

## CURRICULUM VITAE

### PAOLA PERIN

Email: [paola.perin@unipv.it](mailto:paola.perin@unipv.it)

[https://www.researchgate.net/profile/Paola\\_Perin/](https://www.researchgate.net/profile/Paola_Perin/)

<https://orcid.org/0000-0002-5897-4444>

#### DATI ANAGRAFICI

Data di nascita: 12 maggio 1970  
Luogo di nascita; Viadana (MN), Italia  
Cittadinanza: Italiana  
Codice Fiscale: PRNPLA70E52L826M

#### POSIZIONE ATTUALE

Ricercatore Confermato, Dip. Scienze del Comportamento e del Sistema Nervoso, Università di Pavia.

#### TITOLI DI STUDIO

1988-1992      Laurea in Scienze Biologiche, Università di Pavia (110 e lode)  
1992-1996      Dottorato in Scienze Fisiologiche, Consorzio interuniversitario di Pavia, Milano, Torino e Genova

#### ESPERIENZE PROFESSIONALI

- 1989-1992: Alunna del Collegio Ghislieri
- 1993: Borsista, Baylor College of Medicine (Houston, TX, USA) - Borsa di studio dell'Università di Pavia per ricerca presso il laboratorio del prof. Arthur M. Brown
- 1994: Research Associate, Baylor College of Medicine (Houston, TX, USA) presso il laboratorio del prof. Arthur M. Brown
- 1997-1998: Borsa postdottorato alla Tulane University (New Orleans, LA, USA) per ricerca presso il laboratorio del Prof. Paul S. Guth, Dip. Farmacologia
- 1998-attuale: Ricercatore confermato in Fisiologia, Dipartimento di Scienze del Comportamento e del Sistema Nervoso, Università di Pavia
- Lug-Sett 1999: Research Associate, Wayne State University, (Detroit, MI, USA) presso il laboratorio del Prof. Dennis G. Drescher
- Lug 2003- Feb 2005: Research Associate, University of Chicago, Chicago (IL). PI: Prof. Jay M. Goldberg

#### Attività didattica:

##### Università di Pavia

- Dal 2020/21 – Patologia Generale (5CFU, CTF)
- Dal 2008/09 Anatomia Umana (6 CFU, Farmacia)
- Dal 2008/09 Fisiologia Cellulare (3 CFU, Farmacia)
- 2010/11-2019/20 Fisiologia ed Analisi Sensoriale (3CFU, modulo libero Farmacia/CTF)
- 2008/09-2015/16 Fisiologia dei Recettori Sensoriali (3CFU, Neurobiologia)
- 2003/04-2007/08 Biofisica dei Canali ionici (2CFU, modulo libero Farmacia/CTF)

##### Altro

2014/15-16/17 Fisiologia Umana (Corso di laurea in Infermieristica, Hunimed).

#### Attività editoriali:

- Review Editor per Neuro-Otology e per Auditory Cognitive Neuroscience.
- Topic Editor per Brain Sciences
- Membro del Comitato Scientifico della rivista "Argomenti di Otorinolaringoiatria Moderna"
- Reviewer per: Frontiers in Cellular Neuroscience, Frontiers in Immunology, Frontiers in Neuroanatomy, BMC Neuroscience, Journal of Physiology, Trends in Hearing, JoVE.
- Editor per lo Special Topic: "Neuroimmunology of the inner ear" di Frontiers (2019-2020)
- Editor per lo Special Topic di Brain Sciences: "Biomarkers in neurotology" (2021-2022)
- Editor per lo Special Topic di Frontiers: "Neuroimmunology of the inner ear-II" (2022-2024)

### **Altre attività**

- Membro delle seguenti società scientifiche: AINI (Associazione Italiana di Neuroimmunologia), OCNS (Organization for Computational Neuroscience), ARO (Association for Research in Otolaryngology), Society for Neuroscience
- Referente scientifico per le seguenti ONLUS: AIT (Associazione Italiana Tinnitus), Fondazione AMMI
- Partecipante al progetto Europeo COST TINNET (2014-2018)

### **Interessi scientifici:**

Trasmissione del segnale nel sistema acusticovestibolare e sua modulazione da parte del sistema immunitario a livello periferico e centrale.

