

Bases physiologiques du codage des sons dans le nerf auditif

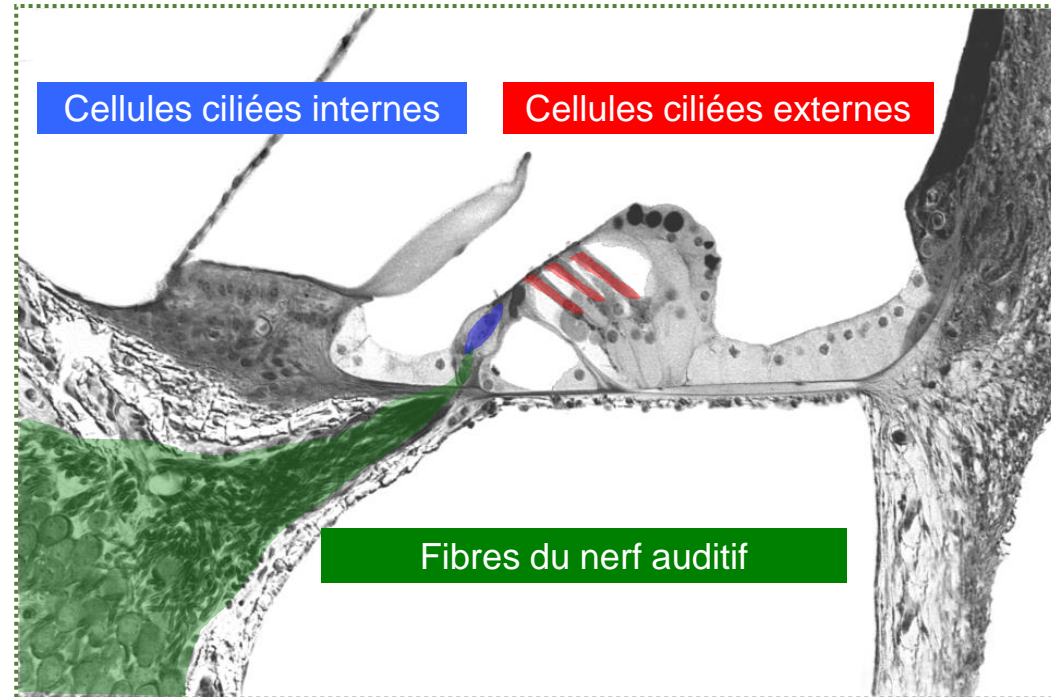
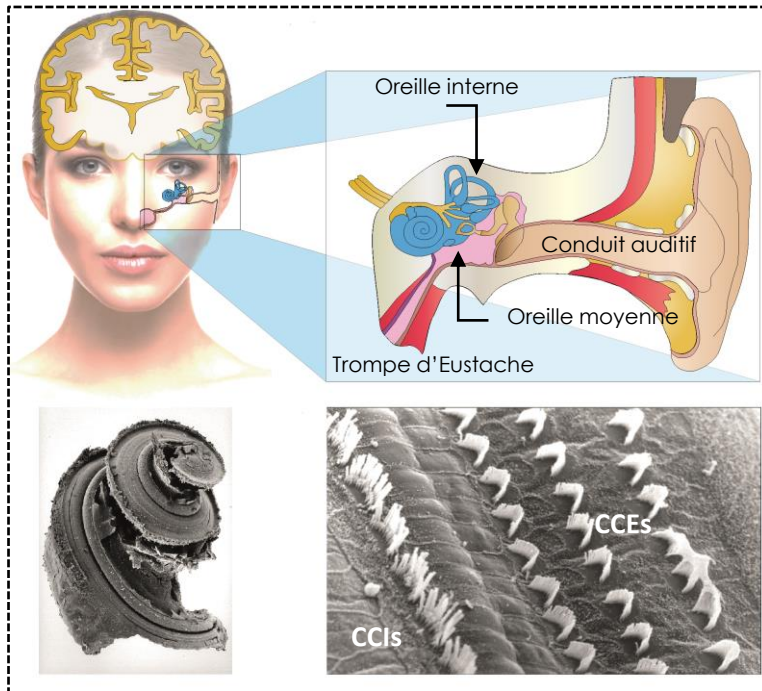
Jean-Luc Puel

Institut des Neurosciences de Montpellier

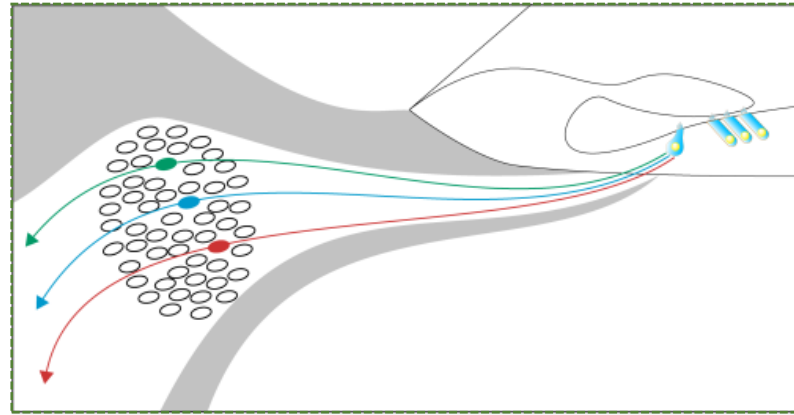
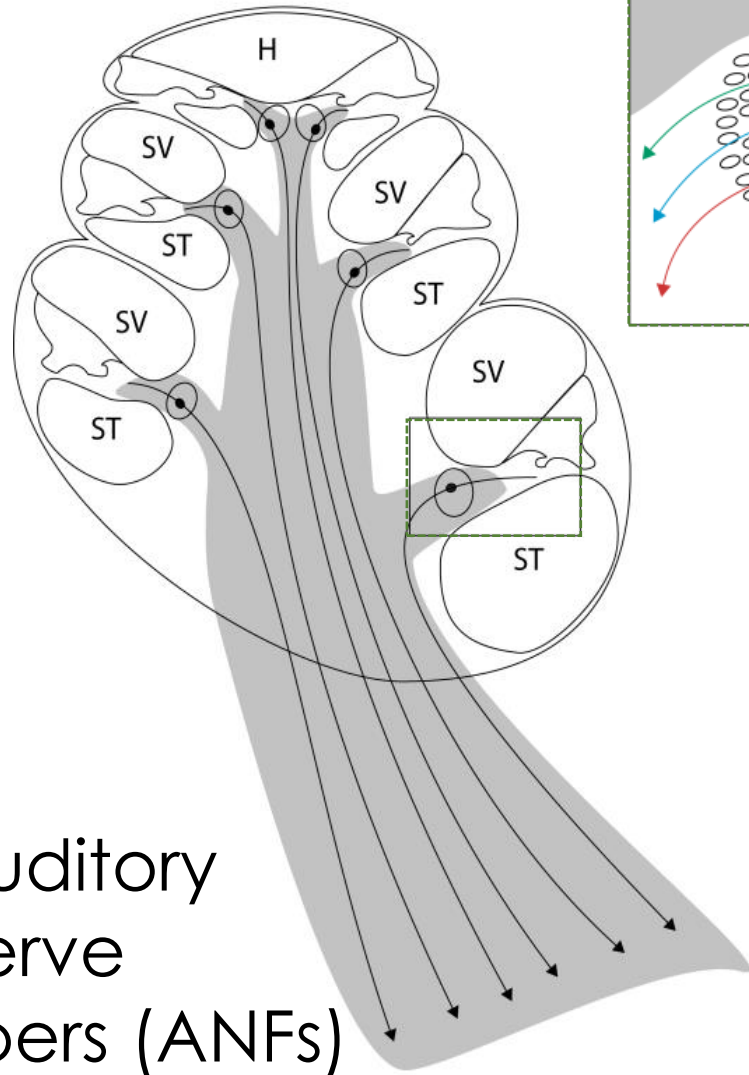
Journées GEORRIC Marseille 30-31 Mai 2024



