University of Iowa Health Care 2013 Annual Report
UNIVERSITY OF IOWA HEALTH CARE

is Iowa’s comprehensive academic medical center comprised of the UI Roy J. and Lucille A. Carver College of Medicine, UI Hospitals and Clinics, and UI Physicians, the state’s largest multispecialty group practice. Through its commitment to innovation, interdisciplinary collaboration, quality and safety, and service, UI Health Care:
+ Educates and trains future generations of physicians and health care providers
+ Provides world-class medical care and expertise to patients, families, and communities
+ Maintains partnerships with doctors, hospitals, and health systems across Iowa
+ Seeks knowledge and discoveries that advance biomedical science, leading to improved treatments and therapies
It’s often said that change is inevitable. In academic medicine, change is essential.

Throughout its history, advances in medicine—in education, research, cures, and treatments—have come from individuals and groups not satisfied with existing ways of exploring science, understanding disease, and alleviating human pain and suffering.

With each new generation of scientists and clinicians, innovations in technology, teaching, and clinical application have brought new knowledge and understanding at an accelerated pace. Today, it is estimated that the body of medical knowledge doubles every five to seven years. Computer-based tools allow scientists to gather and analyze data in ways that were limited, if not impossible, 20 years ago. What we know today about cellular biology, biochemical processes, and the human genome has expanded dramatically over the past two to three decades and will continue to open new avenues for exploration and growth.

So what is *game-changing medicine*?

It’s research, education, and patient care and service that transform medicine to whole new levels. That’s what people expect from University of Iowa Health Care, and it’s evident in important ways:

- Leading and partnering in the development of new diagnostic tests or procedures to treat diseases, disorders, and trauma
- Continuously striving to achieve the highest levels of quality, safety, and service for our patients and employees
- Implementing a new medical curriculum that emphasizes greater integration between coursework and clinical clerkships; more freedom for students to develop a path of study in line with their career interests and goals; and enhanced opportunities to identify and embrace changing practices and technologies
- Teaching medical students to work in interdisciplinary teams, maximizing each student’s capacity to become an outstanding clinician and scientist, as well as a good communicator, listener, and lifelong learner
- Basic sciences research that expands our understanding of human physiology at the molecular level
- Personalized genomic medicine—using a person’s family and medical history, genetic information, and lifestyle to detect, predict, or prevent cancer, diabetes, heart disease, and blinding eye conditions
- Developing programs in the emerging field of predictive analytics in medicine, using bioinformatics, genomics, economics, decision science, and other disciplines to determine the best application of treatments and therapies
- Designing clinical research trials to test the safety and effectiveness of new drugs and medical devices
Working with doctors and other providers across Iowa and the region to ensure timely access to specialty care for their patients

- Strengthening our relationships with our UI Health Alliance partners—who represent more than 50 hospitals and 160 physician clinics—to deliver high-quality services and improve the health of families and communities

- Outreach and educational programs that help people understand—and take a more active role—in their own health

- Partnering with individuals, families, and organizations who believe in our mission and support the work we do through philanthropy

Moreover, game-changing medicine is a commitment to transforming the way we think about and deliver health care.

It’s about our people—more than 12,000 faculty, staff members, students, residents, fellows, and volunteers across our enterprise—who have the skills and resources to understand problems, identify challenges and opportunities, and reach beyond traditional ways of learning, teaching, conducting research, and caring for patients.

Ultimately, it’s about making a tangible difference in the lives of people in Iowa and around the world—how they understand their health, take care of themselves and their families, and how they value their health care team. It’s helping people feel better, live longer, and be healthier.

That’s the change we seek—and the challenge we welcome—each and every day.
TEAM
STRENGTH
INTERDISCIPLINARY LEARNING ONE KEY TO NEW MEDICAL CURRICULUM

Medicine increasingly focuses on disease prevention and management of chronic conditions, not just acute care. Advances in technology produce better tools for diagnosis and treatment and greater access to information that keeps patients healthy, from general medical knowledge on the Internet to patient-specific details identified through genetic sequencing. And the push to provide quality care at lower cost drives revisions in the delivery of care; it’s less about the individual provider and more about an interprofessional team of caregivers who can deliver safe and cost-effective care.

As Iowa’s only comprehensive academic medical center, the University of Iowa Carver College of Medicine introduced a revised curriculum in 2013 designed to help tomorrow’s physicians navigate the changing—and challenging—medical landscape.

The curriculum is modeled around three educational strands, which are woven throughout the four-year program. Two strands were launched in 2013: Clinical and Professional Skills and Medicine and Society. As the academic year started, more than 500 first-year students from the UI Colleges of Dentistry, Nursing, Pharmacy, Public Health, and the Carver College of Medicine convened for a new course, Interprofessional Skills and Team Based Health Care. Grouped into dozens of interdisciplinary teams, the students are working together—through electronic communication or face-to-face—on simulated patient cases. The 18-month course helps the various health profession students learn about, with, and from each other.

Interdisciplinary learning is fostered through an adapted version of the electronic medical record used at UI Hospitals and Clinics.

The modified version—known as emrU—is an innovative way to present relevant clinical information on fictional patients while also training students to navigate and utilize an electronic health record, another crucial skill for practitioners.

First-year medical students used emrU in the new Medicine and Society (MAS) strand; other health sciences students will receive emrU training starting in 2014.

To help students develop coping strategies for the challenges of medical school, residency, and a demanding career—yet also maintain a sense of self—the college created a wellness passport in the MAS strand. Students log activities in four areas of wellness—physical, social, spiritual, and emotional—plus complete reflective writing assignments geared toward building empathetic skills needed to become effective clinicians.
The curriculum’s third strand, Mechanisms of Health and Disease, begins in the fall 2014 semester. Because diseases don’t affect just one organ system—diabetes, for example, affects nerves, eyes, cardiovascular health, and other areas—students will learn scientific content in a multi-system curriculum covering six fundamental mechanisms of health: the delivery of oxygen and its use; metabolism, genetics, and development; the immune system; structural and locomotive systems; and neuropsychiatry. With an understanding of normal functions, students then will learn about diseases associated with each mechanism.

Under the new curriculum, students close out their undergraduate medical education by selecting an 18-month track called Pathways, which enables them to further individualize their training through clinical electives, research, study abroad, or other opportunities that focus on their chosen future career.

The revised curriculum is an innovative program that improves the integration of basic sciences with clinical applications while increasing each student’s ability to tailor his or her educational experience. The ultimate goal is physicians with enduring attitudes, skills, and knowledge that will allow them to adapt to the complex and continuously evolving environment of health care delivery.
Mentor for every student
Beginning in the fall 2013 semester, each first-year medical student was assigned a physician-mentor for real-world experiences in a clinic to practice with patients and see role models in action communicating and caring for people. Through the Longitudinal Clinical Mentorship Program, students receive early exposure to a health care team during at least six official encounters in their first year, when they’ll learn crucial exam skills, such as building rapport with patients, taking their history, and checking vitals. The program involved nearly 150 physicians in the UI Hospitals and Clinics system, Iowa City Veterans Affairs Medical Center, and communities within an hour’s drive of Iowa City.

