CTC advances transplant care

“Ohio State’s Comprehensive Transplant Center has recorded a number of outstanding accomplishments in the recent past, including our first islet cell transplant procedure and a synchronized series of six kidney transplants. The six-way single-institution transplant was the first and largest to date in Ohio and one of only a handful that have taken place in the United States,” says Robert Higgins, MD, director of Ohio State’s Comprehensive Transplant Center (CTC).

Ohio State’s transplant program is one of the largest in the country; among the busiest kidney transplant programs in the region and the only adult transplant center in central Ohio. Since the transplant program was established in 1967, Ohio State has performed more than 7,500 organ transplants.

On average, 225 people with end-stage kidney disease receive a kidney transplant at Ohio State each year, which translates into the opportunity to trade a life of dialysis and disability for improved health.

“Transplantation is one of the real ‘magical’ miracles of medicine,” says Higgins. “Increasingly, people are volunteering to give organs, and that is an impressive, heroic kind of activity. It’s a phenomenal gift of life.”

Approximately 50 percent of kidney transplants are now from live donors. Many donors are family members, but a growing number are friends and even strangers (see story below).

“At Ohio State, nearly 600 people are awaiting a kidney transplant,” says Todd Pesavento, MD, medical director of Kidney and Pancreas Transplantation. “However, the vast majority of these patients could be helped by a living donor.”

One of the major benefits of living donation for the recipient is that he or she can receive the transplant more quickly, potentially avoiding dialysis. “The wait for a deceased donor can be many years,” explains Pesavento. Who can be a living organ donor? A living donor must be in good health and cannot have diabetes, heart disease or a medical condition that requires the donor to take daily medication. Those who are considering organ donation may benefit from discussing the subject with their primary care physicians. Ohio State’s transplant program can evaluate individual situations and give advice on living donation.

But for Ohio State… Friend gives ‘gift of life’

James and Craig (left) have a connection that even the closest of friends don’t often have. Their story started when James, a husband and father from Amanda, Ohio, was denied life insurance because of an abnormal test result from a required physical exam.

James went to his family physician, who referred him to a specialist. The specialist determined that James had chronic kidney disease. At the time, James still had 70 percent kidney function and was told he wouldn’t need dialysis or a kidney transplant for 10-20 years. He began taking medication, altered his diet and started exercising — all to prolong the time before he would need a transplant.

He also enjoyed being with his family, regularly attended church and spent time with his friend, Craig.

Time passed, and only five years later James began suffering fatigue and experienced swelling in his legs. He made an appointment with his nephrologist, who had been monitoring James’ diminishing kidney function. Testing revealed that James’ kidney function had dropped to only 10 percent.

“My kidneys were failing, and there was nothing the doctors could do,” explains James.

He was informed that he needed to start dialysis or get a kidney transplant. His physician immediately referred him to Ohio State, because it has one of the largest, most experienced transplant programs in the state of Ohio as well as the nation.

After James’ transplant eligibility was confirmed, he learned he had two options:

• Undergo dialysis until a deceased-kidney donor could be found, which could take many years.

• Begin the search for a living kidney donor.

James admits he was feeling overwhelmed by the thought of finding a living kidney donor when an announcement was made in church on his behalf. “As it turns out, the friend I saw every Sunday ended up being a perfect match,” says James.

Hearing the announcement at church, James’ friend, Craig, decided to get tested to determine if he was a match to be a living kidney donor for James. When the results came back, Craig was shocked to find out that he and James had the same remarkable organ compatibility that you would find in blood brothers. After talking it over with his family, Craig called James to tell him that he would be his donor.

Following a comprehensive pre-transplant orientation process at Ohio State, James and Craig underwent kidney transplant surgery. Ronald Pelletier, MD, removed Craig’s kidney and Amer Rajab, MD, PhD, implanted the healthy organ into James’ body. The surgeons informed families of both patients that the surgeries were successful. James and Craig each recovered without complications.

Today, James doesn’t worry about being on dialysis for the rest of his life. He’s too busy spending time with his wife, Laura, and playing with their two young daughters. James is thankful for Craig’s selfless decision to become a living kidney donor.

When people ask Craig why he was so generous, he replies simply: “He needed a kidney, and I was able to provide it.”

James hopes that by sharing his story, he will help others suffering with chronic kidney disease. James is an advocate for living kidney donor transplantation and encourages everyone to get tested to become a living kidney donor.