Codage des sons dans le nerf auditif



Single-fiber recordings



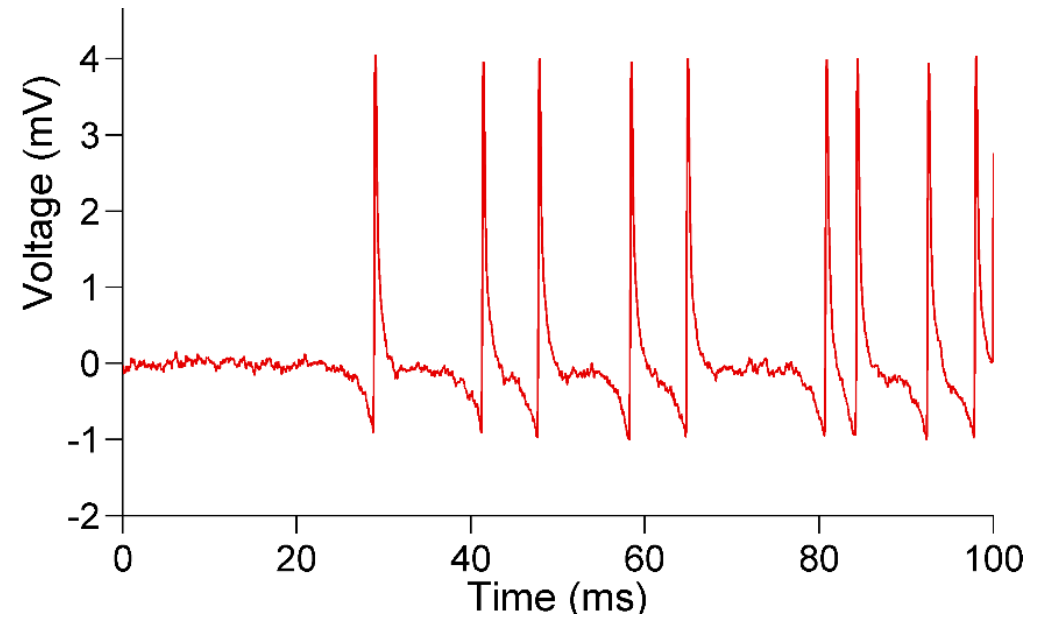
Antoine Huet



Jérôme Bourien

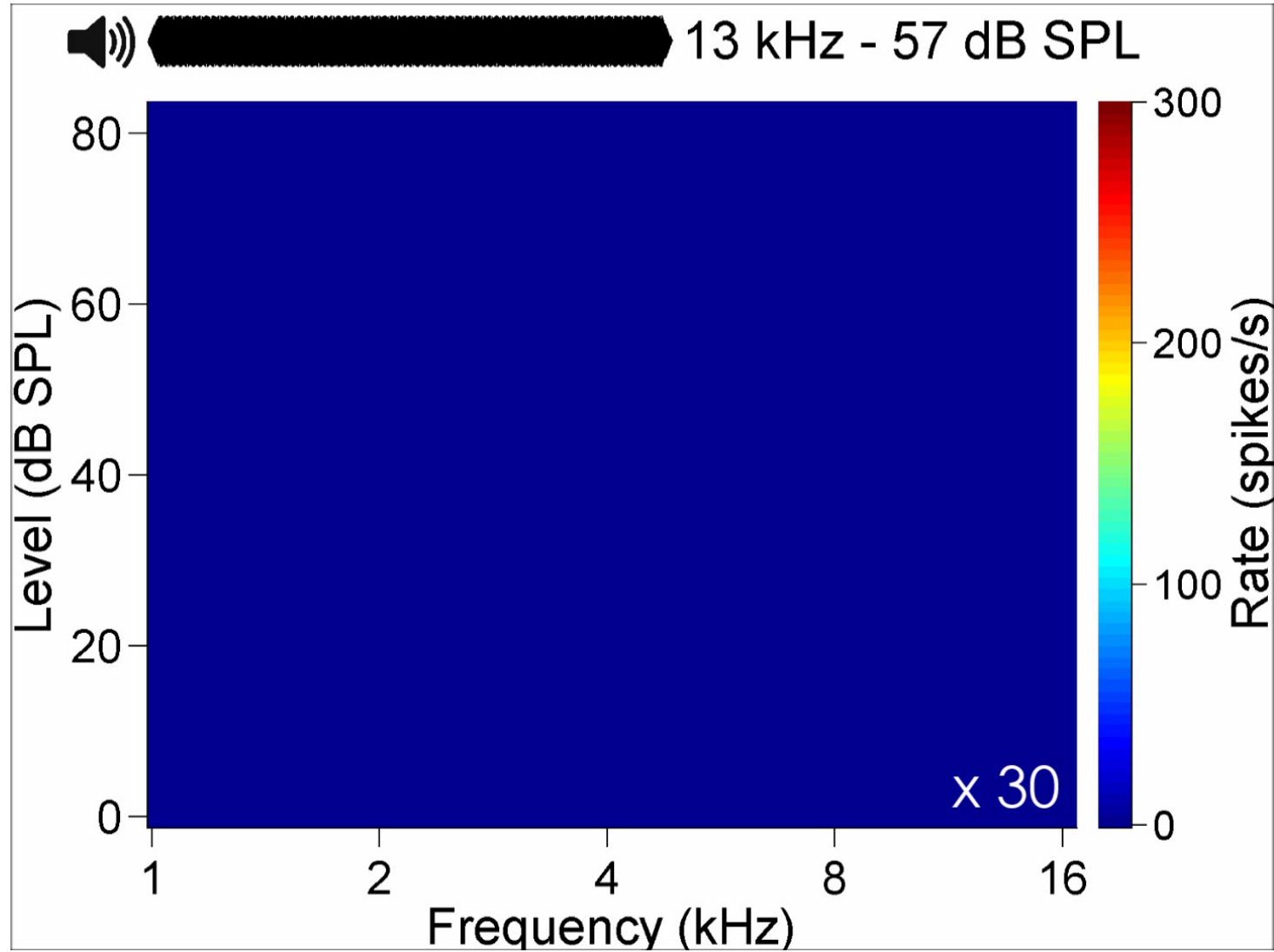


Gerbillé

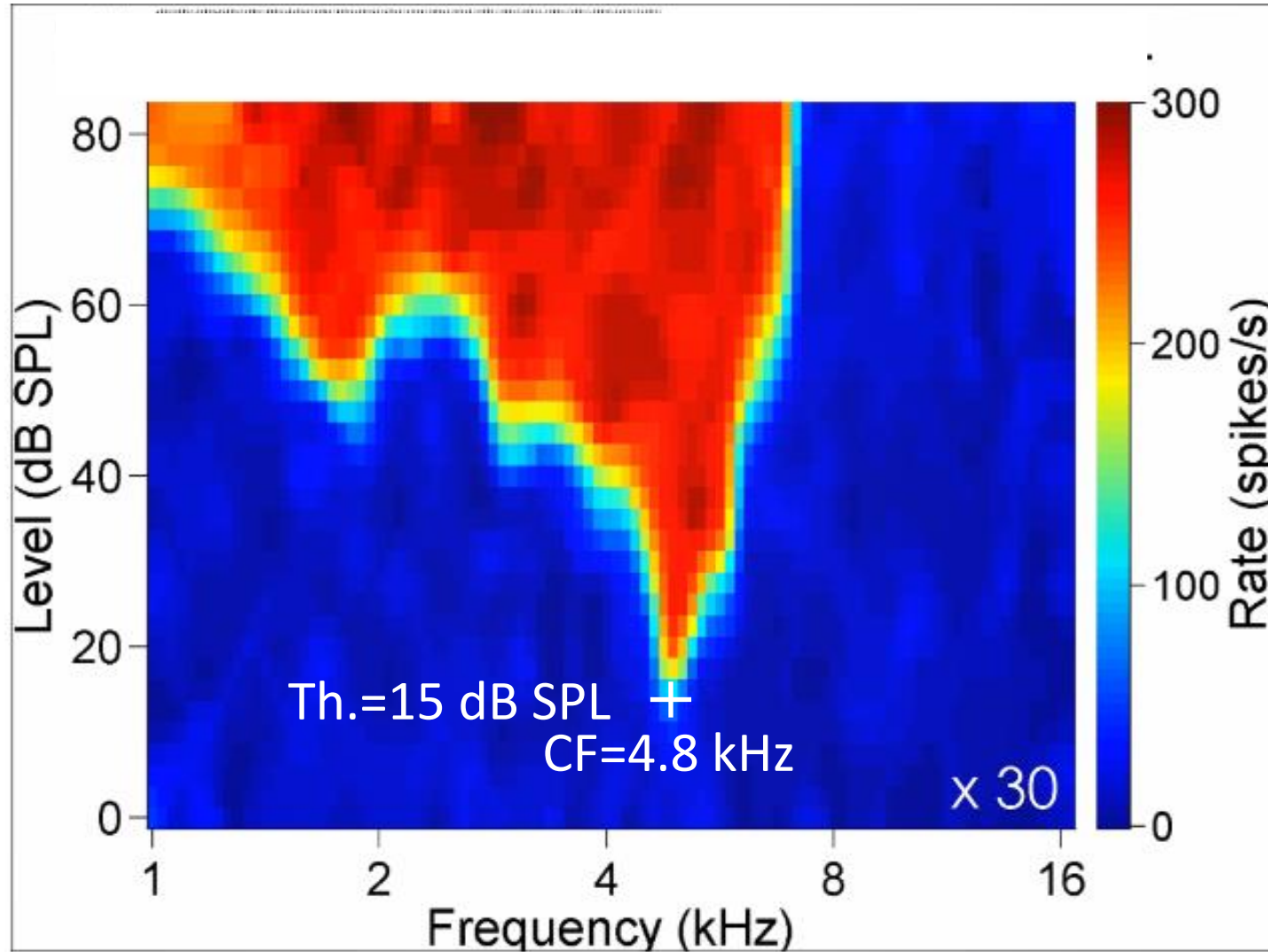


Tuning curve

Gerbils

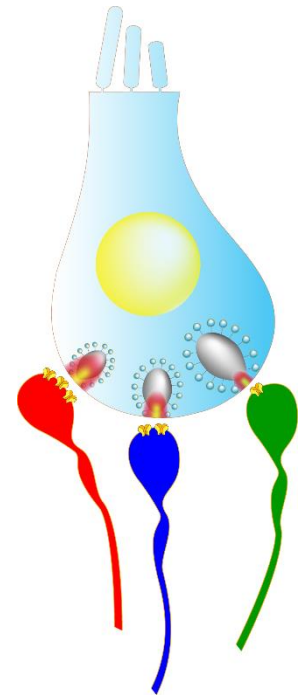
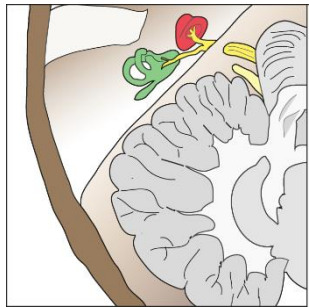
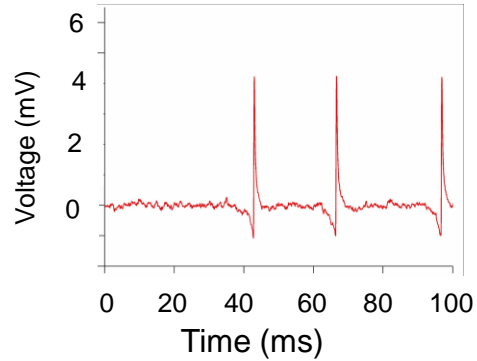


