Pediatric Otolaryngology

Ear, nose and throat subspecialty care for children.
It is my pleasure to introduce you to the Division of Pediatric Otolaryngology at Texas Children’s Hospital.

Located in Houston, the 4th largest city in the United States, and academically affiliated with Baylor College of Medicine, Texas Children’s Hospital is the largest children’s hospital in the country. We serve a large and diverse population in the Houston metropolitan area as well as patients from throughout the southern and western United States.

At Texas Children’s, Pediatric Otolaryngology is the largest program in the Department of Surgery. Our 21 faculty members in Pediatric Otolaryngology have all completed fellowships in pediatric otolaryngology, laryngology or neurotology. All have faculty appointments in the Department of Otolaryngology – Head and Neck Surgery at Baylor College of Medicine.

With active recruitment ongoing for additional faculty members for new clinical locations in The Woodlands, Kingwood and Bellaire, we expect to have 25 faculty members by the summer of 2016 and 28 by the summer of 2017. The division is supported by an outstanding group of pediatric nurse practitioners and physician assistants, a large clinical and administrative staff, and a dedicated quality improvement consultant.

This program is distinguished by an exceptional range of clinical expertise across all specialty areas within Pediatric Otolaryngology, including complex airway surgery, otology and neurotology, head and neck surgery, laryngology, vascular anomalies, rhinology, cleft lip and palate and sleep medicine. The opportunities for clinical training and for experience with health care research and quality improvement are unparalleled.

Please enjoy this overview of our program.

Ellis M. Arjmand, MD, PhD, MMM
Chief of Service, Pediatric Otolaryngology, Texas Children’s Hospital
Director of Practice Standards and Faculty Development, Department of Surgery, Texas Children’s Hospital
Bobby Alford Endowed Chair in Pediatric Otolaryngology, Baylor College of Medicine
Professor of Otolaryngology - Head & Neck Surgery and Pediatrics, Baylor College of Medicine
Adjunct Professor of Management, Jones Graduate School of Business, Rice University
Ellis Arjmand, MD, PhD, MMM is chief of Otolaryngology at Texas Children’s Hospital, and he holds the Bobby Alford Endowed Chair in Pediatric Otolaryngology. Dr. Arjmand joined the faculty as professor and chief of the Pediatric Otolaryngology Division in 2014 following academic appointments at Cincinnati Children’s Hospital and the Children’s Hospital of Pittsburgh. He obtained his medical degree and doctoral degree at Northwestern University in Chicago, and a master’s degree in medical management from Carnegie Mellon University in Pittsburgh. He completed his residency and fellowship training at Washington University in St. Louis.

Dr. Arjmand’s clinical interests include pediatric ear disease, congenital and acquired hearing loss, airway disorders and sinus disease. He is nationally known for his research on pediatric hearing loss and for his expertise in the areas of health economics and health care quality improvement.

Training:
- Fellowship - Pediatric Otolaryngology, Washington University - St. Louis Children’s Hospital, 1994
- Residency - Otolaryngology - Head/Neck Surgery, Washington University School of Medicine, 1993
- Internship - Surgery, Loyola University School of Medicine, 1988
- Medical School - Northwestern University, 1986
Binoy M. Chandy, MD
Pediatric Otolaryngologist
Texas Children’s Hospital
Assistant Professor, Otolaryngology Surgery
Baylor College of Medicine

Dr. Chandy’s area of interest is general pediatric otolaryngology, including cleft palate, and nasal and sinus disease.

Karina T. Cañadas, MD
Pediatric Otolaryngologist
Texas Children’s Hospital
Assistant Professor, Otolaryngology Surgery
Baylor College of Medicine

Dr. Cañadas is a pediatric otolaryngologist, head and neck surgeon, and is proud to be able to serve the community. She enjoys and is happy to take care of any pediatric otolaryngology problem, with a special interest in airway reconstruction, head and neck masses, salivary gland pathology, siailorrhea, drooling and aspiration, airway disorders, applications of ultrasonography in pediatric otolaryngology and medical education in otolaryngology.

Daniel C. Chelius, MD
Pediatric Otolaryngologist
Texas Children’s Hospital
Assistant Professor, Otolaryngology Surgery
Baylor College of Medicine

In addition to general pediatric otolaryngology, Dr. Chelius’ primary interests are in pediatric head and neck surgery including acquired and congenital neck masses, head and neck cancers, thyroid disease and head and neck injury of immunocompromised or cancer patients. His goal is to bring the highest quality care to each individual child as a partner with their parents. His research interests include patient/caregiver education and quality improvement in otolaryngology.

