



FORGING MEDICINE'S FUTURE

**DEPARTMENT OF OTOLARYNGOLOGY
– HEAD & NECK SURGERY**



DEAR COLLEAGUE:

As one of just 18 hospitals named to the **U.S. News & World Report Honor Roll**, University Hospitals Case Medical Center is committed to building upon a legacy of medical discovery that began nearly 150 years ago and continues today.

Through our collaboration with Case Western Reserve University School of Medicine, our otolaryngologists – many of whom are also faculty at Case Western Reserve University School of Medicine – are forging the future of medicine through a number of programs and initiatives:

- The Cochlear Implant Team has defined parameters for restoring hearing using cochlear implants in disorders including far advanced otosclerosis and auto-immune hearing loss.

- The possibility of safe and effective cochlear implants for patients with far-advanced otosclerosis (FAO) or autoimmune inner ear disease (AIED).
- We are developing a tissue-engineered trachea using cartilage cell growth technology to potentially replace defects in the airway.
- Research by the UH Ear, Nose & Throat Institute and Case Western Reserve University School of Medicine has focused on a protein, human beta-defensin-3 (hBD-3), for its potential role as a biomarker for cancerous lesions of the oral cavity

and its ability to serve as both a diagnostic and possibly therapeutic marker for head and neck cancers.

We welcome your feedback on how we can work together to further enhance otolaryngology – head & neck surgery.


P.S. *We look forward to seeing you this May in Las Vegas at the Combined Otolaryngology Spring Meetings, as well as this September in Orlando for the 2014 American Academy of Otolaryngology – Head and Neck Surgery Annual Meeting.*



Cliff Megerian, MD, FACS

*Chairman, Department of Otolaryngology
UH Case Medical Center and Case Western Reserve University School of Medicine
Director, University Hospitals Ear, Nose & Throat Institute
Richard W. and Patricia R. Pogue Chair in Auditory Surgery and Hearing Sciences
UH Case Medical Center
Professor of Otolaryngology – Head and Neck Surgery
Case Western Reserve University School of Medicine*





Department of Otolaryngology – Head & Neck Surgery

To learn more about the UH Ear, Nose & Throat Institute, view publications, learn about our residency program, and read about our latest clinical research and discoveries, please visit UHhospitals.org/ENT.

The University Hospitals Ear, Nose & Throat Institute, established within the Department of Otolaryngology – Head & Neck Surgery at UH Case Medical Center, is a nationally recognized leader in otolaryngology care, with a reputation for performing leading-edge clinical research and offering advanced treatment options for conditions affecting the ears, nose and throat (ENT). With eight Centers of Excellence, the institute is able to provide an unsurpassed level of care for the entire range of ENT conditions, and our board-certified physicians are among the most respected in the field. Our patients benefit from the skill of highly trained specialists with access to the latest, most advanced therapies. Our team is dedicated to providing compassionate, patient-centered care for both adult and pediatric ENT patients.

UH CASE MEDICAL CENTER

Among the nation's leading academic medical centers, UH Case Medical Center is the **primary affiliate of Case Western Reserve University School of Medicine.**

TO HEAL. TO TEACH. TO DISCOVER.

With more than 1,000 registered beds, UH Case Medical Center provides primary, specialty and subspecialty medical and surgical care. Located in the heart of Cleveland's University Circle on a beautiful 35-acre campus, UH Case Medical Center includes general medical, intensive care and surgical units, as well as three major specialty hospitals:

University Hospitals Seidman Cancer Center

University Hospitals MacDonald Women's Hospital

University Hospitals Rainbow Babies & Children's Hospital

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 dedication to clinical research and education has played a major role in building UH Case Medical Center's rich legacy of medical innovation, and continues to this day. Coupled with a commitment to implementing the latest therapies and integrating with the most technologically advanced 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.