### **Finanziamenti:**

#### Attuali:

Donazioni da AIT Onlus (PI: Prof. Paola Perin)

#### Pregressi:

- 2021-2023 Contributo di Ricerca della Fondazione Banca del Monte di Lombardia per la ricerca dal titolo: "Perdita di udito e demenza: c'è un nesso neuroimmune?" (PI: Prof. Roberto Pizzala, 30500 EUR)
- 2018 Internal Research funding from the Dept. of Molecular Medicine (PI: Prof. Roberto Pizzala, 16000 EUR)
- 2017 Universitiamo campagna crowdfunding (PI: Prof. Paola Perin, 17000 EUR)
- 2011 Contributo Miroglio per il progetto "Study of afferent transmission in vestibular organs" (PI: Prof. Paola Perin, 10000 EUR)
- 2005-2008 Cofinanziamento MURST "Processes determining the sensory discharge dynamics in semicircular canals". PI Prof. Paola Perin
- 2002-2007 NIH R01 Grant: "Cellular mechanisms of the vestibular system": PI: Prof. J. Goldberg
- 2002-2004 Progetto MURST "Presynaptic modulation of transmitter release at the hair cell afferent synapse". PI: Prof. P. Valli

## **PUBBLICAZIONI**

### **Datasets**

Cossellu D, Perin P, Vivado E, Pizzala R (2024). 3D atlas of the rat inner ear from iDISCO+ cleared temporal bone. doi: 10.17602/M2/M600073

### **Full papers**

1. Cossellu D, Vivado E, Pizzala R, Perin P. 3D atlas of the rat inner ear from iDISCO+ cleared temporal bone. PeerJ, accepted with revisions
2. Perin P, Cossellu D, Vivado E, Batti L, Gantar F, Voigt FF, Pizzala R. Temporal bone marrow of the rat and its connections to the inner ear. *Frontiers Neurol* 2024, 15, doi:10.3389/fneur.2024.1386654
3. Calisesi G, Ancora D, Tacconi C, Fantin A, Perin P, Pizzala R, Valentini G, Farina A, Bassi A. Enlarged Field of View in Spatially Modulated Selective Volume Illumination Microscopy. *Microsc Microanal.* 2022 Jun 14:1-10. doi: 10.1017/S1431927622012077.
4. Perin P, Rossetti R, Ricci C, Cossellu D, Lazzarini S, Bethge P, Voigt FF, Helmchen F, Batti L, Gantar I, Pizzala R. 3D Reconstruction of the Clarified Rat Hindbrain Choroid Plexus. *Front Cell Dev Biol.* 2021 9:692617. doi: 10.3389/fcell.2021.692617.
5. Perin P, Marino F, Varela-Nieto I, Szczepek AJ. Editorial: Neuroimmunology of the Inner Ear. *Front Neurol.* 2021 Feb 9;12:635359. doi: 10.3389/fneur.2021.635359.
6. Perin P, Mabou Tagne A, Enrico P, Marino F, Cosentino M, Pizzala R, Boselli C. Cannabinoids, inner ear, hearing and tinnitus: a neuroimmunological perspective. *Front. Neurol.* 11:505995 doi:10.3389/fneur.2020.505995
7. Barozzi S, Soi D, Intieri E, Giani M, Aldè M, Tonon E, Signorini L, Renieri A, Fallerini C, Perin P, Montini G, Ambrosetti U. Vestibular and audiological findings in the Alport syndrome. *Am J Med Genet A.* 2020 Aug 20. doi: 10.1002/ajmg.a.61796.
8. Voigt FF, Kirschenbaum D, Platonova E, Pagès S, Campbell RAA, Kastli R, Schaettin M, Egolf L, van der Bourg A, Bethge P, Haenraets K, Frézel N, Topilko T, Perin P, Hillier D, Hildebrand S, Schueth A, Roebroek A, Roska B, Stoeckli ET, Pizzala R, Renier N, Zeilhofer HU, Karayannis T, Ziegler U, Batti L, Holtmaat A, Lüscher C, Aguzzi A, Helmchen F. The mesoSPIM initiative: open-source light-sheet microscopes for imaging cleared tissue. *Nat Methods.* 2019 Sep 16. doi: 10.1038/s41592-019-0554-0.
9. Perin P, Voigt F.F., Bethge P., Helmchen F., Pizzala R. (2019) iDISCO+ for the study of neuroimmune architecture of the rat auditory brainstem. *Front. Neuroanat.* 13:15. doi: 10.3389/fnana.2019.00015
10. Gallus S, Lugo A, Garavello W, Bosetti C, Santoro E, Colombo P, Perin P, La Vecchia C, Langguth B. Prevalence and Determinants of Tinnitus in the Italian Adult Population. *Neuroepidemiology.* 2015;45(1):12-9. doi: 10.1159/000431376.
11. Venturino A, Oda A, Perin P. Hair cell-type dependent expression of basolateral ion channels shapes response dynamics in the frog utricle. *Front Cell Neurosci.* 2015 Sep 7;9:338.
12. Subramaniyam S, Solinas S, Perin P, Locatelli F, Masetto S, D'Angelo E. Computational modeling predicts the ionic mechanism of late-onset responses in unipolar brush cells. *Front Cell Neurosci.* 2014 Aug 20;8:237.
13. Perin P, Botta L, Tritto S, Laforenza U (2012). Expression and localization of ryanodine receptors in the frog semicircular canal, *J Biomed Biotechnol.* vol. 2012, Article ID 398398, 6 pages, 2012. doi:10.1155/2012/398398.
14. Andreescu CE, Prestori F, Brandalise F, D'Errico A, De Jeu MT, Rossi P, Botta L, Kohr G, Perin P, D'Angelo E, De Zeeuw CI (2011) NR2A subunit of the N-methyl D-aspartate receptors are required for

