



# Scoop

Nov. 4, 2005

THE UNIVERSITY OF TEXAS MEDICAL SCHOOL AT HOUSTON

## Events to Know

### November

#### 7 Center for Membrane Biology

**Seminar Series presents Dr. John Marino** to speak on "Probing the Mechanism of Heterotrimeric G-protein Signaling using High-resolution NMR." 11:45 a.m.-12:45 p.m., MSB 2.135.

#### 8 Dr. Shahla Nader to speak at free seminar

on "Osteoporosis in Post-Menopausal Women." 5:30 p.m.-7 p.m., Houston Academy of Medicine-TMC Library's Ground Level Conference Room.

#### 8 Dr. Ferid Murad to present "Research Programs and Commercial Opportunities in the Institute of Molecular Medicine"

at BioHouston Breakfast Forum. 7 a.m.-8:30 a.m., The Dunstan (2415 Dunstan).

#### 10 William S. Fields Lecture presents

**Dr. Henry McFarland** to speak on "The Clinical Trial as a Probe into The Cause of MS." Noon, MSB 3.001.

#### 11 Thanksgiving Celebration. 11:30 a.m.-1 p.m.,

Webber Plaza, Fannin Plaza, and MSB Leather Lounge.

#### 18 Research Day. 9:30 a.m.-4 p.m.,

Institute of Biosciences and Technology and Hornberger Conference Center. Visit <http://research.uth.tmc.edu/ResearchDay/>.

## MUCH TO BE THANKFUL FOR AT NOV. 11 CELEBRATION

'Tis the season for giving thanks, and **Dean Stanley Schultz** and the Employee Relations Committee invite the Medical School family to celebrate four accomplishments for which we can all be thankful – the reopening of Webber and Fannin Plazas, the inaugural exhibit of the Medical School Art Wall, the new look of the Leather Lounge, and the end of the Medical School's recovery from Tropical Storm Allison.

These milestones will be observed at the Thanksgiving Celebration and Employee Appreciation Event 11:30 a.m. - 1 p.m. Friday, Nov. 11 at Webber Plaza, Fannin Plaza, and the Leather Lounge.

The thanksgiving celebration is being combined this year with the annual employee appreciation luncheon – so, lunch, music, and goodies will be included in the festivities. Formal remarks by Dean Schultz and **Dr. James T. Willerson** will be held at noon in the Leather Lounge.

"It's been a long four years, and we've had many challenges, but now is our opportunity to come together and celebrate all that we have to show for the hard work – it's paid off," Dean Schultz said. "I can't wait to see our permanent Leather Lounge furniture and how the berm project will look once it is finished. It will be great to have a front door once again and easy access to the building."

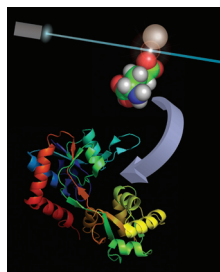
In addition to the finalization of the Leather Lounge and berm project, which encircles the Medical School, a new feature to the ground floor – the Art Wall – will be unveiled. The in-



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## JAYARAMAN'S DRUG, PROTEIN "DANCE" PUBLISHED IN JOURNAL

The glutamate receptor is an important protein involved in diseases of the central nervous system like Alzheimer's, Parkinson's, and epilepsy. **Dr. Vasanthi Jayaraman**, assistant professor of integrative biology and pharmacology, and her team are the first to show the process by which a drug recognizes the glutamate receptor and the changes it initiates in the protein. The finding is an important step toward understanding how a drug controls a protein and will aid in the design of better drugs to treat neurological diseases.



The study, "Evolution of glutamate interactions during binding to a glutamate receptor," appears in the November issue of *Nature Chemical Biology*.

Jayaraman combined two existing technologies to arrive at the results. By taking a drug in inactive form and activating it with light, the team was able to introduce it into the protein's environment and monitor it with vibrational spectroscopy.

"By coupling these two, we were able to initiate the reaction and watch the changes in the vibration of the drug and protein," she said. "The key is that we could do it in microsecond time frame. The traditional millisecond techniques are too slow; you aren't able to see what happens."

She compared this method to watching a movie versus looking at still photos, as seen by other

(Cont'd. on back)



Students dressed as "Double Dare" and "Captain Morgan" took home 1st and 2nd place prizes, respectively, at the Medical School's Halloween Costume Contest.



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A part of The University of Texas  
Health Science Center at Houston



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**In Stock Now –****Books by Faculty Authors**

Medical School faculty teach, conduct research, care for patients – and many write books. Today, there is a new section of the UT Bookstore dedicated to these works by Medical School faculty.

**JoAnn Talib** got the idea for a special section for faculty authors from her book vendors. “I found that I would get pieces of mail from my vendors that would alert me to textbooks that were published by people who worked here, and it came up as an idea,” said Talib, who is the assistant manager of the bookstore.

Talib realized the section could essentially serve two purposes. “We thought it would give good exposure to not only the bookstore but also to the authors we have here at the Medical School,” she said.

