

OSUMC Highlights

Ohio State University Medical Center is one of the largest and most diverse academic medical centers in the country and the only one in central Ohio. Ohio State's Medical Center includes the College of Medicine, five award-winning hospitals, numerous freestanding research institutes, and dozens of community-based primary and specialty care facilities.

OSUMC is proud to be at the center of some of the world's most impressive developments in research, education and clinical care, taking place on our campus every day. Thanks to the thousands of Ohio State physicians, researchers, and healthcare professionals, the Medical Center is internationally known for superior quality, range of services and depth of expertise. And it is taking a leadership role in customizing care, treatment and disease prevention.

Diabetes Breakthroughs

From pancreatic and islet transplantation to patient education and lifestyle modification programs, Ohio State University Medical Center is conquering new frontiers to develop emerging strategies for diabetes prevention, management and care.

- Ohio State's Medical Center Transplant Surgery Program has consistently ranked among the top four in the U.S. in the number and success of pancreas and kidney/pancreas transplants performed. OSU Medical Center operates the only transplant program in central Ohio.
- Ohio State's Medical Center has successfully performed islet transplantation on non-human primates and has received FDA approval that will lead to our first human islet transplantation before the end of 2006. OSU alumni and pathologist Paul Lacey, MD, opened the field of islet transplantation. He and his colleagues discovered a method to isolate islets and were the first to transplant human insulin-producing cells into diabetic patients with the goal of curing their diabetes.
- Ohio State's Medical Center has earned the prestigious American Diabetes Association (ADA) Physician Recognition Certification. The ADA Recognition Program awards recognition to physicians who demonstrate that they provide high-quality care to patients with diabetes. In addition, Ohio State's Division of Endocrinology, Diabetes & Metabolism's patient education program, The Scarlet and Gray Way to Diabetes Self-management, has received the ADA's Certification of Recognition for meeting National Standards for a patient education program.
- One of the giants of American surgery and chair of Ohio State's Department of Surgery for a 30-year period from the 1940s to the 1970s, Robert Zollinger, MD, worked with Edwin Ellison to discover Zollinger-Ellison Syndrome, which dealt with the relationship between non-beta islet cell tumors of the pancreas and diseases of the gastrointestinal tract.
- Ohio State's Medical Center has successfully delivered treatments for hundreds of patients using a glucose management insulin pump, which resulted in better glycemic control and fewer adverse effects.
- Ohio State's Medical Center is capable of delivering continued blood glucose monitoring with a subcutaneous glucose sensor that eliminates finger pricks.
- Ohio State's Medical Center has devised a prevention program specifically for African-Americans, who have a higher incidence of diabetes than Caucasians. The program is centered around patient education and lifestyle modification.
- A study conducted by Ohio State researchers may lead to new prevention and treatment options. The study found that diabetics taking a supplement of conjugated linoleic acid (CLA) lower both their body mass and blood sugar levels. The amount of CLA, how long it's taken and the type taken all impact the fatty acid's ability to affect obesity in humans, and therefore help manage diabetes.
- Ohio State's Medical Center, a leader in the field of weight loss surgery, offers diabetic patients an opportunity to manage their weight with gastric bypass surgery or laparoscopic gastric banding, or through

a lifestyle modification via our Comprehensive Weight Management Program. The OSU Bariatric Surgery Program has been designated a Center of Excellence by the American Society for Bariatric Surgery (ASBS).

Breakthroughs in Research, Education & Patient Care

For almost a century, Ohio State University Medical Center has led the quest to advance quality of life through medical breakthroughs, discoveries and innovations.

- Ohio State's Medical Center is a national leader in the development and application of innovative medical breakthroughs, including clinical cancer genetics counseling, kidney/pancreas organ transplants, voice-activated surgical suites, minimally invasive robotics surgery, the nation's first permanent device for monitoring/treating heart failure and more.
- Ohio State's Medical Center is well-funded by national grants, receiving \$86 million in fiscal year 2005, which allows us to continually perform world-renowned research and translate discoveries to treatments.
- Ohio State pioneered the diagnosis and treatment of heart failure when Carl Leier, MD, researched and developed the drug, Dobutamine, which helps heart failure and heart transplant patients throughout the world.
- OSU's Center for Stress and Wound Healing is one of only five designated National Institutes of Health Mind-Body Research Centers. Investigators have uncovered a connection between chronic stress, the immune status of caregivers, and their susceptibility to disease, discovered that delays in wound healing occur in patients with high levels of psychological stress; and found that certain vaccines may be impaired if the inoculations are given when a person is highly stressed.
- Ohio State's Medical Center installed the world's most powerful human magnetic resonance imaging scanner in 1998, the 8 Tesla MRI, and remains a leader in imaging research.
- Ohio State University Medical Center exclusively delivers one-of-a-kind care, with the only:
 - adult burn unit in central Ohio
 - solid organ transplant program in the area
 - comprehensive children, adolescent and adult mental health facility in central Ohio
 - experimental therapeutics program for cancer care in central Ohio
 - heart and lung research institute
 - comprehensive end-stage heart disease program
 - intraoperative MRI program and clinical cancer genetics counseling program in the area
 - 24/7 stroke management team on site, which is one of only 18 JCAHO-certified stroke programs nationwide.

Milestones and Firsts

Researchers, scientists and physicians at the Ohio State's Medical Center have long been recognized as medical pioneers. Notable discoveries include the early detection and treatment of cervical cancer, the care of women with high-risk pregnancies, the discovery of hairy cell leukemia, and the development of radioimmuno-guided surgery for cancer. In addition, one of the country's largest and most technologically advanced solid organ transplant programs is found here.

- Ohio State's Medical Center robotic surgery program – one of the world's first – is one of the nation's leading robotic training centers for physicians and surgeons. We're one of the nation's premier cancer centers for performing robotic prostatectomies. Ohio State reported the world's first robotic surgery pancreatic resection and esophageal myotomy; published the world's largest series of robotic treatment of achalasia and remain a major training and innovation center for robotic surgery. We also participated in the initial FDA trials for cardiac surgery.
- The OSU Wound Healing Center at University Hospital East became the first in Ohio and among the first in the nation to achieve Level 1 certification from the U.S. Food and Drug Administration in the use of vacuum-assisted closure technology.

- Ohio State's Medical Center Dodd Hall is consistently ranked as one of the top 10 rehabilitation centers in the U.S. by *U.S. News & World Report* magazine and national accrediting organizations.
- Ohio State's Medical Center scientists played a role in advancing the creation of the human genome map.
- Ohio State faculty created the nation's first Independent Study curriculum for medical school education in 1970.
- Ohio State's Medical Center housed one of the first coronary care units in the nation.
- Ohio State developed the country's first human cancer genetics fellowship.
- The country's first voice-activated surgical suites were created at OSUMC.
- In 2003, an Ohio State faculty member became the first physician in the United States to implant a digital pacemaker in a patient.