# Advancing education & research



# Mitchell family gift launches residential construction, design initiative

With a \$2.3 million investment, the Bryan N. Mitch- do to encourage young people interested in building ell family of Fort Worth, Texas aims to revolutionize Texas A&M University. Their gift will fund an interdisci-College of Architecture and Mays Business School for careers in the increasingly diverse construction industry, endowing five faculty positions, 10 scholarships and support for an interdisciplinary studio/class

"This is an opportunity to give back to the university that has given so much to us and our industry, said

as company president. "We've been pleased with the interns and employees that have come to us from Texas A&M. They are very bright people who do well in a changing industry.

efit the College of Architecture and \$300,000 for the Mays Business School.

department in the College of Architecture at Texas A&M University, were recently established through generous donations from Harold L. Adams of Baltimore, Md., chairman emeritus of RTKL Associates and

ditional professorships, almost tripling his initial

mitted more than \$500,000 to Texas A&M's One Spirit the college's fund-raising committee

The two new interdisciplinary professorships were created in the college's departments of Construction Science and Landscape Architecture and Urban Planning. Like Adam's original professorship, the objective of these new faculty posts reflects the donor's professional experience and vision for the future of the built environment professions, which he sees as evolving support faculty whose work transcends such barri-

spirit of cooperation to the studio, the classroom and the projects that the students create together."

avid supporter of the college whose family history is

A member of Texas A&M's Class of 1945, Geren Jr.'s successful careers in the profession. links to architectural education at Texas A&M can be traced to the program's inception. His grandfather. at what was then the Agricultural and Mechanical College of Texas. He also oversaw the design and con-

secke, earned architecture degrees from the school, in 1912 and 1911, respectively, and went on to establish

Last summer, Geren honored his family's enduring architectural legacy at Texas A&M with a major gift the College of Architecture. Subsequently, the auditorium where these lectures will be held, the Preston M.

and complexity," said B. Nelson Mitchell Jr., who serves

The Mitchell family gift provides \$2 million to ben

Bryan N. Mitchell Sr. '70, CEO of History Maker Homes said Dean J. Thomas Regan. "This program will not and the third of four generations involved in the fam- only be unique in the area of residential construction ily business, including his grandfather, father and son, and design, it will advance Texas A&M's leadership in B. Nelson Mitchell Jr. '94. "This is the best thing we can interdisciplinary studies in the built environment."

# Harold Adams '61 creates three interdisciplinary professorships

Three interdisciplinary professorships, one for each a member of Texas A&M's Class of 1961.

Adam's recent \$300,000 pledge creates two ad-

One Vision fund-raising campaign, for which he chairs Harold Adams '61, right, eyes student work with Taeg Nishimoto.

ers, encouraging collaborative research and teaching between the disciplines housed within the College of "As I look at great successes on building projects." Adams said, "they are where everyone works as a team from the very beginning. It is for that reason that I have become even more dedicated to bringing that

# Auditorium, lecture series honor the 'first family' of Texas A&M Architecture

The College of Architecture's new 300-seat audito- struction of many of the revered buildings still gracing um has been named to honor Preston M. Geren, the the Texas A&M campus. Additionally, Geren's fathe father of Fort Worth architect Preston M. Geren Jr., an the auditorium's namesake, and uncle, Bertram Gie deeply tied to the Texas A&M architecture program.

Geren Auditorium, was named to honor the family.

Ranch" won't see faculty and students punching cattle. Instead, they'll be met with scenes of future architects, landscape architects and construction managers hard at work on projects at a large-scale state-of-the-art workshop at the Riverside Campus. "The College of Architecture's 8,000 square-foot Built Environment Teaching and Research Facility, or

'Architecture Ranch,' provides a much needed area where students can gain hands-on experience," says Taeg Nishimoto, the architecture professor and registered architect coordinating the project. "In addition to

"This is the largest gift ever granted to the college; lots of open space inside and around the building for ment for metal welding and woodworking. An 1,800 square-foot canopied open space at the front of the building, directly connected to the workshop, extends the construction activities outside. The 16-acre area

> construction science people will have plenty of ideas for developing the open ground at the site." The idea for the Architecture Ranch came to Texas A&M with the college's dean, J. Thomas Regan, who

