

Curriculum Vitae

PERSONAL INFORMATION

Dr. Philippe Vincent
Postdoctoral Fellow
Otolaryngology Head and Neck Surgery
Johns Hopkins School of Medicine

Nationality: French

Work address: Johns Hopkins University School of Medicine
The Center for Hearing and Balance
Department of Otolaryngology-Head and Neck Surgery
720 Rutland Ave./ Ross 824
Baltimore, MD 212105
Cell Phone: 443-500-1329
Email: pvincen3@jhmi.edu

EDUCATION AND TRAINING

- 06/2009 DEUG of Life Sciences, option molecular and cellular biology (mention 'Assez Bien')
- 06/2010 License of Biology, option Cellular Biology and Animal Physiology, (mention "Assez Bien"), University of Nantes, Nantes, France.
- 06/2011 Maîtrise (equals Bachelor of Science) of Biology, option Biology and Animal Physiology, (mention "Bien"), University of Nantes, Nantes, France.
- 07/2012 Master of Biology, option Cellular Biology and Physiopathology (mention "Bien"), University of Bordeaux, Bordeaux, France
- 10/2012 – 12/2015 Doctorat of Cellular Biology and Physiopathology, University of Bordeaux, Bordeaux, France
Team neurophysiology of the auditory synapse, INSERM U1120, laboratory of Dr. Didier Dulon
“Spatial organization of the Cav1.3 channels underlies the exocytosis efficiency of hair cell ribbon synapses in the inner ear”
- 01/2016 - 04/2016 Postdoctoral Fellowship, University of Bordeaux, Bordeaux, France
Team neurophysiology of the auditory synapse, INSERM U1120

05/2016 - present Postdoctoral Fellowship, The Johns Hopkins School of Medicine, Baltimore, MD, Department of Otolaryngology - Head and Neck Surgery, Laboratory of Dr. Elisabeth Glowatzki, cochlear synaptic physiology.

FELLOWSHIPS AND AWARDS

07/2016 – 04/2018 EMBO Long-term fellowship ALTF 240-2016; 22 months of support for postdoctoral fellowship.

07/2018- 06/2019 Emerging Research Grant from the Hearing research Foundation (\$30,000)

PUBLICATIONS

Research Articles

- 1) **Vincent PFY**, Bouleau Y, Saafieddine S, Petit C, Dulon D (2014) Exocytotic machineries of Vestibular Type I and Cochlear Ribbon Synapses display similar intrinsic otoferlin-dependent Ca^{2+} sensitivity but a different coupling to Ca^{2+} channels. *J Neurosci*, 34:10853-10869.
- 2) **Vincent PFY**, Bouleau Y, Petit C, Dulon D (2015) A Synaptic F-Actin network controls otoferlin-dependent exocytosis in auditory inner hair cells. *Elife*, e10988.
- 3) **Vincent PFY**, Bouleau Y, Charpentier G, Emptoz A, Saafieddine S, Petit C, Dulon D (2017) Different Cav1.3 isoforms control distinct aspect of the synaptic vesicle cycle in auditory hair cells. *J Neurosci*, 37:2960-2975
- 4) **Vincent PFY**, Cho S, Tertrais M, Bouleau Y, von Gersdorff H, Dulon D (2018) Clusterized Ca^{2+} channels are blocked by synaptic proton release at mammalian auditory ribbon synapses. *Cell rep*, 25:3452-3464
- 5) Dulon D, Papal S, Patni P, Cortese M, **Vincent PFY**, Tertrais M, Emptoz A, Tlili A, Bouleau Y, Michel V, Delmaghani S, Aghaie A, Pepermans E, Alegria-Prevot O, Akil O, Lustig L, Avan P, Saafieddine S, Avan P, Petit C, El-Amraoui A, (2018) Clarin-1 gene transfer rescues auditory synaptopathy in model of Usher syndrome. *J Clin Invest*, 128:3382-3401.
- 6) Ryu J, **Vincent PFY**, Ziogas NK, Xu L, Sadeghpour S, Curtin J, Alexandris AS, Stewart N, Sima R, du Lac S, Glowatzki E, Koliatsos VE. (2019). Optogenetically transduced human ES cell-derived neural progenitors and their neuronal progenies: Phenotypic characterization and responses to optical stimulation. *PLoS One* 14:e0224846.

