Phil and Penny Knight’s landmark $125 million pledge establishing the OHSU Knight Cardiovascular Institute will change the game in heart health for every generation.

“Your heart is failing.” The devastating news confirmed what Yolanda Randlett already suspected after living most of her life with a damaged aortic valve. But what she heard next from her brash young doctor came as a surprise. “We can help you.”

That was 50 years ago. The doctor, an up-and-coming OHSU heart surgeon named Albert Starr, M.D., had just invented the world’s first artificial heart valve. It saved her life. In September 2012, a healthy and active Yolanda came back to OHSU for another visit with Dr. Starr. This time, she came to help celebrate the launch of the Knight Cardiovascular Institute.
A historic investment
In the largest private donation ever made to OHSU, Phil and Penny Knight have pledged $125 million to establish the Knight Cardiovascular Institute. Nationally, it is the largest philanthropic gift for cardiovascular medicine ever reported.

Under the leadership of world-renowned cardiovascular researcher Sanjiv Kaul, M.D., and pioneering heart surgeon Albert Starr, M.D., the institute aspires to turn the tables on this intractable public health problem. The new institute will include OHSU’s diverse programs of cardiology, cardiac and vascular surgery, interventional radiology and stroke.

The historic gift comes just four years after the Nike co-founder and chairman and his wife invested $100 million to establish OHSU’s Knight Cancer Institute. That gift brought star-caliber cancer researchers and clinicians to OHSU and strengthened the institute’s global leadership in personalized cancer medicine.

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“Phil and Penny Knight have made an extraordinary gift to all people touched by cardiovascular disease,” said OHSU President Joe Robertson, M.D., M.B.A. “We are proud to have once again earned their trust as a partner in creating a healthier world. Phil and Penny share our confidence that we can finally reduce the many, many preventable deaths each year due to cardiovascular disease by innovating, collaborating and educating.”

Tapping into a translational vein
“This is our opportunity to finish what was started 50 years ago,” said Starr. “We’re entering a new golden age of cardiovascular medicine, and there’s never been a better opportunity to make significant, lasting change. Translational research is the key.”

Translational research – which Starr modeled to great success in the early 1960s – is what first put OHSU on the world’s cardiovascular map. Starr and his engineer collaborator Lowell Edwards worked side by side to develop and test a life-saving device, marketed as the Starr-Edwards valve, which would become the gold standard in heart valve repair for the better part of 50 years.

“Cardiovascular mortality fell by more than 50 percent between 1960 and 2006,” said Starr, “yet it’s still our No. 1 killer. Stroke is No. 3. Through this institute, we can take important new steps to change this trend.”

Kaul’s world-class heart imaging breakthroughs are also a testament to what translational research can accomplish. More than 5 million cardiac patients around the world have undergone the extraordinary, life-saving procedure he developed.

Along with Starr’s artificial heart valve, seminal 1960s innovations by Charles Dotter, M.D., and Melvin Judkins, M.D., put OHSU at the center of advanced cardiovascular care. “In its heyday, OHSU was famous, with patients coming from all over the world for treatment and physicians coming from all over the world to learn new interventional and surgical techniques,” said Kaul.

Dotter, known as the “father of interventional radiology,” performed the world’s first angioplasty at OHSU. He pioneered an easier, less-invasive way to place a catheter in the heart using the femoral artery. The Judkins coronary angiographic technique remains the diagnostic method of choice today.

These life-saving innovations set the stage for subsequent developments such as statin drugs, coronary bypass surgery, stents, improved prosthetic valves and ventricular assist devices.

Now OHSU is poised to make history again. “We are now able to develop treatments that target the underpinnings of heart disease at the molecular level,” said Starr. “We can visualize all the complexities of the beating heart in real time.”

“Penny and I are pleased to help upgrade cardiovascular health in Oregon and around the world. Drs. Starr and Kaul have built a great program in research, care and outreach, and we are excited about what it can contribute to the fight against these deadly diseases.” – Phil Knight
non-invasive diagnostic procedure he pioneered. Microbubble-based myocardial contrast echocardiography (MCE) detects heart attacks that other methods miss, and sends patients home who don’t need hospital care. This revolutionary technology saves lives every day.

“More than 80 percent of cardiovascular deaths can be prevented,” said Kaul. “Changing that number means changing the accepted traditions of cardiovascular medicine. The Knights have given our institute what it takes to translate our world-class science into better prevention, diagnoses and cures.”

“We are extremely grateful for this gift,” said Mark Richardson, M.D., M.B.A., dean of the OHSU School of Medicine. “It will allow us to build the capacity for treating cardiovascular disease across the full continuum of biomedical science, from basic discovery to clinical research to drug and device development.”