potentiation at the mossy fiber to granule cell synapse and vestibulo-cerebellar motor learning. *Neuroscience*;176:274-83.

15. Nigro MJ, Perin P, Magistretti J (2011) Differential effects of Zn<sup>2+</sup> on activation, deactivation, and inactivation kinetics in neuronal voltage-gated Na<sup>+</sup> channels. *Pflugers Arch.* 2011 Aug;462(2):331-47.
16. Perin P, Caldirola E, Cofrancesco P, Marini A (2011) Monitoring academic progress in a Faculty of Pharmacy, Je-LKS, v.7, n.1, 31-40.
17. Perin P, Tritto S, Botta L, Fontana JM, Gastaldi G, Masetto S, Tosco M, Laforenza U (2010) Aquaporin-6 expression in the cochlear sensory epithelium is downregulated by salicylates. *J Biomed Biotechnol.* Epub 2010 Jan 12.
18. Perin P, Lucchelli A (2010) I farmaci ototossici. *Tema Farmacia Anno XXVIII, n.5, maggio 2010*
19. Botta L, Tritto S, Perin P, Laforenza U, Gastaldi G, Zampini V, Zucca G, Valli S, Masetto S, Valli P. (2008). Histamine H1 receptors are expressed in mouse and frog semicircular canal sensory epithelia. *Neuroreport* 19; p. 425-429.
20. Catacuzzeno L, Fioretti B, Perin P, Franciolini F (2004). Spontaneous low-frequency voltage oscillations in frog saccular hair cells. *J Physiol* vol. 561, pp. 685-701.
21. Catacuzzeno L, Fioretti B, Perin P, Franciolini F (2003). Frog saccular hair cells dissociated with protease VIII exhibit inactivating BK currents, K(V) currents, and low-frequency electrical resonance. *Hearing res.* vol. 175, pp. 36-44.
22. Lelli A, Perin P, Martini M, Ciubotaru CD, Prigioni I, Valli P, Rossi ML, Mammano F (2003). Presynaptic calcium stores modulate afferent release in vestibular hair cells. *J Neurosci.* vol. 23, pp. 6894-6903.
23. Masetto S, Bosica M, Correia MJ, Ottersen OP, Zucca G, Perin P, Valli P. (2003). Na<sup>+</sup> currents in vestibular type I and type II hair cells of the embryo and adult chicken. *J Neurophysiol* vol. 90, pp. 1266-1278.
24. Ramahrishnan NA, Green GE, Pasha R, Drescher MJ, Swanson GS, Perin P, Lakhani RS, Ahsan SF, Hatfield JS, Khan KM, Drescher DG. (2002). Voltage-gated Ca<sup>2+</sup> channel Cav1.3 subunit expressed in the hair-cell epithelium of the sacculus of the trout *Oncorhynchus mykiss*: cloning and comparison across vertebrate classes. *Mol Brain Res.* vol. 109, pp. 69-83.
25. Botta L, Valli P, Asti A, Perin P, Zucca G., Racchi M., Govoni S., Pascale A. (2001). beta amyloid-induced disruption of ionic balance: studies on the isolated frog labyrinth. *NEUROREPORT.* vol. 12, pp. 2493-2497.
26. Holt JC, Lioudyno M, Athas G, Garcia MM, Perin P, Guth PS (2001). The effect of proteolytic enzymes on the alpha9-nicotinic receptor-mediated response in isolated frog vestibular hair cells. *Hearing Res.* vol. 152, pp. 25-42.
27. Perin P, Masetto S., Martini M, Rossi ML, Rubbini G, Rispoli G, Guth PS, Zucca G, Valli P (2001). Regional distribution of calcium currents in frog semicircular canal hair cells. *Hearing Res.* vol. 152, pp. 67-76.
28. Botta L, Mira E, Valli S, Zucca G, Perin P, Benvenuti C, Fossati A, Valli P (2000). Effects of betahistine metabolites on frog ampullar receptors. *Acta Otolaryngol.* vol. 120, pp. 25-27.

