

Wednesday, June 15

19:00 WELCOME RECEPTION AT THE CONGRESS VENUE

Thursday, June 16

Session A

08:00 OPENING

József Géza Kiss, László Rovó

Patronage: Ministry of Human Capacities, Secretariat for Health

dr. János Mészáros, Acting Minister of State

Prof. Dr. Gábor Szabó, Rector of the University of Szeged

Prof. Dr. Ferenc Bari, Dean, Faculty of Medicine, University of Szeged

08:15 - 09:45 INTRAOPERATIVE MONITORING I.

(Structured section I. A)

Chairs: Stephen J. O'Leary, József Géza Kiss

08:15 KEYNOTE SPEAKER 1.

To monitor cochlear function during cochlear implantation and determine correlations with postoperative acoustic hearing

Stephen J. O'Leary¹, Luke C. Campbell¹, Robert Briggs¹, Arielle Kaicer²

¹Department of Surgery (Otolaryngology), Univ. of Melbourne, East Melbourne, Australia,

²Cochlear Implant Clinic, Royal Victorian Eye and Ear Hosp., East Melbourne, Australia.

1

08:40 Electrode array tip foldover detection by intraoperative spread of excitation measurements

Tim Liebscher, Frank Digeser, Ulrich Hoppe

Cochlear Implant Centrum CICERO, Department of Audiology, ENT-clinic, University of Erlangen-Nuremberg, Germany

08:50 A voltage telemetry technique for estimating cochlear implant electrode angular insertion depth

Ryan O. Melman¹, Ralf Greisiger², Joseph Giorgio³, Paul M. Carter¹, Greg E. Jablonski², Marie Bunne², Hilde Korslund⁴, Per K. Hol⁴, Nick Pawsey¹, Frank Risi¹

¹Cochlear Limited, Sydney Australia

²Department of Otolaryngology, Oslo University Hospital, Oslo Norway

³Department of Psychology, University of Cambridge, Cambridge UK.

⁴The Intervention Centre, Oslo University Hospital, Oslo, Norway

09:00 Intra-operative assessment of Direct Acoustic Cochlear Implant functioning using ABRs and ASSRs

Hanne Deprez^{1,2}, Robin Gransier¹, Michael Hofmann¹, Marc Moonen², Jan Wouters¹, Nicolas Verhaert^{1,3}

¹ExpORL, Dept. of Neurosciences, KU Leuven, Leuven, Belgium

²STADIUS, Dept. of Electrical Engineering (ESAT), KU Leuven, Leuven, Belgium

³Head and Neck Surgery, Dept. of Otolaryngology, University Hospitals Leuven, Leuven, Belgium

09:10 Intraoperative Electrocochleography During Cochlear Implant Surgery

W. Jason Riggs¹, Michael Harris¹, Oliver Adunka¹, Kanth Koka²

¹Ohio State University Wexner Medical Center, Department of Otolaryngology – Head and Neck Surgery

²Advanced Bionics LLC – Research and Technology

09:20 **Extra- and intracochlear electrophysiological recordings during cochlear implantation**

S. Haumann^{1,2}, V. Helmstaedter^{1,2}, H. Maier^{1,2}, Th. Lenarz^{1,2}

¹ENT Department, Medical School Hannover

²Cluster of Excellence Hearing4All

09:45 BREAK

10:15 - 12:00 INTRAOPERATIVE MONITORING II.

(Free paper section I. B)

Chairs: Douglas C Fitzpatrick, Andreas Buechner, Adam Perenyi

10:15 **KEYNOTE SPEAKER 2.**

Fine-Grain ART study

Lutz Gärtner

Hannover Medical School, Department Of Otolaryngology, Hannover, Germany

10:40 **Monitoring Cochlear Physiology Using Extracochlear Electrocochleography during Implant Insertion**

Douglas C Fitzpatrick¹, Chris Giardina¹, Tatyana Fontenot¹, Oliver F Adunka², Craig A Buchman³, Harold C. Pillsbury¹, Kevin D. Brown¹

¹Dept. of Otolaryngology and Head and Neck Surgery, University of North Carolina, Chapel Hill NC, 27514 USA

²Dept. of Otolaryngology-Head and Neck Surgery, The Ohio State University, Columbus OH, 43212 USA

