Irene Pollin suffered the tragedy of losing not one, but two children, because of congenital heart defects. Her son, Kenneth, died at 13 months of age and her daughter, Linda, lived to age 16. Those experiences led Pollin, a psychotherapist with a master’s degree in social work, to become a widely respected health advocate for people with chronic illness and the founder of a national organization devoted to heart disease prevention in women.

Now, Pollin has made a $10 million commitment to benefit the Ciccarone Center for the Prevention of Heart Disease at Johns Hopkins. Her gift has established the Kenneth Jay Pollin Professorship in Cardiology and will support vital research on heart disease prevention.

“If you’re lucky to be born with a healthy heart, you need to take care of it, and there’s a lot you can do,” Pollin says. “I see this as a way to make a powerful impact on the knowledge and behavior of people to improve their health,” she adds.

Her gift will enable the Ciccarone Center to advance the field of prevention in many ways, according to Roger Blumenthal, professor of medicine and director of the Ciccarone Center, who has become the endowed Kenneth Jay Pollin Professor of Cardiology.

“Ms. Pollin’s extraordinary support will help us lead transformative work in the field of preventive cardiology. Her generosity will make it possible for us to better define risk factors and implement new ways to prevent heart attack and stroke,” Blumenthal says.

Pollin and Blumenthal were introduced by mutual friends in 2004 and, because of their common interest in heart disease prevention, especially for women, they worked together on research and outreach efforts over the years.

“Roger does incredible work on prevention, and we are always in sync,” she says. “The big issue is how do you get people to do what they need to do? They have to change behavior.”

In 2000, she established Sister to Sister, an organization dedicated to educating and motivating women to make constructive lifestyle changes that can improve their heart health. At health fairs conducted in Baltimore and more than 20 other cities, the organization has provided free evaluation, counseling and information to more than 80,000 women, making it the nation’s largest provider of free heart screenings for women.

Pollin, who lives in Bethesda, Md., is the author of two books and has earned numerous awards for her advocacy work. She and her late husband Abe Pollin, who died in 2009, were the owners of the NBA’s Washington Wizards and the NHL’s Washington Capitals.

Pollin says her gift to establish the endowed professorship in son Kenneth’s name is a way to honor his memory. “He was a beautiful baby. This is a way to acknowledge that happy, wonderful little guy.”

“IF YOU’RE LUCKY TO BE BORN WITH A HEALTHY HEART, YOU NEED TO TAKE CARE OF IT, AND THERE’S A LOT YOU CAN DO. I SEE THIS AS A WAY TO MAKE A POWERFUL IMPACT ON THE KNOWLEDGE AND BEHAVIOR OF PEOPLE TO IMPROVE THEIR HEALTH.”

—IRENE POLLIN

Irene Pollin’s transformative gift has established a new professorship in memory of her son, Kenneth, pictured at left.

The Man Behind the Professorship

Roger Blumenthal, M.D.
Kenneth Jay Pollin Professor of Cardiology
Director of the Ciccarone Center for the Prevention of Heart Disease at Johns Hopkins

• A national expert on the development, treatment and prevention of heart disease
• Co-editor-in-chief of the premier textbook in the field, Preventive Cardiology
• Author of pivotal articles on the development of improved strategies to assess cardiovascular risk
A heartening reunion and gift

When Mike Huff was 9 and his older brother 11, they began their “mowing careers” to boost the family’s strained finances. “We’d start at sun-up and quit at dark,” recalls Huff, one of nine children, “until we had enough money to buy a riding lawn mower with lights on it, so we could work even later.” Eventually, those funds bought two sets of bunk beds for the brothers and a piano for the five sisters.

Over time, Huff drew from that experience to launch his career as co-founder of NN Ball & Roller Inc., now the largest independent manufacturer of precision steel ball bearings and rollers in the world. Along with Huff’s innate work ethic came a penchant to give back. And so begins a wonderful story of philanthropy to Johns Hopkins cardiovascular research.

For years, Huff had suffered from symptoms caused by cardiac hypertrophy, a heart disease in which the muscle wall becomes very thick. In 1995, when Huff—then 47—arrived at The Johns Hopkins Hospital from his native Tennessee, he was short of breath and his blood pressure was soaring. But so were his hopes. Now he’d found his way to Johns Hopkins cardiologist and researcher David Kass.

