Innovative partnership
Collaborative design studio develops post-flood concepts for Missouri River
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Two great universities. Two great states. One great river.

That’s the vision of a year-long, studio-based collaboration between the landscape architecture programs at Iowa State University and the University of Nebraska-Lincoln, coordinated by interdisciplinary design firm Sasaki Associates and sponsored by Back to the River, a nonprofit advocacy organization based in the Omaha-Council Bluffs metropolitan area.

This unusual partnering was spurred by unprecedented flooding of the Missouri River in 2011, which submerged areas of Nebraska and Iowa for more than 100 days.

“Riparian areas and wetlands, all the natural foliage and fauna that had developed for 50 years undisturbed except for occasional small floods, were under water for months,” said Larry Foster, director of the Council Bluffs Department of Parks, Recreation and Public Property and president of Back to the River.

“As cities on both sides of the river moved past fighting the flood, the conversation focused on what would happen to areas that for so long had been used a certain way,” Foster explained.

“Sasaki had been working in Council Bluffs on the Tom Hanafan River’s Edge Park project, so I asked Gina [Ford, principal with Sasaki] how we could begin to analyze where we are today compared to where we were before the flood, with a renewed focus on the riverfront both in Iowa and in Nebraska.”

Making connections
Ford, who specializes in post-flood analysis, prevention and mitigation, was in a unique position to connect all the players.

In addition to working with Foster on the Council Bluffs riverfront project, she was part of the team that won the 2011 Des Moines Water Works “Parkitecture” competition, which was co-developed with Carl Rogers, ISU associate professor of landscape architecture. And last spring, Ford taught an urban design studio and seminar as the Hyde Chair of Excellence in the University of Nebraska-Lincoln College of Architecture.

“Larry and I spent a lot of time together talking about the river and the impact of this major flood event,” Ford said. “He was concerned that no one was thinking holistically about the post-flood river landscape.”

Ford secured the commitment of Rogers and Sarah Karle, professor of landscape architecture at UNL, and together with Foster they formed a steering committee with community leaders and other stakeholders. The group developed a study structure involving a spring 2013 option studio at Iowa State and a fall 2013 community design studio at UNL.

The study area comprises about 60 miles of the Missouri River from Soldier Bend Wildlife Area at Mondamin, Iowa, to its confluence with the Platte River at Plattsmouth, Neb. This includes the Omaha-Council Bluffs metropolitan area and a range of agricultural, industrial, urban and wilderness areas.

Rogers and landscape architecture graduate assistant Henry Narigon, Minneapolis, Minn., collected basic data on the area last fall. This spring, 10 architecture and landscape architecture students in Rogers’ innovation option studio conducted site visits and an aerial survey, met with steering committee members and studied precedents to help classify post-flood activity.
“Members of Back to the River have worked with the river their entire professional lives,” Narigon said. “It was daunting at first to imagine how we could develop something that’s new or significant. Ideally our fresh look would bring forth something they haven’t thought of or didn’t have the ability to explore more fully.”

From its research, the class created regional frameworks to assess the potential of different sites to achieve flood mitigation, redevelopment or new development, and increased use and awareness of the river. Individually or in two-person teams, students then generated ideas to test the frameworks’ validity.

“It was up to us to narrow the scope and determine our own project sites and goals and ways we would evaluate our projects,” Narigon said. “This made it difficult but also very rewarding.”

Islands, apps and earthworks
In the past, the Missouri River has been channelized and maintained at a specific width and depth by the U.S. Army Corps of Engineers. Narigon looked at natural mechanisms like the formation of sandbars and islands, increased shoreline and backwater areas, which reduce the river’s velocity, accommodate flooding, provide greater recreational opportunities and increase habitat.

He proposed a hybrid channel concept similar to adding a carpool lane on the interstate: one part of the river would remain a fast-flowing, managed channel for commercial purposes like shipping, and the other would be a braided or meandered system with a slower current and wetlands. He also explored the creation of artificial floating islands that could serve as outdoor classrooms for area schools or as public art installations and recreational destinations.

