

# Stapedius

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The stapedius is the smallest striated muscle in the human body. At just over one millimeter in length, its purpose is to stabilize the smallest bone in the body, the stapes. The stapedius is innervated by the tympanic branch of cranial nerve VII, the facial nerve. ( [From the Wikipedia article Stapedius.](#) )



## Recent Publications on Stapedius:

- [Development of the Stapedius Muscle and Unilateral Agenesis of the Tendon of the Stapedius Muscle in a Human Fetus.](#)  
*The objective was to analyze the development of the stapedius muscle to...*10th November, 2009  
Departamento de Anatomia y Embriologia Humana II, Facultad de Medicina,- Anat Rec (Hoboken). 2009 Nov 6. ([DOI Direct Link](#))
- [Test-retest reliability of the acoustic stapedial reflex test in healthy neonates.](#)  
*OBJECTIVE: The acoustic stapedial reflex (ASR) test has been shown to...*30th October, 2009  
Hearing Research Unit for Children, Division of Audiology, School of- Ear Hear. 2009 Jun;30(3):295-301. ([DOI Direct Link](#))
- [Microscopic guide to the middle ear anatomy in guinea pigs.](#)  
*OBJECTIVES: To reveal microscopic surgical anatomy of the middle ear in...*3rd October, 2009  
Department of Otolaryngology, Dr. Lutfi Kirdar Kartal Training and- Kulak Burun Bogaz Ihtis Derg. 2009 Mar-Apr;19(2):87-94.
- [Evolution of Cochlear Implant Arrays Result in Changes in Behavioral and Physiological Responses in Children.](#)  
*OBJECTIVES:: To determine whether a change in cochlear implant technology...*5th September, 2009  
\*Department Otolaryngology-Head and Neck Surgery; and daggerThe Cochlear- Otol Neurotol. 2009 Sep 2. ([DOI Direct Link](#))
- [\[Functional model of the middle ear ossicles\]](#)  
*In students' dissection practice, it is very difficult to teach students...*4th September, 2009  
School of Oral Health Science, Faculty of Dentistry, Hiroshima University,- Kaibogaku Zasshi. 2009 Jun;84(2):41-6.
- [Developmental anatomy, angiography, and clinical implications of orbital arterial variations involving the stapedial artery.](#)  
*Classical anatomists have provided detailed description of the arterial...*6th August, 2009  
Department of Radiology, Division of Interventional Neuroradiology, The- Neuroimaging Clin N Am. 2009 May;19(2):169-79, Table of Contents. ([DOI Direct Link](#))
- [\[Study of the relationship of stapedial reflex thresholds induced during cochlear implant surgery and the highest hearing comfort of paediatric patients\]](#)  
*INTRODUCTION AND GOALS: We have studied the relationship between the...*6th August, 2009

Facultad de Medicina, Universidad de Zaragoza, and Servicio de- Acta Otorrinolaringol Esp. 2009 Mar-Apr;60(2):90-8.

- [The Incudostapedial Articulation: New Concepts.](#)  
*HYPOTHESIS: To study the detailed anatomy of the incudostapedial joint...*23rd July, 2009  
\*Department of Otolaryngology, Tufts University School of Medicine; and- Otol Neurotol. 2009 Jul 21. ([DOI Direct Link](#))
- [Development of the stapedius muscle and pyramidal eminence in humans.](#)  
*The aim of the study was to systematize the key developmental phases of...*18th June, 2009  
Departamento de Anatomia y Embriologia Humana II, Facultad de Medicina,- J Anat. 2009 Sep;215(3):292-9. Epub 2009 Jun 15. ([DOI Direct Link](#))
- [Tenotomy of the tensor tympani and stapedius tendons in Meniere's disease.](#)  
*Tenotomy of the tensor tympani and stapedius tendons in Meniere's disease....*10th June, 2009  
Antwerp University Research centre for Equilibrium and Aerospace, Univ.- B-ENT. 2009;5(1):1-6.
- [Dose-dependent suppression of the electrically elicited stapedius reflex by general anesthetics in children undergoing cochlear implant surgery.](#)  
*BACKGROUND: Cochlear implants stimulate the auditory nerve to enable...*1st May, 2009  
Department of Anesthesia and Pain Medicine, The Hospital for Sick- Anesth Analg. 2009 May;108(5):1480-7. ([DOI Direct Link](#))
- [Pathology quiz case 2. Intramuscular myxoma of the stapedius muscle.](#)  
*OBJECTIVE: The acoustic stapedial reflex (ASR) test has been shown to...*11th March, 2009  
Mayo Clinic, Rochester, Minnesota, USA.- Arch Otolaryngol Head Neck Surg. 2009 Feb;135(2):217, 219-20. ([DOI Direct Link](#))
- [Electromyographical recording of the electrically elicited stapedius reflex via a bipolar hook electrode.](#)  
*OBJECTIVE: To prove the feasibility of recording stapedius reflexes by...*14th February, 2009  
ENT Department, Medical School, University of Rostock, Austria.- Otol Neurotol. 2009 Jan;30(1):1-6. ([DOI Direct Link](#))
- [\[Clinical value of negative pressure tympanograms for diagnosis of middle ear effusion in adults\]](#)  
*OBJECTIVE: To investigate the clinical value of negative pressure...*4th November, 2008  
Department of Otorhinolaryngology, Second Affiliated Hospital of Nanhua- Lin Chung Er Bi Yan Hou Tou Jing Wai Ke Za Zhi. 2008 Aug;22(16):731-3.
- [Modifications of standard cochlear implantation techniques for children under 18 months of age.](#)  
*Cochlear implantation is being performed in increasingly younger children....*16th September, 2008  
California Ear Institute, Palo Alto, CA, USA.- Cochlear Implants Int. 2006 Dec;7(4):207-13. ([DOI Direct Link](#))

