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Thank you to our dedicated physicians, nurses and staff for once again making University Hospitals of Cleveland one of America’s Best Hospitals as ranked by U.S. News & World Report.

#1 for cancer care in Ohio
{University Hospitals Ireland Cancer Center}

#1 children’s hospital in the Midwest
{University Hospitals Rainbow Babies & Children’s Hospital}

and, nationally ranked as one of America’s best hospitals in the areas of: digestive disorders, ear, nose + throat, geriatrics, gynecology, heart + heart surgery, hormonal disorders, kidney disease, neurology + neurosurgery, orthopaedics, respiratory disorders, rheumatology, urology.

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University Hospitals HealthSystem
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Embracing opportunities

Since moving to Cleveland a year ago, I have immersed myself in the workings of the University Hospitals Health System. As I travel throughout Northeast Ohio, visiting our many patient care locations, I am continually impressed by both the excellence of patient care and the dedication and commitment of our physicians and employees.

I also see wonderful opportunities to serve our community, to enhance our ability to provide outstanding patient care, to conduct critical biomedical research, and to help educate the next generation of caregivers.

These opportunities are exciting – which leads me to the important role that philanthropy will play in our future.

Since 1866, and the establishment of University Hospitals’ predecessor, the Wilson Street Hospital, charitable giving has been critical to our success. Today, we depend on philanthropy more than ever.

To illustrate the point, consider that from 1990 through 2002, University Hospitals of Cleveland, including Rainbow Babies & Children’s Hospital and other University Hospitals Health System entities, received more than $200 million in philanthropic support. Think of what a greatly expanded fundraising program could accomplish in this decade in terms of healing the sick, enriching the lives of the families we serve, and attracting and retaining extraordinary physicians, nurses, researchers, and staff.

Through a strategic planning process, we are identifying major focal points for the Health System. In the coming months, you will hear about the creation of a System-wide Development plan, the recruitment of a chief Development officer for the Health System, and implementation of new fundraising initiatives.

University Hospitals Health System delivers an essential, highly valued community service: superb healthcare. We are composed of an outstanding group of physicians and employees. Our patients benefit from the “advanced care, advanced caring” for which we are so well known. Our challenge for the future is to find ways to continue providing that level of exceptional care and service in a financially responsible way. With your ongoing support, we will continue to be the region’s premier healthcare provider.

Thomas F. Zenty III
In its annual rankings of America’s Best Hospitals, *U.S. News & World Report*, again in 2003, named University Hospitals Rainbow Babies & Children’s Hospital the #1 children’s hospital in the Midwest. The magazine ranked University Hospitals Ireland Cancer Center the #1 cancer program in Ohio.

Of more than 6,000 American hospitals rated, University Hospitals of Cleveland (UHC) was ranked among the best for 14 out of 17 clinical areas: cancer; digestive; ear, nose and throat; geriatrics; gynecology (especially fertility issues and female cancers); heart and heart surgery; hormonal disorders (including diabetes); kidney disease; neurology and neurosurgery (including stroke and seizure disorders); orthopaedics; pediatrics; respiratory disorders; rheumatology; and urology.

Two University Hospitals Health System (UHHS) partners also made the prestigious list: Mercy Medical Center in Canton is ranked among the top hospitals in heart and heart surgery; and Southwest General Health Center in Middleburg Heights is ranked among the top hospitals in respiratory medicine.

Christopher M. Connor was elected last spring as chairman of the Board of Directors of both UHHS and UHC. Mr. Connor, who is chairman and chief executive officer of The Sherwin-Williams Company, joined the board in 2000 and has served as vice chairman of both boards. Active in a broad range of corporate, civic, and cultural affairs, Mr. Connor serves on the board of directors of National City Corporation; Diebold, Inc.; the National Association of Manufacturers; and the Rock and Roll Hall of Fame and Museum. He also is chairman of the board of trustees of Keep America Beautiful; and he serves on the boards of The Catholic Diocese of Cleveland Foundation, Cleveland Tomorrow, The Greater Cleveland Roundtable, The Cleveland Growth Association, United Way Services of Greater Cleveland, The Musical Arts Association, Boys Hope/Girls Hope, and Walsh Jesuit High School. A 1978 graduate of The Ohio State University, he and his wife, Sara, have three children.

Mr. Connor succeeds Henry L. Meyer III, who served a four-year term as board chair. At their annual joint meeting, the two boards adopted a resolution honoring Mr. Meyer for his “distinguished leadership, insightful wisdom, ever-present wit and devoted service.”

After more than 23 years of service to UHC, Robert B. Daroff, M.D., retired as UHC chief of staff and senior vice president for Academic Affairs, effective December 31. Similarly, after more than 30 years of service to UHC, Charlene Phelps, M.S.N., R.N., F.A.A.N., senior vice president for Nursing Integration, also retired at year-end. Both were celebrated at a November reception in their honor, which included Board resolutions to commemorate their compassionate care, teaching and leadership.

M. Orry Jacobs, UHHS senior vice president and executive director of University Hospitals Regional Network, retired July 31. Mr. Jacobs joined UHC in 1987 as senior vice president responsible for Strategic Planning, Marketing, Public Relations, and Development.

Arlene Rak, president of UHHS Bedford Medical Center since 1996, retired Sept. 1. Ms. Rak came to UHC in 1985 to help develop the Integrated Health Systems management center. She returned to UHC in 1992 as a strategy consultant and later as director of Elder Health and Home Care.

Robert Harr retired last summer as president and chief executive officer of UHHS Heather Hill Hospital, after 32 years with the institution. Under Mr. Harr’s leadership, Heather Hill grew to become one of the finest facilities of its kind in the region, offering rehabilitation services, long-term care, skilled nursing, assisted-living, home care and an Alzheimer’s disease center.
Nathan Levitan, M.D., was named chief medical officer and senior vice president effective September 1. Dr. Levitan, an oncologist who specializes in lung cancer, was most recently medical director of clinical cancer programs for University Hospitals Ireland Cancer Center.

An associate professor of medicine-hematology/oncology at Case Western Reserve University (Case), Dr. Levitan divides his time among patient-care, research, and teaching responsibilities. His clinical research focuses on thoracic oncology. A graduate of Tufts University School of Medicine in Boston, Dr. Levitan also earned a master’s degree in business administration from Case’s Weatherhead School of Management.

As chief medical officer, he shares leadership of the Office of Patient Care, Nursing and Medical Outcomes with Ronald E. Dziedzicki, R.N., UHC’s new chief nursing officer. A highly regarded nursing administrator with more than 20 years of health-care experience in military and civilian settings, Mr. Dziedzicki earned a bachelor’s degree in nursing from Ursuline College and a master’s degree in business administration from John Carroll University.

Dr. Fanaroff named interim Pediatrics chair

Avroy A. Fanaroff, M.D., was appointed in June to the post of interim chair of the Department of Pediatrics. Dr. Fanaroff succeeds Ellis D. Avner, M.D., who is on a sabbatical leave to focus on his internationally renowned research in polycystic kidney disease (PKD). Dr. Fanaroff, who holds the Eliza Henry Barnes Chair in Neonatology at Rainbow Babies & Children’s Hospital, also is a professor of neonatology in reproductive biology at Case. In announcing Dr. Fanaroff’s appointment, Fred C. Rothstein, M.D., president and chief executive officer of UHC, said, “Dr. Fanaroff is superbly qualified to assume this post, given his outstanding leadership in the Division of Neonatology over the last 30 years.” In addition, Dr. Fanaroff was recently named a Cleveland Magazine Medical Hall of Fame Inductee.

Responding to a national shortage of registered nurses, UHC launched a successful campaign in May to recruit 50 nurses in 50 days. The drive attracted 77 nurses in that time frame, according to Ron Dziedzicki, R.N., chief nursing officer for UHC.

Mr. Dziedzicki and his team designed creative recruitment strategies, including continuing-education reimbursements, interview incentives, and an aggressive advertising campaign. He hopes the new hires will eliminate the need to employ temporary nurses from agencies. “In doing so, we could effectively reduce hospital operating costs by about $7 million on an annualized basis,” Mr. Dziedzicki explains.

Though the team will continue to recruit, the focus has shifted to nurse retention. One well-received perk – nurse relaxation centers featuring 15-minute “chair massages,” yoga, music therapy, and aromatherapy – recently garnered recognition in Forbes.com.
athletic trainers and primary care physicians to provide a variety of services to children from grade school through college.

One of the keys to the success of young athletes is injury prevention, says Dr. Weiss Kelly. “A comprehensive physical exam prior to participating in sports can help identify problems that might predispose children to injury,” she explains. A sports-medicine physician measures a child’s flexibility, strength, balance and reaction time, limb length, foot imbalance, joint stability and posture. Physical therapists also can determine fitness capability and areas for improvement, while cardiology and pulmonary experts evaluate children with chest pain or trouble breathing during exercise.

Rainbow Babies & Children’s Hospital has established a new sports-medicine program to help young athletes prevent injury, maximize their performance, and recover from injuries as safely and quickly as possible. Under the leadership of Amanda Weiss Kelly, M.D., a multi-disciplinary team of physicians, surgeons, therapists and psychologists work with patients, families, coaches, athletic trainers and primary care physicians to provide a variety of services to children from grade school through college.

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Peggy Fleming celebrates women’s health with UHHS

Olympic figure skating champion and ABC Sports commentator Peggy Fleming was the featured speaker at a luncheon in May celebrating women’s health. Fleming, 1968 Olympic gold medalist and a breast cancer survivor, encouraged women to make personal health and wellness a priority. The event was organized by Meri B. Armour, senior vice president and general manager, Women’s, Children’s, and Cancer Services, to highlight the January opening of a Women’s Wellness Center at UHHS Chagrin Highlands Medical Center. Sponsors were the Cymaron Foundation, GlaxoSmithKline Oncology, and UHC Senior Vice President for Development Gary W. Weimer and his wife, Betsy.