Ellen M. Friedman, MD
Pediatric Otolaryngologist
Texas Children’s Hospital
Professor, Otolaryngology Surgery
Baylor College of Medicine

In addition to being a pediatric otolaryngologist, Dr. Ellen Friedman is the Director for the Center for Professionalism in Medicine at Baylor College of Medicine. Prior to this appointment, she served as the Chief of Service for the Department of Otolaryngology at Texas Children’s and held the Bobby Allford Department Chair in Pediatric Otolaryngology at Baylor College of Medicine for 24 years. Before coming to Houston, she was a tenured associate professor at The Boston Children’s Hospital and Harvard Medical School. Dr. Friedman has published over 90 articles in peer reviewed journals and is on the editorial boards of a number of journals. Dr. Friedman has served as president of several professional organizations. She was the first woman to serve as the president of the American Society of Pediatric Otolaryngology and the 3rd woman to serve as president for the American Broncho-Esophagogal Association. She was president of the medical staff at Texas Children’s Hospital from 2011-2012. She recently completed a term as a Director of the American Board of Otolaryngology - Head and Neck Surgery, is a representative for Otolaryngology on the Residency Review Committee and is on the Otolaryngology Advisory Council for the American College of Surgeons. Among many professional honors, Dr. Friedman was named the 2010 recipient of the Arnold P. Gold Foundation Award for Humanism in Medicine and was recognized by the Baylor College of Medicine Academy of Distinguished Educators with the Fulbright and Jaworski Faculty Excellence Award in Teaching and Evaluation. Last year the ABEA renamed one of their national awards the Ellen M. Friedman Award for Excellence in Foreign Body Management.
Dr. Jones has interest in general pediatric otolaryngology and sinusitis in cystic fibrosis.

Dr. Hughes treats all aspects of Pediatric Otolaryngology disorders. Specialty clinical interests include pediatric airway and voice, vascular anomalies, sleep disorders and obstructive apnea, sinusitis and vestibular problems.

Dr. Hughes has interest in general pediatric otolaryngology and sinusitis in cystic fibrosis.

Dr. Liu gives personalized and patient-centered care to her pediatric patients. Each child has their own medical issues and she uses her clinical and research expertise to offer individualized and unparalleled quality care in the least invasive way. Under her care, patients benefit from innovative and cutting edge technologies. She treats both the child and family with respect and appreciate the opportunity to be involved in a child’s health decision. Her clinical interests include chronic ear disease, sensorineural and conductive hearing loss management (including BAHA and cochlear implant procedures), microtia, airway disorder, sinus disease and congenital head and neck masses.

Dr. Mehta's clinical interests are complex airway surgery, pediatric swallowing disorders and head and neck masses, along with general otolaryngology. His research interests include outcomes of airway surgery, laryngeal cleft management and outcomes of sleep disorders.
Shraddha S. Mukerji, MBBS
Pediatric Otolaryngologist
Texas Children’s Hospital
Assistant Professor, Otolaryngology Surgery
Baylor College of Medicine

Dr. Mukerji provides comprehensive care to all children with compassion and kindness. She has found that getting parents involved in their child’s treatment goes a long way in making families happy and engaging their trust in the long run. Her clinical areas of interest include treatment and diagnosis of chronic ear and sinus problems in children. She is particularly interested in the role of balloon sinuplasties for chronic sinusitis in children—a new, minimally invasive technique that has shown promising results. Her research focuses on finding factors such as genetic predisposition, environmental influence and others that may help prevent chronic otitis media in children.

Mary Frances Musso, DO
Pediatric Otolaryngologist
Texas Children’s Hospital
Assistant Professor, Otolaryngology Surgery
Baylor College of Medicine

Dr. Musso’s areas of interest include general pediatric otolaryngology, obstructive sleep apnea, Down syndrome, sinusitis and its complications, and neck masses.

Julina Ongkasuwan, MD
Pediatric Otolaryngologist
Texas Children’s Hospital
Assistant Professor, Otolaryngology Surgery
Baylor College of Medicine

Dr. Ongkasuwan participates in the aerodigestive clinic which is a multidisciplinary clinic that includes pulmonary, otolaryngology and gastroenterology and focuses on complicated patients with airway and swallowing disorders. She also is involved in the development of a multidisciplinary voice and swallowing clinic partnering otolaryngology and speech pathology.

Tiffany Powell Raynor, MD
Pediatric Otolaryngologist
Texas Children’s Hospital
Assistant Professor, Otolaryngology Surgery
Baylor College of Medicine

Dr. Raynor has a special interest in pediatric aerodigestive disorders and congenital anomalies. Her philosophy of care is a careful collaboration between physicians, both primary care and subspecialty, and parents, with an emphasis on parent/patient education about disease process.

Matthew S. Sitton, MD
Pediatric Otolaryngologist
Texas Children’s Hospital
Assistant Professor, Otolaryngology Surgery
Baylor College of Medicine

Dr. Sitton’s clinical interests are congenital and acquired neck masses, airway disorders, vascular anomalies, thyroid disorders and cochlear implants.
Fellowship - Washington University School Of Medicine, 1992
Residency - Baylor College of Medicine, 1982
Internship - University of Alabama Medical Center, 1979
Medical School - Baylor College of Medicine, 1977

Dr. Sulek's areas of interest include pediatric otolaryngology, laryngology, endoscopic sinus surgery, airway disorders and head and neck masses.