29. Masetto S, Perin P, Malusà A, Valli P (2000). Membrane properties of chick semicircular canal hair cells in situ during embryonic development. *J Neurophysiol.* vol. 83, pp. 2740-2756.
30. Zucca G, Botta L, Valli S, Giannoni B, Mira E, Perin P, Buizza A, Valli P (1999). Effects of caloric stimuli on frog ampullar receptors. *Hearing Res.* vol. 37, pp. 8-14.
31. Zucca G, Botta L, Valli S, Giannoni B, Mira E, Perin P, Valli P (1999). Caloric stimulation of ampullar receptors: a new method to produce mechanically-evoked responses in frog semicircular canals. *J Neurosci Meth.* vol. 88, pp. 141-151.
32. Perin P, Soto E, Vega R, Botta L, Masetto S, Zucca G, Valli P (2000). Calcium channels functional roles in the frog semicircular canal. *Neuroreport* vol. 11, pp. 417-420.
33. Botta L, Mira E, Valli S, Perin P, Zucca G, Valli P (1998). Effects of Betahistine on vestibular receptors of the frog. *Acta Otolaryngol.* vol. 118, pp. 519-523.
34. Guth PS, Holt JC, Perin P, Athas G, Garcia M, Puri A, Zucca G, Botta L, Valli P (1998). The metabotropic glutamate receptors of the vestibular organs. *Hearing Res.* vol. 125, pp. 154-162.
35. Guth PS, Perin P, Norris CH, Valli P (1998). The vestibular hair cell: post-transductional signal processing. *Prog Neurobiol.* vol. 54, pp. 193-247.
36. Norris CH, Miller AJ, Perin P, Holt JC, Guth PS (1998). Mechanisms and effects of transepithelial polarization in the isolated semicircular canal. *Hearing Res.* vol. 123, pp. 31-40.
37. Zucca G, Valli S, Valli P, Perin P, Mira E (1998). Why do benign paroxysmal positional vertigo (BPPV) episodes recover spontaneously?. *J Vestib Res.* vol. 8, pp. 325-329.
38. Toselli M, Perin P, Taglietti V. (1995). Muscarine inhibits w-conotoxin-sensitive calcium channels in a voltage- and time-dependent mode in the human neuroblastoma cell line SH-SY5Y. *J Neurophysiol.* vol. 74, pp. 1730-1741.