Hospital website enhanced

University Hospitals Health System has updated its website with a new look and new selections to reflect the breadth of its community services, including primary care practices, community hospitals and outpatient centers. The site now offers a user-friendly, easy-to-navigate design; options for online enrollment in clinical trials; and opportunities to register for community-education programs. As before, patients may still use the UHHS website to request physician appointments. Please visit www.uhhs.com; while there, navigate to www.uhhs.com/giving to view the hospital’s current edition of Legacy magazine online.

Former UHC resident wins Nobel Prize

Peter Agre, M.D., an intern at UHC from 1975-1976, and a resident from 1976-1978, won the 2003 Nobel Prize in Chemistry for his 1991 discovery of the “channels” that regulate and facilitate water-molecule transport through cell membranes. The discovery is expected to enhance modern medicine’s understanding of diseases of the kidney, heart and nervous system. Dr. Agre is now a professor of biological chemistry at the Johns Hopkins University School of Medicine.
Parents of school-age children everywhere know how vital it is to collaborate with teachers on their offspring’s education. But how to maintain that relationship, when a child is hospitalized for an extended period? Long-term patients at Rainbow Babies & Children’s Hospital have the opportunity to connect with their classmates via a program called “Providing Education by Bringing Learning Environments to Students,” or PEBBLES - the world’s first "telepresence" robot.

Rainbow is one of five children’s hospitals in the nation participating in a federally funded program to provide PEBBLES technology to hospitalized children. The funding, which covered purchase of the first two sets of PEBBLES robots, is administered by a private, non-profit educational foundation, The Learning Collaborative.

“Chronically ill kids really suffer, both academically and psychologically, from isolation,” says Barbara Baetz-Greenwalt, M.D., Rainbow physician and assistant professor of infectious disease, pediatrics at Case. "The learning gaps these children experience are so significant that 50 percent often do not finish high school. PEBBLES creates a presence so strong that teachers, students and hospitalized children react as if all were together in the classroom.”

Indeed, the classroom robot has a “hand” – operated by a video-game style controller in the hands of the hospitalized child – that raises like any other child’s hand in class. Moreover, the head on each PEBBLES robot turns up to 330 degrees and makes it possible for the remote child to “look” around the classroom and “zoom” in and out to focus on objects in the room.

PEBBLES utilizes two child-sized robots that connect homebound, hospitalized or special needs children with their classmates. Each robot includes video and audio capabilities, plus a scanner/printer for sending and receiving homework and other documents.

Dr. Baetz-Greenwalt expects the technology will be useful for children who need long-term care for a variety of illnesses and injuries including cancer, cystic fibrosis, orthopaedic problems and trauma.

PEBBLES was developed by Telbatics, a Canadian videoconference and robotics company, in partnership with the University of Toronto and Ryerson University, also in Toronto. The current version of PEBBLES was redesigned and manufactured in partnership with IBM.
The Iris S. and Bert L. Wolstein Research Building was dedicated at a gala celebration in October. Mr. and Mrs. Wolstein made a $25 million gift to University Hospitals of Cleveland and Case Western Reserve University to name the new building, which will house scientists and physicians who will collaborate closely on medical research.

More than 600 guests at the dedication enjoyed fabulous food and drink, musical ensembles, mimes, stilt walkers, festive decorations, and tours of the laboratories, where scientists explained the work they will conduct in the state-of-the-art facility.

In further recognition of the Wolsteins’ gift - the largest single gift in the hospital’s history - University Hospitals awarded the couple its highest philanthropic
Dr. and Mrs. Richard A. (Donna) Walsh,
Dr. and Mrs. Fred C. (Jackie) Rothstein

Etched crystal gift presented to Bert L. and Iris S. Wolstein, who were also honored during the dedication with the hospital's 2003 Samuel Mather Award for Philanthropy.

Mr. and Mrs. Richard W. (Patricia) Pogue

Howard S. Nearman, M.D.,
James A. Schulak, M.D.,
Sanford D. Markowitz, M.D., Ph.D.,
Suzanne Schaffer, M.D.

Terri Hamilton Brown,
Darnell Brown

Kimberly Osborne,
Brock Milstein, Evelyn Charna,
Gayle Singerman, Myron Charna,
Bert L. Wolstein

Thomas F. Zenty III,
Edward M. Hundert, M.D.,
Fred C. Rothstein, M.D.,
Iris S. Wolstein,
Bert L. Wolstein,
Christopher M. Connor,
Ralph I. Horwitz, M.D.
honor, the Samuel Mather Award for Philanthropy, named for one of University Hospitals’ most generous benefactors, Samuel Mather (1851-1931).

In her remarks at the dedication, Mrs. Wolstein encouraged others to experience “the sweet taste of giving.” Mr. Wolstein said: “We’re not done yet!”

The day after the event, Case and University Hospitals co-sponsored a symposium to address the topic of “Science and Education Serving Society.” Invited speakers included: Ohio Gov. Robert Taft; Mr. Wolstein; Thomas F. Zenty III, president and chief executive officer of University Hospitals Health System; Fred C. Rothstein, M.D., president and chief executive officer of University Hospitals; Edward M. Hundert, M.D., Case president; Ralph I. Horwitz, M.D., dean of the Case School of Medicine and director of the Case Research Institute; Sanford D. Markowitz, M.D., Ph.D., UHC oncologist, Ingalls Professor of Cancer Genetics at Case, and a Howard Hughes Medical Institute investigator; James W. Kazura, M.D., professor of medicine and director of the Center for Global Health and Diseases; and the keynote speaker, Leon E. Rosenberg, M.D., lecturer in molecular biology and public and international affairs at Princeton University.

The Wolstein Research Building stands six stories tall and occupies 320,000 square feet. It includes lab space for 900 researchers, a 180-seat auditorium, and meeting rooms to accommodate up to 60 people. The building’s layout promotes collaboration and communication, with abundant common areas and conference rooms and an open floor plan.
By Ann T. McGuire

Ninety percent of the world’s children are born in “less developed countries,” according to the latest figures from the U.S. Census Bureau. In these countries, malnutrition, as well as malaria and other infectious diseases, threaten children’s chances of survival.
To help improve the outlook for these children, Rainbow Babies & Children’s Hospital exports its expertise in pediatric medicine through a program that also attracts top-shelf medical residents to Cleveland.

The highly acclaimed Rainbow Center for International Child Health was created by Karen N. Olness, M.D., a pediatrician with 30 years’ experience in treating children and training health-care professionals in developing countries.

Dr. Olness, now co-director of the Center, was recruited to University Hospitals of Cleveland (UHC) and her faculty position in the School of Medicine at Case Western Reserve University (Case) in 1987 as Division Director of General Academic Pediatrics. Dr. Olness launched the Rainbow Center for International Child Health by establishing the nation’s first international health track in a pediatric residency program. Rainbow’s international health residency offers medical-school graduates the option of learning – in a structured curriculum and in clinical rotations in the Third World – about the medical needs of children in developing countries. The first residents entered the program in 1989.

Chandy C. John, M.D., joined Dr. Olness in 2001 as co-director of the Center, adding his expertise in infectious diseases. Rainbow Center for International Child Health has grown to include components in service, education, and research, echoing University Hospitals’ mission: “To heal, to teach, to discover.”

TO DISCOVER

Under the auspices of the Center, Dr. Olness conducts HIV research in Uganda, Dr. John conducts malaria research in Kenya and Uganda, and Anna M. Mandalakas, M.D., director of Rainbow’s Adoption Health Service, conducts research focusing on (among other things) infectious-disease screening in immigrant children. Researchers share their findings with medical students, residents, fellows and other physicians in seminars, journal groups, and courses that enrich the academic environment at University Hospitals.

Dr. John’s research on malaria, a disease that claims the lives of more than 1 million children under 5 every year, is in collaboration with James W. Kazura, M.D., director of Case’s Center for Global Health and Diseases and a faculty member in UHC’s Department of Medicine. “Good research can make a huge difference in the health of children in developing countries,” Dr. John says. “And there’s still a lot of work to be done in the field of malaria research.”

While the projects of the Rainbow Center for International Child Health are many and varied, Dr. John stresses the whole is more than the sum of its parts. “What we have developed and are refining is a comprehensive center that uses education and research to produce practical, measurable improvements in healthcare for children in developing countries.”

TO TEACH

Education through the Center takes the form of the original international health track in Rainbow’s pediatric residency program, a fellowship program at Rainbow for physicians interested in international child health, a pediatric residency program in Laos, a course offered in conjunction with Case entitled “Preparation for International Health Service,” and a disaster-management course focusing on the unique needs of children in humanitarian emergencies.

TO HEAL

The Center’s service component includes the medical care delivered by residents, fellows, and volunteer UHC physicians who travel to Third World hospitals affiliated with the Center; an international adoption health service (see related story, Spring/Summer 2003 Legacy); and a “child travel” clinic, which offers appropriate immunizations and other medical support for children from Northeast Ohio, who are traveling to tropical countries.

WANTED: OUT-OF-THE-BOX THINKERS

This comprehensive approach to international child health is increasingly attractive to American medical students. “The international health track brings us great residents,” says Dr. John, who now runs this program. An assistant professor of pediatric infectious diseases and international health at Case, Dr. John notes that in the past two years, 39 of the 48 incoming pediatrics residents have enrolled in the international health track. “It is clearly a big
draw and something that sets Rainbow apart. There is a big interest in this among medical students. More than ever, I'd say.”