Ranch realized

ties to a much larger scale. "For many years, faculty in colleges of agriculture at land grant universities have developed new strategies

wanted to expand the college's design and build activi-

surrounding the building is not quite developed at this

stage, though I'm sure our landscape architecture and

Visitors to Texas A&M University's new "Architecture "The Architecture Ranch will significantly advance our planning, design, and construction research, and it will encourage research and teaching opportunities for our faculty and students that few colleges of architecture enjoy."

in their research laboratories for improving plants and animals, then tested those new ideas on experimental farms within the university," Regan said. "Similarly, Texas A&M College of Architecture faculty and students construction and fabrication, the facility features equipare developing advanced strategies for design, construction, and planning in our design-research studios and laboratories. Now our new Built Environment Teaching and Research Facility — also known as the Architecture Ranch — offers our faculty and students, in collaboration with the professions and industries, an opportunity to test their research theories by constructing full-size experimental prototypes."

"The facility also provides our students opportunities to learn through action," Regan continued. "The Architecture Ranch will significantly advance our planning, design, and construction research, and it will encourage research and teaching opportunities for our faculty and students that few colleges of architecture

# Students help design Costa Rican teaching/research station

'Architecture Ranch' takes shape at Riverside Campus

Rare gifts are nothing new to Texas A&M University. Being offered a rainforest, however, is.

Charles W. Soltis, a 1955 graduate of Texas A&M, is donating a 250-acre rainforest in Costa Rica to the university, providing a unique learning opportunity for Texas A&M students.

Soltis and his associate, Curt Clemenson, are beneficial owners of the rainforest design. That design, pictured above in a preliminary located in north central Costa Rica, known as the "Casa" rendering, is also being developed by A&M students Verde Reserve." In addition, a 40-acre site adjacent to the reserve. On that site, Soltis is constructing a research and education facility that includes dorm rooms and bungalows for students, faculty and staff, dining and conference facilities, classrooms and laboratories.

The facility design resulted from a multidisciplinary studio held last spring at the College of Architecture. The project included five instructors and 62 students from architecture, landscape architecture and construction science, who produced a site analysis and 12 different design concepts — the best of which significantly influenced the research and education station's final

and faculty. The students' 12 design concepts can be viewed online at http://archone.tamu.edu/~gvv\_s06/

Preliminary rendering of student-designed Texas A&M research/education facility in Costa Rican cloud forest.

Last summer Texas A&M faculty and students traveled to the Costa Rican cloud forest education/research station site to finish site surveys and meet with students from the University of Costa Rica.

"Mr. Soltis and Mr. Clemenson desire to make the Casa Verde Reserve a model for the studies of environmental sustainability and ecology, not only in Latin America, but also in the world," said Robert Gates, president of Texas A&M University.

Texas A&M team readies for 2007 Solar Decathlon



# Aggies seek support for solar building initiative

wenty-first Century challenges in the built and natural environment — housing, energy, community and ecology — are being met by a Texas A&M student team that is reconceiving the house as a lifelong home — energy efficient, affordable, expandable, and in harmony with the environment — a "Home for Life."

Their project, a prototype solar home, will be Texas A&M's entry in the U.S. Department of Energy's 2007 Solar Decathlon. It is the first major project under way at the College of Architecture's new Built Environment the Riverside Campus.

The Solar Decathlon is a biannual competition in which teams of college students from across the country compete to design, build and operate the most attractive and energy efficient solar powered house. A major objective of the decathlon is to educate students, faculty and the public on the benefits of incorporating photovoltaic energy production into homes. The project homes are evaluated on their ability to generate electricity, charge an electric car, maintain thermal comfort, address a welldefined market, and other criteria like "curb appeal."

The decathlon culminates with each of 20 teams erecting their solar homes on the National Mall in Washington D.C. The structures form a solar village that will be open to the public, Sept. 21-30, 2007. The DOE's last Solar Decathlon, in 2005, attracted more than 125,000 visitors.