From that first day, the interactions between Kass, Huff and his wife, Janet, would turn out to be “life-changing,” says Janet. “Dr. Kass greeted us with a big smile, filled with compassion. We were worried and out of our element, but he spoke to us at length in language we could understand.”

Kass told them that Huff qualified for a study designed to see if a pacemaker would help those with hypertrophic cardiomyopathy, an abnormal thickening of the heart muscle that reduces one’s ability to exercise and can even lead to sudden death.

Huff agreed to take part in the study, and while he was recovering from the pacemaker procedure, Kass discovered that Huff’s potassium levels kept coming back low. The culprit turned out to be hyperaldosteronism, a condition in which the adrenal glands produce too much of the hormone aldosterone. Between treatment for that discovery and the pacemaker, Huff was on a better road.

“This is an endowment for the future. To fund early, new ideas is incredibly important,” says Kass, “this is an endowment for the future. To fund early, new ideas is incredibly important.”

A heartening reunion and gift

Development officer Shannon Wollman, with Johns Hopkins Medicine’s Office of Planned Giving, recalls the Huffs’ warmth and resolve to give back in an impactful way. Eager to reconnect, the Huffs set up a phone call with Kass. They shared their plans to leave a generous bequest to the Heart and Vascular Institute, half of which would establish the permanently endowed David Kass Cardiovascular Research Fund. The other half goes to more immediate support in Kass’ lab and after Kass retires the research of his successor. “It was an amazing call,” recalls Wollman. “Everyone was crying.”

“I was very surprised,” says Kass. “It’s a marvelous thing to do,” especially now, he adds, when federal funds for NIH studies are drying up. Ultimately, says Kass, “this is an endowment for the future. To fund early, new ideas is incredibly important.”

An in-person reunion followed in Palm Beach last January, where the Huffs made their donation official. The couple has also begun making smaller but significant gifts toward Kass’ current work. “The Huffs are the most remarkable, warm, funny and down-to-earth couple I’ve ever met,” says Kass. “Their gift will have a profound impact.”
New Hope for Patients With Heart Valve Disease

When patients have narrowing or severe blockages of their aortic valve, the condition can seriously jeopardize their health and quality of life. They become short of breath and easily fatigued. They also may experience dizziness or fainting spells and even sudden cardiac death. But if their health is fragile, they may not be candidates for open-heart surgery to correct the problem.

In these cases, interventional cardiologist Jon Resar and cardiac surgeon John Conte have witnessed the benefit to many of their frail and elderly patients of having a minimally invasive procedure to replace the aortic valve. As co-investigators in the national clinical trial to evaluate the CoreValve device, a transcatheter aortic valve replacement (TAVR), Conte and Resar were one of the first teams to perform the procedure.

With CoreValve, an artificial aortic valve attached to a wire frame is guided by a catheter to the heart. The catheter is inserted through an incision in the groin or the arm or, if these arteries are too small, directly into the aorta through a small incision in the sternum. Once in the proper position in the heart, the wire frame is expanded, allowing the aortic valve to open and begin to pump blood.

“Recovery is quicker with the TAVR approach compared to open surgery,” says Resar. “Patients have almost immediate relief from their symptoms, such as shortness of breath and fatigue, and are walking the next day.”

In 2011, Johns Hopkins launched the Transcatheter Valve Program to meet the distinct needs of heart valve patients and push forward frontiers of what is possible, through research. Every patient who comes to Johns Hopkins with a heart valve condition is evaluated to determine the best treatment. For some, this does mean traditional open surgery. But with the new TAVR that Resar and Conte now offer, many more patients with valve disease can be treated with the less invasive approach.

“We still need to proceed cautiously,” says Conte. “But, in appropriately selected patients, TAVR can be lifesaving. It offers high-risk surgical patients, many of whom are elderly, a new chance to enjoy their golden years.”

To learn more about these potentially lifesaving options or to support the Transcatheter Valve Program, contact the Heart and Vascular Institute Development Office at hopkinsheart@jhmi.edu or 443-877-7384.

