

CURRICULUM VITAE



Name In Seok Moon, MD.

Birth date 10/07/1974

Place of Birth Seoul, Korea

Position Professor & Chairman

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A. Education & Training

INSTITUTION AND LOCATION	DEGREE	Start Date	Completion Date	FIELD OF STUDY	
Yonsei University Medical College, Korea	BS, MD	03/1993	02/1999	Medicine	
Yonsei University Health System, Korea	Intern	03/1999	02/2000	Surgery	
Yonsei University Health System, Korea	Resident	03/2000	02/2004	Otorhinolaryngology	
House Ear Institute, Los Angeles, CA	Visiting Resident	05/2003	05/2003	Otology	
Yonsei University, Seoul, Korea	PhD	09/2002	08/2011	Otology	
University of Antwerp Hospital, Belgium	Visiting Scholar	01/2012	01/2012	Otology	
Marseille University, Marseille, France	Visiting Scholar	03/2015	03/2015	Otology	
Harvard University, Boston, MA	Postgraduate Research Fellow	09/2017	8/2018	Otology & Neurotology	

B. Personal Statement

I'm neuro-otologist from Yonsei University College of Medicine and devoted to lateral skull base surgeries and endoscopic ear surgeries.

- · World's foremost experience in active middle ear implants surgeries (>200).
- · Asia's first experience of total transcanal endoscopic acoustic tumor removal.
- · Korea's first experience of ABI in NF2
- >700 cases of VS surgeries
- >150 cases of EAC Ca surgeries

C. Positions and Honors

Pos	iti	on	S
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2007 – 2008	Clinical Fellow, Department of Otorhinolaryngology, Yonsei University College of Medicine
2008 – 2011	Clinical Assistant Professor, Department of Otorhinolaryngology, Chung-Ang University Hospital
2012 – 2013	Assistant Professor, Department of Otorhinolaryngology, Yonsei University College of Medicine
2014 – 2020	Associate Professor, Department of Otorhinolaryngology, Yonsei University College of Medicine
2021 -	Professor, Department of Otorhinolaryngology, Yonsei University College of Medicine
2021 -	Chairman, Department of Otorhinolaryngology, Gangnam Severance Hospital

Committees

2012 - 2014	Education Committee, Korean Audiologic Society
2013 - 2014	Planning Committee, Korean Otologic Society
2013 - 2016	Director, Education & Training Committee, Korean Skull Base Society
2014 - 2015	Medical Affairs Committee, Korean Society of ORL-HNS
2016 - 2018	Academic Committee, Korean Society of ORL-HNS
2019- 2021	Director, Publishing Committee, Korean Skullbase Society
2020- 2021	General Secretary, Korean Pediatric Society of Otorhinolaryngology
2021- 2022	Director, Information Committee, Korean Audiologic Society
2022-	Academic Chair, Korea Otorhinolaryngology-Head & Neck Surgery
2022-	Director, Publishing Committee, Medical Metaverse Society
2023-	Director, International Committee, Korean Audiologic Society
2023-	Director, International Committee, Korean Skullbase Society
2023-	Academic Chair, International Vestibular Schwannoma Congress 2027

Editorial Boards

2012 -	Editorial Board, Yonsei Medical Journal
2019 -	Editorial Board, Scientific Reports
2021-	Guest Editor, Frontiers in Neurology
2021-	Guest Editor, Diagnostics

<u>Awards</u>

09/2020	Best Paper award, Korean Otorhinolaryngolgy Seciety
02/2018	Best Paper award, North American Skull Base Society
04/2016	Best paper award, Korean Otologic Society
05/2012	Best paper award, Korean Audiologic Society
11/2011	Best paper award, Korean Skullbase Society
04/2006	Minister of national defense Award

D. Contributions to Science

Contribution to endoscopic Ear Surgeries: I published several articles associated with EES and hold EES hands-on workshop every year (www.yees.or.kr).

