

GENERAL PROGRAMME

Saturday Sept 16th

18:00 *Welcome reception* (Old Medical School)*

Sunday Sept 17th

08:30 - 18:00 Symposium "Hearing rehabilitation and Innovative Inner Ear Therapy"

Monday Sept 18th

08:45 - 17:45 IEB-2006 Sessions I to IV and Posters

19:00 *Mayor Reception* (City Hall)*

Tuesday Sept 19th

09:00 - 16:00 IEB 2006 sessions V to VII and Posters

16:00 - 16:15 Spöndlin Junior Award

16:30 - 17:30 IEB Business Meeting

19:30 *Gala Dinner** (Opera Comédie)*

Wednesday Sept 20th

08:45 - 12:00 IEB : Sessions VIII and IX

12:00 End of the Meeting

** Free of charge, but upon reservation (registration form) only*

*** Tickets only available online (registration form)*

SYMPOSIUM

Hearing Rehabilitation and Innovative Inner Ear Therapy

Sunday, 17 September

Programme

08:30-08:45 Welcome: JL Puel, R Pujol and official representatives for University Montpellier 1, INSERM, Montpellier-Agglomération and Région Languedoc-Roussillon

Session I : *Hearing Rehabilitation*

Moderators : J Magnan, M Mondain

08:45 - 09:10 S1 Hearing aids and brain plasticity
Collet L, Veuillet E, Thai-Van H

09:10 - 09:30 S2 New developments in hearing aid technology
Chalupper S

09:30 - 10:00 S3 Implantable middle ear devices
Lefebvre PP

10:00 - 10:25 S4 New trends in cochlear implantation
Uziel A

10:30 - 11:00 Pause

Session II : *Pharmacology*

Moderators: P Gil-Loyzaga, R Pujol

11:00 - 11:30 S5 From brain molecular pharmacology to clinical applications
Bertrand D

11:30 – 11:55 S6 Local therapy of hearing loss and tinnitus
Puel JL

11:55 – 12:20 S7 Mechanisms of auditory hair cell death in response to oxidative stress initiated damage and otoprotective strategies to preserve hearing
Van De Water TR

12:20 - 12:45 S8 Gene expression in cisplatin ototoxicity and protection with p53 inhibitor
Salvi R, Ding D, Jiang H

12:45 - 14:30 Lunch

Session III : *Cell and gene therapy*

Moderators: N Trigueiros-Cunha, A Uziel

- 14:30 - 14:55 S9 Cellular therapy for inner ear disorders
Ryan AF, Pak K, Mullen LM
- 14:55 - 15:20 S10 Strategies to regenerate hair cells: identification and differentiation of progenitors
Malgrange B
- 15:20 -15:45 S11 Developing stem cell-based therapies for deafness: Isolation and differentiation of human fetal auditory stem cells (hFASCs)
Chen W, Johnson S, Marcotti W, Moore H, Andrews P, Rivolta MN
- 15:45 -16:10 S12 Probing the structure and function of the tectorial membrane in tectorin mutant mice
Richardson G, Russell IJ, Legan PK, Lukashkina V, Goodyear RJ, Lukashkin A

16:10 - 16:40

Pause

Session IV : *Cell and gene therapy (continued)*

Moderators: A Martini, JL Puel

- 16:40 - 17:05 S13 Re-activation of developmental signaling for repair of mature inner ears
Batts SA, Crumling MA, Miyazawa T, Kim YH, Izumikawa M, Shoemaker CR, Johnson MD, Qazi T, Dolan DF, Pflugst BE, Raphael Y
- 17:05 - 17:30 S14 Human hereditary deafness: from genes to the underlying pathogenic processes
Delmaghani S, Roux I, Safieddine S, del Castillo F, Nouvian R, Grati M, Avan P, Moser T, Petit C

Closing lecture

Moderator: R Pujol

- 17:30 -18:00 S15 The new era of hearing habilitation
Rubel EW

IEB-2006 WORKSHOP

Programme

Monday, 18 September

- 08:45 - 09:00 Welcome and Workshop opening
- 09:00 - 10:30 Oral session I – *Neurotransmission* (O1 - O6)
- 10:30 - 11:00 **Pause**
- 11:00 - 12:30 Oral session II – *Endolymph homeostasis* (O7 - O12)
- 12:30 - 13:30 **Lunch**
- 12:30 - 14:30 Poster session (Presentation by authors of odd number posters)
- 14:30 - 16:00 Oral session III – *Rescue* (O13 - O18)
- 16:00 - 16:30 **Pause**
- 16:30 - 17:45 Oral session IV – *Ototoxicity and physiopathology* (O19 - O23)
- 19:00 *Mayor Reception* (City Hall)*

