We live our mission every day.
University Hospitals has been recognized by the American Hospital Association as the top hospital in the nation for its leadership and innovation in quality.

Scan the QR Code to the left or visit UHhospitals.org/missionquality to see how a focus on quality can enhance outcomes and improve a hospital’s overall performance.

To Heal. To Teach. To Discover.

DEPARTMENT OF PEDIATRICS

American Hospital Association – McKesson
*Quest for Quality Prize*
Hospitals in Pursuit of Excellence
FROM THE CHAIR

Dear Colleague:

Delivering on our mission – To Heal. To Teach. To Discover. – inspires our ongoing commitment to train the next generation of physician-scientists and advance clinical research and new treatment protocols.

University Hospitals Rainbow Babies & Children's Hospital is building upon a legacy of innovation that began more than 125 years ago and continues today through its 16 medical divisions and 11 surgical specialties.

This spirit of innovation and medical discovery is demonstrated today in a number of programs and initiatives that are helping forge medicine’s future:

- UH Rainbow Babies & Children’s Hospital is the recipient of $12.7 million from the Centers for Medicare and Medicaid Innovation (CMMI) to establish a sustainable model to improve care, lower costs and improve the overall health and wellness of children. UH Rainbow Babies & Children’s Hospital received the largest grant awarded to an individual children’s hospital.

- Leading the pediatric component of the Ohio Perinatal Quality Collaborative (OPQC) to improve perinatal care and outcomes in Ohio. Initial projects focusing on reducing bloodstream infections in hospitalized premature infants and near-term deliveries without medical indications have reduced infections and NICU admissions, saving Ohio $11 million or more annually.

- Advancing the search for a cure for cystic fibrosis through National Institutes of Health-funded research aimed at discovering new therapies and extending the lives of cystic fibrosis patients.

- The launch of The Harrington Project for Discovery & Development, a $250 million investment in drug discovery and commercialization that aligns a not-for-profit entity, Harrington Discovery Institute at University Hospitals Case Medical Center, with a for-profit company, BioMotiv.

These and other UH Rainbow Babies & Children’s Hospital advances are poised to benefit the lives of patients for generations to come.

We look forward to seeing you at the Pediatric Academic Societies Annual Meeting in May and the American Academy of Pediatrics Annual Conference in October.

Michael W. Konstan, MD
Chairman, Department of Pediatrics,
University Hospitals Case Medical Center and Case Western Reserve University School of Medicine
Austin Ricci Chair in Pediatric Pulmonary Care and Research,
UH Rainbow Babies & Children’s Hospital
Gertrude Lee Chandler Tucker Professor and Chairman of Pediatrics,
Case Western Reserve University School of Medicine
Our physicians and researchers – who also serve as faculty at Case Western Reserve University School of Medicine – are leaders in their respective fields, and their ongoing clinical research programs push the boundaries of medical progress. Our strong emphasis on translational research and personalized medicine means newly developed treatments transfer more rapidly from the research stage to life-enhancing patient care.

Case Western Reserve University School of Medicine is among the leading recipients of National Institutes of Health (NIH) awards and ranks in the top 25 among U.S. research-oriented medical schools as designated by U.S. News & World Report.

This unified dedication to clinical research and education has played a major role in building UH Case Medical Center’s rich legacy of landmark medical innovation, and continues to this day. Coupled with a commitment to implementing the latest therapies and advanced technologies at our hospitals and community facilities, UH Case Medical Center offers a depth of care and scope of services unmatched by any other medical center in Ohio.

To Heal. To Teach. To Discover.
University Hospitals Rainbow Babies & Children’s Hospital

University Hospitals Rainbow Babies & Children’s Hospital and the Department of Pediatrics at Case Western Reserve University School of Medicine have collaborated for decades to advance discoveries that enhance the care of babies and young people. Internationally renowned, UH Rainbow Babies & Children’s Hospital is a pediatric academic medical center with experts in 16 medical divisions and 11 surgical specialties who offer nationally ranked care not available at other institutions in the region, including a center dedicated to adolescent and young adult cancer treatment and Northeast Ohio’s only single-site provider of advanced maternal fetal medicine and neonatal services. As a leading academic medical center that is the primary pediatric teaching hospital of Case Western Reserve University School of Medicine and the only Level I Pediatric Trauma Center in the region, UH Rainbow Babies & Children’s Hospital offers novel therapies, advanced technologies and clinical discoveries to children long before they are available nationwide, including single-site surgery, a combined PET/MRI scanner and a team leading the search to cure cystic fibrosis. When a child’s life is in the balance, there simply is no better facility.

UH Rainbow Babies & Children’s Hospital is ranked one of America’s Best Children’s Hospitals in all 10 children’s specialties by U.S. News & World Report – including #5 in neonatology, #5 in pulmonology and #10 in orthopaedics. Learn more at RainbowBabies.org/USNews.

Dr. Benjamin Gaston

Drs. Peter Kouretas and Christopher Snyder

Dr. Gregory Lakin with patient
As a full-service children’s hospital, University Hospitals Rainbow Babies & Children’s Hospital has a multidisciplinary team of 1,300 physicians, nurses, child life specialists, social workers and other professionals devoted solely to pediatric medicine and surgery – including more nationally recognized pediatric specialists than any other hospital in the region. Experts at UH Rainbow Babies & Children’s Hospital are engaged in today’s most advanced clinical research and are regarded by pediatricians across the country as among the best in the nation – and in some specialties, the best in the world. Our comprehensive pediatric surgery center features experts in anesthesiology, neurosurgery, ophthalmology, otolaryngology, urology, cardiothoracic surgery, nephrology, plastic and reconstructive surgery, orthopaedic surgery, dentistry/oral surgery, pediatric surgery and the region’s only Level I Pediatric Trauma Center.

UH Rainbow Babies & Children’s Hospital’s medical staff is led by Chairman Michael W. Konstan, MD, who also holds the Austin Ricci Chair in Pediatric Pulmonary Care and Research at UH Rainbow Babies & Children’s Hospital, and is the Gertrude Lee Chandler Tucker Professor and Chairman of the Department of Pediatrics at Case Western Reserve University School of Medicine. A pioneer in his field, Dr. Konstan’s academic career has focused on developing new therapies for cystic fibrosis, with a special interest in anti-inflammatory therapies and clinical trial design. An international expert in cystic fibrosis, Dr. Konstan also leads Case Western Reserve University’s Cystic Fibrosis Translational Therapeutics Development Center. His team’s efforts in developing new treatments and leading the search for a cure for cystic fibrosis have led to novel therapies as well as significantly extending the lives of children – and now, adults – with the disease.

Edward M. Barksdale Jr., MD, FACS, FAAP, is Vice Chairman of the Department of Surgery at UH Case Medical Center and Case Western Reserve University School of Medicine. He is Surgeon-in-Chief, Chief of the Division of Pediatric Surgery and the Robert J. Izant Jr., MD, Chair of Pediatric Surgery at UH Rainbow Babies & Children’s Hospital, and Professor of Pediatrics and Surgery at the School of Medicine. Under his leadership, the Rainbow Surgical Specialists have become recognized for novel minimally invasive surgical approaches, family-centered care and a comprehensive focus on quality and safety. He is the recipient of the 2012 Kaiser-Permanente Teaching Award, the highest teaching honor bestowed by the School of Medicine. Dr. Barksdale is co-chair of Project Focus, a youth violence prevention program and a member of the strategic planning committee for the U.S. Attorney General’s Defending Childhood Initiative in Cuyahoga County, Ohio.

All National Institutes of Health (NIH) funding for basic and clinical research is awarded to the School of Medicine at Case Western Reserve University.
Leona Cuttler, MD, is Division Chief and the William T. Dahms Chair of Pediatric Endocrinology, Diabetes & Metabolism at UH Rainbow Babies & Children’s Hospital and Professor of Pediatrics at Case Western Reserve University School of Medicine. A nationally recognized expert in pediatric endocrinology and public health policy, Dr. Cuttler conducts clinical research in growth, diabetes, obesity and pediatric health policy. Her research is supported by the National Institutes of Health through the School of Medicine, other government agencies and philanthropic organizations. Under her leadership, the Division of Pediatric Endocrinology, Diabetes & Metabolism has grown as a nationally recognized program. As Director of the Center for Child Health and Policy at UH Rainbow Babies & Children’s Hospital, Dr. Cuttler and her team have made major contributions to advance the health of children. Dr. Cuttler is co-chair and a former director of the Policy Council of the National Pediatric Endocrine Society. She is on the Pediatric Public Policy Council, representing the Society for Pediatric Research, and the American Academy of Pediatrics’ Council on Federal Government Affairs, and has served on several national review, advisory and steering committees.