³Dept. of Otolaryngology-Head and Neck Surgery, Washington University School of Medicine, St. Louis, MO 63110 USA

10:50 **Electrocochleography to Monitor Cochlear Function During Cochlear Implantation**

Huber A, Dalbert A, Pfiffner F, Veraguth D, Roosli C,

University of Zurich, Switzerland, Department of Otorhinolaryngology – Head and Neck Surgery

11:00 **Optimizing electrode array position of the Cochlear CI532 Slim Modiolar electrode array with per-operative fluoroscopy and Evoked Compound Action Potentials**

Ralf Greisiger¹, Hilde Korslund², Marie Bunne¹, Greg Eigner Jablonski¹, Per Kristian Hol²

¹Department of Otolaryngology, Oslo University Hospital, Norway

²Intervention Centre, Oslo University Hospital, Norway

11:10 **Electrically evoked potentials of the apical and medial region of the cochlea in children implanted with deep insertion electrodes**

Raquel Lopes-Fontanelli, Ana Adelina Della Torre, M. Valéria Schmidt Goffi-Gomez, Roberto Beck, Liliane Ikari, Robinson Koji Tsuji, Rubens Brito Neto, Ricardo Ferreira Bento

Otorhinolaryngology Division of Clinical Hospital of the Faculty of Medicine from the University of São Paulo

11:20 **Electrocochleography for Monitoring of Residual Hearing during and after Cochlear Implantation**

Andreas Buechner, Sabine Haumann, Benjamin Krueger, Kanthiah Koka, Gunnar Geissler, Thomas Lenarz

Department of Otolaryngology, Hannover Medical School, Germany

11:30 **Intraoperative testing of Cochlear Nucleus electrodes – CI512 vs. CI532**

Adam Perenyi, Ferenc Toth, Balazs Dimak, Greta Csorba, Balint Posta,

Alice Szamoskozi, Jozsef Jori, Jozsef Geza Kiss, Laszlo Rovo

Department of Otorhinolaryngology, Head and Neck Surgery, University of Szeged, Hungary

- 11:40 **Attenuation of noise induced hearing loss by near-infrared-light pre-treatment**
D. Basta¹, I. Strübing¹, M. Gröschel¹, D. Jiang², P. Boyle³, A. Ernst¹
¹Dept. of Otolaryngology at UKB, University of Berlin, Germany,
²Dept. of Otolaryngology at St Thomas' hospital, University of London, UK
³Advanced Bionics European Research Center, Hanover, Germany
- 11:50 **Chronic animal model of cochlear implantation in guinea pigs: interests and applications for comparison of loudness coding using pulse amplitude or pulse duration**
Dan Gnansia¹, Victor Adenis², Boris Gourévitch², Matthieu Recugnat¹, Pierre Stahl¹, Elisabeth Mammelle³, Yann Nguyen³, Jean-Marc Edeline²
¹Oticon Medical CI Scientific Research, Vallauris France
²NeuroPSI UMR CNRS9197, Paris-Sud Univ., Orsay, France
³UMR-S 1159 INSERM/UPMC Paris 6 Univ., Pitié Salpêtrière Hospital, Paris, France
- 12:00 LUNCH**
- 13:00 INDUSTRY SYMPOSIUM**
- 14:00 - 15:30 IMAGINE TECHNIQUES**
(Structured section II. C)
Chairs: J.H.M. Frijns, Gábor Katona, János Jarabin
- 14:00 **KEYNOTE SPEAKER 3.**
Imaging to avoid trauma
J.H.M. Frijns
ENT-department, Leiden University Medical Center, Leiden, The Netherlands
- 14:25 **Audiovisual speech recognition in cochlear implant users measured with functional near-infrared spectroscopy**
M.M. van Wanrooij¹, L.P.H. van de Rijt², A. Roye¹, E.A.M Mylanus², A.F.M. Snik², A.J. van Opstal¹
¹Department of Biophysics, Donders Institute for Brain, Cognition, and Behaviour, Radboud University, Nijmegen, Netherlands
²Department of Otorhinolaryngology, Donders Institute for Brain, Cognition, and Behaviour, Radboudumc, Nijmegen, Netherlands
- 14:35 **Electrophysiologic detection of scalar changing perimodiolar cochlea electrode arrays: a follow-up study**
P. Mittmann, A. Ernst, G. Rademacher, S. Mutze, S. Lang, D. Arweiler-Harbeck, F. Christov, I. Todt
Department of Otolaryngology, Head and Neck Surgery, Unfallkrankenhaus Berlin, Germany
- 14:45 **Predicting the degree of difficulty in cochlear implant surgery – the use of an objectively structured imaging based grading system**
Ameet Kishore¹, Ashwani Kumar¹, Neevita Narayan²
¹Indraprastha Apollo Hospital, New Delhi, India
²SpHear Speech & Hearing Clinic, New Delhi, India
- 14:55 **MRI based estimation of scalar cochlear implant electrode position**
I. Todt¹, A. Stratmann¹, G. Rademacher², P. Mittmann¹, G. Grupe¹, S. Hofmann¹, S. Mutze², A. Ernst¹
¹Unfallkrankenhaus Berlin, Germany, Department of Otolaryngology, Head and Neck Surgery,
²Unfallkrankenhaus Berlin, Germany, Department of Radiology
- 15:05 **Deconvolution of Spread of Excitation Curves: Towards Identification of the Excitation Area**
J.D. Biesheuvel, J.J. Briaire and J.H.M. Frijns
ENT-department, Leiden University Medical Center, Leiden, The Netherlands