1,000+
registered
beds

35
acre
campus

3
major
specialty
hospitals



THE PRIMARY AFFILIATE OF Case Western Reserve University School of Medicine

The commitment to exceptional patient care begins with revolutionary discovery. **University Hospitals Case Medical Center 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.



Dr. Kenneth Rodriguez

UH Ear, Nose & Throat Institute

The UH Ear, Nose & Throat Institute at UH Case Medical Center is comprised of eight Centers of Excellence that showcase its national prominence in the field of otolaryngology and head and neck surgery.

CENTERS OF EXCELLENCE

- Audiology & Cochlear Implant Center
- Community Ear, Nose & Throat Center
- Ear, Hearing & Balance Center
- Head & Neck Cancer Center
- Nose, Sinus & Allergy Center
- Pediatric Ear, Nose & Throat Center
- The ENT Translational & Basic Science Research Center
- Voice & Swallowing Center

Few institutes in the nation can claim the number of fellowship-trained otolaryngologists in as many subspecialties as the UH Ear, Nose & Throat Institute at UH Case Medical Center. Many of these physicians are among the most respected in their field; in fact, half are listed in America's Top Doctors®.

Institute leadership comprises:

Cliff A. Megerian, MD, FACS, *Chairman, Department of Otolaryngology, UH Case Medical Center and Case Western Reserve University School of Medicine; Director, UH Ear, Nose & Throat Institute; Richard W. and Patricia R. Pogue Chair in Auditory Surgery and Hearing Sciences, UH Case Medical Center; and Professor of Otolaryngology – Head and Neck Surgery, Case Western Reserve University School of Medicine*, who leads the world-renowned cochlear implant program.

Pierre Lavertu, MD, *Director, Head and Neck Surgery and Oncology, UH Case Medical Center; and Professor of Otolaryngology – Head and Neck Surgery, Case Western Reserve University School of Medicine*, who is the chief of the treatment of head and neck cancers in coordination with the nationally recognized UH Seidman Cancer Center.

James Arnold, MD, *Program Director, Otolaryngology and Pediatric Otolaryngology, UH Case Medical Center and UH Rainbow Babies & Children's Hospital; Professor of Otolaryngology and Pediatrics and the Julius W. McCall Professor, Case Western Reserve University School of Medicine*, who was one of the first pediatric otolaryngologists in the country to become a department chair.

Kumar Alagramam, PhD, *Anthony J. Maniglia Chair in Otolaryngology Head and Neck Surgery, Director of Research and Associate Professor of Otolaryngology, Genetics and Genome Sciences and Neurosciences, Case Western Reserve University School of Medicine*, who runs the department's research laboratory, with the long-term goal of understanding the genetic program associated with hair cell development and function in the inner ear.

Todd Otteson, MD, MHP, *Division Chief, Pediatric Otolaryngology, UH Case Medical Center and UH Rainbow Babies & Children's Hospital; Associate Professor, Otolaryngology, Case Western Reserve University School of Medicine*, who specializes in pediatric otolaryngology with particular interest in ENT manifestations of eosinophilic esophagitis, cleft palate and craniofacial patients.

**To contact the institute directly,
email ENT@UHhospitals.org.**

Dr. Cliff A. Megerian



NATIONALLY RECOGNIZED EXPERTS

DEPARTMENT OF OTOLARYNGOLOGY
– HEAD & NECK SURGERY

A protein, human beta-defensin-3 (hBD-3) has been the subject of research for its potential role as a biomarker for cancerous lesions of the oral cavity and its ability to serve as both a diagnostic and possibly therapeutic marker for head and neck cancers.