The gift will give Starr and Kaul immediate leverage in recruiting and retaining additional international-caliber faculty in high-impact areas. It will also assist them in acquiring new scientific capabilities that will drive discovery in cardiovascular health as well as stroke, cancer, neurological disorders, immunodeficiency, diabetes and other diseases.

KEY STRENGTHS IN CARDIOVASCULAR MEDICINE

Prevention
• OHSU is a national leader in studying the developmental origins of disease, such as how certain factors in the prenatal environment can make people more susceptible to heart disease and obesity.
• The OHSU Bob & Charlee Moore Institute for Nutrition & Wellness promotes better heart health through improving nutrition.

Diagnosis
• OHSU brings internationally respected experts in ultrasound, MRI, CT, PET and other imaging modes together to create better ways to diagnose and treat heart attacks and artery diseases.
• OHSU’s telemedicine technologies and outreach programs extend advanced expertise into communities and clinics across the region.
• Sanjiv Kaul, M.D., developer of the powerful microbubble-based myocardial contrast echocardiography (MCE) technique, directs the West Coast’s only MCE program.

Healing
• OHSU is the state’s only provider of clinical services for end-stage heart failure and heart transplants.
• OHSU has programs for the placement and follow-up care of the most advanced pulmonary valves and assist devices.
• OHSU Doernbecher Children’s Hospital’s pediatric cardiac surgery and intensive care program for congenital heart defects are recognized as the region’s best.

Discovery
• OHSU heart researchers are identifying the genetic and biochemical underpinnings of heart valve defects, vascular disease, rhythm disorders and other potential targets for drug therapies.
• A multi-institutional team at OHSU is exploring key questions in the genetics of heart disease.
• Scientists across OHSU have identified biological markers and promising drug candidates for treatment of cardiac and stroke damage.
Hippocrates. Elizabeth Blackwell. Jonas Salk. Behind almost every major advance in medicine, there is a brilliant individual whose single-minded focus inspired teams, broke through barriers and persevered over years to attain the impossible. In 2009 OHSU set out to raise $100 million in three years to support visionary researchers and clinicians through the Faculty Support Initiative. OHSU supporters came through – and then some. By the time the campaign concluded in June 2012, more than 8,000 foundations, corporations, and individuals had invested $169 million – nearly 70 percent more than the original three-year goal. Supporting faculty will always be a top philanthropic priority for OHSU – and one of the most gratifying investments for our donors.
Donors contributed to OHSU through the Faculty Support Initiative in a variety of vital ways – endowing faculty positions, helping to purchase state-of-the-art equipment, and investing in game-changing projects. The following are examples of the kind of leadership and progress the initiative made possible.

**Impact: Accelerating new treatments for breast cancer**

One of the most effective tools for attracting – and keeping – talented faculty is to provide them with endowed funding. Be it a chair, professorship or research fund, endowed support provides a stable stream of funding in perpetuity, encouraging leaders to explore new ideas and assemble the best teams.

The Boyle family of Portland well understood the power of endowment, and saw it as the perfect vehicle for honoring the legacy of the late Hildegard Lamfrom, Ph.D., an influential scientist and the sister of Gert Boyle, chairwoman of Columbia Sportswear. With investment from Gert Boyle and Tim and Mary Boyle, OHSU established the Hildegard Lamfrom Endowed Chair in Basic Science in 2010. This prestigious chair helped attract leading breast cancer researcher Lisa Coussens, Ph.D., world-renowned for her work exploring how cells that surround a tumor fuel its growth. In addition to helping recruit new faculty, the Boyles’ gift has helped to leverage additional investments which will speed the rate at which new cancer treatments reach patients.

“Investment in new faculty and technology will help us better understand cancer and develop durable, personalized therapies to treat them. We are grateful for the generous support of donors like the Boyles and all others who are helping make our vision a reality,” said Brian Druker, M.D., director of the OHSU Knight Cancer Institute.

**Impact: Unlocking the mysteries of parasite-borne disease**

Faculty Support Initiative funds made it possible for OHSU to create a special endowed professorship for Scott M. Landfear, Ph.D., an exceptional basic scientist. Landfear’s lab is developing a new understanding of the life cycles of parasites that transmit diseases such as sleeping sickness, which kills tens of thousands of Africans every year.

Philanthropic resources for Landfear’s professorship came in the form of unrestricted bequests. These flexible estate gifts allowed OHSU
to invest in a researcher chosen by his peers as worthy of additional support.