Tuesday, 19 September

- 09:00 - 10:30 Oral session V – *Mechanisms of development and repair* (O24-O29)
- 10:30 - 11:00 **Pause**
- 11:00 - 12:30 Oral session VI – *Deafness genes* (O30 O35)
- 12:00 - 13:30 **Lunch**
- 12:30 - 14:30 Poster session (Presentation by authors of even number posters)
- 14:30 - 16:00 Oral session VII – *Micromechanics* (O36 – O41)
- 16:00 - 16:15 Spöndlin Junior Award
- 16:15 - 16:30 **Pause**
- 16:30 - 17:30 IEB Business Meeting
- 19:30 *Gala Dinner** (Opera Comédie)*

Wednesday, 20 September

08:45 - 10:15 Oral session VIII – *Cell and gene therapy* (O42 - O47)
10:15 - 10:45 **Pause**
10:45 - 12:00 Oral session IX – *Ionic signalling* (O48 – O52)
12:00 End of the Meeting

* *Free of charge, but upon reservation (registration form) only*

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IEB-2006 WORKSHOP

Detailed programme

Monday, 18 September

08:45-09:00 Welcome: JL Puel, R Pujol
Workshop opening: BM Johnstone

Session I : *Neurotransmission*

Moderators: M Eybalin, A Lysakowski

- 09:00 - 09:15 O1 Otoferlin as a hair-cell synaptic-complex protein
Ramakrishnan NA, Drescher DG
- 09:15 - 09:30 O2 A Monte Carlo model of calcium dynamics in vertebrate
hair cells: role of influx, buffering, diffusion and
sequestration
Bortolozzi M, Lelli A, Mammano F
- 09:30 - 09:45 O3 Persistence of $Ca_v1.3$ Ca^{2+} channels in mature outer hair
cells supports afferent signalling of type II fibres
Engel J, Knirsch K, Brandt N, Braig C, Schug N, Kuhn S,
Münkner M, Knipper M
- 09:45 - 10:00 O4 Proteins associated with nicotinic receptor clustering in
cochlear hair cells
Osman AA, Schrader AD, Hawkes AJ, Simmons DD
- 10:00 - 10:15 O5 Ultrastructural and confocal localization of calcium store
channels in cochlear and vestibular hair cells and ganglia
Lysakowski A, Gaboyard S, Price SD, Klapczynski M,
Cameron P
- 10:15 - 10:30 O6 Adrenergic Innervation of the organ of Corti
Drescher MJ, Drescher DG, Ramakrishnan NA, Hatfield JS
- 10:30 - 11:00 Pause

Session II : *Endolymph homeostasis*

Moderators: S Bartolami, E Ferrary

- 11:00 - 11:15 O7 Distribution of TRPV4 in the human endolymphatic sac
Kumagami H, Yamaguchi N, Fujiyama D, Baba A,
Miyamoto I, Fukuda T, So K, Takasaki K, Takahashi H

- 11:15 - 11:30 O08 Regulation of the endocochlear potential by ATP
Thorne PR, Chung M, Muñoz DJB, Wit HP, Housley GD
- 11:30 - 11:45 O09 Endocytosis of ion channels in the stria vascularis: Of any importance for hearing?
Knipper M, Claussen C, Rüttiger L, Saftig P, Koenig O, Willnow TE, Gross M, Zimmermann U
- 11:45 - 12:00 O10 Expression of aquaporin-2, -3, -4, -6 and vasopressin type 2 receptor in the lateral wall of the cochlea
Takeda T, Nishioka R, Kakigi A, Taguchi D
- 12:00 – 12:15 O11 In vivo visualization of endolymphatic hydrops in man
Pyykkö I, Zou J, Daspidar P
- 12:15 – 12:30 O12 FXVD6, a novel cochlear regulator of Na,K-ATPase
Delprat B, Schaer D, Roy S, Wang J, Renard N, Puel JL, Geering K
- 12:30 - 13:30 Lunch
- 13:30 - 14:30 **Poster session**
(Presentation by authors of odd number posters only)
- Session III : *Rescue***
Moderators: J Ashmore, J Ruel
- 14:30 - 14:45 O13 Animal models of salicylate and noise induced tinnitus and pharmacologic treatments
Salvi R, Sun W, Lobarinas E, Yang G, Zhang L, Mirza N, Dalby Brown W
- 14:45 - 15:00 O14 Acoustic stimulation via open ear hearing aid: results in tinnitus therapy
Del Bo L, Ambrosetti U, Fagnani E, Forti S, Scotti A
- 15:00 - 15:15 O15 Prevention of noise and drug-induced hearing loss with D-methionine
Campbell K, Meech R, Rybak L, Klemens J, Hughes L
- 15:15 - 15:30 O16 Drug delivery to the inner ear through a port and septum attached to the CI housing and electrode: long term in vitro safety results
Jolly C, Reetz G, Béal F, Baumgartner WD, Miller J