A Protein as Biomarker for Cancer

Potential as Tool to Predict, Monitor and Treat Oral, Head and Neck Cancers

A collaboration between **Chad Zender, MD, FACS**, *Otolaryngology, UH Case Medical Center; and Assistant Professor, Otolaryngology – Head and Neck Surgery, Case Western Reserve University School of Medicine* and **Aaron Weinberg, DMD, PhD**, *Associate Dean for Research; Professor and Chair, Department of Biological Sciences, Case Western Reserve University School of Dental Medicine, Professor of Pathology, Case Western Reserve University School of Medicine*, has focused on several unique qualities of hBD-3. They have found elevated levels of this protein in some oropharyngeal (tongue-based and tonsil) cancers and it may provide early identification of these frequently asymptomatic tumors. They are also exploring hBD-3 in relation to cancers caused by the human papilloma virus (HPV).

hBD-3 is unusual in that it is a secretory protein, measurable in both the saliva and the bloodstream. Drs. Zender and Weinberg are trying to correlate specific levels in patients who are cancer-free, those with cancer, and those who have been treated for cancer of the head and neck. They believe that hBD-3 may also help differentiate, and predict, premalignant tumors from malignant, as well as differentiate between benign vs. premalignant or malignant oral cavity lesions or growths.

Dr. Weinberg's lab has developed an assay to measure hBD-3 levels in saliva and serum. The goal of the research is to determine if that technique has **potential to identify high-risk lesions** in patients as well as differentiate them from lesions that

are unlikely to possess potential for malignancy. They hope, eventually, to use this technology to identify patients with oral cancer, correlate it with their response to therapy and help monitor them for recurrence.

It does appear that hBD-3 levels decrease *in vitro* when cell lines are treated with certain chemotherapeutic agents like cisplatin, cetuximab and others. They are currently trying to expand some of these experiments to animal models in which patient-derived xenografts are used to attempt to create a more *in vivo* model to look at how hBD-3 levels change in response to cancer treatments such as chemotherapy and radiation therapy.



Dr. Chad Zender

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



Dina Cirino, RN, Dr. Todd Otteson, Dr. James Arnold and Dr. Jay Shah

Plans Under Way for **PEDIATRIC AIRWAY CLINIC**

CONVENIENCE, EFFICIENCY AND STRESS REDUCTION FOR MULTIDISCIPLINARY TREATMENT

New to UH Case Medical Center is **Jay Shah, MD**, *Pediatric Otolaryngology, and Assistant Professor, Otolaryngology, Case Western Reserve University School of Medicine*. His plans for the year to come include initiation of a clinical study of photodynamic therapy of respiratory papillomatosis. His immediate undertaking, however, is the organization of a **pediatric airway clinic – a centralized area with easy access for the community**, patients and families to a pediatric gastroenterologist, pediatric pulmonologist and pediatric otolaryngologist.

Using existing facilities and updated equipment, he hopes to create a location that would serve as a one-stop clinic in which patients would see multiple specialists in a single visit and in a centralized area. Many patients and their families come from the areas surrounding Cleveland and Northeast Ohio, some from as far as Sandusky, the Pennsylvania border, Columbus and Akron. In addition, children with airway disorders often have overlying gastrointestinal issues such as reflux, pulmonary disease and tracheomalacia. Dr. Shah's clinic would facilitate and strengthen the team-oriented approach to managing these kids, many of whom have special needs and are already well-established in the UH Rainbow Babies & Children's Hospital system.

Such a multiple disciplinary approach to managing these patients will, in the short term, result in cost savings and stress reduction for patients and their families. In the longer term, Dr. Shah believes, it will also increase efficiencies that come from fewer missed follow-ups and appointments, as well as less delay of care.

Planning is still in the early phases, primarily involving the coordination of multiple schedules of the various specialists involved. The goal is for the clinic to be up and running by fall 2014.

To read our latest issue of *Innovations in Otolaryngology – Head and Neck Surgery*, visit UHhospitals.org/ENTInnovations.

