

2016 ANNUAL CORLAS MEETING

August 28-31, 2016

Bordeaux, France

SCIENTIFIC PROGRAMME

MONDAY, August 29th

OPENING SCIENTIFIC SESSION

Chair: Antti Mäkitie

08:30 – 09:15 Michal Luntz: UPDATES AND CURRENT CHALLENGES
IN ADVANCED HEARING REHABILITATION AND
IMPLANTED DEVICES FOR HEARING RESTORATION

09:15 – 09:30 Michael M. Paparella: ENDOLYMPHATIC SAC
REVISION (PATHOGENESIS AND CLINICAL
RELEVANCE)

09:30 – 10:00 **Coffee break**

10:00 – 13:00 **PRESIDENTIAL MINISYMPOSIUM**

Stem Cell Therapy in ORL

**Moderators: Thomas Van De Water, Allen Ryan,
Stefan Heller**

Chair's Introduction: Thomas Van De Water (5 min)

Pascal Senn (New member): COCHLEAR PROGENITOR
CELLS (15 min)

Hinrich Staecker: MOLECULAR MODIFICATION OF
MESENCHYMAL STEM CELLS FOR TRANSLATIONAL
INNER EAR RESEARCH (15 min)

Shi-Ming Yang: COCHLEAR IMPLANTS COMBINED WITH STEM CELLS FOR TREATING HEARING LOSS (15 min)

Brigitte Malgrange (New member): A HUMAN iPS-CELL MODEL OF ALSTRÖM SYNDROME REVEALS NEW MOLECULAR MECHANISMS (15 min)

Break (20 min)

Bradley Goldstein (Invited): STEM CELLS AND MAINTENANCE OF THE ADULT OLFATORY NEUROEPITHELIUM (15 min)

Koichi Omori: STEM CELLS AND TRACHEAL REPAIR (15')

Simon Angeli: STEM CELL-BASED THERAPY ASSISTS IN THE REPAIR OF CHRONIC TYMPANIC MEMBRANE PERFORATIONS (15 min)

Bee See Goh (New member): CHONDROGENESIS OF HUMAN ADIPOSE DERIVED STEM CELLS FOR FUTURE MICROTIA REPAIR (15 min)

Round Table Discussion - Thomas Van De Water, Allen Ryan, Stefan Heller and presenters (20 min)

13:00 – 14:30 **Group photograph and lunch**

14:30 – 15:30 **GENERAL ASSEMBLY**

TUESDAY, August 30th

8:00 – 10:00 **SCIENTIFIC SESSION**

OTOLOGY 1

Chair: Richard Smith

Konstantina Stankovic (Guest): EXTRACELLULAR VESICLES DERIVED FROM HUMAN VESTIBULAR SCHWANNAOMAS ASSOCIATED WITH POOR HEARING DAMAGE COCHLEAR CELLS (15 min)

Anne Schilder: REGENERATION OF INNER EAR HAIR CELLS WITH GAMMA-SECRETASE INHIBITORS: THE REGAIN PROJECT (15 min)

Hubert Löwenheim (New member): PROGENITOR CELLS IN THE HUMAN ORGAN OF CORTI? INSIGHTS FROM SURGICAL SPECIMENS AND POSTMORTEM ANALYSIS (15 min)

Allen F Ryan: HAIR CELL STEREOCILARY BUNDLE REGENERATION BY ESPIN GENE TRANSDUCTION AFTER AMINOGLYCOSIDE DAMAGE AND HAIR CELL INDUCTION BY NOTCH INHIBITION (15 min)

Rosamaria Santarelli: OPA1- AND OTOF-RELATED AUDITORY NEUROPATHY: SITE OF LESION AND OUTCOME OF COCHLEAR IMPLANTATION (10 min)