15:15 **Objective functional peri-implant vascular analysis in Baha implantees**

János Jarabín¹, Zsófia Bere¹, Ádám Perényi¹, Petra Hartmann², Ferenc Tóth¹, László Rovó¹,
József Géza Kiss¹

¹Department of Otorhinolaryngology and Head-Neck Surgery, University of Szeged, Hungary

²Institute of Surgical Research, University of Szeged, Hungary

15:30 BREAK

16:00 - 18:20 ECAP DETECTION I.

(Free paper section II. D)

Chairs: Carolin Frohne-Buechner, J.M. Deeks, Imre Gerlinger

16:00 **Non-linear behavior of the amplitude growth functions of electrically evoked compound action potentials at higher stimulation levels**

Carolin Frohne-Buechner¹, Matthias Hey², Britta Boehnke², Lutz Gaertner⁴, Stefan Fredelake¹,
Idrick Akhoun¹, Joachim Mueller-Deile³, Andreas Buechner⁴

¹Advanced Bionics GmbH, European Research Center, Hannover

²Klinik für Hals-, Nasen-, Ohrenheilkunde, Kopf- und Halschirurgie, Universitätsklinikum Schleswig-Holstein

³Audiology Consultant, Kiel

⁴Klinik und Poliklinik für Hals-Nasen-Ohrenheilkunde, Medizinische Hochschule Hannover

16:10 **Evaluation of eCAP Thresholds Derived from Amplitude Growth Functions**

J.H.M. Frijns, J.D. Biesheuvel and J.J. Briaire

ENT-department, Leiden University Medical Center, Leiden, The Netherlands

16:20 **The Accuracy of Electrically Evoked Compound Action Potential Threshold Measurements**

J.J. de Vos, P.S. Boot, J.J. Briaire and J.H.M. Frijns

ENT-department, Leiden University Medical Center, Leiden, The Netherlands

4

16:30 **Behavioural and ECAP measures of temporal processing in cochlear implant listeners at switch-on and 2 months later**

J.M. Deeks¹, A.J. Billig¹, F. Guérit¹, Y. Tam², R.P. Carlyon¹

¹MRC Cognition and Brain Sciences Unit, Cambridge, UK.

²Addenbrooke's NHS Trust, Cambridge, UK.

16:40 **ECAP Characteristics and Artifacts for Diverse Recording Electrodes**

Konrad E. Schwarz¹, Stefan B. Strahl¹, Philipp Spitzer¹, Angelika Dierker¹, Florian Schwarze¹,
Santiago L. Arauz², Marcus Atlas², Wolf-Dieter Baumgartner², Marco Caversaccio², Han
DeMin², Javier Gavilán², Benoit Godey², Joachim Müller², Lorne Parnes², Christopher H. Raine²,
Gunesh Rajan², José Antonio Rivas², Henryk Skarzynski², Yuri Yanov², Patrick Zorowka², Paul
van de Heyning²

¹MED-EL HQ, Innsbruck, Austria;