Medicine facilities receive UI’s first hearing loops
A lecture hall in Medical Laboratories and the Medical Alumni Auditorium were the first UI campus spaces fitted with hearing loop technology, which provides unprecedented sound clarity for audience members who are hearing impaired. With a hearing loop—a stretch of copper wire embedded in a floor or ceiling—a signal passes from the room’s audio system through the loop and then to a hearing aid or cochlear implant, activated with a flip of a switch on the personal device. Hearing loops are planned for the Pappajohn Biomedical Discovery Building opening in 2014.

Academic medicine helps economy’s health
U.S. medical schools and teaching hospitals had a combined economic impact of $587 billion, generated more than $34 billion in total state revenues, and supported nearly 3.5 million jobs directly or indirectly in 2011, according to an economic impact analysis conducted for the Association of American Medical Colleges by the consulting firm Tripp Umbach. In Iowa, the UI Carver College of Medicine and UI Hospitals and Clinics provide a total economic impact of $4.6 billion, support $277 million in revenue for the state, and have a total employment impact of 32,598 people.

Degree with distinction
Medical students with a passion for global health, the humanities, research, service, or teaching can pursue these personal interests along structured paths to earn their degree with distinction. Students take relevant elective courses, work in settings appropriate to each distinction track—for example, clinics for underserved populations, research labs, or environments around the world—and complete final projects under the guidance of faculty mentors with expertise in the project area. About 33 percent of medical students graduate with distinction in one or more of the five areas.
Iowa’s primary care partnership
Over four decades, the Office of Statewide Clinical Education Programs (OSCEP) has worked to expand the UI Carver College of Medicine’s outreach programs for medical education and community service. Among its efforts are the UI-affiliated Regional Medical Education Centers in six cities across Iowa, a statewide network of eight family medicine residency programs, and an inventory tracking all of Iowa’s physicians, dentists, pharmacists, physician assistants, and advance nurse practitioners. Today, more than half the state’s practicing doctors are graduates of the college or a UI-affiliated residency or fellowship program, and more than 700 Iowa doctors are preceptors to UI students in the practice community. OSCEP’s founder and director, Roger Tracy, retired in December.

Online continuing education for Iowa providers
Iowa’s health care professionals have access to current information on the safest and most effective care for their patients through the online Iowa Health Pro Network (IHPN), which offers health care presentations by UI faculty. The site is continually updated with new content, which is open to anyone and can be viewed at no cost. At any given time, approximately 60 lectures populate the IHPN site (medicine.uiowa.edu/healthpro), and many of the presentations qualify for continuing education credit that can be applied immediately.

Going global
To better understand the health of populations in a global context, medical students in their final year embarked on a total of 30 international clerkships, and 25 second-year students spent the summer doing coursework in the field worldwide. Through these experiences, students focused on social determinants of health, health care disparities including infectious and non-communicable disease issues, human rights, economic development, and policy and system challenges. Students presented the results of their work in multiple conferences and programs.

Locations where medical students traveled during 2013:
- Arctic Circle
- Argentina
- Bosnia-Herzegovina
- England
- Germany
- Ghana
- Guatemala
- Haiti
- India
- Lebanon
- New Zealand
- Nicaragua
- Niger
- Norway
- Peru
- South Africa
- Spain
- Timor-Leste
OVERVIEW OF CONTINUING MEDICAL EDUCATION ACTIVITIES IN FISCAL YEAR 2013

INTERNAL CME EVENTS (for UI faculty and staff)

104 events
3,626 attendees
3,842 hours of instruction
167,137 credits awarded

EXTERNAL CME EVENTS (for statewide, regional, national, and international audiences)

133 events
5,070 attendees
1,107 hours of instruction
57,145 credits awarded

PROFILE OF THE 2013 ENTERING CLASS
University of Iowa Roy J. and Lucille A. Carver College of Medicine

Total Number of Applications: 3,564
Iowa – 364; Out-of-state – 3,200
Number in Class: 152
Iowa Residents: 101
Out-of-state Residents: 51
Women: 55 (36%)
Under-represented Minority: 12 (8%)
Other Minority: 26 (17%)
White or No Response: 114 (75%)
Medical Scientist Training Program (MD/PhD) Students: 9

Undergraduate Colleges Represented: 70
Graduates of Regents Institutions:
Iowa – 41 (27%); ISU – 13 (9%); UNI – 3 (3%)
Regents Total – 57 (38%)
Graduates of Other Iowa Colleges: 14 (9%)
Graduates of Colleges Outside of Iowa: 3,200 (53%)
SEEING PROMISE
Over the next decade, will “vision medicine” mean not only better screenings and improved therapies but also cures for blinding eye conditions once considered untreatable?

Based on the experience and expertise of more than 140 people across eight University of Iowa departments and four colleges—complemented by the foresight of one of the world’s leading businessmen and philanthropists—the answer could be yes, as Iowa is poised at the forefront of life-changing discoveries and treatments in vision science.

In August, entrepreneur Stephen Wynn made a $25 million gift commitment to ophthalmology programs at the UI, enabling the UI Institute for Vision Research—which includes the Carver Family Center for Macular Degeneration and other programs—to unify strategically under one research umbrella.

Wynn, chairman and CEO of Wynn Resorts Ltd., has personal experience with vision loss and is committed to accelerating progress toward cures for inherited retinal diseases. Clearly, he believes Iowa is the place to make it happen. In recognition of his generous support, the institute was renamed the UI Stephen A. Wynn Institute for Vision Research.

The Steven W. Dezii Translational Vision Research Facility, the only lab of its kind in the world completely dedicated to the production of gene- and cell-based therapeutics for the treatment of blinding eye diseases, also was renamed to honor Wynn’s trusted associate, Steven Dezii.

The Wynn Institute’s programs are divided into three major areas: genetic testing, gene therapy, and patient-derived stem cell research. UI scientists are confident that many forms of heritable blindness will become treatable within 10 years. Restored vision is the goal.

The UI Department of Ophthalmology and Visual Sciences has been a leader for decades and a valuable partner to vision scientists across the country and around the world. Investigators at Iowa, such as Edwin Stone, MD, PhD, director of the Wynn Institute for Vision Research, and his colleagues have discovered genes associated with multiple vision disorders, including age-related macular degeneration, glaucoma, retinitis pigmentosa, Leber congenital amaurosis, Stargardt disease, and Bardet-Biedl syndrome.
Stephen Wynn (right) and Steven Dezii were honored at a naming ceremony in October for the Stephen A. Wynn Institute for Vision Research at the University of Iowa.

Today, UI scientists are pursuing gene replacement treatments aimed at slowing or even stopping deterioration of the retina, the thin membrane of light-sensitive nerve tissue at the back of the eye that controls how (and how well) we see.

They also are studying stem cells as potential treatments for patients with retinal disease. With macular degeneration and similar diseases, damaged cells do not normally replace themselves. With the introduction of induced pluripotent stem cells in 2007, researchers can “recreate” the disease in real human tissue and test treatments without endangering the tissue inside the person’s eye.

