Tool aids design of assisted living facilities

Interdisciplinary initiative promotes healthy design, easy access to nature

Texas A&M students and faculty members from architecture, landscape architecture, visualization, and public health are developing a multimedia educational tool to assist with the design of outdoor space for the elderly. Funded by the National Institutes of Health (NIH), the project recently received $747,000 from the National Institute on Aging (a division of NIH), through a Small Business Innovation Research (SBIR) grant (#R44 AG024786), in collaboration with Arkitex Studio, Inc., a local design firm.

The interactive presentation, on a set of three compact discs, will translate research-based guidelines into a user-friendly format with drawings, photos, models, case studies, research links, video clips and interactive exercises. The shows how facilities can be designed to encourage elderly residents to go outdoors, for improved health and quality of life. The educational series will be disseminated all over the United States, to design practitioners, care providers, policy planners, educators and consumer advocates. It is the first program of its type linking environmental design with health outcomes and behavior in older adults.

Dr. Mardelle Shepley, director of the Center for Health Systems & Design, holder of the William M. Peña Endowed Professorship in Information Management, and a member of the Texas A&M University faculty since 1993, was on a partial development leave during the 2006-07 academic year. Though absent from the day-to-day activities of the center, Shepley continued reviewing student work and worked as a design research consultant for six firms including Anshen + Allen, Goody Clancy, Steffian Bradley, Shepley of California, Berkeley, and John Zeisel of Hearthstone Alzheimer’s Care.

In the research phase of the project, carried out summer 2007, two four-person teams conducted surveys and environmental assessments at 68 healthcare facilities in three cities — Houston, Chicago and Seattle — and obtained about 10,000 photographs and 20 hours of video interviews.

"By making it easier and faster to obtain evidence-based information," Rodiek said, "this educational tool will facilitate applying research to actual design situations."

Dr. Shepley returns to CHSD helm

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Dr. Susan Rodiek interviews a resident in an assisted living facility in Chicago that features a five-story tropical rain forest.
Mann tapped as international liaison

Professor George J. Mann, AIA, holder of the Skaggs-Sprague Endowed Chair of Health Facilities Design and president of Global University Programs in Healthcare Architecture (GUPHA), was recently appointed as the Academy of Architecture for Health’s Liaison to the International Union of Architects/Public Health Group (UIA/PHG). Mann has been an active member of this group, which is made up of representatives from all over the world involved in Architecture for Health.

“Since 1974, when I first joined the UIA/PHG in Nairobi, Kenya,” Mann said, “the contact with other architects, who are designing health and hospital facilities all over the world has been a tremendous learning experience for me. These architects have to do a lot more with a lot less.” The organization meets annually in different countries. Last July, at the meeting held in Beijing, China, Mann gave a presentation titled “The Unique Architecture-for-Health Program at Texas A&M: A Case Study Approach to Learning.”

This year, he has been invited to speak at the Technion - Israel Institute of Technology in Haifa, Israel, to the World Congress of the International Hospital Federation in Seoul, Korea, and to the 5th GUPHA Forum in Tokyo. He will also deliver a keynote address to the Health Engineering Association of Japan and travel at Kogisan University.

College eyes executive M. Arch. program

Two CHSD faculty fellows are drafting a proposal for a unique Executive Master of Architecture program at the Texas A&M College of Architecture. The program is being designed to respond to architecture firms’ demands for a master’s program that allows students to remain in practice, according to the program’s advocates, Kirk Hamilton, FAIA, FACHA, associate director of CHSD and founding principal emeritus of WHR Architects, and Dr. Roger Ulrich, faculty fellow of CHSD and holder of the Julie and Craig Beale ’71 Endowed Professorship in Health Facilities Design.

“The concept,” said Hamilton, “is to serve a group of potential students who are in the middle of their careers, but lack a dedicated degree to become licensed and for various reasons are unable to pursue a full time M. Arch. program.”

