

Annual Report Executive Summary 2008-2009

College of Architecture Georgia Institute of Technology

Prepared by

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EXECUTIVE SUMMARY 2008-2009 ANNUAL REPORT OF THE COLLEGE OF ARCHITECTURE GEORGIA INSTITUTE OF TECHNOLOGY

This Executive Summary highlights the College of Architecture's accomplishments of the past year; changes in enrollment, faculty, staff, and resources; our international engagement; and new initiatives. This summary also documents our affirmative action recruitment activities; significant program accomplishments in the Architecture, Building Construction, City and Regional Planning, Industrial Design, Music, and Doctoral Programs, and the Architecture Library; the distinguished honors of our faculty and staff; progress made in the College's research and creative activities by the faculty and the College's seven research centers: Center for Assistive Technology and Environmental Access (CATEA), Construction Research Center (CRC), Center for Geographic Information Systems (CGIS), Center for Quality Growth and Regional Development (CQGRD), the Advanced Wood Products Laboratory (AWPL), the Georgia Tech Center for Music Technology (GTCMT), and the Interactive Media Architecture Group in Education (IMAGINE Lab); development of our outreach initiatives; and advancement in institutional planning.

This year began with Alan Balfour taking the helm as the new dean. A prominent scholar and educator, he resigned as dean of Rensselaer Polytechnic Institute School of Architecture to take the position. Under Dean Balfour, the College set an ambitious agenda including a year-long celebration of 100 *Years of Architecture at Georgia Tech*. The centennial activities included lectures by its prominent alumni and faculty; exhibits on its history, students, faculty, and alumni; the publication of a book edited by Dr. Elizabeth Meredith Dowling and graduate student Lisa Thomason, titled *One Hundred Years of Architecture Education, 1908-2008, Georgia Tech*; a student charrette envisioning the next 100 years; all culminating in a party that included an installation by one of our young faculty members—Tristan Al Haddad and attended by over 400 alumni, friends, and faculty. The Georgia State Legislature issued 2 proclamations in honor of the 100th Anniversaries of architecture and the marching band at Georgia Tech.

The College also began a reassessment of its undergraduate, Master of Science, and PhD degrees which included a planned restructuring of the College administration, the creation of an undergraduate division to strengthen student services and enhance the curriculum, a refocusing of the MS concentrations, and the proposed development of discipline-specific PhD degrees. A renovation of the East Architecture Auditorium, the most-used classroom on campus, began in May 2009 and was finished in time for the Fall 2009 semester through the generosity of the Reinsch-Pierce Family. The programming and design phase began for the renovation of the Hinman Research Building, construction is planned to begin in January 2010.

College-wide activities include the following:

- The College and the Institute launched the Georgia Tech Center for Music Technology; Dr. Gil Weinberg was named its director.
- Dr. John Peponis was appointed Director of Post-Professional and PhD Programs in Architecture upon the resignation of Dr. Chuck Eastman.
- Dr. George Johnston was appointed Director of the Master of Architecture Program upon the resignation of Associate Professor Ellen Dunham-Jones.
- Dr. Stephen Sprigle was named Interim Director of the Graduate Program in Industrial Design upon the resignation of Professor Abir Mullick.
- Harry West Professor Catherine Ross was named as NSF ADVANCE Professor for the College of Architecture and was cited by Georgia Trend magazine as a "notable Georgian" and by the Atlanta Business League as one of Atlanta's Top 100 Black Women of Influence.
- Associate Dean Douglas Allen was named Senior Associate Dean for Academic Affairs; Associate Professor Sabir Khan was named Associate Dean for Undergraduate Education and will oversee the undergraduate division; Dr. Leslie Sharp was named Assistant Dean for Academic Administration and Outreach; and beginning July 2009 Dr. Steven French will become Associate Dean for Research.