Xi Lin: RESULTS OBTAINED FROM NEXT GENERATION SEQUENCING (NGS) OF A PANEL OF DEAFNESS GENES SUPPORT THE CLINICAL UTILITY OF THE NGS APPROACH IN THE DIAGNOSIS OF SENSORINEURAL HEARING LOSS (10 min)

Hannie Kremer: DIAGNOSTICS BY WHOLE EXOME SEQUENCING TARGETING A GENE PANEL FOR HEARING IMPAIRMENT IN THE NETHERLANDS AND THE NEXT STEPS (10 min)

Marcos Goycoolea: EXTERNAL EAR CANAL EXOSTOSIS AND OTITIS MEDIA IN TEMPORAL BONES OF PREHISTORIC AND HISTORIC CHILEAN POPULATIONS. A PALEOPATHOLOGICAL AND PALEOEPIDEMIOLOGICAL STUDY (10 min)

Maurizio Barbara: LEVEL OF SATISFACTION AFTER AUDITORY IMPLANT SURGERY (10 min)

Herman Jenkins: POSTOPERATIVE VESTIBULAR FUNCTION CHANGES AND COCHLEAR IMPLANT PERFORMANCE (10 min)

10:00 – 10:30

Coffee break

10:30 – 13:00

SCIENTIFIC SESSION

RHINOLOGY

Chair: Metin Önerci

Ludovic de Gabory (Guest): COMPUTATIONAL FLUID DYNAMIC SIMULATION TO APPRECIATE NASAL PHYSIOLOGY (15 min)

Luo Zhang (New member): PHENOTYPES OF CHRONIC RHINOSINUSITIS WITH NASAL POLYPS (15 min)

Shigeharu Fujieda: CLINICAL MARKERS FOR INTRACTABLE EOSINOPHILIC CHRONIC RHINOSINUSITIS (15 min)

Richard Harvey: ENVIRONMENTAL RESPONSES OF VIRALLY INFECTED RESPIRATORY EPITHELIAL CELLS (15 min)

Chae-Seo Rhee: IL-17A DEFICIENCY INDUCES A DECREASED CHEMOTACTIC RESPONSE TO CCL7 IN EOSINOPHILS IN AN ALLERGIC RHINITIS MODEL (15 min)

Johan Hellgren (New member): NOCTURNAL GERD – A RISK FACTOR FOR RHINITIS/RHINOSINUSITIS: THE RHINE STUDY (15 min)

Sverre Steinsvåg: THE RELATIONSHIP BETWEEN CHRONIC RHINOSINUSITIS AND GASTRO-ESOPHAGEAL REFLUX DISEASE (15 min)

Mark Jorissen: LOCAL RECURRENCES IN PATIENTS WITH ADENOCARCINOMA AFTER ENDOSCOPIC RESECTION, POSSIBILITIES FOR OUTCOME IMPROVEMENT (15 min)

Livije Kalogjera: GENDER RELATED DIFFERENCES IN SUBJECTIVE SEVERITY OF SYMPTOMS AND QUALITY OF LIFE IMPAIRMENT IN PATIENTS WITH CHRONIC RHINOSINUSITIS WITHOUT NASAL POLYPS (15 min)

Bernd Kremer: ALLERGIC RHINITIS IS A RISK FACTOR FOR TRAFFIC SAFETY (15 min)

13:00 – 14:00

Lunch

14:00 – 15:30

POSTER SESSION 1

Chairs: Mark Jorissen, Jay Rubinstein

15:30 – 17:00

HEAD AND NECK

Chair: Yasuo Hisa

Carol Bradford: NEW ERA OF PRECISION MEDICINE FOR HEAD AND NECK CANCER (15 min)

Ivan Keogh (Guest): POINT OF CARE OPTICAL DIAGNOSTIC TECHNOLOGY, USING SALIVA AS A MOLECULAR FINGERPRINT FOR THE EARLY DETECTION OF ORAL AND OROPHARYNGEAL SQUAMOUS CELL CARCINOMA (15 min)