In fact, adds Dr. Olness, “We are the only children’s hospital in the country with a program like this; a couple of other facilities have tried for a year or two, but they did not continue.”

The program is obviously good for children in the developing world who are desperately in need of modern medical care, Dr. John says, and it’s good for Rainbow, too. “Universities and employers always say they want young people who think differently — out-of-the-box thinkers. I assure you, our residents do think out of the box. International health is not the obvious choice. It’s not linear; it’s not simple. The kind of person who chooses this is exactly the kind of person we want here.”

**LIFE-ALTERING EXPERIENCES**

Dr. Olness and her husband, Hakon Torjesen, established an ongoing collaboration with Khon Kaen University in Thailand during her whirlwind first year in Cleveland. At the time, Mr. Torjesen was executive director of the former Center for International Health at Case. Rainbow pediatric residents—as well as Case students of medicine, nursing, and engineering—periodically volunteer at Khon Kaen. Two UHC physicians, Dr. Russell W. Hardy, Jr. (see related story) and Dr. Mary F. Hellerstein, have served at Khon Kaen, which Dr. Olness calls a “sophisticated, well-organized place.”

In the early 1990s, she added a pediatric residency program at the National University of Laos. That program, which Dr. Olness says is “the first post-graduate training Laos has ever had,” was designed to educate Lao residents, but six Rainbow residents in the international health track have served clinical rotations there.

A. Desiree La Beaud, M.D., was one. “It changed my life,” she says. “It was striking to see how versatile Lao doctors and families were — how generous and happy they were despite poverty and limited resources.” Dr. La Beaud is now serving a Rainbow fellowship in pediatric infectious diseases.

Several physicians from UHC’s faculty have taught in Laos on a pro bono basis, including Ellis D. Avner, M.D., currently on sabbatical leave from his positions as Rainbow’s chief medical officer, and professor and chairman of Pediatrics (Case); Richard J. Martin, M.D., chief of Rainbow’s Division of Neonatology; and Michael L. Nieder, M.D., vice chairman of the Department of Pediatric Hematology and Oncology.

The Lao pediatric residency program inspired three physicians—Robert Stern, M.D., assistant professor in the Department of Medicine; Keith B. Armitage, M.D., director of Residency Programs; and Richard A. Walsh, M.D., chairman of the Department of Medicine—to establish a similar program at the National University of Laos for adult patients.

**VO LUNTEERISM FUELS CENTER PROGRAMS**

“We feel very blessed by these amazing colleagues who just give. They do this, I suppose, because they think it has meaning and it’s worthwhile,” Dr. Olness says.

Dr. John agrees. “Most of our visiting lectures and other programs are done on goodwill,” he notes. Dr. Hellerstein, for instance, volunteers full time in Rainbow’s Adoption Health Service. John H. Kennell, M.D., director of the Behavioral Pediatrics Fellowship Program at Case and associate pediatrician at Rainbow; and Douglas S. Kerr, M.D., Ph.D., professor of pediatrics, biochemistry and nutrition at Case, director of Rainbow’s Center for Inherited
Disorders of Energy Metabolism and physician in Rainbow's Division of Endocrinology and Metabolism; have volunteered for 17 years with the "Preparation for International Health Service" course. Yet another dedicated volunteer, Patricia Douthitt, provides clerical support to the Center on a volunteer basis.

“The Board of Trustees of the Rainbow Babies & Children's Corporation covers the salary of our coordinator, Rita Reber, and we are so grateful to them because she has helped transform the program, especially our residency track, which we have strengthened academically in recent years and plan to grow further,” Dr. John says. “With additional funding, we could expand medical student and resident education, investigate more of the important research questions that have evolved from our work overseas, and – perhaps most importantly – implement some of the changes that have been demonstrated by our research to improve children's health in these countries.”

COURSE FOCUSES ON CHILDREN IN DISASTERS

Another facet of the Rainbow Center for International Child Health is a disaster-management training course, which focuses specifically on the needs of children in complex humanitarian emergencies. The course has been offered in Thailand, Pakistan, Ethiopia, Nicaragua, India, Panama, and Syria and an accompanying handbook has been translated into four languages.

Marisa Herran, M.D., associate director of Rainbow Center for International Child Health and director of Latin American Child Health Projects at Rainbow, volunteered to organize the course in Nicaragua in May and in Panama in November. “I was a refugee and this is my way to give back,” says Dr. Herran, a Cuban national who is a clinical instructor of pediatrics at Case School of Medicine. “For the sake of the children, we should do as much as possible. That’s what we are all moved by.”

The September 11 terrorist attacks underscored the need for a domestic version of the course, notes Dr. Olness, who serves on the domestic terrorism task force of the American Academy of Pediatrics. In December, the Center presented the course to Ohio healthcare professionals, city and school officials, and emergency personnel.

“Children are not simply little adults,” Dr. Olness insists. “The sensitive nature of their developing minds and bodies places them at disproportionate risk.”

That’s a message the Rainbow Center for International Child Health continues to reinforce at home and abroad.

Ann T. McGuire is a manager/writer in the Department of Development at University Hospitals of Cleveland.

FIENS teaches best practices to physicians in developing nations As an academic medical center, University Hospitals of Cleveland (UHC) has a history of attracting broad-minded physicians concerned with international health. Over the years, many have traveled to developing countries to volunteer their services. Neurosurgeon Russell W. Hardy, Jr., M.D., takes that concept to the next level. Not only has he treated patients and taught his counterparts – in Peru, Chile, Honduras and Russia – Dr. Hardy also chairs a foundation that annually sends some 10 neurosurgeons abroad.

The Foundation for International Education in Neurological Surgery (FIENS) was established in 1969 to educate physicians in the developing world in the latest techniques of neurosurgery. FIENS currently sends volunteers to teaching hospitals in Ghana, Honduras, India, Indonesia, Nepal, Peru, the Philippines, and Zimbabwe.

“This is an organization that’s trying to improve standards of neurosurgery around the world. Our goal is to leave behind a legacy of better neurosurgical care,” Dr. Hardy explains.

Coincidently, one of FIENS sites is at Khon Kaen University in northeastern Thailand, where Dr. Hardy’s colleague, Karen N. Olness, M.D., established a volunteer pediatric program through the Rainbow Center for International Child Health (see main story).

Asked why he chose to become involved in FIENS – and stay involved for 10 years – Dr. Hardy says, “There was a need and an opportunity to do something to improve the neurosurgery profession in developing countries.”

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Marisa Herran, M.D., associate director of Rainbow Center for International Child Health and director of Latin American Child Health Projects at Rainbow, volunteered to organize the course in Nicaragua in May and in Panama in November. “I was a refugee and this is my way to give back,” says Dr. Herran, a Cuban national who is a clinical instructor of pediatrics at Case School of Medicine. “For the sake of the children, we should do as much as possible. That’s what we are all moved by.”

The September 11 terrorist attacks underscored the need for a domestic version of the course, notes Dr. Olness, who serves on the domestic terrorism task force of the American Academy of Pediatrics. In December, the Center presented the course to Ohio healthcare professionals, city and school officials, and emergency personnel.

“Children are not simply little adults,” Dr. Olness insists. “The sensitive nature of their developing minds and bodies places them at disproportionate risk.”

That’s a message the Rainbow Center for International Child Health continues to reinforce at home and abroad.

Ann T. McGuire is a manager/writer in the Department of Development at University Hospitals of Cleveland.
Karen and Jeg Coughlin, Jr., live a fast-paced life – the kind that many young couples only dream about. Mr. Coughlin, 33, is a two-time National Hot Rod Association (NHRA) POWERade™ Drag Racing Series Pro Stock Champion. The couple crisscrosses the country, participating in more than 25 NHRA races each year. They might seem to have it all, but seven years ago, the Coughlins ran the race of their lives against cancer. They emerged victorious and committed to helping others.

Each year, nearly 13,000 women in the United States are diagnosed with cervical cancer. After the birth of their son, Jeg III, in 1997, Mrs. Coughlin was one of those women, diagnosed with advanced cervical cancer in her mid-20s, during a routine doctor’s examination.

To complicate matters, her husband was away at a race when Mrs. Coughlin received the diagnosis. Not wanting to alarm him, she waited until he returned home. “It was a matter of days – hours really – between my diagnosis and radical surgery. I couldn’t begin to conceptualize how this would affect my family or me.” Although in a state of disbelief, Mrs. Coughlin knew she had to take action. She quickly underwent lifesaving surgery and treatment at the Arthur G. James Cancer Hospital at The Ohio State University in Columbus.

Today, Mrs. Coughlin is cancer-free, but the experience ignited a new passion for the couple, JEG’S Foundation – Racing for Cancer Research. “Like many cancer survivors, I felt the need to give back. We have a lot to be thankful for,” she says.
JEG’S Foundation supports pioneering cancer treatments at The James Cancer Hospital, and University Hospitals Ireland Cancer Center. Both are cancer treatment, research, and education facilities honored by the National Cancer Institute with the prestigious Comprehensive Cancer Center designation, in recognition of their exceptional capabilities. In addition, JEG’S Foundation encourages individuals to volunteer for organizations devoted to cancer-related causes, and also to take an active role in their own health through education and preventive measures.

By creating JEG’S Foundation, the Coughlins harnessed the support of their entire family, including their extended JEG’S Racing and Mail Order families. “Cancer touches us all, since one in four people are diagnosed with some form of this disease in their lifetime,” Mrs. Coughlin says. JEG’S Racing includes Jeg Coughlin, Sr. (a bladder cancer survivor), and his other sons Mike, Troy and John. Each team member’s uniform bears the symbol of JEG’S Foundation – a multi-colored cancer awareness ribbon, created by Mrs. Coughlin to symbolize the many types of cancer.