CLINICAL ADVANCES

An innovative treatment designed to treat sleep apnea, the Inspire™ Upper Airway Stimulation (UAS) therapy, by **Kingman Strohl, MD**, Professor of Medicine, Physiology & Biophysics at Case Western Reserve University School of Medicine; Director of the Sleep Disorders Program at the Louis Stokes Cleveland VA Medical Center and **Jonathan Baskin, MD**, Department of Otolaryngology, UH Case Medical Center, and Assistant Professor of Otolaryngology and Biomedical Engineering, Case Western Reserve University School of Medicine,

is currently under review by the FDA. A Phase II trial was followed by the Stimulation Therapy for Apnea Reduction (STAR) Trial two years ago and then an 18-month follow-up in seven patients. Results of the FDA review should be known by the summer of 2014. This is a first-in-class therapy. Other medical devices that take this approach in treating obstructive sleep apnea are still in a feasibility and safety evaluation mode and may or may not get to an FDA Phase III trial. This is the first one to be reviewed by the FDA.

Research by **Maroun Semaan, MD**, Co-Director, UH Ear, Nose & Throat Institute, Ear, Hearing & Balance Center and Cochlear Implant Surgery; and Assistant Professor, Otolaryngology – Head and Neck Surgery, Case Western Reserve University School of Medicine, indicates that safe and effective cochlear implants may be possible for patients with far-advanced otosclerosis (FAO) or autoimmune inner ear disease (AIED). A chart review of 30 patients with severe FAO for whom hearing aids were not effective was compared with 30 age-matched controls. All had received cochlear implants and the presence of radiographic abnormalities was not found to be predictive of poor outcomes. There was no difference between treatment groups in terms of mean short- and long-term postoperative speech reception threshold, word and sentence scores,

and no patients in either group experienced postoperative facial nerve stimulation. A similar chart review of patients with AIED included 10 patients with AIED in a total of 12 implanted ears compared with 12 randomly selected control-group patients who had been deafened postlingually by nonimmune-mediated disease. There were no significant differences between treatment groups in terms of short- or long-term postimplantation words and sentence scores. They concluded that patients with immune-mediated disease may benefit from cochlear implantation and that some patients, prior to the occurrence of postinflammatory obliterate cochlea changes, may benefit from earlier implantation. Findings were published in the American Journal of Otolaryngology.



Drs. Kingman Strohl and Jonathan Baskin

The UH Ear, Nose & Throat Institute also continues to study outcomes of piezoelectric BoneScalpel™ osteotomies in osteocutaneous free-flap surgeries. Approximately 130 to 150 free-flap procedures for reconstruction following removal of head and neck tumors are performed annually at UH. About 30 percent of these procedures are osteocutaneous free flaps.

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



Researchers at UH Ear, Nose & Throat Institute and Case Western Reserve University School of Medicine have developed not one, but two mouse models engineered to carry the most common mutation in Usher syndrome III causative gene (Clarin-1) in North America.

ANIMAL MODELS DEVELOPED FOR STUDY OF USHER SYNDROME

Models Engineered to Carry Mutation and Mimic Disease Onset in Humans

Usher syndrome is an incurable genetic disease that is the most common cause of the dual sensory deficits of deafness and blindness. Clinically, it is subdivided into types I – III and all patients ultimately arrive at the same consequence, the progressive loss of hearing and vision. The focus of this study is Usher type III. More than a dozen genetic mutations are associated with Usher III, with N48K mutation in Clarin-1 being the most prevalent.

As reported in the Journal of Neuroscience in July 2012, **Kumar Alagramam, PhD**, *Anthony J. Maniglia Chair for Research and Education, Director of Research and Associate Professor of Otolaryngology, Case Western Reserve University School of Medicine* and his co-investigator **Yoshikazu Imanishi, PhD**, *Assistant Professor, Case Western Reserve University Department of Pharmacology*, developed the first mouse model to mimic the N48K mutation in Usher III patients. This model allowed researchers to understand the pathophysiology in fine detail, as there is no noninvasive way to evaluate soft tissue pathology in the human inner ear.