Marcelle Sulek, MD
Pediatric Otolaryngologist
Texas Children's Hospital
Associate Professor, Otolaryngology Surgery
Baylor College of Medicine

Fellowship - Neurotology, Baylor College of Medicine, 2003
Residency - Otolaryngology-Head/Neck Surgery, Tulane University School of Medicine, 2007
Internship - General Surgery, Tulane University School of Medicine, 2003
Medical School - University of Texas at Houston, 2002

Dr. Vilela is interested in a wide variety of pediatric otolaryngology disciplines including chronic ear disease and hearing loss, cochlear implantation, sinonasal problems, diseases of the airway including airway reconstruction, tonsil and adenoid surgery and surgery for velopharyngeal insufficiency. He believes patient care is best approached by a team that includes your primary care physician, other subspecialists, if need be, and, most importantly, parents and/or caretakers.

Ronald Jason Vilela, MD
Pediatric Otolaryngologist
Texas Children’s Hospital
Assistant Professor, Otolaryngology Surgery
Baylor College of Medicine

Fellowship - Pediatric Otolaryngology, University of Minnesota Medical School at Minneapolis, 2008
Residency - Otolaryngology-Head/Neck Surgery, Tulane University School of Medicine, 2007
Internship - General Surgery, Tulane University School of Medicine, 2003
Medical School - University of Texas at Houston, 2002

Dr. Williamson’s interests include chronic otitis media, middle ear infection, cholesteatoma disease, middle ear reconstruction, stapes surgery for otosclerosis, acoustic neuroma and skull base tumors, vestibular and balance disorders and cochlear implantation, hearing aids, deafness, vertigo, Meniere’s disease, facial nerve disorders, tympanic membrane perforation, aural atresia and bone-anchored hearing aids (BAHA).

Robert A. Williamson, MD
Pediatric Otolaryngologist
Texas Children's Hospital
Assistant Professor, Otolaryngology Surgery
Baylor College of Medicine

Advanced Practice Providers

Amy Bartholomew, PA-C
Linda Brock, PNP
Jennifer Brown, PA-C

Jessie Marcet-Gonzalez, PNP
Henna Narsi-Prasla, PNP
Erin Roper, PA-C
Kathy Shelly, PA-C
Audiology and Speech Services

The Audiology Center is staffed by audiologists, all of which have advanced degrees, have the certificate of clinical competence (CCC) by the American Speech Hearing Association (ASHA) and are licensed by the state of Texas to practice audiology and to fit and dispense hearing aids. Services provided include: newborn hearing screening, comprehensive audiologic evaluations, auditory brainstem response (ABR) evaluation, auditory steady state response (ASSR) evaluation, hearing aid services and cochlear implant evaluation and mapping.

The Speech, Language and Learning Clinic at Texas Children's provides evaluation, management and consultation for infants, children, adolescents and adults who have problems with communication, learning, feeding and swallowing.

Our speech-language pathologists collaborate with key Texas Children's Hospital departments and clinics, including Radiology, the Cleft Lip and Palate Clinic, the Craniofacial Anomalies Clinic, the Meyer Center for Developmental Pediatrics, Physical Medicine and Rehabilitation, the Hearing Center and Texas Children's Health Centers.

Referrals to Speech, Language and Learning are accepted from schools, physicians, other professionals and families. A physician referral is required for all hospitalized patients as well as for people with voice disorders and swallowing disorders. Cognitive assessments can be performed by a certified educational diagnostician. Our clinic has several bilingual providers who speak both English and Spanish.

An Overview of Our Interdisciplinary Programs

Aerodigestive Program | Director: Deepak Mehta, MD
Otolaryngologists: Elton Ashe-Lambert, MD, Karina Cañadas, MD, Julina Ongkasuwan, MD and Tiffany Powell Raynor, MD

The Aerodigestive Program at Texas Children's Hospital is one of the few of its kind in the Southern United States. Our team is dedicated to the comprehensive and multidisciplinary management of children with complex airway and digestive tract disorders. Coordination of care between several different specialists can be challenging and time consuming, and unfortunately this burden too often falls on the patient and family. The Aerodigestive Program is designed so that our complex patients can be seen by multiple specialists in a single visit which facilitates better communication, early diagnosis and faster, more comprehensive care. This collaborative approach provides several potential advantages for the patient and family:

- Patients are seen by all the necessary physicians and care providers at one appointment and one location.
- If an endoscopic evaluation is deemed necessary, the patient undergoes a coordinated exam which requires anesthesia only once, rather than multiple times for each specialty.
- After each evaluation, all physicians meet together to discuss and develop a collaborative treatment plan.
- The patient is treated as a whole, rather than individual symptoms, with a focus on continuity of care and communication with the family.

During their initial appointments, patients will see specialists from pediatric otolaryngology, pulmonary medicine and gastroenterology, and may see other specialists such as feeding specialists and nutritionists based on each individual patient's need. Additional testing (swallow function study, pulmonary function test, etc.) may also be coordinated on the same day. A joint diagnostic evaluation with all three specialists in the operating room may be recommended. This is typically coordinated to take place the day after the clinic appointments. After the evaluation, the physicians will meet together to discuss the clinical concerns of each patient and the initial findings. A unique treatment plan is developed for each patient, which is then communicated to the family by a clinical coordinator. Detailed letters for the patient's primary care physician will also be sent in a timely manner shortly after the appointments and evaluation.
Develop and discuss a detailed care plan.