Jacob Wilson, graduating senior in landscape architecture from Lenox, Iowa, developed a mobile app to provide convenient access to maps and information for a wide range of potential users—hunters, anglers, boaters, hikers, bicyclists, birdwatchers, etc.

For example, it could provide access to weather reports, sunrise and sunset tables, river levels, trail conditions, hunting and fishing regulations or wildlife identification tools. It could include an event calendar and links to organizations like Back to the River.

“The app is intended for both those who interact with the river on a regular basis and those with limited experience,” Wilson said. “It also allows users to upload and share new data.”

Graduating seniors Justin Holinger, Geneva, Ill., and Yue Zhao, Kunming, China, chose to examine land use along one of the Missouri River’s branches in Nebraska and how to increase access to and interaction with the river while reducing flooding’s impact.

Zhao and Holinger proposed a system of terraces and earthworks to mitigate flooding, recycle sand and debris deposits, and enhance recreational spaces and river access in the residential and industrial areas; create an ecological buffer to reduce soil loss and pollution from runoff in the agricultural area, and expand habitat through artificial wetlands and native vegetation to increase diversity in the wilderness area.

“Our work provides a guide to the next studio to apply the framework to a specific site and design project. It’s up to the next class to actually develop projects for specific sites and purposes,” Zhao said.

A new set of eyes
In late February the class visited Sasaki’s Massachusetts office and presented its preliminary concepts to Ford and her colleagues. In May, students shared their final analyses and proposals with Foster and Gayle Malmquist, past president of Back to the River.

“We’ve all lived along the Missouri River and know there have been countless studies since the flood of 1952. These students brought a whole new set of eyes to examine the issues with none of the preconceptions we may maintain,” Malmquist said.

Over the summer, Rogers and Narigon will package the results of the spring studio for Karle and her students at UNL, who will use the frameworks and examples as tools to conduct focus groups, obtain feedback and work with communities along the river to develop strategies for specific sites.

“The ISU-UNL collaboration is a super catalyst for conversation about reflection and planning for landscape change. It serves as a model for how new partnerships form and how we might think more proactively,” Ford said.
Top horror-fantasy artist illuminates the human condition

While Brad Pitt fans eagerly await the release of the zombie movie “World War Z” this summer, fans of fantasy art await the release of a limited edition of the Max Brooks book on which the movie is based, with cover art and illustrations by Jeremy Caniglia.

Though Caniglia (BFA 1993 Drawing, Painting and Printmaking) may not claim the same following as Pitt, he is a celebrity in his own right, having created original artwork to accompany the stories, poetry and novels of such acclaimed authors as Stephen King, F. Paul Wilson, William Peter Blatty and Douglas Clegg.

Brooks approached Caniglia last year.

“When World War Z was first published in 2006, the cover was just a ‘Z,’” Caniglia explained.

For the new cover, Brooks sought something other than the “typical zombie,” so Caniglia painted a screaming, skeletal corpse with a narrow halo of light above it—a soul caught between heaven and hell,” he said—exactly what the author wanted.

“My work for the book is a combination of traditional and contemporary, with visceral brush strokes, modernist pulling and dripping, and gold leaf. I really believe that without my background at Iowa State, I wouldn’t have been able to make this piece.”

An artist through and through

Caniglia was nominated in 2003 for the International Horror Guild Award for best artist and won the prestigious award in 2004. In 2005 he was nominated for a World Fantasy Award for best artist. So it may surprise some to know he started out thinking he’d be a graphic designer.

“I was taking graphic design foundations classes when one of my professors saw that my work was totally different from the other students’. She looked at my paintings and said ‘you’re an artist through and through.’”

That professor shared Caniglia’s portfolio with Brenda Jones, who teaches in what is now the integrated studio arts department. Jones encouraged Caniglia to study fine art instead.

“Brenda gave me a stack of books to read to learn about art history and how it related to my work. I’d finish one set and she’d hand me another. She introduced me to the Old Masters and to modern artists and techniques,” Caniglia said. “She showed me that art was a gift in life and with discipline, perseverance and reverence, I could make it my own.”