The hope is that ultimately, scientists will be able to use these cells to create new cells that would literally “turn the lights back on” for patients. Much work is needed still, but it’s a challenging—and conceivably attainable—goal, one that offers a game-changing future for those with rare inherited retinal disorders.
New home for breakthroughs

Progress continues on construction of the John and Mary Pappajohn Biomedical Discovery Building (PBDB), the final piece of a trio of facilities (joining the Medical Education and Research Facility and the Carver Biomedical Research Building) that have reshaped the health sciences campus beginning in the late 1990s. The new building will be home to the Pappajohn Biomedical Institute, directed by Michael Welsh, MD; the Fraternal Order of Eagles Diabetes Research Center; and the Iowa Institute for Biomedical Imaging. Housing wet laboratories, administrative space, and core facilities, PBDB will support new investigative models that allow interdisciplinary research teams to focus on specific biomedical research problems. The facility will be nine levels with three levels below ground and six levels above ground at the courtyard.

Pappajohn Biomedical Discovery Building
Location: 169 Newton Road
Completion Date: June 2014
Project Budget: $133.7 million, funded by the state of Iowa, the federal government, the university, and private sources, including a major gift commitment from longtime UI benefactors John and Mary Pappajohn
Size: 225,000 square feet
Major Contractor: Walsh Construction Company II LLC
Architects: Gwathmey Siegel & Associates Architects LLC, Rohrbach Associates PC

Abel leads diabetes research center

In June, E. Dale Abel, MD, DPhil, joined the UI as director of the Fraternal Order of Eagles (FOE) Diabetes Research Center, established in 2008 through a $25 million gift commitment from the FOE and to be based in the new Pappajohn Biomedical Discovery Building, which will open in summer 2014. Abel arrived from the University of Utah School of Medicine, where he was chief of the endocrinology, metabolism, and diabetes division. He is internationally recognized for his research on the molecular mechanisms responsible for cardiac dysfunction in obesity and diabetes and for studies of the role of mitochondrial dysfunction in the development of insulin resistance, obesity, and its complications.

Personal genomic medicine made possible

A major focus of the Iowa Institute of Human Genetics (IIHG) is to bring personalized medicine to patients across Iowa and beyond, and in one area of gene-drug interactions (known as pharmacogenomics) it’s a reality. Led by the institute’s director, Richard Smith, MD, IIHG scientists have developed and launched a genetic test to identify people who do not respond to clopidogrel (Plavix®), a drug commonly prescribed to prevent blood clots. The test identifies individuals who do not metabolize the medication due to DNA changes in the CYP2C19 gene, which can increase their risk for thrombosis and stroke. It’s just one example of how the IIHG is a resource for health care providers, patients, and the public.
A promising target for asthma treatment
An enzyme known for its role in heart disease may hold the key to new asthma treatments. UI researchers, led by Mark Anderson, MD, PhD, and Isabella Grumbach, MD, PhD, determined that the enzyme, called CaMKII, is linked to the harmful effects of oxidation in the respiratory tract, triggering asthmatic symptoms. The finding could lead to the development of a drug that would target CaMKII. Asthma affects billions of people worldwide, yet treatment options have remained confined to steroids, which may have harmful, even life-threatening, side effects for people with severe cases. Inhibiting CaMKII could be an effective antioxidant strategy for treating allergic asthma, the researchers reported July 24 in the journal Science Translational Medicine.

Vaccine unit on the front line of pandemic preparedness
The University of Iowa was one of nine institutions nationwide to receive a seven-year, multimillion-dollar contract from the National Institute of Allergy and Infectious Diseases to test promising vaccines and therapies for infectious diseases. Expertise and collaboration among a multidisciplinary group of investigators and a strong track record for securing reliable and enthusiastic participation in vaccine studies were key to the UI’s renewal as a federally funded Vaccine and Treatment Evaluation Unit, notes Patricia Winokur, MD, director of the project. One of the Iowa group’s major efforts: collaborating with colleagues nationwide to test a vaccine against a new strain of bird flu (H7N9) that emerged in humans in China in spring 2013.

Bracing effective for scoliosis
For decades, back braces have been used to treat spine curvature in children and adolescents. While some questioned whether this was truly an effective way to avoid surgery, few had attempted to find a definitive answer—until UI researchers led a multi-center study to do exactly that. Stuart Weinstein, MD, and colleagues compared the risk of curve progression in patients with adolescent idiopathic scoliosis who wore a brace with patients who did not. The trial was stopped early after finding that bracing significantly reduced the risk of curve progression and the need for surgery. More hours of brace wear—at least 13 hours a day to be effective—was associated with higher success rates. The study was published online Sept. 19 in the New England Journal of Medicine.

Beating bacteria through the nose
Staphylococcus aureus (staph) infections in U.S. hospitals are a serious concern, yet there is no uniformly accepted procedure to reduce surgical-site infections, many of which are caused by a patient’s own bacteria. A team led by UI researchers is recommending clinical guidelines that could cut post-surgical infection rates dramatically for staph bacteria and a broader class of agents.
known as gram-positive bacteria. Published in the *British Medical Journal* in June, the researchers recommend swabbing patients’ noses, where staph can exist naturally. For those patients who have the bacteria, applying an antibacterial ointment to the nose in the days before surgery and administering an antibiotic at the time of surgery are effective preventive measures. The group is testing the protocol at 20 hospitals nationwide, including UI Hospitals and Clinics.

**Improving colon cancer screening rates**
A study by UI researchers found that patients who received mailed educational information about colon cancer screening plus an at-home testing kit were more than three times as likely to get screened for the disease as patients who received usual medical care. Two main tests are used in the United States to screen for colorectal cancer—the fecal occult blood test and a colonoscopy. A newer type of fecal occult blood test, called a fecal immunochemical test (FIT), is now available. The FIT does not require any dietary restrictions and can be used at home by the patient. The UI study results were published in the September/October issue of the *Journal of the American Board of Family Medicine*.

**Bacterial toxins cause deadly heart disease**
Researchers led by Patrick Schlievert, PhD, chair and DEO of the UI Department of Microbiology, have discovered what causes the lethal effects of staphylococcal infective endocarditis—a serious bacterial infection of heart valves that kills approximately 20,000 Americans each year. The culprits are superantigens—toxins produced in large quantities by staph bacteria—that disrupt the immune system. The new study, led by Schlievert and published Aug. 20 in the online open-access journal *mBio*, suggests that blocking the action of superantigens might provide a new way to treat infective endocarditis.

**Hip replacement prices: highly variable, hard to get**
A “secret shopper” study conducted by UI and Iowa City Veterans Affairs Medical Center researchers found that 40 percent of top-ranked and 36 percent of non-top-ranked hospitals were unable to provide a price estimate for a total hip replacement procedure. Moreover, among the hospitals that could provide an estimate, the cost quoted for the procedure ranged from $11,100 to $125,798—a more than tenfold difference. While data on hospital quality is widely available from public and private sector sources, the UI study indicates that pricing data is much harder to obtain, suggesting that calls for greater transparency in pricing have not had a big effect. The study was published online Feb. 7 in *JAMA Internal Medicine*.
Remarkable things can happen when smart, dedicated individuals team up to achieve a common goal.

Members of Holden Comprehensive Cancer Center at the University of Iowa have embraced this concept, and it’s led to a subtle yet fundamental shift in the way they do cancer research, clinical care, and education.