In addition to supporting cancer research through contributions to The James Cancer Hospital and Ireland Cancer Center, the Coughlins promote cancer awareness by distributing cancer prevention and treatment literature at their races across the nation.

At University Hospitals of Cleveland, JEG’S Foundation has drawn attention to their cause in a variety of ways. Mr. Coughlin’s championship racecar has been displayed twice in the hospital’s Atrium. Mr. Coughlin and his brothers also visited pediatric oncology patients at Rainbow Babies & Children’s Hospital. The group toured a floor specifically designed for children with suppressed immune systems, and distributed JEG’S teddy bears and coloring books. They also posed for photos with some of their youngest fans. Says Mrs. Coughlin: “When you see the faces of the children, then you know what we are working for.”

“Karen is an inspiration to all of us in the cancer field,” says Meri B. Armour, senior vice president and general manager, Ireland Cancer Center. “By transforming her own experience with cancer into a committed campaign to improve the lives of others, she reaches thousands of racing fans around the country, brings a message of hope to patients and their families, and a promise of continued support to researchers and physicians dedicated to discovering new treatments. Literally, we could not continue in our mission to find a cure without people like Karen Coughlin.”

Mr. Coughlin’s championship racecar was also displayed at the Five Star Sensation, a biennial event, co-chaired by internationally renowned chef Wolfgang Puck and interior designer Barbara Lazaroff, which brings together the world’s finest chefs and vintners to benefit Ireland Cancer Center. JEG’S Racing’s chef, Nicky Morse, himself a cancer survivor, pleased the hungry crowd with some of the team’s favorite dishes. The team surprised Five Star guests with an enormous 18-wheel truck, which serves as home base for JEG’S Racing on the road.

As would be expected of a racing family, JEG’S Foundation has no intention of slowing down in their race against cancer. “Our family has been so blessed. Forming JEG’S Foundation is one small way we can help others meet the challenge of surviving cancer,” Mr. Coughlin says.

Jeanne Michaelides, long-time JEG’S friend, contributed to this article.
Imagine a treatment to cure leukemia and lymphoma. Indeed, doctors at Ireland Cancer Center (ICC), a partnership of University Hospitals of Cleveland and Case Western Reserve University, report cure rates of 70 percent to 80 percent in patients who might otherwise have died from these cancers and other blood disorders. These incredible and encouraging statistics are made possible by advances in stem cell research and transplantation.

Once a topic familiar only to medical researchers and clinicians, stem cell research has become a more mainstream phrase in recent years. While some countries, including England and Sweden, and even some states in this country, notably California and New Jersey, engage in the hotly debated embryonic stem cell research, doctors at Ireland Cancer Center conduct only non-embryonic, therapeutic stem cell research. In fact, University Hospitals of Cleveland (UHC) has invested and engaged in non-embryonic stem cell research and pioneered clinical trials for more than two decades, yielding the promising outcomes already cited and more.
“We used to call this ‘bone marrow transplantation,’” explains Stanton “Stan” L. Gerson, M.D. “It took us a decade to determine it was the blood stem cells in the bone marrow – called hematopoietic stem cells – that were therapeutic. It took us another decade to determine how to purify the stem cells, then isolate and infuse the 1 percent of the cells with healing capabilities.” Dr. Gerson is director of The Center for Stem Cell and Regenerative Medicine (see “$19.4 million” sidebar, page 20), chief of the Division of Hematology and Oncology at UHC, and Asa and Patrick Shiverick Professor of Hematological Oncology at Case Western Reserve University.

STEM CELL PRIMER

So what are stem cells, what other potential benefits do they offer, and how are they collected?

According to the National Institutes of Health, stem cells are primitive cells that can be derived from many tissues in the body. Stem cells are distinguished by their remarkable ability to divide and renew themselves, creating a repair network, where needed, in specific organs of the body. Each time a stem cell divides, it can either remain an unspecialized stem cell or, under certain physiologic or experimental conditions, be transformed, as needed, into specialized muscle, blood, blood vessel, lung, liver, pancreatic and brain cells. In fact, Minneapolis-based National Marrow Donor Program reports that more than 70 diseases already are treatable by blood stem cell transplant.

Because stem cells can miraculously “morph” into specialized cells and tissues, some scientists believe they hold the key to treat and cure myriad more diseases, conditions, and disabilities, including Alzheimer’s disease, diabetes, heart disease, osteoarthritis and rheumatoid arthritis, Parkinson’s disease, spinal cord injury, and stroke.

“We are finding stem cells in most of the tissues in which we look, using sophisticated detection, isolation and growth methods,” Dr. Gerson says. “Now that we can collect and manipulate these cells, we are developing new cell therapies that have the potential of replacing diseased and aging cells. After all, drugs just try to get the diseased cells to work better. Here we are on the verge of proposing to introduce new ‘replacement’ cells to fix the underlying problem. These advances will come slowly, but surely, as specific stem cell types are analyzed and specific diseases are targeted for therapy.”

One source of non-embryonic stem cells is umbilical cords of newborn babies. Collecting cord blood poses no health risk to baby or mother, and is obtained only with the mother’s signed consent. Cord blood usually is gathered by needle aspiration from
the umbilical cord after birth. In a sense, before they are discarded, umbilical cords that once nourished “in utero” can give life again. “Hematopoietic (blood forming) stem cells that are discarded from an umbilical cord are very different from adult stem cells. Their capacity to grow, differentiate and do special things is quite remarkable,” Dr. Gerson notes. “They haven’t lost their capacity to adapt.”

Stem cells also can be obtained, or “harvested” to use stem cell vernacular, from bone marrow, blood, and organs in adults and children. In bone marrow collection, a hollow needle is inserted into the pelvic bone to reach and aspirate the marrow, which is a sponge-like material that is rich in stem cells.

The process to extract adult blood stem cells is called apheresis. A few days before the procedure, the donor receives injections of a medication that increases the number of blood stem cells. During apheresis, blood is drawn from one arm, circulated through a machine that separates out stem cells, and the remaining blood is returned through the donor’s other arm.

In each case, harvested cells are tested, processed, and frozen for later use, or immediately infused into the recipient.

**DEDICATED TEAM OF STEM CELL EXPERTS**

More than 60 faculty and support staff are dedicated to advancing the stem cell program at Ireland Cancer Center, including several researchers and physicians who are pioneers in their areas of expertise. “Drs. Arnold Caplan and Stephen Haynesworth, from Case, invented methods to isolate mesenchymal stem cells and approached us for help developing these cells as therapy. Mesenchymal stem cells reside in the marrow, and have the capacity to differentiate into bone, cartilage, tendon, fat, and perhaps organs, as well. In 1995, Dr. Hillard Lazarus and I began the first clinical trials using mesenchymal cells,” Dr. Gerson adds.

Dr. Lazarus has served as director of the Blood & Marrow Transplantation Program at ICC since its inception in 1982. “When we first started that mesenchymal stem cell trial, it was considered risky and novel. Today, there are a number of trials underway around the country, because of that first trial.

“Dr. Lazarus and Dr. Ömer Koç are leading the mesenchymal stem cell clinical effort now,” Dr. Gerson adds. Dr. Koç brings a new dimension because of his interest in improving the outcomes of stem cell transplantation by using mesenchymal stem cells to reduce side effects on the immune system. He directs ICC’s program in hematologic malignancies.

**Kenneth M. Pasko** is a cancer survivor. On June 15, 2001, the 41-year-old sales engineer from Brecksville, Ohio, was diagnosed with leukemia. Today, he is cancer-free, thanks to a life-saving stem cell transplant at University Hospitals Ireland Cancer Center (ICC).

“I was always a healthy person. I worked out every day. But in early 2001, I noticed that I was tired a lot. In June, I started bruising easily. Then one day, I collapsed at the gym,” Mr. Pasko recalls.

His doctor ordered blood work. “The following morning at 9, he called and told me I had leukemia. He said: ‘You need to get to the Ireland Cancer Center by noon today.’ That day, they extracted a bone marrow sample from me.”

Mr. Pasko’s marrow was collected as a first step in pairing him with a suitable stem cell donor. Luckily, his younger sister was a

Leukemia survivor Ken Pasko and Rock, his appropriately named, 110-pound Bernese Mountain Dog. Rock doesn’t “do” stairs, but the day Mr. Pasko was diagnosed, the dog was found lying at the foot of his master’s bed. It’s the only time Rock has ever ventured up or down stairs.
Mary J. Laughlin, M.D., Ph.D., a pioneer in umbilical cord blood transplants, and director of Allogeneic Bone Marrow Transplantation at UHC, joined Ireland Cancer Center from Duke University in December 1997. Within two weeks of her arrival, Dr. Laughlin performed the first-ever cord blood transplant in an adult in the state of Ohio.

Vince Pompili, M.D., director of Interventional Cardiology at UHC, is working with Dr. Laughlin to explore the use of vascular stem cells to heal damaged heart muscles.

“Hematologist/oncologist Keith R. McCrae, M.D., leads a large program in vascular cell biology, so the applied work with stem cells by Drs. Laughlin and Pompili is rooted in Keith’s work,” says Dr. Gerson, noting the amount of team collaboration.

Physician-scientists at the cancer center have subsequently conducted a variety of studies in patients undergoing blood, umbilical cord, and mesenchymal stem cell transplants; in patients with malignancies; in children with genetic disorders; and to reduce the risks of immune reactions after hematopoietic stem cell transplants.

In Case’s Department of Neurosciences, Robert H. Miller, Ph.D., and Jerry Silver, Ph.D., are investigating how neural stem cells can treat multiple sclerosis and repair spinal cord injuries. “Both are incredibly unmet medical needs,” Dr. Gerson says. “The perfect match. According to the National Marrow Donor Program in Minneapolis, only 30 percent of patients find a donor match in their family.