“The combination of philanthropic dollars and peer support made it possible for Landfear to assemble one of the leading teams in the nation exploring parasite-borne disease,” said Mary Stenzel-Poore, Ph.D., chair of the Department of Molecular Microbiology and Immunology and associate dean for research. “Their work will make an important impact on global health.”

“Far-sighted donors made this initiative a success, providing a powerful mechanism for sustaining and expanding excellence.”
– Joe Robertson, M.D., M.B.A.
President, OHSU

Already the sequencer has helped researchers gain new insight into the genetic components of cancer and alcoholism. The instrument’s presence on campus has also helped OHSU research groups qualify for more than $5 million in additional funding, and is a key factor in several important pending faculty recruitments.

New hope for treating inherited disease
During the past two decades, advances in gene therapies have opened the door to an entirely new approach to treating genetically based diseases, including many eye diseases. Specialists at the OHSU Casey Eye Institute have pioneered techniques for inserting healthy genes directly into the eye, where they may be able to prevent progressive vision loss. Other technological breakthroughs have made it easier for them to isolate which genes are the cause of eye disease, enabling early diagnosis and potential treatment. Donor support has now made it possible for Casey’s exceptional researchers and clinicians to test these promising leads through clinical trials.

With leadership from donors such as Paul Casey, Maureen Casey, Mike Clark, and Joanne Lilley, Casey Eye Institute launched the Translational Clinical Trials Center (TCTC). Today the center is a world leader in advancing the field of gene therapy. Treatments under study at Casey are the first of their kind in the world and Casey is rapidly becoming a resource for other eye centers seeking guidance on clinical trials.

“We knew we had all the right elements in place to become a nationally prominent clinical trials center – this infusion of donor support turned that potential into reality,” said David Wilson, M.D., director of the OHSU Casey Eye Institute.
Through their estate, Garthe and Grace Brown designated more than $10 million to benefit OHSU’s groundbreaking heart research. The Garthe Brown and Grace L. Brown Fund II was established through the Oregon Community Foundation (OCF) and will support OHSU’s cardiac research in perpetuity. The Browns’ long-standing support of OHSU was first inspired by the exceptional care their son received at OHSU. An earlier gift from the Browns’ estate established the Garthe and Grace L. Brown Lecture in Heart Disorders, which debuts this spring. Both gifts will be realized through perpetual endowments made by the Browns through the OCF.

An estate gift totaling $787,579 from Wilbur N. Van Zile and Ruth Harrison Van Zile will support an OHSU School of Dentistry scholarship trust in the Van Ziles’ name. The gift is in addition to last year’s $5.1 million philanthropic investment from the estate – the second largest individual donation in the dental school’s history. Wilbur N. Van Zile, D.D.S., was professor emeritus of the school’s Department of Oral and Maxillofacial Surgery (OMFS). Four OMFS residents received the first Van Zile scholarships in January.

A grant of $713,570 from The Leona M. & Harry B. Helmsley Charitable Trust will support a study led by Markus Grompe, M.D., director of the Papé Family Pediatric Research Institute, in which researchers at the Oregon Stem Cell Center will explore new therapies for type 1 diabetes. Type 1 diabetes is characterized by the loss of insulin-secreting B-cells in the pancreas. The study aims to generate transplantable insulin-producing B-cells from a patient’s gallbladder cells. The research holds significant promise for diabetes patients everywhere.

A number of recent gifts benefited the OHSU Casey Eye Institute. The estate of Leona Moe designated $216,995 to the Chairman’s Discretionary Fund, International Ophthalmology and Macular Degeneration Research. The estate of Leona Hite also provided $265,300 for the Chairman’s Discretionary Fund. The Oregon State Elks Association provided $1.46 million to the Elks Children’s Eye Clinic at the OHSU Casey Eye Institute, bringing their total 2012 contribution to $1.51 million. The Elks have supported the Children’s Eye Clinic since 1949.

OHSU Foundation Trustee Eric Parsons learned that he had Hodgkin’s Lymphoma in the late 1960s, at a time when scientists were only starting to uncover effective treatments. Fortunately, Parsons received care at OHSU (then the University of Oregon School of Medicine), and had the opportunity to participate in a clinical trial. Parsons and his wife Janet recently committed $250,000 to establish the Eric and Janet Parsons Cancer Research Fund at the OHSU Knight Cancer Institute to support this kind of groundbreaking clinical cancer research. Their gift will help researchers identify and validate new
targets for therapy, expand the number of clinical trials under way at OHSU, support the most promising clinical cancer researchers, and help match Oregon’s cancer patients with drugs or clinical trials appropriate for their tumor types.