Collaborate in a single location to provide comprehensive care for each child, we review each child’s case and work closely with the sleep pulmonologist and behavioral pediatricians. The specialists at the Down Syndrome Airway Center currently meet monthly and include otolaryngologists, pulmonologists and behavioral pediatricians. This multidisciplinary clinic currently meets monthly and includes otolaryngologists, pulmonologists and behavioral pediatricians. The specialists work closely with the sleep pulmonologist and behavioral pediatricians. The specialists collaborate in a single location to provide comprehensive care for each child, we review each child’s case and develop and discuss a detailed care plan.

The Down Syndrome Airway Center at Texas Children’s Hospital specializes in the comprehensive care of patients born with cleft lip and palate. Cleft lip and palate involve feeding difficulties, speech development, oral hygiene, dental problems and social interaction. The multidisciplinary cleft team at Texas Children’s has over 40 years of experience treating these particular issues. Each patient’s condition is unique and care is tailored to his specific needs. All of our specialists are trained in the care of cleft lip and palate patients.

**Cleft Lip and Palate Clinic | Otolaryngologists: Binoy Chandy, MD and Tara Rosenberg, MD**

The Cleft Lip and Palate Clinic at Texas Children’s Hospital specializes in the comprehensive care of patients born with cleft lip and palate. Cleft lip and palate involve feeding difficulties, speech development, oral hygiene, dental problems and social interaction. The multidisciplinary cleft team at Texas Children’s has over 40 years of experience treating these particular issues. Each patient’s condition is unique and care is tailored to his specific needs. All of our specialists are trained in the care of cleft lip and palate patients.

**Cleft Lip and Palate Clinic | Otolaryngologists: Yi-Chun Carol Liu, MD, Matthew Sitton, MD, Ronald Vilela, MD and Robert Williamson, MD**

Texas Children’s Hospital offers comprehensive services to evaluate and implant children with cochlear implant devices. Cochlear implantation is one of the most innovative treatment options available for a child with profound deafness or hearing loss. To become a candidate for cochlear implantation, a child is assessed by a team of specialists including audiologists and otolaryngologists. Tests include high-resolution scans to examine the structure of the ear, extensive hearing evaluations, and evaluation by a variety of other specialists such as a psychologist, geneticist, speech-language pathologist and surgeon. If the evaluation suggests cochlear implantation is the appropriate treatment for a child, the center’s specialists handle the surgery and the activation of the cochlear implant device as well as supervise a thorough follow-up program of support for the child and family. The program provides guidelines and support for teachers and other educational personnel who work with the child on a regular basis.

**Cochlear Implants | Otolaryngologists: Yi-Chun Carol Liu, MD, Matthew Sitton, MD, Ronald Vilela, MD and Robert Williamson, MD**

Cochlear implantation is one of the most innovative treatment options available for a child with profound deafness or hearing loss. To become a candidate for cochlear implantation, a child is assessed by a team of specialists including audiologists and otolaryngologists. Tests include high-resolution scans to examine the structure of the ear, extensive hearing evaluations, and evaluation by a variety of other specialists such as a psychologist, geneticist, speech-language pathologist and surgeon. If the evaluation suggests cochlear implantation surgery is the appropriate treatment for a child, the center’s specialists handle the surgery and the activation of the cochlear implant device as well as supervise a thorough follow-up program of support for the child and family. The program provides guidelines and support for teachers and other educational personnel who work with the child on a regular basis.

The Cochlear Implants service at Texas Children’s Hospital provides a comprehensive, multidisciplinary approach to caring for children with complex obstructive sleep apnea. We have specific expertise in treating obstructive sleep apnea in children with craniofacial abnormalities and Down Syndrome. Anatomically, these patients are predisposed to airway obstruction and obstruction during sleep. Most children with Down Syndrome will develop sleep apnea by 9-11 years of age, with 60% developing sleep apnea by age three. Long-term consequences of not treating a child’s sleep disordered breathing include pulmonary hypertension, behavior problems, cognitive delays and developmental delays. Greater than 50% of children with Down Syndrome are at risk of having persistent sleep obstruction after having their tonsils and adenoids taken out. This multidisciplinary clinic currently meets monthly and includes otolaryngologists, pulmonologists and a nutritionist. We work closely with the sleep pulmonologist and behavioral pediatricians. The specialists collaborate in a single location to provide comprehensive care for each child, we review each child’s case and develop and discuss a detailed care plan.