The proposal is modeled on examples from various universities, including Boston Architectural College’s Distant Master of Architecture Program and various executive MBA programs. It will be a two-calender-year degree program based on intensive sessions of eight to 10 actual class days, which Hamilton said amounts to the equivalent face hours with faculty a student receives in resident programs.
Ke Tang

Masters - 2nd Year

Ke Tang, from Shanghai, China, is interested in complex healthcare facilities, such as cancer hospitals and medical centers. He is intrigued by the dilemma between design and function in healthcare architecture, and he believes that hospital care should be more personal and technology-oriented, but all good healthcare design should be evidence-based. His final study project will focus on finding better solutions in this area.

Mayur Joshi

Masters - 2nd Year

Mayur Joshi, from Mumbai, India, is interested in using evidence-based and non-stereotypical hospital space that provides a staff and patient-centered environment. She is working in telemedicine technology and methods for making healthcare more accessible and efficient. In her final study project, Mayuri is employing telemedicine and evidence-based design to create a multispecialty healthcare facility.

Amanda Scott

Masters - 2nd Year

Amanda Scott, from Conroe, Texas, is interested in investigating the ability of a space to assist, rather than hinder, the processes which occur in a hospital itself. Having spent several years with family in hospitals, she wants to invest her time to research and analyze a variety of healthcare facilities to design spaces which invite and heal rather, than annoy and harm; to influence patients, families, and staff in a positive way.

Ashley Dias

Masters - 2nd Year

Ashley Dias, from Dallas, Texas, is interested in cardiovascular care design. Her final study is a mixed-use heart hospital campus that promotes healthy lifestyles. She plans to design the campus according to evidence-based research on lifestyle intervention and behavioral change.

Alejandro Irarite

Masters - 2nd Year

Alejandro Irarite is originally from Guatemala, but has made Houston, Texas his home. He is interested in the planning and development of evidence-based sustainable healthcare facilities.

Nurture by Steelcase

Dissertation Grants

Dissertation grants were awarded to doctoral students Zhe Wang and Woc-Hwa Shin for the 2008-09 academic year. These funds were made available through a commitment from Nurture by Steelcase, a company in the University design research lab. The latest members are Karlsburger Companies and BSA Lifecycles. HAC was founded in 2002 to support the activities of the Center for Health Systems & Design and magazine in the College of Architecture with an interest in health design and research. HAC funds are cutting-edge companies in the design, construction and manufacturing fields. Below are HAC member firm update featuring current research, latest practice innovations, new employees and interns programs, as well as young architects involvement in their firms. To become an HAC member firm please contact Mandelle Shepley, director of the Center for Health Systems & Design at Texas A&M University e-mail at mandelle@zuche.tamu.edu or (979) 845-7059.

WHR Architects, Inc.

www.whrarchitects.com

WHR Architects Inc. has been honored again with the 2007 Global Student Competition for Design of Healthcare Architecture (GPD/HCA). The AIA awarded the Gold Student Project for a design for a hospital to only one group of student architects. GPD/HCA, an annual competition co-sponsored by the Global University Programs in Healthcare Architecture (GUPHA). The winning project is the result of a class taught by the Architect Robert Gardner, senior partner of WHR Architects Inc. The project won the Design Excellence Award for recognition of WHR’s design for the Memorial Hermann Healthcare System Community Hospitals in Katy, Texas.

A group of 21 designers from WHR travelled to Japan this year to share knowledge on the unique challenges of healthcare planning in Japan as well as the design opportunities on the other side of the globe.

Brian Briscoe

HKS, Inc.

www.hksinc.com

HKS, Inc. member firm received the American Institute of Architects (AIA) Excellence Award for the Large Firm of the Year. The Pinnacle, the highest honor AIA can bestow upon a design firm, is granted only to firms that have consistently contributed to the highest aspirations of the profession, community and the AIA while remaining committed to enhancing the quality of life through excellence in architecture.