Research over the past 10-15 years has brought new insight into cancer biology at the molecular level, underscoring the value of basic science in the search for new cancer treatments and cures that benefit patients.

Translational research—transforming basic science discoveries into useful applications that improve or enhance patient care—will become even more important. So will collaboration and communication among people who bring different backgrounds, knowledge bases, and perspectives to the bedside and research bench. Game-changing cancer care will require even more information sharing and partnering among experts in medical oncology, surgery, radiation therapy, pathology, radiology, genetics, pharmacology, and cell biology.

That’s the goal of the Holden Cancer Center’s Multidisciplinary Oncology Groups (MOGs), 14 teams that include faculty and staff members from multiple specialties and backgrounds working to improve care, coordinate multispecialty services, train medical residents and fellows, and facilitate cancer research.

Each MOG is based on a cancer type (such as breast cancer, leukemia, lymphoma, or melanoma) and is co-led by physicians from different subspecialties—a surgical oncologist and a radiation oncologist, for example. Some MOGs have multidisciplinary clinics where physicians of different specialties work side by side. All MOGs have tumor board meetings, typically each week, where different cancer specialists come together to discuss individual patient cases and determine the best courses of treatment. MOGs also have research group meetings that occur on a regular basis. This gives MOG members—experts from all sides of cancer research and care—opportunities to share ideas and gain insights in ways that otherwise might not happen.

Improved cancer care for patients is the ultimate goal, but MOGs also address important topics such as enrollment of patients in clinical studies, research funding opportunities, patient safety, and partnerships with referring providers. MOGs also promote new ways to train residents and fellows by fostering interaction among
doctors, nurses, and staff members with a wide range of perspectives.

Collaboration occurs in additional ways at Holden Comprehensive Cancer Center. Its faculty, staff, and students work together as members of their academic departments within the Carver College of Medicine and as participants in the center’s various research programs—cancer genetics, immunology, imaging, epidemiology, and free radical biology, for example.

MOGs, however, provide an additional avenue for people from multiple departments and programs—medical, surgical, and radiation oncologists as well as nurses, pharmacists, epidemiologists, laboratory personnel, and others—to form new connections. And with its expertise in molecular oncology (and cancer research in general), subspecialists in all cancer types, and a culture of collaboration among colleagues as well as referring providers, Holden Comprehensive Cancer Center is uniquely positioned to help “change the game” of cancer understanding and patient care.

Progress over the past year in supporting the MOGs includes hiring a tumor board coordinator who identifies and shares best practices among the groups, as well as the establishment of a MOG seed-grant program to stimulate clinical and translational research proposals.

Moving forward, the MOGs will continue to look for ways to improve and support each member’s individual commitment to what is truly a total team effort.
Microsurgery for lymphedema
Assistant professor of plastic and reconstructive surgery at the UI Carver College of Medicine Wei Chen, MD, is one of a handful of experts across the United States performing two innovative techniques to treat lymphedema, the swelling in an arm or leg caused by a blockage in a person’s lymphatic system. Lymphedema is a common side effect of cancer surgery or radiation treatment, and correcting this condition—using a lymph node transfer of lymphovenous anastomosis (LVA)—involves severing and reattaching tiny lymph vessels.

The vessels range from about 1.8 millimeters to about 0.3 millimeters wide. Chen practices the microsurgery on raw chicken thighs, which he has found to be the best biological model.

Facial reanimation surgery
When Natalie Wright of Provo, Utah, was 2 years old, she was diagnosed with a brain tumor. Three surgeries and chemotherapy have kept the tumor under control, but the treatments paralyzed the left side of her face. Through a chance conversation with a neighbor in 2012, Natalie’s mom, Dana, learned about the expertise of facial nerve specialist Douglas Henstrom, MD, director of facial plastic surgery and reconstructive surgery and the Facial Nerve Center at UI Hospitals and Clinics.

Natalie, now 15, became the first pediatric patient to receive facial reanimation surgery in Iowa. She underwent two separate surgeries—one to transplant a sensory nerve into her left cheek, and another a year later to place muscle into the cheek—which restored the teenager’s ability to have an involuntary, natural smile.

Submammary device implantation
UI Heart and Vascular Center cardiologist Michael Giudici, MD, has pioneered a new approach to implanting devices with a much-improved cosmetic result. The new procedure, called submammary device implantation, involves placing a pacemaker or defibrillator under the breast, between the chest muscle and ribs. Small incisions are concealed in the armpit and under the breast, resulting in greater comfort and no visible scarring.
New clinic serves LGBTQ patients
A clinic designed specifically to serve lesbian, gay, bisexual, transgender, queer, and questioning (LGBTQ) patients opened at UI Health Care—Iowa River Landing, under the direction of primary care physicians Nicole Nisly, MD, and Katie Imborek, MD, to meet the needs of an underserved community. The importance of welcoming all patients and families, including using preferred names and pronouns, is stressed with the medical and reception staff.

IRL one year later: growth and promise
Since opening in October 2012, UI Health Care—Iowa River Landing has proved to be an ideal location for outpatient primary and specialty care services for adults and children. Located two miles from the main hospital campus, the new medical office building has seen consistent growth in its total number of clinic visits—from slightly more than 6,000 visits in the first month to an average of more than 9,700 clinic visits for the last three months of 2013.

Magnet designation
In July, UI Hospitals and Clinics was recognized once again by the American Nurses Credentialing Center’s Magnet Recognition Program® for excellence in nursing practice. Our hospital was the first in Iowa to be designated: initially in 2004, then re-designated in 2008, and now again in 2013. The re-designation follows an 18-month effort by the Department of Nursing Services and Patient Care to collect and submit comprehensive data about the quality of its nursing practice.

Above right: The inner workings of a cochlear implant are illustrated.

Above: UI Health Care—Iowa River Landing is located at the Coralville First Avenue interchange on Interstate 80.
Orthopaedics and Rehabilitation 100-year anniversary

Over the past century, the UI Department of Orthopaedics and Rehabilitation has built a global reputation for clinical expertise, research, teaching, and the development of leaders in the field. Some notable contributions:

- Faculty member Ignacio Ponseti, MD, pioneered a nonsurgical treatment for clubfoot that is considered the gold standard and has been used to correct the condition in children worldwide
- Medical resident Ruth Jackson became the first female orthopedic surgeon in the United States
- Since 2002, the department has received funding from the National Institutes of Health to pursue multidisciplinary research to prevent osteoarthritis following joint injuries
- Departmental faculty have held leadership positions with many of the top specialty societies and have won every major research award in orthopedics

Primary Stroke Center designation; stroke robot collaboration

The Primary Stroke Center at UI Hospitals and Clinics achieved Advanced Certification Comprehensive Stroke Center by The Joint Commission and the American Heart Association/American Stroke Association, making it the only institution in Iowa and one of only 35 nationwide to receive the designation.

Comprehensive Stroke Centers are recognized as industry leaders and are responsible for setting the national agenda in highly specialized stroke care. The UI Stroke Center also uses a wireless remote presence robot to connect stroke patients for a consultation and neurologic examination within minutes.