- The College made the following new appointments: Ioannis Brilakis (PhD, University of Illinois, Urbana Champaign) as Assistant Professor in Building Construction; Mario Carpo (PhD, European University Institute) as Professor in Architecture; Laura Hollengreen (PhD, University of California, Berkeley.) as Associate Professor in Architecture; Perry Yang (PhD, National Taiwan University) as Associate Professor in Architecture and City and Regional Planning.
- Dr. Stephen Sprigle was promoted to Professor in Industrial Design and Applied Physiology.
- Dr. Daniel Castro-Lacouture was promoted to Associate Professor with Tenure in Building Construction.
- Dr. Gil Weinberg was promoted to Associate Professor with Tenure in Music.
- Dr. Jerry Ulrich was awarded tenure in Music.
- Architecture Program Associate Director Chris Jarrett resigned to become Director at University of North Carolina-Charlotte beginning fall 2009. Two tenure-track faculty in architecture accepted offers at other universities: Ruchi Choudhary at Cambridge and Franca Trubiano at the University of Pennsylvania.
- Almost 400 students and faculty associated with the Yellow Jacket Marching Band performed in the Macy's Thanksgiving Day Parade and received significant airtime on the national news show "Fox and Friends."
- The Solar Decathlon House was moved to the Tellus Northwest Georgia Science Museum in Cartersville, made possible through Green Habitats Foundation, Inc. and a loan agreement between the museum and Georgia Tech.
- The Woodruff Arts Center hosted the Sonic Generator, Georgia Tech's contemporary music ensemble, in a free and open-to-the-public event in March. The ensemble performed other cutting-edge concerts throughout the year.
- The inaugural Guthman New Musical Instrument Competition was held in February 2009 and included 28 finalists from 7 different countries. For the previous ten years, Richard and Margaret Guthman sponsored a keyboard competition. The competition's new direction continues to enhance the family's dedication to music and musicians, and reflects Tech's role as a center of innovation.
- Organized by Ventulett Chair Professor Lars Spuybroek, the 2nd Ventulett Symposium titled *Textile Tectonics* brought recognized figures Cecil Balmond, Mark Burry, and others to speak on tectonics as the expression of matter itself using Gottfried Sempler's understanding of textile as a framework.
- The College organized and hosted the inaugural meeting and symposium of the North American Chapter of the Construction History Society in November.
- The College transferred its Heffernan Design Archives to the Georgia Tech Library and Archives in order to maintain professional archival standards for its preservation, processing, and accessibility.
- The College partnered with the Georgia Tech Library and Archives to host *Documenting Design: The Work of Alan Buchsbaum (Arch '58)* exhibit, which archives staff curated from the Buchsbaum Collection of the Heffernan Design Archives.
- The College continued its monthly COA Research Forum in partnership with the Georgia Tech Library.
- The College maintained a solid record of externally funded research through its instructional programs and research centers. This past year, new contract awards increased to \$5.4 million, up from \$4.9 million the previous year. The College has sustained a high level of research among its peers with an average of roughly \$6 million in new contract awards per year over the past five years. Increasing our funded research remains an ongoing priority.
- The College's international programs in Paris, France; Summer Study Abroad Programs in Holland-Paris-Berlin; and in Greece and Italy continued their strong tradition. In AY 2008-2009, 104 students from the College of

Architecture participated in a study abroad experience, either through one of the College's programs, or through another program at Georgia Tech. Among degree recipients, 76 or 44.71% of the College's undergraduate students participated in a study abroad program while enrolled at Georgia Tech and 28 or 17.95% of the graduate students participated.

Enrollment and Degrees Awarded: Enrollment in the College dropped slightly from last year's numbers with 1,206 students enrolled in fall 2007, which represents a decrease of 6 students over the previous year of 1,210 students. In the College as a whole, undergraduate enrollment decreased to 690 students from 759 and graduate enrollment increased to 516 students from 451 students. The Common First Year (CFY) decreased to 152 students from 185 students the previous year. However, the overall high enrollment in the College is best represented by the fact that the enrollment has increased by 53% over the past decade. This substantial and continuous growth in enrollment continues to stress the physical facilities of the College. In the past year, the College awarded 165 Baccalaureate degrees, 158 Master's degrees, and 7 PhD degrees, which represents an increase in the overall number of degrees awarded. In addition, roughly 1200 students from all colleges enroll in music classes.

Diversity: The College continues to place increased diversity of its faculty as a high priority. The full-time academic faculty is composed of 4% African American, 6% Hispanic, 12% Asian, and 19% women. Although the College compares well nationally among its peers, the need to continue efforts to increase the diversity of its faculty and staff in future appointments continues. The percentage of African American graduate students dropped slightly at 9.5% from 10.4%. The percentage of African Americans enrolled in our undergraduate programs remained steady at 4.5%. Overall, ethnic minorities now account for 30% of the total student population within the College of Architecture. Asians comprise the largest minority group at 18%. Females make up 45% of undergraduate students and 41% of graduate students. Part of the College's outreach efforts included its continued participation in the Atlanta University Center's Graduate and Professional School Fair in October 2008. The College continues to advocate for increased participation in the Institute's FOCUS Program, as outlined in the College's Diversity Committee's strategic plan for College-wide diversity. Faculty and staff worked hard to get students to participate in the FOCUS 2009 program, resulting in 9 potential applicants to the College participating in the program. With support from the Alcoa Foundation, the College was able to to attract and assist diverse rising high school juniors and seniors to its Career Discovery in Architecture summer enrichment program. The College will continue to participate in Institute programs such as FOCUS, and to refine its strategies for attracting more diverse applicants interested in the College at all levels.

The accomplishments of the individual programs of the College over the past year were many:

Architecture, including PhD program:

Fundamental restructuring of doctoral studies at the College of Architecture capitalizes on 25 years of success of the PhD program in placing the College at the forefront of research and scholarship related to the design, planning, construction, and management of the built environment nationally and internationally. The restructuring included disbanding the PhD Program as a separate administrative unit and moving toward designated PhDs in City and Regional Planning, Music Technology, and Building Construction. Upon the resignation of Professor Chuck Eastman, Professor John Peponis took over the administration of the PhD and MS programs with the new title of Director of Post-Professional and PhD Programs. Since the existing doctoral degree is a PhD with a major in Architecture, the achievements of its faculty and students will be discussed within the Architecture section.