Publications:

- a. Choi JE, Kang WS, Lee JD, Chung JW, Kong SK, Lee IW, Moon IJ, Hur DG, <u>Moon IS</u>, Cho HH. Outcomes of Endoscopic Congenital Cholesteatoma Removal in South Korea. JAMA Otolaryngol Head Neck Surg. 2023 Mar 1;149(3):231-238.
- b. <u>Moon IS</u>, Choi IS, Shin SH, Yang S, Jung Y, Na G. Endoscopic-Assisted Keyhole Middle Cranial Fossa Approach for Small Vestibular Schwannomas. J Clin Med. 2022 Apr 21;11(9):2324.
- c. Misron K, Mfuko G, Hur YK, <u>Moon IS</u>. Simultaneous Nonmastoidectomy Infrapromontorial Tumor Removal and Cochlear Implantation in Vestibular Schwannoma Patient. Otol Neurotol. 2021 Jun 1;42(5):e631-e634.
- d. Hashim D, Jang SH, <u>Moon IS</u>. Endosopic Intervention of Abrrent Carotid Artery in the Middle Ear. Otol & Neurotol. 2021 Jan;42(1):e82-e85
- e. Hashim ND, Lee SA, Jang SH, <u>Moon IS</u>. A comparison of endoscopic and microscopic inlay butterfly cartilage tympanoplasties and their educational utility. PLoS One. 2020 Oct 30;15(10):e0241152.
- f. <u>IS Moon</u>, DC Cha, SI Nam, HJ Lee, JY Choi. The Feasibility of a Modified Exclusive Endoscopic Transcanal Transpromontorial Approach for Vestibular Schwannomas. J Neurolog Sur B. 2019 Feb;80(1):82-87
- g. Kahinga AA, Han JH, <u>Moon IS</u>. Total Transcanal Endoscopic Facial Nerve Decompression for Traumatic Facial Nerve Palsy. Yonsei Med J. 2018 May;59(3):457-460

Development of new treatment for Vestibular Schwannoma: I have endeavored to develop cheap and efficient Vestibular Schwannoma xenograft models, and have explored new treatment modalities for Vestibular Schwannoma growth suppression including plasma and sulforaphane. Machine learning prediction for VS surgery outcome was also addressed.

Publications:

- a. Kim NH, Kwon M, Jung J, Chae HB, Lee J, Yoon YJ, <u>Moon IS</u>, Lee HK, Namkung W, Stankovic KM, Lee SA, Lee JD, Park SA. Celastrol suppresses the growth of vestibular schwannoma in mice by promoting the degradation of β-catenin. Acta Pharmacol Sin. 2022 Nov;43(11):2993-3001.
- b. Cha D, Shin SH, Kim SH, Choi JY, **Moon IS**. The Machine learning approach for prediction of hearing preservation in vestibular schwannoma surgery. Sci Rep. 2020 Apr 28;10(1):7136
- c. JM Lee, JW Joo, SH Kim, JY Choi, <u>IS Moon</u>. Evidence Based Tailored Parotidectomy in Treating External Auditory Canal Carcinoma. Sci Rep. 2018
- d. Kahinga AA, Han JH, <u>Moon IS</u>. Total Transcanal Endoscopic Facial Nerve Decompression for Traumatic Facial Nerve Palsy. Yonsei Med J. 2018 May;59(3):457-460
- e. Yoon YJ, Suh MJ, Lee HY, Lee HJ, Choi EH, <u>Moon IS</u>, Song K. Anti-tumor effects of cold atmospheric pressure plasma on vestibular schwannoma demonstrate its feasibility as an intra-operative adjuvant treatment. Free Radic Biol Med. 2018 Feb 115:43-5
- f. Lee HJ, Yang YJ, Jeong S, Lee JD, Choi SY, Jung DW, <u>Moon IS</u>. Development of a vestibular schwannoma xenograft zebrafish model for in vivo antitumor drug screening. Laryngoscope. 2016 Dec;126(12):E409-E415.

Improvement of conventional treatment of hearing rehabilitation: I have sought to redefine conventional hearing rehabilitation methods for existing and novel auditory implants, and to improve conventional medical treatment for patients with hearing loss.