Cochlear implants: three decades of leadership/expertise

Cochlear implants are devices that translate sound into electronic signals, bypass faulty inner ear structures, and directly stimulate a patient’s auditory nerve. Today, cochlear implants have become the standard of care for deaf individuals who want to perceive sound and interact with the hearing world. Modern implants restore “hearing” to adults who have become deaf and allow congenitally deaf children to learn to speak.

Over the past three decades, Bruce Gantz, MD, and his colleagues at the Iowa Cochlear Implant Research Center have helped improve the success and expand the use of cochlear implants. They also helped develop a new cochlear implant, which combines electronic sound perception with a patient’s acoustic hearing, opening up implant technology to new patient populations and paving the way for patients to benefit from future advances in regenerative medicine.

Patient Care

With the use of a wireless remote robot, UI stroke specialists provide vascular neurology expertise to patients outside UI Hospitals and Clinics. The telestroke program currently partners with two Iowa hospitals: Mercy Medical Center in Clinton and the Grinnell Regional Medical Center.
“How do you handle having chemo and being pregnant and wondering how it’s going to turn out? How do you answer the question posed to you if it’s not possible to save you both?”

-Carol Schulte

UI CHILDREN’S HOSPITAL
AROUND-THE-CLOCK CARE LEADS TO SUCCESS FOR MOTHER AND CHILD

In May 2009, Carol Schulte of Pella, Iowa, was diagnosed with recurrent leukemia, a life-threatening cancer of the blood and bone marrow. After chemotherapy, her cancer went into remission that October.

But Carol’s leukemia returned 10 months later while she was 26 weeks pregnant. A team of UI Hospitals and Clinics maternal-fetal medicine doctors, UI Children’s Hospital neonatal specialists, and experts from Holden Comprehensive Cancer Center at the UI collaborated to determine the best course of action for Carol and her unborn baby. They decided to begin chemotherapy, which jump-started her treatment for leukemia, and were able to get baby Faith to 33 weeks, thereby improving her chances for survival.

Faith spent 18 days receiving around-the-clock care in the UI Children’s Hospital Neonatal Intensive Care Unit (NICU) and was sent home earlier than expected. A month later, Carol returned to UI Holden Comprehensive Cancer Center for a bone marrow transplant.

In all, Carol and Faith spent 88 total days in the hospital. Today, Faith is an active toddler, and Carol is cancer-free.

About the NICU

UI Children’s Hospital is home to Iowa’s highest-level Neonatal Intensive Care Unit (NICU), which means we have the expertise to care for the tiniest and most critically ill babies and offer the greatest range of neonatal services and support.

Our NICU is Iowa’s largest, caring for 800 babies on average each year; since 1974, we have cared for approximately 30,000 premature or sick babies.

Our 13 board-certified neonatologists have 250 years of combined experience—the largest and most highly trained NICU team in Iowa.

As part of Iowa’s only comprehensive children’s hospital, our NICU has immediate access to the expertise of every possible pediatric specialist 24 hours a day.

Our survival rates for babies born at 23, 24, and 25 weeks are significantly higher than the survival rates of extremely premature infants born at other U.S. hospitals, placing UI Children’s Hospital among the top neonatal intensive care providers anywhere.
PURPOSE: The new University of Iowa Children’s Hospital is being designed as a healing environment that improves the health and well-being of children and their families. Plans include expanding existing programs and developing new services on site and throughout Iowa to meet the current and future needs of Iowa’s children. The guiding principle of the UI Children’s Hospital project is to create a system of care for Iowa’s children—bringing together services and resources as part of a comprehensive pediatric care network.

CONSTRUCTION BEGAN: Fall 2012
TARGET COMPLETION: March 2016
COST: Approximately $292 million – funded through bonds, patient revenue, and private gifts; no tax dollars are being used
LOCATION: South of, and connected to, UI Hospitals and Clinics
SIZE: 480,000 square feet in new construction plus 56,250 square feet of renovated existing space
NUMBER OF FLOORS: 14 (12 floors above ground, two below ground)
GAME-CHANGING PROGRAM: KID CAPTAIN TURNS 5

Since 2009, the Kid Captain program—a partnership between UI Children’s Hospital and the Iowa Hawkeyes—has become a recognized part of every Hawkeye football game, spotlighting the strength, determination, courage, and hope of young people who received care at UI Children’s Hospital. Each Kid Captain receives a commemorative Hawkeye game jersey and has his or her story highlighted during the football season.

67 KID CAPTAINS
Boys: 39  Girls: 28

PLACES REPRESENTED
Cities/Towns: 54
States: 6
   Iowa 56, Illinois 6, Wisconsin 2
   Idaho 1, Missouri 1, New York 1

KID CAPTAIN FROM FARTHEST AWAY
Savannah Erck – Alexandria Bay, N.Y.
975 miles

SIBLINGS CHOSEN TOGETHER
2009: Lucas and Nathaniel Anderson
2013: Molly and Alex Kirby

BY THE NUMBERS: UI CHILDREN’S HOSPITAL AT A GLANCE

PATIENTS
57,872 (FY2013)

PATIENTS BY STATE (Unique patients 25 or more)
Iowa 54,173
Illinois 2,365
Nebraska 175
Wisconsin 158
South Dakota 125
Missouri 124
California 67
Kansas 54
Texas 50
Michigan 45
Ohio 40
Indiana 30
Georgia 29
Colorado 28

STAFF
More than 170 pediatric physicians, surgeons, and dentists
More than 500 specially trained pediatric nurses

RESEARCH
Ranks 36th in the U.S. for National Institutes of Health awards to combined children’s hospitals and university-affiliated pediatrics departments
In May 2013, seven photographers set out to document a “day in the life” of University of Iowa Children’s Hospital. These professionals captured literally thousands of images. Their behind-the-scenes moments—of our faculty, staff, students, volunteers, and donors, as well as patients and families from across Iowa and throughout the nation and world—represent not only a visual record of one day’s events. They also serve as a testament to the compassion and commitment we share around the clock—24 hours a day, 365 days a year.

PHOTOGRAPHERS

Brian Banowetz
Metro Studios – Cedar Rapids, Iowa

Wayne Cable
Wayne Cable Photography – Chicago, Ill.

Thomas Langdon
Thomas Langdon Photography – North Liberty, Iowa

Lisa Lewis
Envisage Studios – Mount Vernon, Iowa

Susan McClellen
UI Health Care Marketing and Communications

Joe Pyle
Joe Pyle Photography – Estes Park, Colo.

Nola Riley
UI Health Care Marketing and Communications
Commitment—to Iowa, the nation, and the world—can be found every day across University of Iowa Health Care. It is evident in the medical care delivered to patients and families; the educational and training programs that will prepare the next generation of health care providers; and the basic and clinical research advancements that help expand our understanding of human health and disease.

This commitment is strengthened by philanthropy, which gives us the opportunity to build upon our success as one of the finest academic medical centers anywhere—the best people, the best facilities, and the best programs. And this is clearly evident in private support to UI Health Care through the University of Iowa Foundation.

In October 2013, university leaders announced the successful realization of a major fundraising goal: more than $500 million in gift commitments to Iowa First: Our Campaign for Breakthrough Medicine, launched publicly in 2011 to support the UI Health Care missions of medical education, research, and patient care.