Overall enrollment for fall 2008 within the baccalaureate and masters' degrees was 472, a decrease of 7.8% from last year's total of 512. Undergraduate enrollment fell nearly 9%, or 356. Graduate enrollment has remained steady over the same period with 111 Master of Architecture students enrolled in the fall of 2008 plus 24 Master of Science and 3 French exchange graduate students from LaVillette. Enrollment in the PhD Program had 89 students officially enrolled in fall 2008, an increase of 11 students from the previous year. Seven doctoral students graduated, bringing the total number of PhD degrees awarded by the College to 97. There were 77 applicants to the program and 16 were accepted...this during a year of transition and with little recruitment activity. For the second year in a row, the percentage of women increased at the masters level. The male-female ratio for graduate women flipped from 58:53 in AY 2007-08 to 53:58 this year, while the gap between male and female undergraduate enrollment jumped by 13% in the women's favor. Twenty-nine undergraduate students participated in the Paris Program. Fifty-eight (up from 35 last year) architecture students are pursuing the Institute's International Plan. Faculty brought in external funding totaling \$1,232,643, all of which is attributed to former PhD faculty who hold appointments in Architecture.

The Architecture faculty maintained a high level of scholarly activity during 2008, collectively producing 4 books, 5 book chapters and encyclopedia entries, 7 articles in refereed archival journals, 6 refereed conference proceedings, 4 articles or papers non-refereed journals or proceedings, and 2 research reports. Faculty members gave a total 39 keynote or invited lectures; gave 18 other lectures at conferences and symposia; had their work exhibited 16 times; and received 21 cites in books and national journals. With 78 refereed publications, 2 new books and 2 guest edited special issues of journals, 34 refereed articles, and 39 conference proceedings, the faculty formerly associated with the PhD program continued to be at the forefront of scholarly productivity in the College. Twenty-nine of the papers have PhD students as first authors; 12 additional papers have students among their co-authors.

The Master of Architecture Program received a 6-year accreditation from NAAB. The M.Arch was ranked 17th in the country by *DesignIntelligence*; George Johnston, Lars Spuybroek, Mike Dobbins and Ellen Dunham-Jones each came out with new books. Harris Dimitropoulos co-guest edited an issue of *Places*. Betty Dowling and graduate student Lisa Thomason produced a yearlong exhibition of student work at Georgia Tech over the school's 100 years as well as a companion book. Francis Hsu produced a catalog of faculty work.

Associate Professor Gottfried Augenbroe received an achievement award from IBPSA-USA for his work on building simulation and the best paper award with his students for the paper "Lessons from an advanced building simulation course" presented at the SimBuild conference, Berkeley, August 2008. Eastman received the Best Paper Award for the "Relative productivity" paper in the ASCE Journal of Construction Engineering and Management. The faculty and students continue to be active on numerous boards and organizations; are involved in numerous outreach and consulting activities with industry, professional associations, and academic institutions; and serve in a variety of editorial capacities. Visiting Assistant Professor Tristan Al-Haddad was accepted to the Fulbright Teacher Exchange Program in Chile for the fall 2009 semester. Al Haddad and Visiting Assistant Professor Ruth Dusseault each received a 2009 Artadia Artist award. Ellen Dunham-Jones' book, Retrofitting Suburbia, was featured in Time Magazine's March 23 cover story "10 Ideas Changing the World Right Now," in addition to many other national print and digital publications. David Green was awarded the AIA Bronze Medal for distinguished and outstanding service to the Institute and the community. Lars Spuybroek's myLight was included in the "Design and the Elastic Mind" exhibition at MOMA in New York; he also participated in 15 invited design competitions. Dusseault received an Individual Artist Grant from the City of Atlanta, Office of Cultural Affairs. Robert Craig received the Southeastern College of Art Conference (SECAC) Award for Excellence in Scholarly Research and Publication. Harris Dimitropoulos served as the Hesburgh Fellow at CETL. Michael Dobbins was named to the selection committee for this year's Rudy Bruner Award for Urban Excellence. Betty Dowling received the COA ADVANCE Women of Distinction Faculty Award. Franca Trubiano received the AIA Atlanta 2008 Committee on the Environment Award. Sponsored studios included the design of a new headquarters for the Georgia Peanut Association, a theater for Hazlehurst, Georgia, and a green hospital in Borneo. Jonathan Segal FAIA of San Diego was this year's Portman Visiting Critic. Michael Mesko and Michael Watkins shared being this year's Harrison Design Associates Visiting Scholar. The Georgia Tech NOMAS team took 2nd place in the national NOMAS design competition.