Publications:

- a. Misron K, Mufko G. Hur YG, <u>Moon IS</u>. Simultaneous Nonmastoidectomy Infrapromontorial Tumor Removal and Cochlear Implantation in Vestibular Schwannoma Patient. Otol Neurotol. 2021 Jun 1;42(5):e631-e634.
- b. Lee HJ, Kahinga A, <u>Moon IS.</u> Clinical effect of an active transcutaneous bone-conduction implant on tinnitus in patients with ipsilateral sensorineural hearing loss. Auris Nasus Larynx. 2021 Jun;48(3):394-399.
- c. Lee JM, Lee HJ, <u>Moon IS</u>, Choi JY.Effects of Vibrant Soundbridge on tinnitus accompanied by sensorineural hearing loss. PLoS One. 2020 Feb 4;15(2):e0228498
- d. Lee JM, Lee YH, Jung J, Kim SH, <u>Moon IS</u>, Choi JY. Audiologic Gain of Incus Short Process Vibroplasty with Conventional Incus Long Process Vibroplasty: A Retrospective Analysis of 36 Patients. Otol Neurotol. 2017 Sep;38(8):1063-1070
- e. Ji YB, Moon IS, Bark HS, Kim SH, Park DW, Noh SK, Huh YM, Suh JS, Oh SJ, Jeon TI. Terahertz otoscope and potential for diagnosing otitis media. Biomed Opt Express. 2016 Mar 9;7(4):1201-9.
- f. Seo YJ, Kim HJ, <u>Moon IS</u>, Choi JY. Changes in Tinnitus After Middle Ear Implant Surgery: Comparisons with the Cochlear Implant. Ear Hear. 2015 Nov-Dec;36(6):705-9
- g. Park SH, <u>Moon IS</u>. Round window membrane vibration may increase the effect of intratympanic dexamethasone injection. Laryngoscope. 2014 Jun;124(6):1444-51
- h. **Moon IS**, So JH, Jung YM, Lee WS, Kim EY, Choi JH, Kim CH, Choi JY. Fucoidan promotes mechanosensory hair cell regeneration following amino glycoside-induced cell death. Hear Res. 2011;282(1-2):236-42

Complete List of Published Work (105 peer-reviewed published and accepted journal papers, on 55 of which I am the first or last author) can be checked.

https://pubmed.ncbi.nlm.nih.gov/?term=in+seok+moon&sort=date

D. Research Support

- 2023 Korean Healthcare Technology R&D Project for Health, Welfare & Family Affairs (Project Number RS2023-00253371). PI (\$150,000) Title: Single-Cell RNA-Seq for EAC Cancer
- 2022 National Information Society Agency. PI(\$100,000) Title: Study data filing Endoscopic drum phot set
- 2021 National Evidence-based Healthcare Consultation Agency. PI (\$200,000) Title: Endoscopic Repair of Perilymph Fistula
- 2021 Korean Healthcare Technology R&D Project for Health, Welfare & Family Affairs (Project Number A210367). PI (\$250,000) Title: Development of Smart application for Tinnitus Treatment
- 2018 National Research Foundation of Korea (Project number 2018R1A1A02085472)
 PI (\$250,000) Title: evelopment of adjuvant treatment using cold atmospheric pressure plasma for skullbase tumor
- 2017 Research Grant of Korean Institute of Industrial Technology (Project number 10080691)

 (PI: \$400,000) Title: Development of health food for presbycusis using Avocado component
- 2016 Research Grant of Yonsei University College of Medicine PI (\$30,000) Title: Development of

novel zebrafish	human head	& Neck cancer	and skullbase	xenograft model f	for effective c	ancer treatment
drug screening						

- 2014 National Research Foundation of Korea (Project number 2014R1A1A1004680) PI (\$150,000)

 Title: Detection of Gene which involving auditory hair cell regeneration after noise induced cell damage and Development of Knockout model using zebrafish
- 2013 Korean Healthcare Technology R&D Project for Health, Welfare & Family Affairs (Project Number A102065). PI (\$100,000)
 - Title: Feasibility of Auditory branstem implant in non-tumor patients
- 2012 Research Fund of Yonsei University College of Medicine PI (\$20,000) Title: Development of novel zebrafish human vestibular schwannoma xenograft model
- 2012 National Research Foundation of Korea (Project number 2012R1A1A2004323) PI (\$150,000)

 Title: Mass drug screening for therapeutic agents against noise-induced hearing loss
- 2010 Korean Healthcare Technology R&D Project for Health, Welfare & Family Affairs (Project Number A102039). PI (\$30,000) Title: Detection of microRNA related to noise-induced hearing loss using zebrafish
- 2009 Korean Healthcare Technology R&D Project for Health, Welfare & Family Affairs (Project Number A090496). PI (\$10,000) Title: Mass drug screening for therapeutic agents against ototoxic hearing loss