





## Letter from the Dean





In my fall letter to the alumni and friends of the College, several major objectives for this year were reported. Since we are more than halfway through the year, you may be interested in where we stand today regarding those objectives.

• Planning for the next Georgia Tech Capital Campaign: Through retreats held by the provost and the president in early fall, significant progress has been made in identifying strategic actions that, if taken, would have a transformative impact on the Institute and its colleges and schools. These were exciting and fascinating discussions suggesting a very significant, bottom-up process that cuts across all of Georgia Tech. At the College level, campaign targets were refined over the course of the fall and initial fundraising begun. The College Development Council, the program and center directors, and the faculty were all involved in this process. For the Institute and

the College, final plans and fund-raising announcements are expected to be finalized in early summer.

- Academic Program Reviews and New Degrees: Over the fall, several developments took place: the Master of City and Regional Planning degree received full, seven-year accreditation, signifying the significant strength of this Program; our B.S. degree in Building Construction was reviewed for reaccreditation by the American Council for Construction Education, which was very helpful to the Program and the College (we expect the results of this review by the end of this academic year); the College faculty approved in the fall the proposal to create a new master's degree in Music Technology (this proposal is presently under review by the Institute's Graduate Curriculum Committee). We are hopeful that this degree program can be in place by the 2006 fall semester.
- Finalization of College and Unit Strategic Plans: The College's revised plan is presently in its final stages of completion, as are several of the revised plans of our programs and centers. New directions will be discussed with the faculty and staff over the course of the spring and summer, with a completion date targeted by the end of the 2006 fall semester. These directions presently under discussion are very exciting, suggesting an extended vision for the College; new "drivers" presenting new demands and opportunities for the College over the next five years; new enrollment targets; new faculty and staff requirements; and possibly new or modified degree programs, research centers, and academic/research initiatives.

• Extension of the College's Initiative for Achieving Greater Integration within its Curricula and its Research Centers of the Architecture, Engineering, and Construction (AEC) Industry and the Related Professions: Almost all that we do in the College is related to this cross-cutting theme, particularly our Common First Year Program, our new AEC Integration/Building Information Modeling Laboratory, our academic programs, and our research centers.

All of these initiatives are taking place along with our fundamental mission of educating students to become leaders in the art, design, planning, and construction professions concerned with the built environment. Many of these dimensions are spelled out in fuller terms in the various stories in this issue of the College newsletter. It is an exciting time to be in the College of Architecture at Georgia Tech and in Atlanta.

With warm regards,

Thomas D. Galloway, Ph.D. Dean and Professor

## Parent's Day Reception 2005







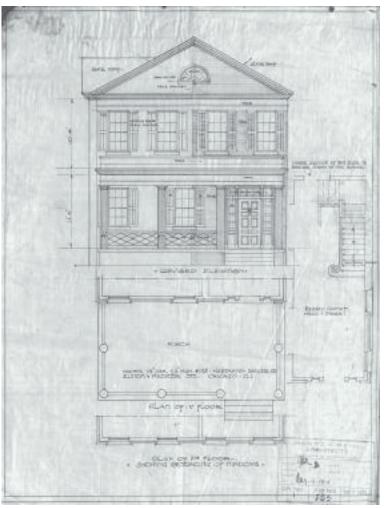




The College of Architecture hosted a Parent's Day Reception in September as part of the campus-wide Family Weekend. Parents interacted with faculty and staff and got a chance to view student work on exhibit from the Architecture, Industrial Design, City and Regional Planning, Building Construction, Ph.D., and IMAGINE Multimedia Lab programs.

## College News

## College loans J. Neel Reid Collection to the Atlanta History Center's Kenan Research Center



Reid drawing from the GT collection, the William C. Miller residence, Macon, Georgia, 1914.

The College of Architecture has loaned its collection of J. Neel Reid's work to the Atlanta History Center's Kenan Research Center for five years. The collection consists of more than 2,000 of Reid's architectural drawings and plans.

The Kenan Research Center collects primary and secondary source materials in all formats relating to the history of Atlanta and the culture of the American South. It has a vast architectural collection and already houses a large collection of Reid's work. With the College's loan, the two collections reside in one place.

"This is a win-win situation," said Michael Rose, director of the Kenan Research Center. "The College of Architecture still owns the documents, but we will be able to care for them in climate-controlled conditions, bring the two collections together, and make them available to a wider research audience."

Reid was one of the first Atlanta-based architects to gain international prominence. He studied architecture at Columbia University and the Ecole des Beaux-Arts in Paris, where his studies focused on classic and Renaissance architecture. In 1909, Hal Hentz and Neel Reid formed Hentz and Reid. In 1915, the firm's name changed to Hentz, Reid and Adler. Reid died in 1926.

The Kenan Research Center is free and open to the public Tuesday through Saturday. For more information, visit **www.atlantahistorycenter.com**.

# Architecture Program chooses second endowed chair



Nader Tehrani

Thomas Galloway, dean of the College of Architecture, recently announced that award-winning architect and designer Nader Tehrani is the College's newest endowed faculty member. Tehrani will be the Thomas W. Ventulett III Distinguished Chair in Architectural Design,

endowed by and named after the 1957 Tech alumnus whose global architecture firm designed many of Atlanta's landmark buildings (including the Proscenium, the Woodruff Arts Center, and the Georgia World Congress Center).

Tehrani joins the faculty this fall and will build on the momentum established by his business partner Monica Ponce de Leon, last year's Ventulett chairholder, in using digital manufacturing to produce full-size installations. Making extensive use of the College's Advanced Wood Products Laboratory, the installations explore the formal and structural possibilities of various CNC techniques applied to various materials.

Tehrani has taught extensively at the Harvard Graduate School of Design, Massachusetts Institute of Technology, Rhode Island School of Design, and Northeastern University and is a principal partner in the Boston design firm Office dA. The firm's broad range of work, from urban to furniture design, and residential and cultural buildings, has won more than two-dozen significant design awards, been exhibited at New York's Museum of Modern Art and the Venice Biennale, and equally widely published, including a recent monograph by Rockport Publishers. They have projects under construction or recently built in Korea, Chile, Kuwait, Iraq, and the United States.

"In a short period of time, Office dA has established itself as one of the leading design firms in

the country," said Ellen Dunham-Jones, director of the Architecture Program. "Their work is consistently intelligent at all levels, but their innovative and visually stunning assemblies of materials have especially earned them a reputation for advancing architectural aspirations for work that is both hightech and high-touch. I'm thrilled that Professor Tehrani and our students will be able to make use of Georgia Tech's Advanced Wood Products Lab and materials science research to further advance his work on digitally manufactured architectural components."

Tehrani has earned several prestigious honors, including the Architectural League of New York's Young Architects Award in 1997 followed by its Emerging Voices Award for 2003. In 2002, he was one of the youngest recipients ever of the highly prestigious American Academy of Arts and Letters' Award in Architecture.

Tehrani received a Bachelor of Fine Arts in 1985 and a Bachelor of Architecture in 1986 from the Rhode Island School of Design, participated in the postgraduate program in history and theory at the Architectural Association in London in 1987, and received a Master of Architecture and Urban Design degree with distinction from Harvard University in 1991.

The Thomas W. Ventulett III Distinguished Chair in Architectural Design has been made possible by the generous gifts of Ventulett and through commitments made by his firm (Thompson, Ventulett, Stainback & Associates) as well as his family, friends, and business associates.

"Tom has a real love and passion for architecture," Galloway said. "The Architecture Program's first endowed chair could not have a better name associated with it, as Tom Ventulett truly represents one of the best in the field."

Endowed chairs are crucial for attracting worldclass students and faculty to Georgia Tech. They also attract eminent teachers and scholars who serve as academic hubs for the curriculum and enrich research efforts among the various colleges.

### **Hunt and Frankel tour COA**



(L to R) Design Futures Council Board Members Neil Frankel and Gregory Hunt, Dean Thomas Galloway, and IMAGINE Lab Manager and Professor Tolek Lesniewski.