The genetically engineered mouse developed hearing loss similar to clinical presentations observed in Usher III patients with N48K mutation. However, unlike real world onset, which is gradual,

the genetically engineered mouse developed hearing loss very quickly, and injecting the potential therapeutic agents early is toxic to the young animal. This necessitated an even more recent and significant progression, which is the development of a newer mouse model in which the onset of hearing loss is delayed. By more closely mimicking the disease's onset in humans and allowing testing on more mature animal models, this model provides a better platform to administer the calculated therapeutic doses and even adjust them if needed.

The immediate goal is to develop a drug therapy to prevent hearing loss in the mice, but the other potential that this newer animal model presents is the possible development of gene replacement therapy. Tests are under way to determine if the hearing loss in the newer mouse model can be predicted in terms of delayed onset, and preliminary data indicates this to be the case.

At the end of 2013, testing on the new mouse concluded and longitudinal testing began, with drug therapies administered every other day. The study is projected to last through June 2014. Funding was, and continues to be, provided by the Usher III Initiative and the National Institutes of Health through Case Western Reserve University School of Medicine.

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.

TOMORROW'S CURES TODAY.



Dr. Brian McDermott

Brian McDermott, PhD, Assistant Professor, Otolaryngology, Genetics and Genome Sciences and Neuroscience, Case Western Reserve University School of Medicine, continues to study hearing loss in humans using a zebrafish model and will oversee expansion of that facility and its research capacity, doubling the number

of zebrafish housed in the facility from 10,000 to 20,000. His work in the zebrafish laboratory was added as an ad-hoc group of the National Institutes of Health study for hearing. His lab participates in the Cleveland Neuroscientists' and Innovators' Program, a novel program designed to educate curious high school students about neuroscience. Each summer, the program brings together students in the greater Cleveland area to learn the fundamentals of neurobiology and to perform experiments in neuroscience.

Local participants include The Cleveland Museum of Natural History; The Center for Science and Mathematics Education at Case Western Reserve University; The Departments of Neurosciences, Biology and Otolaryngology – Head and Neck Surgery at Case Western Reserve University School of Medicine; and the Medical Library at Case Western Reserve University School of Medicine. Over the next year, Dr. McDermott will also be a visiting professor at the California Institute of Technology, UCLA and the University of Michigan.

Rod Rezaee, MD, FACS, Director, Microvascular Head and Neck Reconstructive Surgery, UH Seidman Cancer Center; and Assistant Professor, Otolaryngology – Head and Neck Surgery, School of Medicine, and colleagues recently published a case series on free flaps in the laryngoscope. They found that the more precise control offered by the BoneScalpel, compared with traditional scalpels, may reduce the potential for postoperative neurovascular complications. Further study is planned, including a possible cost-benefit analysis of the technology.

RESEARCH

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



The commitment to exceptional patient care begins with revolutionary discovery. University Hospitals Case Medical Center 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.

The Harrington Project for Discovery & Development is a \$250 million national initiative to accelerate the development of medical breakthroughs by physician-scientists into medicines that benefit patients. It is a unique model that aligns, through mission and structure, nonprofit and for-profit resources into a system for drug development. The Harrington Project thereby addresses a set of major challenges in medicine that have created a development gap for promising discoveries.

The Harrington Discovery Institute at University Hospitals Case Medical Center, the nonprofit component of The Harrington Project, enables physician-scientists to translate their clinical insights and research into novel therapies that benefit patients and society. Through an annual competition, the Harrington Discovery Institute selects a group of medical innovators known as Harrington Scholar-Innovators whose projects are funded and actively guided by drug discovery experts toward the clinical realm.