**Down Syndrome Airway Center | Otolaryngologists: Mary Frances Musso, DO**

The Down Syndrome Airway Center at Texas Children’s Hospital provides a comprehensive, multidisciplinary approach to caring for children with complex obstructive sleep apnea. We have specific expertise in treating obstructive sleep apnea in children with craniofacial abnormalities and Down Syndrome. Anatomically, these patients are predisposed to airway obstruction and obstruction during sleep. Most children with Down Syndrome will develop sleep apnea by 9-11 years of age, with 60% developing sleep apnea by age three. Long-term consequences of not treating a child’s sleep disordered breathing include pulmonary hypertension, behavior problems, cognitive delays and developmental delays. Greater than 50% of children with Down Syndrome are at risk of having persistent sleep obstruction after having their tonsils and adenoids taken out. This multidisciplinary clinic currently meets monthly and includes otolaryngologists, pulmonologists and a nutritionist. We work closely with the sleep pulmonologist and behavioral pediatricians. The specialists collaborate in a single location to provide comprehensive care for each child, we review each child’s case and develop and discuss a detailed care plan.

**Down Syndrome Airway Center | Otolaryngologists: Mary Frances Musso, DO and Robert Williamson, MD**

The Down Syndrome Airway Center at Texas Children’s Hospital provides a comprehensive, multidisciplinary approach to caring for children with complex obstructive sleep apnea. We have specific expertise in treating obstructive sleep apnea in children with craniofacial abnormalities and Down Syndrome. Anatomically, these patients are predisposed to airway obstruction and obstruction during sleep. Most children with Down Syndrome will develop sleep apnea by 9-11 years of age, with 60% developing sleep apnea by age three. Long-term consequences of not treating a child’s sleep disordered breathing include pulmonary hypertension, behavior problems, cognitive delays and developmental delays. Greater than 50% of children with Down Syndrome are at risk of having persistent sleep obstruction after having their tonsils and adenoids taken out. This multidisciplinary clinic currently meets monthly and includes otolaryngologists, pulmonologists and a nutritionist. We work closely with the sleep pulmonologist and behavioral pediatricians. The specialists collaborate in a single location to provide comprehensive care for each child, we review each child’s case and develop and discuss a detailed care plan.

**Head and Neck | Otolaryngologists: Daniel Chelius, MD, Elton Ashe-Lambert, MD and Matthew Sitton, MD**

The Pediatric Head and Neck Surgery program at Texas Children’s Hospital specializes in the comprehensive surgical care of children with cancerous, benign and infectious masses in the head and neck including the face, sinuses, mouth, throat, salivary glands, thyroid and parathyroid glands, neck, jaw and ear. These complex conditions and the effects of their treatments can significantly impact a child’s daily life. These conditions are rare in children, and their rarity and complexity requires a team of coordinated subspecialists through the entire treatment process. This includes efficient and accurate state-of-the-art diagnostics, multidisciplinary planning for optimized oncologic, cosmetic and functional outcomes and consistent postoperative therapy to help children return to their normal lives. We coordinate with pediatric oncologists, pediatric anesthesiologists and pediatric critical care medicine specialists to ensure the safe, high-quality care throughout the entire course of treatment. We have a team of speech and language pathologists, audiologists, physical and occupational therapists who assist us in the rehabilitation of these children. Our surgeons in pediatric otolaryngology also serve as a key participants in the Texas Children’s Hospital Thyroid Tumor Program. To fulfill our commitment to deliver the best possible care to our patients at Texas Children’s, we regularly collaborate with our colleagues in head and neck surgery from Baylor College of Medicine and from the University of Texas-MD Anderson Cancer Center.

**Microtia and Atresia | Otolaryngologists: Anthony E. Brissett, MD, Yi-Chun Carol Liu, MD and Robert Williamson, MD**

The Microtia and Atresia Clinic at Texas Children’s Hospital has been caring for children since 2008. It is a multidisciplinary care team that includes board-certified pediatric ear, nose and throat surgeons, a board-certified facial plastic surgeon and an audiologist (hearing specialist) to help create a comprehensive treatment plan. We offer treatment options and a unique plan for each patient including bone-anchored hearing aids, middle ear implant and microtia and atresia surgical repair.

**Microtia and Atresia | Otolaryngologists: Binoy Chandy, MD and Tara Rosenberg, MD**

The Microtia and Atresia Clinic at Texas Children’s Hospital has been caring for children since 2008. It is a multidisciplinary care team that includes board-certified pediatric ear, nose and throat surgeons, a board-certified facial plastic surgeon and an audiologist (hearing specialist) to help create a comprehensive treatment plan. We offer treatment options and a unique plan for each patient including bone-anchored hearing aids, middle ear implant and microtia and atresia surgical repair.

**Cochlear Implants | Otolaryngologists: Yi-Chun Carol Liu, MD, Matthew Sitton, MD, Ronald Vilela, MD and Robert Williamson, MD**

Texas Children’s Hospital offers comprehensive services to evaluate and implant children with cochlear implant devices. Cochlear implantation is one of the most innovative treatment options available for a child with profound deafness or hearing loss. To become a candidate for cochlear implantation, a child is assessed by a team of specialists including audiologists and otolaryngologists. Tests include high-resolution scans to examine the structure of the ear, extensive hearing evaluations, and evaluation by a variety of other specialists such as a psychologist, geneticist, speech-language pathologist and surgeon. If the evaluation suggests cochlear implantation surgery is the appropriate treatment for a child, the center’s specialists handle the surgery and the activation of the cochlear implant device as well as supervise a thorough follow-up program of support for the child and family. The program provides guidelines and support for teachers and other educational personnel who work with the child on a regular basis.

