

CURRICULUM VITAE

NAME AND TITLE **UMANG KHETARPAL, MD**

CURRENT PRACTICE Starting up practice in Houston, Texas
Previous Practice 2000-2019, Rio Grande Valley, Texas

EDUCATION

1979, ISC St. Columba's School, New Delhi, India
1983, M.B.B.S. (M.D.) Armed Forces Medical College, Pune, India
1985-1987, MS Resident in Otolaryngology, All India Institute of Medical Sciences, New Delhi, India

POSTDOCTORAL FELLOWSHIPS/RESIDENCY TRAINING IN THE US

1988-89 Research Fellow, Massachusetts Eye and Ear Infirmery and Harvard Medical School, Boston
1990-92 Clinical Fellow in Otolaryngology, Massachusetts Eye and Ear Infirmery and Harvard Medical School, Boston
1991-1993 Research Associate, Department of Otolaryngology, Massachusetts Eye and Ear Infirmery, Boston
1990-1993 Research Fellow in Molecular Biology of Hearing and Deafness, Department of Pathology, Brigham and Women's Hospital, Boston
1993--1998 Internship/Residency in Otolaryngology, SUNY Health Science Center, Syracuse, New York

HONORS

1983 President's Gold Medal for Best Outgoing Medical Student
2007 Listed in Best Doctors in USA (Best Doctors Company)

LICENSURE

2000- Texas
2013- New York, dormant
2019- Florida
2019- Nevada

CERTIFICATION

1999 Board Certification in Otolaryngology-Head and Neck Facial Plastic Surgery (5/10/99)
2012 Board Certification in Sleep Medicine (1/2012)

MEMBERSHIPS

1994-present	American Academy of Otolaryngology Head and Neck Surgery
1998-present	American Academy of Facial Plastics and Reconstructive Surgery
2005-present	American Rhinology Society

SPECIFIC PRACTICE INTERESTS

Comprehensive management of chronic sinusitis and sinus headache including balloon sinuplasty
Allergic rhinitis
Obstructive Sleep apnea
Rhinoplasty and facial plastic surgery including nose and eyelid surgery
Meniere's disease, vestibular disorders and sudden hearing loss
Thyroid and parathyroid disorders

MANUSCRIPTS CURRENTLY UNDER REVIEW FOR PUBLICATION OR IN PREPARATION

1. Khetarpal U. Characterizing Recurrent Acute Rhinosinusitis - Part I: Clinical and CT findings during baseline and acute rhinosinusitis - implications on timing and extent of surgery.
2. Khetarpal U, Vatcheva K. Characterizing Recurrent Acute Rhinosinusitis - Part II: SNOT-22 and CT score correlation and an investigation into the role of allergy, anatomic variants, septal deviation and outflow tract size in RARS.
3. Khetarpal U, Vatcheva K. Characterizing Recurrent Acute Rhinosinusitis - Part V: Outcomes of in office balloon sinuplasty with or without ethmoidectomy in RARS- a pilot study.
4. Chronic Recurrent Acute RhinoSinusitis (CRARS): A distinct phenotype? Description, subtypes, and outcomes of balloon sinuplasty.
5. Khetarpal U, Vatcheva K. Prevalence of allergic rhinitis and chronic rhinosinusitis in CRS-AR dual symptom patients and relationship between AR and CRS. Being submitted.
6. Khetarpal U. In Office Pediatric balloon sinuplasty with or without ethmoidectomy - feasibility, anesthesia considerations and recurrent disease. In preparation.
7. Khetarpal U. Clustering of chronic rhinosinusitis in five nuclear families: Can we invoke genetics in CRS? Case reports

**RECENT ABSTRACTS PRESENTED AT THE INTERNATIONAL CONGRESS OF
RHINOLOGY, June 5-9, 2019 Chicago**

1. Khetarpal U. Characterizing Recurrent Acute Rhinosinusitis - Part I: Clinical and CT findings during baseline and acute rhinosinusitis - implications on timing and extent of surgery. *Int For Allergy Rhinol.* 2019; 9 (S2): S65
2. Khetarpal U, Vatcheva K. Characterizing Recurrent Acute Rhinosinusitis (RARS) - Part II: Correlation of SNOT-22 scores, nasal endoscopy and CT findings. Poster presentation
3. Khetarpal U, Vatcheva K. Characterizing Recurrent Acute Rhinosinusitis - Part III: Investigating the role of Allergy in RARS. Poster presentation.
4. Khetarpal U, Vatcheva K. Characterizing Recurrent Acute Rhinosinusitis – Part IV: Relationship of septal deviation, variant air cell and outflow tract size on severity of ipsilateral sinusitis during acute rhinosinusitis in RARS. Poster presentation.
5. Khetarpal U, Vatcheva K. Characterizing Recurrent Acute Rhinosinusitis - Part V: Outcomes of in office balloon sinuplasty with or without ethmoidectomy in RARS- a pilot study. *Int For Allergy Rhinol.* 2019; 9 (S2): S65

CURRENT RESEARCH

Western Institutional Review Board approval for “Investigations into chronic and recurrent rhinosinusitis, allergic rhinitis and sinus headaches – clinical and molecular correlates and outcomes research”

PREVIOUS PUBLICATIONS/ABSTRACTS/BOOK CHAPTERS

Khetarpal U: DFNA9 is a progressive audiovestibular dysfunction with a microfibrillar deposit in the inner ear. *Laryngoscope* 2000;110:1379-1384.

Gacek RR, **Khetarpal U:** Neurotrophin 3, not Brain-Derived Neurotrophic factor or Neurotrophin 4, knockout mice have delay in vestibular compensation after unilateral labyrinthectomy. *Laryngoscope* 1998; 108: 671-678.