HARRINGTON DISCOVERY INSTITUTE
AT UNIVERSITY HOSPITALS CASE MEDICAL CENTER

A CATALYST FOR A NEW MODEL IN DRUG DEVELOPMENT

2014 SCHOLARS

The 2014 class of Harrington Scholar-Innovators selected by the institute's scientific advisory board are:

Jayakrishna Ambati, MD
University of Kentucky

Darren Carpizo, MD, PhD
Rutgers Cancer Institute of New Jersey

Garret FitzGerald, MD
University of Pennsylvania

Mark Humayun, MD, PhD
University of Southern California

John Kheir, MD
Harvard University

Rahul Kohli, MD, PhD
University of Pennsylvania

Gavril Pasternak, MD, PhD
Memorial Sloan-Kettering Cancer Center

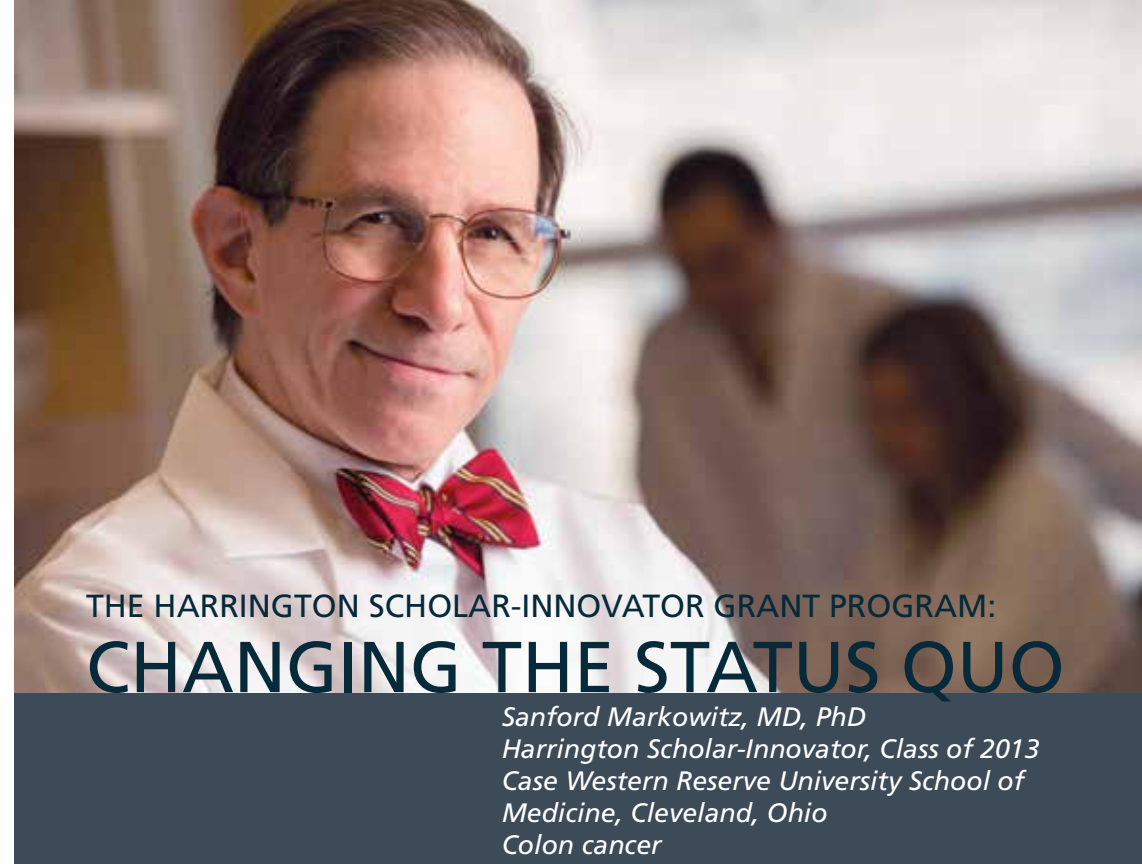
Irina Petrache, MD
Indiana University

David Rowitch, MD, PhD
University of California, San Francisco

Jean Tang, MD, PhD
Stanford University

David Wald, MD, PhD
Case Western Reserve University

To learn more, visit HarringtonDiscovery.org.



