HOPE FOR THE HEART

Leading innovations in CPR technology

ALSO INSIDE:
- New research on Parkinson's disease, mental illness, brain tumors
- Wine Auction breaks record
- Creating a legacy of caring
GREETINGS TO OUR COMMUNITY

Medical research gives patients and their families hope. Patients long for medical breakthroughs to survive their illnesses or to live better lives with them. Families want their loved ones to receive state-of-the-art care, but they also want a more promising future for members of the next generation who may otherwise suffer similar disorders.

More and more, thriving research programs set quality medical organizations apart, and Regions Hospital has a historic footprint in research. From oncology to Alzheimer’s to emergency and trauma care, Regions is a leader in research. This improves the quality of our care while attracting the best and brightest physicians to our organization.

As one example, our researchers discovered that medications could be effectively delivered to the brain through nasal passages while avoiding the side effects that often accompany injections and oral medications. This has led to the development of several promising treatments, including intranasal insulin. Discovered in our own labs, intranasal insulin appears to improve memory and functioning in patients with Alzheimer’s disease.

All this work could not happen without philanthropy, especially as the government funding of medical research shrinks. Working in partnership with our patients and community creates a beneficial snowball effect; our breakthroughs improve patient care, which inspires the community to fund further research, which leads to more breakthroughs. Our close collaboration with our donors is deeply rewarding to me and everyone at the hospital.

This newsletter features several projects that put Regions at the forefront of medical research. I hope you will be inspired by these examples to become a part of our research programs with a charitable contribution. To learn more, contact Regions Hospital Foundation at 651-254-2376.

Bret Haake, MD
Vice President of Medical Affairs and Chief Medical Officer, Regions Hospital

WINE AUCTION RAISES RECORD AMOUNT

On September 19, approximately 1,000 people participated in Regions Hospital Foundation’s 2015 Wine Auction at the Saint Paul RiverCentre. The event raised $1,050,000, a new record. Proceeds will support the Burn Center at Regions Hospital. A big thank you to everyone who supported the event!

Signe Fadness, center, spoke at the event about her journey with the Burn Center, which began with a burn injury at the age of five. She is pictured with her parents, Sandy and Kris. To watch a six-minute video about Signe, visit YouTube.com and search for “Regions Hospital Foundation 2015 Wine Auction”.

Leaders of Regions, HealthPartners and The Wine Auction are pictured at the event. From left: Donna Zimmerman, Sarah Bazey, Sheryl Ramstad, Mary Brainerd, Megan Remark and Scott Aebischer.
Tim Franko, a 56-year-old man from New Richmond, Wisconsin, survived a heart attack in August 2013 after receiving two hours and forty-five minutes of cardiopulmonary resuscitation (CPR). The length of CPR time was believed to be among the longest on record anywhere and was made possible because of a mechanical chest compression machine called the LUCAS device. The CPR began at Franko’s workplace and ended at Regions Hospital. He went home ten days later.

Each year, approximately 300,000 Americans experience sudden cardiac arrest outside the hospital, and survival rates in most communities are less than 10 percent. Manually performing standard CPR is difficult and can rarely be done for more than 30 minutes.

However, advances in CPR technology such as the LUCAS device have brought hope that people can have higher survival rates after cardiac arrest with good brain function. Regions EMS and St. Paul Fire did the original research on the type of CPR applied by the LUCAS device, publishing the results in the Journal of the American Medical Association in 1994. Now nearly every emergency medical service agency and many of the hospitals in the Twin Cities use the device.

“The Twin Cities is an epicenter of research on cardiac arrest care, and Regions and HealthPartners are a big part of that,” said R.J. Frascone, MD, Medical Director of Regions Emergency Medical Services. Our cardiac arrest care research has been aided by contributions to Regions Hospital Foundation.