Gacek RR, Schoonmaker J, **Khetarpal U:** Morphological and neurochemical correlates of vestibular compensation. *Auris Nasus Larynx* 1998.

Khetarpal U, Morton CC: Inner ridge cells may be the source of type II collagen in human fetal tectorial membrane: a quantitative *in situ* hybridization study. *Acta Otolaryngol*, 1998.

Halpin C, **Khetarpal U, McKenna MM:** Autosomal dominant progressive audio-vestibular dysfunction in a large North American family. *Am J Audiol*, 1996; 5: 105.

Manolis E, ..., **Khetarpal U, et al:** A gene for non-syndromic autosomal dominant progressive postlingual sensorineural hearing loss maps to chromosome 14q12-13. *Hum Mol Genet* 1996; 5: 1047-1050.

Rehm HL, ..., **Khetarpal U, et al.:** Norrie disease gene mutation in a large Costa Rican kindred with a novel phenotype including venous insufficiency. *Human Mutation* 1996; 9: 402-408.

Khetarpal U, Morton CC: Expression of COL1A2 and COL2A1 mRNA in a temporal bone of lethal osteogenesis imperfecta. *Arch Otolaryngol Head Neck Surg*, 1993; 119: 1305-1314.

Khetarpal U, Robertson NG, Yoo TJ, Morton CC: Expression and localization of COL2A1 mRNA and type II collagen in human fetal cochlea. *Hear Res* 1994; 79, 59-73.

Magovcevic I, **Khetarpal U, Bieber FR, Morton CC:** GNAZ in human fetal cochlea: expression, localization, and potential role in inner ear function. *Hear Res* 1995; 90: 55-64.

Robertson NG, **Khetarpal U, Guitierrez-Espelela G, Bieber FR, Morton CC:** Isolation of novel and known genes from a human fetal cochlear cDNA library using subtractive hybridization and differential screening. *Genomics* 23: 42-50, 1994.

Khetarpal U: Autosomal dominant sensorineural hearing loss - further temporal bone findings. *Arch Otolaryngol Head Neck Surg* 1993; 119: 106-108.

Khetarpal U: Investigations into the cause of vertigo in sudden sensorineural hearing loss. *Otolaryngol Head Neck Surg*. 1992; 105: 360-371.

Khetarpal U, Schuknecht HF, Gacek RR, Holmes LH: Autosomal dominant sensorineural hearing loss - Pedigrees, audiological and temporal bone findings in two kindreds. *Arch Otolaryngol Head Neck Surg*. 1991; 117: 1032-1042

Khetarpal U, Nadol JB, Glynn RJ: Idiopathic sensorineural hearing loss and postnatal viral labyrinthitis - a statistical comparison of temporal bone findings. *Ann Otol Rhinol Laryngol* 1990; 99: 969-976.

Khetarpal U, Schuknecht HF: In search of pathological correlate of hearing loss in Paget's disease. A study of 26 temporal bones. *Ann Otol Rhinol Laryngol* 1990; 145: 1-16.

Kumar L, **Khetarpal U, et al.** Intracranial Plasmacytoma. *J Ind Med Assoc* 1989; 20-24.

ABSTRACTS

Khetarpal U, Deka RC, Kacker SK: Brainstem auditory potentials in cerebello-pontine angle tumors. Abstract, Sixth Asia Oceania Congress of Otorhinolaryngological Societies, New Delhi, India, Nov. 9-13, 1987.

Morton CC, ..., **Khetarpal U**, et al: Isolation of novel and known genes from a human fetal cochlear cDNA library using subtractive hybridization and differential screening. Abstract, Association for Research in Otolaryngology Meeting, Feb. 5-9, 1995, Fla.

Khetarpal U, et al: Dystrophin, cochlea and hearing-hearing loss. Abstract #45, Molecular Biology of Hearing and Deafness Meeting, October 6-8, 1995, Bethesda, MD.

Khetarpal U, Morton CC: Tissue specific expression of type II procollagen mRNAs and their role in chondrogenesis and inner ear morphogenesis. Abstract #28, Molecular Biology of Hearing and Deafness Meeting, October 6-8, 1995, Bethesda, MD.

Khetarpal U, Morton CC: The role of aggrecan and its alternatively spliced products in human fetal morphogenesis and chondrogenesis. Abstract # 10, Association for Research in Otolaryngology Meeting, Feb. 2-6, 1997, St. Petersburg, Fla.

Khetarpal U, Morton CC: Aggrecan is expressed in noncartilaginous human fetal tissue. Variable alternative splicing of EGF-like domains during development and mRNA localization in human fetal tissues.

Khetarpal U: Genetic mechanisms that determine tissue specificity during human development in general and cochlear development in particular. Abstract, International Otopathological Society Meeting, Boston, June 15-17, 1997.

BOOK CHAPTERS

Krespi Y, **Khetarpal U**: Conservation Laryngeal Surgery. In *Complications of Head and Neck Surgery*, Eds. Krespi Y, Ossoff RJ. WB Saunders Co, Philadelphia, 1993, 215-232.

Khetarpal U, Lalwani A: Nonsyndromic hereditary hearing loss. In *Pediatric Otolaryngology and Neurotology*, Eds. Grundfast KG, Lalwani A. Lippincott-Raven Press, Philadelphia, 1998.

INVITED SPEAKER

1) X-linked hearing loss. Mapping Genes for Deafness Workshop, NIH sponsored, New Delhi, India, Jan. 1992

2) Autosomal dominant sensorineural hearing loss. Mapping Genes for Deafness Workshop, NIH sponsored, New Delhi, India, Jan. 1992

3) Molecular correlates of audiovestibular development and disease. Department of Otolaryngology, University of Pennsylvania Medical Center, Jan 28, 1998.