Surgery to remove his spleen – dangerously enlarged due to the leukemia – and other hurdles, postponed Mr. Pasko’s transplant. In the meantime, Konnie Tlasky traveled from New Milford, CT., to Cleveland to donate stem cells that saved her brother’s life.

Mr. Pasko spent the next five weeks in isolation at ICC, while his bone marrow and immune system were depleted by an aggressive course of chemotherapy, to create a “clean slate,” in preparation for his transplant.

Stem Cell Transplant Day arrived, February 6, 2002, and so did his team of cancer and stem cell specialists. “They attached a syringe – which looks like a foot-long turkey baster – to a port in my chest,” he recalls. “They slowly injected the stem cells, which were pink and resembled caviar. It took about four hours to inject four syringes. During that time, I remember a taste of garlic in my mouth, (which is from the chemical used to preserve blood prior to transplant) and heat flashes.

“You don’t notice a difference right away, but I had no doubt this would work. I forced myself to eat. I smiled every day. I’m convinced that a positive attitude makes all the difference in the world.”

Days passed; his red-blood cells regenerated first, then his white-blood cells. He was discharged from the hospital in late February.

“Dr. Stan Gerson led the entire process. He’s the best at stem cell transplantation. We have a special bond – Sally Erin, too, my bone marrow/stem cell transplant coordinator,” Mr. Pasko says.

“Stem cell transplantation saved my life. I feel great, thanks to my entire team at ICC, my family, friends, all the prayers, and my dog, Rock, who gave me a reason to get up every morning, even when I didn’t feel like it. I’m in remission now and I’m a better person because of my leukemia; it gave me a whole new perspective on life.
number of people with spinal injuries is significant, but it’s really nothing compared with the degree of spinal injuries suffered as a result of aging and bone disease.

“Finally, there’s my own gene therapy trial, in which we’re putting a new drug-resistance gene into purified hematopoietic blood stem cells and trying to determine how to protect these cells from chemotherapy so cancer patients experience fewer side effects,” he adds.

The UHC/Case stem cell “esprit de corps” extends well beyond the boundaries of the academic medical center. Indeed, The Center for Stem Cell and Regenerative Medicine is an entirely collaborative effort that unites UHC and Case with peers from The Cleveland Clinic, Athersys Inc., and other research entities.

“Much of this work,” notes James K. V. Willson, M.D., Ireland Cancer Center director, “is coordinated through The Case Comprehensive Cancer Center, which is developing clinical research that bridges the institutions. I think all of the physicians and clinical scientists recognize that, to promote and advance clinical research, it’s best to collaborate,” Dr. Willson says. “It speaks to the strength of the expertise, and it promotes us as a center for that expertise.

“Given our improved understanding of how cells grow, survive and differentiate, our own cells may well emerge as the basis of new treatment and cures for many chronic diseases across all disciplines in medicine in the next five to 15 years. We are just beginning to harness the full and broad potential of stem cells as therapy,” Dr. Willson adds.

“The strong tradition for innovative stem cell clinical research at UHC is recognized nationwide and is a reputation on which we intend to build.”

Marcia Meermans Aghajanian is editor of Legacy magazine, and assistant director in UHC’s Department of Development.

State commits $19.4 million to promote stem cell research

A research consortium led by a University Hospitals of Cleveland physician received $19.4 million from the state of Ohio early in 2003, to develop new, non-embryonic stem cell technologies to treat disease. The Center for Stem Cell and Regenerative Medicine is a collaborative effort involving University Hospitals, Case Western Reserve University, The Cleveland Clinic, Athersys, Inc., and other research partners committed to improving patient care by developing and commercializing stem cell biology therapeutics to treat a broad range of human diseases.

“The Center for Stem Cell and Regenerative Medicine represents a breakthrough initiative for Ohio,” says Stanton “Stan” L. Gerson, M.D., director of the new center, chief of the Division of Hematology Oncology at University Hospitals and professor of hematological oncology at Case. “The center launches a new program using non-embryonic stem-cell therapy, supplanting the use of drugs and devices to treat and cure diseases.”

Fred C. Rothstein, M.D., president and chief executive officer of University Hospitals, notes that, “More than 20 years ago, researchers and physicians at University Hospitals of Cleveland and Case began to see the potential of stem cells. Stem cell research here, supported by more than $20 million in annual federal funds, is a perfect example of bench-to-bedside science, producing real cures in cancer and other diseases using stem cells from adults, children, even from the umbilical cords of newborn babies.”

The state grant represents nearly $10.9 million in new funding from Ohio’s Wright Capital Fund and $8.6 million from the state’s Biomedical Research and Technology Transfer Fund. In addition to state funding, the new research center will receive more than $20 million from University Hospitals, Case, and The Cleveland Clinic to match the Wright Capital Fund Money.

Initially, the center will focus its research on common disorders, including degenerative joint disease, congestive heart failure, leukemia and lymphoma, and degenerative neurological diseases.

Within the next five years, the center will seek to recruit 26 new investigators, who will bring funding from the National Institutes of Health and join the NIH-funded investigators currently associated with the center. Over time, the center could bring as many as 140 new jobs to the area.

“The center catapults Ohio to the forefront of stem cell and tissue engineering translational research,” Dr. Gerson notes. “We have a portfolio of expertise that could be spun off to a corporate entity, or collaborate with an existing company, to really expand our capabilities for the isolation, production and development of stem cells. It’s a huge industry that needs to be created and we would love to see it happen here, because it will all come back to benefit our patients.”
UHC offers new treatment for single-sided deafness

University Hospitals of Cleveland (UHC) now offers a surgical solution to single-sided deafness, a condition affecting an estimated 60,000 people in the United States.

Thanks to approval from the U.S. Food & Drug Administration (FDA), Cliff A. Megerian, M.D., director of Otology and Neurotology at UHC, first performed the specialized surgery early last year. The minimally invasive procedure involves implanting a three-part hearing restoration system into the patient’s skull behind the deaf ear.

The tiny titanium device transfers sound waves to the normal-hearing ear. Attached to the device is a removable sound processor that transfers sound waves through the skull. The sound waves stimulate the cochlea in the normal-hearing ear, enabling the patient to hear from both sides.

The procedure requires only local anesthetic and typically takes about an hour. The system, produced by Entific Medical Systems, has been used in Europe for decades, but only won FDA approval in 2002 for use in adults in the U.S.

“Most patients with single-sided deafness are dissatisfied with traditional hearing aids and look for a better solution. This option can make a difference in their lives,” says Dr. Megerian, also an associate professor of medicine at Case Western Reserve University. “This new treatment is a safe and proven solution.”

Researchers to develop new drug to treat myasthenia gravis

Under a new $4.7 million grant from the National Eye Institute, researchers from University Hospitals of Cleveland and Case Western Reserve University School of Medicine hope to develop in five years a drug ready for human clinical trials to treat myasthenia gravis, an autoimmune disease that weakens muscles, affects vision, and, in the most severe cases, requires patients to go on artificial ventilation. According to the National Eye Institute, this is the largest single project grant it has awarded to an Ohio institution.

The grant to Henry J. Kaminski, M.D., member of the Visual Sciences Research Center at UHC and Case, and a professor in the Department of Neurology at Case, brings together a group of experts from both institutions, and the Louis Stokes Cleveland Department of Veterans Affairs Medical Center, who are well-versed in myasthenia gravis, muscle biology, genetics, and related drug development. Among the unique features of this research project is that it will be the first to apply genomic analysis to this disorder and will be the first to comprehensively investigate eye muscle involvement by the disease.

UHC physician develops major breakthrough in psoriasis treatment

A new psoriasis medication studied at UHC seems to bring about long-term remission in patients diagnosed with this painful, autoimmune skin disease.

Kevin D. Cooper, M.D., chairman of the Department of Dermatology at UHC and Case, is a co-inventor of Amevive, the first biologic therapy for psoriasis to obtain U.S. FDA approval. He says Amevive probably represents one of the biggest advances in psoriasis treatment in 20 years and was the product of basic lab research on psoriasis and fusion protein technology at Biogen, Inc.

Dr. Cooper performed research with UHC dermatologist and Case Associate Professor Neil J. Korman, M.D., Ph.D., and with Case Assistant Professor Thomas S. McCormick, Ph.D., to understand how Amevive works. Results indicated that the drug interferes with the immune-system response that causes autoimmunity, while leaving other critical functions of the immune system intact. The drug’s ability to rebalance the immune system is unique, and could lead to new therapies for other autoimmune diseases, Dr. Cooper says.

“What makes this successful therapy so novel for patients who respond is the ability of the drug to bring about long-term remission,” Dr. Cooper adds. “Traditional and other newer therapies not only can pose health risks; they lack the staying power of Amevive.”

Results encouraging in cystic fibrosis gene therapy

Early results are promising for a new therapy to treat the cause of cystic fibrosis (CF), say physician-scientists at UHC, along with colleagues at Case, Children’s Hospital of Denver, and Cystic Fibrosis Foundation Therapeutics, Inc.

Their first-of-its-kind trial used gene therapy to deliver a healthy gene into 12 cystic fibrosis patients. “The primary goal of this Phase I study was to determine if this gene therapy is safe and
tolerable as administered in this trial,” notes Michael W. Konstan, M.D., director of the LeRoy Matthews Cystic Fibrosis Center at UHC's Rainbow Babies & Children’s Hospital. The good news, he says, is that all participants completed the trial without significant side effects and the treatment was well tolerated.