### **Presentazioni a congresso**

1. Barozzi S, Conte G, Perin P, Di Berardino F (2023). Corso monotematico: Mancata visualizzazione del labirinto membranoso vestibolare alla RM con sequenze tardive: perché? Pisa, Congresso nazionale SIAF, 9-12 Novembre 2023
2. Perin P., (2023) Popolazione cellulare e funzioni nell'orecchio interno, Pavia Congresso Nazionale VIS, 19-21 ottobre 2023
3. Perin P., Barozzi S. (2023) Women in Audiology: audiologia di genere e disordini audiovestibolari, AIOLP Meeting, Milan October 6-8th 2023
4. Perin P, Cossellu D, Vivado E, Zambelli A, Pepe M, Pizzala R. (2023), "Perisinusal vs perilabyrinthine bone marrow: are they doing the same thing? 58th Workshop on Inner Ear Biology, September 10-13th 2023, London.
5. Perin P. (2022) Orecchio e neuroinfiammazione. AIOLP Meeting, Bari September 28-October 1st 2022

6. Perin P, Cossellu D, Lazzarini S, Vivado E, Pizzala R. (2022), "3D reconstruction of the inner ear vascularization and temporal bone marrow in the rat", 57th Workshop on Inner Ear Biology, September 10-13th 2022, Trieste.
7. Cossellu D, Perin P, Lazzarini S, Pizzala R. (2022), "Automating vascular segmentation in the cleared auditory system", 57th Workshop on Inner Ear Biology, September 10-13th 2022, Trieste.
8. Perin P, Szczepek A, Murillo S, Varela-Nieto I (2022) *Frontiers: Neuro-immunology of the Inner Ear*. 57th Workshop on Inner Ear Biology, September 10-13th 2022, Trieste.
9. Perin P. (2021) Neuroflogosi e labirinto. SIO Meeting, Turin, November 10-13, 2021
10. Perin P., de Jonge H, Barozzi S. (2021) Melanocytes in the cochlea. SIO Meeting, November 10-13, 2021
11. Perin P. (2021) Neuroinfiammazione ed invecchiamento dell'orecchio. AIOLP Meeting, Riva del Garda (TN) September 26-29 2021
12. Cossellu D, Ricci C, Rossetti R, Perin P, Pizzala R (2020) "Bone channels and inflammation routes in the rat auditory system " BraYn – 3rd Brainstorming Research Assembly for Young Neuroscientists November 25-26, 2020 (online) NI07
13. Ricci C, Rossetti R, Cossellu D, Cobiauchi L, Dondi D, Perin P, Pizzala R (2020) "Tools for large specimen clearing: applying SOCRAT to the auditory system of small and large mammals " BraYn – 3rd Brainstorming Research Assembly for Young Neuroscientists November 25-26, 2020 (online) NI24
14. Rossetti R, Ricci C, Cossellu D, Perin P, Pizzala R (2020) "What does the microanatomy of the choroid plexus tell us on its function? " BraYn – 3rd Brainstorming Research Assembly for Young Neuroscientists November 25-26, 2020 (online) NI25
15. Perin P. (2019) Vascular districts in the intact 4th ventricle of the rat: do we have the whole picture on circumventricular organs? LFSM2019, December 4-6, Frankfurt
16. Perin P, Scarpa S, D'Onofrio S, Pizzala R (2019) "Vascular networks of rat choroid plexus and cochlear nucleus: do they communicate?" BraYn - 2nd Brainstorming Research Assembly for Young Neuroscientists November 14 - 16, 2019, Milano, Istituto Mario Negri
17. Barozzi S, Perin P, Ginocchio D. (2019) Possibile ruolo dei melanociti nei disturbi audio-vestibolari. XXXVII Congresso SIAF – November 6-9, Modena.
18. Perin P, Barcio V, D'Onofrio S, Scarpa S, Pizzala R. (2019) Vascular associations in the choroid plexus: do they matter for the auditory system?, 56th Workshop on Inner Ear Biology, September 7-10th, Padua.
19. Perin P, Barcio V, D'Onofrio S, Scarpa S, Pizzala R. (2019) Vascular network of the rat cochlear nuclei, 56th Workshop on Inner Ear Biology, September 7-10th, Padua.
20. Perin P. (2019) Acufeni e neuropatia, Cenacolo Italiano d Audiovestibologia, September 5-7th, Chieti
21. Perin P, 3D imaging and segmentation of the rat choroid plexus, Swiss Light-Sheet Microscopy Workshop, Zurich, 24-25 Apr 2019
22. Perin P, "Acufeni e plasticità sinaptica", 4° Update in vestibologia tra ricerca e clinica Arenzano (GE) 11 november 2018