Last summer, the St. Paul Fire Department, with Regions EMS providing medical direction, was among the first emergency medical service providers in the U.S. to adopt an even newer medical device that should surpass the effectiveness of the LUCAS device in most situations.

Did you know?

For every minute that people experiencing cardiac arrest do not receive CPR, their chance of survival drops by 7 percent.
REGIONS IS FIRST LOCAL HOSPITAL TO TEST NEW BRAIN TUMOR VACCINE

In July, Regions became the first hospital in the Twin Cities to enroll a patient in a trial for a new brain tumor vaccine. If effective, the vaccine will help fight recurrent glioblastoma (GBM), a particularly aggressive brain tumor and the most common malignant tumor to begin in the brain.

“Our first hope is that the vaccine prevents any further progression of the disease. If it eradicates the tumor altogether, that would be fabulous,” said Richard Peterson, MD, the HealthPartners neuro-oncologist who oversees the trial. Researchers will also study whether the vaccine has fewer side effects compared with current treatments for recurrent GBM, such as chemotherapy.

As with other vaccines, the goal is to induce an immune response that then targets the disease, which in the case of this trial are cancer cells. However, the vaccine being used in the Regions trial uses tissue from a patient’s own tumor. By individualizing the treatment to the patient’s specific cancer cells, the vaccine has the potential to be much more effective.

It takes a highly coordinated effort between individuals in neuro-oncology, research, neurosurgery, the OR and pathology to create the vaccine. Surgeons must first remove the tumor from a patient’s brain as intact as possible. Then, within 30 minutes, the tumor must be prepped in a specific fashion and prepared for delivery to a laboratory in Massachusetts. “Not every hospital is equipped to do all that,” Dr. Peterson said. The vaccine is made at the lab and sent back to the hospital. Each treatment is delivered to the patient via an injection.

Regions and HealthPartners are local leaders in providing clinical trials for cancer treatments; they are traditionally among the highest enrollers of patients of the 19 hospitals in the local cancer care consortium. Regions is one of two local hospitals to take part in this recurrent GBM vaccine trial.

“This trial illustrates that a community hospital can participate in a high level of research,” Dr. Peterson said. “In Regions and HealthPartners, many of us are academically inclined and are fortunate to practice in an environment that encourages progressive treatment. We have the ability to do state-of-the-art research, from pre-clinical development through clinical trials and outcomes-based research.

“At the end of the day, though, it all comes down to doing what we can for our patients. Our ability to offer these treatments locally is a relief to patients and their families. They appreciate how much easier it is to participate in such research trials. It’s more convenient and reduces their stress in a difficult time.”

Did you know?

Dr. Peterson was elected to the Brain Malignancy Steering Committee of the National Cancer Institute (NCI). The committee evaluates and prioritizes potential brain tumor research that will eventually be conducted in NCI-sponsored clinical trials.
HEALTHPARTNERS STUDIES EFFECTS OF EXERCISE ON PARKINSON’S DISEASE

In March 2014, Julia Johnson, MD, a HealthPartners movement disorder neurologist, diagnosed John Stella with early stage Parkinson’s disease. John kept his spirits up about the condition, but over the next year he began to experience more symptoms. “I would feel stiff and would have trouble getting out of the car and even out of a chair.”

Dr. Johnson, who is also the clinical director of the HealthPartners Parkinson’s Center, recommended that John take part in a new study she is overseeing. The study tests whether vigorous exercise can improve the physical and cognitive functioning of people with Parkinson’s disease. As part of the 12-week pilot study, patients came in three times each week to spend 50 minutes on a treadmill. Researchers measured their cognitive and physical functioning both before and after the exercise and compared the data. Dr. Johnson and her team are currently analyzing the study’s results. The trial is being funded with proceeds from both a previous Wine Auction and the Sharing at Work employee giving campaign of Regions and HealthPartners.

