

UMASS MEMORIAL FOUNDATION



University of Massachusetts  
MEDICAL SCHOOL



UMassMemorial  
HEALTH CARE



**Connecting  
Knowledge, Discovery and Care**

**I m p r o v i n g   H u m a n   H e a l t h**

# Committed to Health Care Excellence

The compassionate care UMass Memorial provides, combined with advanced technologies and specialized knowledge and skills, enables our physicians to treat each patient's unique needs.

The following examples are a few of many that illustrate our commitment to health care excellence. It is a commitment that makes a difference in the lives of our patients and their families each and every day of the year.

## Cardiac Surgery Program Awarded Prestigious Three Stars by STS

Thanks to highly experienced cardiologists, emergency room physicians and our state-of-the-art **Heart and Vascular Center of Excellence** facilities, heart attack victims move very quickly from the time of arrival at the emergency room to our cardiac catheterization lab, where arteries are unblocked and lives are saved — in dramatically shorter “door-to-balloon” times than the national average. Our new Cardiac Catheterization Laboratory employs the most advanced electrophysiology and interventional cardiology technology to evaluate heart structure and function to detect and treat heart disease. Patient care is enhanced by our strong behavioral medicine research program that provides feedback to and from researchers, clinicians and patients. This is leveraged with the combined expertise of specialists in cardiothoracic surgery, vascular surgery, cardiology and imaging, who work together as a unified team to provide each patient with specialized care. With a highest possible three-star quality rating from the Society of Thoracic Surgeons, the UMass Memorial Cardiac Surgery Program holds a ranking awarded to only 12 percent of hospitals nationwide with cardiac surgery programs. Our survival rate for patients undergoing coronary artery bypass surgery is better than 99 percent — exceeding national benchmarks.





# Transforming the Promise — Advancing Medicine

**A**s the RNAi research capital of the world, UMass embraces the great responsibility we have to use our expertise to improve human life. Several scientific breakthroughs, including the discovery of RNAi, are propelling our vision and planning into reality:

**The Human Genome Project** | The human genome project has provided us with the blueprint for human life, and we have only just begun to tap this extraordinary resource.

**The Discovery of RNAi** | The discovery of RNAi holds enormous potential to treat and cure diseases such as cancer, diabetes, degenerative diseases of the eye and the central nervous system — Alzheimer's disease, Huntington's disease and ALS (Lou Gehrig's disease) as well as for acute and chronic viral infections such as Hepatitis C and HIV/AIDS. RNAi is also the foundation for the further study of gene therapy. While researchers believe they can deliver RNAi directly to some types of cells and tissues, delivering RNAi therapies to other parts of the human body will require special methods. Our researchers are focused on fostering innovation in creating other new RNAi applications and extending our cutting-edge position in this field.

**Regenerative Medicine** | Regenerative medicine and stem cell research hold

the potential to cure cancer, juvenile diabetes, Alzheimer's, Parkinson's and other diseases. But donated stem cells are recognized as foreign by a patient's immune system, requiring that the patient be treated with potent immuno-suppressive drugs.