## Stapedius Patents:



- 4014320- [Audiometric apparatus](#)
- 6118875- [Binaural synthesis, head-related transfer functions, and uses thereof](#)
- 6132218- [Images for communication of medical information in computer](#)
- 6157861- [Self-adjusting cochlear implant system and method for fitting same](#)
- 6195585- [Remote monitoring of implantable cochlear stimulator](#)
- 6205360- [Apparatus and method for automatically determining stimulation parameters](#)
- 6208882- [Stapedius reflex electrode and connector](#)

- 6216040- [Implantable microphone system for use with cochlear implantable hearing aids](#)
- 6219580- [Multichannel cochlear prosthesis with flexible control of stimulus waveforms](#)
- 5765134- [Method to electronically alter a speaker's emotional state and improve the performance of public speaking](#)
- 5626629- [Programming of a speech processor for an implantable cochlear stimulator](#)
- 4029083- [Probe for audiometric apparatus](#)
- 4079198- [Electro-acoustic impedance bridges](#)
- 4099035- [Hearing aid with recruitment compensation](#)
- 4471171- [Digital hearing aid and method](#)
- 4841986- [Method and apparatus for measuring intracranial fluid pressure](#)
- 4987488- [Video system for visualizing microsurgical images with enhanced depth of field](#)
- 5061918- [Sound emitting device for behavior modification](#)
- 5370689- [Method of implanting a middle ear prosthesis](#)
- 6231500- [Electronic anti-stuttering device providing auditory feedback and disfluency-detecting biofeedback](#)
- 6237947- [Device and method for avoiding hearing damage during activation of vehicle occupant restraint systems](#)
- 6265379- [Method for treating otic disorders](#)
- 6944502- [Method and apparatus for picking up auditory evoked potentials](#)
- 7117038- [Method and system for obtaining stapedial reflexes in cochlear implant users using multiband stimuli](#)
- 7190247- [System and method for reducing effect of magnetic fields on a magnetic transducer](#)
- 7206640- [Method and system for generating a cochlear implant program using multi-electrode stimulation to elicit the electrically-evoked compound action potential](#)
- 7450994- [Estimating flap thickness for cochlear implants](#)
- 7483751- [Automatic fitting for a visual prosthesis](#)
- 7493169- [Automatic fitting for a visual prosthesis](#)
- 7616999- [System for generating a cochlear implant program using multi-electrode stimulation to elicit the electrically-evoked compound action potential](#)
- 6925332- [Methods for programming a neural prosthesis](#)
- 6663575- [Device for electromechanical stimulation and testing of hearing](#)
- 6295467- [Method and device for detecting a reflex of the human stapedius muscle](#)
- 6308101- [Fully implantable cochlear implant system](#)
- 6358926- [Neurotoxin therapy for inner ear disorders](#)
- 6368267- [Stapedial-sacculus strut and method](#)
- 6415185- [Objective programming and operation of a Cochlear implant based on measured evoked potentials that precede the stapedius reflex](#)
- 6428484- [Method and apparatus for picking up auditory evoked potentials](#)
- 6496734- [Auditory prosthesis with automated voice muting using the stapedius muscle reflex](#)
- 6636768- [Implantable microphone system for use with cochlear implant devices](#)
- 7617000- [Methods for programming a neural prosthesis](#)

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