²Members of HEARING, Network of Comprehensive Hearing Implant Centers

16:50 **Characterization of Electrically Evoked Compound Action Potentials in Patients with a Hybrid Cochlear-Vestibular Implant**

T.A.K. Nguyen¹, K. Schwarz², S. Cavuscens³, M. Ranieri³, S. Micera^{1,4}, A. Perez-Fornos³

¹Bertarelli Foundation Chair in Translational Neural Engineering, Center for Neuroprosthetics, EPF Lausanne, Switzerland

²MED-EL, Innsbruck, Austria

³Cochlear Implant Center for French Speaking Switzerland, Service of Otolaryngology-Head & Neck Surgery, Geneva University Hospitals, Rue Gabrielle-Perret-Gentil 4, 1211 Geneva, Switzerland

⁴BioRobotics-Institute, Scuola Superiore Sant'Anna, P.za Martiri della Libertà 33, 56127 Pisa, Italy



- 17:00 **Amplitudes of Electrically Evoked Compound Action Potentials in Children and Adults**
Ulrich Hoppe, Thomas Hocke, Tim Liebscher, Frank Digeser
Cochlear Implant Centrum CICERO, Department of Audiology, ENT-clinic, University of Erlangen-Nuremberg, Germany
- 17:10 **Recordings of acoustic evoked potentials directly from the different places of cochlea via intracochlear electrodes in cochlear implantees**
A. Walkowiak¹, A. Lorens¹, M. Polak², H. Skarzyński¹
¹*World Hearing Center, Institute of Physiology and Pathology of Hearing, Kajetany/Warsaw, Poland*
²*Med-EL, Innsbruck, Austria*
- 17:20 **Assessing the firing properties of the electrically stimulated auditory nerve using a convolution model**
Dyan Ramekers^{1,2}, Stefan B. Strahl³, Marjolijn M.B. Nagelkerke¹, Konrad E. Schwarz³, Philipp Spitzer³, Sjaak F.L. Klis^{1,2}, Huib Versnel^{1,2}
¹*Department of Otorhinolaryngology and Head & Neck Surgery, University Medical Center Utrecht, Utrecht, the Netherlands;*
²*Brain Center Rudolf Magnus, Utrecht, the Netherlands;*
³*R&D MED-EL GmbH, Innsbruck, Austria*
- 17:30 **Cochlea Health Measurements To Show The Efficiency Of Steroid Treatment During Cochlear Implantation Using A Cochlear Catheter**
Lutz Gärtner, Athanasia Warnecke, Ariane Römer, Verena Scheper, Thomas Lenarz
Hannover Medical School, Department Of Otolaryngology, Hannover, Germany
- 17:40 **Myographic Recordings of the Electrically and Acoustically Elicited Stapedial Reflex with a Chronically Implanted Recording Electrode**
M. Gröschel¹, D. Basta¹, R.-D. Battmer¹, P. Boyle², A. Ernst¹
¹*Dept. of Otolaryngology at UKB, University of Berlin, Germany,*
²*Advanced Bionics European Research Center, Hanover, Germany*
- 17:50 **Changes in the temporal response of the auditory nerve over time: Recovery function after 12 months of cochlear implant use**
Cintia Tizue Yamaguchi (Yamaguchi CT)¹, Maria Valéria Schmidt Goffi-Gomez (Goffi-Gomez MVS)², Manoel da Silva Filho (da Silva Filho M)¹
¹*Neuroengineering Laboratory of the Federal University of Pará-Brazi*
²*Otorhinolaryngology Division of Clinical Hospital of the Faculty of Medicine from the University of São Paulo*
- 18:00 **Are spread of excitation and neural response refractory time influenced by electrode array type?**
Maria Valéria Schmidt Goffi-Gomez; Ana Tereza Magalhães; Robinson Koji Tsuji; Rubens Vuono de Brito Neto; Ricardo Ferreira Bento
Hospital das Clínicas da Faculdade de Medicina da Universidade de São Paulo. Brazil
- 18:10 **Modelling the physiology of Spiral Ganglion Neuron electro-stimulation**
Matthieu Recugnat¹, Jaime Undurraga¹, David McAlpine¹
Macquarie University, Sydney, NSW, Australia

20:00 OPTIONAL SOCIAL PROGRAMS



Session B

10:40 - 12:00 DIAGNOSTIC, BONE CONDUCTION

(Free paper section I. BB)