The OHSU Center for Women’s Health Circle of Giving elected to award their annual gift of $125,000 to Wendy Wu, Ph.D., from the OHSU Department of Obstetrics and Gynecology. The grant will support Wu’s investigation into therapies to maintain brain function and cognitive performance after menopause. The Circle of Giving Award is targeted at promising researchers in the early stages of discovery, when it is difficult to attract federal funding. This early investment can have a profound impact.

OHSU School of Dentistry Dean Emeritus Jack W. Clinton, D.M.D., and Mary Clinton pledged $100,000 to name a seminar room in the Skourtes Tower, the OHSU School of Dentistry’s new facility on Portland’s South Waterfront. Dean Clinton has been instrumental in raising funds for the state-of-the-art building. The Clintons are one of several School of Dentistry faculty families who have contributed to this project.

Hyundai Hope on Wheels and Portland-area Hyundai Dealers awarded OHSU Doernbecher Children’s Hospital a $250,000 Hope Grant to support research investigating new treatments for acute lymphoblastic lymphoma (ALL), a cancer of the white blood cells.

“At Hyundai, our goal is for a child to never again have to hear the words ‘you have cancer,’” said John Krafcik, President and CEO of Hyundai Motor America.

Doernbecher has received $580,000 from Hope on Wheels since 2005. The current grant will support the work of Bill Chang, M.D., Ph.D., assistant professor of pediatric hematology/oncology at Doernbecher and a member of the OHSU Knight Cancer Institute. Chang’s lab is performing the preliminary research that will make it possible to use the drug dasatinib for patients with ALL.

“Dasatinib, a new drug used in the fight against cancer, has been shown to work very well in a small group of patients with a type of ALL,” said Chang.

To improve the odds in the fight for a cure, Hope On Wheels increased its Hyundai Hope Grant award amount this year from $100,000 to $250,000.
The American Nurses Credentialing Center (ANCC) has awarded OHSU Magnet status. The designation is only awarded to hospitals that meet the highest standards of patient care nationally. Fewer than 6 percent of U.S. hospitals have achieved this standard.

“This is an outstanding achievement,” said OHSU chief medical officer Charles Kilo, M.D. “It directly reflects the quality of care our patients receive. We’ve known for a long time that OHSU nurses provide some of the best care available. This announcement serves as proof positive.”

To achieve Magnet designation, more than 2,000 nurses throughout OHSU, including Doernbecher Children’s Hospital, completed numerous steps over a decade to demonstrate excellence. These steps included extensive training to develop advanced practices, meticulous documentation of care quality, and a rigorous week-long inspection by the ANCC.

Magnet designation is one of the most respected indicators of a hospital’s nursing quality. “It will help us continue to recruit and retain the best nurses,” said Jennifer Jacoby, R.N., OHSU chief nursing officer. “It is also tracked by national organizations that measure quality of care in hospitals because it is considered such a major commitment to positive outcomes for patients.”

OHSU turns 125
October marked OHSU’s quasquicentennial (kwos’kwí-sen-tên-əl) – 125 years since the University of Oregon established a department of medicine in northwest Portland. OHSU kicked off the celebration with the Health Fair on the Square offering free health screenings and health information at Portland’s Pioneer Square. Look for other signature events throughout the year, including an exhibition at the Oregon Historical Society in March, 2013, and a School of Medicine-sponsored series of forward-looking lectures by artists and distinguished thinkers. For more information go to www.ohsu.edu/125/.

Discovery offers new hope for MS patients
Researchers at OHSU have discovered that blocking a certain enzyme in the brain can help repair brain damage associated with multiple sclerosis and a range of other neurological disorders. The scientists focused on demyelination – damage to the sheath surrounding nerve cells in the brain. The study, published in October in the online edition of the Annals of Neurology, was led by Larry Sherman, Ph.D., a senior scientist in the Division of Neuroscience in OHSU’s Oregon National Primate Research Center. The next step is to develop drugs that specifically target the enzyme.

“Any therapy that promotes remyelination could be an absolute life-changer for the millions of people suffering from MS and related disorders,” Sherman said. Among the supporters of the study was the Laura Fund, a research innovation fund supporting early-stage MS research established by Wieden + Kennedy founder Dan Wieden, his daughter, Laura, and family.

Promising medical students receive Swindells Family Scholarships
In August six OHSU M.D. students were awarded Swindells Family Scholarships, the School of Medicine’s most prestigious M.D. scholar awards. The new scholars are Ethan Beckley, Andrew Dworkin, Benjamin Larson, Heidi Schroeder, Karl Tjerandsen and Katherine Watson.