PRESENTATIONS AT MEETINGS

Oral communications

Vincent PFY, Cho S, Tertrais M, Bouleau Y, Buran B, Liberman MC, Petit C, von Gersdorff H, Dulon D (2016) Transient Block of Ca²⁺ Channels by Exocytosed Protons at Mammalian Auditory Hair Cell Ribbon Synapses. Annual midwinter meeting of the Association for Research in Otolaryngology, Baltimore, Maryland, U.S.A.

Poster presentations (only 1st author listed)

Vincent PFY, von Gersdorff H, Dulon D (2017) The compact active zone topography of mature mammalian auditory hair cell ribbon synapses promotes a fast proton-mediated block of Ca²⁺ current. Annual midwinter meeting of the Association for Research in Otolaryngology, Baltimore, Maryland, U.S.A.

Vincent PFY, Bouleau Y, Charpentier G, Emptoz A, Safieddine S, Petit C, Dulon D (2016) Transient and sustained exocytosis at the auditory hair cell ribbon synapse involve different Cav1.3 channel isoforms. Annual midwinter meeting of the Association for Research in Otolaryngology, San Diego, CA, U.S.A

Vincent PFY, Bouleau Y, Dulon D (2015) A differential sensitivity to nifedipine reveals the implication of two pools of Ca²⁺ channels in IHC exocytosis: a nifedipine-insensitive pool triggering the RRP and a nifedipine-sensitive pool controlling vesicular recruitment to the ribbon. Annual midwinter meeting of the Association for Research in Otolaryngology, Baltimore, Maryland, U.S.A.

Vincent PFY, Bouleau Y, Charpentier G, Emptoz A, Safieddine S, Petit C, Dulon D (2015) Transient and sustained exocytosis involve different Cav1.3 channel isoforms in auditory hair cells. 12th congress of the neuroscience society, Montpellier, France.

Vincent PFY, Bouleau Y, Charpentier G, Emptoz A, Safieddine S, Petit C, Dulon D (2015) Transient and sustained exocytosis involve different Cav1.3 channel isoforms in auditory hair cells. Scientific day of the doctoral school, Arcachon, France

Vincent PFY, Bouleau Y, Safieddine S, Petit C, Dulon D (2014) Exocytosis at vestibular Type I Calyceal and Cochlear bouton ribbon synapses displays similar intrinsic otoferlin-dependent Ca²⁺ sensitivity but a different coupling with Ca²⁺ channels. Scientific day of the doctoral school, Arcachon, France

Vincent PFY, Bouleau Y, Safieddine S, Petit C, Dulon D (2014) Ca²⁺ sensitivity of otoferlin-dependent exocytosis at cochlear and vestibular hair cell ribbon synapses.” Annual midwinter meeting of the Association for Research in Otolaryngology, San Diego, CA, U.S.A.

Vincent PFY, Bouleau Y, Safieddine S, Petit C, Dulon D (2013) Probing the Ca²⁺ sensitivity of otoferlin-dependent exocytosis in inner ear hair cells.” The Ribbon Synapses Symposium, Göttingen, Germany.

Vincent PFY, Bouleau Y, Safieddine S, Petit C, Dulon D (2013) Probing the Ca²⁺ sensitivity of otoferlin-dependent exocytosis in inner ear hair cells.” The 9th Molecular Biology of Hearing & Deafness Conference, Stanford, CA.

Vincent PFY, Bouleau Y, Safieddine S, Petit C, Dulon D (2013) Calcium-sensitivity and otoferlin-dependence of synaptic exocytosis in vestibular and auditory hair cells” Scientific day of the Pasteur Institute, Dreux, France.

INVITED TALKS

02/2016 “Spatial organization of the Cav1.3 channels controls the exocytosis efficiency of hair cell ribbon synapses”. The Johns Hopkins University, The Center for Hearing and Balance Seminar Series, Baltimore MD, USA

TEACHING

Mentoring

04/2013 – 06/2013 Marion Rincel, Master student (Neuroscience program), University of Bordeaux, Bordeaux France

01/2014 – 06/2014 Simon Beyries, Master student (Neuroscience program), University of Bordeaux, Bordeaux France

01/2017 – 07/2017 Amrita Singh, rotation student, Department of Neuroscience, The Johns Hopkins University, Baltimore, MD, U.S.A

Classroom Instruction

03/2016 “Neurophysiology and pathologies of the auditory synapse” EPHE (Ecole Pratique des Hautes Etudes), Paris, France
Course for students in Master 1