Chairs: Flurin Pfiffner, M. Van Eeckhoutte, Adrienn Németh

10:40 **Wave propagation on the surface of the skull in bone conduction stimulation**

Röösli C¹, Dobrev I¹, Sim JH¹, Pfiffner F¹, Dalbert A¹, Stenfelt S², Huber AM¹

¹University Hospital Zurich

²Linköping University

10:50 **Intracochlear Sound Pressure Measurements with a Newly Developed MEMS Condenser-Microphone-Based Sensor**

Flurin Pfiffner¹, Lukas Prochazka^{2,3}, Dominik Péus¹, Ivo Dobrev¹, Adrian Dalbert¹, JaeHoon Sim¹, Dominik Obrist⁴, Joris Walraevens⁵, Francesca Harris⁵, Christof Röösli¹, Alexander Huber¹

¹University of Zurich, University Hospital Zurich, Dept. Otorhinolaryngology, Head and Neck Surgery, Zurich, Switzerland

²Institute of Fluid dynamics, Swiss Federal Institute of Technology (ETHZ), Zurich, Switzerland

³Streamwise GmbH, Technoparkstrasse 1, 8005 Zurich, Switzerland

⁴ARTORG Center, University of Bern, Switzerland

⁵Cochlear Technology Centre Belgium

11:00 **Nasal sound pressure as verification of a Bone Conduction Implant**

Sabine Reinfeldt¹, Bo Håkansson¹, Karl-Johan Fredén Jansson¹, Cristina Rigato¹, Måns Eeg-Olofsson²

¹Dept of Signals and Systems, Chalmers University of Technology, Gothenburg, Sweden

²Dept of Otorhinolaryngology, Head and Neck Surgery, Sahlgrenska University Hospital, Sahlgrenska Academy, University of Gothenburg, Gothenburg, Sweden

11:10 **Promontory electrically auditory brainstem response recording with MED-EL clinical system**

Giacomo Mandruzzato¹, Marek Polak¹

¹R&D, MED-EL GmbH, Innsbruck, Austria

11:20 **Use of aided cortical assessment in cochlear implant candidacy evaluation**

Laurie Behar, Muammer Gulekin, Julie Kosaner

Meders speech and Hearing Clinic, Kadikoy, Istanbul, Turkey

11:30 **How steady is the auditory steady-state response?**

M. Van Eeckhoutte, R. Luke, J. Wouters, T. Francart

ExpORL, Dept. Neurosciences, KU Leuven, Belgium

11:45 **New Finding ABR's Character as a Tool in children with Speech Delay with Unknown Cause**

Susan Abdi

Department of Cochlear Implantation Clinic, General Surgery, Tehran University of Medical Sciences, Tehran, Iran

11:50 **Objective estimation of the bone conduction hearing threshold**

Vera Matievics, Ferenc Tóth, Linda Szabó, Balázs Dimák, János Jarabin, Ádám Perényi, József Jóri, László Rovó, József Géza Kiss

Department of Otorhinolaryngology and Head-Neck Surgery, University of Szeged, Hungary

12:00 LUNCH

13:00 BREAK

16:00 - 18:00 EXAMINATION OF THE CORTICAL FUNCTION I.

(Free paper & poster section II. DD)

Chairs: László Tamás, Paul Kileny, Ferenc Tóth

16:00 The acoustic change complex and its relation to speech perception in noise in sensorineural hearing impairment

B.M.D. Vonck¹, M.J.W. Lammers¹, W.A.A. Schaake¹, G.A. van Zanten¹, H. Versnel¹, W. Grolman¹

¹Department of Otorhinolaryngology and Head & Neck Surgery, University Medical Center Utrecht

16:10 Auditory evoked responses to pitch matched stimuli in unilateral cochlear implant users with residual hearing in the non-implanted ear

Chin-Tuan Tan¹, Brett Martin², and Mario Svirsky¹

¹Department of Otolaryngology, NYU School of Medicine

²Speech and Hearing Sciences, CUNY

16:20 Working memory capacity and its influence on hearing in cochlear implant users

Hanna Bönitz^{1,2}, Andreas Büchner^{1,2}, Bruno Kopp³, Mareike Finke^{1,2}

¹Department of Otolaryngology, Hannover Medical School, Germany

²Cluster of Excellence "Hearing4all"

