Professor Jose Antonio LOPEZ-ESCAMEZ, MD, PhD Meniere's Disease Neuroscience Research Program, The Kolling Insittute, The University of Sydney jose.lopezescamez@sydney.edu.au

Professor Lopez-Escamez is an international leader in genetics of Meniere's disease (MD) and tinnitus, ranked in the Stanford World Top 2% Scientists in 2021-23. He has over 175 papers in top scientific journals with >9000 citations in GS. He has been granted > 7M in competitive funding in Europe and currently lead the Meniere's disease Neuroscience Research Program at the University of Sydney. His work during the last 10 years has re-defined the condition (2015 MD diagnostic criteria), identified five clinical variants, including autoimmune and familial MD, discovered the main genes involved in familial MD in European descendant population (OTOG, MYO7A, TECTA), and re-classifed MD clinical variants, according to cytokine profile and genetic data, leading to a better understanding of the genetic contribution and inflammatory process in MD. Besides, his collaborative work in several European Consortia (TINNET, ESIT, TIGER, UNITI) has also lead to seminal contributions in the tinnitus heritability and the discovery of several genes in patients with severe tinnitus (ANK2, TSC2). Professor Lopez-Escamez has supervised 13 International PhD and 27 Master students at the University of Granada in Spain. His mentees are enrolled as postdoctoral researchers in top ranked Universities including University of Edinburg, University of Cambridge, University College London, Harvard University and Karolinska Institute. He has around successfully administered >50 productive Grants and fellowships, including several RCT (e.g., hiring staff, research ethics, IPR, budget), collaborating with other researchers.

Top 5 publications

- a. Gallego-Martinez A, Escalera-Balsera A, Trpchevska N, Robles-Bolivar P, Roman-Naranjo P, Frejo L, Perez-Carpena P, Bulla J, Gallus S, Canlon B, Cederroth CR, Lopez-Escamez JA. Using coding and non-coding rare variants to target candidate genes in patients with severe tinnitus. NPJ Genom Med 2022 Nov 30;7(1):70. http://dx.doi.org/10.1038/s41525-022-00341-w IF 5.1 Q1
- b. Roman-Naranjo P, Parra-Perez AM, Escalera-Balsera A, Soto-Varela A, Gallego-Martinez A, Aran I, Perez-Fernandez N, Bächinger D, Eckhard AH, Gonzalez-Aguado R, Frejo L, Lopez-Escamez JA. Defective α-tectorin may involve tectorial membrane in familial Meniere disease. Clin Transl Med 2022; 12(6):e829. http://dx.doi.org/10.1002/ctm2.829 IF 10.6 Q1
- c. Amanat S, Gallego-Martinez A, Sollini J, Perez-Carpena P, Espinosa-Sanchez JM, Aran I, Soto-Varela A, Batuecas-Caletrio A, Canlon B, May P, Cederroth CR, Lopez-Escamez JA. Burden of rare variants in synaptic genes in patients with severe tinnitus: An exome based extreme phenotype study. EBioMedicine 2021 Apr;66:103309. http://dx.doi.org/10.1016/j.ebiom.2021.103309. IF 11.2 Q1
- d. Gallego-Martinez A, Requena T, Roman-Naranjo P, May P, Lopez-Escamez JA (2020) Enrichment of damaging missense variants in genes related with axonal guidance signaling in sporadic Meniere's disease. *J Med Gene*t 2020; 57(2):82–88. http://dx.doi.org/10.1136/jmedgenet-2019-106159. **IF 6.3 Q1**
- e. Roman-Naranjo P, Gallego-Martinez A, Soto-Varela A, Aran I, Moleon MDC, Espinosa-Sanchez JM, Amor-Dorado JC, Batuecas-Caletrio A, Perez-Vazquez P, Lopez-Escamez JA. Burden of Rare Variants in the OTOG Gene in Familial Meniere's Disease. Ear Hear. 2020 Nov/Dec;41(6):1598-1605. http://dx.doi.org/10.1097/AUD.0000000000000878. IF 3.6 Q1

Ongoing Research Support

B3413. Lopez-Escamez (PI) 2023-27.

Meniere disease Neuroscience Program, University of Sydney. AUD 3,000,000. Deciphering the genetics and inflammatory bases of Meniere's Disease and Tinnitus Disorder by combining multi-omic data and cellular models.

2024 ATA Innovative Grant Research Program. Lopez-Escamez (CI). 2024-2026.

Genetics and epigenetics of severe tinnitus. American Tinnitus Association. US\$ 120.000. This project will study the rare genetic variation and DNA methylation in patients with severe tinnitus.