When he completed his BFA degree, Caniglia received a full scholarship to study with abstract expressionist Grace Hartigan at Maryland Institute College of Art, and returned to his hometown of Omaha, Neb., after completing his MFA in 1995.

Word of mouth

As a young artist, Caniglia exhibited his work at galleries “willing to show fantasy, surrealism and art that dealt with the human condition,” he said. At the same time, he took HTML classes and created his own website, which allowed him to reach a wide range of potential clients.
“By 2000 I had the equivalent of a blog,” he said. “Douglas Clegg [bestselling author of fantasy and horror novels] found it, contacted me and said he wanted to buy the rights to put my work on his book cover.”

Clegg has since called upon Caniglia for a half dozen covers for his novels, such as Breeder, The Wicked and Neverland.

Clegg’s publisher, Cemetery Dance Publications—a specialty press that focuses on horror and suspense—offered Caniglia additional projects, including The Devil’s Wine, a collection of poetry by Stephen King, Ray Bradbury, Peter Straub and other established authors.

From there, the power of Caniglia’s art spread by word of mouth, leading to more book projects, magazine art and CD covers. In 2004, he was approached by a representative of IDT Entertainment, the owner of Anchor Bay, Showtime and other smaller companies.

“IDT asked for a skeleton painted in my style and said, ‘If we like it, we’ll tell you what the project is about.’”

IDT did like it, and hired Caniglia as the conceptual artist for its Masters of Horror series on Showtime. The program brought together some of the greatest writers and directors of modern horror films—John Carpenter and Tobe Hooper among them—to compose one-hour movies. The movies later were released on DVD with collector cards with artwork by Caniglia. He also did the packaging art for the DVD release in Japan, which spawned a graphic novel.

**Disturbing but beautiful**

Much as the World War Z project unfolded, William Peter Blatty sought Caniglia out for his 40th anniversary edition of The Exorcist, published in 2012.

“I was only required to do five illustrations, but I was so engrossed in the project, I wound up doing 13,” Caniglia said. “Blatty was blown away.”

The hardcover limited edition, featuring Caniglia’s “disturbing but beautiful” cover painting of the demon-possessed Regan MacNeil, sold out in 30 hours. Later this year, Warner Brothers will release a 40th anniversary Blu-ray version of the 1973 movie with a new documentary featuring 20 images by Caniglia.

And Blatty was so pleased, he asked Caniglia to produce artwork for a new edition of Legion, the followup to The Exorcist.

**Hope and enlightenment**

Although Caniglia has made a name for himself in the horror genre, he also does a great deal of fantasy art and portraiture.

Caniglia’s latest project—a 170th anniversary edition of Charles Dickens’ A Christmas Carol to be published by Easton Press in December—brings him back to the traditional classical painting and illustration he studied at Iowa State.

“Easton wanted a realist vision of what Dickens was trying to say about the plight of the poor,” Caniglia said. “I re-read the story and found it so intense that I did 25 initial sketches,” many of which portrayed scenes no other artist has chosen to illustrate.

“When Tiny Tim passes away, his body is kept upstairs in his bedroom. I did a picture of Bob Cratchit beside the bed holding his son’s lifeless body. It is a very powerful and emotional piece,” Caniglia said.

Regardless of the project or genre, “I always see it as being about the human condition,” Caniglia said.

“If there’s no redemptive quality in it, I won’t take the project. I look for points of hope and enlightenment in the things I illustrate.”
David Ringholz was searching for a project idea for an Iowa State industrial design graduate class he teaches when he heard a startling story on the radio: Tractor fatalities had reached epidemic rates. That was in the fall of 2011.

This spring, Ringholz and his team unveiled the prototype of a device that addresses two aspects of tractor rollover fatalities: warning and response time. It’s an amazingly simple product design that could save hundreds of lives in Iowa alone.

The team developed a tractor-mounted instrument that can warn operators of impending danger and also alert family members and emergency personnel of a rollover when it happens. If the operator is unconscious or unable to reach a cell phone, help can still be summoned quickly.