³Department of Neurology, Hannover Medical School, Germany

16:30 Auditory and Audio-visual Processing in Individuals with Auditory Implants: Electrophysiological Findings in Cochlear, Auditory Brainstem and Auditory Midbrain Implant Patients

Irina Schierholz^{1,2}, Mareike Finke^{1,3}, Andrej Kral^{1,4}, Thomas Lenarz^{1,3}, Reinhard Dengler^{1,2}, Sabine Haumann^{1,3}, Pascale Sandmann^{1,2,5}

¹Cluster of Excellence „Hearing4all“, Germany

²Department of Neurology, Hannover Medical School, Germany

³Department of Otolaryngology, Hannover Medical School, Germany

⁴Institute of Audioneurotechnology, Hannover Medical School, Germany

⁵Department of Otorhinolaryngology, University of Cologne, Germany

16:40 Bimodal processing with AEP recordings, part I: evidence from the cognitive P300 auditory Event-Related Potential

Van Yper L.N.^{1,2}, Dhooge I.J.M.^{1,2}, Vermeire K.³, De Vel E.F.J.², Beynon A.J.⁴

¹Department of Otorhinolaryngology, Ghent University, De Pintelaan 185, 1P1, B-9000 Ghent, Belgium

²Department of Otorhinolaryngology, Ghent University Hospital, De Pintelaan 185, 1P1, B-9000 Ghent, Belgium

³Long Island Jewish Hospital, 430 Lakeville Road, New Hyde Park, New York 11040, USA

⁴Radboud University Medical Centre, Donders Institute for Brain, Cognition and Behaviour Centre for Neuroscience, Department of Otorhinolaryngology, Head and Neck Surgery, Philips van Leijdenlaan 15, 6525 EX Nijmegen, The Netherlands

16:50 Electrophysiological Measurement of Pitch Perception in Cochlear Implant (CI) users

Luise Wagner, Stefan Plontke, Torsten Rahne

University Hospital Halle (Saale), Department of Otorhinolaryngology, Halle Hearing and Implant Center, Halle (Saale), Germany

17:00 Cortical Auditory Evoked Potentials in CI users

Madalina Georgescu, Magdalena Cernea

Institute of Phono-Audiology and E.N.T. Functional Surgery, OTOMED Medical Center, Romania



- 17:10 **Measuring benefits from transformation of lost segregation cues in hearing devices with Acoustical Change Complex**
Niels Henrik Pontoppidan¹, Marianna Vatti¹, Filip Marchman Rønne¹, Abin Kuruvilla Mathew², Suzanne Purdy²
¹Eriksholm Research Centre, Oticon A/S, Denmark
²School of Psychology, University of Auckland, New Zealand
- 17:20 **The time course of top-down processing during speech perception by normal hearing and CI users**
Anita Wagner^{1,2}, Deniz Başkent^{1,2}
¹University of Groningen, University Medical Centre Groningen Department of Otorhinolaryngology/Head and Neck Surgery Groningen, The Netherlands
²Graduate School of Medical Sciences, School of Behavioral and Cognitive Neuroscience, University of Groningen
- 17:25 **Electrically evoked auditory brainstem responses and acoustic change complexes in adolescents with sequential bilateral cochlear implants**
B.M.D. Vonck¹, M.J.W. Lammers¹, G.J.J. Ramakers¹, G.A. van Zanten¹, H. Versnel¹, W. Grolman¹
¹Department of Otorhinolaryngology and Head & Neck Surgery, University Medical Center Utrecht
- 17:30 **Determining free field detection thresholds in cochlear implant users using a clinical single-channel cortical auditory evoked potential recording device**
Bram Van Dun^{1,2}, Nicky Chong-White^{1,2}, Robert Cowan^{1,3}
¹The HEARing Cooperative Research Centre, Melbourne
²The National Acoustic Laboratories, Sydney
³The University of Melbourne, Melbourne
- 17:35 **Cochlear implant in prelingually deafened adolescents: road blocks**
Chandrakant Vishwakarma¹, Rupali Mathur¹, Dr. Rajesh Vishwakarma²
¹Audiologist & Speech Language Pathologist at Shabda-Brahma Speech & Hearing Clinic, Ahmedabad, INDIA
²Prof & Head of E.N.T at B.J. Medical College & Civil Hospital, Ahmedabad
- 17:40 **Decoding Speech Sound Source Direction from Electroencephalography Data using Cochlear Implant VoCoder Simulations**
W. Nogueira¹, I. Schieholz², C. Kantzke²
¹Hearing4all, Dept. of Otolaryngology, Hannover Medical University, Hannover, Germany
²Hearing4all, Dept. of Neurology, Hannover Medical University, Hannover, Germany
- 17:45 **Early hearing loss diagnosis based on consanguineous marriages and methods of rehabilitation of patients**
D.I. Kholmatov, T.R. Halimova
Department of Otorhinolaryngology, Avicenna Tajik State Medical University, Tajikistan
- 17:50 **Measurement of Residual Cochlear Physiology Using Electrocochleography: Correlations with Speech Perception Outcomes in Adults and Children**
Douglas C Fitzpatrick¹, Tatyana Fontenot¹, Margaret Dillon¹, Meredith Anderson¹, Holly Teagle¹, Lisa Park¹, Oliver F Adunka², Craig A Buchman³, Harold C. Pillsbury¹, Kevin Brown¹
¹Dept. of Otolaryngology and Head and Neck Surgery, University of North Carolina, Chapel Hill NC, 27514 USA
²Dept. of Otolaryngology-Head and Neck Surgery, The Ohio State University, Columbus OH, 43212 USA
³Dept. of Otolaryngology-Head and Neck Surgery, Washington University School of Medicine, St. Louis, MO 63110 USA