PI-0027-2020. Lopez-Escamez (PI). 2021-24.

Health Andalusian Regional Government. €146,522. Pro-inflammatory cytokines and epigenetic signature to improve molecular diagnosis and personalized medicine in patients with episodic vertigo and migraine

(EPIVERT). EPIVERT combines a systematic clinical data, cytokines and genome methylation profiling in patients with MD, vestibular migraine and migraine through a prospective, multicenter longitudinal study.

Academic and Professional positions

- 2023- Professor of Meniere disease Neuroscience, School of Medical Sciences, University of Sydney, Australia.
- 2023-25 Visiting Scholar, Department of Surgery, Facultad de Medicina, Universidad de Granada, Spain.
- 2019-23 Assoc. Prof. Otorhinolaryngology, Dept. of Surgery, Div. Otolaryngology, Univ. of Granada, Spain.
- 2018-20 Scientific Director, Health Research Institute of Granada (IBS-Granada), Granada, Spain.
- 2017-18 Visiting Researcher, Bioinformatic Core, Center System Biomedicine, Univ. du Luxembourg. Luxembourg.
- 2015-23 Consultant in Otolaryngology, Hospital Universitario Virgen de las Nieves, Granada, Spain
- 2012-23 PI, Dept. Genomic Medicine, Centre for Genomics and Oncology (GENyO), Granada, Spain
- 2011-12 Res. Assoc., Dept. Genomic Medicine, Ctr. for Genomics and Oncology (GENyO), Granada, Spain
- 2008-09 Director of Research, Hospital de Poniente, El Ejido, Almería, Spain
- 2002-15 Head of Otology & Neurotology Group CTS495, Hospital de Poniente, El Ejido, Almeria, Spain
- 1999-15 Consultant in Otolaryngology, Hospital de Poniente, El Ejido, Almeria, Spain
- 1999-99 Consultant in Otolaryngology, Hospital Universitario Virgen de las Nieves, Granada, Spain
- 1995-98 Residency in Otolaryngology Head and Neck Surgery. Hospital Virgen de las Nieves. Granada.
- 1993 Postdoctoral Research Fellow, Kresge Hearing Research Institute, University of Michigan, US
- 1992 Research Scholar Exchange Visitor, Kresge Hearing Research Institute, University of Michigan, US
- Honorary Research Fellow, Dept. of Physiology, St. Thomas' Hospitals, University of London, UK.
- 1986-90 Medical Internship, Dept. Cell Biology, Faculty of Medicine, University of Granada, Granada, Spain

Honors & Awards

- 2024 Hallpike-Nylen Medal. Barany Society. Uppsala
- American Tinnitus Association Scientific Advisory Committee.
- Kolling Discovery Science Research Award Best publication by a researcher at any career stage.
- 2021-23 Chair, Education Committee and Member of the Executive Board of the Spanish Society Otorhinolaryngology (SEORL)
- 2018 Frontiers Spotlight Award 2018. Research Topic: Vestibular contribution to health and disease
- 2018 Global Otology Research Forum- Vestibular Research Prize. Politzer Society meeting 2018. Genetic Diagnosis of Autoimmune Meniere's Disease.
- Joan Gasso Best publication Award: Extended phenotype and clinical subgroups in unilateral Meniere disease. Clinical Otolayngology. 2017;1-9. DOI:10,1111/coa.12844. 2018.
- 2016-20 Member, Program Committee, Association for Research in Otolaryngology (ARO).
- 2016 Member, Collegium Oto-Rhino-Laryngologicum Amicitae Sacrum (CORLAS).
- 2016-17 Chair, reviewer panel for Chronic Inflammatory Disorders, Fundación Progreso y Salud.
- 2015-21 Chair, Research Committee of the Spanish Society Otorhinolaryngology (SEORL)
- 2011-15 Chair of Meniere's Disease subcommittee of Barany Society, Member of International Classification for Vestibular Disorders.
- 3th award Ulyssess to best Medical Staff paper Best Spanish Research to "Immunogenetic profile and endophenotypes in Meniere disease. CTO Foundation. 2011.
- 2010 Award Fundacion Juan Gasso to best Oral Presentation SEORL Congress.
- Awarded Bronze medal of the SEORL. Meniere disease: from basic science to clinical medicine.
- 2009 First Prize Solvay Pharma to best publication in Otoneurology.
- 1998 Outstanding PhD Award, University of Granada, Spain.