Learn more about patient stories that illustrate the remarkable care provided every day by the staff of The Ohio State University Wexner Medical Center at medicalcenter.osu.edu.
Support for your fitness goal

Are you considering participation in Pelotonia 12 or another community challenge? Have you taken the P4 Pledge to Get Fit? Would you like to be healthier as you enjoy summer activities or an upcoming vacation? Ohio State offers services and employee benefits that can help you reach your health and fitness goals. Learn more about these programs on the Ohio State, OneSource and Your Plan For Health websites:

- **Find a physician** — Partner with your primary care physician to ensure that you are healthy enough to begin a regular exercise routine, to set health goals and create a plan to achieve them, or to monitor and treat concerns you have as you become more active. Don’t have a primary care doctor? To find an Ohio State physician who is now accepting patients, go to medicalcenter.osu.edu and type “accepting new patients” in the search box. You will find an updated list of Ohio State primary care physicians who are accepting new patients at convenient locations throughout central Ohio.
- **Achieve your athletic goals** — OSU Sports Medicine experts offer unique programs for active youth and adults at all levels of participation. Combining expertise in sport science, nutrition, psychology, therapeutic and restorative methods, the OSU Sports Medicine experts provide athletes with a comprehensive training experience that produces real results.
- **Get a health coach** — OSU Health Plan offers Personal Health Coaching to Ohio State faculty and staff who are Your Plan for Health members. Coaches, who are healthcare professionals from Ohio State’s Wexner Medical Center, can support your personal health and wellness strategies related to weight management; nutrition; exercise; stress management; tobacco cessation; blood pressure, cholesterol and diabetes management; and disease prevention and management. This service is confidential and voluntary.
- **Locate a fitness program**
  - The Fitness Center at Ohio State’s Center for Wellness and Prevention, located in the Martha Morehouse Pavilion, 2050 Kenny Road, provides a friendly, comfortable environment for exercise. With exercise and fitness programs for all fitness levels, the Center contains aerobic and strength-training equipment and offers free one-hour orientations. Personalized fitness coaching is also available. For more information, call 293-2800.
  - The Faculty and Staff Fitness Program is operated by the staff of the Exercise Physiology Laboratory in the School of Physical Activity and Educational Services. Graduate students in Health and Exercise Science serve as fitness instructors.
  - RPAC (Recreation and Physical Activity Center) provides individual, team and club activities for Ohio State faculty, staff and students.
  - Your Plan For Health offers educational fitness programs quarterly to benefits-eligible faculty and staff. Several local fitness centers offer discounts to Ohio State faculty and staff. Check the Your Plan For Health site for more information.

Pelotonia’s goal: a cancer-free world

Pelotonia 12, the annual grassroots bicycle tour that raises millions of dollars for cancer research at Ohio State’s Comprehensive Cancer Center – James Cancer Hospital and Solove Research Institute (OSUCCC – James), is set for Aug 10-12. The weekend celebration opens with dinner and a concert on Friday night. Bike rides begin on Saturday morning, leaving from the Columbus Commons in downtown Columbus. Riders may choose one of several routes, with the longer routes ending at Kenyon College in Gambier, Ohio.

Why do people ride in Pelotonia and give to Ohio State cancer research? Ultimately, their shared goal is to create a cancer-free world. While thinking globally, riders often have a personal connection to cancer and the impact it can have on loved ones. Two-of-three respondents to a survey posted recently on the intranet OneSource at Ohio State’s Wexner Medical Center indicated they have been touched by a loved one’s battle with cancer and see their contributions through Pelotonia as a way to help create a cancer-free world.

In 2011, 4,986 cyclists rode in Pelotonia and helped raise $13.1 million. In its first three years, Pelotonia has raised more than $25 million. Some of the money is being use to ensure the brightest, most dedicated young scientists will commit to cancer research. Already, $5 million generated by riders and donors has been allocated to the Pelotonia Fellowship Program, which awards grants to Ohio State students in any discipline and at all levels of scholarship who want to conduct cancer research in the labs of OSUCCC – James faculty mentors. The program so far has awarded 116 grants to 56 undergraduates, 32 graduate students and 26 postdoctoral fellows. The fellowship awards span multiple colleges and departments, bringing many disciplines together in the fight against cancer while helping to train the cancer scientists of tomorrow.

To learn how you can contribute to Pelotonia 12 as a rider, donor or volunteer, visit pelotonia.org.
P4 Medicine: Genomic testing not a ‘do-it-yourself’ project

Sherri Kirk | The Ohio State University Wexner Medical Center

Don’t include genetic testing on your weekend list of “do-it-yourself” projects. Some things are best left to professionals, suggests Amy Sturm.