Building Construction: Undergraduate enrollment decreased from 215 to 179. At the graduate level, the MS BC Program increased from 104 students to 141 in the fall of 2008. This is a 128% growth in the BC program since the fall of 2000. The Building Construction faculty continued their research and scholarship activities, which are reflected under the Construction Resource Center section of this summary. The faculty and staff expanded their outreach activities, which included hosting their annual golf tournament and career fair, accepting multiple speaking engagements, and holding leadership positions in many professional organizations. BC faculty offered two distance learning courses taught for General Motors (GM) in fall 2008 and spring 2009.

Dr. Baabak Ashuri, Dr. Javier Irizarry, and Dr. Ioannis Brilakis joined the BC Program as Assistant Professors. Javier Irizarry established CONECTECH Laboratory, whose mission is to establish the framework for developing next generation technology enhanced solutions to construction environment problems by incorporating the cognitive processes of the human component of construction operations. Brilakis established a Technology Lab focused on Vision-based Automation of Bridge Modeling & Inspection, and Automated as-built BIM generation from visual and spatial data. Brilakis and Z. Zhu published a paper which received the Best Paper Award, it was titled: "Real Time Concrete Damage Visual Assessment for First Responders" at the ASCE Construction Research Congress, April 2009, Seattle, WA.

BC Undergraduate student Shannon Barnes won the Outstanding Undergraduate Researcher Award, the Best Oral Presentation Award at the 2009 Georgia Tech Undergraduate Research Awards Ceremony, and the Fall 2008 President's Undergraduate Research Award (PURA), for the project "BIM-enabled Integrated Optimization Tool for LEED Decisions in A/E/C/FM Projects," July 2008. Graduate student Angelica Ospina-Alvarado won the Charles R. Carroll, Jr. Graduate Student Research Grant from the Construction Sciences Research Foundation. BC oversaw one post doctoral and eleven PhD students in 2008-09. Two PhD students and 5 MS students graduated.

City and Regional Planning: Enrollments reached an all time high in 08-09 of 130 graduate students: 113 master's students and 17 doctoral students. 38 master's degrees and two doctorates were awarded. Studio projects were completed in one Atlanta neighborhood, Covington, South Fulton County and Chattanooga, Tennessee. Eight master's students and one doctoral student were recognized with awards, including Andrea Lytle (MCRP '09) named as AICP student of the year, Glenn Frankel (MCRP '08) named as Georgia Planning Association student of the year, and Jessica Doyle (PhD class of '12) named as ADVANCE College of Architecture Outstanding Graduate Student of the Year. Doctoral student Ann Carpenter was elected as one of two student representatives to the Governing Board of the Association of Collegiate Schools of Planning. Andrea Lytle served as Student Representative to the Executive Committee of the Georgia Planning Association. Thirty-seven graduate students were supported with teaching or research assistantships. Planetizen.com, a major commercial web publisher, named Georgia Tech 10th and 11th among U.S. planning schools in reputational surveys of planning educators and practitioners.

Professor Bruce Stiftel started his tenure as director. Perry Pei-ju Yang began work as Associate Professor of City and Regional Planning and of Architecture, coming from National University of Singapore where he was Assistant Professor of Architecture. In addition, Jerome Weitz, FAICP, was appointed as part-time Lecturer. Dracy Blackwell joined Program staff as Academic Advisor II. Associate Professor Daniel Immergluck was on leave as Visiting Scholar, Federal Reserve Bank of Atlanta. During 2008, Program faculty authored or co-authored one book, nine refereed journal articles, two book chapters and twenty other publications. They submitted 23 research proposals, seventeen of which were successful for a total of almost \$1.7 million in new contract funding. They made 55 national or international conference presentations. Bruce Stiftel was named as the 2008 recipient of the Association of Collegiate Schools of Planning's Jay Chatterjee Award for Distinguished Service to Planning Education. Assistant Professor Jiawen Yang was selected as a Lincoln Institute of Land Policy China Fellow.

Professor David Sawicki, FAICP, continues as editor of the *Journal of the American Planning Association (JAPA)*, for which Associate Professor William Drummond served as associate editor. Program faculty served on fifteen national or international journal editorial boards. Professor Nancey Green Leigh and Associate Professor Perry Pei-ju Yang were named as members of the leadership Board of the International Urban Planning and Environment Association (UPE) and will serve as co-chairs of the program committee for their 2010 conference in Guangzhou, China. Catherine Ross was named to the steering committee of the Atlanta Regional Commission's *Fifty Forward* initiative. Professor Steven French served as a member of NSF's Science and Technology Center review panel, and on Georgia Tech's presidential search committee. Many other faculty members served in leadership roles on national and regional commissions, advisory boards, and conference planning committees. The Thomas D. Galloway Fellowships in City and Regional Planning were endowed by the family of former College of Architecture Dean Tom Galloway. A joint studio initiative between Georgia Tech and Tongji University (Shanghai) was agreed to. The Program's proposal for a named city and regional planning PhD degree was approved by the Institute Graduate Committee. Proposals for new master's degrees in urban design and in geographic information systems involving program participation were prepared.