For the entire week, the nation will have an opportunity to admire Aggie ingenuity as demonstrated in the team's reconception of home-building with its affordable, sustainable, energy efficient "Home for Life" — a dwelling conducive to personal and social well-being. In sight of the Capitol, the Texas A&M team will erect and occupy the home showcasing their expertise, commitment, integrity and pride.

a way of making buildings — to design the future," said Mark Clayton, interim head of the Department of Architecture. "Our Solar Decathlon 'Home for Life' will be the first step in achieving this vision and we are inviting our Teaching and Research Facility, or "Architecture Ranch," at friends and former students to be a part of this high-tech exploration into the future of the built environment."

An extraordinary faculty is guiding the 2007 Texas A&M Solar Decathlon team's success. Among them are internationally recognized authorities in sustainable design and development energy simulation and design, visualization and modeling, healthy communities, disaster recovery, and environ-

mental psychology. To help realize their vision, the Texas A&M Solar Decathlon team is relying on the broader Aggie community to contribute expertise, materials and funds to build the 2007 Aggie Solar Decathlon house — the "Home for Life."

"Not strangers to empowering positive change in the community and world at large, Aggies aim high and get results," said Clayton. "With their help, anything is pos-

Become a Decathlete! The Aggie Solar Decathlon team is seeking donations of cash, in kind materials and technical expertise to help realize the vision for Texas A&M's entry in the 2007 Solar Decathlon.

To make a donation, please contact: Larry Zuber, senior director of development, College of Architecture, 3137 TAMU, College Station, TX 77845-3137, or call 979.845.0939. To learn more visit the Solar Decathlon "Our goal is not to design one building, but to design Web site at: http://solar.tamu.edu.

complete stories and more pictures online at

# archone.tamu.edu

Editor's note: The articles and news briefs about the Texas A&M College of Architecture appearing in this publication are but a small sample of the 150 stories appearing in the archone. newsletter's fall 2006 online edition: http://archone.tamu.edu



## College honors CRS as the 'Firm of the Century'

As part of its centennial year observance, the College of Architecture honored Caudill Rowlett Scott, Architects (CRS) as the "Firm of the Century" for being the architectural firm that has most significantly influenced the college in the last 100 years.

### 100 years, 100 ties, 100 designs

skinnies" of Ed Romieniec to the creative cravats of Rodney Hill. ties have had a historic role in the College of Architec-

ture. The neckwear was once mandatory for classroom presentations and iob interviews. To honor this tradition and celebrate the college's 100th year, 100 blank white polyester neckties were distributed to former and current students, faculty,

# Heritage conservation center created

and special friends of the college to design, adorn, acces-

sorize and otherwise decorate.

The College of Architecture's Historic Resources Imaging Laboratory (HRIL) has a new name and an expanded mission as the newly established "Center for Heritage Conservation."The center will conduct research, teaching and service projects related to management and preservation of historic buildings, places and cultural sites, while uniting faculty from academic departments across the university to build on their work.



ast Fall, the College of Architecture added six more distinguished alumni to its ranks: Charles Greco '78. Dennis Jerke '78, Thomas McKittrick '91, Jose Luis Palacios '83, Joel Reitzer '68 and Robert Shemwell '82. Read about their myriad accomplishments online.



# **Saving Pointe du Hoc**

Texas A&M researchers say serious erosion problems pose a significant threat to the historic Pointe Du Hoc battle site in Normandy, where one of the most important battles of the D-Day invasion was ought. The research team, led by the Center for Heritage Conservation, documented the historic site with the help of a \$500,000 grant secured by U.S. Rep. Chet Edward

# At a Houston press junket for the animat-

ed feature "Over the Hedge" Dream-Works CEO Jeffrey Katzenberg referred to the Texas A&M Visualization Sciences program as "fantastic," adding, "my people are working on getting me to visit College Station to meet the students myself." That meeting with Viz students and faculty is now set for October.

Lighting Exposed'

Fire, water and dancers wowe

the crowd attending "Lighting Exposed," a light show staged

last April by Jill Mulholland's

Architectural Lighting class at the

Langford Architecture Center. The

course explores emotional and

intangible aspects of light. See

more spectacular pictures on the



# orchone.

# COLLEGE OF ARCHITECTURE TEXAS A&M UNIVERSITY arch**one.** is the official newsletter for the College of Architecture at Texas A&M University. The publication highlights news and feature articles posted in entirety online at http://archone.tamu.edu.

