

## Events to Know

### April

- 2 Faculty Development Leave Proposals due.** Office of Faculty Affairs, MSB G.300. Proposals can be submitted twice a year. Contact Faye Viola at 713.500.5101.
- 4 Annual Easter Basket Raffle,** sponsored by ERC. Noon, MSB 3.001 lobby area. Five tickets for \$1.
- 9 MSRDP Board Meeting.** 4-6 p.m., MSB 2.103. All members invited.

## UTMost Interest

UT Neurosurgery is pleased to announce their newest physician **Dr. Fangyi Zhang** who also has an appointment with the Medical School as assistant professor of neurosurgery. Zhang specializes in complex spinal surgery, minimally invasive spinal surgery, and general neurosurgery. His practice is located in Suite 1020 of the UT Professional Building, 6410 Fannin St.

**Dr. Pedro Ruiz**, professor and vice chair of the Department of Psychiatry and Behavioral Sciences, delivered "The 2006 Stuart Asch Memorial Lecture" at the New York Academy of Medicine on "The Role of Aculturative Stress on Suicide."

**Dr. Heinrich Taegtmeier**, professor of internal medicine in the Division of Cardiology, was elected president of the Society for Heart and Vascular Metabolism. The international society was founded in 2001 to advance cardiovascular health through research in molecular and cellular metabolism. Taegtmeier, who joined the Medical School in 1982, is a leader in the research of cardiac metabolism, gene expression and function of the heart, and heart failure and diabetes. He previously served on the society's board of directors and is one of the founding members. As president, Taegtmeier said his goals are to organize annual meetings that foster the exchange of scientific information and collaboration among investigators and their respective laboratories.

## \$2 million state grant will help Lichtenberger's research

Among the more than \$13 million in awards recently announced by **Gov. Rick Perry** under the Texas Emerging Technology Fund (TETF) is \$2 million to PLx Pharma Inc. of Houston, which is building on research originally developed at the Medical School.

The TETF award will help PLx Pharma produce new formulations for safer and more effective non-steroidal anti-inflammatory drugs (NSAIDs) than those currently on the market, such as aspirin and ibuprofen. The pharmaceutical company will use a platform technology licensed from the UT Health Science Center at Houston and will focus on reducing the potential life threatening gastrointestinal (GI) toxicities related with chronic use of NSAIDs.

**Dr. Lenard Lichtenberger** is chief scientific officer and a founder of PLx Pharma, as well as a professor of integrative biology and pharmacology at the Medical School.

"My PLx Pharma colleagues **Ron Zimmerman** and **Upendra Marathi** and I are very encouraged that the State of Texas continues to support our PC-NSAID technology," Lichtenberger said. "This major award will greatly facilitate our efforts to commercialize our aspirin formulation."

Lichtenberger has conducted extensive research supported by more than \$8 million of National Institutes of Health (NIH) and other grants into the effects of NSAIDs on the GI tract. He has found that chemically associating a substance called phosphatidylcholine (PC), a purified form of lecithin which is derived from soybeans, with an NSAID (e.g. aspirin or ibuprofen), will dramatically reduce the GI bleeding and ulcers NSAID use may cause.

Lichtenberger noted positive laboratory findings using rodent models of ulcer disease. "These  
(Cont'd. on back)



**Dr. Lenard Lichtenberger**

## Kone returns to Florida as new medical school dean

**Dr. Bruce Kone**, chair of the Department of Internal Medicine, will return to his alma mater May 15 as the next dean of the University of Florida College of Medicine, according to **Dr. Douglas Barrett**, UF senior vice president for health affairs.

Kone, 49, was one of four candidates named in February as finalists to replace outgoing dean **Dr. C. Craig Tisher**, who will return to the faculty after five years at the helm.

"I believe Bruce Kone is the perfect fit to sustain our national prominence in medical education and to build on the work Craig Tisher has done to lead the college to elite status in research and clinical activities," Barrett said in a press release. "Bruce stood out in a field crowded with talented candidates in part because he's so well-rounded."

Kone received his medical degree with honors from the University of Florida College of Medicine in 1983 and returned as faculty in 1991 as assistant professor of medicine in the nephrology section and was later promoted to tenured associate professor.

"I'm very excited and humbled by my selection," Kone said. "I was attracted by the opportunity to come back to my medical school alma mater and serve it in this way. I've been extremely impressed with the faculty, students and trainees, and the enormous potential of the institution.

"I had a wonderful time at UT-Houston, worked with outstanding colleagues, and will always be grateful for the opportunities I was provided," Kone continued.

Kone joined the UT Medical School faculty in 1995 as associate professor of internal medicine in the Division of Renal Diseases and Hypertension. In 2000, he was promoted to professor and vice chair of internal medicine and director of the Division of Renal Diseases and Hypertension,  
(Cont'd. on back)



**Dr. Bruce Kone**



## FRET research feeds drug discovery assay

What started out as a basic laboratory study to understand the structural changes in a glutamate receptor lent itself to a drug discovery application undertaken by **Dr. Vasanthi Jayaraman**, associate professor of integrative biology and pharmacology and member of the Center for Membrane Biology, and her colleagues at the Medical School.