Many of the physical symptoms of Parkinson’s disease are commonly known — trouble walking, tremor, speech difficulty, loss of movement or muscle stiffness — but people with the disorder can also experience cognitive decline at an elevated rate. Dr. Johnson was encouraged by past research that showed the effectiveness of exercise in assisting people with brain disorders.

“Physical exercise has been shown to improve motor function in patients with Parkinson’s,” Dr. Johnson said. “Research in other neurodegenerative disorders such as Alzheimer’s disease has also shown a positive effect of exercise on cognition. Therefore, we hypothesized that our exercise program would improve memory in Parkinson’s patients.”

According to Dr. Johnson, the study was made possible thanks to a collaboration between neurologists, physical therapists, exercise physiologists and researchers. “At HealthPartners, we are very fortunate to work with a great team of experts in different specialties,” she said. If the results of the pilot study are positive, Regions and HealthPartners will seek funding for a larger study.

The researchers have already received very good feedback from the participants, including John. Inspired by the study, John follows the individualized exercise program recommended by his HealthPartners care providers. This includes 40 minutes of daily stretching routines. John and his wife also walk three to four miles a day up to five times each week.

“The study made me realize that, if I remain active, I can still do the things I want to do. My body feels much better now,” John said. “I am very thankful to the doctors, exercise staff and care providers at Regions and HealthPartners. They are such great people. They are always upbeat and got me inspired.”

Did you know? Over one million Americans live with Parkinson’s disease in the United States and that number is expected to triple in the next 50 years.
On average, people who experience schizophrenia and bipolar disorder die 20 to 25 years earlier than the general population, and cardiovascular disease is the number one cause of death. HealthPartners is leading a new clinical trial aimed to reduce that risk. The study, known as the Serious Mental Illness (SMI) Wizard, will occur in randomized HealthPartners primary care clinics. When patients with schizophrenia or bipolar disorder visit a provider in the intervention clinics, the electronic medical record will automatically look for six risk factors associated with cardiovascular disease (high blood pressure, cholesterol, blood sugar level and body mass index as well as tobacco use and a lack of regular aspirin intake). If at least one of these factors is not at goal, the nurse will print documents for both the care provider and patient that explain the specific risks faced by the patient. The documents will also suggest ways to reduce the risks and prioritize suggestions.

“Many primary care providers and patients are not even aware of the additional risk for cardiovascular disease in patients with serious mental illness,” said Rebecca Rossom, MD, a psychiatrist who oversees the SMI Wizard trial. “The SMI Wizard gives patients and providers a quick way to evaluate cardiovascular risk factors and discuss potential changes.”

The SMI Wizard will offer specific recommendations to patients and providers. For example, if patients are overweight, it may refer them to a nutritionist, weight loss resources or even a medication therapy management pharmacist if the potential side effects of their current medications include weight gain.

“If the SMI Wizard can reduce the risk of cardiovascular disease among these populations, then we may be able to change the medical culture,” Dr. Rossom said. “Even when primary care providers know the risks among patients with serious mental illness, some don’t believe such patients can make necessary changes because they may have chaotic social situations or decreased social supports. Hopefully our trial will demonstrate that it is possible to reduce cardiovascular risk for this population using strategies that are evidence-based.”

Part of Dr. Rossom’s optimism is based on previous research showing that patients with schizophrenia have a higher rate of adherence to cardiovascular medications than the general population.

“We need to educate patients, families and providers about the increased cardiovascular risk in this population while providing them with tools to address the risk,” Dr. Rossom said. “The SMI Wizard could have a real impact.”

Did you know?

Approximately 2.4 million American adults live with schizophrenia and 6.1 million live with bipolar disorder.
RESEARCH KEY TO PATIENT-CENTERED CARE: A Q&A WITH ELIE GERTNER, MD

Elie Gertner, MD, is head of Internal Medicine/Medical Education, professor of medicine and chair of the Institutional Review Board (IRB) of Regions and HealthPartners, which reviews all the organization’s research. The IRB currently oversees more than 300 active studies. We asked Dr. Gertner about his own research and that of the organization.