Readers may submit address changes, news, photos and comments online at http://archone.tamu.edu/college/people/alumni/update.html



Who's doin' what? Catch up with your old college classmates in the online edition of archone.

# Shindig to mark 40th anniversary of rchitecture-for-health at Texas A&M

The Center for Health Systems & Design is planning a celebration to mark the 40th anniversary of the Texas A&M College of Architecture's internationally acclaimed initiatives in healthcare architecture and planning. Plans call for a special event in San Antonio during the American Society for Healthcare Engineering's Feb. 25-28, 2007 conference. Former students who studied or are currently involved in healthcare facility design or planning are urged to contact Judy Pruitt at jpruitt@archone.tamu.edu or call 979.845.7009 to update their profile and make sure their name is on the event's invitation list

# **Upcoming Events:**

# 10/30 Faculty Research Symposium The 8th annual faculty research sympo-

Wrangling art at the 'Ranch'

The College of Architecture's new 16-acre Built

Environment Teaching and Research Facility, or

"Architecture Ranch," opened this fall at Texas

A&M's Riverside Campus and is already abuzz

with activity. In September, visiting artist Paolo

mance, "Platonic 5," which involved the creation

of several sculptural shapes that build over time

A&M Solar Decathlon project. Learn more about

the Ranch and Solar Decathlon inside this issue.

The Ranch is also the staging area for the Texas

Piscitelli (above) staged a three-day perfor-

sium, "Research on the Built and Virtual Environments: Global Symposia Presentations," features faculty research presented at scholarly venues around the world.

# 11/2 Texas A&M TSA Reception

The Dept. of Architecture is hosting a reception for former students during the Texas Society of Architects Convention in Dallas, 7 - 9 p.m. at the office of HKS, 1919 McKinney Avenue.

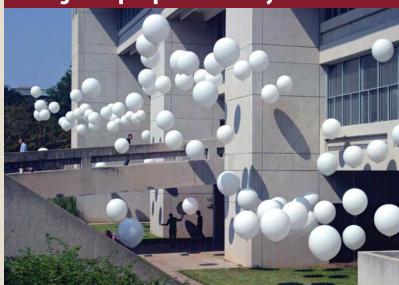
# 11/7 Frederick E. Giesecke Lecture The college's inaugural Frederick E. Giesecke

Lecture features Dr. Ken Yeang, the prolific Malaysian architect and writer known for his green high-rise designs. The lecture runs 6 − 9 p.m. in the Preston Geren Auditorium.

# 11/11 Former Student Open House

Former students and friends of the College of Architecture are urged to attend the annual Former Student Open House, 8 a.m. noon at the Langford Architecture Center.

# College wraps up centennial year



n Sept. 1, 2005, balloons adorned the entrance of the Langford Archite re Center on the Texas A&M campus while inside, amid a flurry of fanre, students, faculty and friends celebrated the College of Architecture's 00th birthday. The college's yearlong, event-packed Centennial Celebraon, which began with an April 1, 2005 gala, culminated with a second big event on March 31, 2006, followed by the April 1 Former Student Oper louse. Details and video clips from the celebration are available online

http://archone.tamu.edu

# LEARN MORE ABOUT THESE GIFTS AND OTHERS IN THE FALL 2006 WEB EDITION OF THE ARCHONE. NEWSLETTER: http://archone.tamu.edu









# College responds to **Gulf Coast disasters**

In the aftermath of Gulf Coast hurricanes Katrina and Rita, the Texas A&M College of Architecture mobilized its intellectual resources to assist national reconstruction and recovery efforts in the region and beyond.

The initiative, which began with a series of roundtable discussions examining potential research and educational initiatives that would benefit the relief effort, as well as the nation's disaster preparedness, generated dozens of research and classroom projects throughout the college.

"The College of Architecture is uniquely suited to identify problems and develop solutions to the myriad disaster recovery, reconstruction and mitigation problems related to these horrific events, and to help the nation gird for future inevitable catastrophes," said J. Thomas Regan, dean of the college.

