recruits students elsewhere. The two schools are the only entrance points for study at Janelia, where students will complete PhD degrees during their research.

Students will come from a variety of scientific backgrounds. They will spend one year at their partner university and the remainder of their time at Janelia. Each student will have two mentors—one at Janelia and one at the university.

Two senior fellows have been recruited so far: Sydney Brenner, a molecular biologist and Nobel laureate, and Charles Shank, former director of the Lawrence Berkeley National Laboratory.

"Janelia opens up a whole new set of resources for our students and provides new opportunities for scientific imagination and collaboration," said James Madara, MD, dean of the Biological Sciences Division at Chicago.

Because HHMI will completely fund the 20 to 30 group leaders and 300 researchers who eventually will work there, research at Janelia Farm will differ from that at traditional institutions. Without the constraints that accompany most grant funding, researchers will have greater opportunity to follow new leads and the surprising twists and turns that arise in their investigations.

The idea for the campus was sketched out on the back of a napkin during a lunch seven years ago. Thomas Cech, current HHMI president, and HHMI vice presidents David Clayton and Gerald Rubin sought a place, like England's Medical Research Council Laboratory of Molecular Biology or AT&T’s Bell Laboratories, where researchers from various disciplines could come together in research and discussion to answer complicated biological questions that require more time and attention than most federal grants allow.

Proposed projects at Janelia reflect that multidisciplinary ambition. Students will build new types of microscopes capable of magnifying living cells to unprecedented detail. They’ll study adaptations the brain makes in response to new experiences. They’ll interpret neurons in the fruit fly’s brain, and use protein design and computation techniques to create nanosensors for living cells.

The first students will begin in fall 2007.

--KSB

“Uniquely human” component of language found in songbirds
Although linguists have argued that certain patterns of language organization are the exclusive province of humans—perhaps the only uniquely human component of language—researchers from the University of Chicago and the University of California-San Diego have discovered the same capacity to recognize and distinguish such patterns in *Sturnus vulgaris*, the common European starling.

In the April 27, 2006, issue of *Nature*, the researchers show that these starlings—long known as virtuoso songbirds and expert mimics—can be trained to reliably discriminate between two different patterns of organizing the sounds they use to communicate.

“Our research is a refutation of the canonical position that what makes human language unique is a singular ability to comprehend these kinds of patterns,” said Timothy Gentner, PhD, assistant professor of psychology at UCSD and lead author of the study. “If birds can learn these patterned rules, then their use does not explain the uniqueness of human language.”

The researchers focused on recursion, or center-embedding, a characteristic found in all human languages. Recursion is one

**NOTEWORTHY**

Morton F. Arnsdorf, MD, a professor of medicine, won the American Heart Association’s 2006 Women in Cardiology Mentoring Award, designed to recognize individuals effective at mentoring women cardiologists. He received the award during the annual Clinical Cardiology Council Dinner at the AHA’s Scientific Sessions this November.

Elliot S. Gershon, MD, professor of psychiatry, won the 2006 Lifetime Achievement Award from the International Society for Psychiatric Genetics.

Arthur Herbst, MD, a professor emeritus of obstetrics/gynecology who exposed the dangers of diethylstilbestrol (DES), a hormone that doctors prescribed for the prevention of miscarriages between 1938 and 1971, received the University of Arizona Alumni Association’s College Alumni Council Award for Excellence.

Ken Kasza, PhD, a research associate in emergency medicine at the University of Chicago and a senior mechanical engineer at Argonne National Laboratory, won a R&D 100 Award for “one of the year’s most innovative ideas” from R&D magazine. His work revolves around ice slurries—a mixture of ice and salt water that, when injected into the lungs, may sustain the heart and brain cells after heart attack.

Raymond Roos, MD/PhD, professor and former chair of neurology, has been elected to the Johns Hopkins University Society of Scholars as one of 15 esteemed scientists and clinicians honored during the society’s 37th induction ceremony. Roos is a nationally recognized researcher and leading clinician in the field of neurodegenerative disorders, particularly amyotrophic lateral sclerosis, multiple sclerosis and prion diseases.