“I couldn’t believe this product didn’t already exist. Now it does, and that’s ridiculously exciting,” said Ringholz, an associate professor and chair of the industrial design department.

Current events to design studio
The radio story that sparked the project was a public health bulletin from a University of Iowa College of Public Health study of tractor accidents. Ringholz sought out Kelley Donham, director of that university’s Center for Agricultural Safety and Health, who was enthusiastic about getting people from design involved, “but we’re not 100 percent sure how you’re going to deal with this problem,” he said.

To “unpack the problem,” Ringholz and his students first completed an extensive literature review of research on tractor accidents and safety systems, and conducted interviews with key ag safety experts, researchers and ISU Extension and Outreach specialists. Jamie Horwitz, an associate professor of industrial design with expertise in the psychology of design, also joined the project to help students examine the behavioral context of rollover accidents.

“As far as I know, we are the first industrial designers to look at this problem,” Ringholz said. “All previous research we encountered was from public health, ag safety and policy perspectives. Designers are looking at other ag safety issues—like air quality—but none have looked at tractor rollover safety.”

Complex issues
Although tractors built after 1985 are well equipped with rollover safety devices, the older ones are not. And, as the class discovered, the oldest tractors are used for the most rollover-prone activities—routine chores.

“They’re pulling stumps, driving fencepost, mowing—basically the most dangerous jobs. Over and over we saw trained operators, people with decades of experience, getting into these rollover situations,” Ringholz said.

They concluded that tractor safety is as much a behavioral issue as it is a design issue. For example, they considered why farmers perceive risk so differently from others, and what makes them do things that others find dangerous.

They also discovered that rollover protection systems added to older tractor models are 99 percent effective when used properly. But the systems aren’t used.
“There are lots of analogous safety products—like seat belts, life jackets and helmets—where a technology exists, but people choose not to use it,” he said. “So that gap is an opportunity to investigate why safety devices aren’t used. We found it’s actually a very complex story.”

**Two lines of attack**

At the end of the fall 2011 semester, the class had selected two strategies to carry forward. One would examine how to increase the likelihood that people would buy, properly install and correctly use rollover protection systems.

The second strategy would investigate how to reduce the amount of time between occurrence and discovery of a rollover accident. Tractor operators regularly work in remote areas for long periods of time. The class surmised that many deaths could be prevented if first responders were notified of the accident much sooner. And that opened possibilities for “some very concrete design opportunities” to explore.

John Pritchard, Sioux City, Iowa, a doctoral candidate in electrical and computer engineering, joined the team to help develop the device prototype. The device monitors tractor position with an orientation sensor, and a visual indicator flashes to alert the operator of a dangerous angle; the device also sends out a signal in the event of a rollover. Using cellular technology, data are sent to a relay station that locates the tractor on a map and notifies EMS and family members.

The current transmitter range is 40 miles; if satellite technology is also used, the alert can be sent to “anyone, anywhere.”

Ringholz and Pritchard demonstrated the prototype for state lawmakers at ISU Day at the Capitol in Des Moines at the end of February.

“A decade or two ago, this might not have worked, or it would have been much bulkier and more complicated,” Pritchard said. “Cell phone technology and advanced electronics have made this more feasible. It’s really exciting.”

**ROP Squad**

While the prototype accomplishes one strategy proposed by Ringholz’s class, the other—getting people to use the safety device—required an “advanced design thinking” technique known as a service design. A service design model includes every element and touch point in a system that addresses a problem too complex for a single solution.

The class came up with the idea of a community-based service similar to a volunteer fire department. They envisioned a kind of Rollover Protection Squad to provide information, training and outreach on tractor rollover safety devices for specific pre-1985 tractor models. All they lacked was access to the community of tractor operators.

The University of Iowa’s Donham connected Ringholz’s team to just the right people at the Rural Health and Safety Clinic of Greater Johnson County. They address issues like tractor safety through outreach and training intended to improve the adoption of farm safety technology.

“Farming is still the most dangerous job, and many opportunities exist for applied industrial design,” Ringholz said. “Our primary goal is fatality prevention. We’d give these away if people would use them. But if there is a viable community business model for this, we have the responsibility to do that.”

