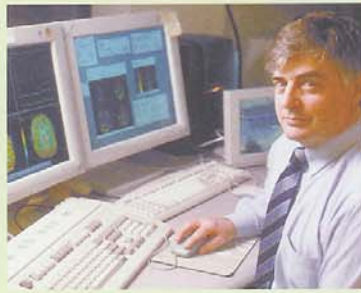


## CHICAGO

### Peek inside the brain

The world's most powerful MRI machine went online at the UIC Center for Magnetic Resonance Research in December 2007. More than 100,000 times stronger than the Earth's magnetic field, the MRI will allow physicians to see real-time views of biological processes in the human brain. Oncologists, for example, will be able to see if chemotherapy is shrinking a tumor. The 9.4 tesla (the measuring unit of magnetism) magnet is more than three times the strength of state-of-the-art clinical units and is the first such device large enough to scan the head and visualize the human brain. Following the FDA-required safety trials, UIC researchers are putting the unit to work.



## CHICAGO

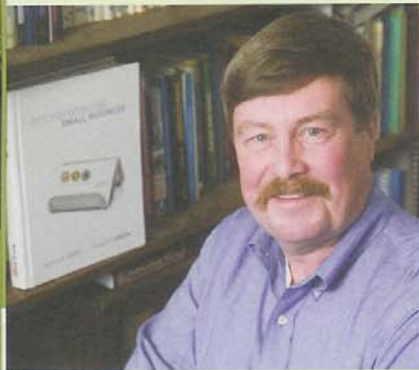
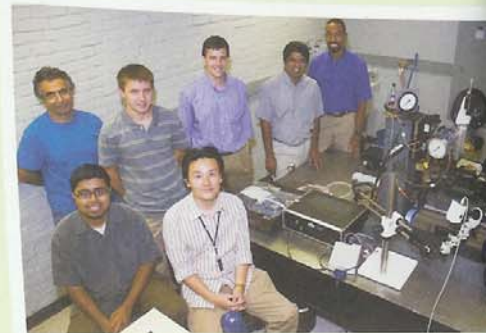
### To sleep, perchance

The new Sleep Science Center on the UIC campus, which opened in September 2007, offers resources to diagnose and treat a range of sleep disorders in children and adults, including sleep apnea, excessive sleepiness, restless leg syndrome and sleep problems in shift workers. Director James Herdegen says the facility will further UIC's national presence in clinical care and sleep research. UIC is part of a study sponsored by the National Institutes of Health that examines sleep problems in patients with chronic renal insufficiency.

## URBANA

### From the pockets of students

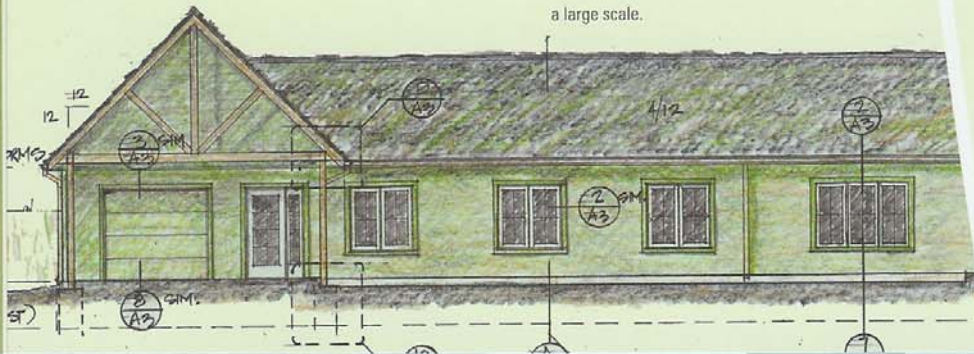
A course on entrepreneurship gave students a chance to create a business plan and market a small business as well as an opportunity to be micro-lenders to entrepreneurs in developing countries. Bruce Wicks, professor of recreation, sport and tourism, asked his students if they would be willing to commit their own resources — approximately \$10 each — to help individuals in developing countries looking for a modest bit of capital to start or develop a small business. Among the entrepreneurs the students funded were a tailor in Afghanistan and a grocer in Azerbaijan. The social entrepreneurship experience exposed the students to the practice of micro-lending, gender issues and self-sufficiency.



## SPRINGFIELD

### Building at Emiquon

At the newly constructed Emiquon Field Station, UIS faculty and students will research floodplains, particularly the restoration of The Nature Conservancy's Emiquon Preserve. The 7,400-acre preserve is the largest floodplain restoration project in the Midwest and the premier demonstration site for the Conservancy's work on the Illinois River and within the Upper Mississippi River system. UIS students will learn field biology techniques and how to conduct research projects. Current projects focus on water quality and other projects are planned for the restoration sites, some of the first river reclamation efforts to be undertaken on such a large scale.



## URBANA

### e-jet printing has variety of uses

By combining electrically induced fluid flow with nanoscale nozzles, an interdisciplinary team of researchers has established new benchmarks for precision control and resolution in jet-printing processes. The electrohydrodynamic jet (e-jet) printing process can produce patterns and functional devices that establish new resolution benchmarks for liquid printing, significantly exceeding those of established ink-jet technologies. John Rogers (center back row), a Founder Professor of Materials Science and Engineering, and other scientists from the Center for Nanoscale Chemical Electrical Mechanical Manufacturing Systems, funded by the National Science Foundation, believes the e-jet printing could be used for large-area circuits and displays as well as in security, biotechnology and photonics.