Generations of Aggie architects assemble at ASHE

Celebration marks 40 years of architecture-for-health initiatives at Texas A&M

Amid a flurry of fanfare, former students, faculty and friends of the Texas A&M College of Architecture gathered Feb. 26 at San Antonio’s Marriott Rivercenter Hotel to celebrate the college’s 40th anniversary of architecture-for-health education.

Held in conjunction with the American Society for Healthcare Engineering’s (ASHE) 2007 International Conference and Exhibition on Health Facility Planning, Design and Construction (PDC), the gala event drew more than 150 well-wishers — some from as far away as Tokyo, Japan, and most of them currently engaged in the healthcare design profession.

Throughout the evening, the history, heritage and global influence of healthcare design education at Texas A&M was revealed as participants swapped tales from past and present.

The opportunity to meet with former students had special significance for George J. Mann, the Skaggs-Sprague Endowed Chair of Health Facilities Design at Texas A&M, who with other faculty in 1967 initiated architecture-for-health education at the college. In fact, Mann’s longstanding contributions to the health facility design field were officially recognized during the conference, when ASHE presented him with a national Award of Appreciation.

“George remembers what project you participated in, even if it was in 1972,” noted participant Erin Peavey, president of Texas A&M’s Student Health Environments Association. “His students have been and always will be his passion.”

Among those in attendance were past presidents of the AIA’s Academy of Architecture for Health and Mann’s longtime Japanese colleague, Yasushi Nagasawa, a professor of architecture from the University of Tokyo with whom in 1999 Mann founded Global University Programs for Healthcare Architecture.

More than $23,000 in scholarships and grants was awarded to Texas A&M healthcare architecture students during the Texas A&M Center for Health Systems & Design’s inaugural awards ceremony, held Jan. 25 at the College of Architecture’s Preston Geren Auditorium. Altogether, both graduate and undergraduate students received a total of 16 awards, including traveling fellowships and dissertation grants funded by Corporate Partner firms of the center’s Health Industry Advisory Council (HIAC).

The awards included the Herman Miller for Healthcare Traveling Fellowships, STERIS Traveling Fellowships, Nurture by Steelcase Dissertation Grants, the Design with Evidence Scholarship, and the Mann Prize.

Representatives from all three HIAC Corporate Partner firms were on hand to present awards funded by their companies included Josh Stiles with Herman Miller for Healthcare, Natasha Rudis of STERIS, and Patsy Jackson and Chris Laderer representing Nurture by Steelcase.

Ten masters of architecture students earned Traveling Fellowships that will fund travel to the next American Society of Healthcare Engineering Planning and Design Construction Conference.

Nurture by Steelcase Dissertation Grants were presented to three doctoral students, including Jin Gyu “Phillip” Park, who earned $5,000; the ceremonies largest award. Ph.D. students Zhipeng Lu and Xuemei Zhu each received $2,500.

Arijit Dutta, a second-year master of architecture student, received the Design with Evidence Scholarship, and several undergraduates were recognized, including two senior environmental design students who earned the Mann Prize.

See scholar profiles and photos: Page 4
From designing a cancer center in the Middle East, to quantifying success factors in the design and construction of healthcare facilities worldwide, the 11 Texas A&M students slated to receive Graduate Certificates in Health Systems & Design this May, have been working on final study projects that together exemplify the myriad needs of the healthcare design professions.

Soumitra Shende is designing a cancer center for Dubai Healthcare City, a master-planned medical complex in the United Arab Emirates. Diane Hubert is working with Brazosport Memorial Hospital in Lake Jackson, Texas to design a new women's center that includes 10 new labor-delivery-recovery-postpartum (LDRP) rooms. Other students, like Ashish Kulkarni, are working on children's hospitals. Kulkarni's final study involves the design for the Richmond Children's Hospital in Richmond, Va.

Other final projects involve design on a smaller scale. Rupa Kango is providing architectural ideas for Joshua's Place Hospice in Houston, Texas. Lei Guo is working on a cardiology hospital for the Texas Medical Center, also in Houston; and Yuri Kim is working on designs for the Woman's Hospital in Baton Rouge Louisiana.