Robert Baatenburg de Jong: RAMAN SPECTROSCOPY AT THE TUMOR BORDER TO IMPROVE ONCOLOGIC SURGERY (10 min)

Christian Righini: ROLE OF NEAR INFRARED FLUORESCENCE IMAGING-GUIDED SURGERY IN HNSCC RESECTION (10 min)

Wendell Yarbrough: NEURAL CREST-LIKE CANCER STEM CELLS: A NEW TARGET IN ADENOID CYSTIC CARCINOMA (10 min)

Cherie-Ann Nathan: ROLE OF FIBROBLAST GROWTH FACTOR RECEPTOR IN UVB-INDUCED ACUTE EPIDERMAL HYPERPLASIA (10 min)

Liang Zhou: SURGERY FOR HYPOPHARYNGEAL SQUAMOUS CELL CARCINOMA: AN ANALYSIS OF TREATMENT OUTCOME AND PROGNOSTIC FACTORS (10 min)

Giovanni Almadori: MINI-CHROMOSOME MAINTENANCE PROTEIN 7 (MCM7) AND GEMININ EXPRESSION: PREDICTIVE VALUE IN LARYNGEAL SQUAMOUS-CELL CARCINOMA IN PATIENTS TREATED WITH RADIOTHERAPY AND CETUXIMAB (10 min)

17:00 – 17:30

Coffee break

17:30 – 18:30

SCIENTIFIC SESSION

TINNITUS

Chair: Jos Eggermont

Jukka Ylikoski: NON-INVASIVE VAGUS NERVE

STIMULATION REDUCES SYMPATHETIC PREPONDERANCE IN PATIENTS WITH TINNITUS (10 min)

Tobias Kleinjung (New member): EVALUATION OF TOMOGRAPHIC VS. STANDARD NEUROFEEDBACK PROTOCOLS FOR TREATMENT OF SUBJECTIVE TINNITUS (10 min)

Pim van Dijk: FUNCTIONAL MAGNETIC RESONANCE IMAGING OF GAZE-EVOKED TINNITUS AFTER ACOUSTIC SCHWANNOMA SURGERY (10 min)

Carol Bauer: THE CEREBELLUM AS A GAIN CONTROL MODULATOR OF TINNITUS (10 min)

Fan-Gang Zeng: TINNITUS SUPPRESSION WITH NON-INVASIVE AND MINIMALLY-INVASIVE ELECTRIC STIMULATION (10 min)

General discussion (10 min)

WEDNESDAY, August 31st

8:00 – 09:15

MINISYMPOSIUM

ROBOTIC SURGERY

Chair: Marco Caversaccio

Marco Caversaccio: ADVANCES OF ROBOTIC COCHLEAR IMPLANTATION (15 min)

Bert O'Malley: THE "TORS STORY" - A CASE OF CREATION AND THE DIFFUSION OF INNOVATION (15 min)

Yann Nguyen (Guest): RobOtol: A MULTI-TASK ROBOT-BASED ASSISTANT FOR EAR SURGERY (15 min)

Stephan Lang: A NEW FLEXIBLE ENDOSCOPE FOR TRANSORAL ROBOT ASSISTED SURGERY (TORS) IN HEAD AND NECK LESIONS (15 min)

Round Table Discussion (15 min) – Marco Caversaccio and Presenters

09:15 – 10:30

SCIENTIFIC SESSION

THE ROLE OF HPV IN HEAD AND NECK CANCER

Chair: Reidar Grénman

René Leemans: DIFFERENT PROGNOSTIC MODELS FOR DIFFERENT PATIENT POPULATIONS: VALIDATION OF A NEW PROGNOSTIC MODEL: FOR PATIENTS WITH OROPHARYNGEAL CANCER IN WESTERN EUROPE (15 min)