All National Institutes of Health (NIH) funding for basic and clinical research is awarded to the School of Medicine at Case Western Reserve University.

John J. Letterio, MD, holds the Jane and Lee Seidman Chair in Pediatric Cancer Innovation and is Chief of the Division of Pediatric Hematology and Oncology and Director of the Cancer Survivorship Program at the Angie Fowler Adolescent & Young Adult Cancer Institute at UH Rainbow Babies & Children’s Hospital. He also is Professor of Pediatrics at Case Western Reserve University School of Medicine. Under Dr. Letterio’s leadership, the division has cemented UH Rainbow Babies & Children’s Hospital’s national reputation as a leader in pediatric hematology and oncology, elevating the standard of care and expanding programs in basic, translational and clinical research to increase clinical trial opportunities for patients, with a focus on the adolescent and young adult population. Dr. Letterio is a member of the American Association for Cancer Research, the American Academy of Pediatrics, the American Society of Hematology and the Society for Pediatric Research, and he serves on the editorial board of the Journal of Biological Chemistry.

Ingrid Tuxhorn, MD, is Chief of the Division of Pediatric Epilepsy at UH Rainbow Babies & Children’s Hospital and Professor of Pediatrics at Case Western Reserve University School of Medicine. A distinguished expert in refractory epilepsy in children and adolescents, she leads an interdisciplinary team, one of the most experienced in the nation, in using the most advanced medical and surgical options to diagnose, localize and treat the complete range of seizure disorders. Dr. Tuxhorn has published in numerous journals, including Epilepsia, Neuropediatrics, Seizure and Epilepsy Research.

Michele C. Walsh, MD, MS, is Chief of the Division of Neonatology and the William and Lois Briggs Chair in Neonatology at UH Rainbow Babies & Children’s Hospital, and Professor of Pediatrics at Case Western Reserve University School of Medicine. Under Dr. Letterio’s leadership, the division has cemented UH Rainbow Babies & Children’s Hospital’s national reputation as a leader in pediatric hematology and oncology, elevating the standard of care and expanding programs in basic, translational and clinical research to increase clinical trial opportunities for patients, with a focus on the adolescent and young adult population. Dr. Letterio is a member of the American Association for Cancer Research, the American Academy of Pediatrics, the American Society of Hematology and the Society for Pediatric Research, and he serves on the editorial board of the Journal of Biological Chemistry.

Max Wiznitzer, MD, FAAP, is a Child Neurologist at UH Rainbow Babies & Children’s Hospital and an Associate Professor of Pediatrics at Case Western Reserve University School of Medicine. Dr. Wiznitzer is a nationally recognized expert and speaker on autism spectrum disorders and attention deficit hyperactivity disorder (ADHD). He also serves as a liaison to the American Academy of Pediatrics Council on Children with Disabilities and Autism Subcommittee.

Christopher Snyder, MD, is Chief of the Division of Pediatric Cardiology and the KeyBank – Meyer Family Chair for Excellence in Leadership at UH Rainbow Babies & Children’s Hospital, and Clinical Associate Professor of Pediatrics at Case Western Reserve University School of Medicine. Dr. Snyder is a leader in the field of pediatric electrophysiology, performing radiofrequency and cryoablations, as well as pacemaker and defibrillator implants in children and adults with congenital heart disease. He is on the executive committee of the American Academy of Pediatrics Section of Cardiology and Cardiovascular Surgery, the board of the Pediatric Cardiology National Review Course and the advisory board of the AED Petition Now Alliance. He also serves on the editorial...
LEADERS IN THE FIELD continued

board for Congenital Heart Disease and Case Reports in Cardiology, and is an editor for the Journal of Invasive Electrophysiology and Congenital Heart Disease and Cardiology in the Young, and has been published in numerous journals.

**Peter C. Kouretas, MD, PhD**, Chief of the Division of Pediatric Cardiothoracic Surgery at UH Rainbow Babies & Children’s Hospital and Associate Professor of Surgery, Case Western Reserve University School of Medicine, is a leader in performing complex neonatal reconstructions, hypoplastic left heart syndrome and transposition of the great arteries. He also has expertise in adult congenital cardiac care using innovative techniques, such as valve sparing aortic root procedures in the Marfan population, and pediatric heart failure, with a focus on pediatric ventricular-assist devices and cardiac transplantation.

**Thomas Sferra, MD**, Division Chief of Pediatric Cardiothoracic Surgery and the Martin and Betty Rosskamp Endowed Chair in Pediatric Cardiothoracic Surgery in honor of Fred C. Rothstein, MD, at UH Rainbow Babies & Children’s Hospital, and Associate Professor of Pediatrics at Case Western Reserve University School of Medicine, is internationally renowned for his work on the discovery and development of novel gene- and small molecular-based therapies for inflammatory bowel disease and colon cancer. Dr. Sferra is on the Technology Committee and Training Guidelines Steering Committee of the North American Society for Pediatric Gastroenterology, Hepatology and Nutrition (NASPGHAN), and a member of the medical advisory board of the Batten Disease Support & Research Association, the American Gastroenterological Association, the American Society of Gene Therapy and the Society for Pediatric Research.

**George H. Thompson, MD**, Chief of the Division of Pediatric Orthopaedics at UH Rainbow Babies & Children’s Hospital and Professor of Orthopaedic Surgery at Case Western Reserve University School of Medicine, specializes in correcting spine deformities, including scoliosis and kyphosis, using innovative surgical techniques that minimize the invasiveness of — and potentially the need for — major spine surgery. Under his leadership, the Division of Pediatric Orthopaedics received a $1 million grant from Ohio Third Frontier, along with Cincinnati Children’s Hospital and SpineForm LLP, to develop and implement a new pediatric spinal growth modulation device. The device, implanted through minimally invasive video-assisted thoracoscopic surgery, is designed to control growth of the spine as a child grows without actually fusing the spine. Division clinician researchers also helped develop ScoliScore, a saliva test used on children ages 9 to 13 who have a spine curvature between 10 and 25 degrees. The test provides a score that can help stratify the risk that a curve will progress. ScoliScore, the only genetic test validated for evaluating spine curve progression, has proven effective in combination with clinical and radiographic evaluation.

At the helm of pediatric urology care is **Jonathan H. Ross, MD**, Director, Pediatric Urology Center, UH Urology Institute and UH Rainbow Babies & Children’s Hospital, and Professor at Case Western Reserve University School of Medicine, and a national expert in the treatment of pediatric tumors of the kidney, bladder and testicles. Dr. Ross has been involved in groundbreaking minimally invasive surgery, such as a novel approach to ureteral reimplantation using laparoscopic surgical techniques. Dr. Ross is a member of the American Urological Association and the American Association of Pediatric Urologists, among others, and has published many book chapters and in several journals including Biochemistry, the British Journal of Urology and the Journal of Urology. Dr. Ross has served as guest editor for Pediatric Urologic Oncology in the Urologic Clinics of North America, and he contributed to the Strategic Plan for Pediatric Urology in the U.S. Department of Health and Human Services’ Research Progress Report. He currently is a member of the Children’s Oncology Group’s Germ Cell Tumor Committee and Surgical Committee.

**Benjamin Gaston, MD**, is Chief of Pediatric Pulmonology at UH Rainbow Babies & Children’s Hospital and Professor at Case Western Reserve University School of Medicine. He is world-renowned for his work in studying nitric oxide metabolism and lung inflammation related to cystic fibrosis, asthma, pulmonary hypertension and apnea. Dr. Gaston has published more than 120 peer-reviewed journal articles and is a frequent guest lecturer at international and national conferences. He serves on several national editorial and advisory boards, and is a reviewer for numerous national journals, including Nature and the New England Journal of Medicine.
• Cystic Fibrosis: Physician-scientists at UH Rainbow Babies & Children’s Hospital, ranked fifth in the nation in pediatric pulmonology by U.S. News & World Report, and Case Western Reserve University School of Medicine are leading the search for a cure for cystic fibrosis, developing new therapies and setting the standard of care for cystic fibrosis centers across the nation. This includes developing and testing drugs aimed at improving gene and protein function in patients, and devising successful strategies to treat cystic fibrosis by using anti-inflammatory therapy to control pulmonary function in the lungs.