"In addition to our Hazard Reduction and Recovery Center (HRRC) and their distinguished faculty, the college mobilized students and faculty to contribute in the areas of sustainable development, urban planning, construction science, historic preservation and other disciplines related to the built environment and — with our Visualization Laboratory — the virtual environment, as well," Regan noted.

Much of the storm's damage and loss of life could have been avoided, said HRRC director Walter G. Peacock, had officials followed well-known and established best practices for emergency management. In Katrina's wake, he added, the initial challenges of emergency response are now being replaced by the challenges of recovery, reconstruction, and resettlement.

This feature touches on a few of the many research, studio and classroom projects undertaken as a result of this college-wide multidisciplinary effort. Articles detailing these and other disaster response initiatives are available in the Fall 2006 online edition of the arch**one.** newsletter. To find it, follow the news links on the Texas A&M College of Architecture Web site: http://archone.tamu.edu.



Student design for new Charity Hospital in New Orleans features emergency ight beacons to help disaster victims locate the facility in the dark.

# Texas A&M architecture students win Katrina-inspired hospital design contest

Designs by four Texas A&M University architecture students for short- and long-term emergency healthcare facilities to serve post-Katrina New Orleans earned first place honors, including \$5,000, in an exclusive competition sponsored by Skanska USA Building Inc., one of the nation's leading healthcare facility design and construction compa-

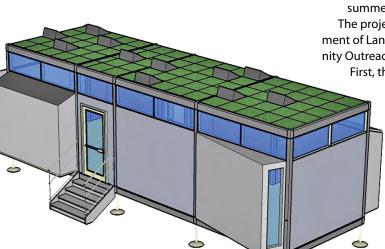
The winning entry included recovery solutions for the Medical Center of Louisiana at New Orleans, which had been rendered inoperable by the storm. The team's primary goal was providing fast and available healthcare facilities. Their immediate solution entailed the construction and placement of a network of specially designed modular clinics to temporarily replace the center's Charity and University hospitals. The team's long-range plans called for the construction of a new hospital especially equipped to deal

# Prof proposes 'Quilting Bee' new homes in areas devastated by Hurricane Katrina

Texas A&M University researchers are using a "quilting bee" approach with other universities and communities across the Gulf Coast to build new homes for people displaced by Hurricane Katrina.

"We borrowed ideas derived from the southern art of communal guilt-making to help us devise building processes and procedures that fit the culture of the Gulf Coast," says Pliny Fisk, a Texas A&M architecture professor.

"Our first building using some of these ideas to help rebuild the area devastated by Katrina started construc-



ion in early December, 2005.

"Quilting new homes using community supported archiecture — we call it CS-Arch borrows from the concept of community-supported agriculture, in which farms and communities partner to ink production of food with ts consumption," he explains. **of fabric and the** 'CS-Arch links community volunteers, construction experts patterns of stitching and local businesses to build healthy, locally manufactured housing and other buildings.

Once a set of shared procedures has been created, outcomes of such cooperative efforts are economical, environmentally friendly and disaster-safe buildings, resulting in a regionalized building system using a wide range of natural and human resources

The Gro-Home system

uses a finite system

of parts that can fit

toaether in an infi-

nite number of wavs

much like the pieces

used to make a quilt.

Last spring,

To guilt communities, Texas A&M's architecture depart ment and its Center for Housing and Urban Development have joined with the Austin based Center for Maximum Potential Building Systems, Mississippi State University's architecture department and its Rural Town Center, the Healthy Building Network, the National Council of Churches, LZT Architects and EcoRetro Systems to come up with the GroHome Building System. This system uses a finite system of parts that can fit together in an infinite number of ways, much like the pieces of fabric and the patterns of stitching used to make a quilt, and is based on advanced, fast, economical, healthy building methods from foundation to roof.

# LAUP grad students redesign Beaumont public housing site damaged by Rita

graduate Texas A&N University landscape architecture students in Nancy Volkman's Open Space Developmen II studio, completed a project to redesign the site of Beaumont Housing summer by Hurricane Rita.

Authority's Magnolia Gardens, a public housing property that had been damaged last The project was the first to be tackled under the Department of Landscape Architecture's Partnership for Commu-

nity Outreach initiative. It involved two major components: First, the development of a scheme that looked at complete demolition of the existing public

housing site and its replacement with a new, smaller public housing facility, with areas to be sold for single family homes and areas to be sold for commercial development. Secondly, the development of an alternative site plan in which selected residential buildings at Magnolia Gardens were renovated and enlarged, while others were demolished.