Dean Thomas Galloway presented a luncheon address to the Board of Directors of the Design Futures Council at its fall meeting in October. His presentation, titled "Georgia Institute of Technology: Changes and Innovations," summarized the current work of the College's faculty and students. After the meeting, board members Gregory Hunt, vice chairman and director of design at Leo A. Daly, and Neil Frankel from Reed Kroloft toured the College's IMAGINE Multimedia Lab and the Advanced Wood Products Lab.

The Design Futures Council is a global network of professionals involved with the design community with the mission to explore trends, changes, and new opportunities in design, architecture, and building technology for the purpose of advancing innovation and leading members to new levels of success. For more information, visit www.di.net.

## College News continued

## **College responds to Hurricane** Katrina

Caring individuals and institutions from around the world have come to the aid of thousands of Gulf Coast residents displaced by Hurricanes Katrina and Rita. The College of Architecture and the entire Institute have also joined these efforts, providing intellectual capacity and resources to aid in the aftermath of these hurricanes. Here are a few of the ways the College has responded:

- Tulane University's School of Architecture has asked the College's Architecture Program to join a consortium of schools to focus design studios and workshops on rebuilding efforts in New Orleans over a two-year period. Professors Cheryl Contant and Jude LeBlanc attended a kickoff conference in New Orleans in November sponsored by Tulane and Louisiana State University.
- The College opened its doors to seven students from Tulane University, three of whom were visiting Tulane as exchange students from Brandenberg Technical University in Germany. "We are German students of architecture and were supposed to spend the fall semester at Tulane University as part of an exchange program," said Konrad Scheffer and Sarah Haubner. "We left New Orleans three days before hurricane Katrina arrived. At this time, we really did not expect that things would become serious. Being evacuated by Tulane University to Jackson, Mississippi, we just took our passport and some clothes. After a week, we left Jackson for Atlanta, believing that we would go straight back to Germany. When it turned out that we could study here at Georgia Tech, it was a great relief. Due to the enormous help we received from the very beginning, it was easy to get started quickly. We like the city of Atlanta a lot. Georgia Tech gives us a lot of opportunities. Studying at the College of Architecture is demanding, but really enriching. Right now we feel that being here is more than just a temporary solution - it is a great experience."
- · During fall semester, the Architecture Program engaged Alan Lewis, adjunct professor at Tulane University, to lead an interdisciplinary study group in relief and reconstruction efforts related to Hurricane Katrina. Faculty, staff, students, and interested community members participated. Independent study credits were also available to students. The presentations and discussions included information on: structural mitigation, transportation systems, evacuation, preservation, new vernacular typologies, ecology, environmental architectural and landscape issues for the region, community rebuilding, and programs beyond housing. For more information, visit http://www.arch.gatech.edu/neworleansgroup/.
- · Dean Thomas Galloway is serving on a Technical/Scientific Advisory Committee organized by the Regional Plan Association to prepare a comprehensive vision for the Gulf Coast region. Members included major planning, design, and

- development organizations (i.e. APA, ULI, ASLA, and AIA). As a first step in the process, the team will prepare an environmentally sensitive areas map of the region. That map (or series of maps) will consist of natural hazard areas, ecologically significant areas, natural resource production areas, and culturally important areas.
- During the weeks following the landfall of Hurricane Katrina on the Mississippi-Louisiana border, Professor Robert Craig researched "the impact of Katrina on cultural resources" of the Gulf Coast, from New Orleans to Mobile. "I sought to learn what buildings still stood, what archival records or art collections had not flooded, and what cultural aspects of these extraordinary places called New Orleans, coastal Mississippi, bayou country, and the South remained intact, and (on the other hand) what landmarks and historic districts and documents collections had been utterly and irretrievably destroyed." Craig's study appears in several publications, including Georgia Tech's Research Horizons magazine (with an extended essay published on the magazine's Web site), as well as in six newsletters of academic societies: Docomomo Georgia (Documenting and Conserving the Modern Movement), VAF (Vernacular Architecture Forum), SAH (Society of Architectural Historians), SESAH (Southeast Chapter, Society of Architectural Historians), SECAC (Southeastern College Art Conference), and NCSA (Nineteenth Century Studies Association). In addition, Craig presented a plenary information session on Katrina and southeastern regional art and architecture at the SECAC Annual Meeting in Little Rock in October.
- Director of the Center for Geographic Information Systems and Professor Steven French gave a phone interview for National Public Radio's "On Point" on reviewing the prospects for rebuilding New Orleans and the rest of the Gulf Coast. The interview, which aired September 1, is available at http://www.onpointradio.org/ shows/2005/09/20050901\_a\_main.asp.
- · French also participated in the plenary session of the Association of Collegiate Schools of Planning, presenting a session on "New Orleans, The Gulf Coast Region, and Planning Communities" in October.
- The Southeast Disability and Business Technical Assistance Center (DBTAC), housed at the Center for Assistive Technology and Environmental Access (CATEA), one of the College's research centers, served as a resource for people with disabilities looking for housing assistance, general financial assistance, food, where to fill prescriptions, and replacement of various devices and medical equipment that were lost or damaged. To assist with this task, they have compiled a comprehensive resource list that provides the appropriate referrals. For more information, call DBTAC toll free at 800.949.4232.
- This spring Craig Zimring will be teaching a class looking at precedents of hospital design intended to feed into rebuilding hospitals in New Orleans.

## In Memory: Bernard "Rocky" Rothschild, 1915 - 2005



Bernard "Rocky" Rothschild, influential architect and friend of the College, died September 16, 2005.

"Rocky was a true friend of the College and an extraordinary individual who will be missed," said Dean

Thomas Galloway. "He was a driving force in shaping the city of Atlanta and the architecture profession. Rocky leaves behind a legacy of committed dedication and exemplary service."

Rothschild graduated from the University of Pennsylvania School of Architecture in 1937. He served as a member of the Board of Overseers and the Graduate School of Fine Arts and served as an associate trustee of the university from 1976 until 1983.

After World War II, Rothschild moved to Atlanta and formed the firm Alexander and Rothschild with Cecil Alexander. The two started their firm in an upstairs bedroom of Rothschild's father-in-law's home in Inman Park.

"Our first major job was an office building on the corner of Peachtree and Seventh Street for Ben Massell, which was built for under \$5 a square foot," said Alexander. "The building has now been successfully converted to condos."

After ten years of working together, in 1958 Alexander and Rothschild merged with another firm to create the prominent architectural firm Finch, Alexander, Barnes, Rothschild and Paschal (FABRAP), which is today know as Rosser, FABRAP International.

Among the projects the group designed were the Fulton County Stadium, the Southern Bell (Bell South) headquarters, the Coca-Cola headquarters, the Five Points MARTA station, the Atlanta Jewish Community Center, and a project Rothschild headed, the David Marx Educational Building at The Temple.

Throughout his career, Rothschild was extremely active in the American Institute of Architects (AIA). He served in numerous capacities, including the Georgia (Atlanta) chapter president in 1955, regional director of AIA from 1965 to 1968, and president of the Georgia state chapter in 1972. In 1966, he was elected a Fellow of AIA and from 1984 to 1985 served as chancellor of the AIA College of Fellows.

"Rocky could have been a lawyer because he was excellent at putting contracts together," said Alexander. "Rocky worked with the AIA's lawyers to design standards for contracts that are still being used today.'

During his career, Rothschild received many awards, including a citation for outstanding service to AIA in 1982 and one for exceptional service to the board of directors in 1981.

Rothschild is survived by his wife of sixty-two years, Barbara Haas Rothschild of Atlanta; sons and daughter-in-law Robert Rothschild of Atlanta and Richard and Carol Rothschild of Roswell; daughter and son-in-law Nancy and Ken Lyons of Roswell; and grandchildren Richard and Renee Rothschild and Kathryn Lyons.





class project.

## Alumni/ea News



**Ed Rondeau** 

# Alumni Spotlight: Edmond "Ed" P. Rondeau, AIA, CFM, IFMA Fellow

Ed Rondeau, BS 1969, is the general manger for real estate in the Real Estate Development Office at Georgia Tech where he is responsible for the acquisition, development, and management of selected owned and leased properties for the Institute and associated organizations.