• Pediatric Hematology and Oncology: A major referral center for children, adolescents and young adults with cancer and nonmalignant blood disorders, the Angie Fowler Adolescent & Young Adult Cancer Institute at UH Rainbow Babies & Children’s Hospital is one of the only programs in the nation that will offer dedicated inpatient and outpatient facilities and services for adolescents and young adults. Integrated with UH Seidman Cancer Center, it ensures patients have access to the most advanced therapies first. With a special focus on changing the face of cancer care and outcomes for an age group with very specific needs, our pediatric hematologists and oncologists serve as senior investigators on National Institutes of Health-funded clinical trials and members of national committees on solid tumors, leukemia and bone marrow transplantation. Over the next five years, UH Rainbow Babies & Children’s Hospital will become recognized nationally as a leader in the conduct of early phase, investigational drug clinical trials for children with relapsed or refractory cancer.

• Pediatric Blood and Marrow Transplant Program: Kenneth R. Cooke, MD, Director of the Pediatric Blood and Marrow Transplant (BMT) Program at UH Rainbow Babies & Children’s Hospital, is the Ohio Eminent Scholar and the Leonard P. Hannah Professor in Stem Cell and Regenerative Medicine at Case Western Reserve University School of Medicine. He has created a pre-eminent program that provides leading-edge clinical research protocols, access to groundbreaking clinical trials and hope for young patients. Integrated with the UH Seidman Cancer Center’s Adult BMT Program, UH Rainbow Babies & Children’s Hospital is the only pediatric program in Northern Ohio accredited by the Foundation for the Accreditation of Cellular Therapy. Under Dr. Cooke’s leadership, the number of annual transplant procedures has nearly quadrupled and the 100-day survival rate is 95 percent.

• Neonatology and Maternal Fetal Medicine: The Quentin & Elisabeth Alexander Level III-C Neonatal Intensive Care Unit (NICU) has a 96 percent survival rate – one of the best in the nation – making UH Rainbow Babies & Children’s Hospital’s Division of Neonatology one of the foremost in the nation. An international leader in the treatment of critically ill and extremely low birth-weight babies, the NICU team combines innovative technologies, advanced clinical research and comprehensive services in a patient- and family-centered environment. The NICU’s Extracorporeal Membrane Oxygenation Center is among a select group in the nation recognized with the Excellence in Life Support Award by the Extracorporeal
Life Support Organization. Through the efforts of Honor Wolfe, MD, the Mary D. Fergus Endowed Chair in Maternal and Fetal Medicine, Division Chief of Maternal Fetal Medicine at UH MacDonald Women’s Hospital and Professor of Reproductive Biology at Case Western Reserve University School of Medicine, the maternal fetal medicine team at UH MacDonald Women’s Hospital and the neonatology team at UH Rainbow Babies & Children’s Hospital have collaborated to become one of only a handful of U.S. academic medical centers offering single-site care for both high-risk mothers and babies.

- **Pediatric Epilepsy:** As a Comprehensive Level IV Pediatric Epilepsy Center and a regional, national and international center of excellence, our interdisciplinary pediatric epilepsy team provides novel programs and intensive neurodiagnostic monitoring and brain mapping, as well as more extensive medical, neuropsychological, psychosocial and surgical treatment, for the full range of seizure disorders. The New Onset Seizure Clinic, the first outpatient rapid access seizure clinic in Northern Ohio, offers expert diagnostic services, referrals, treatment and follow-up care from a multidisciplinary team for children who suffer a first seizure. Through close collaboration with the Epilepsy Center at UH Case Medical Center, UH Rainbow Babies & Children’s Hospital offers the Epilepsy Transition Clinic – one of only a few programs in the nation and the only in Ohio – to ensure continuity of care for adolescent epilepsy patients as they transition to adult care. The program is comprised of both adult and pediatric epileptologists and is designed to address the unique needs and concerns of adolescents, and facilitate a smooth handover of epilepsy specialty care from pediatric to adult services.

- **Pediatric Surgery:** Under the leadership of Edward M. Barksdale Jr., MD, UH Rainbow Babies & Children’s Hospital’s Minimally Invasive Pediatric Surgery (MIPS) Center is a leader in the evolution of minimally invasive surgical technologies and techniques for pediatric patients, setting the standard for pediatric hospitals nationally and internationally. Dr. Barksdale leads a team of pediatric experts in 11 specialty areas in achieving highly successful outcomes and performing complex surgeries on the tiniest infants.

- **Pediatric Trauma:** As Northern Ohio’s only verified Level I Pediatric Trauma Center – the highest level given by the American College of Surgeons – UH Rainbow Babies & Children’s Hospital can treat the most seriously injured children at a moment’s notice. The pediatric trauma team, led by Medical Director Anthony DeRoss, MD, Assistant Professor of Surgery and Pediatrics at Case Western Reserve University School of Medicine, is comprised of board-certified pediatric and trauma surgeons, as well as board-certified surgeons in all pediatric specialties, including neurosurgery, ophthalmology, otolaryngology, urology, cardiothoracic surgery and orthopaedic surgery, and other skilled pediatric trauma professionals.

- **Neurosurgery:** Jonathan Miller, MD, Director of Functional and Restorative Neurosurgery at UH Neurological Institute and Assistant Professor of Neurological Surgery at Case Western Reserve University School of Medicine, is using a surgical technique new to the United States that spares most of the brain and immediately stopped seizures for a 10-month-old infant with intractable epilepsy. Whereas traditional surgery for many of these patients is a hemispherectomy, which means removal of half the brain, the new technique, called temporoparietooccipital (TPO) disconnection, spares much of the brain by separating the region of the brain responsible for seizure onset from the surrounding healthy brain tissue. TPO disconnection offers lower risk of complications, quicker recovery time and superior long-term results.
OTOLARYNGOLOGY/ENT: UH Case Medical Center and UH Rainbow Babies & Children’s Hospital cochlear implant program celebrated its 600th cochlear implant surgery in 2012. The program is led by Cliff Megerian, MD, Chairman of the Department of Otolaryngology – Head & Neck Surgery at UH Case Medical Center and Case Western Reserve University School of Medicine, Director of Otolaryngology, Neurotology and Lateral Skull Base Surgery and Medical Director of the Cochlear Implant Program for Adults & Children at UH Case Medical Center, the Richard W. and Patricia R. Pogue Chair in Auditory Surgery and Hearing Sciences at University Hospitals, and Professor of Otolaryngology – Head & Neck Surgery at the School of Medicine. Dr. Megerian also directs the University Hospitals Ear, Nose & Throat Institute, which provides streamlined delivery of diagnostic and therapeutic ENT services for children and adults.

PEDIATRIC UROLOGY: Listed among the 2012 U.S. News & World Report top-ranked pediatric hospitals, the UH Urology Institute’s Pediatric Urology Center at UH Rainbow Babies & Children’s Hospital, headed by Jonathan Ross, MD, offers comprehensive care and a full range of medical and surgical services for infants through teens. Dr. Ross has been recognized for his expertise in dealing with rare conditions, such as pediatric testicular tumors. He is joined in the center by Lynn Woo, MD, Pediatric Urologist, UH Urology Institute and UH Rainbow Babies & Children’s Hospital, and Assistant Professor, Case Western Reserve University School of Medicine and Edward Cherullo, MD, Vice-Chair, Clinical Operations, Co-Director, Men’s Health & Stones Center, UH Urology Institute, Urology Residency Program Director, UH Case Medical Center, and Associate Professor, Case Western Reserve University School of Medicine. With Dr. Woo’s minimally invasive and robotics-assisted surgical expertise and Dr. Cherullo’s nationally recognized experience with adult and pediatric urology, the Pediatric Urology Center truly offers comprehensive care unique to each patient.

Rainbow Care Connection: Leona Cuttler, MD, and Andrew Hertz, MD, Medical Director of the UH Rainbow Care Network and Clinical Assistant Professor of Pediatrics at the School of Medicine, are collaborating with other key specialists to implement a novel model to transform pediatric ambulatory care. Funded by a $12.7 million award from the Centers for Medicare and Medicaid Innovation (CMMI) – the largest amount awarded to an individual children’s hospital, the Rainbow Care Connection establishes a sustainable system that will simultaneously improve the quality of care and care delivery, while reducing costs and improving the overall health of children. Through this model, a physician extension team – a multidisciplinary team of traditional and new health care professionals – will bridge the primary care provider office, the home and the hospital, provide coordinated care for children with complex chronic conditions or behavioral problems, and avoid avoidable emergency room visits and hospitalizations.

UH Rainbow Babies & Children’s Hospital was one of eight Ohio children’s hospitals to launch the nation’s first-ever patient safety collaboration. Since its inception in 2009, the Ohio Children’s Hospitals’ Solutions for Patient Safety (OCHSPS) has achieved significant improvements in quality and safety for pediatric care while reducing costs statewide. Today, the OCHSPS is leading efforts to improve quality, safety and affordability of health care in pediatric hospitals across the nation.