THE HARRINGTON SCHOLAR-INNOVATOR GRANT PROGRAM: CHANGING THE STATUS QUO

*Sanford Markowitz, MD, PhD
Harrington Scholar-Innovator, Class of 2013
Case Western Reserve University School of
Medicine, Cleveland, Ohio
Colon cancer*

When Dr. Markowitz is not treating patients at UH Seidman Cancer Center, he is dedicated to understanding the genetic basis for colon cancer as the key to developing better treatments. He and his team have identified a genetic "switch" that controls cell division and tissue growth in colon cancer.

As exciting as he finds the basic research process, Dr. Markowitz is keenly aware of the need to translate scientific discoveries into commercially viable treatments – and the barriers to making that happen.

"The biggest challenge for any academic laboratory is to get beyond the lab and develop a therapy," he explains. "By connecting academics with industry experts, the Harrington Discovery Institute is giving our ideas a fighting chance to succeed."

Read more at HarringtonDiscovery.org/Scholar-Innovator2013.

To be notified of the next Harrington Scholar-Innovator Grant call for proposals, email Natalie.Haynes@UHhospitals.org.

In 1996, UH created a clinical trials office at what is now UH Case Medical Center. At the time of its creation, the focus and management of clinical trials was managed by a small staff. This team was charged with the fiscal management of a handful of clinical trials, as well as regulatory oversight of human subject protections. By 2000, the office became known as the UH Research Institute.

From 1996 to 2003, the clinical research enterprise at the academic medical center continued to expand, resulting in exponential growth of both the staff and the research activity managed. The institute grew into a much broader

support department and became the **Center for Clinical Research and Technology (CCRT)**, which consists of seven offices dedicated to developing a standardized platform ensuring the responsible conduct of research for patients through scientific, regulatory, legal, ethical and fiscal review.

The CCRT now provides infrastructure, programmatic, personnel and administrative support for all research activities performed at UH by UH medical or scientific staff. These medical scientists are national and international leaders in their respective fields and are committed to **identifying standards of excellence** and potential areas for improvement to promote and **facilitate clinical and translational research**.

By 2013, the CCRT activities amounted to over \$42 million at UH and \$167 million of UH activity related to the affiliation between UH and Case Western Reserve University School of Medicine. These funds emanate from nearly 1,200 active grants and contracts at UH and nearly 700 additional grants that annually fund the shared faculty of UH and the School of Medicine through nearly 2,300 active human research protocols.

To learn more about the Center for Clinical Research and Technology directly, visit UHhospitals.org/Clinical-Research, call 216-844-5576 or email ClinicalResearch@UHhospitals.org.

UH Case Medical Center **CENTER FOR CLINICAL RESEARCH AND TECHNOLOGY**

Clinical research has always driven the practice of medicine to new heights and, as such, is deeply embedded within the very mission statement of University Hospitals:

To Heal. To Teach. To Discover.

Department of
Otolaryngology – Head &
Neck Surgery

Leadership

Cliff A. Megerian, MD
*Chairman of Otolaryngology –
Head & Neck Surgery
Director, UH Ear, Nose &
Throat Institute
Richard W. and Patricia R. Pogue
Chair in Auditory Surgery and
Hearing Sciences
Professor*

James E. Arnold, MD
*Program Director
Julius W. McCall Professor*

Kumar Alagramam, PhD
*Anthony J. Maniglia Chair
in Otolaryngology Head
and Neck Surgery,
Director of Research,
Associate Professor*

Jonathan Baskin, MD
*Chief, Wade Park Medical Center
Assistant Professor*

Joseph B. Carter, MD
*Chief, MetroHealth
Medical Center
Associate Professor*

Allergy/Rhinology/Anterior
Skull Base Surgery

**Steven Houser, MD, FACS,
FAAOA**
Associate Professor

Tony Reisman, MD
Assistant Professor

Kenneth Rodriguez, MD
*Chief of Rhinology, Allergy and
Skull Base Surgery
Assistant Professor*

