship endowment in their names with a \$10,000 gift. Bill is a principal at Kohn, Pedersen, Fox of New York, and a trustee of the University of Minnesota Foundation.

## **PICKARD CHILTON, NEW HAVEN, CONNECTICUT**

The architecture firm Pickard Chilton has pledged an additional \$80,000 to support the Design Democracy Fellowship in Architecture, bringing their overall gift for the fund to \$100,000. William Chilton, MArch '80, is a principal of Pickard Chilton and is a member of the College of Design Advisory Board.

## **GARY TUSHIE, BED, BLA '77, TUSHIE-MONTGOMERY, RICHFIELD**

Gary added to the Jo Tushie Fellowship in Landscape Architecture with a \$25,000 gift.

## **EXISTING FUNDS GROW THROUGH NEW GIFTS**

The college has received meaningful gifts, which were added to the following funds: the Girard K. Gray Fellowship in Architecture and Landscape Architecture; the Sam Druy Scholarship in Retail Merchandising; the George G. Gorbatenko, Jr., Memorial Fellowship; the Steven R. Andrews Fellowship in Landscape Architecture; the Design Democracy Fellowship; the Sandy Ritter Fellowship, and the KKE-Ron Krank Vision Award.

## **ESTATE GIFTS BENEFIT STUDENTS**

Several alumni who passed away recently included the college in their wills.

## **SAUL PARNES, BA Arch '36**

An estate gift of \$68,000 will support an endowed scholarship fund to benefit architecture students. Parness, of Sacramento, California, died in November 2007.

## **RUTH CARTER WARMINGTON, BS Arch '29**

Her estate funded a scholarship in the College of Design. In her memoirs she writes fondly of a trip to Europe and the tour of Paris led by Professor Leon Arnal. Her husband, Carl F. Warmington, also a University of Minnesota graduate, funded programs in the School of Social Work and the Carlson School of Management. Ruth, who died in 2002, and Carl, who died in 2006, lived in Bradenton, Florida.

# THE COLLEGE OF DESIGN ADVISORY BOARD

By *Lori-Anne Williams*

*The College of Design's Advisory Board works with Dean Fisher to review the relationship of CDes to the design community. Each member of the advisory board has been selected because of his or her expertise and relationship to the college, its students, and alumni. The board meets several times a year to look broadly at the scope and direction of College of Design programs. We asked two of our board members about the impact of digital design trends on their professions.*

## **BOB WORRELL, PRESIDENT AND CEO, WORRELL, INC.**

According to Bob Worrell, "Design—combined with technology innovation—is the only true way to differentiate a product from its competition." He would know from experience. Since Bob Worrell opened shop 30 years ago, his eponymous company has experienced a rich history of growth and design innovation.

Worrell, Inc., is a nationally recognized, world-class product innovation and design consultancy that helps Fortune 100 companies and venture start-ups alike "innovate out of the middle" to establish durable brands and loyal customers. It focuses on strategic issues related to the development and integration of technology, competitive advantage, and brand promise in a company's product lines. Over the past few years the company has experienced tremendous growth, relocating to an amazing new design campus in Northeast Minneapolis and infusing the design team with fresh, exciting talent.

Worrell said that in designing anything, from computer accessories to a modern baby buggy, the focus is on the customer and how the product will enhance the lives of users. Familiar Worrell designs include the X-Sled for Hammerhead, earphones for Plantronics, and a brewed iced tea machine for Lipton. Other clients include Jacuzzi, Guidant, and Hutchinson Technology.

As the only industrial designer on the College of Design Advisory Board, Worrell, a graduate of Purdue University, looks for collaboration among the design disciplines to bring industrial and product design to the college. He said he expects a high level of competency and expertise in digital design from even the newest employees. "We value the other softer skills such as form generation, design organization abilities, ability to communicate ideas to us and our clients, and other abilities related to owning revenue stream and creating relationships with our clients."

Through deeper client relationships and an expanding stable of new ventures, Worrell continues to pave the way for sustainable success.



**Bob Worrell**



**Worrell designer Dan Clements reimagines the classic carriage stroller with the Wiegen buggy (Wiegen is German for cradle).**

*Photos courtesy Worrell, Inc.*



## TIM LARSEN, PRESIDENT AND FOUNDER, LARSEN



**Tim Larsen**

Tim Larsen runs Larsen, a graphic design company providing branding, design marketing, interactive, and environmental graphics services. Larsen currently employs 50 people in Minneapolis, with 7 more in the San Francisco (Silicon Valley) area. The company,

which was started in 1975, has been involved in digital design for more than 15 years and has been a leader in the field.