Jens Peter Klussmann: CD56-POSITIVE LYMPHOCYTE INFILTRATION AND LOSS OF FUNCTIONAL HUMAN LEUKOCYTE ANTIGEN CLASS I EXPRESSION IN HPV-ASSOCIATED OROPHARYNGEAL SQUAMOUS CELL CARCINOMA (15 min)

Sandro Stoeckli (New member): IMPACT OF HPV IN PATIENTS WITH OROPHARYNGEAL CARCINOMA TREATED WITH PRIMARY SURGERY WITH AND WITHOUT CHEMORADIATION (15 min)

Hidenori Inohara: A NOVEL APPROACH TO DETECT ORAL HPV INFECTION (10 min)

Miquel Quer: CD45 AS PROGNOSTIC FACTOR IN HEAD AND NECK CANCER (10 min)

General Discussion (10 min)

10:30 – 11:00

Coffee Break

11:00 – 13:00

SCIENTIFIC SESSION

AUDIOLOGY

Chair: Olivier Sterkers

Christof Stieger (New member): SWISS NATIONAL COCHLEAR IMPLANT REGISTER: ANALYSIS OF SOUND FIELD THRESHOLD, SPEECH PERCEPTION AND SUBJECTIVE BENEFIT (15 min)

Juan A Chiossone-Kerdel (New member): MEDICAL AND TECHNICAL FAILURE ANALYSIS IN A LARGE COCHLEAR IMPLANT SERIES (15 min)

Anil Lalwani: HEARING AID USE IS ASSOCIATED WITH BETTER MINI-MENTAL STATE EXAM PERFORMANCE (15 min)

Bernard Fraysse: FACTORS AFFECTING SENTENCE UNDERSTANDING IN ADULT COCHLEAR IMPLANT USERS (15 min)

Narayanan Prepageran (New Member): SIMULATED SURGICAL TRAINING FOR COMPLEX ENDOSCOPIC SKULL BASE AND COCHLEAR IMPLANT WITH 3D PRINTING (15 min)

Tatsuo Matsunaga: AN ANIMAL MODEL OF ACUTE COCHLEAR ENERGY FAILURE AND EXPERIMENTAL THERAPEUTIC STRATEGIES (15 min)

Christophe Vincent: A NEW APPROACH FOR DRUG DELIVERY TO THE INNER EAR: EXTENDED DEXAMETHASONE RELEASE FROM SILICONE-BASED EXTRA-COCHLEAR IMPLANTS (10 min)

Philippe Lefebvre: LOUDNESS SCALING TEST AS A TOOL TO EVALUATE NEURONAL FUNCTION IN NEUROSENSORY DEAFNESS (10 min)

Wolfgang Gstöttner: A POTENTIAL ROLE OF ALTERNATIVE *GJB2* TRANSCRIPTION IN NEONATAL SENSORINEURAL DEAFNESS IN AUSTRIA (10 min)

13:00 – 14:00

Lunch

14:00 – 16:00

POSTER SESSION 2

Including coffee

Chairs: Henri Marres and Ashley Wackym

16:00 – 18:00

SCIENTIFIC SESSION

VESTIBULAR DISORDERS

Chair: Måns Magnusson

Tatsuya Yamasoba: FUNCTIONAL AND MORPHOLOGICAL RECOVERY FROM GM-INDUCED VESTIBULAR DAMAGE BY TRKB AGONIST (15 min)

Paul Avan: TRANSIENT APPLICATION OF DIFFERENTIAL PRESSURE BETWEEN ENDOLYMPH AND PERILYMPH MIMICKS AN ATTACK OF MENIERE'S DISEASE (15 min)

Nicolas Pérez: DOES MRI ENDOLYMPHATIC HYDROPS VISUALIZATION CORRELATE WITH AUDIO-VESTIBULAR FINDINGS? (15 min)

Shinichi Iwasaki: EFFECT OF NOISY GALVANIC VESTIBULAR STIMULATION IN PATIENTS WITH BILATERAL VESTIBULAR DYSFUNCTION (15 min)