Construction science graduate student Swati Tyagi is taking a distinctively different approach, evaluating the critical success factors for design-build healthcare projects.

To earn a graduate certificate from the Center for Health Systems & Design, students are required to take 15 credit hours specific to healthcare design and to incorporate healthcare design in their final study project.

This year, the Center for Health Systems & Design welcomed 11 new firms to the Health Industry Advisory Council (HIAC) — three Corporate Partners and eight Professional Members.

Professional Membership targets design and construction firms, while Corporate Partnership is geared for healthcare industry companies, such as the new Corporate Partners: STERIS, Nurture by Steelcase and Herman Miller for Healthcare.

Since established in 2003, HIAC membership has almost tripled in strength and numbers to include a total of 23 associated firms that together play a vital role in the success and growth of CHSD.
Ulrich wins Bush Excellence Award in Research

For his groundbreaking research of global significance, Roger Ulrich, professor of architecture at Texas A&M University and faculty fellow with the Center for Health Systems Design, recently received the 2007 Bush Excellence Award for Faculty in International Research.

Known throughout the international healthcare community, Ulrich’s theories and ideas have been changing the way buildings are designed and healthcare services are provided since 1984, when his landmark paper on the effect of nature on patient recovery was published in Science magazine.

“There are few faculty members of a department of architecture on any continent who have had as extensive an influence in scientific research as Dr. Roger Ulrich,” wrote Mark Clayton, interim head of the Texas A&M Department of Architecture, in nominating Ulrich for this distinguished award. “He has inspired an entire new field of both basic and applied research that links environmental psychology to building design and performance.”

Ulrich received the award Feb. 28 at the Consul General’s luncheon held at Texas A&M University’s Annenberg Presidential Conference Center.

George Bush, the 41st president of the United States, and his wife, Barbara, established the Bush Excellence Awards in 2002 to recognize those who have made outstanding international contributions in research, teaching and public service.

For nearly 30 years, Ulrich has developed scientific evidence that has significantly influenced the fields of healthcare architecture, landscape architecture and urban design. His rigorous scientific studies on the physical and natural environments’ effects on patient medical outcomes have made him the most cited and quoted researcher internationally in evidence-based healthcare architecture.

His early work concluded that nature views offer positive distractions for recovering patients that can reduce pain and improve health outcomes. His discovery, that nature can even shorten hospital stays, has stimulated a great deal of study by other researchers.

Ulrich has had an unprecedented international impact on healthcare, influencing hospital projects on nearly every continent. In 2005, he was invited to work with the British National Health Service (NHS) as a senior advisor, providing insight on design and construction of the United Kingdom’s estimated $25 billion healthcare infrastructure overhaul. His research on single-patient bedrooms and direct advisement played a pivotal role in the NHS decision to increase single-bed patient rooms from 20% to 100%.

Ulrich has presented nearly 30 keynote plenary research presentations on evidence-based design at major conferences and he remains a much-sought-after speaker for international venues.

Ulrich is the second CHSD faculty fellow to be honored with a Bush Excellence Award. In 2003, George Mann, the Skaggs-Sprague Endowed Chair of Health Facilities Design at Texas A&M, received the Bush Excellence Award in Public Service.

“I am very pleased that two of us in the health program and CHSD have been winners,” said Dr. Ulrich.

Second HIAC portfolio review called ‘big success’

On Feb. 8, representatives from five Health Industry Advisory Council firms traveled to College Station to critique the portfolios of more than 40 members of the Student Health Environments Association (SHEA) at the second annual HIAC Portfolio Review.

With more firms and students participating, the 2007 event was a big success, said Erin Peavey, SHEA president.

Firms participating in this year’s portfolio review included Ellerbe Becket, HDR Architecture, HKS, HOK and WHR Architects. Among the firms’ representatives were several former students, including founding SHEA officer Liz Viets of WHR Architects, who attended with the firm’s senior principal Anthony Haas. Also attending were Jason Schroer from HKS, Marta Willgoose and Ron Smith from HOK, and John Hollingsworth from Ellerbe Becket.