The study, "Allosteric mechanism in AMPA receptors: A FRET-based investigation of conformational changes," appeared in a recent issue of *Proceedings of the National Academy of Sciences*.

Jayaraman and **Dr. Gomathi Ramanoudjame**, postdoctoral fellow, **Dr. Mei Du**, research assistant professor, and **Kimberly Mankiewicz**, graduate student, developed a fluorescence resonance energy transfer (FRET)-based method that allowed them to investigate the changes that happen in a glutamate receptor when a drug is introduced into its environment.

The glutamate receptor is an important protein involved in central nervous system diseases, such as Alzheimer's, Parkinson's, and amyotrophic lateral sclerosis (ALS).

"This receptor is very important in learning and memory and communicating between nerve cells," Jayaraman said. "It converts chemical signals to electrical signals in nerve cells."

Jayaraman said they were initially interested in learning about the structural changes that occur when a drug activates the protein versus when a drug inhibits the protein. For this, they chose a FRET-based application that used light to measure distance.

"By just shining light at a specific frequency, you can see whether the drug is going to activate the protein or inhibit the protein," Jayaraman explained. "You have two sites, which you chemically modify. On one site, you have a compound that absorbs the light and then it gives the light to the other compound at the second site. The efficiency with which it gives from one site to the other is going to depend on the distance."

If the compounds are close to each other, more light will be emitted versus less light if they are far apart.

"By looking at how much light is transferred from one site to the other, we can say what the distance is."

They then determined that the FRET-method was a potential assay they could use to find the function of the drug.

"We found out that the light changes were so dramatic. In one case, light emitted more than in the other case," she said. "The initial reason we studied this was to find out how the distance changes between the two sites, but since the distance changed the activity of the drug that bound, we could just measure the light to see what the drug is doing to the protein."

Now, Jayaraman and her colleagues are using their finding to look for drugs that inhibit the protein and which have the potential to be used in the design of better drugs to treat neurological diseases.

-C. Webb

## William S. Fields Lecture, April 13

The Department of Neurology announces the 18th annual William S. Fields Lecture on "Post Stroke Complications – Dementia, Seizures and Depression" presented by **Dr. Natan Bornstein**, professor and head of the neurology department, Tel-Aviv Sourasky Medical Center, Tel-Aviv, Israel, at noon Friday, April 13 in room 2.135 of the Medical School. Contact **Dr. Gage Van Horn** or **Annie Rose** at 713.500.7051 for details.

## Advances in Teaching & Learning Call for Abstracts

Faculty, researchers, and innovators in health sciences education are invited to submit abstracts, due Thursday, April 19, for competition in the Advances in Teaching & Learning Regional Conference at The University of Texas Health Science Center at Houston.

This year's all-day event, 8 a.m.-5 p.m. Thursday, May 17 at the UT School of Nursing and Student Community Center, 6901 Bertner St., marks the eighth annual conference to highlight research and innovations in teaching, learning, and technology.

Abstract submission and conference registration are FREE. See <http://atlday.shis.uth.tmc.edu/>. The best poster and podium presentations will receive \$500 awards. All abstracts are peer reviewed and will be published in the DigitalCommons@ The Texas Medical Center. For details, contact [Connie.J.Tapper@uth.tmc.edu](mailto:Connie.J.Tapper@uth.tmc.edu).

### Mark your calendars...

for the 2007 Annual Faculty Meeting from 11:45 a.m.-1 p.m. Tuesday, May 15 in room 2.006 of the Medical School. Lunch will be available at 11:30 a.m. for the first 150 attendees. The meeting will be broadcast live to rooms 212 and 213 at the Lyndon B. Johnson General Hospital.

### TETF award, cont'd.

have recently been translated into meaningful observations from a clinical trial with ibuprofen-PC inducing significantly less GI injury in "at risk" osteoarthritic subjects than were endoscopically observed in an age/gender-matched group receiving the same dose of Motrin," he said.

The patented technology may eventually extend from NSAIDs to a much larger potential market that could include prevention of cardiovascular disease, Alzheimer's disease, and several types of cancer.

The most recent TETF awards to six Texas emerging technology companies are part of a \$200-million initiative created by the Texas Legislature in 2005 at the governor's request. The grants are intended to help early stage businesses introduce their innovations to the marketplace and attract leading university research teams to Texas universities.

-D. Bates

### Kone, cont'd.

as well as chief of the nephrology section at M. D. Anderson Cancer Center. In 2001, he was named the first holder of the James T. and Nancy B. Willerson Chair. In 2004, he was appointed chair of the Department of Internal Medicine.

"Dr. Kone's ascent in academic medicine has been absolutely meteoric, and we have benefited greatly from his glow over the last decade," said interim Dean **Jerry Wolinsky**. "He will be greatly missed, but I think we all gather a bit more pride in our school as our students and faculty move on to greatness, having grown from their experiences here. He has set a difficult standard for his successor."

Kone will become the eighth dean of the UF College of Medicine, which was founded in 1956.

"Bruce Kone has been a wonderful leader, educator, basic and translational scientist, and physician in our Medical School for over 12 years," said **Dr. James T. Willerson**, president of the UT Health Science Center at Houston. "He will be an enormous asset to the University of Florida Medical School as its dean. We shall miss him very much."

-C. Webb