• Michele Walsh, MD, is the state lead for the pediatric component of the Ohio Perinatal Quality Collaborative (OPQC), a statewide, multistakeholder network dedicated to improving perinatal health in Ohio. The OPQC has partnered with physicians in obstetrics and gynecology to improve care and outcomes for infants and women across the state. Initial projects focusing on reducing bloodstream infections in hospitalized premature infants and near-term deliveries without medical indications have reduced infections and NICU admissions, saving Ohio at least $11 million annually. The group works closely with the Ohio Department of Health and Best Evidence for Advancement of Child Health in Ohio Now (BEACON), a public/private partnership that supports initiatives that achieve measurable improvements in child and adolescent health care and outcomes through science and a quality improvement infrastructure.

• Leona Cuttler, MD, leads the Center for Child Health and Policy in a variety of quality improvement endeavors related to the work coordinated through BEACON. She has successfully engaged several clinical faculty practices to participate in ongoing efforts to improve the early identification and support of children with developmental delay, and to improve the recognition and care of children with obesity. Dr. Cuttler and her team work on issues that impact children’s health and children’s hospitals at the regional, state and federal levels. The center draws heavily on UH Rainbow Babies & Children’s Hospital’s clinical strengths. Chronic illness is among its areas of focus, including: obesity, diabetes, asthma, dental decay, lead poisoning, cancer, sickle cell disease; maternal/newborn and early childhood health; health care quality and comparative effectiveness; and health care delivery systems.
As one of the nation’s leading academic medical centers, UH Case Medical Center is committed to advancing the field of medicine through a passionate commitment to training tomorrow’s clinicians.

In its teaching role, UH Case Medical Center helps provide medical education in a wide variety of forums through Case Western Reserve University School of Medicine, one of the nation’s leading medical schools. Our physicians – who also serve as members of the school’s faculty – are leaders in their respective fields and their ongoing clinical research programs push the boundaries of medical progress throughout the world. UH Rainbow Babies & Children’s Hospital is the primary pediatric affiliate of Case Western Reserve University School of Medicine and annually trains around 160 pediatric residents and fellows – many of whom go on to serve in leadership positions at children’s hospitals around the world.

This multidimensional approach and dedication to education by UH Case Medical Center and Case Western Reserve University School of Medicine play a major role in further enhancing our rich tradition of developing medicine’s future leaders.

**Case Western Reserve University School of Medicine** has secured $6.4 million through the Medicaid Technical Assistance and Policy Program (MEDTAPP) Healthcare Access Initiative (HAI) to support the development and retention of health care practitioners to serve Ohio’s Medicaid population using emerging health care delivery models and evidence-based practices. Ohio’s MEDTAPP HAI will train and place psychiatrists, primary care physicians, advance practice nurses, dentists and other practitioners. Through this initiative, the Center for Child Health and Policy at UH Rainbow Babies & Children’s Hospital has created a joint program to address pediatric work force needs.

Case Western Reserve University’s Children’s Access Now (CaseCAN) trains residents, fellows and faculty to expand the number of pediatricians and child health professionals serving Ohio’s disadvantaged pediatric population.

• **The Global Child Health track**, the first in the nation, teaches residents about the health needs of children in developing countries and equips them to address those needs. In addition, residents have the option for an overseas rotation to help establish and identify research, clinical and educational opportunities with global health centers.

• **UH Rainbow Babies & Children’s Hospital’s Pediatric Residency program** uses online and blended learning techniques to complement an at-the-bedside patient care experience. A comprehensive research curriculum culminates with an annual Science Day, providing graduating residents the opportunity to present and share their work locally, regionally and nationally.

**ABOUT:**
**UH Rainbow Babies & Children’s Hospital**

Located on the campus of University Hospitals Case Medical Center, UH Rainbow Babies & Children’s Hospital is a 244-bed, full-service children’s hospital and academic medical center. A trusted leader in pediatric health care for more than 125 years, UH Rainbow Babies & Children’s Hospital consistently ranks among the top children’s hospitals in the nation. As the region’s premier resource for pediatric referrals, UH Rainbow Babies & Children’s Hospital’s dedicated team of more than 1,300 pediatric specialists uses the most advanced treatments and latest innovations to deliver the complete range of pediatric specialty services for 700,000 patient encounters annually. Learn more at RainbowBabies.org.
• With 16 American College of Graduate Medical Education-accredited pediatric subspecialty training programs, UH Rainbow Babies & Children's Hospital's Fellowship Training Program was one of the first to offer training in both pediatric and adult fellowships for cardiology and infectious diseases – leading the way for the development of an adult congenital heart fellowship. The combined fellowships allow participants to develop unique niches within their fields and greater collaborations to advance pediatric medicine.

• Edward M. Barksdale Jr., MD, FACS, FAAP, is a master educator who has been recognized in multiple venues for his excellence as a teacher and mentor. He recently received the Kaiser-Permanente Award for Teaching Excellence, the highest award for clinical teaching at the School of Medicine. He is a mentor in the Fellowship Program in Academic Medicine for Minority Students and an invited speaker around the country. He was honored by the Domestic Violence & Child Advocacy Center for his work to heal and prevent the trauma of child abuse. He is a member of the American Board of Surgery Review Board (Pediatric Surgery), Lilliputian Society and the American Pediatric Surgery Association. He also is a Diplomate of the American Board of Medical Specialties and a fellow at the American Academy of Pediatrics – Surgical Section and the American College of Surgeons. Dr. Barksdale is an ad hoc reviewer for the Journal of Pediatric Surgery, Surgery, Journal of Surgical Research, Canadian Institute of Health Research and the Journal of Immunotherapy.

• With a commitment to furthering the development of health care industry professionals, UH Rainbow Babies & Children's Hospital hosts a number of annual continuing education events through Case Western Reserve University featuring national and international presenters who are leaders in the field, including an annual Pediatric Trauma Conference, Pediatric Pain Symposium, and the Pediatric, Adolescent and Young Adult Cancer Symposium.

• Faruk Örge, MD, FAAO, FAAP, Division Chief of Pediatric Ophthalmology and the William R. and Margaret E. Althans Chair in Pediatric Ophthalmology at UH Rainbow Babies & Children's Hospital, and Assistant Professor of Ophthalmology & Visual Sciences at Case Western Reserve University School of Medicine, initiated the nation’s first Retinopathy of Prematurity (ROP) web symposium, bringing together world-renowned experts to teach and discuss common ophthalmic problems in the pediatric population. Topics included mechanism of disease, follow-up criteria, treatment options and imaging in ROP.

• Jonathan Fanaroff, MD, JD, Director of the Rainbow Center for Pediatric Ethics and Associate Professor of Pediatrics at Case Western Reserve University School of Medicine, published an article in the journal, Pediatrics, along with students from the Schools of Medicine and Law at Case Western Reserve University, discussing the ethical and legal challenges health care providers face when treating child victims of abusive head trauma. The article proposes deferring to the child’s rights when a parent’s personal interest, such as potentially long jail time, conflicts with the best interest of the child, and adjusting sentencing guidelines for cases of suspected abusive head trauma in an effort to decrease inherent conflicts of interest. The goal of the proposals, some of which are under consideration by Ohio legislators, is to place the focus on the child and not the alleged perpetrator.

• Drs. Andrew Hertz and Leona Cuttler earn CME credit online. Join us via live webcast for weekly Pediatric Grand Rounds, held Thursdays from 8 – 9 a.m. Learn more at RainbowBabies.org/GrandRounds.
UH Case Medical Center's physicians, surgeons and scientists – all members of the faculty of Case Western Reserve University School of Medicine – are leaders in their respective fields, and their ongoing research programs are at the leading edge of medical progress. A strong emphasis on translational, or “bench-to-bedside,” research means that new and innovative treatments and technologies transfer more rapidly from the research laboratory to actual patient care.

• A pioneer in his field, Michael W. Konstan, MD, and his team are among the world’s most innovative researchers in pediatric pulmonology, developing new treatments and leading the search for a cure for cystic fibrosis. Their efforts have led to several therapies that are in use today, including the only recommended therapy for treating lung inflammation in cystic fibrosis by using high doses of ibuprofen. This therapy has recently been shown to extend the lives of patients with cystic fibrosis. Dr. Konstan is also playing a major role in the investigation of several potentially curative therapies for cystic fibrosis.