Industrial Design Program: In the fall of 2008, there were 158 undergraduate majors enrolled in ID or pre-ID and 38 Master of Industrial Design students (MID). Graduate applications increased slightly with over 80 people applying for fall 2009 admission; the program enrolled 15. The 2009 *Design Intelligence* rated the ID Program very highly—the grad program rated 4th and the undergrad program 10th nationally. The ID Program has faced extreme challenges in serving its growing number of students with only two full-time tenure-track faculty members and multiple part-time or visiting faculty members. Professor Stephen Sprigle began serving as interim director and continues teaching while maintaining his research agenda at CATEA and a partial appointment in Applied Physiology. Director of CATEA Jon Sanford continues teaching in ID. Kevin Shankwiler remains a visiting assistant professor. Professor Abir Mullick brought in \$191,933 for his Inclusive Indoor Play project from the US Department of Education. Sprigle and Sanford brought in over one million dollars in research for CATEA.

Including part-time faculty, visiting professors, and the prolific work of Sprigle, ID faculty and instructors published 9

articles and 4 conference proceedings; gave many conference papers and workshops; as well as participated in several exhibits and installations. Under the leadership of Assistant Professor Claudia Rebolá Winegarden, the ID Program completed its third year of the ID lecture series under the theme of Nature in Design. The invited speakers included Dr. Jeannette Yen (GT), Neri Oxman (MIT), Dr. Albert Chim (MAQUET Cardiovascular), Thad Sterner (GT), Michael Sater (Maurgood), and Robin Moore (N C State University). Two sponsored studios were taught during the year: part-time faculty David Lynn taught an automotive studio sponsored by Moto America and research scientist Alan Harp taught a furniture studio that was supported by Crate and Barrel.

The faculty serves on international, national, and regional committees and boards. ID students continued to be engaged in the larger community: graduate students coordinated the LiveD lecture series they had begun in the previous year and the undergraduates continued their involvement in Viva Studio with architecture students. The students organized the first ID Career fair in March 2009. Taryn Ericson's "The Flirt" was selected as a finalist in the American Wood Furniture Society's national furniture competition called Fresh Wood.

Department of Music: The Music Department had another exciting and productive year. The official launch of the interdisciplinary, Institute-wide Georgia Tech Center for Music Technology in the fall of 2008 increased the visibility of the Music Department, both on and off campus. Director Dr. Frank Clark led the reformulation of the Guthman Keyboard Competition into the unique and highly successful Guthman New Musical Competition that featured twenty-eight participants from the US, Canada, Asia, Europe, and South America and internationally recognized adjudicators. The Board of Regents approved the Letter of Intent for the PhD with a major in Music Technology. The 18-credit hour Music Minor was split into three distinct 15-credit hour minors—Music Technology Minor, Music Performance Minor, and Music Minor. As of fall 2008, there were 13 students studying music technology at the graduate level. Four students graduated with a Master of Science in Music Technology. Over 1200 students from all of the colleges continue to enroll in music classes each year.

Faculty participation at conferences, meetings, and performances and scholarly output remains high and included 5 invited performances, 8 peer-reviewed articles, 3 commissioned works, 9 conference papers, 5 peer-reviewed proceedings, and 5 compositions or transcriptions. Jason Freeman and Jerry Ulrich received the American Society of Composers, Authors, and Publishers (ASCAP) Plus Award. Student Sriram Viswanathan presented a peer-reviewed electroacoustic composition, *In the Womb* at the International Computer Music Conference, Belfast, August 2008.

In the year of its 100th Anniversary, the Yellow Jacket Marching Band performed in the Macy's Thanksgiving Day Parade. The Men's Glee Club toured Washington DC in March 2009, which included a performance for the Secretary of the Smithsonian, Dr. Wayne Clough. As with previous tours, all the transportation costs were provided through the Glee Club's continuing partnership with AirTran. The Music Technology Group held the fifth successful *Listening Machines* event (April 2009). This year was particularly exciting as it featured a large-scale collaboration between the Music Technology program and the School of Literature, Communication and Culture (LCC). *Sonic Generator*, a collaborative performance project with GVU, continued its enormously successful concert series and most notably, a standing-room only performance at the Woodruff Arts Center. Jason Freeman's composition, *Flock* was sponsored for \$20,050 and performed at the Zero One Festival, San Jose in June 2008. Department ensembles, students, and faculty provided over 100 performances on and off campus.

Research: The College of Architecture experienced an increase in contract awards from the previous year's total to \$5.4 million. New and existing contracts represent a sustained level of research among a broad range of research activity by faculty across all academic programs and research centers in the College.

