

More than 25,000 organ transplants were performed in the United States in 2003, according to the Organ Procurement and Transplantation Network. As of August 2004, more than 86,000 people have their names on waiting lists for organs such as hearts, lungs, kidneys, and intestines.

Obstacles to successful organ replacement include genetic incompatibility between donor and recipient and transplant rejection by the recipient's immune system. Also, patients who

take immunosuppressive drugs for a long period of time are more susceptible to conditions such as diabetes, high blood pressure, and loss of kidney function.

The consortium will seek to identify genetic factors in patients that could help doctors predict transplant outcomes and responses to post-transplant therapy, develop diagnostic tests that enable early detection and ongoing monitoring of immune-related processes, and test the safety and ef-

fectiveness of new, less toxic immunosuppressive drugs.

The three institutions in the consortium and the principal investigator at each are Brigham and Women's Hospital, Boston, Mohamed H. Sayegh, MD; Cleveland Clinic Lerner College of Medicine of Case Western Reserve University, Peter Heeger, MD; and University of Pennsylvania, Philadelphia, Abraham Shaked, MD, PhD.

University of Iowa Presents Award for Distinguished Mentoring



Jeffrey C. Murray

Jeffrey C. Murray, MD, professor of pediatrics in the University of Iowa (UI) Roy J. and Lucille A. Carver College of Medicine, has been named the recipient of the college's third annual Award for Distinguished Mentoring. Murray received the award during a ceremony and lecture on September 29, 2004.

Mary-Claire King, PhD, American Cancer Society Professor and professor of genome sciences and medicine (medical genetics) at the University of Washington, delivered the third annual

Distinguished Mentor's Lecture, titled "Race, Genes, and Medicine."

The Distinguished Mentoring Award honors UI Carver College of Medicine faculty members whose careers have emphasized the mentoring of students, postdoctoral research fellows, and faculty who have forged their own notable careers. The Distinguished Mentor's Lecture highlights the award for mentoring by bringing to the UI world-class scientists who embody the ideals of the award and its recipient. The award was initially established and is supported by a gift to the UI Foundation from UI graduates Nancy and Daryl Granner, MD, of North Liberty, Iowa.

A UI faculty member since 1984, Murray is widely regarded as an outstanding clinician, researcher, and teacher. His clinical activities center on newborn medicine and care of children born with birth defects. His research incorporates genetics, molecular biology, embryology, and epidemiology to study birth defects, particularly cleft lip and palate. He has been active in a variety of international studies to provide improved treatment and prevention for birth defects.

Recently, researchers from eight countries, led by Murray's UI research team, reported identifying a genetic variation that increases the risk of a baby being born with a cleft lip and palate. The finding helps explain 10 to

15% of all cases of the common form of cleft lip and palate and offers new directions for predicting, preventing, and treating the condition.

Graduate students and postdoctoral fellows in Murray's laboratory take on leadership roles in research studies and assume primary responsibility for project design and implementation. In the recent cleft lip and palate finding, Theresa Zuccherro, a doctoral student in the UI Interdisciplinary Program in Genetics, played a key role in getting the project under way and helped organize deoxyribonucleic acid (DNA) testing of thousands of study participants—a major collaborative effort among multiple laboratories in Asia, Europe, and South America. UI undergraduate students also work in Murray's laboratory.

King, who delivered the Distinguished Mentor's Lecture, is internationally recognized as a groundbreaking researcher and an advocate for using science to advance human rights. She is perhaps best known for her 1990 discovery that mutations in a single gene, today known as *BRCA1*, cause breast cancer in certain high-risk families. King's finding was a watershed moment in genetics research and has been emulated by scientists studying other serious illnesses, such as Alzheimer's disease, Parkinson's disease, and prostate cancer.