• Kenneth Cooke, MD, is the principal investigator of a Phase II clinical trial, which closed early due to better than expected results, to determine the safety and therapeutic potential of Enbrel for BMT patients who developed a frequently fatal lung disorder following treatment. Dr. Cooke’s lab discovered that an inflammatory protein, called tumor necrosis factor alpha, played a major role in the development of IPS. The Phase II pediatric trial was developed and approved by a National Institutes of Health-funded cooperative group involving the Children’s Oncology Group and Pediatric Blood and Marrow Transplant Consortium. Blood and lung fluid samples of patients with IPS are being analyzed to learn more about what drives the clinical process.

• Katherine Dell, MD, Division Chief of Pediatric Nephrology at UH Rainbow Babies & Children’s Hospital and Associate Professor of Pediatrics at Case Western Reserve University School of Medicine, is leading translational research focused on developing and utilizing novel quantitative magnetic resonance imaging (MRI) techniques to study chronic kidney diseases, including autosomal recessive polycystic kidney disease, early diabetic nephropathy and sickle cell nephropathy. The research program is a multidisciplinary collaboration under the auspices of the Case Center for Imaging Research at Case Western Reserve University, with collaborators in the Departments of Pediatrics, Radiology, Medicine and Biomedical Engineering. The goal of these studies is to develop novel, clinically applicable therapies and identify reliable early markers of disease.

• A study led by John J. Letterio, MD, revealed that a new class of drugs, known as antioxidant inflammation modulators (AIMs), may halt or reverse multiple pathogenic processes in multiple sclerosis (MS). The study showed that AIMs promote repair of myelin and prevent neurodegeneration in preclinical models in the disease. Dr. Letterio is working with an industry partner to investigate how AIMs suppress immune cell function while simultaneously inducing an antioxidant gene response to prevent damage from ongoing oxidative stress. In the study recently published in Nature Scientific Reports, AIMs significantly reduced disease symptoms and increased the time between relapses, providing a potentially unique and more effective therapeutic strategy. The study was funded by The Reuter Foundation and is now supported by the U.S. Department of Defense through the School of Medicine.

• Gregory E. Lakin, MD, Chief of the Division of Pediatric Plastic Surgery and Director of the Craniofacial Center at UH Rainbow Babies & Children’s Hospital and Clinical Assistant Professor of Plastic Surgery at Case Western Reserve University School of Medicine, led a 30-year review of patients who underwent the Le Fort II osteotomy, discovering new techniques to fix deformities not previously published. Le Fort II fractures involve the central nose and upper jaw, and surgery is used to restore the occlusion, function and balance to the face. This was the first study to report the use of bilateral upper eyelid incisions to approach the nasion and medial orbital walls for a Le Fort II osteotomy. Dr. Lakin will present the results of the study at the 12th International Congress on Cleft Lip/Palate and Related Craniofacial Anomalies in 2013.

• James Chmiel, MD, in the Division of Pulmonology at UH Rainbow Babies & Children’s Hospital and Associate Professor of Pediatrics at Case Western Reserve School of Medicine, was part of a team that looked at adding omalizumab, an anti-IgE antibody, to guideline-directed treatment for inner-city children, adolescents and young adults with allergic asthma. The findings may help identify patients who will benefit most from omalizumab and could lead to improved treatments for asthma control. The study was supported by contracts with the National Institute of Allergy and Infectious Disease, NIH; grants from the National Center for Research Resources, NIH; and Novartis Pharmaceuticals. UH Rainbow Babies & Children’s Hospital also is a site for the NIH’s AsthmaNet network and the Severe Asthma Research Program to advance knowledge and treatment of the disease through coordinating networks.

• Michele C. Walsh, MD, MS, is the site principal investigator of a randomized study evaluating whether induced whole-body hypothermia initiated between six and 24 hours after birth and continued for 96 hours in infants with hypoxic-ischemic encephalopathy (HIE) will reduce the incidence of death or disability at 18 to 24 months of age. UH Rainbow Babies & Children’s Hospital is the site principal investigator of a randomized study evaluating whether induced whole-body hypothermia initiated between six and 24 hours after birth and continued for 96 hours in infants with hypoxic-ischemic encephalopathy (HIE) will reduce the incidence of death or disability at 18 to 24 months of age. UH Rainbow Babies & Children's Hospital will present the results of the study at the 12th International Congress on Cleft Lip/Palate and Related Craniofacial Anomalies in 2013.

All National Institutes of Health (NIH) funding for basic and clinical research is awarded to the School of Medicine at Case Western Reserve University.

University School of Medicine

University Hospitals Case Medical Center

The commitment to exceptional patient care begins with revolutionary discovery. University Hospitals Case Medical Center and its Rainbow Babies & Children’s Hospital is the primary affiliate of Case Western Reserve University School of Medicine, a national leader in medical research and education and consistently ranked among the top research medical schools in the country by U.S. News & World Report. Through their faculty appointments at Case Western Reserve University School of Medicine, physicians at UH Case Medical Center are advancing medical care through innovative research and discovery that bring the latest treatment options to patients.
& Children's Hospital is one of 16 Eunice Kennedy Shriver National Institute of Child Health and Human Development (NICHD) Neonatal Research Network sites. Hypothermia shows promise as a neuroprotective therapy in HIE patients. The National Center for Research Resources is collaborating on the study. Dr. Walsh also was part of an NICHD study examining the relationship between brain injury and outcome following neonatal HIE treated with hypothermia. Fewer areas of infarction and a trend toward more normal scans were noted in brain MRI following whole-body hypothermia.

* Richard Martin, MBBS, the first Drusinsky-Fanaroff Chair in Neonatology at UH Rainbow Babies & Children's Hospital and Professor of Pediatrics, Reproductive Biology, Physiology/Biophysics and Division of General Medical Sciences at Case Western Reserve University School of Medicine, led a review of results of bronchopulmonary dysplasia clinical trials that used inhaled nitric oxide (NO) in preterm infants. The review placed in context the biologic basis for novel NO therapies and possible future NO-focused clinical and basic research in developmental lung disease with the goal of identifying new and better-targeted NO-based therapies. Dr. Martin is the recipient of the 2012 National Education Award of the American Academy of Pediatrics, Perinatal Section. This prestigious award is given to an individual who played a prominent role in the education of neonatologists worldwide. Dr. Martin has lectured worldwide on apnea of prematurity and lung injury and maturation, and authored more than 140 articles and 70 book chapters.

* Faruk Örge, MD, is leading a team of investigators, engineers and entrepreneurs in the development of a novel proprietary strabismus screening and measurement device, known as iStrab. Dr. Örge also is the co-principal investigator for the evaluation of a Retinopathy of Prematurity screening device invented by NASA engineers. He and his team modified the device for neonatal use to measure oxygenation through a slight touch to the eyeball to determine if treatment is necessary. His team also is working on a patent-pending glaucoma microtubular device inserted into the eye to bypass the faulty drainage mechanism in the eye that leads to the blinding disease.

* Thomas Sferra, MD, is focusing on the discovery and development of novel gene- and small molecule-based therapies for inflammatory bowel disease and colon cancer. He and his team have begun a series of studies to determine the impact of interleukin 6 on gastrointestinal mucosa, small molecular inhibitors targeted toward interleukin 6, and novel therapies directed against specific genes and proteins known to be involved in the development of colon cancer. His team also is collaborating with a Chinese research group to examine the potential use of traditional Chinese medicines as therapies for inflammatory bowel disease and colon cancer.

* UH Rainbow Babies & Children’s Hospital was one of 15 national sites – and the only site in Ohio – for the Treatment Options for Type 2 Diabetes in Adolescents and Youth (TODAY) study. This landmark clinical study on comparative treatments for type 2 diabetes in children revealed that combination treatment with metformin and rosiglitazone is more effective for many children than the standard metformin monotherapy or metformin combined with lifestyle intervention. Leona Cutler, MD, was site principal investigator of the study, which was supported by grants from the National Institute of Diabetes and Digestive and Kidney Diseases and the National Center for Research Resources through the School of Medicine.

* H. Gerry Taylor, PhD, ABPP, in the Division of Developmental-Behavioral Pediatrics and Psychology at UH Rainbow Babies & Children’s Hospital and Professor of Pediatrics and Psychiatry at Case Western Reserve University School of Medicine, led a study showing that adolescents and young adults with very low birth weight had smaller brain volumes than normal birth weight peers. This was associated with more pervasive cognitive deficits, confirming previous studies. Dr. Taylor also led a study showing that extremely preterm birth impacted achievement, cognitive abilities and behavior across the first three years of school, placing these children at risk for developmental and learning problems. He said the results justify early identification and intervention. These studies were supported by a National Institute of Child Health and Human Development, NIH grant through the School of Medicine. Dr. Taylor also is involved in studies of family intervention for children with traumatic brain injury and the effects of maternal HIV disease in Kenya on early child development.