Previously Rondeau was director of Global Operations for Conway Data Inc., an association management company based in Atlanta, where he was responsible for assignments primarily outside of North America. There he was responsible for the International Development Research Council's (IDRC) member and chapter development programs, world congresses, and staff for Asia, Australia, Europe, and Latin America.

In addition to his architecture degree from Tech, Rondeau holds an MBA in real estate from Georgia State University. "My architecture degree from Georgia Tech prepared me with a process to review and analyze a client's requirements, ask meaningful questions, and develop creative concepts and thoughts for client review and comment," he said. "This is the process that I have used throughout my career whether in architecture, construction, real estate, facility management, business, or financial management. The process has helped me to stand back and look at the big picture, to understand the strategy, before trying to get to a solution or a tactical approach."

Rondeau is a registered architect in Georgia, holds an NCARB Certificate and is a Certified Facility Manager (CFM). He was president of the International Facility Management Association (IFMA) in 1988, served as the 1990 chair of the IFMA Foundation, was elected an IFMA Fellow in 1992, and was president of the IFMA Real Estate Council in 1995. He served on the Board of Directors for the Board Certified in Corporate Real Estate (BCCR), was a member of the IDRC Financial Review Board, was a trustee of the IFMA Foundation, served as the 2003-04 chair of the Advisory Committee for the Georgia Tech "Integrated Facility and Property Management" master's degree program, and currently serves as a member of the CoreNet Global Finance

Author of numerous articles, Rondeau was coauthor of the book *Managing Corporate Real Estate*, lead author of the book *Facility Management* (for which he received the 1997 IFMA Book Author of the Year Award), and lead author of the second edition of the book *Facility Management*, which is scheduled for publication in early 2006. In his spare time, Rondeau likes to play golf and travel.

#### Alumni/ea At A Glance:

#### 1950-1959

Thompson, Ventulett, Stainback & Associates was awarded AIA's 2005 Award of Merit for its design of the Washington, D.C. Convention Center. **Thomas Ventulett III**, BS 1957, B Arch 1958, is founding principal of the firm.

#### 1960-1969

**Robert W. Bivens,** MCP 1960, and bother **John Bivens,** MCP 1960, co-authored a book titled *GREAT CITIES ... A Bold Initiative*, published by AuthorHouse in 2005. The book examines the health and well-being of cities and how great cities can be built by harnessing the powers of private enterprise in concert with those of cooperating governments.

Lord, Aeck & Sargent was awarded AIA's 2005 Architecture Firm Award for developing a culture of professional excellence in numerous design and community awards, services to AIA Georgia and the Institute, consistent civic involvement, and fostering a learning environment to mentor interns. **Larry Lord**, B Arch 1965, is founding principal of the firm.

Surber Barber Choate & Hertlein Architects, PC was awarded AIA's 2005 Architecture Design Citation for its design of The Winshape Retreat in Mt. Berry, Georgia. **Eugene Surber,** BS 1961, B 1965, **James Barber,** B Arch 1967, and **James E. Choate III,** BS 1983, M Arch 1985, are founding principals of the firm.

Mack Scogin, B Arch 1967, and Merrill Elam, B Arch 1971, principals of Mack Scogin Merrill Elam Architects Inc., won the 2005 AIA Award of Excellence for their design of Knowlton Hall, School of Architecture at The Ohio State University in Columbus, Ohio.

The work of **Thomas Walter Fleming**, BS ID 1968, was exhibited in "SAFE: Design Takes On Risk" at the Museum of Modern Art from October 2005 through January 2006. The show focused on products that promote safety. One of Fleming's designs selected to be included in the exhibit was a new "earplug" design that conforms to the shape of the human ear canal when it warms up from room temperature to body temperature.

#### 1970-1979

William J. Stanley III, FAIA, B Arch 1972, was awarded AIA's 2005 Presidential Bronze Award.

**Fernando Costa,** MCP 1976, planning director in Fort Worth, Texas, headed up a team for APA to evaluate and make recommendations regarding planning functions in New Orleans at the request of local officials and FEMA. Costa was in residence for three weeks working with local planners and officials.

**Victor Orlikowski,** MCRP 1978, translated an anthology of contemporary Polish literature as well as a guide titled *The Joy of Aging.* He is currently writing Environmental Impact Statements for a large internationally known development in Warsaw, Poland, called the Golden Terraces.

William D. "Will" McKnight, BC 1979, has been named to the board of directors of First Bank of Georgia in Augusta. He is president of McKnight Construction Co. McKnight and his wife, Janet, live in Augusta.

#### 1980-1989

**Janice Wittschiebe,** BS 1978, MS 1980, was named Outstanding Alumna at Georgia Tech's 2005 Women's Leadership Conference.

**Art Sheldon**, MS CP 1981, was named chairman of the Gwinnett Transit Advisory Board in May. He was an original appointee to the board when it was formed four years ago and was reappointed to the board this year for another four-year term.

**Mitchell Ginn,** BS 1982, of L. Mitchell Ginn and Associates Inc. has been chosen by *Southern Living* magazine to design the 2006 Southern Living Idea House. The house will be built on Daniel Island, South Carolina, and will be open to the public in the summer of 2006.

**Greg Jenkins**, BC 1982, has been named chairman of the board of the Elizabethtown-Hardin County Industrial Foundation in Elizabethtown, Kentucky. Jenkins is president of Jenkins-Essex Construction Inc. He and his wife, Hedda, live in Elizabethtown.

**Todd Braselton O'Dell,** BS 1984, has been elected chairman of the Beaufort County, South Carolina Design Review Board. The board is responsible for the aesthetic review of all development along the major corridors in Beaufort County. O'Dell is past president of the Hilton Head chapter of the American Institute of Architects and a past member of the board of directors of the South Carolina chapter of AIA. He lives on Hilton Head Island with his wife Kim and their son Chase.

Jones Lindgren, BS 1982, M Arch 1985, has been named a principal of the Atlanta architectural firm Perkins+Will. Lindgren is the leader of Perkins+Will's health care market sector in the Southeast. He and his wife Mary live in Atlanta and have three children.

#### 1990-1999

Jack Ames, M Arch 1990, has recently joined the faculty in the architecture department at Tuskegee University in Alabama, where he teaches fourth-year design studio. Along with fellow alumnus **Sharon Tsepas**, he is also a principal in Urban Studio Inc, an Atlanta-based architecture and planning firm. Ames lives in Atlanta with his wife Havat.

**Steven Chan,** BC 1992, of Duluth, Georgia, opened a quick-casual Asian restaurant called Café Sampan on Howell Mill Road in Atlanta in March 2005 and an upscale Chinese restaurant called Sampan next door the following month. He also owns three other Atlanta restaurants: Tin Drum, Thai Spice, and Thai Diner.

Conrad Marcus Rathmann, BS 1995, presented "Body and Architecture: Explorations from Composition to Theorydriven Space" at "A Beginner's Mind: The 21st National Conference on the Beginning Design Student" at the University of Texas-San Antonio in February 2005.
Rathmann is a professor of architecture at the Savannah College of Art and Design. He and his wife Robin live in Savannah, Georgia.

Sarah Lorenzen, M Arch 1997, is a tenure-track faculty member of California Polytechnic State University in Pomona, where she teaches architecture and urban design. Lorenzen is also co-founder of Plasmatic Concepts of Los Angeles, a multidisciplinary research and design firm specializing in finding innovative ways for companies and institutions to strengthen their identity. The company's design services focus on planning, environments, and graphic design. She and Plasmatic Concepts partner David Hartwell participated in the AEC World Expo (www.aecworldexpo.com) in Mumbai, India, in December (cover image, top left). They designed the central information and gathering space for the Expo. They also exhibited their work and spoke at the conference.

#### 2000-2005

**Darrell Howard,** MCRP 2000, is principal transportation planner for Birmingham, Alabama's Metropolitan Planning Organization, where he manages all mobility projects and programs.

**Claudia Martin Bilotto,** MCP 2001, has joined GeoStats as a project coordinator/manager. GeoStats specializes in the development and use of GPS and GIS technologies for use in data collection and analysis in transportation-related studies. Bilotto will be working on studies that examine travel patterns and behavior as well as data collection and survey efforts for transportation agencies.