Tuning curve



Les fibres du nerf auditif

Hautes activités spontanées
(> 18 spikes/s)



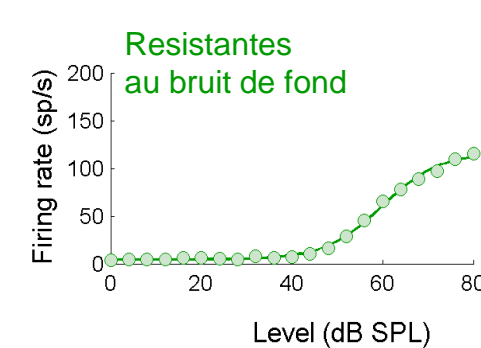
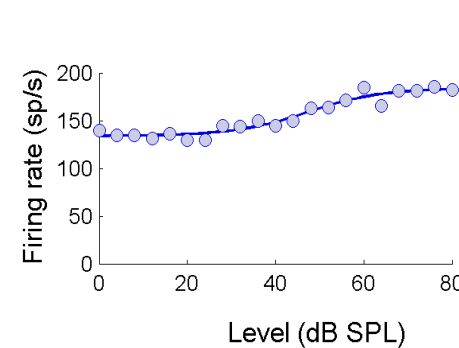
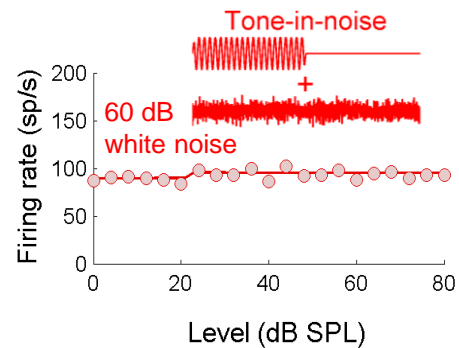
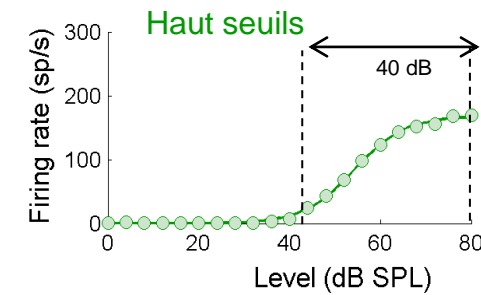
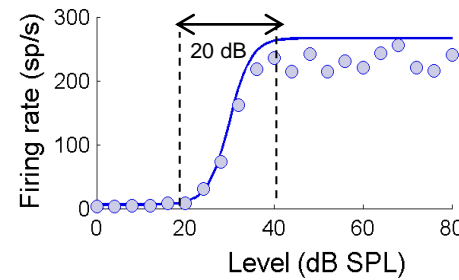
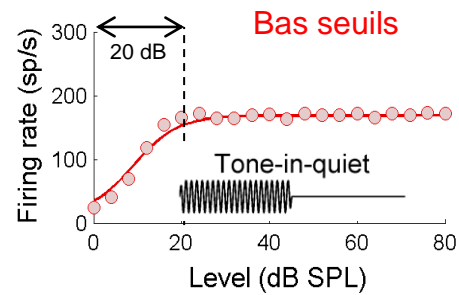
Antoine Huet