**Texas Children’s Hospital Otolaryngologists: Yi-Chun Carol Liu, MD, Matthew Sitton, MD, Ronald Vilela, MD and Robert Williamson, MD**

Texas Children’s Hospital offers comprehensive services to evaluate and implant children with cochlear implant devices. Cochlear implantation is one of the most innovative treatment options available for a child with profound deafness or hearing loss. To become a candidate for cochlear implantation, a child is assessed by a team of specialists including audiologists and otolaryngologists. Tests include high-resolution scans to examine the structure of the ear, extensive hearing evaluations, and evaluation by a variety of other specialists such as a psychologist, geneticist, speech-language pathologist and surgeon. If the evaluation suggests cochlear implantation surgery is the appropriate treatment for a child, the center’s specialists handle the surgery and the activation of the cochlear implant device as well as supervise a thorough follow-up program of support for the child and family. The program provides guidelines and support for teachers and other educational personnel who work with the child on a regular basis.

**Microtia and Atresia | Otolaryngologists: Anthony E. Brissett, MD, Yi-Chun Carol Liu, MD and Robert Williamson, MD**

The Microtia and Atresia Clinic at Texas Children’s Hospital has been caring for children since 2008. It is a multidisciplinary care team that includes board-certified pediatric ear, nose and throat surgeons, a board-certified facial plastic surgeon and an audiologist (hearing specialist) to help create a comprehensive treatment plan. We offer treatment options and a unique plan for each patient including bone-anchored hearing aids, middle ear implant and microtia and atresia surgical repair.
Thyroid Tumor Program | Otolaryngologists: Daniel Chelius, MD and Matthew Sitton, MD

The Thyroid Tumor Program at Texas Children’s Hospital is a multidisciplinary program dedicated to the diagnosis and treatment of children and young adults with thyroid tumors. Although thyroid tumors are rare in children, they are being diagnosed with increasing frequency. About 2% of children develop solitary thyroid nodules – lumps which can grow on an otherwise normal thyroid gland. Most of these are benign, but a few are malignant and can develop into thyroid cancer. Medical experts have not yet standardized the management of thyroid tumors in children. To improve the care and treatment of children with thyroid tumors, Texas Children’s Hospital has established the Thyroid Tumor Program.

Vascular Anomalies Clinic | Otolaryngologists: Karina Cañadas, MD, Tara Rosenberg, MD and Matthew Sitton, MD

The Vascular Anomalies Clinic at Texas Children’s Hospital is a multidisciplinary clinic managed by a team of specialists who are experts in the field of vascular malformations and tumors. Multiple divisions, including dermatology, general surgery, hematology/oncology, interventional radiology and plastic surgery, to name a few, are involved in caring for patients. Vascular malformations result from the abnormal growth and development of vascular tissues, including arteries, veins, capillaries and lymphatic vessels. Some conditions are present at birth while others may take months or years to appear. The vascular anomalies team collaborates to evaluate, diagnose and treat children with a variety of vascular lesions. The group meets regularly to review individual patient information (including medical records, imaging and surgical pathology reports). Patients are then seen and examined by the entire team of specialists during one special visit.

Voice Clinic | Otolaryngologist: Julina Ongkasuwan, MD

The Voice Clinic at Texas Children’s Hospital provides specialized, multidisciplinary treatment for a wide range of pediatric voice disorders. Our clinicians have extensive training in both the care of children and treatment of the voice. Voice problems and hoarseness, such as vocal fold nodules and vocal fold paralysis, can dramatically impact a child’s interactions with their peers and teachers. Research has indicated that the behavior of children with vocal fold nodules may be more negatively perceived by adults. Children with vocal fold paralysis may have difficulty being heard or understood in noisy environments and may withdraw socially. Early intervention can help lessen these behaviors and improve the ability of these children to communicate.

Quality Program - Outcomes & Impact Service

The Texas Children's Hospital Outcomes & Impact Service is dedicated to helping patients, families and providers make better health care decisions using outcomes data. Our patients and families deserve the most complete and accurate information possible about our performance. We want to be able to tell families, “If you come to Texas Children’s, this is what you can expect.” As a hospital system, we believe that a critical component to offering outstanding clinical programs is tracking the results of the care delivered through them. By tracking outcomes, we learn about what happens to our patients, and we also learn about our performance as a health care delivery organization. We always know that we can do better and must continue to strive toward excellence in care delivery. Another aspect of our service is talking to patients and families about their medical questions. In addition to providing statistics, we strive to engage patients and families in a conversation about the choices they face that will impact their health.