Hurricane Rita evacuees pile up on I-45 North in Huntsville, Texas.

# HRRC team helps officials make hurricane evacuation decisions

When Texas Gulf Coast residents want to know their risk for hurricane damage or when, or even whether, to evacuate, they can turn to Texas A&M University professor Mike Lindell — or, at the very least, to the publications, computer programs, and training techniques resulting from his research.

"Needless evacuation as a hurricane approaches costs money," says Lindell, a professor of landscape architecture and urban planning based in the College of Architecture's Hazard **Reduction & Recovery** Center. "But erroneo ly failing to evacuate costs lives."

"Unfortunately, most of the local officials who must make the decision

whether to evacuate their communities and when to do so receive little training and have no experience in making such critical decisions. Worse yet, major urban areas take so long to evacuate that local officials must make an evacuation decision when an approaching storm is so far offshore there is only about a one in seven chance it will strike their jurisdiction. Basically, deciding whether to evacuate or not can be a lot like playing Russian roulette."

rapher Richard Nira. Reprinted with permission.

Lindell, who is trained in psychology but whose work also incorporates concepts from meteorology and traffic engineering, wants to help local officials by providing them the information they need during a hurricane's approach. The challenge is to give them the right amount of the right types of information and give it to them in a format most compatible with their decision making

Over the past three years, the National Science Foundation has funded Lindell's work with several computer science graduate students in developing an Evacuation Management Decision Support System (EMDSS). During that time, he and co-principal investigator Carla Prater, a visiting assistant professor in the College of Architecture, also worked with graduate students in urban and regional science to collect survey data on household evacuations from Hurricanes Lili, Katrina, and Rita. The data from these more accurate predictions about hurricane evacuations.

# 'Surge Parks' can provide needed respite for disaster victims, says LAUP professor

Hurricanes dramatically demonstrated last year they can displace entire communities, driving them far from their familiar environments, and those demonstrations nave prompted Texas A&M University landscape architecre professor Jody Naderi's novel idea for "surge parks" hat could smooth such evacuees' adjustments to their new situations

"The idea for surge parks came from the surge hospital concept," Naderi says. "Just as surge hospitals are designed to convert existing structures to handle a massive influx of sick and injured persons generated by a natural disaster, surge parks are intended to 'pop up' in open areas around these facilities. The surge park can be used as pleasant settings for evacuees waiting in line for food or medical services, as outdoor communication centers, as recreation sites for children, as picnic grounds more inviting than food lines, for meditation and spiritual renewal and as places to grieve their losses."

Surge parks would serve different functions during the different stages of recovery from a disaster, Naderi explains. After people's immediate needs for shelter from wind and rain, which usually last up to 24 hours after a disaster strikes, their attention turns to seeking more longterm evacuation shelters, where they may stay for two to 4 days. Temporary housing during large-scale reconstruction may be needed for as long as 18 months, while longerm replacement and more hurricane-resistant housing is constructed.

Surge parks would be most important during the time people are housed in evacuation shelters, Naderi notes, alchough temporary housing during rebuilding should also Rita evacuation photos by Huntsville Item photogtake into account the importance of green spaces.



# A&M team leads Key West summit on post-hurricane preparedness

Preparing for the inevitable, citizens and community leaders of Key West, Fla., took a progressive look at innovative hurricane preparedness and post-hurricane recovery options developed by faculty and students at Texas A&M University during a special two-day summit held July 20-21 at Key West High School.

The city invited a team of faculty and students from Texas A&M's College of Architecture to share the latest thinking for empowering communities in the aftermath of a major hurricane. The objective was to re-conceptualize disaster recovery as a community event and develop comevacuations are being integrated into EMDSS so it can make munity awareness of the role design and planning can play in resolving disaster-related problems.



Currier and Ives illustration of the Port of New Orleans in the 19th Century.