Why is medical research important to you and HealthPartners?

At HealthPartners, the patient comes first. To accomplish this, we provide superb, state-of-the art medical care and conduct research. In this manner, we can be at the forefront of advances in medical knowledge and immediately translate these into practice to improve the lives of our patients.

Tell me about some of the research you are involved in.

As a rheumatologist, my patients usually have extremely complex autoimmune diseases which may affect every organ system in the body, including vital areas such as the brain, heart, lungs, and kidneys. [Lupus, vasculitis, gout and inflammatory arthritis are just a few of the conditions treated by rheumatologists.] Many of these diseases are uncommon or rare, and we at Regions and HealthPartners have developed great expertise in these areas. Thus we have described new syndromes and discovered novel treatments that are being used around the world.

For example, this year we published an important paper documenting a new treatment for a rheumatological condition experienced by patients in intensive care units. Previously, no conventional treatment had been considered safe. The impact locally, nationally, and internationally was almost immediate; within a day, the information was highlighted by numerous medical information services and we received follow-up questions from several continents.

As the chair of the IRB you have a unique view of the research going on in the organization. How would you characterize that work?

The research is all encompassing and covers almost every discipline. Most importantly, Regions and HealthPartners must protect the rights, safety and well-being of research subjects and their data, whether they are participating in a clinical trial, their medical data is being studied or they need an emergency drug or medical device that is not yet approved for use. The Board consistently sees the tremendous dedication on the part of our researchers to advance scientific knowledge in the interest of our patients while exhibiting the deepest commitment to ethical and responsible behavior in the conduct of research.

CREATE YOUR LEGACY OF CARING AND HOPE AT REGIONS HOSPITAL

Regions Hospital has a long history of providing outstanding care to our patients, family members and community. Perhaps you or a loved one has received our Level I Trauma care or were served by one of our award-winning specialties. As the second largest provider of charity care in Minnesota, we are here for everyone who needs us.

Some of our patients and their family members recognize the high quality care they received through a gift in their will. We would be honored to talk with you about your experience and to answer any questions you may have about supporting a patient care, research or medical education program that is significant to you and your loved ones.

For more information, contact Christine Pulkrabek at 651-254-3736 or visit our Giving Options website at www.RegionsHospital.com/giftplanning.
A three year grant from a Medtronic Philanthropy-funded program has made Regions Hospital part of a worldwide effort to reduce premature death from heart disease and diabetes among underserved populations. Called HealthRise, the program targets four countries: Brazil, India, South Africa and the United States. Regions Hospital Foundation was one of three Minnesota nonprofits that received HealthRise U.S. Grant Awards.

The HealthRise grant will allow Regions to expand its community paramedic program in partnership with the St. Paul Fire Department and West Side Community Health Services. Community paramedics are advanced life support personnel who provide non-emergency care to patients who have trouble visiting a doctor and do not qualify for traditional home care services. They can perform physical exams, draw blood samples, educate patients on the use of medications and evaluate a home for physical hazards. Bilingual community health workers (CHWs) will work alongside the community paramedics and assist in connecting patients to community resources.

“We know that only a small part of a person’s health is determined by the care they receive in hospitals and clinics,” said Megan Remark, President and CEO of Regions Hospital. “With the community paramedic program, patients are empowered to improve their environment and health care habits. In this way, they can live healthier, more independent lives.”

Regions will work with West Side Community Health Services to identify patients with heart disease and diabetes who qualify for the program. Community paramedics from Regions and St. Paul Fire along with CHWs will then coordinate care with the primary care providers to ensure the full needs of patients are met.

The HealthRise award will allow Regions and its partners to collaborate with fellow grantees and share results broadly for the benefit of all patients. According to Remark: “HealthRise is a perfect example of how, working together across organizations, communities and countries, we can tackle really tough health care challenges.”