Our team is comprised of outcomes nurses dedicated to different clinical specialties, computer programmers, data architects and specialists, and statisticians who work closely with clinical and administrative teams to measure, improve and share our outcomes. The goals of our service are to: track and improve our clinical outcomes, understand the impact of those outcomes on the lives of our patients and families over time, make these outcomes data available in a form accessible by the general public partner with patients and families in understanding outcomes data and help patients and families know what questions to ask when seeking medical treatment.

Quality Improvement Specialist
Division of Otolaryngology
Manish Kumar, MS
Faculty members in Pediatric Otolaryngology are actively involved in a wide range of research activities.

**Dr. Tara Rosenberg** leads our research activity related to the diagnosis and treatment of vascular anomalies. Recent projects and publications have addressed laser treatment for vascular anomalies of the head and neck, Transforming Growth Factor β-1 and related receptors expression in arteriovenous malformations, primary surgical excision of venous malformations of the head and neck, role of percutaneous direct puncture sclerotherapy with bleomycin in the multimodality treatment of arteriovenous malformations of the head and neck, and other topics.

**Dr. Julina Ongkasuwan** leads our research activity related to the diagnosis and treatment of pediatric voice disorders. Current projects and recent publications have addressed innovative ways to identify laryngeal pathology such as laryngeal ultrasound and audiometers.

**Dr. Deepak Mehta** leads our research activity related to the diagnosis and treatment of congenital and acquired airway anomalies. Together with Drs. Raynor, Cañadas, and Ashe-Lambert, current projects and recent publications have addressed outcomes of swallowing in laryngomalacia and laryngeal cleft and the role of multidisciplinary care of tracheostomized patients and their outcomes. Ongoing research includes economical impact and outcomes of standardization of tracheostomy in patients with cardiac anomalies. The other projects include role of bioengineered stents in the management of subglottic stenosis in a pig model and 4-D CT imaging in the diagnosis and management of complex airway patients. Also within this group, Dr. Raynor and Dr. Arjmand are leading the Texas Children's Care Process Team for improvement in the management of children who have a tracheostomy.

**Dr. Robert Williamson** leads our research activity related to the diagnosis and treatment of pediatric sensorineural hearing impairment, including cochlear implant surgery and the surgical correction of microtia and atresia. Together with Drs. Sitton, Vilela, and Liu, current projects and recent publications have addressed novel use of cochlear implantation in genetic conditions, the utility of CT imaging in cochlear reimplantation, collaborative efforts to characterize clinical and epidemiologic features of hearing loss in pediatric renal failure/dialysis patients, and MR imaging for posterior fossa lesions in pediatric patients with sensorineural hearing loss. Dr. Williamson is investigating outcomes in cochlear implant recipients for whom the native language spoken in the home is different from that spoken by the members of the CI team.

**Drs. Chelius and Sitton** lead our research activity related to solid tumors of the head and neck, including thyroid tumors. Current projects and recent publications have addressed the multidisciplinary care of extremely young patients with head and neck cancer, the care of patients with rare head and neck masses, and the otolaryngology care of patients with complications of cancer care such as hearing loss and sinusitis.

**Dr. Mussso** leads our research activity in the area of otolaryngologic disorders in children with Down syndrome, including sleep disorders. Current projects and recent publications have addressed magnetic resonance imaging in children with sleep apnea supported by Texas Children’s Hospital Department of Surgery Seed Grant.

**Dr. Chandy** leads our research activities in the area of airway management in fetal surgery patients and complex rhinology. Current projects and recent publications have addressed airway management of head and neck teratomas and evaluating the prevalence and extent of obstructive sleep apnea in the cleft lip and palate population.

**Education**

**Residency Program**

The Department of Pediatric Otolaryngology at Texas Children’s is committed to the education of future physicians in the care of children with conditions of the head and neck. Otolaryngology residents from the Baylor College of Medicine rotate through the department where they are trained in the medical, surgical and psychosocial diagnosis and management of aerodigestive and swallowing disorders; congenital, benign and malignant masses of the head and neck; hearing and otologic disorders; issues surrounding voice and other otolaryngologic areas. Their education is supplemented by participation in case discussions, radiology conferences and multidisciplinary meetings. Many of them choose to pursue research in these areas receiving local, regional and national recognition for their efforts. Residents from other departments, including General Pediatrics, rotate through the department, to broaden their knowledge with respect to care of the pediatric patient with diseases of the head and neck. Education will continue to be a key component for the mission of the division.
Fellowship Program

Our Pediatric Otolaryngology Fellowship was established in 1992. In 1998, our program became one of the first fellowship programs to obtain Accreditation Council for Graduate Medical Education (ACGME) accreditation. In 2015, the pediatric otolaryngology service at Texas Children's Hospital was responsible for 9,785 operating room cases and 30,813 outpatient visits at our main and West Campus locations. Fellows typically perform 1,200 to 1,500 cases during their year of fellowship. In addition, 30%-40% of the cases fellows perform are on neonates, infants and children less than 2 years of age. Cases involving medically complex children with an ASA status of 3 or above comprise 30%-40% of cases. In particular, Texas Children’s Hospital and the new Pavilion for Women house 173 NICU beds, making the hospital the largest level-3 NICU in the nation. This allows our fellows an extensive experience in congenital and neonatal otolaryngologic disorders.