# Clayton suggests shipping fee to renew Gulf's port cities in Times-Picayune Op/Ed

New Orleans and the stretch of river from Baton Rouge to the Gulf of Mexico constitute the world's fourth-largest port, and the foremost port in terms of bulk cargo handling, says New Orleans native Mark Clayton, architecture professor and interim head of the Department of Architecture at Texas A&M University. "It just doesn't make good economic sense not to restore it."

In fact, says Clayton, New Orleans shares its vulnerability to hurricane damage with other cities along the Gulf Coast from Brownsville to Houston to Miami.

"The Gulf Coast is the import-export engine of the entire United States," he continues. "You can't close these cities just because they may be vulnerable to future hurricanes. Our challenge is to figure out how we can coexist with the environment in that region. Our successful response to that challenge is vital to the health of the country as a whole.

In a May 6, 2006 editiorial in the New Orleans Times-Picayune, Clayton suggested that the nation pool its resources to secure the Gulf Coast ports by establishing a Gulf Coast Renewal Fee on all shipping that enters or exits the nation through Gulf Coast ports. Such a fee, he wrote "would be a fair, broad-based way to protect this critical region from destruction."

"The amount of a fee must be set by economists, politicians, and development experts. However, with 1 billion tons of shipping annually through these ports, a \$10 per ton fee would raise \$10 billion annually. When considered over the decades that recovery will require, this fee could provide an enormous fund for recovery. It could also be a very significant resource for funding prevention and preparation actions.

# HRRC scientists eye U.S. storm surge hazards on NSF project

Hazards Reduction and Recovery Center faculty fellows, Mike Lindell and Carla Prater, have begun a threeyear, \$750,000 National Science Foundation research project to study hurricane and tsunami surge hazards.

The Texas A&M College of Architecture scientists will be working with Harry Yeh and Cherri Pancake of Oregon State University.

Summarizing the project objective, Lindell said: "Our first task is to continue our work on the Evacuation Management Decision Support System by testing people's ability to use different types of information about hazard onset — especially information about uncertainties in hurricane track and tsunami run-up — and population

response — the time required to complete an evacuation under different types of circumstances. In the early stages of this task, we will conduct laboratory experiments with undergraduates.

"Our second task, Lindell continued, "is to conduct interviews of local jurisdictions vulnerable to tsunami, in Washington and Oregon, and hurricanes, in Texas, to identify the problems they face in adopting land use planning, building construction, and emergency preparedness practices to avoid damage and casualties. This task will involve traveling to coastal jurisdictions to meet with local officials."



Survivors of the Indian Ocean Tsunami, the children in Chandrapadi, India pause for a photo snapped by a member of the HRRC research team.

# HRRC team maps social vulnerability in India after Dec. 26, 2004 tsunami

In the wake of the devastating December 26, 2004 tsunamis that ravaged the coastal communities on the Indian Ocean, research scientists from the Hazard Reduc tion and Recovery Center (HRRC) at Texas A&M University's College of Architecture traveled to the hard-hit district of Tamil Nadu, on the southeastern coast of India, to assess regional response to the disaster and develop a social vulnerability profile, or map, that could ultimately assist disaster response initiatives throughout the world.

A social vulnerability map utilizes Geographic Information System (GIS) technology to merge geographical and government census data with information gathered through field observation and surveys, to relate the social characteristics of the target population with its disaster

"A lot of what we do here in the college is focused on the broader perspectives of the built environment," explained urban planning professor Walter Gillis Peacock, director of the HRRC and a member of the tsunami team. "What we do, especially in planning, is look at the nature of the social systems that are also operating in those environments and what consequence that has for making communities more sustainable."

The tsunami, which killed an estimated 6,665 people in the study area and as many as 229,866 worldwide. presented the HRRC scientists with an opportunity to vali date disaster research theories developed in the United States, in a completely different political, economic and



# **RELATED STORIES ONLINE:**

fessor Pliny Fisk says Gulf Coast needs ex

a reportage thrusts HRRC into media limelig ture changes needed to meet future disaster reli ndell eyes vulnerability of U.S. chemical infrastructure ticles detailing these stories and all of the other news in this publication are available in the Fall 2006 online edition of the A&M College of Architecture Web site: http://archone.tamu.edu

Complete stories and photos available online: http://archone.tamu.edu