* Alex Yee-Chen Huang, MD, PhD, in the Division of Pediatric Hematology and Oncology at UH Rainbow Babies & Children’s Hospital, and Associate Professor of Pediatrics at Case Western Reserve University School of Medicine, received a 2012 Innovation Award from Alex’s Lemonade Stand Foundation and Flashes of Hope for his research into developing immune-modulatory strategies against primary and metastatic tumors in the central nervous system. Dr. Huang also received a St. Baldrick’s Scholar Career Development Award for his research in enhancing immune surveillance in pediatric sarcomas.

* Duncan Stearns, MD, in the UH Rainbow Babies & Children’s Hospital Division of Pediatric Hematology/Oncology and Assistant Professor of Pediatrics at Case Western Reserve University School of Medicine, received a 2012 Hyundai Hope Grant from Hyundai Hope on Wheels to identify anti-death proteins in medulloblastoma that will lead to targeted therapies. His approach may ultimately lead to the development of clinical trials using new drugs to help children at the highest risk of treatment failure.

* Mahmoud Ghannoum, PhD, EMBA, FIDSA, Director of the Center for Medical Mycology and the Mycology Reference Laboratory at UH Case Medical Center and Case Western Reserve University, Co-Director of the Skin Diseases Research Center and Professor of Dermatology and Pathology at Case Western Reserve University School of Medicine, and Frank Esper, MD, an infectious disease expert at UH Rainbow Babies & Children’s Hospital and Assistant Professor of Pediatric Infectious Disease at the School of Medicine and their collaborators presented findings about a first-of-its-kind oral antiseptic spray that kills a broad spectrum of bacteria and viruses, including rhinovirus, influenza and H1N1, at the Interscience Conference on Antimicrobial Agents and Chemotherapy (ICAC) and the Infectious Disease Society of America (IDWeek). The antiseptic spray – known as Halo® – fights infection and may prevent disease from common or even pandemic respiratory viruses. Additional clinical trials are ongoing.
Founded after the Civil War as a place of healing, the institution embraced a broader role as medical science advanced. By the turn of the twentieth century, a modern general hospital was enhanced by specialty facilities for women, children and infants. An affiliation with the medical school of what was then Western Reserve University – today Case Western Reserve University – formed one of the first true academic medical centers in the United States, as University Hospitals of Cleveland joined Johns Hopkins Hospital and Massachusetts General in combining the training of young physicians and the pursuit of laboratory research with delivery of the most advanced patient care.

In 1931, new facilities brought University Hospitals and the School of Medicine onto the same medical campus in University Circle. Over the years the complex continually expanded both its physical presence and the scope of its professional activities, adding diagnostic and treatment capabilities as well as top-flight physicians and surgeons.

Today, as the primary affiliate of Case Western Reserve University School of Medicine, University Hospitals Case Medical Center advances care through a commitment to clinical and translational research in a large academic medical campus that incorporates nationally acclaimed hospitals including UH Rainbow Babies & Children's Hospital, UH Seidman Cancer Center and UH MacDonald Women's Hospital.

In 2011, University Hospitals put the finishing touches on Vision 2010, a five-year, $1.2 billion strategic plan, which included building the new freestanding 150-bed inpatient and outpatient UH Seidman Cancer Center; the Center for Emergency Medicine and Marcy R. Horvitz Pediatric Emergency Center at UH Case Medical Center; the Quentin & Elisabeth Alexander Neonatal Intensive Care Unit at UH Rainbow Babies & Children's Hospital, which was ranked fifth in the nation for newborn care by U.S. News & World Report; the UH Ahuja Medical Center, a 435,000-square-foot hospital and 60,000-square-foot Kathy Risman Pavilion, a medical office building in Beachwood, Ohio; and several outpatient health centers throughout Northeast Ohio. A key strategy of Vision 2010 involved the implementation of a new state-of-the-art Electronic Medical Record System throughout the system.
1915: Babies’ Dispensary physicians develop S.M.A. (Simulated Milk Adapted), one of the first commercially prepared infant formulas.

1950: Development of the mist tent at UH Rainbow Babies & Children’s Hospital helps to provide moist air to cystic fibrosis patients.

1952: The premature nursery, precursor to the NICUs of today, admits its first infants.

1954: The hospital opens the first metabolic observation unit for babies in northern Ohio.

1957: The first open heart surgery performed at UH Rainbow Babies & Children’s Hospital.

1957: The LeRoy W. Matthews Cystic Fibrosis Treatment and Research Center is founded, providing the first comprehensive and effective therapeutic approach to CF treatment.

1958: Benjamin Spock, MD, begins his groundbreaking child-rearing study.

1960: Jerome Liebman, MD, performs the region’s first newborn cardiac catheterization.

1964: The Cystic Fibrosis Core Center grant was awarded to the School of Medicine by the National Institutes of Health, and has been funded to the present day.

1968: Carl Doershuk, MD, pioneers the first pulmonary function testing equipment and studies used for infants and children.

1971: Jerome Liebman, MD, designs the first angiographic equipment for children.

1971: Hospital neonatologists develop silicone nasal prongs for the application of continuous positive airway pressure in treating respiratory distress in preterm and term neonates.

1972: Robert Stern, MD, develops the heparin lock, eliminating the need for continuous intravenous hookup in children needing frequent IV administration and eventually leading to home IV therapy.

1973: LeRoy W. Matthews, MD, establishes Pediatric Clinical Faculty (PCF) as a formally structured organization – the first of its kind in the nation for an academic medical center.

1973: Neonatologists Marshall Klaus, MD, and Avroy Fanaroff, MD, publish Care of the High-Risk Neonate – a textbook that continues to be updated and widely used today.

1974: Hospital nursing staff initiates the ideal of family-centered care – a concept that remains a central guiding principle at many hospitals today.

1975: Maureen Hack, MD, establishes a comprehensive, long-term follow-up program evaluating neonates for growth and neuro-developmental issues.

1976: John Kennell, MD, and Marshall Klaus, MD, publish groundbreaking research on infant/parent bonding, laying the foundation for making family-centered care standard practice in newborn nurseries and hospitals.

1976: UH Rainbow Babies & Children’s Hospital opens its pediatric intensive care unit (PICU), one of the first in the nation.

1978: The region’s first pediatric bone marrow transplant is performed at UH Rainbow Babies & Children’s Hospital, curing a boy of aplastic anemia.

1978: The nation’s first international health track in a pediatric residency program is offered by the hospital’s Center for International Child Health.

1980: Hospital neonatologist Waldemar Carlo, MD, and respiratory therapist Robert Chatburn build a high frequency jet ventilator to more safely treat premature babies.

1982: Jeffrey Blumer, MD, establishes the hospital’s Center for Drug Research – one of the nation’s first pediatric clinical pharmacology and basic research programs.

1986: UH Rainbow Babies & Children’s Hospital becomes a founding member of the National Institute of Child Health and Human Development (NICHD) Neonatal Research Network.

1987: The hospital becomes one of 21 centers nationwide to offer ECMO for babies with pulmonary and cardiac problems.

1989: The nation’s first international health track in a pediatric residency program is offered by the hospital’s Center for International Child Health.

1990: Two children receive revolutionary gene therapy for an immune deficiency disorder at UH Rainbow Babies & Children’s Hospital – the first in the world.

1990: Hospital Child Life Specialists, led by Mary Barkey, pioneer the Comfort Measures model to help children and their parents manage their health care experiences.

1991: A 19-day-old infant becomes the youngest donor heart recipient in Ohio after undergoing transplant surgery.
1991 – 1994: Hospital physicians participate in a national clinical study which demonstrates that hydroxyurea is an effective drug in preventing painful episodes of sickle cell disease.

1992: Paula Forsythe, RN, a neonatal nurse, receives a grant to create three semi-private spaces for families to stay with their babies prior to discharge – leading to NICUs with private rooms today.


1994: Hospital neonatologists pioneer research on surfactant replacement therapy to reduce fatal lung disease in infants.

1995: Hospital physician performs the region’s first bone marrow transplant using umbilical cord blood.

1995: Michael W. Konstan, MD, publishes a study in the New England Journal of Medicine demonstrating ibuprofen’s profound effect on cystic fibrosis (CF) patients’ pulmonary function, leading to its widespread acceptance as the first effective therapy to suppress inflammation in CF.

1996: Pediatric neurosurgeons help develop miniaturized tools for performing endoscopic brain surgery, reducing the need for open-skull surgery.

1997: The hospital advances the concept of family-centered care through its new Horvitz Patient Tower, which provides parent sleeping space at every child’s bedside.

1997: Dorr Dearborn, MD, leads a study linking sudden infant death syndrome and a bleeding lung condition associated with exposure to black mold.