Noriaki Takeda: EFFECTS OF REPEATED SNOWBOARD EXERCISE IN VIRTUAL REALITY WITH TIME LAGS OF VISUAL SCENE BEHIND BODY ROTATION ON HEAD STABILITY AND SUBJECTIVE SLALOM RUN PERFORMANCE IN HEALTHY YOUNG SUBJECTS (15 min)

Richard Gacek: EVIDENCE FOR A VIRAL CAUSE OF MENIERE'S DISEASE (15 min)

Måns Magnusson: MENIERE'S DISEASE: FUTURE OF TREATMENT AND DIAGNOSING AND DEVELOPMENT OF AN EXPERIMENTAL MODEL (15 min)

Floris Wuyts: HOW TO IDENTIFY VESTIBULAR PAROXYSMIA AND DISCRIMINATE IT FROM VESTIBULAR MIGRAINE (15 min)

POSTERS

TUESDAY, August 30th

POSTER SESSION 1

Chairs: Mark Jorissen and Jay Rubinstein

Andrew Oxenham (New member): MECHANISMS OF PITCH PERCEPTION: IMPLICATIONS FOR COCHLEAR IMPLANTS

Hamlet Suarez: RELATIONSHIP BETWEEN GAIT PERFORMANCE DURING CHILDHOOD AND HEARING INPUT ASSESSED IN PRELINGUAL COCHLEAR IMPLANT USERS

Istvan Sziklai: SPEECH INTELLIGIBILITY AFTER COCHLEAR IMPLANTATION IN PRELINGUALLY DEAF CHILDREN CAN BE IMPROVED BY AUDIOVISUALLY-AIDED TRAINING

Johan Frijns: DYNAMIC CURRENT FOCUSING: A NOVEL APPROACH TO LOUDNESS CODING IN COCHLEAR IMPLANTS

Blake Papsin: STIMULATION PARAMETERS AND HEARING OUTCOMES AFTER INSERTION OF PERI- AND ANTI-MODIOLAR ELECTRODE ARRAYS IMPLANTED WITHIN THE SAME CHILD

Michael C Tong: AUDITORY BRAINSTEM IMPLANT IN NON-NF 2 CHINESE CHILDREN

Stephen O'Leary: REVERSIBLE CHANGES IN COCHLEAR MICROPHONICS RECORDED FROM COCHLEAR IMPLANT ELECTRODES DURING IMPLANT SURGERY

Ronen Perez: FLUOROSCOPIC ASSISTED COCHLEAR IMPLANTATION IN CHILDREN WITH INNER EAR MALFORMATIONS

Daniel Tollin: INTRACOCHELEAR PRESSURE TRANSIENTS DURING COCHLEAR IMPLANT ELECTRODE INSERTION

Adrien Eshraghi: FACTORS INFLUENCING LOSS OF RESIDUAL HEARING POST COCHLEAR IMPLANTATION

Manuel Manrique: MOVING TOWARDS A
DEXAMETHASONE-ELUTING ELECTRODE ARRAY
FOR COCHLEAR IMPLANTATION

Yasushi Naito: ELECTRICALLY EVOKED BRAINSTEM
RESPONSES OF PRELINGUALLY DEAFENED
CHILDREN WHO UNDERWENT SEQUENTIAL
BILATERAL COCHLEAR IMPLANTATION

Stefan Plontke (Guest): INTRALABYRINTHINE
SCHWANNOMAS – MANAGEMENT AND HEARING
REHABILITATION WITH COCHLEAR IMPLANTS

Malou Hultcrantz: MINIMALLY INVASIVE PONTO
SURGERY: A NEW SURGICAL TECHNIQUE FOR
BONE ANCHORED IMPLANTS

Wolf-Dieter Baumgartner: BETTER CLINICAL
OUTCOME OF BONEBRIDGE IMPLANTATION
THROUGH DIRECT PLACEMENT ON DURA?