James Fulton III, BS 2002, recently graduated from Yale School of Architecture with a master's degree in architecture. He is currently working with Pickard Chilton Architects in New Haven, Connecticut. Pickard Chilton is interested in hiring from among the many talented graduates of the College of Architecture. Interested candidates may visit www.pickardchilton.com and should address their employment inquiries to Pickard Chilton, 980 Chapel St., New Haven, CT 06510.

**April Atkins,** MCRP 2003, was recently promoted to senior government affairs representative for the Greater Atlanta Homebuilders Association, where she will serve as a lobbyist on issues such as infill works workforce housing, fire codes, and impact fees.

**Kayah Royal,** MCRP 2005, accepted a position as an environmental protection specialist trainee with the Federal Highway Administration's Professional Development Program. She is based in Vancouver, Washington, in the Western Federal Lands Highway Division.

Stay in touch. Visit the "Alumni/ea News" section at

www.coa.gatech.edu/alumni/newsletter\_submission.php or call 404.385.2156

and let us hear from you.

## **Architecture News**

### Cottle receives award for renovation of apartment



Mark Cottle, assistant professor and a principal in Cottle Khan Architects, received a Merit Award in this year's AIA Georgia Residential Design Awards for the renovation of an apartment in Hanover House, a '70s-era concrete high-rise located in the Colony Square complex in Midtown Atlanta. While the 1,750-square-foot unit had originally followed a typical layout of "cubicles and corridors," Cottle cleared away the partitions to create one main loftlike space, divisible into three separate rooms with sliding panels. A "gray zone" of services against the building corridor accommodates kitchen, office, baths, and storage. An important component of the design was the consideration given to the view. "We were careful to preserve and reinforce the breathtaking panorama in the main space, as well as provide framed views from deep within the gray zone," said Cottle. "We wanted the space to feel like a verandah in the sky.'

Jerry Goux, M Arch 1993, BS 1991, was the contractor for the project.

#### Gamble receives awards for **Art Studio**



Michael Gamble, MS 1991, assistant professor and co-principal of Gamble & Gamble Architects, and partner and wife Lee Ann Gamble were awarded the AIA Atlanta Award of Merit in May and then the AIA Georgia Award of Merit in September for their Fields/Badoud Art Studio. Associate Professor Russell Gentry served as the structural engineer, and Brian Mills, BS 2001, was the contractor on this project.

The Art Studio, completed in January 2005, was designed for a couple with similar creative interests; painting and pottery. They wanted a space that would accommodate both mediums as well as create a social nexus for entertaining. The painter requested a loft and the potter a plinth. The 800square-foot Art Studio was built on a gently sloping lot in a circa 1920s Eastside neighborhood with a 1,100-square-foot existing cottage situated among mature hardwood trees.

"The collection and storage of water was an essential part of the program, and the clients wanted to have a strong connection to the site," said Cottle. "The poly-bicarbonate skin captures the shadows of the surrounding trees, the roof collects water, and the wood frame is exposed in intentional dialogue with the other trees. In most cases, the environmental response was intentional."

## Dusseault exhibits works at **International Contemporary Art Exhibition in Beijing**



Ruth Dusseault, artist in residence and visiting assistant professor, exhibited work from her Atlantic Steel Project at CONVERGENCE at E116Ú/N40Ú in Beijing last September and October. This international art exhibition was named for the global coordinates of the exhibition space. The exhibit, curated by Feng Boyi, Marilyn Kiang, and Els Silvrant, featured thirty-seven artists from China, Europe, and the United States.

Dusseault's work included an eighteen-foot photo installation of the demolition of the Atlantic Steel mill. In a neighboring room, she showed the demolition in action in a fifteen-minute video.

The Atlantic Steel Project will be shown in full, in a four-person exhibition, at the High Museum of Art in Atlanta this July through October.

### **Trubiano receives Best Paper Award** from ARCC Research Conference

Assistant Professor Franca Trubiano's paper "Material Matters: Seeking Collaborations between the Building Industry and Innovative Architectural Practices," has been selected as the recipient of the Best Paper Award from the Architectural Research Centers Consortium (ARCC) Conference 2005. Her paper was chosen from forty-four previously selected papers that were presented at the conference, then nominated and chosen as one of four finalists.

The ARCC is an international consortium of architectural research centers committed to the expansion of research culture and infrastructure in architecture and related design disciplines.

## Touati wins second place in National **Green Architecture Student** Competition

Amine Touati received second place in the National Green Architecture Student Competition, co-sponsored by the American Solar Energy Society (ASES) and the Society of Building Science Educators (SBSE). The design competition focused on architectural applications of solar and renewable energies, energy efficiency, and green design held at the 2005 Solar World Conference in Orlando, Florida. Touati presented his urban housing project from Professor Chris Jarrett's Options III Design Studio. In addition to a cash prize of \$200, Touati received a one-year membership to ASES and SBSE.

"Amine's project was recognized not only for its sound intelligence and design integration of renewable technologies, but also in the way that his project poetically bridged the application of green technologies with social and livable concerns, of particular importance with urban housing," said Professor Jarrett, associate director of the Architecture Program.

Touati, M Arch II 2005, is one of three exchange students from Ecole d'Architecture de Paris-La Villette who studied at Georgia Tech in 2004-05. He is currently an intern at the Atlanta office of Cooper Cary and planned to return to Paris in January 2006 to complete his thesis on green building.

## Siebieda and Kim receive Honorable **Mention in Design Competition**

Kathy Siebieda and Donny Kim's project, "Balance: Relative vs. Absolute," was awarded an Honorable Mention in the 2004-05 ACSA/American Institute of Steel Construction Student Design Competition, Open Category.

Their award-winning project was from a graduate design studio last spring co-taught by Professors Thanos Economou and Michael Gamble. The studio focused on the courthouse building type. The site was the Central Business District in Charlotte, North Carolina.

"Courthouses are very complicated buildings functionally and symbolically," said Gamble. "The students were fortunate to have a real site and the actual working program at hand for the Charlotte courthouse to help shape a response."

Siebieda and Kim's project will be published in the 2004-05 ACSA/AISC Competition Summary Catalog.

## **UPCOMING 2006 LECTURES**

All lectures will begin at 5:00 p.m. and will be held in the College of Architecture auditorium. For more information, contact Lecture Committee Chair Ruchi  $Choudhary\ at\ ruchi. choudhary @coa. gatech.edu.$ 

**Power Play: The Spatial and Cultural** February 22 **Agency of Architecture** 

LISA FINDLEY Associate Professor, California College of the Arts

March 1 **Recent Work** THOMAS PHIFER

> Thomas Phifer and Partners, New York Sponsored by the KPS group in honor of Marvin Housworth

March 8 **SOM Urban Design Forum:** 

The Middle East

Beirut: MARILYN TAYLOR, FAIA Bahrain: PHILIP ENQUIST, FAIA **Dubai: RICHARD DAGENHART** Sposored by Skidmore, Owings

& Merrill

March 27 **ANNETTE GIGON** 

Gigon/Guyer Architekten, Zurich Co-sponsored with the Young Architects

Forum of AIA Atlanta

March 29 on the matte

NADER TEHRANI office dA, Boston

2005-2006 Thomas W. Ventulett III Distinguished Chair in Architectural Design,

Georgia Institute of Technology

April 5 Architectural Empowerment

TED SMITH Smith & Others, San Diego

April 12 Interactions of Architecture, Music,

and Speech RONALD LEWCOCK

Professor of Architecture, Georgia Institute of Technology

## **Building Construction News**

# Roper receives prestigious teaching award



Dave Brady, president of the IMFA, presents Kathy Roper with the Distinguished Educator Award.

Assistant Professor Kathy O. Roper was named a "Distinguished Educator" by the International Facility Management Association (IFMA) at its annual World Workplace Conference held in Philadelphia in October. The Distinguished Educator Award of Excellence is presented annually to an outstanding professor for demonstrated teaching excellence and significant contribution to the facility management industry.

Roper has been teaching graduate-level courses in facility management in the Building Construction Program since 2002. She has more than twenty years of experience in the facility management and corporate real estate industries, holding positions in various public, private, and non-profit organizations. She was nominated for the award by the IFMA Atlanta Chapter.