23. Perin P, "Compensazione adattativa e patologica nelle vie acustiche centrali", VI Congresso Gruppo Campano ORL - Salerno, 15/17 november 2018
24. Perin P, Ceccarini M, Centineo A, Pizzala R. (2018) Choroid plexus association to the auditory system: observations in a clarified brainstem-inner ear preparation, 55th Workshop on Inner Ear Biology, September 6-8th, Berlin.
25. Perin P, Ceccarini M, Centineo A, Pizzala R. (2018) Segmentation and cell feature extraction in the clarified auditory system 55th Workshop on Inner Ear Biology, September 6-8th, Berlin.
26. Ceccarini M, Centineo A, Perin P, Pizzala R. (2018) Reconstruction of neuroimmune communication pathways between the cochlea and the 4th ventricle, XXVII AINI CONGRESS, May 8-11, Trieste.
27. Centineo A, Ceccarini M, Perin P, Pizzala R (2018) Stereological analysis of Iba1+ cells in clarified brain regions, XXVII AINI CONGRESS, May 8-11, Trieste.
28. Perin P, Ceccarini M, Centineo A, Pizzala R (2018) A clarified rat cochlea – brainstem preparation for the visualization of inflammation spread after ototoxic treatment, XXVII AINI CONGRESS, May 8-11, Trieste.
29. Perin P (2018), A clarified cochlea-auditory brainstem preparation for the visualization of inflammation spread after ototoxic treatment. Lightsheet microscopy workshop, March 19-20, Wyss Center, Geneva
30. Perin P, Venturino A, Ceccarini M, Centineo A, Pizzala R (2018), Neuroinflammatory responses in choroid plexus and dorsal cochlear nuclei after unilateral cochlear damage. TRI/TINNET Meeting, March 14-16, Regensburg
31. Perin P, Pizzala R (2017), Age-related changes in cochlear nuclei microglia and macrophages in the rat. 54th Workshop on Inner Ear Biology, September 13-16th, Hannover
32. Perin P, Venturino A, Pizzala R (2017) Choroid plexus trafficking of immune cells towards the rat cochlear nuclei after noise trauma or cochlear destruction XIII European Meeting on Glial Cells in Health and Disease July 8 –11th, Edimburgh
33. Venturino A; Colombo G; Sanchini G; Vitale V; Bertone V; Oda A; Pizzala R; Perin P. (2016) Does blocking microglial activation prevent tinnitus onset? *Journal of Neuroimmune Pharmacology*; 11:1, #16
34. Vitale V, Sanchini G, Solinas S, Pizzala R, Perin P (2016) Microglial subpopulations in rat DCN and their changes in tinnitus models Inner Ear Biology Workshop, September 17-21st, Montpellier
35. Perin P, Venturino A, Sanchini G, Vitale V, Pizzala R (2016) Microglial functional state modulation and tinnitus onset: comparison of different rat models. FENS Forum, July 5-9th, Copenhagen
36. Perin P, Venturino A, Solinas S, Bertone V, Pizzala R (2016) DCN microglia in rat tinnitus models: density, activation and possible roles. TRI/TINNET Meeting, March 15-18th, Nottingham (UK)
37. Perin P, Pizzala R, Oda A, Colombo G. Capetta A, Sanchini G, Vitale V, Venturino A (2015) Does blocking microglial activation prevent tinnitus onset? 52nd Workshop on Inner Ear Biology Workshop, August 30th-September 2nd, Rome