- 15:30 - 15:45 O17 Local administration of triamcinolone or dexamethasone preserve hearing after cochlear implantation in guinea pigs: CAP-measurements
Braun S, Ye Q, Kiefer J, Gstöttner W, Tillein J
- 15:45 - 16:00 O18 TNF α is ototoxic to the hair cells of organ of Corti explants and dexamethasone protects these sensory receptor cells from damage by TNF α
Van De Water T, Chen S, Eshraghi A, Jaben K, Haake S, Balkany T

16:00 - 16:30 Pause

Session IV : Ototoxicity and physiopathology

Moderators: J Schacht, J Wang

- 16:30 - 16:45 O19 Phosphoinositide signaling and cytoskeletal arrangements in the organ of Corti
Sha SH, Jiang HY, Schacht J
- 16:45 - 17:00 O20 Vestibular toxicity of nitriles in the mouse and the guinea pig
Díez-Padrisa N, Soler-Martín C, Boadas-Vaello P, Llorens J
- 17:00 - 17:15 O21 Thrombomodulin expression in the stria vascularis
Sunami K, Kanazawa A, Okabe Y, Nishiura H, Takayama M, Inoue A, Yamane H
- 17:15 - 17:30 O22 The effects of several anaesthetics on auditory evoked compound action potentials and brainstem responses in the guinea pig
Aarts MCJ, Verhaal J, Albers FWJ, Klis SFL
- 17:30 - 17:45 O23 Presbycusis- a complex disorder with genetic and environmental background
Toppila E, Manninen M, Zou J, Makela K, Varpa K, Pyykkö I

19:00 *Mayor Reception* (City Hall)*

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Tuesday, 19 September

Session V : *Mechanisms of development and repair*

Moderators: M Knipper, M Lenoir

- 09:00 - 09:15 O24 Brief noise exposure in juvenile rats causes a deterioration in the frequency selectivity of inferior colliculus neurons in adulthood
Popelar J, Suta D, Syka J
- 09:15 - 09:30 O25 Expression of genes involved in the apoptosis in the organ of Corti, the modiolus and the stria vascularis of newborn rats
Gross J, Mazurek B
- 09:30 - 09:45 O26 Sox 10 is not necessary for auditory neurons survival
Breuskin I, Bodson M, Thelen N, Thiry M, Belachew S, Lefebvre PP, Malgrange B
- 09:45 - 10:00 O27 P2X2/3 receptor inhibition of BDNF-mediated spiral ganglion neurite outgrowth
Housley GD, Greenwood D, Jagger DJ, Hoya N, Huang LC, Thorne PR, King BF, Wildman SS, Ryan AF
- 10:00 - 10:15 O28 Peripheral nerve regrowth in vivo through BDNF/ FGF treatment in deafened guinea pigs
Glueckert R, Bitsche M, Miller J, Zhu Y, Prieskorn D, Altschuler R, Schrott-Fischer A
- 10:15 - 10:30 O29 Evidence for the involvement of JNK signaling in epithelial repair, proliferation and stereocilia development during hair cell regeneration
Warchol ME, Speck JD
- 10:30 - 11:00 Pause