"I am extremely honored to receive this award and appreciate the Atlanta chapter's support of both my work and Georgia Tech's program," said Roper. IFMA is the largest and most widely recognized professional association for facility management, supporting approximately 18,000 members in 56 countries worldwide.

Roper also presented a paper during one of the conference's educational sessions, titled "Facility Management: Tomorrow and Beyond."

A LEED Accredited Professional of the U.S. Green Council, Roper presented her research at several additional conferences, including the GreenBuild International Conference and Expo 2005 in Atlanta in November, where she also served on a panel of experts discussing "LEED EB and Facility Management." She also gave a presentation on facility management education at the "Eleventh International Symposium of Korea Facility Management Association" in Seoul, South Korea, in November.

In January, she presented "Future Trends Impact Construction, Real Estate, and Facility Management" at the International Council for Research and Innovation in Building Construction (CIB) conference. The CIB conference on "Construction in Developing Economies: New Issues and Challenges" was held in Santiago, Chile.

## Georgia Tech wins 2005 ASC-AGC Region II Student Competition: Commercial Building Division

Georgia Tech's student chapter of the Associated General Contractors of America captured first place at the 2005 Associated Schools of Construction Region II Student Competition: Commercial Building Division, sponsored by the Carolinas AGC and Turner Construction.

The Georgia Tech team, composed of six Building Construction students, included Angela Alverson, Thomas Callahan, Rani Ghawi, Brett Haynie, Irina Mihei, and Chris Ruskin.

During the competition, teams put together proposals for the construction of a 38,000-square-foot multi-purpose recreation facility in just fourteen hours. The project required the students to demonstrate the application of scheduling techniques, estimating, risk management, budgeting, value engineering, evaluation of client criteria, and subcontractor coordination.

"This was a tremendous accomplishment for these students and the Building Construction Program," said Maureen Weidner, Building Construction professor and AGC faculty advisor. "It was, by far, the best team effort I've ever seen, which goes to show the caliber of our students."

Georgia Tech competed against student chapters from Auburn University, the University of Florida, Clemson University, and Virginia Tech in the Region II competition. The team will go on to compete in the 2006 National Student Competition in Dallas in April, which will be Georgia Tech's first appearance at the national competition.

## **Music News**

# **Chamber Ensembles perform** in China



Georgia Tech Chamber Ensembles perform at the Shanghai International Arts Festival.  $\label{eq:condition} % \begin{subarray}{ll} \end{subarray} % \begin{subarray}{ll} \end{subarray}$ 

While international experience is nothing new for Georgia Tech students, playing at the Shanghai International Arts Festival goes far beyond the usual trip abroad.

Sixteen students from the Georgia Tech Chamber Ensembles traveled to Shanghai and Beijing during fall break to participate in several collaborative concerts. Director of Bands Andrea Strauss filled the itinerary with opportunities for the students to perform, including at the China Shanghai International Arts Festival, the Children's Palace, and the Beijing Sino-Canadian Concord College.

"For me this trip was a bonus," said Michael Abraham, an aerospace engineering major. "I would have gone to play my clarinet in Wichita, Kansas. But the fact that it was in China and a travel opportunity I may very well never have again made the whole trip irresistible."

Adam Wilson, a computer science major, said that this experience was invaluable to him as a musician and a person. "I've noticed that every time I leave the country to visit another culture, I come back changed. It takes a little time to be able to look back at it and see exactly what the change was, but I'm sure that it will be fascinating. People grow from experiences, and that week in China was full of experiences."

# Freeman develops unique program to create individualized audio signatures

Jason Freeman, an assistant professor in the Music Department, recently created a program that utilizes iTunes to create a unique audio signature of a person's musical taste. The iTunes Signature Maker (iTSM) analyzes your most selected music collection and creates a short audio signature to represent who you are and what you listen to.

"I made a java-based application that anyone with a Web browser and iTunes can go to and use this Web site to launch it," said Freeman. "It takes about three to four minutes to churn through everything and make a signature of their music collection. They can make it their cell phone ring tone or use it for their blog or their Web page. They can e-mail it to people. They can post it on the Web page if they want."

Freeman said the application is a way for the average person to have a creative music experience.

"I find it pretty accurate as a representation of the type of music I listen to," said Freeman.

iTSM has been a huge hit on the Web and has even been featured on National Public Radio's Marketplace.

Freeman says he received a Rhizome Commission for the iTunes Signature and is proud of how many people have been touched by his latest invention.

"There have been about 36,000 hits on the Web site and I'm amazed," he said.

The Rhizome Commissions Program is made possible by support from the Jerome Foundation in celebration of the Jerome Hill Centennial, the Greenwall Foundation, the Andy Warhol Foundation for the Visual Arts, and the New York City Department of Cultural Affairs.

For more information on iTunes Signature Maker, visit <a href="http://www.jasonfreeman.net/itsm/">http://www.jasonfreeman.net/itsm/</a>.

## **Upcoming Performances**

For more information, contact the Music Department at 404.894.8949.

## Symphony Orchestra and Jazz Ensemble Concert

February 15, 2006, 8:00 p.m. Ferst Center

## **2006 Margaret A. Guthman Keyboard Competition**

February 17 and 18, 2006, 10:00 a.m. - Evening Couch Music Building Georgia Tech Campus

#### **Men's Glee Club Concert**

April 3, 2006, 7:30 p.m. Spivey Hall, Clayton State University

## **Percussion and Concert Band Performance** April 11, 2006, 8:00 p.m.

Ferst Center

Orchestra and Jazz Ensemble Concert

#### April 19, 2006, 8:00 p.m. Ferst Center

**Symphonic Band Concert** April 20, 2006, 8:00 p.m. Ferst Center

### **Spring Choral Concert**

April 22, 2006, 7:30 p.m. St. Mark United Methodist Church, 781 Peachtree Street NE

## City and Regional Planning Program News

# Stone investigates land use to explore impact on air quality



Professor Brian Stone stands in front of his car that has been retrofitted to burn vegetable oil or bio-diesel fuel.

When Brian Stone joined the faculty last fall, he brought his Environmental Protection Agency Science to Achieve Results (STAR) grant with him. The three-year research grant, titled "Projecting Land Use and Transportation Impacts on Future Air Quality (PLUTO)," allows Stone and his co-principal investigator, Tracey Holloway from the University of Wisconsin at Madison, to investigate the potential for "smart growth" land use strategies to improve air quality over time.

For example, when people live far away from where they work, they become heavily dependent upon cars, which leads to air pollution. Smart growth land use strategies seek to reduce auto dependence through the promotion of compact urban forms, pedestrian-friendly design, and access to transit.

Stone and his team are interested in measuring the effects of both smart growth planning strategies and technological solutions, such as the wider use of hybrid-electric vehicles, on ground-level ozone formation and fine particulate matter throughout the upper midwestern United States for the target years of 2025 and 2050.

The integration of national travel survey and U.S. Census data with regional air chemistry and climate change models is enabling the team to measure the impact of fine scale changes land use and travel behavior on future air pollution patterns across a six-state study region. "While we are limiting our initial focus to the upper Midwest, the use of nationally available data sources will permit us to evaluate urban growth patterns and future air quality anywhere in the country," said Stone. He hopes to apply his model to the Atlanta region once the midwestern phase is completed.

Data are being analyzed using three scenarios: a business-as-usual model (what will air quality be like in the future if present patterns of development continue), a smart growth model (what will air quality be like in the future if smart growth policies are implemented), and a technological model (what will the air quality be like if we increase the usage of hybrid-electric vehicles and emissions controls on power plants and industrial sources of air pollution). The results of this research will assist the EPA and state and local governments in developing innovative strategies for combating air pollution and improving public health over the next several decades. For more information, visit

 $http://www.coa.gatech.edu/{\sim}stone/Pluto.htm.\\$ 

# Michael Elliott participates in White House Conference on Cooperative Conservation

Michael Elliott recently served as a lead facilitator for the White House Conference on Cooperative Conservation. The conference featured discussion among conservationists, property owners, and federal, state, and local officials on more effective ways to conserve natural resources through cooperative conservation initiatives.