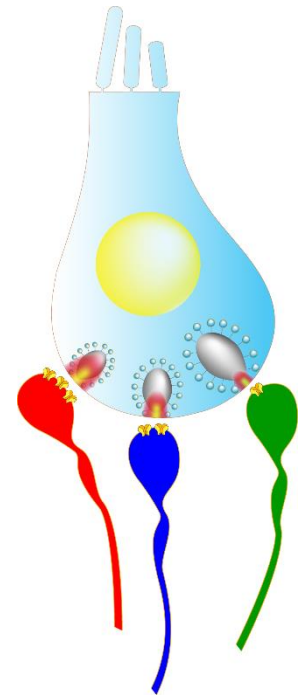
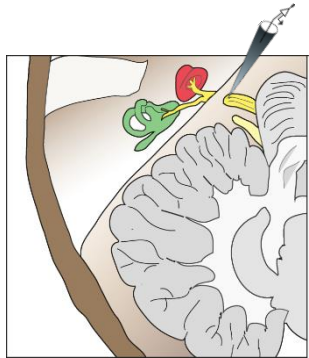
Jérôme Bourien



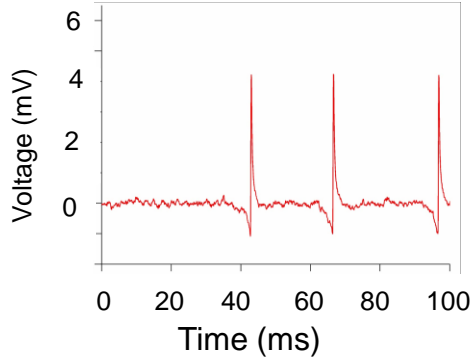
Gerbille



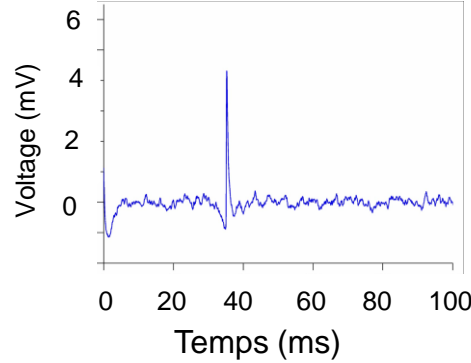
Les fibres du nerf auditif



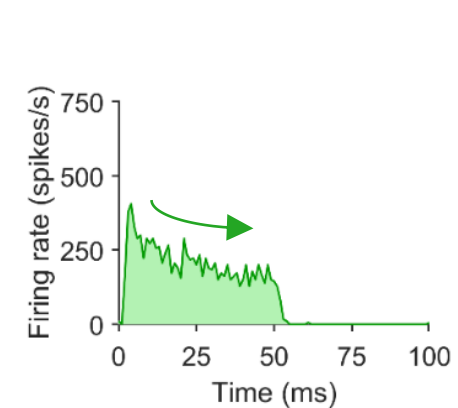
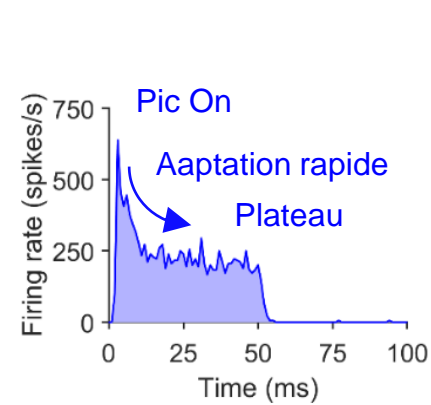
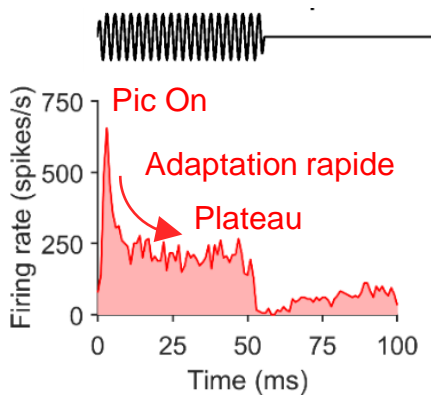
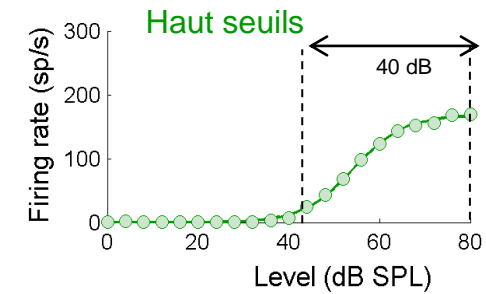
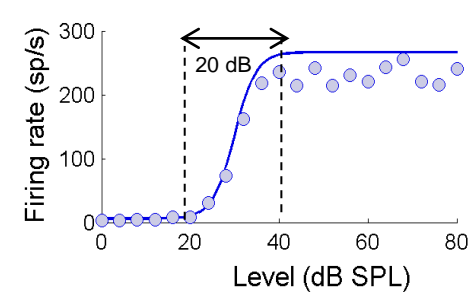
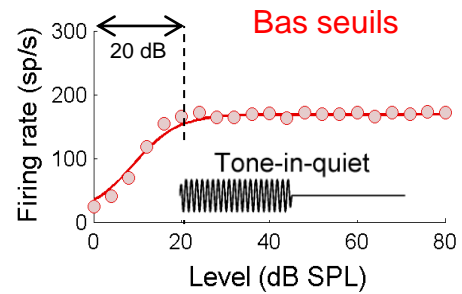
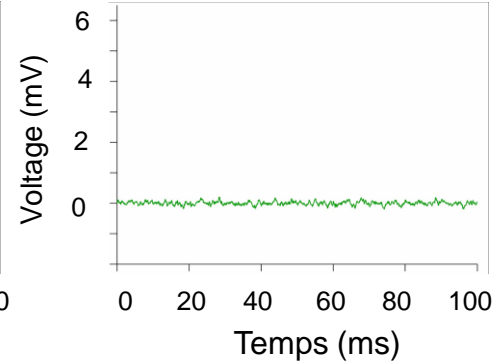
Hautes activités spontanées
(> 18 spikes/s)



Medium



Basses activités spontanées
(< 1 spike/s)