Session VI : *Deafness genes*

Moderators: K Avraham, D Hillaire

- 11:00 - 11:15 O30 Progression of the inner ear pathology of DDR1-null mice
Meyer zum Gottesberge AM, Gohla A, Massing Th, Gross O, Vogel WF
- 11:15 - 11:30 O31 Hearing loss in mice with partially-deleted vitamin D receptor gene
Zou J, Barth S, Minasyan A, Keisala T, Wang JH, Lou YR, Kalueff A, Pyykkö I, Tuohimaa P

- 11:30 - 11:45 O32 Novel pendrin and myosin VI mutations in humans and mice: Functional implications
Avraham KB, Dror AA, Brownstein Z, Rzadzinska AK, Fuchs H, Hasson T, Steel KP, Hrabé de Angelis M
- 11:45 - 12:00 O33 Hearing impairment in an animal model of oculocutaneous albinism type I
Murillo-Cuesta S, Cantero M, Rodríguez L, Lazcano J, Sánchez-Calderón H, Montoliu L, Varela-Nieto I
- 12:00 - 12:15 O34 Contribution of GJB6 to DFNB1 related hearing loss in Portuguese families
Teixeira H, Fialho G, Caria H
- 12:15 - 12:30 O35 Catalase polymorphisms associated with noise-induced hearing loss in two independent noise-exposed populations
Konings A, Van Laer L, Malczyk M, Carlsson PI, Bondeson ML, Fransen A, Borg E, Sliwiska-Kowalska M, Van Camp G
- 12:30 - 13:30 Lunch
- 13:30 - 14:30 **Poster session**
(Presentation by authors of even number posters only)
- Session VII : Micromechanics**
Moderators: G Rebillard, J Santos-Sacchi
- 14:30 - 14:45 O36 The outer hair cell active force production in the cochlear environment
Spector AA, Liao Z, Popel AS, Brownell WE
- 14:45 - 15:00 O37 Membrane tension effects on chloride binding to prestin
Santos-Sacchi J, Song L
- 15:00 - 15:15 O38 Non-mammalian orthologs of prestin are electrogenic divalent/chloride exchangers
Schaechinger TJ, Oliver D
- 15:15 - 15:30 O39 A low-coherence interferometry system and its use for vibration measurement and imaging of the guinea pig organ of Corti in vivo
Chen F, Choudhury N, Zheng J, Matthews S, Jacques SL, Nuttall AL

15:30 - 15:45	O40	Group delay contour plots derived from human DPOAE level/phase maps Meinke DK, Lonsbury-Martin BL, Stagner BB, Martin GK
15:45 - 16:00	O41	Measuring olivocochlear feedback via modulation of otoacoustic emissions: An individualized measurement paradigm Wagner W, Heppelmann G, Müller J, Janssen T
16:00 - 16:15		Spoendlin Junior Award Moderators: JL Puel, R Pujol
16:15 - 16:30		Pause
16:30 – 17:30		IEB Business Meeting
19:30		<i>Gala Dinner** (Opera Comédie)</i>

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Wednesday, 20 September

Session VIII : *Cell and gene therapy*

Moderators: J Ito, F Venail

- 08:45 - 09:00 O42 Distribution of hematopoietic stem cell-derived cells in mouse cochlea and their possible roles
Nakagawa T, Kita T, Okano T, Kada S, Kojima K, Ito J
- 09:00 - 09:15 O43 The role of bone marrow derived stem cells in inner ear repair
Tan B, Ruan RS
- 09:15 - 09:30 O44 Cell transplantation to the auditory nerve and cochlear duct
Kojima K, Sekiya T, Matsumoto M, Kim TS, Tamura T, Ito J
- 09:30 – 09:45 O45 BDNF gene delivery into the mouse cochlea by cell transplantation
Okano T, Nakagawa T, Kita T, Ito J
- 09:45 - 10:00 O46 Time course of hair cell death in the cochlea of connexin30 knockout mice and its complete rescue by augmented connexin26 protein expression
Ahmad S, Tang W, Chang Q, Qu Y, Hibshman J, Li YH, Söhl G, Willecke K, Chen P, Lin X
- 10:00 - 10:15 O47 Over-expression of XIAP delays the development of presbycusis in C57Bl/6 mice
Wang J, Yu Z, Bance M, Morris D, Moore CS, Robertson GS, Korneluk R
- 10:15 - 10:45 Pause