The goal of the conference was to expand the role of state, tribal, and local communities in cooperative conservation; ensure a cooperative approach to use of public lands; measure and monitor results of cooperative conservation; encourage and reward leadership, innovation, and technology; improve certainty and incentives for stakeholders; and accelerate cooperative conservation as a way of doing business.

As one of nine lead facilitators, Elliott took responsibility for designing and managing the dialogue around "Measuring Success of Cooperative Conservation Efforts." During this discussion, participants explored barriers to and strategies by which cooperatives can more effectively set clear goals to guide the cooperative, monitor achievement of those goals for feedback, and evaluate the success of these efforts.

Initiated through Executive Order, this fourth White House conference was held in St. Louis last August. The conference was hosted by the U.S. Council on Environmental Quality; the Departments of Commerce, Agriculture, Interior, and Defense; and the U.S. Environmental Protection Agency. The 1,200 invited participants included federal, state, tribal, and local governmental officials, non-profit and private sector organizations, and private citizens, all with an interest in cooperative conservation. For more information about the conference, visit

http://www.conservation.ceq.gov/about.html.

## Erica Betts receives FEMA Community Planning Fellowship for 2005-2006



City and Regional Planning Program dual degree student Erica Betts was chosen as this year's FEMA (Federal Emergency Management Agency) Community Planning Fellowship recipient. Betts was chosen for the Fellowship from a highly

reputable field of applicants.

Betts is pursuing a joint degree in water resources, which includes Master of Science in Civil Engineering and Master of City and Regional Planning degrees. This is a rare degree combination and was created to equip water resource professionals with both technical and planning expertise.

Chosen for the Fellowship from a field of twenty-four applicants, Betts credits the reputation of both the City and Regional Planning Program and her advisor, Steven French, for her receipt of this year's award.

Since 1999, FEMA has funded the Community Planning Fellowship for graduate planning students to raise awareness and ensure that hazard mitigation is effectively incorporated into future urban and rural planning. In recent years, the Environmental Protection Agency (EPA) has provided partial support for this program in an effort to increase integration of flood plain and watershed planning. The Fellowship is intended to provide opportunities for students to learn about and apply planning expertise to the fields of hazard mitigation and emergency management; give students practical exposure in multi-objective watershed planning; assist communities, regions, and states in effectively addressing watershed planning and flood plain management issues; and provide graduate students with the opportunity to network with a wide range of planning professionals.

The Fellowship provides students with funding

for one year of field research within a community, state, or region; six hours of independent study with a faculty advisor in the area of local and state hazard mitigation planning; and summer orientation work in Washington, D.C., that exposes students to the operations of FEMA, EPA, and other agencies. At the end of each academic year, each recipient is required to present a research paper describing the student's work during the year at the annual Natural Hazards Research and Applications Workshop in Colorado.

Betts completed her internship in Washington, D.C., this summer, working with FEMA, EPA, and the Army Corps of Engineers. She calls her experiences an incredible educational opportunity and encourages anyone interested in this exciting and valuable field to apply to next year's program. Betts is currently working with the NOAA Coastal Services Center and the Georgia Conservancy to look at the impact of development pressures on isolated wetlands along the Georgia coast. For more information, visit

http://www.csc.noaa.gov/alternatives/.

The **2005 ACSP Conference** was held in Kansas City, Missouri, in October. Cheryl Contant, director of the City and Regional Planning Program, is the national conference committee chair for the conference. Numerous City and Regional Planning faculty and students presented at this international conference. Presentations included:

Ning Ai (Ph.D. student) and Nancey Green Leigh, Designing Waste Recycling Programs to be Community and Material Specific: Insights from

Bill Drummond, Greenspace Planning

Michael Elliott and Eric Sundquist (Ph.D. student), Elites and the Grassroots: The Politics of Growth Machine and Sustainable Community Development in Chattanooga and Seattle

**Steven French**, Estimating the Social and Economic Consequences of Earthquakes

Amy Helling, Steven French, Howard Frumkin, Bill Kohl, Karen G. Mumford, Candace Rutt, and Lance Waller, Travel to Urban Parks: Results from Surveying Users

**Dan Immergluck**, The Impact of Single-Family Mortgage Foreclosures on Neighborhood Crime

**Elizabeth Keysar** (Ph.D. student), *Integrated Environmental Management: Theory in Practice* 

Nancey Green Leigh and Sugie Lee (Ph.D. 2005), Female-Headed Households in the Evolving Metropolis: A Four-City Comparison from 1970 to 2000

**Karen Leone de Nie** (research scientist, Center for Quality Growth and Regional Development) and **Catherine Ross**, *Economic Development and Quality Growth in the Southern Exurbs* 

**Lynn Patterson** (Ph.D. student), *Public and Private Sector Motivators for Construction and Demolition Recycling as Sustainable Economic Development* 

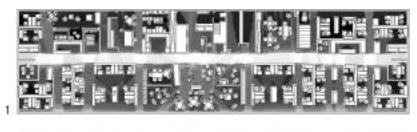
**Catherine Ross, Cheryl Contant, and Eric Sundquist** (Ph.D. student), *Planning for a Sustainable Future: Lessons From Abroad* 

**Brian Stone**, Climate Change and Air Quality in Cities: Assessing the Role of Urban Heat Island Formation in Annual Ozone Alerts

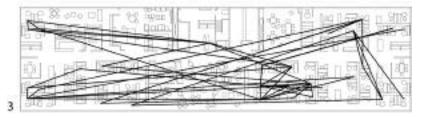
**Jiawen Yang**, The Commuting Impacts of Spatial Decentralization: An Examination of Economic Centers

## Ph.D. Program News

# Working with Steelcase to relate office design to organizational dynamics







Georgia Tech researchers help Steelcase analyze the relationship between the structure of space (1, 2) and the structure of interaction networks (3).

Steelcase, one the market leaders in office furniture and systems worldwide, is committed to the development of the knowledge base that informs office design. A Georgia Tech team led by John Peponis and including Sonit Bafna, Craig Zimring, Mahbub Rashid (who recently moved to the University of Kansas), and Yan Zhang (a recent graduate of the Ph.D. Program) has been working with Steelcase to help evaluate and further develop some of the analytical tools and procedures used to better understand the needs of client organizations and to formulate the aims of workplace design. The joint Steelcase/Georgia Tech research team is looking into the effects of workplace designs on four areas of business performance: the efficiency of the work process, the creation of an environment that contributes to employee satisfaction and motivation, the projection of organizational and cultural identity to support an organization's recognition, and standing in the communities involved with its business cycle.

Recent case studies have focused on the cognitive functions of workplace design in knowledgedriven organizations. When human creativity and the production, application, or transformation of knowledge is critical to business success, an important management question is how to make a given set of individuals collectively more creative and cognitively effective. In this context, the design of space can be leveraged to define how two kinds of potential cognitive resources become available: first, other people with different kinds of expertise, experiences, and skills; and second, various forms of material inscriptions that are part of the cognitive creative process, such as visual representations and diagrams of different kinds, symbolic expressions, models, charts, or images. Thus, designers have to understand how to design space so as to provide a framework within which people are related to one another and pieces of information are placed in a relevant context so that they can inform ongoing creative projects. Methods of spatial analysis developed at Georgia Tech and at the University of London are applied in conjunction with the planning and design tools developed by Steelcase toward this end. Results from the first year of collaboration suggest that quantitative models of the complex relationship between layout, interaction networks, and organizational productivity can be developed to document the contribution of workplace design to the creative process.

## Improving healthcare by design

The United States is entering one of the largest hospital building booms in its history. With the graying of the baby boomers, changing technologies, and demographic shifts toward suburbs and the Sun Belt, the American Hospital Association estimates that more than \$200 billion will be spent on new U.S. hospitals over the next decade, and these estimates predate the destruction caused by Hurricane Katrina. At the same time, both the cost and quality of care have been receiving increased attention. The U.S. healthcare system is the most expensive in the world, yet according to the prestigious Institute of Medicine, as many as 100,000 Americans die annually due to preventable medical errors and 88,000 people die due to hospital-acquired infections.