Martin Kompis: LONG TERM BENEFIT OF BONE
ANCHORED HEARING SYSTEMS IN SINGLE SIDED
DEAFNESS

Terry Jones: HUMAN PAPILLOMAVIRUS (HPV)
OROPHARYNX CANCER IN THE UK – AN EVOLUTION
IN THE UNDERSTANDING OF DISEASE AETIOLOGY

Ken-ichi Nibu: EXPRESSION OF AMPHIREGULIN IN
MUCOEPIDERMOID CARCINOMA OF THE MAJOR
SALIVARY GLANDS

Gaetano Paludetti: ANTIOXIDANT THERAPY
PREVENTS HEARING LOSS INDUCED BY CISPLATIN
AND MODULATES THE CANCER CELL SURVIVAL
AND PROLIFERATION

Akihiro Shiotani: SWALLOWING AND VOCAL
FUNCTION AFTER TRANSORAL
VIDEOLARYNGOSCOPIC SURGERY (TOVS) FOR
LARYNGOPHARYNGEAL CANCER

Janet Wilson: QUALITY vs. QUANTITY OF LIFE IN
LARYNGEAL CANCER: A TIME TRADE-OFF (TTO)
STUDY

Eben Rosenthal: LACK OF CONSENSUS BETWEEN
PATIENTS AND DOCTORS: SHOULD OUR HEALTH
SYSTEMS ALLOW RAPID ELECTRONIC RELEASE OF
CANCER RESULTS TO PATIENTS?

Antti Mäkitie: BIOELECTRIC IMPEDANCE ANALYSIS
OF HEAD AND NECK CANCER PATIENTS AT
PRESENTATION

WEDNESDAY, August 31st

POSTER SESSION 2

Chairs: Henri Marres and Ashley Wackym

Jong Woo Chung: OUTCOMES OF MIDDLE FOSSA
APPROACH IN UNILATERAL VESTIBULAR
SCHWANNOMAS

Oleg Borysenko: IMPLANTABLE CLOSED-LOOP
SYSTEM FOR RESTORATION OF EYE BLINKING IN
CASE OF UNILATERAL FACIAL NERVE PARALYSIS

Lela Migirov: THE USE OF ENDOSCOPES FOR
CHOLESTEATOMA SURGERY IN CHILDREN

Yun-Hoon Choung: THE CLINICAL SIGNIFICANCE OF
'ATTICOSINOPLASTY' FOR EARLY CHOLESTEATOMA
MANAGEMENT

Ken Kitamura: MIDDLE EAR TUBERCULOSIS - RE-
EMERGING PROBLEM

Olivier Deguine: UNILATERAL HEARING LOSS:
CORRELATION WITH QUALITY OF LIFE AND BRAIN
ACTIVITY BY fMRI

Rudolf Probst: SIDE DIFFERENCE OF SPEECH
AUDIOMETRY IN SINGLE-SIDED DEAFNESS

Orhan Ozturan: DOSE-DEPENDENT OTOTOXICITY OF
ASPARTAME IN RATS

Ana Salome Sánchez del Rey: COMPARATIVE
MORPHOLOGIC AND MORPHOMETRIC STUDY
ABOUT GENICULATE GANGLION DEVELOPMENT IN
MAN AND IN RAT

Brian Blakley: REDOX CONSIDERATIONS IN THE EAR

Henryk Skarzynski: EXPANDING COCHLEAR IMPLANT
CANDIDACY: A CASE STUDY OF ELECTRO-NATURAL
STIMULATION (ENS) IN PARTIAL DEAFNESS
TREATMENT

Karl-Bernd Hüttenbrink: A NEW THEORY INTERPRETS THE CHOLESTEATOMA AS AN OVERSHOOTING SELF-HEALING MECHANISM OF THE RETRACTING SKIN, CONTACTING AND CURING AN UNDERLYING INFLAMMATION IN THE TYMPANIC CAVITY

Hans Scherer: ABOUT THE WOODPICKER PHENOMENON. HOW THE EFFERENT VESTIBULAR SYSTEM IS DEALING WITH PREDICTABLE IMPACTS?