Antoine Huet

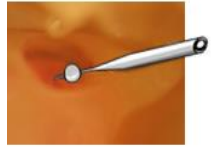


Jérôme Bourien

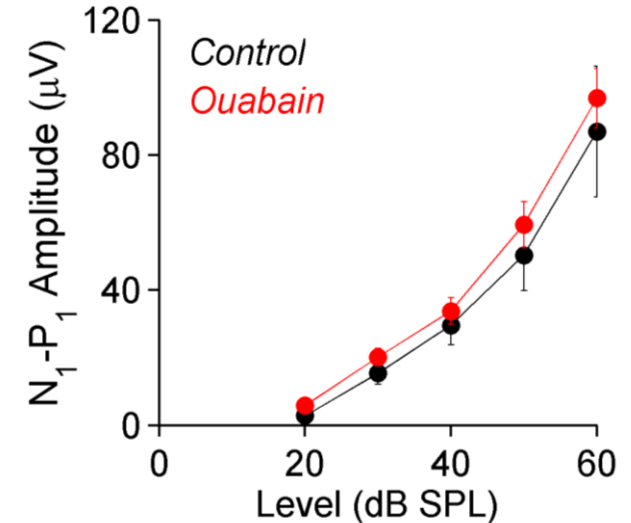
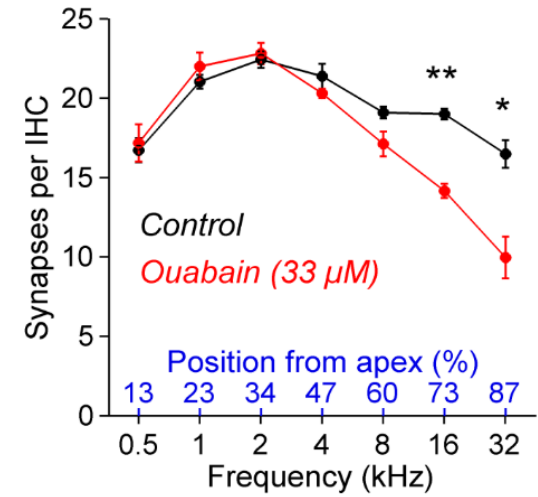
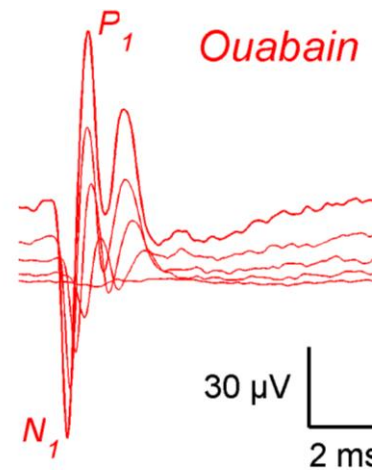
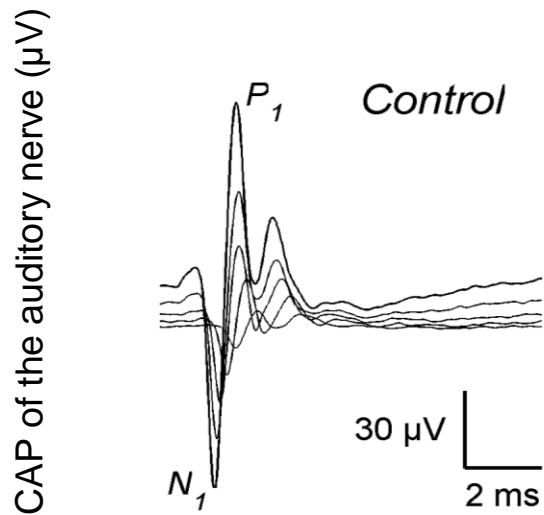
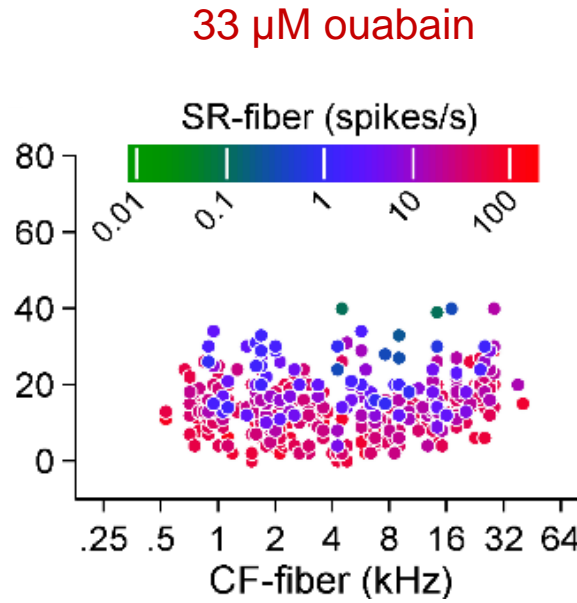
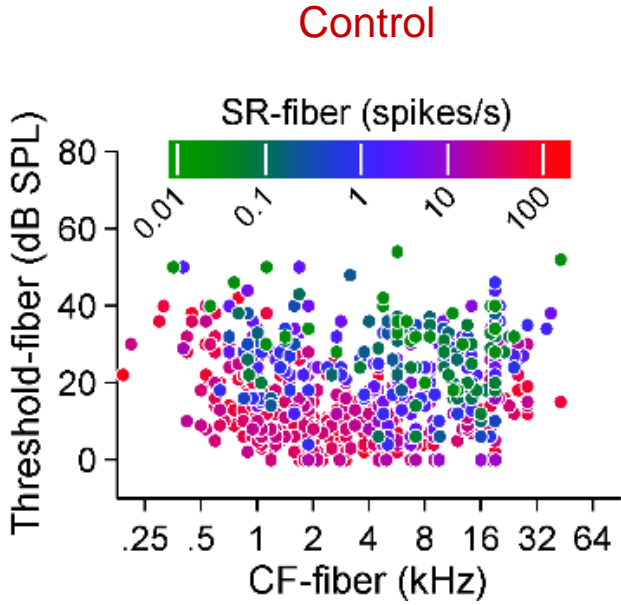


Gerbille

Les fibres du nerf auditif



30 min-round window infusion of ouabain



Charlène Batrel



Antoine Huet



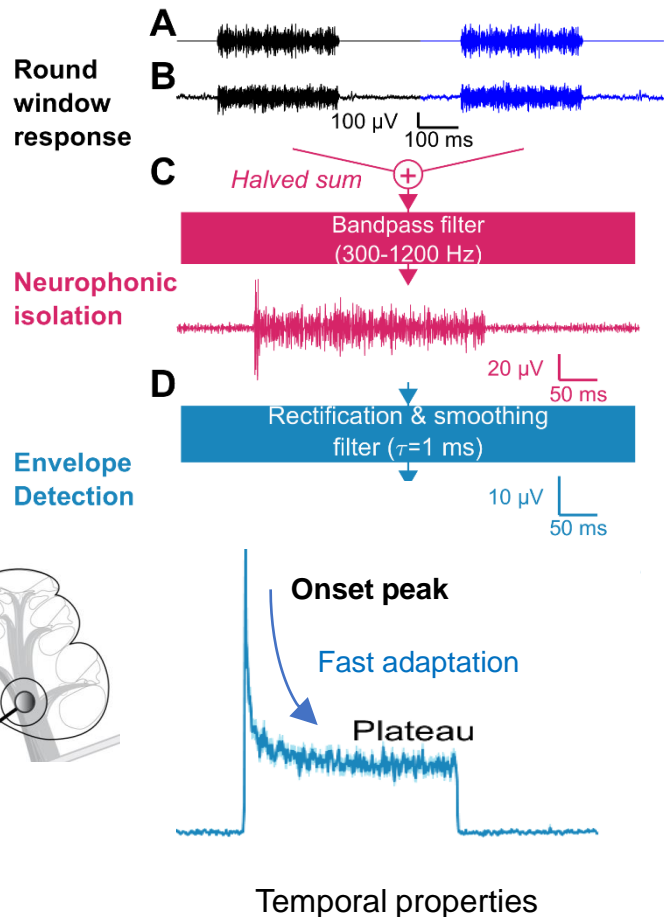
Jérôme Bourien

PSTRs : un nouveau diagnostic ?