17:55 **Use of aided cortical assessment to track auditory maturation of objectively programmed, paediatric, cochlear implant users**

Julie Kosaner¹, Ozgur Yigit², Muammer Gultekin¹, Svetlana Bayguzina¹

¹*Meders speech and Hearing Clinic, Kadikoy, Istanbul, Turkey*

²*Istanbul Training and Research Hospital, Samatya, Istanbul, Turkey*

20:00 OPTIONAL SOCIAL PROGRAMS

Friday, June 17

Session A

08:00 INDUSTRY SYMPOSIUM

09:00 - 10:30 EXAMINATION OF THE CORTICAL FUNCTION II.

(Structured section III. E)

Chairs: K.A. Gordon, George Tavartkiladze, József Géza Kiss

09:00 KEYNOTE SPEAKER 4.

Imaging bilateral developmental plasticity: evidence from children with bilateral cochlear implants, bimodal devices, and normal hearing

Gordon, K.A.¹, Polenenko, M., Easwar, V., Yamazaki, H., Papsin, B.C.

¹Department of Otolaryngology - Head and Neck Surgery, University of Toronto, Canada

09:25 **Artifact or entrainment? Coherence between brain activity and speech in EEG recordings with cochlear implant users**

Anita Wagner^{1,2}, Natasha Maurits^{2,3}, Deniz Başkent^{1,2}

¹University of Groningen, University Medical Centre Groningen Department of Otorhinolaryngology/Head and Neck Surgery Groningen, The Netherlands

²Graduate School of Medical Sciences, School of Behavioral and Cognitive Neuroscience, University of Groningen

³University of Groningen, University Medical Centre Groningen Department of Neurology, Groningen, The Netherlands

09:35 **Cortical auditory evoked potentials in patients with cochlear implants**

George Tavartkiladze¹, Vigen Bakhshinyan¹, Tatiana Chugunova¹, Marina Goykyburg¹, Bram Van Dun^{2,3}

¹National Research Centre for Audiology and Hearing Rehabilitation, Moscow, Russia

²National Acoustical Laboratories, Sydney, Australia

³The HEARing CRC, Melbourne, Australia

09:45 **Speech intelligibility and verbal abilities in cochlear implant users – what we can learn from objective measures**

Mareike Finke^{1,2}, Pascale Sandmann^{1,4,5}, Hanna Bönitz², Esther Ruigendijk^{1,3}, Andreas Büchner^{1,2}

¹Cluster of Excellence "Hearing4all"

²Department of Otolaryngology, Hannover Medical School, Germany

³Department of Dutch, University of Oldenburg, Germany

⁴Department of Neurology, Hannover Medical School, Germany

⁵Department of Otorhinolaryngology, University of Cologne, Germany

09:55 **The acoustic change complex as an objective measure of electrode discrimination in adult cochlear implant users**