Coinciding with this milestone was the announcement of a second $10 million gift commitment from Jerre and Mary Joy Stead of Scottsdale, Ariz., to advance children’s medicine at Iowa by creating four new faculty chairs and establishing funds to support innovation and leadership development.

The multifaceted gift from the Steads—natives of Maquoketa, Iowa, and co-chairs of the Iowa First campaign—included $8 million to endow one faculty chair within each of the UI Department of Pediatrics divisions of pulmonology, nephrology, neurology, and general pediatrics. The leadership development and innovation funds from the gift will enhance medical education and pediatric care, and increase understanding of pediatric diseases.

The $10 million gift commitment from the Steads brought the campaign total to $505 million. The Steads’ previous support of Iowa First included a gift commitment of $10 million in 2011—also to UI Children’s Hospital and the UI Department of Pediatrics—to create endowed faculty positions, support research and staff excellence initiatives, and fund innovative services for patients and their families.
In recognition of the Steads’ remarkable $20 million commitment to children’s medicine at Iowa, the pediatrics department was renamed the University of Iowa Stead Family Department of Pediatrics.

The Steads’ gift is an extension of their long-held belief in the mission of UI Health Care and its commitment to patients, families, faculty, students, and staff.

“Having spent so much of our lives in Iowa, we’ve always understood the quality of UI Health Care, and we were fortunate to see that firsthand when our sons were born in UI Hospitals and Clinics,” says Mary Joy Stead, who attended the UI and has served on the UI Foundation’s board of directors since 1999. “Jerre and I have always felt privileged to be in a position to commit our support to advance health care and research at UI Children’s Hospital and the pediatrics department. We believe in the power of children’s medicine at Iowa, and this new commitment is an extension of that belief.”

Jerre Stead, who received his bachelor’s degree in business from the UI in 1965, has had a long career leading high-tech and information companies. He currently serves as executive chairman of IHS Inc., the leading provider of critical information, insight, and analytics worldwide.

“We believe the people of UI Health Care—outstanding doctors, nurses, staff, and researchers—are what set Iowa apart in children’s medicine,” says Jerre Stead. “The teaching, research, and patient care in the UI Department of Pediatrics are such valuable resources for so many. Mary Joy and I have always been dedicated to helping to provide them with the resources they need to continue to so positively impact people throughout Iowa and beyond.”

Iowa First is part of For Iowa. Forever More: The Campaign for the University of Iowa, the $1.7 billion comprehensive fundraising effort that continues through 2016. Support for medicine and allied health fields is one of the campaign’s key priority areas.
The Cassling Family Foundation of Omaha, Neb., made a generous gift to fund the Health Systems Research Chair in the UI Carver College of Medicine.

Seth A. Bailey Courage Group Inc. and Bicyclists of Iowa City (BIC) pledged $200,000 to support the Seth Bailey Sarcoma Cancer Fund and the Cancer Center Research Fund in the Holden Comprehensive Cancer Center at the UI. Proceeds from The Courage Ride—an annual bicycle ride and event organized by the Bailey Family and BIC—will contribute to the gift.


In January, Iowa State University Dance Marathon announced a $1 million commitment to benefit the University of Iowa Children’s Hospital building campaign. Over the past 15 years ISU Dance Marathon has generated more than $2 million in support for UI Children’s Hospital. All of the money raised by the yearly ISU Dance Marathon is given directly to UI Children’s Hospital through the University of Iowa Foundation and Children’s Miracle Network. In recognition of the gift, a playroom inside the new UI Children’s Hospital will be named in honor of ISU Dance Marathon.
The year 2013 was a turning point in health care reform in the United States, most notably with major implementations of the federal Affordable Care Act such as the launch of the Health Insurance Marketplace for individuals and the SHOP Exchange for small businesses. For health systems across Iowa and across the nation, it also was a time of greater collaboration in terms of sharing medical expertise, clinical services, and information technology.

This was certainly the case for the University of Iowa Health Alliance—established in mid-2012 as a first-of-its-kind partnership in Iowa between UI Health Care; Mercy-Cedar Rapids; the Mercy Health Network, which includes Mercy Medical Centers in Des Moines, Sioux City, Mason City, Dubuque, and Clinton; and Genesis Health System, based in Davenport.

Comprised of more than 50 hospitals and 160 clinics throughout Iowa, UI Health Alliance is a health care partnership with an organizational structure that supports shared expertise, selected support services, and technology among its members—working together to achieve streamlined and coordinated care for patients and families.

Through the 2013 initiatives and other efforts, UI Health Alliance members are continuing to increase the value of services provided, improve clinical integration between the members, provide more streamlined and coordinated care to patients, and ultimately improve the health of people in Iowa and other regions served.
KEY UI HEALTH ALLIANCE INITIATIVES IN 2013 INCLUDED:

COLLABORATION WITH COOPORTUNITY HEALTH to introduce two unique health plans in October when the new Health Insurance Marketplace opened and new rules and regulations for the individual and group markets took effect. CoOportunity Choice UI Health Alliance (UIHA), is an open-access, tiered benefit plan that provides consumer savings when going to tier one providers, including UIHA facilities and clinicians. CoOportunity Preferred UI Health Alliance is a select-network plan that offers the most cost-effective choice for those interested in using an exclusive provider network featuring UIHA providers.

THE IOWA LIVER CENTER is a collaboration between the UI Organ Transplant Center, the Iowa Digestive Disease Center, based in Clive, Iowa, and Mercy Medical Center–Des Moines, including its affiliated clinics. The Iowa Liver Center offers a truly team approach to comprehensive care for Iowans with diseases of the liver and biliary tract. Bringing together the state’s leading digestive disease physicians, transplant surgeons, and other professionals creates a streamlined and well-defined process of care, while sharing clinical data means higher quality and efficiency for patients and families.

A $1 MILLION COMMITMENT TO SUPPORT THE IOWA RURAL PHYSICIAN LOAN REPAYMENT PROGRAM, which assists medical students who choose to practice in rural Iowa communities for five years after graduation. The program was established by the Iowa Legislature in 2012 to improve access to health care providers statewide, particularly in medically underserved areas. After completing residency and receiving a permanent license, participating physicians are required to practice in service commitment areas—any Iowa city with fewer than 26,000 residents and located more than 20 miles from a city with 50,000 people. Up to 20 medical students from the UI Carver College of Medicine or the Des Moines University–Osteopathic Medical Center may enroll in the program annually.

A PARTNERSHIP WITH MOBILE HEALTH SCREENINGS PROVIDER HEALTH FAIR to offer heart screenings in Iowa and western Illinois, beginning in 2014. Consumers and local employer groups who board the Health Fair bus can receive a series of tests—such as electrocardiogram, carotid artery (stroke) ultrasound, peripheral arterial disease test, and abdominal aortic aneurysm ultrasound—in less than an hour. The results are read by board-certified physicians; with abnormal results, individuals may choose to have the information shared with a UI Health Alliance member hospital.
Inspiring future scientists and leaders
Over the course of the 2012-2013 academic year, more than 200 faculty, staff, and students volunteered nearly 900 hours in UI Health Care STEM (science, technology, engineering, and mathematics) education programs, partnering with K-12 educators and community education leaders across Iowa.