Digital design has permeated all facets of Larsen's work. Among the changes Larsen sees ahead is the infusion of video game graphics and sensibility into everyday life. "We're already seeing video game-type graphics in commercials," Larsen said, "and we'll see video game technology in training and education" in years to come.

Larsen, an early proponent for creating the College of Design, believes in the potential of the new college. He said, "The concept is dead-on. This is great for the students and for the state. We have the potential to create a world-class design school at the University of Minnesota." Larsen is a graduate of Minnesota State University Moorhead.

Larsen's company works with a wide range of clients, each with its own vision, needs, and constraints. Clients include the Minneapolis Public Library, Microsoft Business Solutions, Wausau Paper, and the Minneapolis Park District.

Larsen looks for four qualities in prospective employees: talent—the applicant must already possess this, both innately and through education at CDes or another program; personality—the person must be able to engage with clients and colleagues and to add to the richness of the firm; craftsmanship—the potential employee must have an intelligence about precision and detail and work must be clean and organized; and technology expertise—individuals must have a passion for technology and a fearless approach to making what's new work as a tool that produces results for the client.



**Minneapolis communication design firm Larsen provides design expertise for (clockwise, from above) consumer product packaging (Target iFix), wayfinding (Minneapolis Public Library), and Web site design (Litho Inc.)**

*Photos courtesy Larsen*



# ALUMNI

## GET INVOLVED—

### Thank you, mentors!

Check out our list of mentors and their employers for 2007–08 at [design.umn.edu/mentor](http://design.umn.edu/mentor), and while you're there, sign up to mentor a student in 2008–09. Applications open online in May. The program runs from October through April. Questions? Contact Lucy Reile, mentor program coordinator, at 612-624-1245 or [lrreile@umn.edu](mailto:lrreile@umn.edu).

## STAY CONNECTED—

### New alumni e-newsletter

13,100 alumni, but only 4,500 e-mail addresses—stay in the loop, send us your e-mail address.



A lot is happening at the college and University. But it isn't always possible or even desirable to send print mailings about all of the things you might be interested in. Whether it's a podcast of a great lecture, news about your program, or an invitation to a gathering in your area, we'd like to

keep you in the loop. If you did not receive our March edition of the alumni e-newsletter, reDESIGN, we want to hear from you. Send your e-mail address to Anne Schultz at [schultz@umn.edu](mailto:schultz@umn.edu) and ask to be added to our alumni e-mail list.

Three times each year, reDESIGN is e-mailed to alumni to keep our friends informed about local and national events and opportunities at the college and University. To see the last two editions of reDESIGN and other college publications, go to [http://www.design.umn.edu/alumni\\_friends/connect/](http://www.design.umn.edu/alumni_friends/connect/).

## GROW PROFESSIONALLY—

### Split Rock Arts Program

June 15–August 1

The Split Rock Arts Program is the University's series of weeklong workshops in creative writing, visual art, and design. Held on the Twin Cities campus and at the Cloquet Forestry Center, the 25-year-old program is popular because of its promise of intensive study with outstanding artists and writers from around the world.

Instructors for 2008 include graphic design faculty James Boyd-Brent and Carol Waldron as well as Gerald Allan, James Bailey, Doug Beasley, Anna Carlson, Cheng-Khee Chee, Jane Dunnewold, Jan Spivey Gilchrist, Chad Alice Hagen, Ana Lisa Hedstrom, Tracy Krumm, Patricia Mink, Rosae Reeder, Karen Searle, Mary Ruth Smith, and more.

Graduate and undergraduate credit and scholarships available. Scholarship deadline is May 5, 2008. Register online at [www.cce.umn.edu/splitrockarts](http://www.cce.umn.edu/splitrockarts) or call 612-625-1976.

*“Clothing in Context, Fashion in Place,” and “The Stitched Mark: Building a Visual Language,” are 2 of the more than 40 workshops available at this year’s Split Rock Arts Program.*





**Jerry Mayberg (BArch '76), RSP Architects Ltd., (top) and Ed Kodet (MArch '69), Kodet Architectural Group, (bottom) interact with students at the Architecture, Interior Design, and Landscape Architecture Career Fair on March 3.**



**Above: Housing studies students touring the Archive Condominiums in Minneapolis, March 2006.**

**Top right: Housing studies students Nicholas Wall and Shannon Meza on tour of Children's Village Center operated by Hope Community, March 2007.**

**Right: Alumni Jay Chestnut and Jason Christaansen (both MArch '06) at November's College of Design reception, AIA Minnesota convention, Minneapolis Convention Center.**