Chad Zender, MD
Assistant Professor

Facial Plastics & Microvascular
Reconstructive Surgery

Rod Rezaee, MD
Assistant Professor

Jonathan Baskin, MD
Assistant Professor

Freedom Johnson, MD
Assistant Professor

Diana Ponsky, MD
Assistant Professor

David Stepnick, MD
Associate Professor

Chad Zender, MD
Assistant Professor

General Otolaryngology

Tony Reisman, MD
Assistant Professor

Joseph B. Carter, MD
Associate Professor

Diana Ponsky, MD
Assistant Professor

Melvin Strauss, MD
Professor

Laryngology & Voice Disorders

Nicole Maronian, MD
*Director, Voice &
Swallowing Center
Associate Professor*

Harvey M. Tucker, MD, FACS
Professor

Head & Neck Surgical
Oncology

Pierre Lavertu, MD
*Director, Head & Neck Surgery
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Associate Professor

Rod Rezaee, MD
Assistant Professor

Chad Zender, MD
Assistant Professor

Otology & Neurotology

Cliff A. Megerian, MD
Professor

**Gail S. Murray, PhD, MEd,
PhD, CCC-A, FAAA**
Associate Professor

Maroun Semaan, MD
*Associate Director, Otology,
Neurotology & Balance
Disorders
Assistant Professor*

Pediatric Otolaryngology

Todd Otteson, MD, MHP
*Division Chief, Pediatric
Otolaryngology
Associate Professor*

James E. Arnold, MD
Professor

Jay Shah, MD
Assistant Professor

Community Otolaryngology

Fadi Abbass, MD
Clinical Assistant Professor

Hassan Abbass, MD
Clinical Assistant Professor

Steve Hunyadi Jr., MD
Clinical Instructor

Research Faculty

Kumar Alagramam, PhD
*Director of Research
Associate Professor*

James Dennis, PhD
Adjunct Assistant Professor

Steven Eppell, PhD
Associate Professor

Anthony J. Maniglia, MD
Professor Emeritus

Brian McDermott, PhD
Assistant Professor

Reuben Stepanyan, PhD
Assistant Professor

Qing Yin Zheng, MD
Associate Professor

Audiology

**Gail S. Murray, MEd, PhD,
CCC-A, FAAA**

Christine Boyer, AuD, CCC-A

**Melissa Kelly Carter, AuD,
CCC-A (PRN)**

Ellen Cobler, AuD, CCC-A

**Anne Christine Dolan, AuD,
CCC-A (PRN)**

**Jessica Dziedzicki, AuD,
CCC-A**

Christy Pappas, AuD, CCC-A

Robin Piper, AuD, CCC-A

Leslie Schulman, AuD, CCC-A

**Samantha Steiner, AuD,
CCC-A**

Andrea Sterkel, AuD, CCC-A

Katie Strange, AuD, CCC-A

Speech Pathology
Pediatric Speech Pathologists

Vincci Chan, MA, CCC-SLP

Kevin Mahon, MA, CFY-SLP

**Kimberly O'Brien, MA,
CCC-SLP**

Annie Royle, MA, CCC-SLP

**Kathleen Walsh, MA,
CCC-SLP**

Kristen Wood, MS, CCC-SLP

**Lindsay Zombek, MA,
CCC-SLP**

Adult – Swallowing
(Head and Neck)

**George Charpied, MS,
CCC-SLP**

**Tracey Newman, MA,
CCC-SLP**

Caitlin O'Neill, MA, CCC-SLP

Adult – Voice

**Charita Gadson, MA,
CCC-SLP (Speech Supervisor)**

Physicians receive their academic appointments and their accompanying titles from
Case Western Reserve University School of Medicine.

To refer a patient or learn more about
UH Case Medical Center Department
of Otolaryngology – Head & Neck
Surgery, call **216-844-6000**
or visit **UHhospitals.org/ENT**



University Hospitals
Case Medical Center

Cleveland | Ohio