This year, UI Health Care STEM education programs reached a record 10,000 school-aged students through 120 groups and events providing educational tours, classroom presentations, and exhibits. STEM staff strive to promote health literacy and healthy living; increase interest in science, technology, engineering, and mathematics; and provide STEM-related opportunities to a diverse group of students.

More than 80 departments, units, areas, and labs in UI Hospitals and Clinics and the UI Carver College of Medicine made themselves available to host and educate students from 84 schools throughout the year.

Conflict of interest policy lauded
The UI Carver College of Medicine has one of the five strongest conflict of interest policies in the nation, according to a study by the Institute of Medicine as a Profession. Overall, the study says U.S. medical schools have made great progress limiting ties to drug and device makers, but many still need to make more progress. Other medical schools cited as doing the best job of meeting the national conflict of interest standards are Boston University School of Medicine, Emory University School of Medicine, University of Arkansas for Medical Sciences College of Medicine, and University of Massachusetts Medical School.
Service to Iowa communities stays strong
As Iowa’s only comprehensive academic medical center, UI Health Care is committed to the health of families and communities.

Free medical care for uninsured patients; health screenings and other preventive care services; public seminars on important health topics for individuals and families; health professions education; and population-based research are some examples of our responsibility—and commitment—to ensuring a healthier future for people across the state, throughout the nation, and around the world. Service to communities is inherent to our mission of “Changing Medicine, Changing Lives.”

UI Health Care provided more than $214 million in benefits to Iowa communities, according to the most recent annual assessment of community benefit programs and services reported to the Iowa Hospital Association (IHA).

The community benefit data is submitted to IHA as part of a larger effort to report services that exceed mission-driven patient care activities and provide a measurable increase in health care access and the availability of health care resources. All 118 of Iowa’s community hospitals contribute annually to the IHA report.

### Community Health Improvement Services
$15,439,164

### Health Professions Education
$17,613,286

### Subsidized Health Services
$954,747

### Research
$47,961,530

### Financial and In-Kind Contributions
$85,862

### Community Building Activities
$156,056

### Community Benefit Operations
$29,930

### Financial Assistance
$12,797,560

### Government-Sponsored Health Care
$40,518,297

### Unpaid Cost of Medicare
$78,704,344

**TOTAL Community Benefit**
$214,260,776
2013 HIGHLIGHTS

JANUARY

George Weiner, director of Holden Comprehensive Cancer Center at the UI, is elected vice-president/president-elect of the Association of American Cancer Institutes

The Ponseti International Association announces collaboration with partner organization Management Sciences for Health on a two-year, nearly $2 million project to increase access to clubfoot deformity treatment for thousands of children in Nigeria, Pakistan, and Peru

FEBRUARY

Jane Paulsen, professor of psychiatry, neurology, and psychology, is named the Roy J. Carver Chair in Neuroscience

The 19th annual UI Dance Marathon raises $1,529,650.19—a new record—for patients and families who receive care at UI Children’s Hospital

The UI Women’s Health Nurse-Midwife Service is awarded the “With Women for a Lifetime Gold Commendation” by the American College of Nurse Midwives for 20 years of service

The UI’s first hearing loop system, a technology that delivers a signal directly to a person’s hearing aid or cochlear implant, is installed in Medical Laboratories
MARCH
U.S. News & World Report ranks UI Roy J. and Lucille A. Carver College of Medicine as one of the top graduate schools in the country, with several programs and specialties ranked among the 20 best in the country among all public and private schools

Paul James, chair and DEO of the UI Department of Family Medicine, is named president-elect of the Association of Departments of Family Medicine

APRIL
The UI Graduate Nurse Residency Program is awarded national accreditation by the Commission on Collegiate Nursing Education

The American Otological Society (AOS) honors Bruce Gantz with the distinguished Award of Merit and as Guest of Honor at their Combined Otalaryngology Spring Meeting; Gantz’s recognition marks the first time in AOS history that these two honors were given to the same person

MAY
The UI Department of Anesthesia celebrates 50 years as an independent department within the UI Carver College of Medicine

UI Carver College of Medicine faculty members Barry London, Stanley Perlman, and Joseph Zabner are elected as members of the Association of American Physicians

UI Hospitals and Clinics Pulmonary Rehabilitation Program celebrates its 20th anniversary

Gary Rosenthal, professor of internal medicine, and Curt Sig mund, chair and DEO of the UI Department of Pharmacology, each receive 2013 Regents Awards for Faculty Excellence

June
UI Children’s Hospital is ranked in seven specialties in U.S. News & World Report’s 2013-14 Best Children’s Hospitals rankings: cancer; cardiology and heart surgery; diabetes and endocrinology; nephrology; neurology and neurosurgery; orthopedics; and pulmonology

UI President Sally Mason joins UI Health Care leaders, faculty and staff, state officials, former patients and families, and others for a ceremony celebrating the groundbreaking for the new UI Children’s Hospital construction project, scheduled for completion in spring 2016

Qi Wu, assistant professor of pharmacology, is selected as a 2013 Pew Scholar in the Biomedical Sciences

A new UI QuickCare location opens in North Liberty, Iowa

Lisa Mascardo, director of ambulatory pharmacy services at UI Hospitals and Clinics, is named Health System Pharmacist of the Year by the Iowa Pharmacy Association
JULY

UI Hospitals and Clinics is ranked in six specialties by *U.S. News & World Report*: cancer; ear, nose, and throat; nephrology; neurology and neurosurgery; ophthalmology; orthopedics

CoOportunity Health and UI Health Alliance announce health plan collaboration

The Cedar Rapids-Iowa City Corridor Business Journal names UI Hospitals and Clinics “Best Hospital in the Corridor”

AUGUST

Mohammed Milhem receives funding through the two-year 2013 NCI Cancer Clinical Investigator Team Leadership Award from the Office of Cancer Centers and the Coordinating Center for Clinical Trials at the National Cancer Institute

First-year students in the UI Carver College of Medicine receive their first laboratory coats and recite the Oath of Hippocrates before an audience of family and friends at the college’s annual White Coat Ceremony, which serves as the culmination of orientation activities for incoming students

SEPTEMBER

Douglas Van Daele, associate professor of otolaryngology, is named physician leader of UI Physicians and associate dean for clinical affairs in the UI Carver College of Medicine

Thomas Granchi joins UI Health Care as director of the Burn Treatment Center and clinical professor in the UI Department of Surgery; he succeeds Pat Kealy and Lucy Wibbenmeyer, who served as interim co-directors since November 2011
OCTOBER

Allyn Mark, professor of internal medicine, receives the UI Carver College of Medicine Distinguished Mentor Award.

Lori Dolan, clinical trial director of the Bracing in Adolescent Idiopathic Scoliosis Trial in the UI Department of Orthopaedics and Rehabilitation, and B.J. Hannon, director of the Magnet Program in the UI Hospitals and Clinics Department of Nursing Services and Patient Care, receive Board of Regents Staff Excellence Awards.

Michael Lutter, assistant professor of psychiatry, and colleagues publish study in the *Journal of Clinical Investigation* on gene mutations associated with an increased risk for eating disorders.

NOVEMBER

UI Health Care leaders announce the creation of the UI eHealth and eNovation Center, which will develop and expand telehealth services throughout Iowa.