This massive building program will be in place for a generation and provides the opportunity to create hospitals that are far safer for patients and staff, less expensive to run, and less stressful for patients, their families, and staff. A growing body of rigorous evidence shows that the design of the physical environment of hospitals can be an important contributor in creating hospitals that are safer, more effective, and less stressful. A recent literature review by Ph.D. faculty member Craig Zimring, Ph.D. student Anjali Joseph, and two Texas A&M researchers, Roger Ulrich and Xiaobo Quan, found more than 700 good quality scientific studies demonstrating that improved design such as larger variable acuity patient rooms, more natural light, better air filtering, reduced noise, and other factors can improve patient satisfaction, reduce errors, reduce staff turnover, and reduce the length of

The College is involved with several new efforts related to improving healthcare through design. Zimring is a director of the Center for Health Design, a non-profit devoted to evidence-based design of healthcare; Joseph has joined the Center as director of research. The Ph.D. Program hosted a meeting for fifty top decision-makers February 8-9 entitled "Healthcare Environment Research Summit 2006: Developing the Roadmap," which will begin to set an agenda for a new research field of healthcare environment research. This meeting is jointly funded by the Robert Wood

Johnson Foundation (RWJF), the U.S. Agency for Healthcare Research and Quality, and Steelcase. Zimring and Ph.D. graduate Sheila Bosch are starting a new planning project for a national tour program for healthcare decision-makers to visit state-of-the-art new healthcare facilities. Zimring and his team are also starting a new project to create a Web site of best practice new hospital designs. Both of these are funded by RWJF.

# Gharipour selected to write on architecture and history for three major encyclopedias



Mohammad Gharipour, Ph.D. student and former editor of *Abadi Journal of Architecture and Urbanism* (Tehran, Iran), has been selected to write on architecture and history for three major encyclopedias, *Oxford Companion to Architecture, Encyclopedia of World History*, and *Encyclopedia Iranica*.

For the *Oxford Companion to Architecture*, Gharipour was selected to write ten articles on the different periods of Persian architecture (from the Seleucids to the Pahlavi). This first broad reference on architecture published by Oxford University Press is scheduled to be published in 2007. Gharipour has studied Persian architecture for the past ten years and is currently researching the origins of "four part gardens" in Persian architecture as part of his Ph.D. studies.

"My focus in these articles was to highlight social and cultural changes and their impact on the movement of architecture," said Gharipour.

His writings for the *Encyclopedia of World History*, from Facts on File Publications, include eight entries covering a wide range of topics, including two entries on Italian architecture, three on Persian history and mythology, one on medieval philosophy, and two on the history of Japan. Facts on File's *Encyclopedia of World History* is scheduled to be published in 2007.

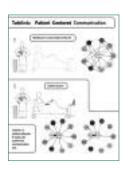
The *Encyclopedia Iranica*, a project of the National Endowment for the Humanities (NEH), and published by Columbia University, is considered the foremost reference work on Persian studies. Gharipour has been selected to write an entry about the bazaar in the city of Isfahan in Iran. He is also one of the youngest contributors selected to write for the *Encyclopedia Iranica*. Currently seven volumes have been published in the *Encyclopedia Iranica*. This series is expected to include twenty-five to thirty volumes once completed.

## **Industrial Design News**

# Cope and Hargove take first place in CHI Atlanta poster competition



**Industrial Design students Walter Hargrove and Clint Cope** 





Two Industrial Design students, Clint Cope and Walter Hargrove, won first prize at the CHI Atlanta student poster competition.

Cope and Hargove entered a project that they completed in the spring of 2005 as a part of Chandan Gokhale's graduate studio. The project, called Tablink, is a personal and interpersonal communication, information collection, and management device for the hospitalized patient. Tablink allows the patient to access a doctor's comments and medication information. It also allows connection to the health care provider after the hospital visit, the ability to manage and monitor outpatient treatment, and keeping track of bills and insurance payments.

"Tablink allows a patient to have full access to the communications that form the foundation of their well-being," said Cope. "Instead of being out of the loop, they become the center of crucial human-to-human and human-to-computer interactions that directly affect their lives."

The twenty-five entries submitted for this year's contest were reviewed based on the originality of the work, the quality of the written presentation, and its contribution to the field of human-computer interaction (HCI).

"This competition was a great opportunity for us," said Cope. "The HCI and ID programs here at Tech complement each other very well. Exposure to HCI practices has given us the ability to try new methodologies, experiment with more regimented development strategies, and to make our respective design research methodologies more effective and meaningful."

CHI Atlanta is the Atlanta metro area chapter of the ACM Special Interest Group on Computer-Human Interaction (SIGCHI).

## Seniors design musical instruments

In last fall's senior design studios led by Assistant Professor Kevin Reeder and Instructor David Lynn, twenty-eight students were asked to imagine, explore, and design the functional and visual aspects of a digital or acoustic musical instrument.

As a part of the project, the students focused on the ergonomic and interface issues posed by the designs. "The design of any product should start with market, the users."

Some students created entirely new instruments while others approached familiar, traditional designs and applied modern technology and improved human factors.

Reeder and Lynn invited Professor Gil Weinberg, who directs the Music Technology program, to help fine-tune the process by providing feedback on the instruments. Weinberg, whose research interests.

an understanding of the person who will use the

anthropometrics and ergonomics. On a more psy-

chological level, the designer must understand the cultural context, needs, and desires of the target

product," said Lynn. "On a physical level, this

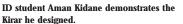
requires an understanding and application of

who directs the Music Technology program, to help fine-tune the process by providing feedback on the instruments. Weinberg, whose research interests include designing new instruments for musical expression, musical networks, and machine and robotic musicianship, was impressed with the student designs.

"The students came up with great ideas and projects," said Weinberg. "I hope that next year we can increase the interaction between the Music Technology students and the ID students, designing operational musical instruments that may be demonstrated in a concert."









ID student Bryan Cosby (left) demonstrates his cello design for Instructor Dave Lynn.

## **Research Centers News**

## **Advanced Wood Products Laboratory**

# AWPL staff leads team in developing building materials from chicken feathers

One of the stated missions of the Advanced Wood Products Laboratory (AWPL) is to engage faculty and graduate students in applied research projects to advance the applications of new wood composite products with commercial potential. Under this research and development mission, Russell Gentry, associate director of research, and Jeffrey Kock, graduate research assistant, are working cooperatively with other units within the Institute, including Kimberly Kurtis, Civil and Environmental Engineering (CEE) associate professor; and Hiroki Nanko, Institute for Paper Science and Technology (IPST) principal research scientist, to investigate the development of composite materials from chicken feather materials.

"The sorts of application that we are looking at in buildings include acoustic ceiling tiles, moistureresistant dry wall, and insulation," said Gentry. "There are also potential applications in the filtration industry, like air filters and water filters, and in the production of printed circuit boards."

This research project, motivated by environmental and sustainability concerns, will assist in repurposing chicken feather material into building materials to aid in eliminating the potential problem of how to deal with this byproduct. Currently, an estimated 4 billion pounds of feathers are produced annually in the United States.

"Projects such as this one attempt to solve future societal problems before they are grave," said Kock, a recent graduate of the Architecture Program who is currently pursuing his master's degree in civil engineering. "In this case, we are investigating ways to productively consume a byproduct of the poultry industry before public concern about mad

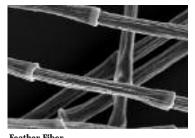
cow disease and avian influenza jeopardizes the feather meal industry, which processes chicken feathers into livestock feed."

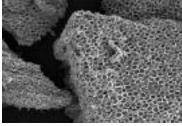
The College of Architecture, CEE, and IPST all have expertise to contribute in this pursuit. Nanko, a nationally recognized expert in scanning electron microscopy, is researching the physical properties of the material to characterize its cellular structure. Kurtis, whose expertise is in cementicious composites, is investigating the mineral binder that will be used to encapsulate the chicken feather material. Gentry adds knowledge of the wood products industry and is leading in the characterization of the chicken feather material combined with wood fiber.

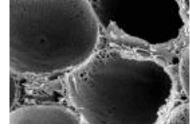
"Jeff ties the whole project together and synthesizes the contributions and expertise of each of the three principal investigators," said Gentry. "He will leave Georgia Tech with an amazingly broad set of skills in the areas of material science, structural engineering, and architecture."