1997: Hospital pediatric pulmonologists release the first study data identifying environmental factors, such as mold, dust and other indoor allergens, as asthma triggers in inner-city children.

1998: The hospital becomes one of eight founding members of the Cystic Fibrosis Therapeutics Development Network.

1999: The hospital launches the Center for Bloodless Medicine and Surgery, becoming the first freestanding pediatric hospital in the nation to develop a bloodless program for children.

1999: Neonatologist Michele C. Walsh, MD, MS, co-authors the first multicenter clinical study on the use of low-dose inhaled nitric oxide in neonates.

1999: Neonatologist Michele C. Walsh, MD, MS, co-authors the first multicenter clinical study on the use of low-dose inhaled nitric oxide in neonates.

2000: The first NIH-designated Polycystic Kidney Disease Research Center is established at the School of Medicine.

2001: The nation’s first electrical stimulation therapy program for the treatment of children with swallowing disorders is founded at the hospital.

2002: Cystic fibrosis clinician-researchers, based on the research of Pamela B. Davis, MD, PhD, Professor of Pediatrics at the School of Medicine, conduct a first-of-its-kind gene therapy trial involving compacted DNA technology.

2003: Neonatologist Maureen Hack, MD, releases the first outcomes of a study on extremely low birth-weight premature infants after reaching young adulthood.

2004: The hospital establishes the nation’s first No Hitting Zone program to educate staff and parents in the use of appropriate discipline.

2005: The hospital launches the Healthy Kids, Healthy Weight™ program – helping children and families adopt lifelong healthy habits.

2005: The hospital launches the Virtual Pediatric Surgery Education Series – a virtual symposium that brings surgical innovation and technology to physicians around the globe.

2009: The hospital receives a $12.7 million grant from the Centers for Medicare and Medicaid Innovation to establish a sustainable model to improve care, lower costs and improve the overall health and wellness of children.
Our Commitment to Quality

The passage of health care reform legislation is changing the way care is delivered, bringing a new focus to optimizing the quality of patient care while controlling costs and using resources efficiently. At UH Case Medical Center, the emphasis on quality is not an outgrowth of new health care legislation, but an integral part of our patient care tradition.

And that is precisely why we have launched the UH Quality Institute.

As an innovative integrated delivery system, UH offers patients the latest technology and treatment methods. By pursuing the newest and best technologies, hiring and retaining highly skilled staff, and promoting a culture of safety and excellence, UH has forged an impressive quality record.

The UH Quality Institute shares the results of our ongoing efforts to provide safe, effective, patient-centered care to our patients and families. This includes a website that provides information about our quality awards, patient safety and quality measures. Through this quality data, we are able to present documentation and further evidence of the top-notch care we provide.

The 2012 American Hospital Association-McKesson Quest for Quality Prize named UH Case Medical Center the top hospital in the nation for its leadership and innovation in quality improvement and safety.

UH Case Medical Center was selected by a multidisciplinary committee of health care quality and patient safety experts.

Awarded annually, the prize is supported by a grant from the McKesson Corp., a national health care services company based in San Francisco. The criteria for the 2012 award include the demonstration of an organizational commitment to and progress in achieving the Institute of Medicine’s six quality aims – safety, patient-centeredness, effectiveness, efficiency, timeliness and equity. One goal of the award is to honor hospitals that are making progress in quality improvement with models that can be replicated by others in the hospital field.
HARRINGTON DISCOVERY INSTITUTE

at University Hospitals Case Medical Center

Harrington Discovery Institute is led by Director **Jonathan Stamler, MD**. Dr. Stamler holds the Robert S. and Sylvia K. Reitman Family Foundation Distinguished Chair in Cardiovascular Innovation at both University Hospitals and Case Western Reserve University School of Medicine. He also serves as Director for the Institute for Transformative Molecular Medicine, Professor of Medicine and Professor of Biochemistry at Case Western Reserve University School of Medicine.

**Mukesh K. Jain, MD**, is the Chairman of the Executive Committee for Harrington Discovery Institute. He also serves as Chief Research Officer, University Hospitals Harrington Heart & Vascular Institute at University Hospitals Case Medical Center, and holds the Ellery Sedgwick Jr. Chair and is a Distinguished Scientist. In addition, Dr. Jain serves as Director, Case Cardiovascular Research Institute, and is a Professor of Medicine at Case Western Reserve University School of Medicine.

Harrington Discovery Institute is a national model dedicated to physician-scientists, enabling them to transform their extensive, cross-cutting knowledge into therapies and medicines that improve patients’ lives.

The institute will support physician-scientists as they undertake fundamental research uniquely capable of changing the standard of care, generating insights into the clinical condition and developing new treatments. As part of its mission, Harrington Discovery Institute will enable physician-scientists to participate in and transform the drug development cycle within academia.

The open design of Harrington Discovery Institute will allow for collaboration with major academic medical centers and nonprofit foundations across the country, build a national community for physician-scientists and advance academic medicine’s involvement in drug discovery and development.

To learn more about the annual Harrington Scholar-Innovator Grant program and view a list of grant recipients, visit HarringtonDiscovery.org.
Clinicians and Scientists at UH Case Medical Center and Case Western Reserve University School of Medicine

Department of Pediatrics

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Chairman, Department of Pediatrics
UH Case Medical Center and Case Western Reserve University
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Austin Ricci Chair in Pediatric Pulmonary Care and Research,
UH Rainbow Babies & Children’s Hospital
Gertrude Lee Chandler Tucker Professor and Chairman,
Case Western Reserve University School of Medicine

Vice Chairs
Martha Wright, MD
Vice Chair for Education
Professor

Mitchell Drumm, PhD
Vice Chair for Research
Professor

Ethan Leonard, MD
Vice Chair for Quality
Associate Professor

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Marjorie Greenfield, MD
Professor

Lisa Perriera, MD
Assistant Professor

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Christopher Snyder, MD
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KeyBank – Meyer Family Chair
for Excellence in Leadership
Clinical Associate Professor

Yasser Al-Khatib, MD
Assistant Professor

Ravi Ashwath, MD
Assistant Professor

Marcelo Auslender, MD
Associate Professor

Manish Bansal, MD
Assistant Professor

Oleg Kovtun, MD
Assistant Professor

Jerome Liebman, MD
Professor Emeritus

James Strainic, MD
Assistant Professor

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Nicole Johnson, MD
Assistant Professor
Karen Lidsky, MD
Assistant Professor
Katherine Mason, MD
Assistant Professor
David Speicher, MD
Assistant Professor
Anne Stormorken, MD
Assistant Professor
Philip Toltzis, MD
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Joseph Bedosky, PhD
Assistant Professor
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Senior Instructor
Peter Corpus, MD
Senior Instructor
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Aaron Ellington, PhD
Senior Instructor
Nora McNamara, MD
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Molly McVoy, MD
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Robert Stansbrey, MD
Assistant Professor
Karen Tien, PhD
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Veerajalandhar Allareddy, MD
Assistant Professor
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Chief Medical Officer, UH Case Medical Center
Associate Professor

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Rose Gubitosis-Klug, MD, PhD
Mary Blossom Lee Chair of Pediatric Diabetes
Assistant Professor
Beth Kaminski, MD
Assistant Professor
Douglas Kerr, MD, PhD
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Michaela Koontz, MD
Assistant Professor
Sarah MacLeish, DO
Assistant Professor
H. Gerry Taylor, PhD
Clinical Instructor
Rachel Tangen, PhD
Assistant Professor
Naveen Uli, MD
Associate Professor
Teresa Zimmerman, MD
Assistant Professor

Gastroenterology, Hepatology and Nutrition
Thomas J. Sferra, MD
Division Chief
Martin and Betty Rosskamm
Endowed Chair in Pediatric Gastroenterology in honor of
Fred C. Rothstein, MD
Associate Professor
Aitiye Aktay, MD
Assistant Professor
Virginia Baez-Socorro, MD
Assistant Professor
Fred C. Rothstein, MD
President, UH Case Medical Center
Clinical Professor
Judy Splawski, MD
Associate Professor
Zili Zhang, MD, PhD
Associate Professor

Genetics
Jirair Bedoyan, MD, PhD
Clinical Assistant Professor
Suzanne Debrose, MD
Clinical Assistant Professor
Laura Konczal, MD
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Shawn McCandless, MD
Associate Professor
Anna Mitchell, MD, PhD
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Division Chief
Jane and Lee Seidman Chair in Pediatric Cancer Innovation
Professor
Rolla Abu-Arja, MD
Assistant Professor
Sanjay Ahuja, MD
Associate Professor
Kenneth Cooke, MD
The Ohio Eminent Scholar and Leonard P. Hannah Professor in Stem Cell and Regenerative Medicine