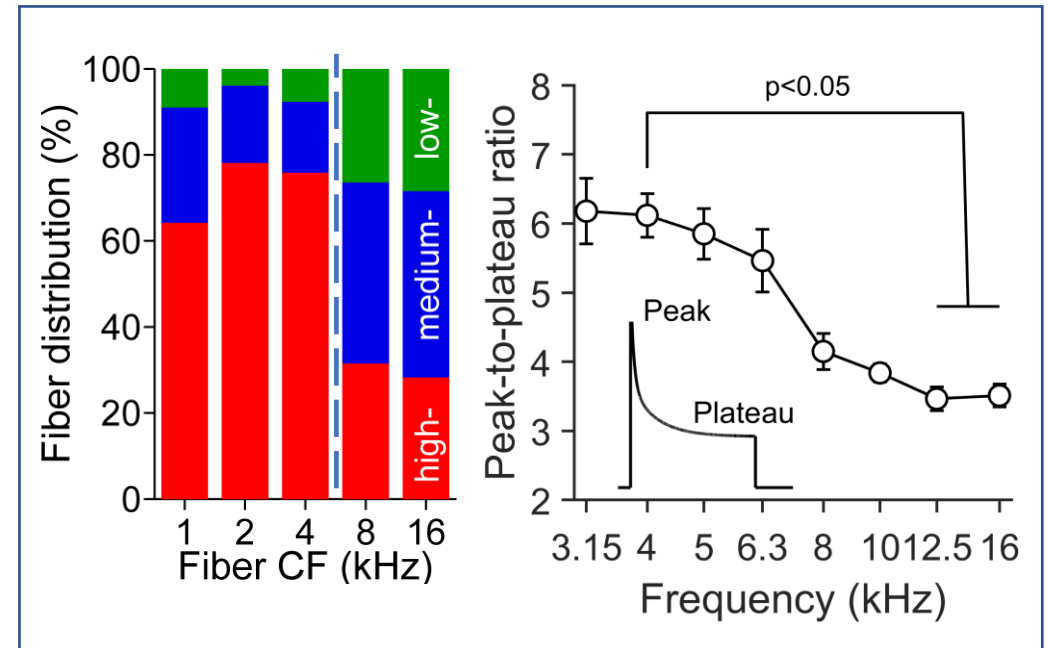
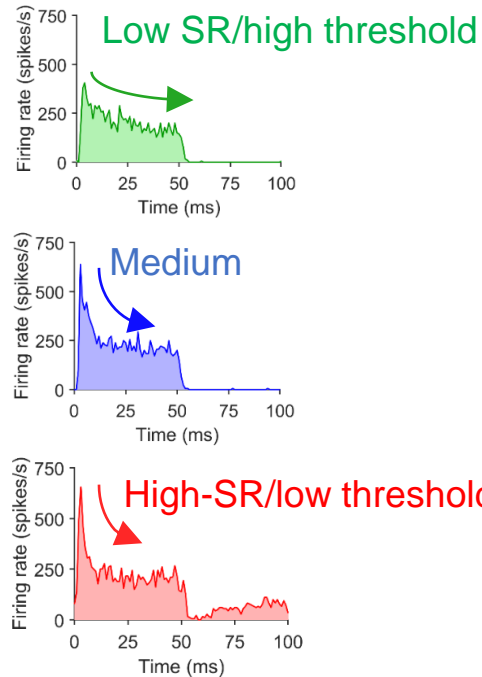


Antoine Huet Jérôme Bourien

Electrocochleographie (EChoG)



$$PSTR = \sum PSTH$$



Les surdités cachées induite par le bruit

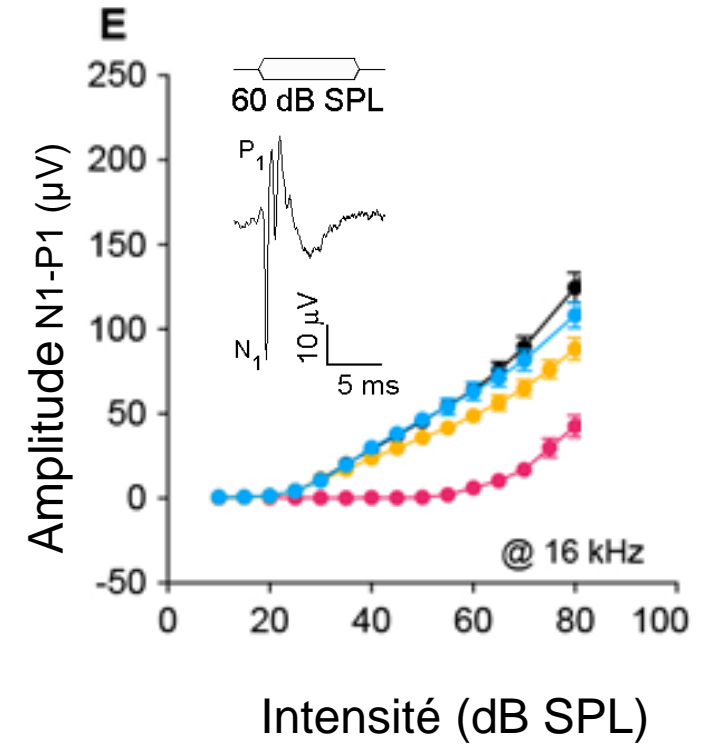
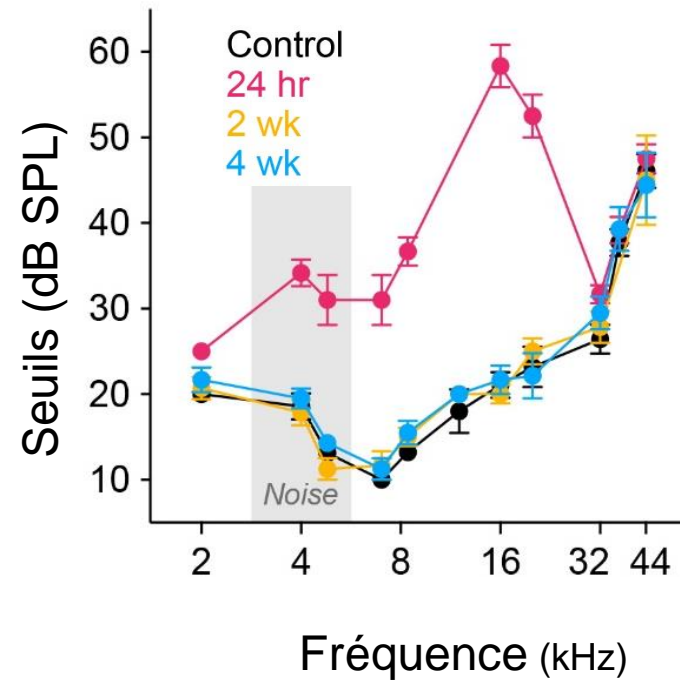
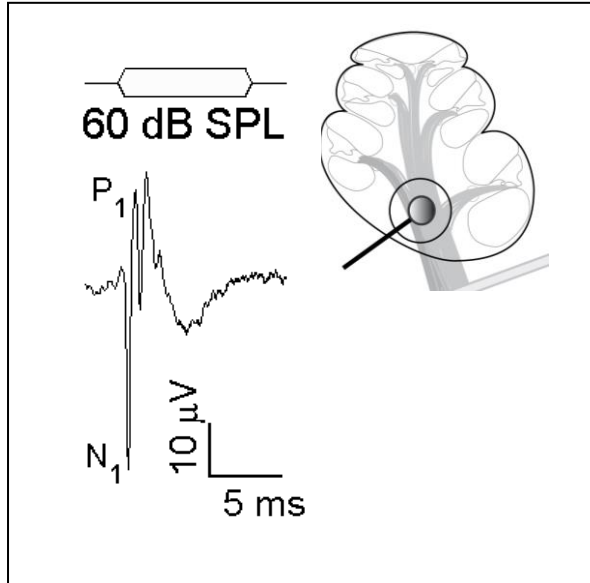