The Bone Marrow Transplant Unit provides fellows with tremendous exposure to patients with many challenging otolaryngologic infections and disorders of the immune and hematologic systems. The Pediatric Pulmonary Service cares for a large cystic fibrosis population and has an active lung transplantation program, which contributes ample opportunities for fellows to care for the otolaryngologic needs in this population of patients.

There is an extensive otologic component to the fellowship. Texas Children’s Hospital Audiology Clinics logged over 6,900 audiologic visits, and the multi-disciplinary Hearing Center clinic logged more than 700 outpatient encounters last year. Pediatric Otolaryngology averages 50 to 70 cochlear implants per year.

Fellows also participate in many multidisciplinary clinics: aerodigestive, cleft and craniofacial, Down syndrome, microtia and congenital hearing loss, vascular anomalies, voice and allergy. Multidisciplinary meetings and conferences include: aerodigestive, airway, craniofacial, fetal, neuroradiology, surgery grand rounds, thyroid, tumor board and vascular anomalies. Didactics include: fellow case conferences, monthly fellow lecture, journal club, otolaryngology grand rounds, laser safety course.

There are ample opportunities to pursue clinical research projects and publications. In association with Baylor College of Medicine, Texas Children Hospital participates in hundreds of research projects and receives more NIH research funding than any other pediatric hospital in the nation. Pediatric otolaryngology faculty and fellows have a long history of collaboration on projects with many services including sleep medicine, infectious diseases, molecular biology and others.

PROGRAM HIGHLIGHTS

Length and Scope
Our one-year program includes an extensive clinical experience covering surgical cases, outpatient clinics, hospital consults, emergency center evaluations and didactic sessions.

Faculty
Twenty-one pediatric otolaryngology faculty members provide the majority of the training experience. Of those, one is fellowship trained in neurotology, another in laryngology and a third faculty is boarded in facial plastic surgery. Six advanced practice providers are also an important part of our team.

Education
Fellows enjoy a structured didactic program with weekly meetings, formal lectures and multidisciplinary conferences.

Case Load
The large volume of patients seen at Texas Children’s Hospital provides broad and extensive exposure to pediatric otolaryngology cases. Tertiary care cases include otologic procedures (including cochlear implants), airway surgery (including laryngotracheal reconstruction and laser surgery of the airway), complex neck masses, voice, velopharyngeal insufficiency, sinus surgery and much more.

Texas Children’s Hospital
at a glance

Named one of the nation’s top children’s Hospitals by U.S. News & World Report with 10 ranked subspecialties in all eligible categories

$60 million invested in research initiatives yearly
Over 30,000 annual admissions
2,000 faculty, residents and fellows
480 beds
More than 7,000 employees

More than 115,000 emergency visits per year to our Level I Trauma Center
Over 1,500 critical patient transports per year
40 pediatric subspecialties
Charles D. Fraser, Jr., MD
Surgeon-in-Chief

Dr. Fraser is Chief of Congenital Heart Surgery and Cardiac Surgeon In-Charge at Texas Children’s Hospital, the nation’s largest pediatric hospital. His academic appointments include Professor of Surgery and Pediatrics (tenured), Baylor College of Medicine and Adjunct Professor of Bioengineering at Rice University. Dr. Fraser holds the Donovan Chair in Congenital Heart Surgery and the Clayton Chair at Texas Children’s Hospital and has clinical appointments at Texas Heart Institute and The University of Texas at Houston. Dr. Fraser also serves as Director of the Adult Congenital Heart Surgery Program at the Texas Heart Institute.
Our Location

The Division of Otolaryngology operates at two hospitals in Houston — Texas Children’s Main Campus and West Campus locations. In 2017, our newest hospital and surgical location in The Woodlands will open. There are six clinic locations across the city where otolaryngologists see patients.

Texas Children’s Main Campus is located within the Texas Medical Center (TMC), which is the largest medical center in the world. Located 10 minutes from downtown Houston, TMC is housed on 1,300 acres, and is home to 54 nonprofit and government institutions, including 14 teaching hospitals, two medical schools, four colleges of nursing, a dental college, a college of pharmacy and a college of optometry. Each year 7.1 million patients visit these institutions.

Referrals

Texas Children’s Hospital cares for patients from all 50 states and nearly 60 countries. To help meet the needs of our patients, the Department of Surgery offers same-day surgical consultation appointments for each of the following surgical division: Congenital Heart Surgery, Neurosurgery, Ophthalmology, Orthopedics, Otolaryngology, Pediatric and Adolescent Gynecology, Pediatric General Surgery, Plastic Surgery and Urology.

To make an appointment for a same-day consultation call 832-TCH-APPT (832-824-2778)

For additional appointment information or to speak with a division administrator, please call 832-822-3250 (Otolaryngology)

Visit texaschildrens.org/refer for more information about referring a patient. Patients and families can visit texaschildrens.org/preparingforsurgery to learn more about the surgery experience at Texas Children’s Hospital.