“The secondary goals of the trial were to evaluate whether the CF gene was successfully transferred to airway cells and whether it functioned normally, results which would suggest that this therapy may be of benefit to people with CF,” adds Dr. Konstan, who is also associate professor of pediatrics at Case. Again, the results looked promising. “Our data were very encouraging with indications that this gene transfer may have occurred.”

Future clinical trials will study the safety and efficacy of an aerosol version that might enable people with cystic fibrosis to have the healthy gene delivered directly into their lungs.

In a fruitful collaboration, the Cleveland-based biotechnology firm Copernicus Therapeutics, Inc., produced the non-viral gene transfer system used in the Phase I clinical trial. Working together with UHC and Case researchers, Copernicus formulated a way to “compact,” or tightly bind, strands of DNA so that it is tiny enough to pass through a cell membrane and into the nucleus. The ultimate goal is for the DNA to produce a protein needed by people with cystic fibrosis to correct the basic defect in cystic fibrosis cells.

Cystic Fibrosis Foundation Therapeutics, Inc., the non-profit drug discovery and development affiliate of the Cystic Fibrosis Foundation, helped fund the initial trial, along with Copernicus and the National Institutes of Health.

Two-pronged approach to battle non-Hodgkin’s lymphoma Researchers at University Hospitals Ireland Cancer Center are testing a new therapy for patients with low-grade, non-Hodgkin’s lymphoma that combines monoclonal antibodies with a vaccine derived from a tumor’s genetic material.

The monoclonal antibody therapy acts to shrink tumors, while the vaccine – administered weeks later – is meant to trigger a patient’s immune system to destroy tumor cells before they can grow back, explains Omer N. Koç, M.D., Ireland Cancer Center oncologist and principal investigator of this Phase II study. A Phase III study will begin this year.

Dr. Koç, who is also the Leukemia and Lymphoma Society Scholar in Clinical Research and assistant professor of medicine at Case, notes that independently, the antibodies and the vaccine have each proven effective against malignancies. By combining the two therapies, it may be possible to enhance the effectiveness of both.

The study is being conducted at 21 medical centers across the nation. UHC is the only site in Northern Ohio. For more information about the study, please call 216-844-5432 or 1-800-641-2422.

Epilepsy medications compared for side effects Doctors may choose from an array of medications on the market to prevent seizures in their epileptic patients, but many doctors say they lack sufficient data to choose the drugs that work best with the fewest side effects. A UHC neurologist and her colleagues hope to change that.

Mary Ann Werz, M.D., Ph.D., director of UHC’s Comprehensive Epilepsy Program and medical director of the Rainbow Babies & Children’s Hospital Epilepsy Sleep Unit, and her colleagues, are conducting “head-to-head comparisons” of the effectiveness and side effects of several epilepsy drugs. The most debilitating side effect of epilepsy medications is a clouding and slowing of thought processes, specifically memory, attention, and language fluency.

Dr. Werz, who is also assistant professor of medicine at Case, says, “The state of epilepsy research offers little rhyme or reason for choosing one treatment over another on the basis of efficacy, even though there are big differences in tolerability.”

UHC researchers test new anti-HIV drug AIDS researchers at UHC are testing the efficacy and safety of an experimental anti-HIV drug, tipranavir, in patients who are resistant to anti-HIV drugs.

“Anti-HIV drugs have enabled people with HIV to live longer, but in long-term treatment, HIV frequently develops resistance to these drugs,” says Barbara M. Gripshover, M.D., director of the John T. Carey Special Immunology Unit at UHC and associate professor of medicine at Case. “As a consequence, building effective treatment regimens hinges on developing new anti-HIV drugs.”

A recent, large-scale study in the U.S. estimates that 78 percent of people with HIV have a drug-resistant virus, a condition that develops most commonly when patients do not consistently take their anti-HIV medications. Resistance renders drugs less effective or ineffective, significantly limiting treatment options.
“We felt that it was important to participate in the (tipranavir) trial to bring new treatment options to HIV patients in the Cleveland area,” Dr. Gripshover says.

The tipranavir studies make up one of the largest programs to date for HIV-positive patients previously treated with three classes of anti-HIV drugs. The tipranavir trial is a Phase III study, the final stage of testing before a drug is submitted to the U.S. FDA for marketing approval.

Case/UHC AIDS Clinical Trials Unit (ACTU) is conducting the trial in Cleveland. Consistently ranked as one of the top performing facilities of its kind in the nation, Case/UHC ACTU has enrolled more than 1,300 persons in treatment trials since it was founded in 1987.

Super MRI will help researchers study addiction A $4.1 million federal grant award announced in June will help researchers at UHC and Case buy an extra-powerful magnetic resonance imaging (MRI) device to scan the human brain and learn more about drug addiction.

Jonathan S. Lewin, M.D., co-director of the MRI Research Laboratory at UHC and professor of radiology at Case, says the 14-ton machine, to be installed sometime this year, will enable doctors and scientists to monitor blood flow in greater detail. Dr. Lewin notes researchers might, for instance, show a drug-addicted patient a video that contains cues to drug-seeking behavior, while monitoring the areas of the brain that are stimulated.

“The ultimate goal is to develop rational and data-driven ways to reduce drug-seeking behavior,” Dr. Lewin explains.

Known as a functional MRI, or fMRI, the device creates a magnetic field that is about three times more powerful than the magnetic field from typical MRI equipment, notes researcher Jeffrey Duerk, Ph.D., professor of radiology and co-director of the MRI Research Lab. Dr. Lewin notes the scanner is one of about 15 of its kind worldwide.

To supplement federal funds, UHC and Case will each commit up to $1.2 million for additional research programs and operating costs, Dr. Lewin says.

Dozens of researchers from the departments of Biomedical Engineering, Neurosurgery, Psychiatry and Radiology at UHC and Case will use the fMRI in a collaboration known as Research on Reduction of Drug Demand.

Sleep problem can be life-threatening A UHC study published in the Journal of Pediatrics found that African-American children, and children born prematurely, face heightened risks of developing sleep apnea, while a UHC study published in the Journal of the American Medical Association found that sleep apnea is five times more common in men than in women.

Sleep apnea is a potentially life-threatening disorder in which a sleeping person stops breathing long enough to decrease the amount of oxygen in the blood and brain and to increase the amount of carbon dioxide. If unrecognized and untreated, sleep apnea - also known as sleep disordered breathing, or SDB - can lead to serious complications for children, including behavior and learning problems, growth impairment, and even heart ailments. In adults, it can lead to, or worsen, life-threatening conditions, including hypertension and cardiovascular disease.

In the Journal of Pediatrics study, Carol L. Rosen, M.D., medical director of Pediatric Sleep Services at Rainbow and associate professor of pediatrics in the Divisions of Clinical Epidemiology, Pulmonology, and Neurology at Case, found that African-American children were up to six times as likely as Caucasian children to exhibit signs of SDB; while children who were born prematurely - at less than 36 weeks' gestation - have up to five times greater risk of SDB than full-term children.

In the Journal of the American Medical Association study, Susan S. Redline, M.D., chief of Clinical Epidemiology in the Department of Pediatrics at Rainbow, found that a woman’s risk of developing sleep apnea increases after the age of 50, until it is on par with men’s risk. Dr. Redline and her colleagues also found that people who become overweight and have high cholesterol are more likely to develop sleep apnea than those with healthy weight and cholesterol levels, and that sleep apnea develops in 7 percent of the general population over a period of five years.

Compiled by Ann T. McGuire.
Kimm A. Leininger wasn’t so sure about delivering her baby at University Hospitals Health System Geauga Regional Hospital. She gave birth to her first two children at “big-city hospitals.” But her doctor, Samir Ahuja, M.D., University Primary Care Practices obstetrician, recommended UHHS Geauga Regional for the Concord woman’s planned Caesarean birth.

“Now I’m disappointed I didn’t have my other children here, because it has been the best experience,” Mrs. Leininger says from her sunny room, after delivering beautiful, 8-pound, 4-ounce Raegann Jayne at UHHS Geauga Regional’s new Center for Women’s Health.

The Center, which celebrated a grand opening in June, was renovated top to bottom and is now configured with 12 private labor, delivery, recovery, and postpartum suites. Mothers who deliver naturally, experience the entire birthing process – from labor to bonding time with baby – in one home-like room, where warm décor conceals a cache of state-of-the-art monitoring and emergency medical equipment.

“The Center for Women’s Health is truly unique in that it offers the highest level of quality obstetrical care in the atmosphere of a five-star resort,” says John G. Griffith, M.D., chief of Obstetrics at UHHS Geauga Regional. Dr. Griffith and his colleagues expect to deliver over 1,100 babies in the renovated facility’s first year.

The Center features rooms with soft-colored curtains and bedspreads, and wood cabinetry and furniture. Carpeting buffers hallway noise, and PA-system pages are rare, thanks to special pagers carried by all nurses and doctors. The Center also features made-to-order breakfasts, “high tea” served to moms and visitors daily, and a patient pantry stocked with refreshments 24/7. Even the family waiting and reception areas are accommodating, with a children’s playroom and media center.

“I have been very impressed,” says Mrs. Leininger, who is executive director of United Way Services of Geauga County. “It’s beautiful. It’s definitely a much more relaxing atmosphere, which makes it more comforting.”

Obstetrics Nurse Manager Carolyn M. Miclea, R.N., says patients in the Center really get to know their nurses. “As much as possible, the patients stay with the nurse that they’ve delivered with, and the nurse who takes care of the mother also takes care of the baby.”

An emphasis on patient and family needs is key to quality, notes Nikki S. Polis, R.N., Ph.D. “The Center is more than a beautiful place; it’s a beautiful place with a purpose,” says Dr. Polis, who is director of University Hospitals of Cleveland MacDonald Women’s Hospital and director of Women’s Services. “The approach to care and the environment matters. By being attentive to both of these important aspects, the Center for Women’s Health facilitates the kinds of birth experiences families want.”