Sharon Kujawa



Jérôme Bourien

Potentiel d'action composite



Les surdités cachées induite par le bruit

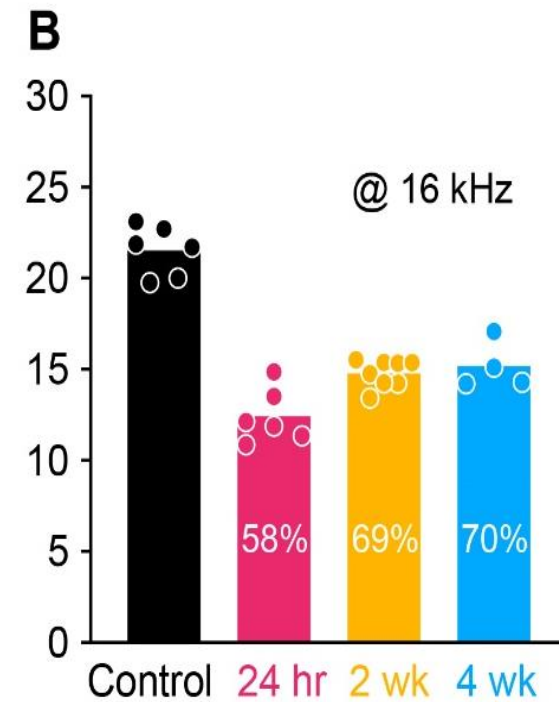
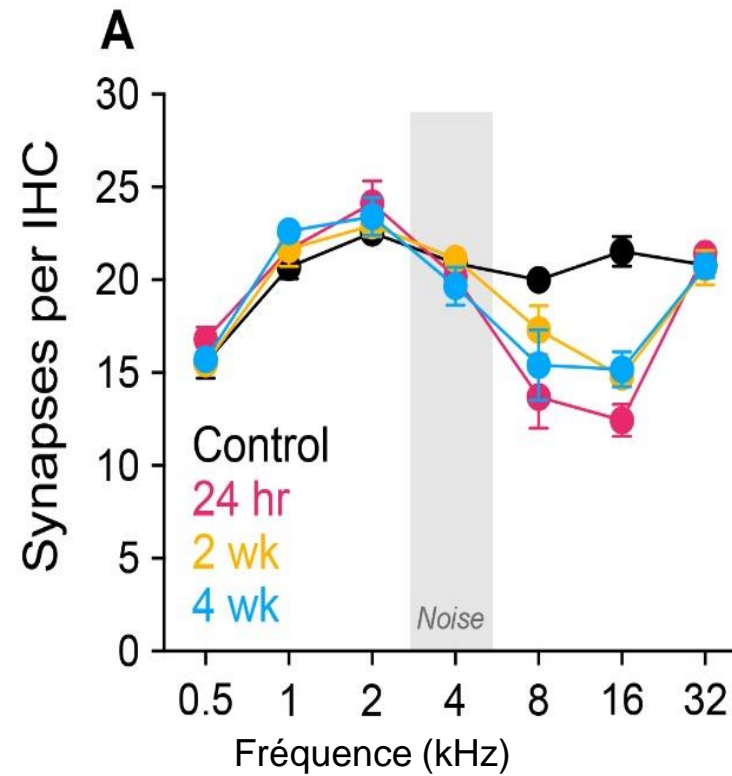
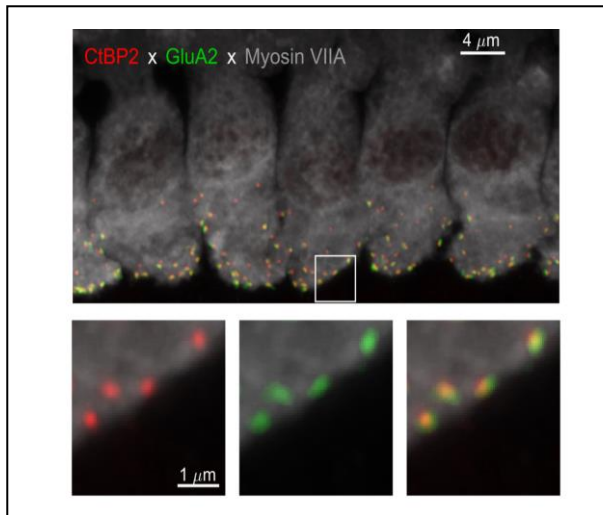