Session IX : *Ionic signalling*

Moderators: C Chabbert, F Mammano

- 10:45 – 11:00 O48 The mechanotransducer channels of mammalian cochlear hair cells
Fettiplace R, Beurg M, Hackney CM
- 11:00 - 11:15 O49 Local Ca^{2+} as indicator of the location of mechano-electrical transduction channels
Harasztosi C, Ramaswamy R, Müller B, Gummer AW
- 11:15 - 11:30 O50 Long-range signalling by calcium waves in the organ of Corti
Mammano F, Anselmi F, Ciubotaru C, Gale JE, Piazza V

- 11:30 - 11:45 O51 Ultrastructural localization of large calcium activated potassium channels in the rat cochlea
Mahendrasingam S, Furness DN, Fettiplace R, Hackney CM
- 11:45 - 12:00 O52 Acid sensing ionic channels in the vestibular endorgans
Soto E, Mercado F, López I, Acuña D, Ortega A, Flores A, Vega R
- 12:00 End of the Meeting

IEB-2006 WORKSHOP

POSTERS

Posters will be posted from Sunday 17th through Tuesday 19th at 18:00
Authors should be at their posters during poster presentation time (odd numbers on Monday 18, even numbers on Tuesday 19)

Normal structure and function

- P1 Excitability properties of rat vestibulocerebellum interneurons
Bottà L, Masetto S, D'Angelo E
- P2 Morphometry of the reticular lamina (SEM and LSM investigations on guinea pig cochlea)
Yarin Y, Meißner H, Bornitz M, Poznyakovskiy A, Zahnert Th
- P3 A novel method for distinguishing between type I and type II spiral ganglion neuron input into the mouse cochlear nucleus
Barclay M, Huang LC, Hoya N, Ryan AF, Housley GD
- P4 Two classes of outer hair cells along the tonotopic axis of the cochlea
Braig C, Engel J, Rüttiger L, Kuhn S, Münkner S, Hirt B, Rohbock K, Knipper M

Endolymph homeostasis

- P5 Functional expressions of KCNQ1/KCNE1 K⁺ channel and P2Y4 receptor
Lee JH, Hur DG, Heo JH, Chang SO, Kim CS, Oh SH
- P6 Electrophysiological recordings of the utricular endolymphatic potassium concentration
Bartolami S, Zussy C, Quentin J, Desmadryl G, Chabbert C
- P7 Expression of AQP2, vasopressin type 2 receptor, TRPV1 and TRPV4 in the human endolymphatic sac
Taguchi D, Kakigi A, Takeda T, Nishioka R, Takumida M, Kitano H

Micromechanics

- P8 Prestin and a functional tectorial membrane are not required to generate electrically evoked otoacoustic emissions
Drexl M, Mellado Lagarde MM, Zuo J, Richardson GP, Russell IJ
- P9 Basilar membrane response to electrical stimulation in mice with and without the tectorial membrane load
Mellado MM, Drexl M, Russell IJ

- P10 Influence of the tectorial membrane resonance on the cochlear acoustical and neural responses
Lukashkin AN, Smith JK, Russell IJ
- P11 The tectorial membrane: trading frequency selectivity and sensitivity in the mammalian cochlea
Russell IJ, Legan PK, Lukashkina VA, Lukashkin AN, Goodyear RJ, Richardson GP
- P12 The effects of cholesterol on outer hair cell motility
Kitani R, Kakehata S, Murakoshi M, Wada H, Abe T, Namba A, Shinkawa H
- P13 Electrogenic chloride and bicarbonate transport by prestin (SLC26A5) in expression systems
Sampedro-Castaneda M, Mistrik P, Ashmore JF

Ionic signalling

- P14 Mechanisms of calcium homeostasis in cochlear hair cells
Nemzou R, Ohlrogge M, Cimica V, Tempel B, Moser T
- P15 Calcium currents in mouse inner hair cells are inhibited by phenylalkylamines and benzothiazepines
Tarabova B, Lacinova L, Engel J
- P16 BK channels regulation in rat inner hair cells
Hoang Dinh E, Dulon D
- P17 Single channel pKir inwardly rectifying currents from pigeon vestibular hair cells
Zampini V, Masetto S, Correia MJ

Neurotransmission

- P18 Temperature enhances exocytosis efficiency at the inner hair cell ribbon synapse
Nouvian R, Moser T
- P19 Analysing the Ca^{2+} currents in inner and outer hair cells of mice lacking the $\beta 3$ - or $\beta 4$ auxiliary Ca^{2+} channel β subunit
Kuhn S, Knirsch M, Rüttiger L, Kasperek S, Münkner S, Freichel M, Flockerzi V, Knipper M, Engel J
- P20 Opioid receptor modulation of the calcium current in cochlear outer hair cells
Vega R, García-Garibay O, Soto E

