

# THE BATTALION

108 Years Serving Texas A&M University

Volume 108 • Issue 160 • 6 pages

www.thebatt.com

Tuesday, July 2, 2002

## Students plan future health services facility

By Lauren Bauml  
THE BATTALION

The College of Architecture and Student Health Services are working together to propose and plan an optimal physical, mental, and spiritual health program and facility for the future students of Texas A&M University.

Ten health service models, created by groups of two students each, will be on display today in 226 Memorial Student Center (MSC) from 3:30 to 5:30 p.m.

"It's more meaningful to work on real life-related projects," said Dr.

George Mann, AIA, the Ronald L. Skaggs Endowed Professor of Health Facilities Design and project director.

Each model makes up phase one, which is designed to reuse and modernize the existing Beutel Health Center.

Phase two will take place in the future, with a longer, more time oriented view of student's needs.

In past years, the architecture center has completed over 350 health projects on national and international levels.

"Beutel Health Center does not serve the growing need of a diverse campus," Mann said. "The current

location lacks privacy, is difficult to park at and has steps that are difficult for those with crutches."

The proposed designs all share common characteristics of counseling, increased privacy, health education, comfort, a greater efficiency of patient flow and a place for students to go for down time and relaxation from stressful experiences of life.

Lily Huang, a senior environmental design major, and Rachel Anderson, a junior agricultural development major, who are married mothers enrolled in the class, added a pediatric center where families can seek medical attention together with

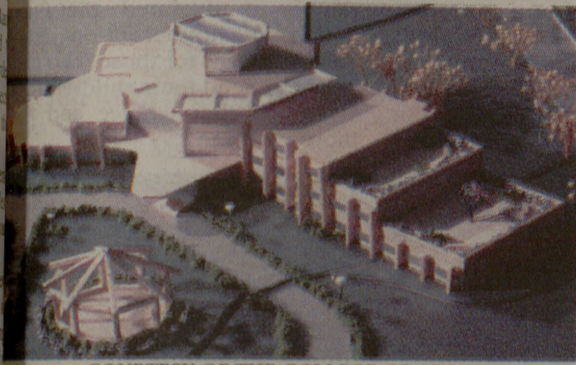
an increased amount of ease.

Senior engineer design and graphics majors David Sekaquaptewa and John Wirth added unlimited expandability through a satellite approach for each clinic included in the Beutel Health network.

Student reactions to the overall experience of producing a possible real-life design were mainly positive.

"I really enjoyed [working on the project]," Huang said. "I have been to the health center, and never really liked it, and have always preferred

See **Future** on page 2



COURTESY OF THE COLLEGE OF ARCHITECTURE

This is one of 10 health service models on display today in the MSC from 3:30 to 5:30.

## Research, technology improve forecasting

By Melissa McKeon  
THE BATTALION

Due to increasingly powerful computers, modern weather forecasts and climate models are two and a half times more accurate than they were 25 years ago, said John Nielsen-Gammon, Texas state climatologist and professor of atmospheric sciences in the College of Geosciences at Texas A&M.

"Today's five-day weather forecast is as accurate as a two-day forecast of a quarter century ago," Nielsen-Gammon said.

Increasingly accurate forecasts result from increased computer processing power and memory that helps in understanding more details about the atmosphere and a better understanding of current conditions found by observations made from satellites.

Dr. Jerry North, head of the meteorological department, said that A&M is also making new discoveries in areas like weather forecasting and climate changes using satellite and radar.

"We (the A&M meteorological department) have a huge devotion to local weather forecasting research," North said.

Nielsen-Gammon's current projects include working with associates at A&M and other universities on projects such as analyzing past floods, predicting future droughts and monitoring air pollution.

Nielsen-Gammon's students have been using computer models to simulate Tropical Storm Allison, to discover what made the storm develop so quick-

ly and cause millions of dollars in flood damages to Houston and surrounding areas last summer.

Models like the ones used in his meteorology classes simulate atmospheric conditions as they existed at the time of specific weather events.

Nielsen-Gammon also works with transformative models, which input hypothetical weather data and simulate their likely effect on things like soil, crops and plant life.

The meteorological department has received grants from several agencies such as National Aeronautics Space Administration (NASA) and the Environmental Protection Agency (EPA).

The A&M meteorological department is also concerned with the impact of weather on a global scale and is using satellites in its ongoing research.

North said A&M is making advances in technology with mobile radar devices on trucks that will monitor and research severe storms in the Great Plains area.

Nielsen-Gammon is also part of a joint study of Houston's air quality proposed to the EPA by the University of Texas, the University of Houston (UH) and Texas A&M.

"Texas A&M and UH will be setting up a modeling facility to simulate Houston's air problems," North said. "We want to focus on forecasting the fate of chemicals such as ozone and nitrogen oxide. We want to learn about

See **Forecasting** on page 2

## Puppy love



JOSHUA HOBSON • THE BATTALION

Senior animal science major and Brazos Animal Shelter employee **Andrea Bahlo** gives vaccinations to two labrador puppies at the shelter Monday. The Humane

Society holds animals for 72 hours in hope their owners will reclaim them. If not claimed, the animals are available for adoption.