Each of the recipients has a distinctive history and strong connection to Oregon, reflecting the goals of the award. The scholarships provide students with $20,000 in annual support.

The scholarship was established in 2010 to support exceptional and distinctive students who have a high probability of positively contributing to Oregon’s future.

Doernbecher + Mass General help kids
OHSU Doernbecher Children’s Hospital and Massachusetts General Hospital are collaborating on an innovative program to help children struggling with significant social, emotional and behavioral challenges. The program, called Think:Kids, is based on a collaborative problem solving model first developed at Massachusetts General by Ross Greene, Ph.D. and Stuart Ablon, Ph.D. The
Think:Kids collaboration will be led by Ablon in Massachusetts and Ajit Jetmalani, M.D., head of the Division of Child and Adolescent Psychiatry at OHSU Doernbecher.

“By seeing kids and families through a different lens, we can more accurately explain what is getting in a child’s way and shift our interactions in overt and subtle ways,” said Jetmalani.

**Heart valve implant the first on the West Coast**

This fall OHSU became the first hospital on the West Coast to perform a breakthrough heart valve surgery that offers patients with severe hardening of the arteries a new lease on life. The procedure, called non-investigational transcatheter aortic valve replacement (TAVR), involves inserting a catheter into a patient’s heart through a small incision between the ribs. The FDA had approved the TAVR approach for patients with severe aortic stenosis just a week before it was performed at OHSU. Until then, patients with aortic valve narrowing had only one option: open-heart surgery.

**Huang wins international award**

A physician-scientist and noted inventor at OHSU Casey Eye Institute is one of six scientists in the world to receive the António Champalimaud Vision Award, the largest scientific and humanitarian prize in the field of vision research. David Huang, M.D., Ph.D., the Weeks Professor of Ophthalmic Research at OHSU Casey Eye Institute, was honored for co-inventing an imaging tool called optical coherence tomography (OCT) that has revolutionized the field of ophthalmology. Today OCT is recognized as the most important diagnostic advance in the history of ophthalmology since the invention of the ophthalmoscope in the 1850s. Huang received the award at a ceremony in Lisbon, Portugal.

**Gene therapy makes international news**

Shoukhrat Mitalipov, Ph.D., has made international headlines again with a new study that builds on previous work. Mitalipov, an associate scientist in the Division of Reproductive & Developmental Sciences at the Oregon National Primate Research Center and the Oregon Stem Cell Center, made news in 2007 and again in 2009 when he developed a new gene therapy method to prevent certain inherited diseases related to gene defects in cell mitochondria. This October his team reached a significant milestone by successfully demonstrating the procedure in human cells. The results were published in the journal *Nature*.

While this form of therapy has yet to be approved in the United States, the United Kingdom is considering its use for treating human patients at risk for mitochondria-based disease.

Grants from the OHSU Center for Women’s Health Circle of Giving and additional private funds from OHSU and the Leducq Foundation supported the breakthrough research.

**US News & World Report names OHSU among the nation’s best**

OHSU Hospital ranks No. 1 in the Portland metro area and statewide, according to *U.S. News Best Hospitals 2012-13*. OHSU was acknowledged for its Department of Otolaryngology/Head and Neck Surgery – the ear, nose and throat specialty, which ranked among the nation’s best. Fewer than 150 hospitals out of the 5,000 evaluated performed well enough to rank nationally in at least one specialty. OHSU was ranked as “high performing” in 11 out of 15 adult specialties: cancer, cardiology and heart surgery, diabetes and endocrinology, gastroenterology, geriatrics, gynecology, nephrology, neurology and neurosurgery, orthopedics, pulmonology and urology.
extra focus: WHY I GIVE

“For our young designers, creating their own shoe to help Doernbecher has been a life-changing opportunity. I’m proud to have been a part of this wonderful program.”

– Carol Ehlen
Doernbecher Children’s Hospital Foundation board member

For the 2012 Doernbecher Freestyle program, six young designers (including Oswaldo Jimenez, 11, holding his Nike Air Jordan 9 Retro, above) make their mark designing limited-edition Nike footwear to support OHSU Doernbecher Children’s Hospital. The annual program involving thousands of Nike and Doernbecher employees has raised more than $4 million in nine years.

The iPad version of Extra has arrived! Our new digital edition is filled with Extra photos, Extra videos, and other Extraordinary features that you will want to share with friends and family. To download, go to the App Store and search for “OHSU Extra.”