Talib worked from a solicited list of books by faculty to stock the section and found she was ordering more than just textbooks. Some members write books geared for patients and the general public on topics ranging from health and diseases to history. “Aging Men’s Health” by **Dr. Robert Tan**, clinical associate professor of family and community medicine, and “The Scleroderma Book” by **Dr. Maureen Mayes**, professor of internal medicine, are just two of the many titles on display.

Both Talib and **Anne Fefer**, the bookstore’s director, want the section to grow. “We have more space to do that than we had in the previous store,” Fefer said.

“We want faculty to know that we recognize their contribution to the medical field by writing the textbooks,” Talib added. “We’re here to support them.”

Fefer said that it’s helpful when faculty members notify them when a book’s going to press. “Although we think we’ve done a pretty good job of ordering and receiving books of faculty members, we know that there are probably a few that are missing,” she said. “Faculty should contact JoAnn, so we can display the textbooks.”

The bookstore is primarily interested in displaying books by faculty who are the noted first authors. Medical School faculty should contact JoAnn Talib at 713.500.5864 or send e-mail to [Joann.Talib@uth.tmc.edu](mailto:Joann.Talib@uth.tmc.edu), so the bookstore staff can add more books to the shelves.

-C. Webb



**JoAnn Talib arranges books by faculty.**

**New TMC Motorcycle Parking Policy**

Effective Nov. 1, motorcycles parked in Texas Medical Center facilities need to be registered and have an affixed permit/decal. The monthly motorcycle permit rate is \$51. To obtain a motorcycle permit, applicants must complete a standard TMC parking contract. Return the form to the TMC Contract Parking Office at 1155 Holcombe Blvd., 7:30 a.m. - 4:30 p.m., Monday - Friday.

Applicants should contact their institutional parking representative or office to find out about payroll deduction, which prevents the sales tax charge on the monthly parking fee. Motorcycles parked without a decal must pay the daily visitor rate. Motorcycles may be ticketed or towed if not in compliance. The motorcycle parking brochure at [www.uthouston.edu/mass\\_info/Motorcycle\\_Parking.pdf](http://www.uthouston.edu/mass_info/Motorcycle_Parking.pdf) describes the program in detail.

**Neuroscience Abstracts Due Nov. 14**

Abstracts for the Twelfth Annual Neuroscience Research Center Poster Session are due Monday, Nov. 14. Entry forms are available at <http://nba.uth.tmc.edu/nrc/>. Send completed forms to **Laura Ross**, MSB 7.046; via e-mail [Laura.J.Ross@uth.tmc.edu](mailto:Laura.J.Ross@uth.tmc.edu); or via fax 713.500.0560.

The poster session takes place from 10 a.m. - noon Saturday, Dec. 3 in the Medical School’s Leather Lounge and is open to faculty members, postdoctoral fellows, graduate students, residents, and medical students. Awards will be given to the best posters presented by a graduate student and a postdoctoral fellow.

**19th Annual Holiday Arts & Crafts Fair**

9 a.m.-3 p.m. / Thursday, Nov. 17  
Medical School Leather Lounge & Grand Staircase Foyer

Buy holiday gifts from 37 vendors ranging from thrown pottery, handcrafted jewelry, indoor and outdoor holiday decorations to homemade beer bread and dips.

**Thanksgiving, cont’d.**

augural exhibit will feature art by **Anne Ribble, Donna Buja, Max Buja, Regina Verani, M.D., and Soraya Thompson.**

The 64-foot Art Wall will be located on the wall between Administration and Finance and the Leather Lounge, across from the Office of Student Affairs, and will feature the selected art of students, faculty, staff, alumni, and family members of those groups. Brochures and an entry form with information on how to submit art to the committee for inclusion to the Art Wall may be found on the Medical School’s homepage under “hot spots.”

-D. Brown

**Jayaraman study, cont’d.**

structural methods. “It’s like if you went to a movie, and instead of seeing the movie, you were seeing still photographs at given intervals,” she said. “You would not see the motion. All you would see are some states from which you would have to deduce the whole story.”

“What we do is actually watch the whole thing as it happens, so we have a movie versus everybody else just having still pictures,” she continued.

From the technology of this “movie,” Jayaraman and her colleagues were able to see the communication between a drug and a protein as an immediate reaction, instead of a cause-effect relationship.

“Most of the time, people think that whenever a drug binds to a protein that the drug comes and docks on the protein,” she said. “The protein then responds and undergoes some change.”

“Our study has shown that it’s not like that,” she continued. “It’s a very beautifully choreographed dance between the drug and the protein.”

Through this study, Jayaraman ultimately hopes to understand why some drugs activate the protein and others inhibit it. “We want to understand the role of these specific steps in activation and inhibition, so we can do a more rational design of drugs,” she said.

“Evolution of glutamate interactions during binding to a glutamate receptor” by **Qing Cheng** (former graduate student), **Mei Du** (instructor), **Gomathi Ramanoudjame** (research fellow), and Jayaraman can be viewed online at [www.nature.com/nchembio/index.html](http://www.nature.com/nchembio/index.html).

-C. Webb