## Bush renews fight for school vouchers

CLEVELAND (AP) — President Bush stepped back into the battle over school vouchers Monday, saying the Supreme Court's decision upholding government funding of private school education was as historic as one that outlawed separate schools for blacks.

A year after his proposal collapsed in Congress, Bush asked lawmakers to reconsider it.

The president's promo-

tion of such programs Monday also was notable for his use of the word "vouchers," which after becoming synonymous with bitter debates over the topic had been avoided by Bush speechwriters.

There was no distance between Bush's support for vouchers and that of his boisterous audience in hot, historic State Theatre in downtown Cleveland. Many in his audience had come from the

inner-city communities that supporters of vouchers contend would benefit from a taxpayer-funded school-choice program that was the subject of the high court's ruling Thursday.

The 5-4 decision upheld a program that gives mostly poor parents a tuition subsidy of up to \$2,250 per child at parochial or other nonpublic schools.

An animated Bush, frequently waving his hands

before the 3,000 people sitting in the red-velvet seats of the ornate theater, said to great applause that the Supreme Court "gave a great victory" to students across America. The event had an unusually intimate feel, with one listener yelling out "Love you, Mr. President!" as he took the stage, and others occasionally murmuring

See **Bush** on page 2

## A&M researchers to alleviate arsenic crisis

By Christina Hoffman  
THE BATTALION

Researchers from Texas A&M will team up with other agencies to help alleviate an arsenic crisis in Bangladesh, which effects millions of people and agricultural production.

Arsenic is a poisonous oxygen compound used in making insecticides.

Dr. Richard Loeppert, a professor from the soil and crop science department of A&M, said they hope to alleviate the crisis by researching and developing new methods that will decrease arsenic levels in ground and surface water to ensure safety and sustainable agricultural production.

The crisis originates from the contaminated Ganges-Meghna-Brahmaputra aquifer, the water source for approximately 110 million people in Bangladesh. The aquifer also provides water for irrigation.

The high levels of arsenic in irrigation water can reduce crop production and allow arsenic to enter the food chain, causing arsenical cancers and related diseases.

Loeppert said cancers can range from skin cancers to bladder and liver cancers. Arsenic can also effect the vascular system, inhibiting blood flow to small veins. The loss of blood flow can in turn initiate gangrene causing people to lose fingers and toes.

A&M researchers will work in conjunction with the Texas Agricultural Experiment Station to find ways of

minimizing arsenic levels in order to provide sustainable agriculture, Loeppert said.

"We will work with agricultural agencies to come up to speed on arsenic issues," he said. "The goal is to minimize hazardous arsenic levels."

He said some traces of arsenic will naturally be found in the water supply and people have developed natural defenses against it.

"We can't eliminate the arsenic, but we can help it become less hazardous," Loeppert said.

The levels in Bangladesh are extremely high compared to U.S. levels. There are approximately 10 parts per billion in the U.S. water supply compared to one part per million in the Bangladesh water supply.

"That is almost 100 times higher than the U.S. standard," Loeppert said.

The threat is so high that almost 50 million people in Bangladesh face a potential threat of arsenic cancer or disease, he said.

Loeppert and Bhajan Biswas, a research associate in the department of soil and crop sciences, are working in a collaborative effort on an international and national level, Loeppert said.

At the international level, A&M researchers will be working with CIM-MYT, an international wheat and maize breeding center, Cornell University and federal relief agencies.

See **Arsenic** on page 2

## Professor's Mars experiment chosen

By Melissa Sullivan  
THE BATTALION

Mark Lemmon, a research scientist with the Department of Atmospheric Science, has conducted an experiment chosen to be part of the 2003 Mars Exploration Rover Mission scheduled to launch June of next year.

The mission consists of two identical robotic rovers that arrive at separate destinations on Mars in January 2004. These rovers will provide a better handle on the nature, accumulation and dissipation patterns of Mars' signature red dust.

"The purpose of the mission is to understand and tell of Mars' history and see if it had water long ago," Lemmon said. "We will also study local geology

and its atmosphere to understand why it is different from Earth today."

Most scientists who study the Mars dust say it is the defining feature of the planet's atmosphere and constitutes the major force eroding the planet's surface, just like the role of water on Earth.

"Mars has a lot of dust in the sky and the surface which may have created water," Lemmon said.

A panoramic camera will look at the landscape and sky of the planet and possibly get a glimpse of Martian dust storms and dust devils, he said.

Lemmon was on the Mars Pathfinder imaging team in

See **Lemmon** on page 2

### 2003 Mars Exploration Rover Mission Six Objectives

1. Study rocks and soil for clues to past water activity
2. Investigate landing sites that have a high probability of containing evidence of the action of liquid water
3. Determine distribution and composition of minerals, rocks and soils surrounding landing sites
4. Determine the nature of local surface geological processes
5. Calibrate and validate data from orbiting missions at each landing site
6. Study geological processes for clues about environmental conditions that existed when liquid water was present

TRAVIS SWENSON • THE BATTALION