A clear focus on patients and their families pervades women’s healthcare services offered throughout UHHS, Dr. Polis adds, from Chagrin Highlands to Canton, from Bedford to Brown Memorial (see related story, page 25).
Women’s services offered throughout UHHS address a continuum of needs that range from first gynecologic exams to obstetrics, to menopause, to diagnosis of osteoporosis and much more.

“We like to say we care for a woman over a lifetime,” says Nikki S. Polis, R.N., Ph.D., director of University Hospitals of Cleveland MacDonald Women’s Hospital and director of Women’s Services. “We work together to provide quality care across our system.” A few highlights of women’s health services offered by UHHS follow.

> At MacDonald Women’s Hospital on the main campus of University Hospitals of Cleveland, a full slate of services ranges from adolescent gynecology to menopause management. All rooms in the mother-baby unit are newly renovated and private. Meals are by room service. MacDonald is licensed by the state of Ohio as a Level III regional perinatal center—the highest classification available. Experts at Rainbow Babies & Children’s Hospital are onsite 24/7 for special newborn care needs.

> Under the banner All About Women, UHHS Bedford Medical Center offers inpatient care, as well as an array of outpatient services and community education programs. Inpatient care is provided in the recently renovated Bretenieder Women’s Unit, named in honor of the late Leonard A. and Helen Russell Bretenieder, whose philanthropy made the renovation possible.

> For Women Only, the new women’s health center at UHHS Chagrin Highlands Medical Center, officially opened in January. For Women Only offers programs to enhance women’s health knowledge and to provide structured, time-limited interventions and appropriate referrals for ongoing needs. The focus is on services and support uniquely designed for women between the ages of 35 and 65. Childbirth education and lactation consultation, as well as medi-spa services, are also in the suite.

> UHHS partner St. John West Shore Hospital offers a range of women’s services, including nutritional counseling, gynecological services, menopause management, the early detection of breast cancer, a women’s cardiac initiative, and a cancer-care initiative linked to University Hospitals Ireland Cancer Center.

> UHHS Westlake Medical Center, an outpatient facility, offers obstetrics, gynecology, and fertility services, and has a lactation consultant on staff to assist expectant and new mothers.

> Mercy Medical Center in Canton, a UHHS Partnership Hospital, offers a range of women’s health services through its Women’s Pavilion.

> Southwest General Health Center, a UHHS Partnership Hospital in Middleburg Heights, recently renovated its Maternity Services area.

> UHHS Brown Memorial Hospital renovated its maternity unit in summer 2002, incorporating a cheerful decorating scheme with a family-friendly layout of private rooms. Brown also provides women’s health screenings and a monthly Health Smart lecture series.

> With the assistance of a grant from the Susan G. Komen Breast Cancer Foundation, UHHS Memorial Hospital of Geneva runs the Rural and Amish Women’s Project, an extensive program of health education, outreach and screening offered throughout Ashtabula County.

“Everybody here was very supportive of my choices, and I know that my family felt very welcome,” Mrs. Leininger says. Husband, Neil J., and their other children, Brendan Patrick, 5, and Darby Susanne, 17 months, felt right at home at UHHS Geauga Regional, she reports.

In addition to comfort food and comfortable armchairs, (which open into beds for spouses or family members,) patients take comfort in knowing the Center is staffed by a specially trained team of board-certified obstetricians, neonatologists, anesthesiologists, nurses and a certified lactation consultant.

Richard J. Frenchie, president and chief executive officer of UHHS Geauga Regional, says, “It is our goal to provide the highest level of compassionate care in a setting that is as comfortable, as it is nurturing.”

Ann T. McGuire is a manager/writer in the Department of Development at UHC.

Further information about UHHS Geauga Regional Hospital is available by calling 440-285-6000 or by visiting www.uhhsgrh.com.
Every Wednesday morning, Philip G. Morgan, M.D., dons a surgical mask and administers anesthesia to young patients about to undergo surgery at Rainbow Babies & Children’s Hospital. He performs this sleight of hand with the assured grace of a veteran.
Dr. Morgan is one of 12 pediatric anesthesiologists at Rainbow, and one of 50 anesthesiologists in University Hospitals of Cleveland’s Department of Anesthesiology. His 18-year-old patient, “Michael,” lies wide-awake on an operating table before him. Dr. Morgan lightly rubs the teen’s cheek with his left thumb and whispers that everything is going to be just fine. Doctors believe Michael suffers from a mitochondrial disease that has robbed him of his ability to talk and walk, among a host of other everyday behaviors. To confirm their diagnosis, he is about to undergo a muscle biopsy.

But first, Michael must fall fast asleep. Dr. Morgan guides a transparent mask into place over the teen’s mouth and nose, filling his lungs with nitrous oxide, a sedative. Michael’s eyelids flutter and close within 45 seconds. A nurse anesthetist with Dr. Morgan starts the flow of an anesthetic through an intravenous needle in the boy’s left arm. Dr. Morgan monitors Michael’s vital signs, as well as his Bispectral Index (BIS) – a measure of brain-power under the influence of anesthetics. After the boy’s BIS drops from 100 to 48, surgery begins.

This is the very picture Dr. Morgan envisioned 30 years ago when he entered medical school. Then a full-time research scientist, he longed for something more. Anesthesiology offered what he calls “a unique opportunity to decrease suffering.”

Dr. Morgan now spends Wednesdays in a Rainbow operating room, and devotes the rest of his week to a laboratory he shares with Margaret M. Sedensky, M.D. Drs. Sedensky and Morgan have much in common. Both are physician-scientists, dividing time between patients and research. Both are anesthesiologists, although her patients are adults. They also happen to be married.

Like her husband, Dr. Sedensky devotes one day a week to patients – women giving birth at MacDonald Women’s Hospital – and the rest of the week to research.

Howard S. Nearman, M.D., chairman of the Department of Anesthesiology calls Drs. Sedensky and Morgan “a triple bonus” as high-powered teachers, clinicians and researchers. “We are a diverse department with a lot of different missions,” Dr. Nearman says. “Not everyone wants to get into the science of why molecules do what they do, but we are grateful that Phil and Marge do their research. We’re fortunate that they are excellent clinicians, too.”

**Painless research**

The two practicing anesthesiologists – both professors of anesthesiology and genetics at Case Western Reserve University – have taken their medical expertise from the operating room to the research lab to gain a deeper understanding of precisely how anesthetic drugs work – a question that has gone unanswered for more than 150 years. Their goal: to make anesthetics safer for their patients.

Dr. Sedensky examines the cellular life of tiny worms that have been knocked out with the same kinds of drugs that anesthetize her patients. The worms, *C. elegans*, are famous for their speedy reproduction and very small genome, which has been sequenced. It is relatively easy, therefore, to identify new mutations in *C. elegans* and to study already-identified mutations under new conditions, such as exposure to anesthetics. Their findings indicate, for instance, an underlying association between anesthetics and aging. As humans grow older, their sensitivity to anesthetics increases. Drs. Morgan and Sedensky conclude that our normal aging process and these drugs affect the same biological systems.

Drs. Sedensky and Morgan are acutely aware of the potency of the drugs they study and administer. They are also aware of the slim margin of safety surrounding their use. “Even though we deliver anesthetics safely, the ratio of a dose that is lethal and a dose that is safe and effective is only a factor of three,” Dr. Morgan says. “If we figure out how they work, we hope we can make them safer.”

Dr. Morgan uses the powerful tools of molecular genetics to unravel questions surrounding the molecular basis of anesthetic action. Dr. Sedensky isolated an animal with a genetic mutation
that causes it to be hypersensitive to volatile anesthetics and ethanol. Together, they have discovered parallels to their scientific model system in children with mitochondrial myopathies, a genetic disorder causing muscular diseases.

The scientific community has recognized the significance of their work. In 2002, the National Institutes of Health awarded $2.7 million to Drs. Sedensky and Morgan for their research on volatile anesthetics. Dr. Sedensky received a four-year competitive renewal grant to study “Mitochondrial Effects on Sensitivity to Anesthetics.” Dr. Morgan received a five-year grant to study “Mechanism of Action of Volatile Anesthetics.”

Painless surgery
Anesthesia is more than a deep sleep. Anesthetics are delivered locally (numbing a specific part of the body), regionally (encompassing a larger part of the body) or generally. A general anesthetic depresses nerve pathways throughout the body, so the patient lies unconscious, pain-free, and will have no memory of the surgery.

An anesthesiologist monitors a patient’s vital signs before, during and after surgery on a bank of blinking and beeping technology. If a crisis should arise, the anesthesiologist must identify its cause quickly, and immediately take appropriate measures to correct the problem. For this reason, anesthesiology training includes study of cardiology, neurology, and the vascular and lymph systems, notes Dr. Nearman.

While they spend only 20 percent of their workweek in operating rooms, Drs. Sedensky and Morgan say they treasure time with patients. “In the operating room, you are always engaged in very concrete, sometimes life and death, situations,” Dr. Sedensky says. “At the end of the day . . . you may have a patient smiling with a baby in her arms after a difficult delivery.”

Dr. Morgan did just that with 10-year-old Kevin Seaman who underwent successful abdominal surgery at Rainbow last year. Kevin’s father, Spencer H. Seaman, Jr., an Avon Lake businessman, was quick to credit the anesthesiologist with making the procedure go smoothly for his son. “Dr. Morgan came over and explained what was going on before the surgery,” Mr. Seaman says. “He told Kevin a story and Kevin never even saw a needle. I felt complete confidence in Dr. Morgan.”