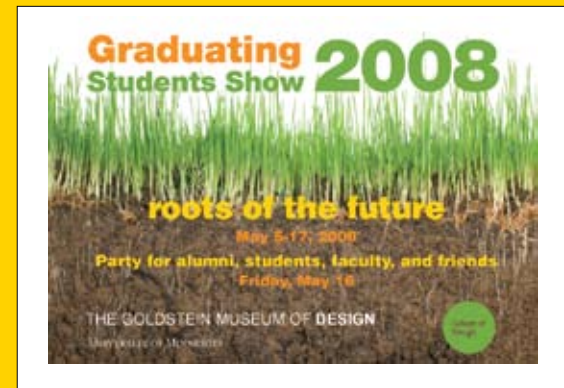
## CAREER FAIR ATTRACTS STUDENTS AND ALUMNI

The 2008 Architecture, Interior Design, and Landscape Architecture Career Fair attracted 225 students and 41 employers and organizations from across the country on March 3 at Coffman Memorial Union. More than 50 alumni and other professionals representing employers attended. Another 35 graduates from the classes of 2005 through 2007 registered to attend as job seekers. Cosponsored by the Design Student and Alumni Board (DSAB) and CDes Student Services, this annual event is part of the ongoing effort to enhance the student experience and support the transition from college to career. Funding for DSAB and college-to-career activities comes from student fees, student services, and college alumni society membership. To learn more about the career fair or to participate in 2009, contact Kim Hindbjorgen, khindbjo@umn.edu. To support college-to-career programs, join the alumni society or volunteer: [http://www.design.umn.edu/alumni\\_friends/join/](http://www.design.umn.edu/alumni_friends/join/)



## NEW GRADS EXHIBITION PARTY

Join alumni, faculty, and friends as we present work by our newest graduates at the exhibition party for "Roots of the Future" on Friday, May 16, 6:30–8:30 p.m., in Rapson Hall. Hors d'oeuvres, drinks, and music will be provided. Watch your mail for details or call Lori Mollberg, 612-625-8796.



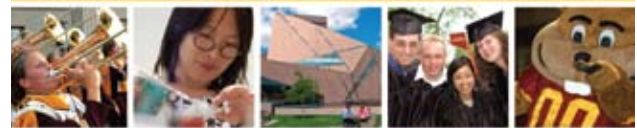
## JOIN THE COLLEGE OF DESIGN ALUMNI SOCIETY

The College of Design Alumni Society has grown to nearly 1,700 members since the college was formed. Membership in the society supports mentoring, career fairs, firm tours, portfolio events, and other activities that enhance the student experience and support the transition from college to career. When you join the University of Minnesota Alumni Association (UMAA), choose Design as your preferred society and you'll become a member of both.



UNIVERSITY OF MINNESOTA  
ALUMNI ASSOCIATION

Join the University of Minnesota Alumni Association and the College of Design Alumni Society to support the outstanding teaching and breakthrough discovery that happens at the U every single day. Your membership will help make the College and the University stronger.



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*and now for something completely different...*



*James Boyd-Brent (left) with the Ostrander Seymour iron hand press, part of the graphic design program's new letterpress and polymer plate studio. Above and bottom, some of the 50 cases of lead type currently on hand.*

## **LETTERPRESS BRINGS THE DIGITS BACK INTO THE DIGITAL**

*By James Boyd-Brent*

The graphic design program has just opened a letterpress and polymer plate studio—acquired recently from publisher Greg Britton—next door to the Surface Design Studio in McNeal Hall. We have 50 cases of lead type (but we're looking for more!) and a Vandercook SP-15 cylinder press, a Vandercook proofing press, and an Ostrander Seymour iron hand press, circa 1896.

The reintroduction of this predigital design technology into our curriculum reflects our program's belief in the continuing value of the handmade in the design process. Contemporary design practice and design thinking continues to draw on the influence of the endlessly engaging possibility and surprise of the handmade in our lives.

Polymer plate printing—digital text or image files are made into plates that can be hand printed like letterpress—allows design students to work back and forth between digital and nondigital design. In letterpress printing, all the senses participate in the

design process: the sight of the letterforms, the hand cranking of the press, the texture of the paper, the hissing sound of the ink on the rollers, even the smell of the ink. Students can experience the direct feel of how the point size of their lead type literally affects the gravity of their typographic design.

Far from being anachronistic, nondigital design processes are central in the world of digital design. Letterpress brings the digits back into the digital.

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### **College of Design**

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