Peter DeBlank, MD
Assistant Professor
Rachel Egler, MD
Assistant Professor
Alex Huang, MD, PhD
Associate Professor
Yousif Matloub, MD
Angie Fowler Chair in Adolescent & Young Adult Oncology
Professor
Robin Norris, MD, MPH
Assistant Professor
Agne Petrosiute, MD
Instructor
Connie Piccone, MD
Assistant Professor
Aymen Saleh, MD
Adjunct Assistant Professor
Duncan Stearns, MD
Assistant Professor

Infectious Diseases and Rheumatology
Grace McComsey, MD
Division Chief, Professor
Elizabeth Brooks, MD, PhD
Assistant Professor
Arlene Dent, MD, PhD
Assistant Professor
Frank Esper, MD
Assistant Professor
Claudia Hoyen, MD
Infectious Diseases and Rheumatology

Aditi Parikh, MD
Clinical Instructor
Arthur Zinn, MD, PhD
Associate Professor

Physicians receive their academic appointments and their accompanying titles from Case Western Reserve University School of Medicine.
Clinicians and Scientists at UH Case Medical Center and Case Western Reserve University School of Medicine

Angela Robinson, MD
Assistant Professor

Maternal Fetal Medicine
Honor Wolfe, MD
Division Chief, Mary D. Fergus
Endowed Chair in Maternal and Fetal Medicine
Professor
Jane Corteville, MD
Assistant Professor

Method Duchon, MD
Assistant Professor

Michael Gyves, MD
Assistant Clinical Professor

David Hackney, MD
Assistant Professor

Noam Lazebnik, MD
Professor

Elizabeth Ann Ruzga, ND, CNM
Assistant Clinical Professor

George A. Van Buren, MD
Assistant Professor

Lisa Wolfe, CNP

Neonatology
Michele Walsh, MD, MS
Division Chief

Prasad Achanti, MD
Clinical Associate Professor

Jill Baley, MD
Professor

Monika Bhora, MD
Assistant Professor

Moira Crowley, MD
Assistant Professor

Avroy Fanaroff, MD
Eliza Henry Barnes Emeritus Chair in Neonatology
Professor Emeritus

Jonathan Fanaroff, MD, JD
Associate Professor

Katherine Griswold, MD
Assistant Professor

Maureen Hack, MD
Professor

Anna Maria Hibbs, MD, MSCR
Assistant Professor

Richard Martin, MD
Drusinsky-Fanaroff Chair in Neonatology
Professor

Mary Nock, MD
Associate Professor

Mary Elaine Patinos, MD
Assistant Professor

Allison Payne, MD
Instructor

Eileen Stork, MD
Professor

Andrea Trembath, MD, MPH
Instructor

Sreekanth Viswanathan, MD
Assistant Professor

Deanne Wilson-Costello, MD
Professor

Gulgun Yalcinkaya, MD
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Qin Yao, MD
Assistant Professor

Nephrology
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Beth Vogt, MD
Associate Professor

Neurology
Mark Scher, MD
Division Chief, Professor

Nancy Bass, MD
Associate Professor

Edward Gilmore, MD, PhD
Assistant Professor

Deborah Gold, MD
Assistant Professor

Dararat Mingbunjerdusk, MD
Assistant Professor

Max Wiznitzer, MD
Associate Professor

Palliative Care
Lisa Humphrey, MD
Director

Dianna Yip, DO
Assistant Professor

Pathology
Raymond Redline, MD
Professor

Pulmonology, Allergy and Immunology
Benjamin Gaston, MD
Division Chief

James Chmiel, MD
Associate Professor

Daniel Craven, MD
Assistant Professor

Elliott Dassenbrook, MD
Connie and Jim Brown Chair in Pediatric Pulmonary Survivorship
Assistant Professor

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Mary Ann Svetland Professor and Chairman, Environmental Health Sciences

Danielle Goetz, MD
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Meeghan Hart, MD
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UH Rainbow Babies & Children's Hospital

Geri Rebrouctor, MD, Chairman,
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Maura Berkelhamer, MD
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Anna Clebone, MD
Clinical Assistant Professor

Sherine Ghafoori, MD
Assistant Professor

Mark Goldfinger, MD
Assistant Professor

Ann Lawrence, MD
Assistant Professor

Sheryl Modlin, MD
Assistant Professor

Kasia Rubin, MD
Assistant Professor

John Stork, MD
Assistant Professor

Judith VanAntwerp, MD
Clinical Assistant Professor

Orthopaedic Surgery
George H. Thompson, MD
Division Chief, Professor

Robert Anderson, MD
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Daniel Cooperman, MD
Professor

Patrick Getty, MD
Assistant Professor

Allison Gilmore, MD
Assistant Professor

Christina Hardesty, MD
Assistant Professor

Stephen Lacey, MD
Assistant Professor

Raymond Liu, MD
Assistant Professor

Jochen Son-Hing, MD
Assistant Professor

Sports Medicine
Amanda Weiss Kelly, MD
Division Chief

Susannah Briskin, MD
Assistant Professor

Mary Solomon, DO
Assistant Professor

Rainbow Surgical Specialists
Edward M. Barksdale Jr., MD, FACS, FAAP
Surgeon-in-Chief and Chief,
Pediatric Surgery

Robert J. Izant, Jr., MD
Endowed Chair in Pediatric Surgery
UH Rainbow Babies & Children's Hospital

Vice Chairman, Department of Surgery,
UH Case Medical Center

Professor of Pediatrics,
Case Western Reserve University School of Medicine

Cardiothoracic Surgery
Peter C. Kourtas, MD, PhD
Division Chief

Associate Professor

Ophthalmology
Faruk H. Orge, MD,
FAAO, FAAP
Division Chief

William R. and Margaret E. Althans Chair in Pediatric Ophthalmology
Assistant Professor

Florin Grigorian, MD
Clinical Instructor

Paula Grigorian, MD
Clinical Instructor

Sara E. Schoeck, OD
Senior Instructor

Otolaryngology/ENT
James E. Arnold, MD
Division Chief

Julius W. McCall Professor and Chair of Otolaryngology –
Head and Neck Surgery

Cliff Megerian, MD
Vice Chairman of Otolaryngology –
Head and Neck Surgery

Richard W. and Patricia R. Pogue Chair in Auditory and Hearing Sciences

Professor

Moroun Semaan, MD
Assistant Professor

Plastic Surgery
Gregory E. Lakin, MD
Division Chief

Clinical Assistant Professor

Transplant and Pancreatico –
Biliary Surgery

James Schulak, MD
Professor

Urology
Jonathan Ross, MD
Division Chief

Associate Professor

Edward Cherullo, MD
Assistant Professor

Lynn Woo, MD
Assistant Professor

Physicians receive their academic appointments and their accompanying titles from
Case Western Reserve University School of Medicine.
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Adebowe Adedipe, MD
Michael Adornetto, MD
Khalid Akbar, MD
Priscilla Ancheta, MD
Mala Appachi, MD
Heather Arnett, MD
Catherine Arora, MD
Jill Azok, MD
Marcus Baratian, MD
Janet Benish, MD
John Bennet, MD
Eva Bhdr, MD
Anita Bhardwaj, MD
Joseph Borus, MD
Cynthia Brawner, MD
Joann Brewer, MD
Deborah Brindza, MD
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Michele Carruozzo, MD
Amy Carruthers, MD
Constancia Castro, MD
Peter Catanzaro, MD
Kevin Chang, MD
Lisa Cherullo, MD
Laura Cifra-Bean, MD
Valerie Coates, MD
Jennifer Cochran, MD
Marcia Columbo, MD
Maria-Josefa Coutinhov, MD
Cathleen Coyne, MD
Chantal Dalencour, MD
Naser Danan, MD
Amy Daso, MD
Lori D’Avello, MD
Barbara Davis, MD
Lyn Dickert-Leonard, MD
Aravind Dipali, MD
Mohan Durve, MD
Stephen Dutko, MD
Susan Dykeman, MD
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Ann Failinger, MD
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Julia Libecco, MD
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Donald Lucker, MD
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Daniel Worthington, MD
Lloyd Yeh, MD
Brian Zack, MD
UH Rainbow Babies & Children’s Hospital ranked in all 10 pediatric specialties for the second consecutive year.

Learn more at RainbowBabies.org/usnews.
To refer a patient or learn more about UH Rainbow Babies & Children’s Hospital, call 216-UH4-PEDS (216-844-7337) or 1-866-UH4-CARE (1-866-844-2273) or visit RainbowBabies.org.