“Taking care of kids is wonderful and I could do it full time with the greatest enjoyment and reward,” Dr. Morgan says. “However, with my training and skills, I also ask myself, ‘What do I have that’s unique to offer?’ The combination of research and clinical is the answer.”

Eric Sandstrom is a medical news writer in the Department of Marketing and Communications at UHC.
The 10th Five Star Sensation was truly stellar, with fabulous food and wine, a delightful atmosphere, and even a flashy racecar! Indeed, the sold-out benefit upheld its impressive tradition as the premier food and wine event in Greater Cleveland, hosting 1,500 guests.

As in past years, the 2003 Five Star Sensation raised funds for the Ireland Cancer Center of University Hospitals of Cleveland and Case Western Reserve University, Northern Ohio’s only Comprehensive Cancer Center, as designated by the National Cancer Institute. Net proceeds for the 2003 gala broke all records, topping $1 million. Corporations and individuals provided generous sponsorship; MBNA Corporation set the pace with a $50,000 contribution.

Literally hundreds of volunteers generously gave thousands of hours to organize the festivities, transforming a large white tent on the grounds of University Health Center at Landerbrook into a gourmet’s delight, with an incomparable gathering of 60 of the world’s finest chefs and vintners.

One of those chefs was the internationally popular Wolfgang Puck, who, along with celebrity designer Barbara Lazaroff, again served as honorary co-chairperson. Another notable chef was Nicky Morse, team chef for two-time National Hot Rod Association POWERade™ Drag Racing Series Pro Stock Champion Jeg Coughlin, Jr. The Coughlin family, of Delaware, Ohio, brought not only their team chef, but also a racecar and their contagious enthusiasm. Ireland Cancer Center is a beneficiary of the family’s JEG’s Foundation for Cancer Research.

Carole A. Carr chaired the biennial event. Monte Ahuja and Sheldon G. Adelman served as corporate co-chairpersons. Jamie Belkin Opalich, Marilyn K. “Mebby” Brown, Jeannie M. Gallagher, and Robert J. Gentile were vice-chairpersons.
The Atrium at University Hospitals of Cleveland was transformed into a satellite radio station for three days last summer, when Rainbow Babies & Children’s Hospital joined forces with Cleveland radio station Mix 106.5 WMVX to sponsor The Brian & Joe Rainbow Radiothon. Popular morning personalities Brian Fowler and Joe Cronauer hosted the marathon fundraiser, which featured 33 hours of live broadcasting and raised over $217,000 for Rainbow.

Dozens of Rainbow’s young patients, their families, and staff members joined Brian and Joe – in 15 taped interviews and more than 30 live interviews – to share their own stories of healing and care, and to encourage Clevelanders to call in and contribute to the hospital.

Prior to Radiothon, Brian and Joe promoted “Change Gang,” a fundraising initiative in which Clevelanders were encouraged to “rob” their co-workers, friends, and family members of spare change and donate it to Rainbow. Sacks of Change Gang loot were counted at a festive bash Downtown at Tower City Amphitheater.

After the broadcast, Fred C. Rothstein, M.D., UHC president and chief executive officer, said to Brian and Joe: "It was — and is —

A beautiful day on the greens at Kirtland Country Club netted more than $110,000 for Rainbow Babies & Children’s Hospital in August when the Rainbow Golf Classic marked its 20th anniversary.

Featured speaker for the outing was Timothy Knapp, a college student who was born at Rainbow 21 years ago. Timothy was born 12 weeks prematurely and weighed less than a pound and a half at birth, but the superior care he received in Rainbow’s nationally renowned Neonatal Intensive Care Unit helped him thrive.

Richard D. Weber, managing director and segment leader, Energy Group, for KeyBanc Capital Markets, chaired the event, which drew some 120 corporate leaders and lived up to its name as one of the largest-grossing golf fundraisers in Northeast Ohio. Another milestone: Joseph R. Elegante, a vice president of Alliance Capital Management L.P., hit the event’s first-ever hole-in-one.
abundantly evident to your listeners that you genuinely care about the children we treat at Rainbow.” In recognition of Brian and Joe’s devoted support, Rainbow dedicated a playroom in their name in its unit for immuno-compromised patients.

Dr. Rothstein also thanked WMVX parent company, ClearChannel, for its dedication of staff time and resources, and Foresters, a financial services organization, which provided critical sponsorship for the event.

The Foundation for Healthy Communities of the Ohio Hospital Association awarded a $15,000 grant to The Otis Moss, Jr. – University Hospitals Medical Center for a camp last summer that taught 52 inner-city children about the health risks of obesity and sexually transmitted diseases.

“Youth Health Initiative” used fun activities to promote healthy eating, routine exercise, and sexual abstinence. The foundation grant funded extensive medical and behavioral evaluations before and after the three-week camp.
Children not only receive expert care at Rainbow Babies & Children's Hospital but, from time to time, they also support that care through their own creative fundraisers. Last fall, two nine-year-old girls, from opposite sides of Cleveland, turned their love of crafts into assistance for the hospital.

In Hudson, 20 miles east of Cleveland, Kathryn Babbin and about 25 of her schoolmates assembled dozens of craft kits for children at Rainbow and two other organizations. Kathryn researched the best materials to include, solicited donations of materials, and organized a session to assemble more than 270 “KitKrafts for Kids” in her home.

“We chose Rainbow as a recipient of Kathryn's community service project for a very special reason. Her twin sisters, Caroline and Jessica, now 6, were born at UHC and spent 6 weeks in the Rainbow NICU. For two children who weren't supposed to live the first 24 hours, the NICU performed one of its miracles, and we have two very healthy children today,” says their mother, Kim Babbin.

When the story of her creativity and generosity made headlines, Kathryn told a reporter from the Akron Beacon Journal, “I just wish more people would help with the world. I'm only a kid. I can't do it all.”

Meanwhile, 45 miles west of Cleveland, in Wakeman, Ohio, Zoe Pendleton learned about Rainbow and decided to do something to help the children in its care. Zoe began creating decorative bookmarks and selling them for five cents apiece. After four weeks of production, her proud grandmother, Vaughn Thompson, mailed Rainbow a check for Zoe's proceeds: $78.33.

“Zoe believes that every one of us is here for a purpose and that we can all make a difference, if we give of ourselves,” Ms. Thompson says.
February 2004 marked the sixth anniversary of Ireland Cancer Center’s (ICC) designation by the National Cancer Institute (NCI) as a Comprehensive Cancer Center. This recognition is the national standard for excellence, and positions ICC among the world’s most highly regarded cancer centers, including Dana Farber in Boston, Johns Hopkins in Baltimore, M.D. Anderson in Houston, and Memorial Sloan Kettering in New York.

Our first five years as a NCI Comprehensive Cancer Center focused on further developing ICC as a national leader in research. Now, with a foundation of seven community-based cancer centers throughout Northeastern Ohio, breakthrough clinical trials, and additional talented cancer experts on board, we have identified early detection and prevention of cancer as our focus for the next five years.

There is no question that cancer will become the leading cause of death in America; we are an aging population (cancer is a disease associated with age), and we are seeing tremendous treatment advances – ergo, fewer deaths – in cardiovascular patients. Worldwide, more than 10 million people are diagnosed with cancer every year, according to the World Health Organization. Pundits project 15 million new cases every year by 2020. Cancer causes 6 million deaths every year – or 12 percent of deaths worldwide.

It is important to keep the statistics in perspective. While the number of reported cancer cases is expected to rise in the next two decades, we are now able to cure the majority of cancers.

Our approach is working – multidisciplinary care, new treatments, earlier detection. Our cancer center intends to build on this strategy and make Cleveland a powerhouse in cancer care.

Toward that end, I am pleased to cite several recent accomplishments at Ireland Cancer Center:

+ Our “Urban Cancer Center Project” earned accolades from NCI as a national model in improving cancer detection and survival among low-income African Americans.
+ Drs. Sandy Markowitz and Georgia Wiesner’s discovery of the genetic basis for inherited colon cancer represents the epitome of medical progress.
+ Clinical trials led by Drs. Paula Silverman and Beth Overmoyer have yielded a significantly reduced recurrence of breast cancer after treatment.
+ Dr. Stan Gerson’s stem cell research team is achieving incredible cure rates of certain types of cancer and will remain a central theme of research for ICC.

As we look forward, we plan to collaborate with UHC clinical leaders to increase our expertise in cancer surgery and childhood cancer programs, assure our continued ranking as the #1 cancer center in Ohio, and – one day – fulfill the mission of Ireland Cancer Center: to cure cancer.

James K.V. Willson, M.D., is Professor of Medicine and Director of the Case Comprehensive Cancer Center and University Hospitals Ireland Cancer Center. The Cancer Center is a catalyst for interdisciplinary clinical and cancer research programs. In addition to his duties as director, Dr. Willson leads a laboratory and clinical research program that focuses on the development of novel treatment approaches to colon cancer.
University Hospitals Health System (UHHS) is the region’s premier healthcare delivery system, serving patients at more than 150 locations throughout Northern Ohio, as shown on the map at right.

The System’s 947-bed, tertiary medical center, University Hospitals of Cleveland (UHC), is the primary affiliate of Case Western Reserve University (CWRU). Together, they form the largest center for biomedical research in the state of Ohio. The System provides the major clinical base for translational researchers at the Case Research Institute, a partnership between UHC and Case School of Medicine, as well as a broad and well-characterized patient population for clinical trials involving the most advanced treatments. Included in UHC are Rainbow Babies & Children’s Hospital, among the nation’s best children’s hospitals; Ireland Cancer Center, Northern Ohio’s only National Cancer Institute-designated Comprehensive Cancer Center (the nation’s highest designation); and MacDonald Women’s Hospital, Ohio’s only hospital for women.