Herman Miller for Healthcare

www.hermanmiller.com

A limited-edition pink Lea personal light will be the focal point of a new exhibition that explores awareness about breast cancer. Orders for the pink edition of Lea will be accepted through Herman Miller dealerships and retail partners in October, which also is Breast Cancer Awareness Month. Herman Miller will donate a percentage of the proceeds to breast cancer awareness, research and treatment. The exhibit, titled “Breast Cancer Exhibit” (available for limited-edition lighting) table-top exhibit — is a result of collaborative engineering and design development between Herman Miller and the breast cancer research organization Susan G. Komen for the Cure Foundation. An estimated 170,400 new cases of breast cancer are expected to occur among women in the United States during 2007, 20% more than in 2000. In 2007, 400 men will also be diagnosed.

Herman Miller has garnered critical acclaim for its exceptional, innovative and sustainable designs. Its products are available in leading stores and design and office management outlets, bookstores, libraries, and at www.hermanmiller.com. Herman Miller was founded in 1923 and is known for its commitment to positive social and environmental impact through product, service, and design innovation. Herman Miller’s 2007 Sustainability Report highlights the company’s ongoing focus on engaging and empowering its employees in making environmentally responsible choices in their personal and professional lives. A global team of designers, engineers, and researchers work together to develop sustainable product design and manufacturing processes that result in products that perform well and have environmental benefits.

Perkins + Will

www.perkinswill.com

Perkins + Will was recently named one of 2007’s ‘Best AEC Firms to Work For’ by Building Design + Construction magazine. This award program recognizes firms in the worldwide AEC industry that excel in providing professional development, social responsibility, workplace environment, compensation/benefits, innovative recruitment and retention policies, and business practices.

Traveling fellowships were given to Ashley Dias, from Dallas, Texas, for his interest in healthcare design, and Ke Tang, from Shanghai, China, for his interest in complex healthcare facilities such as cancer hospitals and medical centers. He is intrigued by the dilemma between design and function in healthcare architecture, and he believes that hospital care should be more personal and technology-oriented, but all good healthcare design should be evidence-based. His final study project will focus on finding better solutions in this area.

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Daniel Berger

Masters - 2nd Year

Danny Berger, from Alexandria, Indiana, is interested in healthcare architecture because “it is complex and challenging, but the real excitement comes from the knowledge that our designs can positively impact the health outcomes of those who use our facilities. We have an opportunity to change lives for the better.”

SCHOLARSHIPS, FELLOWSHIPS & DISSERTATION GRANTS

Recipients

Citation

Perkins + Will

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Texas A&M architecture professors and CHSD faculty fellows Charles Culp and Jeff Haberl were among university faculty honored for their work on one of 15 patents recently awarded to Texas A&M faculty. The inventors were feted at the Feb. 23 Patent and Innovation 2007 Awards luncheon sponsored by the Texas A&M University System Office of Technology Commercialization. The invention earning Culp and Haberl this distinguished honor — United States Patent Number 6,996,508 — is a system and method for remote retrofit identification of energy consumption systems and components.

Culp currently serves as associate director of the Energy Systems Laboratory (ESL) at the Texas Engineering Experiment Station (TEES). He earned a doctorate in solid state physics from Iowa State University with a minor in electrical engineering. A licensed engineer and holder of 11 U.S. patents, Culp has over 25 years of academic and professional experience in engineering, research, teaching and management. Jeff Haberl also serves ESL as associate director. He earned a Ph.D. from the University of Colorado at Boulder in 1986 and has been conducting research for almost 30 years in areas related to energy system efficiency, renewable energy and intelligent measurement system.

4th time in a row! Aggie lands Robert Wood Johnson research grant

Zhipeng Lu, a doctoral student in Architecture at Texas A&M University, recently received a $25,000 dissertation grant from the Robert Wood Johnson Foundation’s Active Living Research. This makes Lu the fourth Ph.D. student in a row from the Texas A&M College of Architecture to receive the prestigious grant. Previous recipients were Xuejia Zhu, Praveen Maghelal and Meghan Wieters.