Sharon Kujawa



Jérôme Bourien

Synapse counting



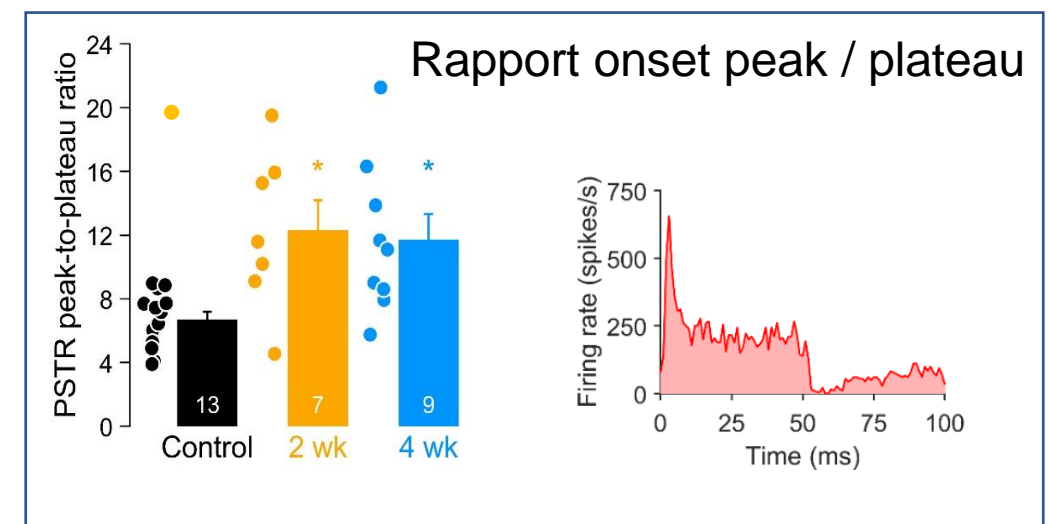
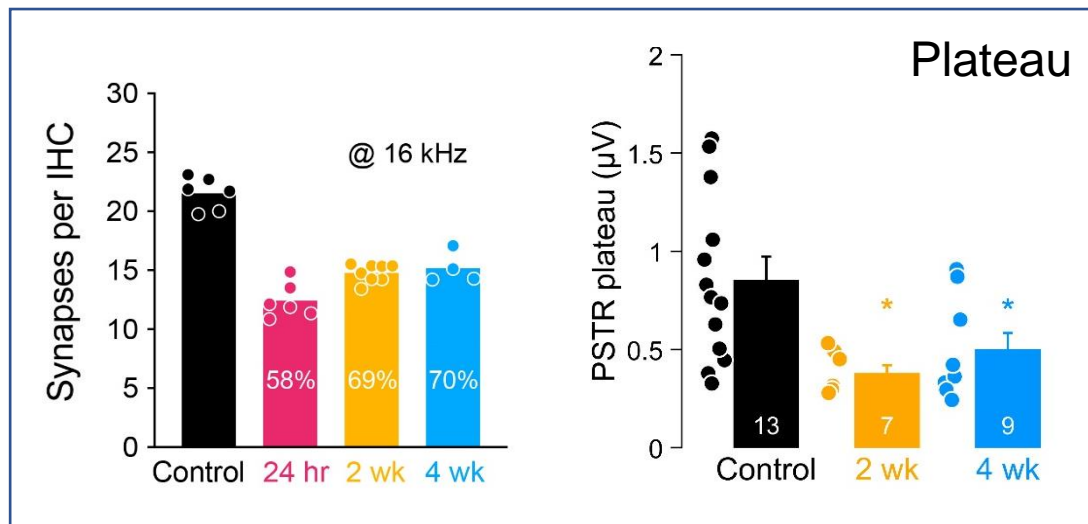
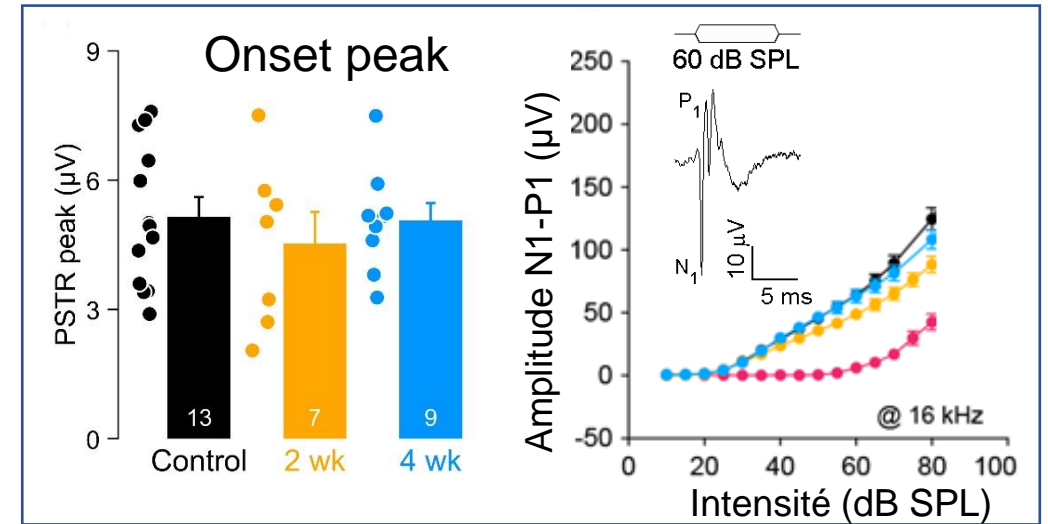
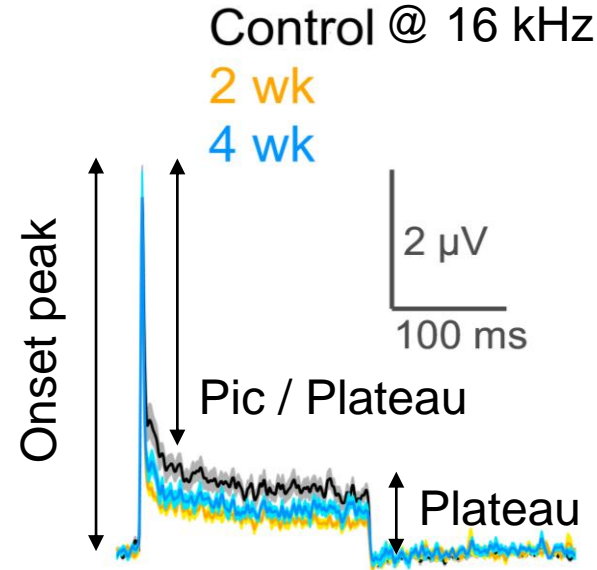
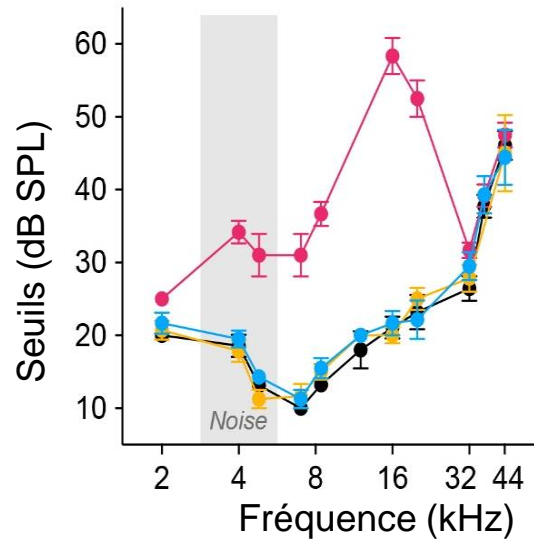
PSTRs : un nouveau diagnostic ?



Sharon Kujawa



Jérôme Bourien



PSTRs : un nouveau diagnostic ?

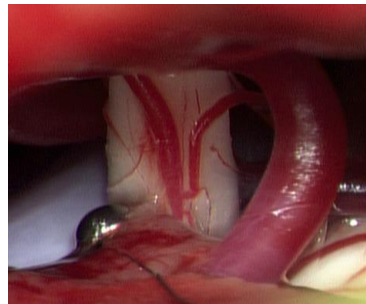
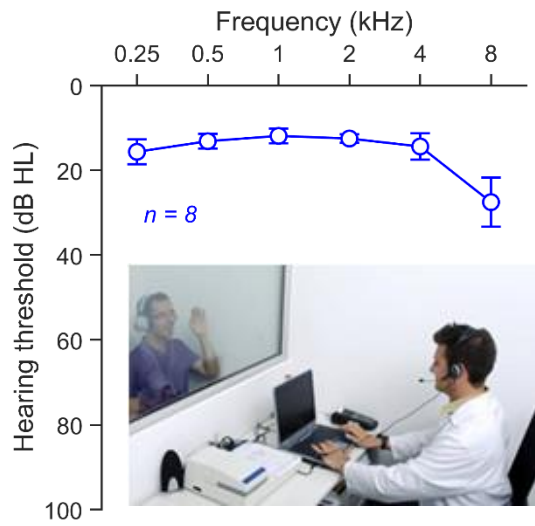


Frédéric Venail Xavier Dubernard

Normal hearing patients

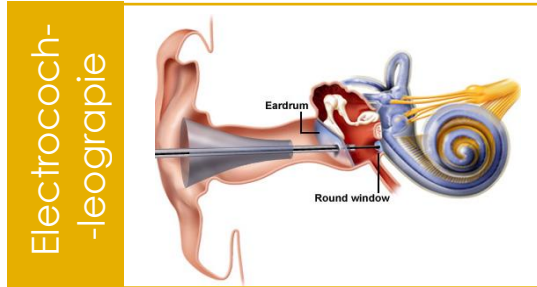
Cerebellopontine angle surgery

Electrophysiological recordings

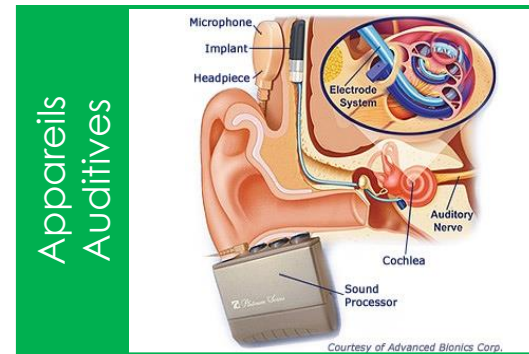


PSTRs : un nouveau diagnostic ?

Electrochleographie non-invasive (ECochG)



Diagnostiquer neuropathies, tinnitus, et l'hyperacusis



Adapter le réglage des aides additives et des implants cochléaires



Deafness, Tinnitus and Therapies
head: Jean-Luc Puel



The logic of sound coding



Régis Nouvian, DR2



J. Bourien,
MCU, UM



G. Desmadryl,
CRHC, Cnrs



A. Diuba



C. Petit



Y. Joshi

Sensory loss and rescue



Jing Wang, DR2



J.C Ceccato,
MCU, UM



F. Francois,
MCU, UM



C. Affortit



D. Nasr



P. Gartia

Translational research



Frédéric Venail, PU/PH



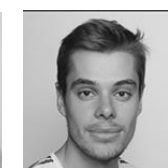
M. Mondain,
PH/PH



C. Nicolas-Puel,
Attaché Hosp



M. Urbain



A. Caplot



F. Blanc