38. Perin P, Venturino A, Oda A, Capetta A, Colombo G, Sanchini G, Vitale V, Bertone V, Pizzala R. (2015) Microglia changes in rat dorsal cochlear nucleus correlate to behavioural tinnitus evidence. XII European Meeting on Glial Cells in Health and Disease, July 15–18th 2015, Bilbao
39. Venturino A, Rizza M, Pedrazzoli M, Perin P (2013). Trying hard not to listen: the evolution of information processing in vestibular hair cells. CNS meeting 2013, Paris.
40. Subramaniyam S, Perin P, Solinas S, D'Angelo E (2013) The mechanisms of late-onset synaptic responses in a realistic model of Unipolar Brush Cells. CNS meeting 2013, Paris.
41. Venturino A, Barbaro S, Oda A, Boselli C, Ferraro D, Pizzala R, Perin P (2013). Microglia in the rat cochlear nuclei: a player in tinnitus-related circuit reorganization? TRI Meeting 2013, Valencia.
42. Perin P., Venturino A., Tritto S., Mansi R., Laforenza U (2012). Resonance and release shape afferent responses in the frog utricle. Fens forum 2012, Barcelona.
43. Subramaniyam S, Perin P, Solinas S, D'Angelo E (2011) Modeling UBC intrinsic excitability BMC Neurosci. vol. 12, pp. 1-2.
44. Mansi R. Perin P.(2010) How Do Hair Cell Currents Shape Afferent Responses in the Frog Vestibular Organs? In: ARO Meeting. Anaheim CA
45. Perin P., Tritto S., Botta L., Laforenza U., Gastaldi G., Valli P. (2008). Salicylates Decrease AQP6 Expression in the Mouse Organ of Corti. In: ARO Abstracts 2008. Phoenix, AZ, 16-21 Feb 2008
46. Tritto S, Botta L, Laforenza U, Gastaldi G, Valli P, Perin P. (2008). Salicylates decrease AQP6 expression in the mouse organ of Corti. In: 45th Inner Ear Biology Workshop. Ferrara, 21 - 24 settembre 2008
47. Tritto S, Botta L, Laforenza U, Gastaldi G, Perin P. (2007). Localization of calcium stores in the frog labyrinth. In: Segnali di Calcio in Piemonte. Novara
48. Perin P., D'Angelo E (2006) Electrotonic analysis of UBCs. In The node and the network, Pavia
49. Perin P., Pascale A, Amadio M, Botta L, Valli P (2004). Voltage-dependent and store-mediated Ca<sup>2+</sup> sources in frog vestibular hair cells. In: ARO meeting. Daytona Beach FL
50. Perin P. (2003). Calcium channels and exocytosis in frog vestibular hair cells. In: Vestibular Pharmacology Symposium, Neuroscience Meeting. New Orleans.
51. Perin P., Pascale A, Pace J, Valli P (2002). Presynaptic Ca channels in frog canal hair cells. In: Barany Satellite Meeting. Orcas Island
52. Perin P., Masetto S, Valli P (2002). Differential expression of voltage-dependent currents by hair cells from the frog utricle and canal. In: ARO Meeting. St. Petersburg FL
53. Perin P., Masetto S, Zucca G, Valli P (2001). Sodium currents in spherical hair cells from the frog utricle and lagena. In: ARO Meeting. St Petersburg FL
54. Perin P., Masetto S, Zucca G, Valli P (2001). Current expression patterns in hair cells from the frog utricle. In: Symposium: "Signal transduction in the auditory system". Goettingen, Germany
55. Masetto S, Malusà, Perin P., Zucca G, Valli P (2001). Depolarization-activated inward currents in type II hair cells of the chick semicircular canal during embryonic development. In: ARO Meeting. St. Petersburg FL

56. Ramakrishnan N.A, Swanson G.J, Perin P., Pasha R, Myers S.F, Drescher D.G (2001). Functional analysis of an N-type, alpha-1B calcium channel coding sequence from the vestibular hair-cell layer of the trout sacculus. In: ARO Meeting. St. Petersburg FL
57. Perin P., Soto E, Botta L, Masetto S, Zucca G., Valli P (2000). Functional roles of voltage-operated calcium channels in the frog semicircular canal. In: ARO Meeting. St. Petersburg FL
58. Perin P., Masetto S, Valli P (1999). Voltage-operated calcium channels in frog vestibular hair cells. In: SIF meeting. Rome
59. Perin P., Masetto S, Valli P, Guth P.S (1999). Regional distribution of voltage-operated calcium channels in the frog vestibular organs. In: ARO Meeting. St. Petersburg FL
60. Guth P.S, Zucca G, Botta L, Perin P., Holt J.C, Puri A, Valli P (1998). The pharmacology of the metabotropic glutamate receptor of frog semicircular canal. In: ARO Meeting,. St. Petersburg FL
61. Masetto S, Perin P., Malusà, Zucca G, Valli P (1998). Development of basolateral potassium currents in semicircular canal hair cells of the chick embryo. In: Pfluegers Arch., vol. 435, p. R9
62. Guth P.S, Perin P., Norris C.H, Puri A, Botta L, Zucca G, Valli P (1997). mGluR-mediated facilitation of the hair cell-afferent synapse in frog semicircular canal (Neuroscience Meeting, New Orleans, abstr. 888.14).
63. Norris, C.H., Perin P., Miller A (1997). Responses to endolymphatic polarization in the isolated semicircular canal. In: 34th workshop on inner ear biology, Rosa Marina, ITALY
64. Mira E, Valli S, Masetto S, Perin P., Valli P (1996). Ion mechanisms involved in receptor current flow in vestibular hair cells. In: Barany Society Meeting. Sydney
65. Masetto S, Perin P., Botta L, Zucca G, Valli P (1996). Ion channels involved in frog vestibular sensory adaptation. In: Gordon Research Conference. New London, New Hampshire