**Moving forward**

The next step is field testing and fine tuning the prototype. The team spent this semester developing “version 2.0,” which is “smaller, faster, cheaper and more versatile,” Pritchard said. They’ll have a chance to field test the new unit in June at a tractor rollover extrication training day the clinic organized with eastern Iowa fire departments.

Industrial design graduate students Michael Tschampl and Mitchell Hinrichsen, both of Sioux City, are working on the design of the device enclosure, exploring different types of visual and auditory warning indicators and trying to determine where and how to mount the device on a tractor.

“It’s tricky because there are so many different tractor sizes, shapes and designs,” Tschampl said. “We need to find the most universal application.”

The team will continue to refine and test the prototype. They’ll also complete intellectual property protection, address liability issues, determine production and distribution, and identify future funding sources.

“Each layer of the warning device can be swapped out to update the technology. One layer controls the power supply for a GPS unit, 3-D orientation sensor and long-range radio transmitter.”
What started as a school project for her cognitively disabled son has turned into a career focus for one Iowa State University graphic design professor.

Debra Satterfield’s teenage son, John, has epilepsy and an autism spectrum disorder. A few years ago, when his school assigned a project from a list of suggestions, Satterfield decided to have John try painting. Not only did he enjoy it, he became engrossed in it. He approached it purposefully. And he was good at it. One of his paintings won a prize at the Iowa State Fair—and none of the judges knew the artist was disabled.

“It was eye opening to me. I had never even thought to give him a chance. When I look at these paintings I see John’s voice,” Satterfield said.

“It made me wonder how many others like him could benefit from having a creative outlet,” she said. “Everybody deserves the opportunity to express themselves.”

Since then, Satterfield, associate professor and interim chair of the graphic design department, has pursued that line of thinking in her teaching, research and outreach projects at Iowa State. She works with a team of faculty and students on the design of educational, social inclusion and play experiences for children with cognitive disabilities, including autism spectrum disorders.

In two recent studies they’ve surveyed two groups: college students with ASD traits, and parents and teachers of children with cognitive disabilities. Now they’re putting their research findings into practice, piloting innovative workshops for kids with cognitive disabilities and autism.

“One research project looked at the potential presence of ASD in the online college community and considered methods of online educational content delivery. The second study presented compared perceptions of parents and teachers of children with autism and other neurodevelopmental disorders regarding the importance of specific skills.

“According to the Centers for Disease Control, one in 88 live births are on the autism spectrum. So, high-functioning ASD children grow up and will be involved in every aspect of society,” Satterfield said. “As a designer, the question ‘how do I design better-quality information, products and services’ is always in my mind. And it comes back to better understanding the audience.”

Preferred learning styles
After Satterfield’s graduate students had researched ASD for a project, some told her they identified with a few traits of people diagnosed with high-functioning autism. She decided to find out more about the educational needs of college students with personality traits associated with ASD.

In the small pilot study, students (from both a traditional, on-campus graphic
design course and an online human computer interaction course) answered a questionnaire about their preferences for course delivery, assignment types and evaluation techniques. They also completed a well-known self-reporting tool—the Ritvo Autism Asperger Diagnostic Scale-Revised.

The results showed 21 percent of the students scored above the diagnostic threshold for ASD on the scale, and 79 percent were below. The human computer interaction students tended to score higher on the scale than the design students. And all who scored above the threshold were from HCI.

Those below the diagnostic threshold (no ASD) preferred face-to-face lectures with personal interaction, selecting their own topics for research and group assignments, and designing, constructing and presenting product prototypes for their evaluations.

Those above the diagnostic threshold favored video-recorded or online course delivery with no personal interaction with students or faculty, topics assigned by the professor, and projects with flexible timeline and completion dates. For evaluations, they favored taking tests, or using phone or Skype discussions with the professor.

“Because of the prevalence of ASD in the general public, and the fact that many are highly intelligent or talented in areas valued by some disciplines, educators need to be able to develop curriculum that optimizes their strengths,” Satterfield said.