Advanced Wood Products Laboratory (AWPL): The economic weakening of the secondary-wood products industry is resulting in a revaluation of the mission of the AWPL. In fulfillment of its academic goals, AWPL was directly involved in 12 academic courses in industrial design and architecture taught by Dr. Russell Gentry, Alan Harp, Kevin Shankwiler, Tristan Al-Haddad, Daniel Baerlecken, and Gernot Riether. Dr. Russell Gentry, Karl Brohammer, and Andrew Dugenski of the Manufacturing Research Center (MARC) led a sponsored class of 6 graduate students. Named "Wood Products, Markets and Manufacturing in US and Europe" and sponsored by ACIMALL/Italian Trade Commission (\$46,300), this course resulted in 31 plan visits in the US and Italy and a study on the wood products industry. Gentry brought in \$54,699 in new contracts. Continuing Education Program conducted thirty (30) workshops, all focused upon Introductory and Advanced software applications for 109 industry trainees providing a gross revenue

contribution of \$106,000. The end of the fiscal years finds the relationship with SCM GROUP Spa and SCM GROUP USA in transition.

The AWPL faculty, staff, and students exhibited and presented at: IWF, Atlanta; Forests to Finished Products, Athens, GA; The Furniture Society, Boone, NC; AWFS, Las Vegas, NV. Georgia Forestry Association, Atlanta, GA. AWPL worked in collaboration with Saint-Gobain Abrasives, New York, for their "Sanding Summit 2009" conducted at GA Tech with 75 sales and technical staff attending. Senior ID students exhibited their AWPL-made furniture at the International Woodworking Fair in Atlanta and the AWFS Design Competition in Las Vegas, NV. For the 5th year, the AWPL completed the Georgia Agriculture Stewardship Awards that are presented by the Governor during Georgia Agriculture Appreciation week. AWPL finished Phase II of its expansion.

Center for Assistive Technology and Environmental Access (CATEA): Jon Sanford became the new director of CATEA. The Center continues to be extremely active in research, scholarship, and outreach in the areas of disability and rehabilitation. As the highest producing COA research center CATEA brought in almost \$3 million in contracts from sponsors such as the United States Department of Education, Shepherd Spinal Center, Syracuse University, the National Science Foundation, as well as private companies. Its faculty and research scientists published 7 articles, 3 book chapters, and several other external publications; reviewed manuscripts, journal articles, and grant applications; spoke at many conferences, workshops, and classes; provided technical assistance to a variety of constituents; maintained a strong web presence; and served on many external committees. Faculty and staff taught courses in the Applied Physiology, Industrial Design, and Architecture programs; and professional education courses bringing in \$15,000 through the Institute on accessibility. Sanford, Sprigle, and Robert Todd continue to advise many graduate students in Industrial Design, Bioengineering, Mechanical Engineering, Electrical Computer Engineering, and Digital Media. The Center also employees 15 graduate students in Bioengineering, LCC, ME, Human Computer Interface, ECE, ID, and Industrial Systems Engineering; and works with 6 undergraduate students from BME and COA.

The Center developed a simple and cost-effective way to modify existing digital camera imaging chips to transform them for use in multi-spectral imaging systems (patent-pending). Jon Jowers' Master's of Industrial Design Project to develop a wheelchair braking system received a student award at the Rehabilitation Engineering Society of North America Conference (Patent filed). LaserFocusWorld.com's Commendation for Excellence in Technical Communications was presented to Linghua Kong, Stephen Sprigle, and student Chao Wang for article "Multispectral Imaging: CMOS imager with mosaic filter detects skin disorders." CATEA hosted the Rehabilitation Engineering Research Center on Wheeled Mobility in October 2008; helped create the Design and Technology for Healthy Aging Initiative (DATHA) as a forum that integrates the various individual efforts at Georgia Tech and the community into a unified, holistic approach on healthy aging; grew CATEA Consumer Network, a mechanism by which we regularly engage persons with disabilities, has grown into a valuable research and design tool, to 800 members; and hosted an open house with over 100 visitors. Sprigle was appointed as Interim Director of the Graduate Industrial Design Program

Center for Geographic Information Systems (CGIS): The Center for Geographic Information Systems continues to develop and apply spatial analysis technologies to an ever-expanding variety of research domains. For example, the GIS Center increasingly is invited to participate on interdisciplinary teams with researchers from Georgia Tech and other peer institutions and this year the Center led or played a major role in five proposals of more than \$1 million to NASA, NOAA, FEMA, DHS and NSF. The GIS Center has significantly expanded its research in alternative energy this year and has begun working closely with the Brook Byers Institute for Sustainable Systems in the area of urban systems modeling. Tony Giarrusso's project on biofuel resources in the southeast has been widely praised as an innovative application of GIS and remote sensing technologies. Steve French and Xuan Shi are working with Georgia Tech-Savannah on a Department of Energy project that is assessing potential energy production from tidal streams. French has been working with Chemical Engineering, Industrial Systems Engineering, and Economics on an analysis of a proposed Power4Georgia 850 mW coal-fired power plant in Washington County, Georgia. Danielle Ayan and Lisa Jackson completed the initial phase of a base mapping project for the Georgia Tech campus. In addition to the existing contracts totaling almost 2 million dollars, the Center brought in \$74,063 in new contracts.