The students, whose portfolios were critiqued for composition, quality of work, and insight as to what firms are looking for in a student’s portfolio,

She also credited the increase in firm representation to the continued success of the grassroots student organization.

“It’s exciting to see SHEA grow, it seems that the level of dedication and enthusiasm keeps rising,” Peavey said. “Many graduate students have joined SHEA and we have a few non-architecture majors. It’s great to see our interdisciplinary vision blossoming.”

SHEA now boasts almost 60 student members, including two new members from Texas A&M’s School of Rural and Public Health.

For more information on SHEA, contact Erin Peavey at ekpeavey@yahoo.com or visit the organization’s Web site at http://shea.tamu.edu.
CHSD profiles 2007 award recipients

At its inaugural awards ceremony on Jan. 25, 2007, the Center for Health Systems & Design at Texas A&M's College of Architecture awarded 16 scholarships, fellowships and grants made possible by the generous donations of Herman Miller for Healthcare, STERIS, Nuture by Steelcase, Susan Roidiek, and David Watkins of WHR Architects. Below are the profiles of the students who received awards.

Herman Miller for Healthcare

TRAVELING FELLOWSHIPS

Jie Ao
Masters - 1st Year

Jie Ao, from Beijing, China, is interested in user-friendly design and creating convenient environments for those in healthcare settings. She is also interested in evidence-based design that leads to better communication and reduced stress for patients, their family and medical staff.

Ashley Dias
Masters - 1st 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 design research in lifestyle intervention and behavioral change.

Alejandro Iriarte
Masters - 1st Year

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

Clayton Merritt
Masters - 1st Year

Clayton Merritt, from Houston, Texas, is interested in using evidence-based design to promote better health outcomes in patients, and in designing efficient facilities for both staff and patients. Clayton also believes savvy design should not have to be sacrificed.

Hyung Jin Yoon
Masters - 1st Year

Hyung Jin Yoon, from Seoul, Korea, is interested in care for the elderly, especially for those dealing with cancer. Last semester Hyung Jin designed a cancer center in his studio, sparking his interest in cancer care design. He has previously practiced in South Korea.

Robert Linnstaedter
Masters - 2nd Year

Robert Linnstaedter, from College Station, Texas, is most interested in using evidence-based design to improve the experiences of patients, family, staff and visitors in healthcare facilities. Specifically, Robert is interested in operating room and critical-care unit design. His final design study is a rehabilitation center in College Station, Texas.

Steris

TRAVELING FELLOWSHIPS

Arijit Dutta
Masters - 2nd Year

Arijit Dutta, from Nagpur, India, is interested in evidence-based design. He has six years of practice experience and is a partner of Crafted Space, a firm in India. He has worked on adaptive reuse, commercial and residential projects. Arijit plans to use his Graduate Certificate in Health Systems & Design to expand his architectural typology experience.

Soumitra Shende
Masters - 2nd Year

Soumitra Shende, from Mumbai, India, is interested in evidence-based design. His final design study is the master plan of a medical city, in which he will focus specifically on the design of a cancer center. Soumitra has practiced in both the United States and India. He plans to practice architecture for health with evidence-based design as his methodology.

Rupa Kango
Masters - 2nd Year

Rupa Kango, from Mumbai, India, is interested in evidence-based design. Rupa has practiced in both the United States and India, working for Perkins + Will in India and Ken Ross Architects in Tennessee. She plans to become licensed in the United States within the next three years. Her final study is a hospice in Houston, Texas.

Center for Health Systems & Design

DESIGN WITH EVIDENCE

Ashish Kulkarni
Masters - 2nd Year

Ashish Kulkarni is from Mumbai, India, where he received his bachelor’s degree. He has a couple years of experience in retail, residential and hospitality design. Ashish’s interests are in evidence-based design, planning, and 3-D building modeling. His final study is a children’s hospital and he plans to specialize in healthcare design.