**Important skills**

In the second study, the researchers surveyed parents and teachers of children with ASD about the impact for these children of various social, emotional, behavioral, language and technology skills. Results indicated that both groups see all areas as extremely significant. A second phase will ask them to rank the relative importance of these skill areas.

“By combining these two studies, we know that even the skill areas that are ranked as least important are, in fact, very important,” Satterfield said. “This will guide future product and service design for persons with ASD, and will allow us to address these issues in a meaningful and well-informed way.”

**Serving child and community**

Satterfield and her colleagues are working with ISU Extension and Outreach to pilot workshops for children with cognitive disabilities at ChildServe, a nonprofit organization that partners with families to help children with special needs. ChildServe provides specialized pediatric healthcare services and offers accessible, family-centered care unique to each child.

Gleaning insight from their previous studies as well as Satterfield’s own experiences with her son, the researchers are developing activities that safely allow the children to explore creativity and communication. They want to help the children increase their ability to communicate using sensory, tactile and visual methods, and to identify the children’s skill areas.

“We’ve observed the children in their activities at ChildServe. We look at markers of engagement, satisfaction or quality—for example, if there’s better eye contact, or higher vocalizations,” Satterfield said.

“I don’t know if all these kids will become artists or designers, but we can at least give them the chance to try and express themselves,” she said.

Once they have the model for how an educational institution can partner with a facility like ChildServe, then the team can replicate and disseminate it.

Satterfield also wants to explore the possibility of displaying the children’s artwork in the community.

“It’s important for the parents of these kids to have some kudos coming back to them. Nobody is telling them that their child is talented or gifted or has value,” Satterfield said. “When you serve the child, you’re also serving the family and the entire community.”
In 2008, architecture professor Thomas Leslie spent spring semester teaching in Italy with the College of Design Rome Program. His morning run took him up the Janiculum, past the American Academy in Rome, an independent study and advanced research center that hosts visiting U.S. scholars and artists who have been awarded a prestigious Rome Prize.

“My apartment was just down the hill from the Academy, and my kids, who were with me in Rome, would play with the kids of people at the Academy. At one point one of my kids said, ‘You know, you should get one of those Rome Prize things. That would be really nice; then we could come back.’ And I remember thinking, that is a total long shot…” Leslie said.

But his child’s comment and his inspirational daily run stuck with him, and after a few years completing other projects (including a book on Chicago skyscrapers coming out in June), Leslie decided to apply for that “long shot” fellowship. In April, he won the 2013 Booth Family Rome Prize in Historic Preservation and Conservation.

“The Chicago book has been eight to 10 years of work, so to finish a project like that and to now have a chance to think about the next project and reflect—you never get to do that or to have that kind of space or time,” Leslie said.

Elite company
Leslie joins a 120-year lineage of Rome Prize Fellows that represents America’s nobility in the humanities and arts. They include composer Aaron Copland; architects Louis Kahn, Richard Meier, Michael Graves and Maya Lin; writers William Styron, Robert Penn Warren, Ralph Ellison and Frank McCourt; and artists Roy Lichtenstein and Frank Stella.

He says he “gets a little dizzy” thinking about the roster he’s joining.

“When I think about who has worked and studied there—especially Kahn, because I wrote a book on him—I realize the bar is set really high,” he said. “You have to be ambitious and do something worthy of that tradition.”

Leslie knows a couple of past Rome Prize winners who returned from the experience “kicked into a different orbit,” he said. “They’re transformed by whom they’ve been around and by having the time and space to reflect and focus on one project.”

During his six-month fellowship in Rome, Leslie will document, analyze and advocate for the preservation of buildings by Pier Luigi Nervi, a postwar Italian engineer and architect. Nervi is known for his technical mastery of reinforced concrete, which he used in large-span structures with a dramatic sense of design. The effect is a rich interplay of engineering and aesthetics.

Worth preserving
Throughout his academic career, Leslie (who teaches building technology, structures and comprehensive design to future architects) has concentrated his research on the influence of structural engineering and construction on architecture and vice versa. Nervi is a major figure in this story, Leslie said, describing his buildings as “cleverly conceived structures.”