A proposal for a post-professional MS degree in GIS has been developed and we expect to admit students to this program in the fall of 2010. GIS Center researchers and faculty taught 5 courses during the academic year and two during the summer to both graduate and undergraduate students. French directed 4.5 PhD students. Subrahmanyam Muthukumar completed his dissertation and won an award for the outstanding PhD student of the year. The Center

continues to provide GIS software to academic and support units across campus. In addition to his role as director, Dr. Steven French will begin a new position as the Associate Dean for Research in the College in July 2009.

Center for Quality Growth and Regional Development (COGRD): The COGRD is a resource for information on topics of sustainability, regionalism, and quality growth. CQGRD continues to focus on three primary goals: developing theory that addresses contemporary and future challenges and incorporates new technologies; transferring new knowledge into practice and implementation; and educating students, community leaders, elected officials, and practitioners on issues of quality growth and regional planning. The staff engages in research, outreach, and education through working with a variety of local, regional, and international groups; hosting and speaking at conferences, symposia, and workshops; teaching in the City and Regional Planning and PhD programs; and writing numerous articles and reports. CQGRD continues their leading role in both the research and analysis of Megaregions. This past year Director Dr. Catherine Ross spoke at several international events as an invited speaker, served on a number of boards and committees, was appointed as the NSF ADVANCE Professor for the College, and named Atlanta's Top 100 Black Women of Influence by Atlanta Business League and a "Notable Georgian" by Georgia Trend. She saw the publication of her edited book Megaregions: Planning for Global Competitiveness, commissioned by the Ford Foundation. Ross brought in new contracts totaling \$102,904 from Earth Tech Consulting, the Atlanta Beltline, and the US Department of Transportation. CQGRD promoted Amy Danner and Michelle Marcus, former graduate research assistants, to the positions of Research Scientists. Xin Wang, a Visiting Scholar from the People's Republic of China, continues research at COGRD.

Construction Resource Center (CRC): Faculty associated with the CRC published 48 papers in refereed journals, conference proceedings, technical reports, and book chapters. They were invited to give 8 papers including 3 keynote addresses. The faculty reviewed and edited a number of papers and proposals for various publications and organizations, including the National Science Foundation and the American Society of Civil Engineers' Construction Engineering and Management Journal; and held key leadership positions in construction-related organizations. Associate Professor Dr. Kathy Roper became the co-developer and co-editor of newly developed, peer-reviewed, open-access journal, *International Journal of Facility Management*, as well as serving on the editorial review boards of *Journal of Corporate Real Estate* and the *Journal of Facilities Management*. The CRC Faculty, who hold appointments in Building Construction, brought in \$662,853 in external funding from General Services Administration, National Science Foundation, RICS Education Trust, and others.

Georgia Tech Center for Music Technology (GTCMT): The Center officially launched November 2008 with the goal of becoming an international center for creative and technological research in music. The Center focuses on the development of musical instruments and applications as well as the pragmatic and aesthetic deployment of them in performance. The Center's mission is to provide a collaborative framework for committed students, faculty, and researchers to apply their musical, technological, and scientific creativity to the development of innovative artistic and technological artifacts. Twenty faculty members from 4 colleges around the Georgia Tech campus serve as active members of GTCMT. Three Music Technology faculty members (Gil Weinberg, Jason Freeman and Parag Chordia) serve as the core leadership of the Center. The center is also a home for more than 20 graduate students and a postdoctoral researcher. In its first year of operation GTCMT activities focused on pursuing external funding, expanding cross-campus research efforts, commercializing research projects, and expanding academic offerings. To date, music faculty associated with the Center have brought in \$2.7 million from internal and external sources including, NSF, Georgia Research Alliance, Woodruff Arts Center, GVU, and Vice Provost for Research. Faculty have completed 20 journal articles, 2 book chapters, 13 conference presentations, 11 international invited talks, and 4 international keynote addresses. There are 19 ongoing research projects. There have been 19 concerts and exhibitions by GTCMT faculty members including 4 GTCMT sponsored concerts (Sonic Generator and Listening Machines). The Center played an integral role in the Guthman New Musical Instrument Competition.

Interactive Media Architecture in Education (IMAGINE Lab): The Lab increased the number of collaborative proposals resulting from increased communication and interactions with different units on the campus. Erik Palmquist presented a paper co-authored with Jonathan Shaw titled "Collaborative City Modeling," at eCAADe, Antwerp 2008. Matthew Swarts presented a paper co-authored with Hugo Sheward titled "Using Multi-Level Virtual Environments as a Medium for Conducting Design Review through a Shared IFC Dataset," CAAD Futures conference, Montreal 2009. Tolek Lesniewski, Swarts, and Shaw taught 7 elective courses for the College. Racel Williams provided weekly technology workshops/seminars for IMAGINE Lab student employees to help develop their knowledge and skills in new technology affecting the AEC Industry. Swarts, Williams, and Lesniewski presented "Serious Games in

Architecture" for the COA Research Forum. The IMAGINE Lab members gave presentations to the Center for Civil and Human Rights, CNN.com, Children's Healthcare of Atlanta, Technology Showcase (Southern Company), Daniel Corporation and many other groups from industry, municipality and Georgia Tech.