Sturm, a certified genetic counselor at Ohio State’s Wexner Medical Center and Center for Personalized Health Care, says direct-to-consumer (DTC) genomic testing doesn’t give the user a complete picture of his or her disease risk.

A major limitation of DTC testing is the incomplete view it gives consumers of their lifetime risks for common, complex diseases, as the vast majority of tests analyze only one or two single nucleotide polymorphisms (SNPs). And, DTC tests typically do not factor in medical or family histories necessary for risk assessment, says Sturm.

“Based on our experience, we developed practical recommendations for genomic counseling, including novel approaches to case preparation, utilization of technology during counseling sessions, and a major focus on genomics education. The knowledge regarding genomic testing we provide to our patients is crucial to their complete understanding and interpretation of results,” Sturm adds.

Sturm and her colleague Kandamurugu Manickam, MD, a geneticist at Ohio State’s Wexner Medical Center, shared their case study of a genomic counseling session with results atypical to assumptions of early adopters of DTC genomic testing online in the Journal of Genetic Counseling. The research was included in a special journal issue on April 12 that is dedicated to DTC genomic testing. The Journal of Genetic Counseling is published by the National Society of Genetic Counselors (NSGC).

The NSGC promotes professional interests of genetic counselors and provides networking and continuing education opportunities related to human genetics.

Sturm received NSGC’s 2011 Outstanding Volunteer Award in recognition of her leadership, dedication and significant contributions to the organization.

Medical Briefs

Blochs commit $5 Million to expansion

Janis and Michael Bloch of Bexley, Ohio, recently committed $5 million to the construction of the new Arthur G. James Cancer Hospital and Richard J. Solove Research Institute, part of The Ohio State University Wexner Medical Center’s expansion project. This donation supports the development of a rooftop garden and executive suite at the new James Cancer Hospital. “Our donation will support some wonderful public spaces for patients and their families, as well as more private spaces for meetings,” says Janis. The spaces will be named in their honor.

Gillison honored for HPV research

Maura L. Gillison, MD, PhD, received the 36th Annual Rosenthal Memorial Award from the American Association for Cancer Research (AACR) recently at the AACR annual meeting in Chicago. The award recognizes Gillison’s significant contributions to the understanding of the role of human papillomavirus (HPV) in head and neck cancers. Gillison is a professor of Medicine, of Epidemiology and of Otolaryngology.

Center for Regenerative Medicine and Cell-Based Therapies opens

The newly created Center for Regenerative Medicine and Cell-Based Therapies has assembled a team of experts working to discover new treatments that will speed wound healing and rehabilitation for patients. Through this partnership of local leaders, the Center will develop research programs on regenerative medicine and cell-based therapies and, by working with the biomedical industry, will deliver innovative health solutions to patients. Partnering in this research are experts from Ohio State’s colleges of Medicine, Engineering, Dentistry, Nursing, Veterinary Medicine, Arts and Sciences, and Pharmacy, as well as Battelle. The initiative is led by Chandan Sen, PhD, the Center’s director, and faculty from Ohio State colleges as well as Nationwide Children’s Hospital.

Cancer cells sound the alarm on tumor-killing virus

Brain-tumor cells that are infected with a cancer-killing virus release a protein “alarm bell” that warns other tumor cells of the impending infection and enables the cancer cells to mount a defense against the virus, an Ohio State study shows.

“Overall, this finding reveals how extracellular signaling can contribute to viral clearance,” says researcher and principal investigator Balveen Kaur, PhD, Neurological Surgery. The study suggests that cells in general might use this mechanism to help control viral infections, and that blocking the response might improve oncolytic viral therapy for glioblastoma and perhaps future gene therapy treatments. The study was published in a recent issue of the journal Cancer Research.

Learn more about how The Ohio State University Wexner Medical Center is "creating the future of medicine to improve people’s lives" by visiting the News and Media Room at medicalcenter.osu.edu.

Faces

Robert S. D. Higgins, MD, MSHA
Professor and Director of the Division of Cardiac Surgery, Department of Surgery
Director, Comprehensive Transplant Center
The John H. and Mildred C. Lumley Chair in Medicine

What do you like best about practicing medicine at Ohio State’s Wexner Medical Center?
I have been impressed with the friendly and open reception I have received at Ohio State. While we have many challenges ahead of us, I believe people are earnest in their willingness to help and to create solutions. It is refreshing to see this in a large academic medical center.