“A lot of these buildings were experimental. They used new techniques; some worked and some didn’t. Many suffer from very particular moisture problems related to the concrete,” Leslie said.
said. “But there is a bigger issue. The postwar buildings, which tried very hard to be new, are now old and need our attention. These 50- or 75-year old buildings are being torn down all over. How do you get the public to understand these are historic?”

Unfortunately, some are “under threat of falling to pieces” or suffer from neglect. But Leslie believes these buildings have distinctive conservation challenges that apply to much postwar concrete construction.

Leslie likened the situation to the period of the 1950s and 1960s when Victorian architecture was demolished because the public deemed it ugly.

“You never know what’s going to be valuable a generation later,” he said.

Leslie will dig into Nervi’s archives of papers and building documents to understand how the buildings were engineered and designed.

“All of his buildings have fantastic curving shapes that were done before computers. I’m curious how he figured out the geometry without having the tools we have today,” he said.

“And what were the specifications? What went into the concrete—what was the recipe?”

And he will meet with local preservationists, building owners and architects to raise awareness of Nervi’s most imperiled works. Leslie’s project could contribute significantly to the discussion of what is worth preserving and what is not.

“This could be a good pilot project or model preservation plan for how we could retrofit, renovate or rehab postwar buildings, which tried very hard to be new,” he explained.

Teaching aids

When he returns to campus, Leslie will be equipped with a “huge library” of classroom examples derived from hand-drawn and hand-calculated construction documents for Nervi’s complex structures.

Intuitive and easy to understand, Nervi’s buildings can help students think technically during the design process, Leslie said. And his architecture graduate students can use the archival drawings to make digital reconstructions and models of Nervi’s buildings to “really understand how things work in three dimensions.”

He also intends to use his research to write a book on Nervi, which he hopes to start while in Rome. And he will prepare a set of technical papers about issues applicable to the preservation of postwar concrete structures.

The Nervi book will be in the same vein as his previous books examining the interplay between structural engineering and construction and architecture. Leslie is the author of Louis I. Kahn: Building Art, Building Science (Braziller, 2005), Country Comes to Town: The Iowa State Fair (Princeton Architectural Press, 2007), and Chicago Skyscrapers, 1871-1934 (University of Illinois Press, June 2013). He co-authored Design-Tech: Building Science for Architects (Architectural Press, 2006) with colleague Jason Alread, associate professor of architecture.

In 2011, Leslie was named Pickard Chilton Professor in Architecture at Iowa State. The endowed professorship—established by Jon Pickard and William D. Chilton (both BA 1976 Architecture), founding partners of the collaborative architectural firm Pickard Chilton—included a research allowance that Leslie used to travel to Rome last summer. He visited major Nervi sites, documented the buildings’ preservation problems, and connected with owners and preservationists.

“When without those funds and that trip, my Rome Prize proposal would not have been as convincing as it apparently was,” he said.
A number of leadership changes will take place this summer in the College of Design.

Deborah Hauptmann, associate professor of architecture and former director of the Delft School of Design at the Delft University of Technology, Netherlands, has been named the new chair of the Department of Architecture. Read more about Hauptmann at www.design.iastate.edu/news.php?ARTICLEID=566.

Ingrid Lilligren, professor and interim chair of the Department of Integrated Studio Arts, has been named chair of that department. Read more about Lilligren at www.design.iastate.edu/news.php?ARTICLEID=567.

Doug Johnston, interim chair of the Departments of Community and Regional Planning and Landscape Architecture, has accepted a new position as chair of the Department of Landscape Architecture at the State University of New York College of Environmental Science and Forestry. His last day at Iowa State will be June 30.

Professor Francis Owusu will serve as interim chair of the community and regional planning department, while Associate Professor Heidi Hohmann will serve as interim chair of the landscape architecture department.

The search for the next chair of the Department of Graphic Design has been extended, and the College of Design will seek the services of an executive search firm to assist with the process. Associate Professor Debra Satterfield will continue as interim chair of that department for the coming academic year.