Rick Friedman: Dcc MEDIATES AXONAL PATH FINDING AND SYNAPTOGENESIS IN THE MOUSE PERIPHERAL VESTIBULAR SYSTEM

Jay Rubinstein: AN IMPROVED IMPLANTABLE VESTIBULAR NEUROSTIMULATOR

Anneliese Schrott-Fischer: HIGH RESOLUTION MICRO CT SCANNING OF THE HUMAN LABYRINTH TO ASSESS ANATOMICAL VARIABILITY FOR A VESTIBULAR ELECTRODE DESIGN

Anthony W. Gummer: A NEW METHOD TO RELIABLY AND QUICKLY EVALUATE COCHLEAR FUNCTION USING SHORT-PULSE DISTORTION PRODUCT OTOACOUSTIC EMISSION

Shin-ichi Usami: EAS IN CHILDREN – WITH SPECIAL REFERENCE TO ETIOLOGY

Juichi Ito: IMPLANTABLE ARTIFICIAL AUDITORY EPITHELIUM IN THE INNER EAR

Kaoru Ogawa: COCHLEAR CELL MODELING USING DISEASE-SPECIFIC iPSC UNVEILED A DEGENERATIVE PHENOTYPE AND TREATMENT OF PENDRED SYNDROME

Anna Carolina Fonseca: MASTOID OBLITERATION WITH PARTICULATED FROZEN ALLOGRAFT BONE

Seung Ha Oh: AUGMENTED VIRTUAL REALITY OPTIMALLY INTEGRATED WITH MICROSCOPIC VISUAL FIELD FOR OTOLOGIC SURGERY

Takashi Nakagawa: BONE DESTRUCTION MECHANISM IN CHOLESTEATOMA

Wei-Chung Hsu (Guest): TREATMENT OUTCOMES OF SUPRAGLOTTOPLASTY FOR PEDIATRIC OBSTRUCTIVE SLEEP APNEA: A META-ANALYSIS

Pa-Chun Wang: HEARING CARE FOR CHILDREN WITH OTITIS MEDIA WITH EFFUSION - A NATIONAL SURVEY

Kimitaka Kaga: SOUND LATERALIZATION ABILITY IN PATIENTS WITH BILATERAL MICROTIA AND ATRESIA AFTER BILATERAL RECONSTRUCTION OF THE AURICLE AND EXTERNAL CANAL AND FITTING OF NEW CANAL-TYPE HEARING AIDS FROM A BONE CONDUCTION HEARING AID

Claude-Henri Chouard: DID NAPOLEON SUFFER FROM CHRONIC RHONCHOPATHY?

Per Gisle Djupesland: EFFECTS OF EXHALED CO₂ FROM BREATH POWERED™ BI-DIRECTIONAL™ (BPBD) DELIVERY ON MUCOSAL PH OFFER POTENTIAL SYNERGIES WITH DRUG ACTIVITY IN MIGRAINE AND INFLAMMATORY DISEASES

Philippe Rombaux: MRI OF THE OLFACTORY APPARATUS IN OLFACTORY DYSFUNCTION

Douglas Mattox: REVIEW OF A SINGLE SURGEON'S STAPES CASES PERFORMED WITH A NICKEL TITANIUM PROSTHESIS (2002-2014)

Sho Kanzaki (Guest): NOVEL IN VIVO IMAGING ANALYSIS OF AN INNER EAR DRUG DELIVERY SYSTEM: DRUG AVAILABILITY IN INNER EAR FOLLOWING DIFFERENT DOSE OF SYSTEMIC DRUG INJECTIONS