Arijit Dutta
Masters - 2nd Year

Arijit Dutta, profiled above as a STERIS Traveling Fellowship winner, resides in College Station with his wife and daughter. His work experience is international.
Jin Gyu’s dissertation is titled, “Environmental Color for Pediatric Patient Room Design.” The purpose of the study is to gather a body of knowledge on the value of color in pediatric patient rooms. The project’s data collection focuses on three subject groups: healthy children, pediatric patients, and design professionals. Phillip has finished collecting data from healthy children, and is currently collecting data from design professionals, and pediatric patients. He intends to complete data collection by March. The goal of his study is to build empirical evidence on the selection of color as a component in healing environments of pediatric patients. The results will also help healthcare providers and professionals select appropriate colors for pediatric patients.

Phillip is scheduled to graduate in August and plans to present the final results of his study at the Academy of Architecture for Health’s 2007 Fall Conference. He is working under the direction of Mardelle Shepley, CHSD director. Upon graduating, Phillip plans to pursue an academic career in healthcare design research.

Viva by Steelcase Dissertation Grants

Xuemei Zhu
Ph.D. Candidate

Xuemei Zhu is from Dungyang, China. Her dissertation is titled, “Healthy Communities for Children: Linking the Built Environment with Children’s Walking to and from School.” She has found that walking to and from school can increase a child’s physical activity and reduce obesity, but that often, the built environment imposes barriers that reduce walking. Her study involves 73 elementary schools in Austin, Texas. The diverse socio-demographic of Austin also allows Xuemei to examine ethnic disparity by comparing Hispanic and non-Hispanic white children’s school travel arrangements. Her study will attempt to develop a “walkability” and safety index of the built environment for school travel, as well as test this index against parent’s decision making on children’s travel methods. Xuemei is studying the environment-behavior relationship through school attendance data, neighborhood walkability, street-level walkability and safety from traffic and crime.

Zhipeng Lu
Ph.D. Candidate

Zhipeng Lu is from Foshan, China. His dissertation is titled “Walking for Healthy Aging: Walkable Corridors in Assisted Living Facilities.” His research has found that the physical inactivity prevalent in long-term care residences poses a threat to older people’s health. He believes assisted living facilities’ indoor corridors have the potential to facilitate regular walking and therefore more healthy aging. According to Zhipeng, the perception of walkability is essential for frail older people to initiate and adhere to walking behavior. The goals of his study are to identify walkability-related physical features of corridors, as perceived by assisted living residents, and to develop an evidence-based “Indoor Walkability Audit Tool” and design guidelines. His study is composed of a mixed-method approach. Zhipeng will conduct focus groups in eight facilities in Harris and Brazos counties, evaluate corridors through visual simulation and photography, and employ gaming with physical models. Zhipeng anticipates graduating in May 2008.
CHSD faculty fellows engage in myriad projects

The Center for Health Systems & Design (CHSD), home to the world’s largest interdisciplinary group of faculty committed to research and education about environments for healthcare, includes 27 faculty fellows who are currently engaged in a variety of related initiatives. Highlighted below, are a few projects currently on the agendas of faculty fellows Pliny Fisk, and Drs. Sherry Bame and Mardelle Shepley.

Fisk, associate professor of architecture at Texas A&M and one of CHSD’s sustainability experts, has been invited to speak at a number of prominent events, including the May 2007 American Institute of Architects, “Beyond Green” national convention in San Antonio, Texas. Additionally, Fisk’s writings have been published in several new books.

Dr. Bame, associate professor in Texas A&M’s Department of Landscape Architecture and Urban Planning, is delving into a variety of research projects on topics including the growth of twin cities, unmet community needs and risk analysis of unmet needs of the elderly. She has also proposed a research examining unmet needs related to the preparation, evacuation and recovery of the 2005 hurricanes that affected Texas.

Dr. Bame has also been appointed academic coordinator of new undergraduate program in urban and regional science that was approved last December by the Texas A&M Board of Regents and is currently awaiting approval this spring from the Texas Higher Education Coordinating Board. If OK’d by the state, the program could accept students this fall.