Repair of Abdominal Aortic Aneurysm Takes a Leap Forward

Endovascular repair of abdominal aortic aneurysms has become increasingly common over the past decade, and now this minimally invasive approach is performed more often than the open surgical method because of lower morbidity and faster recovery.

About 20 to 30 percent of patients, however, who are fortunate enough to have their aortic aneurysms identified prior to rupture can’t have the endovascular repair because their aneurysm is located too close to the renal arteries (which supply the kidneys). For them, the only option has been open surgery, which carries higher risk of heart attack and kidney failure. “In the past, we generally needed at least 10 to 15 millimeters of length between the renal arteries and the aneurysm to secure the stent-graft in place in most patients,” says vascular surgeon James Black.

Only a few dozen surgeons nationwide, including Black, have been trained to repair abdominal aortic aneurysms with a new type of graft that was FDA-approved in April 2012. Johns Hopkins was among the first hospitals in the United States to offer this new approach to patients. The new graft looks similar to the traditional endovascular graft made of a polyester fabric encased by a stainless steel scaffold. But it’s different from the off-the-shelf graft because of fenestrations—two tiny holes drilled into the graft to accommodate the renal arteries, and thereby allow repair of aneurysms that are even closer to the renal arteries than the previous restriction of 10 to 15 millimeters. Black and his team do substantial planning using 3-D modeling of the aorta before the surgery to ensure that the graft will be engineered to match the patient’s unique anatomy. Patients can leave the hospital three days later and resume their normal activities in two weeks, compared with a four- to eight-week recovery following open surgery. As for follow-up, a CT scan is needed one to two months after the procedure, followed by annual doctor visits.

Patients eligible for the new customized graft repair include those whose aneurysms approach within 5 millimeters of the renal arteries and have large enough vessels to deliver the stent-graft to the appropriate location. “At Johns Hopkins, we perform close to 100 open abdominal aortic aneurysm repairs each year for patients ineligible for the minimally invasive option,” says Black. “With the new fenestrated stent graft, we can spare many of those patients from a big operation and long recovery.”

In the Wings: A Game Changer for Lung Transplantation

Selecting “organ donor” on your driver’s license application is still a long way off from transplantation. Even after an organ donor dies and the organs become available, they must still meet the criteria for acceptance. And, in the case of lung donations, only 40 percent pass muster.

The rest are discarded, says cardiothoracic transplant surgeon Ashish Shah, usually based more on assumption than on quantifiable proof—how the lungs look, how stiff they are or how easily they exchange gas, for instance. But in some cases, Shah says, those lungs could actually be viable.

Now, he continues, a procedure called ex vivo perfusion is giving transplant surgeons a chance to determine whether those potentially wasted lungs could actually be put to use. Meanwhile, Shah and his colleagues are studying whether the procedure holds other lung-saving and lifesaving opportunities—possibilities they believe could even negate surgery in some cases.

In the procedure, the lungs are removed from the donor body (hence the term ex vivo) and connected to a special system—a circuit, Shah calls it—that reanimates the lungs by refilling the tissues with blood (perfusion) to see how they respond and whether they improve over the course of time, usually about two hours. The circuit includes a ventilator, a pump and an oxygenator, and temperature-regulating components. “In practice,” Shah says, “we can take those rejected organs, put them on a circuit, and some percentage of them will (continued on page 4)
turn out to be usable.”

For now, ex vivo perfusion is clinically available only in parts of Europe and Canada. However, clinical trials in the United States have proven that the procedure is successful, and FDA approval is pending. If it is granted, Shah says, the possibilities created by ex vivo perfusion dramatically expand. In some cases, the procedure could negate transplantation altogether. For instance, he explains, some therapeutics could heal an injured lung, but would be toxic to other parts of the body. But if the lungs could be removed, those drugs could be used to promote healing without placing other organs at risk. Then the lungs could be placed back inside the patients, who in some cases could be safely kept on a ventilator for several days or up to a week, while physicians work to repair their lungs.

Once FDA approval comes through, ex vivo perfusion will only be allowed for assessing lungs for transplantation, at least for the time being. “But we’re keeping an eye on the future potential of repairing people’s lungs,” Shah says, “so that maybe they won’t need transplanted lungs at all.”

Ashish Shah says potentially discarded lungs can offer lifesaving possibilities.