- P21 Fast and sustained exocytosis of inner hair cells co-vary with the synapse number along the tonotopic axis of the mouse cochlea
Meyer AC, Egner A, Yarin Y, Moser T
- P22 Defective synaptic maturation in the inner hair cells of athyroid Pax8^{-/-} mice
Sendin G, Bulankina A, Moser T
- P23 Role of synaptic ribbons in hair cell sound coding
Buran BN, Khimich D, Gundelfinger E, Moser T, Liberman MC
- P24 Glutamate increases cochlear dopaminergic neurotransmission through NMDA receptors and NO release
Halmos G, Horváth T, Polony G, Vizi ES, Lendvai B, Zelles T
- P25 Maturation changes at the inner hair cell ribbon synapse
Eybalin M, Renard N, Schrott-Fischer A, Striessnig J, Puel JL
- P26 Effects of human defensin NP-1 on synaptic transmission in the frog vestibular organs
Andrianov GN, Nozdrachev AD, Ryzhova IV
- P27 Immunocytochemical and pharmacological studies of the metabotropic glutamate receptors in the frog semicircular canals
Andrianov GN, Puyal J, Raymond J, Ventéo S, Demêmes D, Ryzhova IV
- P28 Evidence of functional purinergic receptors (P2X) in rat vestibular ganglion neurons
Ito K, Chihara Y, Sugasawa M, Sahara Y
- P29 New insights in the vestibular calyceal neurotransmission
Bonsacquet J, Brugeaud A, Compan V, Desmadryl G, Chabbert C

Mechanisms of Development

- P30 Notch signaling inhibitors increase hair cells in embryonic organ culture
Takebayashi S, Yabe D, Yamamoto N, Kojima K, Ito J, Honjo T
- P31 mRNA expression of growth factors in the organ of Corti, modiolus and stria vascularis of newborn rats
Amarjargal N, Mazurek B, Machulik A, Fuchs FU, Haupt H, Ungethüm U, Kuban RJ, Gross J
- P32 Developmental changes of cross-link arrangement and BAPTA sensitivity in rat cochlear hair bundles
Fink S, Koitschev A, Langer MG
- P33 Age-related apoptotic change in the cochlear lateral wall of mice
Watanabe K, Inai S, Jinnouchi J, Baba S, Yagi T

- P34 Developmental BK channel distribution in relation to the appearance of square arrays in the lateral membranes of mice inner hair cells
Mikiel-Hunter J, Forge A
- P35 Estrogen receptors in the inner ear during different stages of pregnancy
Simonoska R, Stenberg E A, Sahlin L, Hultcrantz M
- P36 Role of Sox10 in the development of the inner ear
Bodson M, Breuskin I, Thelen N, Belachew S, Thiry M, Lefebvre PP, Malgrange B
- P37 Distribution of calbindin in the developing inner ear of the mouse
Buckiova D, Syka J
- P38 Survival and differentiation of mouse embryonic statoacoustic ganglion cells in co-culture with auditory brain stem slices
Glavaski-Joksimovic A, Kostyszyn B, Eriksson M, Olivius P, Ulfendahl M
- P39 Temporal and spatial regulation of $\alpha 6$ integrin expression during the development of the cochlear-vestibular ganglion
Davies D

Ototoxicity and physiopathology

- P40 Cochlear effects induced by cisplatin and oxaliplatin – a dose escalation study
Hellberg V, Wallin I, Fransson A, Ehrsson H, Laurell G
- P41 Microarray data of the newborn rat cochlea and their changes during cultivation and hypoxia
Haupt H, Mazurek B, Machulik A, Fuchs FU, Kuban RJ, Ungethüm U, Amarjargal N, Gross J
- P42 Expression of hypoxia-dependent genes in the cochlea of the newborn rat
Mazurek B, Machulik A, Fuchs FU, Amarjargal N, Kuban RJ, Ungethüm U, Haupt H, Gross J
- P43 Oxidative stress pathways in the potentiation of noise-induced hearing loss by acrylonitrile
Pouyatos B, Gearhart C, Nelson-Miller A, Fulton S, Fechter L
- P44 siRNA-based elucidation of the impact of HIF-1 α and HIF-2 α on the expression of hypoxia-inducible genes in the organ of Corti of newborn rat
Henke W, Fuchs J, Mazurek B, Gross J
- P45 Expression of the BK channel is severely delayed in IHCs of hypothyroid rats and shows a mosaic expression pattern
Brandt N, Münkner S, Braig C, Winter H, Knipper M, Engel J