Dr. Shepley, professor of architecture at Texas A&M, is currently concluding a well-deserved, one-year leave of absence after serving as interim head of the Department of Architecture and CHSD Director. Her “break,” however, has been chock full of academic activities. Last January, Shepley visited Seoul, South Korea to deliver a keynote address at the Healthy Urban Community and Housing Conference at Seoul National University of Technology.

To learn more about the center’s faculty fellows and their areas of expertise, visit the CHSD Web site at http://archone.tamu.edu/chsd.

Aggie Tuttle fellows present research to AAH

Projects include Cherokee health center campus, Alzheimer’s patients activity space use analysis

Two Aggie architecture-for-health former students, both recipients of the 2005-06 Arthur N. Tuttle Graduate Fellows in Health Facility Planning and Design, presented their fellowship research at the Academy of Architecture for Health’s (AAH) 2006 Fall Conference in Miami.

Shane Boren, a master of architecture graduate, presented research that coincided with a healthcare campus design project for the Cherokee Nation in Oklahoma. His 45-acre campus master plan was heavily influenced by his research in community design, patient-centered care and the history and culture of the Cherokee Nation.

“Presenting research and product based on culture was a welcomed perspective and an eye opener to many,” said Boren about his presentation, which he characterized as “a part of design that has not received as much attention as other areas of research.”

In his effort to profoundly affect the Cherokee Nation’s healthcare system through design, Boren identified the major causes of premature death within the community, which included cardiovascular disease, diabetes and mental illness.

In addition to his personal research, Boren worked directly with the Cherokee Nation in the development of his campus design, which included an outpatient ambulatory care facility, two in-patient substance abuse facilities, administrative offices, a conference center, day care and elderly care, as well as retail space.

Boren’s concept was well received and the Cherokee Nation is proceeding with parts of his plan.

“The Department of Health for the Cherokee Nation received preliminary approval to move forward with the administration building,” said Boren.

“It will be interesting to see how they utilize the master plan.”

Boren’s approach to the project utilized Texas A&M architecture professor Kirk Hamilton’s evidence-based design process. Literature reviews were conducted and outcomes were hypothesized in the initial phase of the project, which also included site visits and visioning sessions with representatives from the Cherokee Nation.

Advising Boren were Shawn Terry of the Cherokee Nation, Willy Schlein of the AAH and OWP/P, Robert J. Spampiani of STERIS Corporation.

Kirk Hamilton, Dr. Mardelle Shepley and Dr. Sherry Bame all guided Boren’s research and design at Texas A&M.

“From my perspective the presentation was warmly received,” said Boren.

Also presenting her Tuttle Fellowship research, "Therapeutic and Development Design: The Relationship between Spatial Enclose and Elder-Child Social Interaction," was Min-Young Seo Cerruti, a Ph.D. graduate from Texas A&M.

Her study investigated how activity space in long-term care facilities is utilized for the health and well-being of Alzheimer’s patients, and how that space relates to intergenerational interaction.
Almost 100 healthcare design professionals, faculty and students gathered last November at the Texas A&M College of Architecture for the fifth annual meeting of the Center for Health System and Design’s (CHSD) Health Industry Advisory Council (HIAC).

John Ziesel, author of “Inquiry by Design,” delivered the keynote address examining the relationship of environment, behavior and neuroscience. Also, Dr. Roger Ulrich, discussed his recent research and Dr. Marcia Ory, from Texas A&M’s School of Rural and Public Health, detailed the schools Active for Life program.

As the day progressed, Student Health Environments Association (SHEA) president Tiffany DeSalvo presented an update on fall activities followed with details on recent student projects.

The meeting concluded with an active discussion on the future of the CHSD and HIAC.

A representative from HIAC member firm Perkins + Will encouraged the continued interdisciplinary growth in all facets of the Architecture-for-Health education at Texas A&M. An HOK representative’s suggestion that future HIAC meetings include a keynote address “panel” was supported by all members who also called for a greater emphasis on practice issues at the annual gathering.