The project is sponsored by the U.S. Poultry and Egg Association's Poultry Protein and Fat Council. This organization is based in Georgia and has particular relevance to the state, given that Georgia ranks first in the nation in the production of meat birds and sixth in production of eggs.

"On a personal level, this project has given me the opportunity to contribute to the state of the art in a field," said Kock. "I've learned a great deal about how to design and execute quality experiments."







Inner Quill

Quill

## Research Centers News continued

## Center for Assistive Technology and Environmental Access

# CATEA studies the effects of wheelchair technology on activity and participation

One of the goals of the Americans with Disabilities Act and the New Freedom Initiative is increasing participation in society of individuals with disabilities. Historically, society has focused on medical needs of individuals with disabilities while ignoring the social, emotional, economic, and physical factors that enable them to interact with their community. Achieving the goal of full participation in society requires a shift in thinking, moving away from a strictly medical understanding of disability toward a view that recognizes the importance of the physical, social, emotional, and economic factors that contribute to a more positive quality of life.

For people with disabilities, the benefits of increased participation in their communities mean a better quality of life. "People are fundamentally social animals; we are meant to interact and participate in each others' lives," said Frances Harris, CATEA research scientist. "Too often people with disabilities find themselves isolated because of barriers in their physical environment (such as stairs or inaccessible restaurants or bathrooms), societal attitudes, or political or economic policies that ignore their needs."

To assist in the goal of full participation, Stephen Sprigle, director of the Center for Assistive Technology and Environmental Access (CATEA), along with Harris and Ph.D. student Sharon Sonenblum, are conducting research on developing



Ph.D. student Sharon Sonenblum installs a wheel revolution counter to a standing wheelchair.

a methodology to assess activity and participation of individuals who use wheelchairs with specialized features. One example of this is wheelchairs that permit people to tilt the seats of their chairs. This study monitors the daily activities of subjects as they move about their communities in order to better understand those factors that allow them to participate more fully in their lives.

"For researchers who want to better understand those who use mobility devices, this implies embracing a more dynamic interaction between people and their devices," said Harris. "It means looking at where people want and need to go and what they want and need to do."

The study consists of both self-report measures such as questionnaires and semi-structured interviews, and instrumentation that is attached to the wheelchair. The instrumentation includes global positioning systems (GPS) that track individuals as

they move about their community; seat occupancy sensors that document when individuals are in or out of their chairs; wheel revolution counters that determine the distance and time of travel in the wheelchair; and tilt sensors that determine the number of tilts performed and time spent at different tilt angles each day.

"The measurement of activity and participation is challenging enough," said Sprigle. "We're adding the additional complexity of determining the impact that mobility devices have on activity and participation. We're very fortunate to have access to the vast Georgia Tech community since technologies being developed here have potential application to this area of study. Meetings with researchers from the Center for Geographic Information Systems; Graphics, Visualization, and Usability Center; and Georgia Tech Research Institute have greatly expanded our technology options and therefore our measurement capabilities."

While this study is devoted to full-time wheelchair users, once completed the team hopes to extend its research to investigate the application of these technologies for individuals who are partially ambulatory, such as the aging population.

The wheelchair participation study is funded by the National Institute for Rehabilitation Research (NIDRR) through CATEA's Mobility Rehabilitation Engineering Research Center.

## **IMAGINE Lab**

### IMAGINE Lab creates visualizations for Georgia Aquarium and the NASCAR Hall of Fame

Architectural visualization and 3-D animation have become vital assets for developers and architects alike. These key tools grab the attention of investors and benefactors who hold the ultimate power in deciding the success of a project.

For that reason Georgia Tech has often turned to the IMAGINE Lab for high-quality 3-D visualizations of the Georgia Tech campus. Additionally, the IMAGINE Lab has been a strong supporter of economic development in Atlanta by providing visualizations of high-profile Atlanta-based projects, including the 1996 Olympic Games.

Recently, Central Atlanta Progress approached the IMAGINE Lab to assist the Atlanta Bid Committee in the competition with two other cities (Charlotte, North Carolina, and Daytona Beach, Florida) for the NASCAR Hall of Fame.

"The visualization provided by the IMAGINE Lab assisted us in creating a strong case for Atlanta, demonstrating that dynamic downtown Atlanta is the right home for the NASCAR Hall of Fame," said Paul B. Kelman, executive vice president of Central Atlanta Progress.

Located a few blocks away from the proposed NASCAR museum is another high-profile attraction, the Georgia Aquarium. Like the NASCAR Hall of Fame, the Imagine Lab created visualizations of the Georgia Aquarium in the larger context of downtown Atlanta to show investors the benefits that this attraction will offer the city. In addition to the exterior, however, the IMAGINE Lab also modeled the interior galleries as well. Despite the daunting task of bringing to life

several thousand fish, the resulting visualizations proved to be accurate representations of the real aquarium.

"We asked Georgia Tech's IMAGINE Lab to perform a nearly impossible task of bringing to life our vision before any visuals were available. The results of the production provided the aquarium team with a visual aid that greatly improved our understanding of the project in three dimensions.

IMAGINE Lab delivered in a way that far exceeded our highest expectations," said Jeffery S. Swanagan, executive director of the Georgia Aquarium.

To view and download animations for NASCAR and Georgia Aquarium projects, visit <a href="http://www.coa.gatech.edu/imagine/">http://www.coa.gatech.edu/imagine/</a>.



NASCAR Hall of Fame exterior



Georgia Aquarium interior



Georgia Aquarium exterior

## Center for Quality Growth and Regional Development

# **CQGRD** studies health impact of Atlanta Beltline

The Center for Quality Growth and Regional Development (CQGRD) has received a Robert Wood Johnson Foundation grant to conduct a Health Impact Assessment (HIA) of the proposed Atlanta Beltline. The study will research the relationship between health and the built environment and policies surrounding the proposed Beltline project.

Catherine Ross, director of the CQGRD, believes the study is one of a kind. "To my knowledge this is the first health study of this type," said Ross. "I don't think there has been a health impact study of a major transportation project in the United States."

The CQGRD is partnering with the U.S. Centers for Disease Control and Prevention (CDC) and several other local health officials and agencies to conduct the study.

"It is a study that they couldn't do on their own and neither could we," said Ross. "It is a great partnership that will try to answer the question, what are the impacts of the built environment on human health? It's a great marriage using our expertise in built environments and their expertise in health."

The Beltline project, a concept that originated from Georgia Tech graduate Ryan Gravel's master's thesis, would convert a mostly abandoned railroad that encircles downtown Atlanta into a transit corridor and multi-use trail connected to an expanded city park system and targeted areas for redevelopment.

The Health Impact Assessment is the first Beltline project to go through the CQGRD, and Ross believes it makes sense to link the two subjects of development and health.

"We are interested because we're focused on how development issues like this impact the quality of life in the city," she said. "This project has the potential to impact the economic footprint of the city as well as impact the daily lives of the people who live here."

Ross says about half of her staff will be working on the Health Impact Assessment project. She believes that the Center and its partners will make an effective team and will be able to conduct a comprehensive analysis of the Beltline project.

"We have a broadly based technical committee that is guiding the research itself," said Ross. "We're looking at several aspects of the Beltline. In particular, in relation to the transportation options and alternatives, what is the likelihood of public use and how will they all relate to health outcomes?"

The study will also investigate air quality issues, the viability of using the transit for work commuting, what health facilities are in the area, how will the green space be used in each park, and several other issues. The Health Impact Assessment should take twelve to fourteen months to complete.

#### **CQGRD Events:**

Healthy Places Research Group Meetings First Tuesday of each Month A monthly meeting of researchers, practitioners, and community leaders to discuss the relationship between health, policy, and the built environment.

Governments and Growth Workshop March 2-3, 2006

A workshop for elected and appointed Georgia officials on land development, livability, public engagement, transportation, and legal and revenue issues.

**Transportation Design for Communities Course** 

May 11-12, 2006

A course for architects, planners, and engineers on designing transportation facilities and public spaces where pedestrians, bicyclists, transit customers, and motorists are all partners in mobility.

Learn more about these and other CQGRD activities at www.cqgrd.gatech.edu.

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