Architecture Library: The Architecture Library continues to grow. A substantial number of new books have been purchased with funds from the Preston Stevens Endowment. The Library now has almost 49,000 books. Many new architecture and planning DVD's were added per faculty requests. Collection development is an ongoing collaborative effort. The Architecture Librarian Cathy Carpenter attempts to purchase all faculty and graduate student requests. The Library served the academic mission of the College and Institute Course through its very popular course reserve system. This year 35 instructors (20 in Architecture, 9 in CFY, 4 in CP, 2 in BC) used the Library's reserves system. Students had online access to 749 course readings (mainly journal articles) through electronic reserves.

The Library continues to work closely with COA faculty on customized library instruction, including group and individual training sessions for new faculty and doctoral students, as well as students in the Architecture, City Planning, Building Construction, and Industrial Design masters programs. The Architecture Library which serves as a study/research space for students and faculty is also used as a social gathering place for the COA community as well as an exhibit space. For example, the Library hosts the monthly COA Research Forum with the College, and hosts College and Institute meetings and functions including serving as the location for a CNN interview of Georgia Tech students and faculty. In addition, the Library collaborated with Professor Betty Dowling to host parts of the Centennial exhibit within the Library, which included original drawings from the Georgia Tech Archives. The Architecture Librarian, Cathy Carpenter published essays in two library science books, presented at the Art Libraries of North America Annual Conference in April, and wrote several book reviews.

Outreach: The past year marked several notable outreach activities, engaging the College of Architecture with a larger public, locally as well as nationally and internationally.

- Over 35 documented press stories favorably covering the new Georgia Tech Center for Music Technology in media outlets such as NPR, CNN, Washington Post, Wired, Tech Crunch, Reuters, USA Today, The Chronicle of Higher Education, AJC, WABE, and others.
- Georgia Tech faculty and students participated in over 100 musical events on and off campus including: the band marching in the Macy's Thanksgiving Day Parade in New York, Sonic Generator playing in the Woodruff Arts Center, and Jason Freeman's composition *Flock* was performed at the Zero One Festival, San Jose in June 2008.
- The year-long Centennial Lecture Series included alumni: John C. Portman, Merrill Elam, Mack Scogin, Anthony Ames, Ivenue Love-Stanley, William J. Stanley, III, Thomas W. Ventulett, III, K. Michael Hays, Michael Arad, Jerome Cooper, Harry Wolf, and others.
- Florida Gov. Charlie Crist has CRP alumnus Tim Jackson to serve on the Florida Energy and Climate Commission. Jackson is president and CEO of Orlando-based Glatting Jackson Kercher Anglin, Inc., and serves on the College of Architecture Dean's Council.
- Lola Reinsch and Almont Pierce created the Reinsch-Pierce International Initiatives Endowment Fund to fuel efforts to apply the collective power of design and planning knowledge to emerging regions. The first project was a hospital design workshop led by graduate student Arief Setiawan for a rural Indonesian health facility that will be built.
- The Georgia Tech Chapter of the National Organization of Minority Architecture Students captured second place in a national competition to design a memorial and interpretive center of the Black Civil Rights Movement in Washington D.C.
- Professor of Practice David Green was awarded a 2008 Bronze Medal from American Institute of Architecture Georgia Chapter at the Awards Gala in Atlanta October 4. The award recognizes distinguished and outstanding service to the Institute and the community.
- Dean Alan Balfour gave the keynote lecture at the new American Embassy in Berlin, Germany, in September 2008, during an invitation-only symposium to discuss and substantiate public perception of the new building.

Summary: Contributions of the College to the Institute: The accomplishments of the College in turn represent contributions to the Institute as well. These can be seen in the following areas, among others:

• Georgia Tech Solar Decathlon House is now located at the Tellus Northwest Georgia Science Museum in

Cartersville, where 145,000 people have visited the museum since it opened in January 2009.

- The College continues to take leadership roles in several Institute initiatives including the Georgia Tech Center for Music Technology; the Design and Technology for Healthy Aging Initiative (DATHA) forum interdisciplinary grant proposals; and Georgia Tech campus mapping project.
- NSF ADVANCE Professor Dr. Catherine Ross began a Women of Excellence award program for women faculty and students who have distinguished themselves among their peers. Award winners Dr. Elizabeth Dowling received the Faculty Award; Jessica L.H. Doyle, a PhD candidate in City and Regional Planning received the Graduate Student Award; and Shannon Barnes, a Building Construction student, received the Undergraduate Award.
- The College continued to strengthen its relationship with the Georgia Tech Library and Archives through transferring its Heffernan Design Archives to their care; continuing the COA Research Forum, and co-hosting an exhibit on alumnus Alan Buchsbaum.
- Supported by the Alcoa Foundation, the College continued its partnership with CEISMC to offer a two-week Career Discovery Program in Architecture summer enrichment program for rising high school seniors and juniors.
- With funding from the Reinsch-Pierce Family, the College auditorium—once voted the worst classroom on campus and the most heavily used one—has been completely renovated.