It was widely suggested that HIAC meeting be extended to encompass a grander agenda, with more time spent directly with students. Representatives also called for formalizing a “match program” for Master of Architecture design projects.

Kirk Hamilton, interim CHSD director, invited each HIAC member firm to return to the college and meet with healthcare design students on a day dedicated exclusively for their company.

The next HIAC meeting is scheduled Nov. 1 - 3, 2007.

Last December, seven teams of third-year Texas A&M architecture students unveiled their research, design concepts and models of a 50-year master plan for a new sustainable, green campus for the Texas A&M Health Science Center (HSC).

The studio, co-led by George J. Mann, the Skaggs-Sprague Endowed Chair of Health Facilities Design and Joseph J. McGraw, professor emeritus, collaborated with construction science students working under Charles Graham, History Maker Homes Endowed Professor in Construction Science and interim head of the Department of Construction Science at Texas A&M.

The HSC was formed in 1999 through consolidation of a majority of A&M System health-related programs. Since then, the HSC’s Bryan-College Station components — College of Medicine, School of Rural Public Health and central administration — have occupied several areas within these cities.

The project scope included comprehending major trends in medical education, research and practice; determining immediate and long-range space and parking needs over incremental periods; determining criteria for selecting a site able to accommodate growth over many years; and creating a campus plan focusing on indoor and outdoor areas that facilitate interaction and create a collaborative atmosphere for students, faculty and researchers.

Each team developed it’s a phased program and campus design concepts for outdoor spaces, building and parking, which determined the total site area required. However, specific sites were not selected.
New blood: Non-architecture students pursuing healthcare design certificates

For the first time, students from the Texas A&M’s construction science program and School of Rural and Public Health are pursuing a Graduate Certificate in Health Systems & Design. The students are required to take 15 credit hours specific to healthcare design and to incorporate healthcare design in their final study project.

Hamilton speaks at ‘ICU of the Future’

Kirk Hamilton, associate professor of architecture and interim head of the Center for Health Systems and Design, spoke at the “ICU of the Future” conference hosted last January by UCLA. Hamilton's topic was “Novel ICU architectural design strategies for the ICU of the Future.” He discussed new designs; balancing form, function, hospitality and convenience; and nurse efficiency and satisfaction.

ALUM RETURNS — Liz Viets of WHR returned to the College of Architecture to review student portfolios on Feb. 8. Liz helped found SHEA in September 2005 and organized the first Portfolio Review.

Three studios collaborating with HKS on 1.3 million sq. ft. teaching hospital

This semester three healthcare design studios are collaborating on a 500-bed, 1.3 million-square-foot teaching hospital for Florida Atlantic University in Boca Raton, Fla. HKS Inc., the project architects, are advising the students’ development of conceptual designs for the project.

The scope of the project is expansive. The campus is programmed to comprise multiple hospitals dedicated to services such as heart, neuroscience, women’s health, and surgery.

The undergraduate studios, led by Susan Rodiek, George J. Mann and Joseph McGraw, are focusing on campus and medical planning. Graduate students in Kirk Hamilton’s design studio are concentrating on evidence-based design of the facility’s intensive care units.

Last February, 33 participating students had an opportunity to visit the 39-acre site in Boca Raton. In addition to the site visit, the trip included a tour of the nearly completed Homestead Hospital in Homestead, Fla. — a 120-bed prototype facility designed by HKS.

The trip also included a lecture by Dr. Paul Barach of the University of Miami (UM). Barach is a board-certified anesthesiologist with fellowship training in cardiac anesthesia, and critical care medicine at the Massachusetts General Hospital and Harvard Medical School. He serves the University of Miami as director of strategic planning for patient safety, associate professor department of anesthesiology, and associate dean for patient safety and quality improvement.

Dr. Barach encouraged the Texas A&M students to think “outside-of-the-box” in regard to experiencing healthcare and design.

Enthused by the trip and the vertical collaboration, both students and faculty are anticipating an extraordinarily rewarding healthcare design studio experience.