Jennifer Robinson, a faculty member in the UI College of Public Health and the UI Department of Internal Medicine, serves on a national panel that releases new heart health and cholesterol guidelines.

UI Hospitals and Clinics is named a Top Performer on Key Quarterly Measures by The Joint Commission.

DECEMBER

Paul McCray Jr. and David Price are awarded the distinction of 2013 Fellow of the American Association for the Advancement of Science, the world’s largest general scientific society and publisher of the journal *Science*.

Madeline Shea, professor of biochemistry, is named one of the Technology Association of Iowa’s Women of Innovation.

The UI Cardiovascular Research Center is renamed in honor of Francois Abboud, who founded the center in 1974. Scientists affiliated with the center have earned more than $400 million in research funding since the center’s inception, enriching understanding of how the heart functions and interacts with other bodily systems. The center is comprised of 174 researchers, including Abboud, who still conducts cardiovascular studies.
PATIENT SERVICES
Acute Adult and Children Admissions 30,344
Newborn Nursery 1,497
Total Acute Admissions 31,841

Acute Adult and Children Patient Days of Care 193,117
Newborn Nursery 3,206
Total Acute Patient Days of Care 196,323

Births 1,939
Clinic Visits (UI Hospitals and Clinics, Outreach, and UI Community Medical Services) 997,243
UI Hospitals and Clinics Clinic Visits 838,284
    Outreach and UICMS Clinic Visits 158,959
Emergency-Trauma Center Visits 60,785
Major Surgical Operations 28,668
Cardiac Operations 495
Organ and Tissue Transplants 551
    Bone Marrow 181
    Cornea 204
    Heart 14
    Kidney 95
    Liver 31
    Lung 15
    Pancreas 11
Minor Surgical Procedures 102,422
    Digestive Disease Procedures 16,560
Cochlear Implants 117
In Vitro Fertilization/Related Procedures 1,097
Fetal Diagnosis and Therapy Procedures 177
Cardiac Catheterization Procedures 9,188
    Adult 7,984
    Child 1,204
### BED AND CLINIC COMPLEMENTS

<table>
<thead>
<tr>
<th>Category</th>
<th>Number</th>
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<tbody>
<tr>
<td>Inpatient Beds</td>
<td>705</td>
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<tr>
<td>Intensive Care</td>
<td>164</td>
</tr>
<tr>
<td>Acute Care</td>
<td>539</td>
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<tr>
<td>Non-acute</td>
<td>2</td>
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</table>

### HUMAN RESOURCES

<table>
<thead>
<tr>
<th>Category</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Staff Physicians and Dentists</td>
<td>837</td>
</tr>
<tr>
<td>Resident Physicians and Dentists</td>
<td>542</td>
</tr>
<tr>
<td>Fellow Physicians</td>
<td>214</td>
</tr>
<tr>
<td>Subtotal</td>
<td>1,593</td>
</tr>
<tr>
<td>Professional Nurses</td>
<td>1,896</td>
</tr>
<tr>
<td>Other Professional Staff</td>
<td>1,974</td>
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<tr>
<td>Other Hospital Staff</td>
<td>2,676</td>
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<tr>
<td>Total Staff</td>
<td>8,139</td>
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### EDUCATIONAL PROGRAMS

<table>
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<tr>
<th>Category</th>
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</thead>
<tbody>
<tr>
<td>University Health Science College Students in Training</td>
<td>1,777</td>
</tr>
<tr>
<td>Medical Students</td>
<td>681</td>
</tr>
<tr>
<td>Dental Students</td>
<td>87</td>
</tr>
<tr>
<td>Nursing Students</td>
<td>483</td>
</tr>
<tr>
<td>Pharmacy Students</td>
<td>526</td>
</tr>
<tr>
<td>Resident and Fellow Physicians and Dentists in Training</td>
<td>755</td>
</tr>
<tr>
<td>Other Iowa Health Profession Students in Training</td>
<td>1,295</td>
</tr>
<tr>
<td>Total in Health Education at UI Hospitals and Clinics</td>
<td>3,827</td>
</tr>
</tbody>
</table>
FINANCIAL STATEMENTS  JULY 1, 2012, TO JUNE 30, 2013

REVENUE

78% Patient Care

4% General Education Funds

12% Extramural Funding

6% Other Operating Revenue

EXPENSES

62% Personnel

4% Occupancy, Billing & Overhead

1% Services

4% Repairs & Maintenance

5% Depreciation & Amortization

8% Licenses, Fees & Other Operating Expenses

16% Supplies

0% State Appropriations
The integrated financial report for University of Iowa Health Care consolidates the financial statements of its three entities—UI Hospitals and Clinics, the Roy J. and Lucille A. Carver College of Medicine, and UI Physicians.

Through ongoing fiscal review, UI Health Care can continue to make timely, well-informed budgetary and investment decisions.

Following are the consolidated net revenues and expenses for fiscal year 2013.

<table>
<thead>
<tr>
<th>REVENUE</th>
<th>Amount</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Patient Care</td>
<td>$1,296,310,739</td>
<td>78%</td>
</tr>
<tr>
<td>Extramural Funding</td>
<td>198,506,826</td>
<td>12%</td>
</tr>
<tr>
<td>Other Operating Revenue</td>
<td>106,799,695</td>
<td>6%</td>
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<tr>
<td>General Education Funds</td>
<td>65,059,952</td>
<td>4%</td>
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<tr>
<td>State Appropriations</td>
<td>2,437,195</td>
<td>0%</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>$1,669,114,407</strong></td>
<td><strong>100%</strong></td>
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<table>
<thead>
<tr>
<th>EXPENSES</th>
<th>Amount</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Personnel</td>
<td>$1,013,407,306</td>
<td>62%</td>
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<tr>
<td>Faculty</td>
<td>$280,044,210</td>
<td>28%</td>
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<tr>
<td>SEIU</td>
<td>246,737,819</td>
<td>24%</td>
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<tr>
<td>P&amp;S</td>
<td>224,530,917</td>
<td>22%</td>
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<tr>
<td>Merit</td>
<td>182,332,145</td>
<td>18%</td>
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<tr>
<td>Residents/Fellows</td>
<td>60,687,337</td>
<td>6%</td>
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<tr>
<td>Other</td>
<td>19,074,878</td>
<td>2%</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>$1,013,407,306</strong></td>
<td><strong>100%</strong></td>
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<thead>
<tr>
<th>Category</th>
<th>Amount</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Supplies</td>
<td>262,059,178</td>
<td>16%</td>
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<tr>
<td>Licenses, Fees &amp; Other Operating Expenses</td>
<td>139,769,636</td>
<td>8%</td>
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<tr>
<td>Depreciation &amp; Amortization</td>
<td>77,722,370</td>
<td>5%</td>
</tr>
<tr>
<td>Repairs &amp; Maintenance</td>
<td>68,451,871</td>
<td>4%</td>
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<tr>
<td>Services</td>
<td>13,781,871</td>
<td>1%</td>
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<tr>
<td>Occupancy, Billing &amp; Overhead</td>
<td>64,151,694</td>
<td>4%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$1,639,343,926</strong></td>
<td><strong>100%</strong></td>
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