#### **Libri di testo**

- 2010 - Fisiologia: molecole, cellule e sistemi (D'Angelo, Peres), EdiErmes
- 2013- Cellule, tessuti, sistemi (Zaccheo, Pestarino), Pearson

#### **Corsi ECM e scuole**

1. Lecture "Fisiologia del vestibolo" in the course: "Corso Teorico-Pratico sulla Vertigine e su altre patologie dell'orecchio interno, Milan, June 28th 2024
2. Organizer of the course: "Acufeni: teoria e clinica." Related to the Tinnitus Awareness Week, Pavia, February 8th, 2020
3. Lecture "Teorie neurofisiologiche dell'acufene" in the course: "Acufeni: teoria e clinica." Related to the Tinnitus Awareness Week, Pavia, February 8th, 2020
4. Invited Lecture "Quantifying shape in complex cells" in the NEURON School (Alghero, Italy) May 2019
5. Invited Lecture "Quantifying shape in complex cells" in the NEURON School (Alghero, Italy) April 2018
6. Invited Lecture: "Compensazione adattativa e patologica nelle vie acustiche centrali" – nel corso ECM RINOPATIE VASOMOTORIE E ACUFENI: STATO DELL'ARTE, Gasperina (CZ) October 10th, 2019

7. Invited Lecture: "Compensazione adattativa e patologica nelle vie acustiche centrali" – nel VI Congresso NAZIONALE G.C.ORL "Nuove evidenze, orientamenti e strategie delle patologie ORL più comuni", Salerno, 15/16/17 novembre 2018
8. Invited Lecture: "Acufeni e plasticità sinaptica" – nel corso ECM - 4° UPDATE IN VESTIBOLOGIA TRA RICERCA E CLINICA - Arenzano (GE), 10 Novembre 2018
9. Invited Lecture: "Basi fisiopatologiche dell'acufene" – in CME course "XXV Anni del Corso di Laurea in tecniche audioprotesiche - Novità cliniche e tecnologiche in ambito audioprotesico" - Rome, Università degli studi Tor Vergata, November 10-11 2017
10. Invited Lecture: "Acufene e vertigini: novità nella ricerca in neuroscienze" – in CME course "Aggiornamento su acufeni e vertigini" – Organized by Dott. Vincenzo Marcelli – Naples, March 4th, 2017
11. Invited Lecture: "Acufene e vertigini: novità nella ricerca in neuroscienze" – in CME course "Acufeni e vertigini: corso teorico-pratico" – Organized by Prof. Alberto Eibenstein – Rome October 8th, 2016
12. Invited Lecture: "Acufene: novità nella ricerca in neuroscienze" – in CME course "Acufeni: esperienze multidisciplinari nell'ambito del progetto europeo COST TINNET" – Organized by Prof. Alberto Eibenstein – Rome 26th February, 2016
13. Invited Lecture: "Acufene: novità nella ricerca in neuroscienze" in Master course "La riabilitazione audiologica nel bambino e nell'anziano: la gestione delle complessità" – Organized by Prof. Alessandro Martini – Padua December 12th, 2015
14. Invited Lecture: "Acufene: novità nella ricerca in neuroscienze" – in CME course "Acufeni e disturbi dell'udito: aspetti multidisciplinari nell'ambito del progetto europeo COST TINNET e presentazione casi clinici" – Organized by Prof. Alberto Eibenstein – Rome, October 3rd 2015