- P46 A mouse model for selective degeneration of the spiral ligament due to local application of 3-nitropropionic acid
Kada S, Nakagawa T, Ito J
- P47 Differential gene expression of artemin, GDNF, BDNF and TGF β in deafened rats following electrical stimulation
Wissel K, Prieskorn DM, Miller JM, Lenarz T, Stöver T
- P48 Cisplatin-induced gene expression in the rat cochlea
Kirkegaard M, Skjönsberg Å, Bucinskaite V, Laurell G, Ulfendahl M
- P49 Relationship between noise-induced hearing loss, enhanced amplitudes of cortical evoked responses and gap detection threshold changes
Rybalko N, Grecova J, Popelar J, Syka J
- P50 Macrophages invasion in the amikacin treated rat cochlea
Ladrech S, Wang J, Simonneau L, Gallego M, Puel JL, Lenoir M
- P51 Noise induced hearing loss (NIHL) and vestibular functional damage
Sergi B, Fetoni AR, Paludetti G, Rizzo D, La Greca C, Troiani D, Ferraresi A
- P52 The vestibular toxicity of cis-crotononitrile does not require CYP2E1-mediated metabolism
Boadas-Vaello P, Díez-Padrisa N, Llorens J
- P53 Identification of markers for neuronal plasticity in the auditory system
Singer W, Panford-Walsh R, Haas H, Rüttiger L, Köpschall I, Rohbock K, Zimmermann U, Knipper M
- P54 No difference between inner and outer hair cells in uptake of FM1-43
Taylor R, Forge A
- P55 Up-regulation of Notch signaling following ototoxic deafening
Batts SA, Shoemaker CR, Raphael Y
- P56 Middle ear gas loss in inflammatory conditions: The role of mucosa thickness and blood flow
Amos AR, Herman P, Lecain E, Wassef M, Tran Ba Huy P, Kania RE
- P57 Cubilin and megalin co-localize in the inner ear
Tauris J, Christensen EI, Nykjaer A, Jacobsen C, Ovesen T
- P58 Neuronal activity in the inferior colliculus and auditory cortex in rats with noise-induced altered gap detection ability
Profant O, Burianová J, Popelar J, Syka J
- P59 Meniere's disease and the electromodel
Offutt G

Gene

- P60 Association of SNPs in KCNE1 and KCNE3 genes with Meniere's disease
Doi K, Sato T, Kuramasu T, Nishimura M, Kubo T
- P61 KCNQ4, a gene for age related hearing impairment
Van Eyken E, Van Laer L, Fransen E, Topsakal V, Lemkens N, Laureys W, Nelissen N, Vandeveldel A, Wienker T, Van De Heyning P, Van Camp G
- P62 Auditory neuropathy in a hereditary mitochondrial disease : Evaluation of hearing function in Friedreich ataxia mouse transgenic model
Giraudet F, Martelli A, Puccio H, Mom T, Avan P

Protection, repair and regeneration

- P63 Protective effect of Ebselen on noise induced cochlear damage in rat
Park YH, Kim Y
- P64 TEM analysis of the synaptic consequences of hair cell loss and regeneration in a bird with progressive, genetic inner ear abnormality
Ryals BM, Sanovich E, Petralia RS, Dooling RJ
- P65 Protective properties of Idebenone and Vitamin E in noise induced hearing loss in the guinea pigs
Fetoni AR, Sergi B, La Greca C, Rizzo D, Troiani D, Ferraresi A, Paludetti G
- P66 Pharmacological protection against cisplatin induced ototoxicity
Lorito G, Giordano P, Sathiyaseelan T, Petruccelli J, Magosso S, Bertolaso L, Martini A, Hatzopoulos S
- P67 Ethanolic extracts from *Hemidesmus Indicus Linn.* displays otoprotectant activities on organotypic cultures
Corbacella E, Bertolaso L, Previati M, Martini A
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