Zhipeng’s dissertation proposal, “Design for the Frail Old: Environmental and Perceptual Influences on Corridor Walking Behaviors of Assisted Living Residents,” examines the potential of corridors to promote walking among the frail, older residents who spend most of their time indoors. The study explores the relationship between physical features of corridors in assisted living facilities and residents’ walking behaviors, as well as the mediating effect of perceived walkability on this relationship.

Lu has visited 34 facilities in Houston and 16 in other parts of Texas to carry out his research. Currently, Zhipeng is working on focus groups, surveys and photographic experiences, to gather data.

Texas A&M students, HKS collaborate on 1.7 million sq. ft. medical center campus

Texas A&M architecture students and faculty collaborated with HKS Inc., an international architecture and construction firm, to develop design concepts for a 1.7 million sq. ft. medical center in Boca Raton, Fla. The 43 participating students formally unveiled more than 60 large format display boards and seven design models for the proposed Charles E. Schmidt Medical Center on April 27 at the HKS office at McKinney Ave. in Dallas.

It was a great experience to be able to work on a third year design project with a firm like HKS,” said Jenny Holzer. “The Boca Raton project proved to be challenging and exciting. We really enjoyed being able to present our final work where employees of HKS were able to offer some incredible feedback for our designs.”

Three studios collaborated on this project. Leading the undergraduate studios, which focused on campus and medical planning, were George J. Mann, Joseph McGraw, Susan Rodek and Roger Ulrich. Graduate students in Kirk Hamilton’s design studio concentrated on the facility’s critical care tower.

“The students were asked to utilize the latest evidence-based design principles in developing a vision for a new, sustainable healthcare environment with the utmost emphasis on patient safety,” noted Mann.

Haberl elected ASHRAE fellow

Dr. Jeff S. Haberl, CHSD faculty fellow and associate director of the Texas Engineering Experiment Station’s Energy Systems Laboratory was elected fellow of the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE).

Haberl has distinguished himself as an expert on building energy consumption. He has developed numerous methods for determining energy usage and applied these in the Texas LoanSTAR program, which gives low-cost loans to municipal and state facilities to install energy conservation measures. Haberl used his research to become a founding contributor to the International Performance Measurement and Verification Protocol. The U.S. Environmental Protection Agency has taken an interest in his current work, which is to create emissions calculation methods to generate energy efficiency and renewable energy savings.

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‘07 HIAC meeting expanded

The 6th Annual Health Industry Advisory Council (HIAC) expanded its 2007 annual meeting. Beginning Nov. 1, 2007, members meet at Traditions Golf Course for what will be the first Annual HIAC Golf Tournament. Later that evening, members meet at The Plaza Hotel for a kick-off Welcome Dinner.

The annual meeting will be held Friday, Nov. 2. Saturday’s events will begin with a portfolio review, sponsored by SHEA, the healthcare architecture student organization, which will be followed by a review of projects in George Mann’s studio.

The keynote speakers at the HIAC meeting are Dr. Leonald L. Berry, a distinguished professor of marketing, who also holds the M.B. Zale Chair in Retailing and Marketing Leadership in the Mays Business School at Texas A&M University, and Dr. Clifford Dacso, also a distinguished researcher professor, and director of the Abramson Center for the Future of Health.


The project featured open and friendly office space for patient care. The project program included designing an office building that would provide adequate patient-care space, ample work stations for the staff, and an area that conducive to private time for the physician. The students had an opportunity to tour the project site as well as an existing cardiovascular diagnostic center hospital in Louisiana. They learned about different procedures including catheterizations and the nature of unique spaces such as echocardiogram rooms, cardiovascular intensive care units, and stress laboratories.

“The knowledge gained helped the 16 students make informed decisions and create sustainable designs,” said Mann. “The clients were very accommodating and the architects they do hire will have quite a challenge, because these students have given them so many questions to ask and so many ideas to integrate into their plans.”