What excites you most about the future of medicine?
This is a very exciting time in the field of organ and tissue transplantation. We continue to develop our program to provide the best service for the citizens of central Ohio and beyond. Whether it is lifesaving organ and tissue transplants, cardiovascular surgery or innovative approaches to disease management, I believe that Ohio State’s Wexner Medical Center has the leadership, vision and resources to change the future of medicine.

How do you think P4 Medicine will change your specialty over the next 10 years?
Even though we treat patients with end-stage organ failure, we still emphasize in those patients who come to us prior to transplantation that they need to be actively participating in their care and employing strategies to prevent disease progression. Each patient has a responsibility, with our support, to prevent disease progression, whether it is heart, liver, kidney disease or diabetic complications.

Name a medical career mentor and tell us what you learned from him/her.
One of the most influential mentors in my career was Dr. Claude Organ. Dr. Organ was in the Army Medical Corps in the late 1950s with my father, and he was among the most distinguished and well-respected African-American surgical leaders over the past 50 years. I believe he exemplified key lessons for all young surgical faculty, particularly African-Americans: Keep your head down, work hard and take advantage of the opportunities that are provided for you by being prepared.

What advice do you have for young physicians early in their careers?
We are fortunate to have the opportunity to have an extraordinary impact on people’s lives that few outside of medicine can expect. I encourage young physicians to take advantage of these opportunities and to have an impact on people’s lives one patient at a time.

Who in history would you like to meet and why?
Lincoln because he had the opportunity to have an extraordinary impact on people’s lives at a time.
Ohio State provides leadership for MCAT revision

Changes are coming to the MCAT (Medical College Admission Test) that will play a pivotal role in the selection process of our nation’s future medical students.

Steven G. Gabbe, MD, chief executive officer of Ohio State’s Wexner Medical Center, chaired the 22-member advisory committee charged in 2008 to review and recommend changes to the test to the Association of American Medical Colleges’ Board of Directors.

That study was prompted by the AAMC’s recognition of the changing and expanding responsibilities of physicians. According to the AAMC: “The changes to the MCAT exam, the first since 1991, are designed to help students prepare for a rapidly changing healthcare system and an evolving body of medical knowledge while addressing the needs of a growing, aging and increasingly diverse population.”

The final recommendations of the committee, led by Gabbe, were gathered from more than 90 outreach events, input from experts and advisory groups, and more than 2,700 surveys of undergraduate and medical school faculty, administrators, residents and medical students.

The new MCAT will be used for students applying to medical schools in 2015. The test will no longer require students provide a writing sample, but it will take more time – 6.5 hours instead of the 4.5 hours. The revised exam will evaluate students in three areas:

- Understanding of human behavior
- Critical analyses and reasoning skills
- Scientific knowledge.

The new MCAT reflects broader expectations of future physicians and will hopefully attract a wider range of medical school applicants. Gabbe said the committee worked to make the test a better tool for identifying applicants with an extensive understanding of behavioral and social factors that contribute to health problems.

“We want to broaden the knowledge base that students have about those factors that influence health,” Gabbe said. Darrell G. Kirch, MD, AAMC president and chief executive agrees. “Being a good doctor is about more than scientific knowledge,” he said. “It also requires an understanding of people. By balancing the MCAT exam’s focus on the natural sciences with a new section on the psychological, social and biological foundations of behavior, the new exam will better prepare students to build strong knowledge of the socio-cultural and behavioral determinants of health.”

The revised MCAT includes:

- A new section called “Psychological, Social, and Biological Foundations of Behavior” based on concepts about how behavioral, socioeconomic and cultural factors affect health. This change recognizes that integrating cultural and behavioral sciences into medical education curriculum and clinical practice can improve the health of all patients.
- In the new section of “Critical Analysis and Reasoning Skills,” students will read passages that present scenarios about how different lifestyles, behaviors, cultures and ethics can affect patients’ health. For example, one passage could discuss the connection between poverty and poor health, while another could examine the ethical dilemma of a prison physician who finds drugs and paraphernalia on an inmate/patient. Students will be asked to analyze the information and apply it using a broad range of social sciences and humanities.

- Two natural sciences sections will test concepts typically taught in introductory biology, general and organic chemistry, biochemistry and physics that faculty, residents and students considered important to succeeding in medical school. In these sections, students will combine their knowledge of natural science concepts with scientific inquiry and reasoning skills to solve problems.

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- Minor surgery, such as suturing, biopsies, and removal of skin lesions and moles
- Education and counseling regarding healthcare issues and concerns

To schedule an appointment with a primary care physician at CarePoint Lewis Center call 614-688-7150.