R.G. Mathew¹, J. Undurraga^{1,2}, G. Li¹, P. Boyle³, D. Vickers¹

¹UCL Ear Institute, 332 Grays Inn Road, London, WC1X 8EE, UK

²Department of Linguistics, The Australian Hearing Hub, 16 University Avenue, Macquarie University, NSW 2109, Australia

³Advanced Bionics GmbH, European Research Centre, Feodor-Lynen Str. 35, 30625 Hannover, Germany

10:05 **Comparison of BAHA sound processors with cortical evoked responses**

József Géza Kiss, Ferenc Tóth, Orsolya Beöthy-Fehér, Balázs Dimák, János Jarabin, Vera

Matievics, Attila Nagy, Ádám Perényi, József Jóri, László Rovó

Department of Otorhinolaryngology and Head-Neck Surgery, University of Szeged, Hungary



- 10:15 **Assessing spatial hearing by utilizing the mismatch negativity response**
Katharina Vogt¹, Anja Roye¹, Luuk van de Rijt², Andy J Beynon^{2,3}, Marc M van Wanrooij¹,
Martijn JH Agterberg¹, Ad Snik²
¹Department of Biophysics, Donders Institute for Brain, Cognition and Behaviour, Radboud University, Nijmegen, The Netherlands
²Hearing & Implants, Donders Institute for Brain, Cognition and Behaviour, Centre for Neuroscience Radboud University Medical Centre, Nijmegen, The Netherlands
³Vestibular & Auditory EP Lab, Dept Otorhinolaryngology, Radboud University Medical Centre, Nijmegen

10:30 BREAK

11:00 - 12:00 EXAMINATION OF THE CORTICAL FUNCTION III.

(Free paper section III. F)

Chairs: Madalina Georgescu, Ferenc Tóth, László Tóth

- 11:00 **Objective assessment of stream segregation abilities of CI users as a function of electrode separation**
Andreu Paredes Gallardo, Sara Madsen, Torsten Dau and Jeremy Marozeau
Hearing Systems group, Department of Electrical Engineering, Technical University of Denmark, DK-2800, Kgs. Lyngby, Denmark
- 11:10 **Can you hear the difference? EEG-Based Single-Trial Deviant Detection in Cochlear Implant Users**
Martin Billinger^{1,2}, Mareike Finke^{1,2}, Andreas Büchner^{1,2}
¹Cluster of Excellence "Hearing4all", Hannover, Germany
²Department of Otolaryngology, Hannover Medical School, Hannover, Germany
- 11:20 **Representation of spatial cues processed with fine structure coding versus continuous interleaved sampling in cochlear implant users**
Torsten Rahne, Nico Heidekrüger, Stefan Plontke, Luise Wagner
University Hospital Halle (Saale), Dept. of Otorhinolaryngology, Martin-Luther-University, Halle (Saale), Germany
- 11:30 **Cortical evoked responses in patients with bilateral cochlear implants**
Ferenc Tóth, Beáta Szakáll, Norbert Balogh, Balázs Dimák, János Jarabin, Vera Matievics, Attila Nagy, Ádám Perényi, József Jóri, László Rovó, József Géza Kiss
Department of Otorhinolaryngology and Head-Neck Surgery, University of Szeged, Hungary
- 11:40 **Cortical neural manifestations of binaural processing in children using a cochlear implant and a contralateral hearing aid and in children using bilateral hearing aids**
Henkin Yael^{1,2}, Yaar-Soffer Yifat^{1,2}, Katz-Abitbul Rinat^{1,3}, LesriRavid¹, Hildesheimer Minka^{1,2}, Kaplan-Neeman Ricky^{1,2,3}
¹Department of Communication Disorders, Sackler Faculty of Medicine, Tel-Aviv University, Tel Aviv
²Hearing, Speech, and Language Center, Sheba Medical Center, Tel Hashomer
³Shema Koleno, Jerusalem, Israel
- 11:50 **Developing a new objective measure to quantify listening effort in cochlear implant users: a pilot study**
H. Willis, S. Rosen, D. Vickers
University College London

12:00 LUNCH

13:00 INDUSTRY SYMPOSIUM



14:00 - 15:40 FITTING I.

(Structured section IV. G)

Chairs: Norbert Dillier, Sandro Burdo, Marianna Küstel

14:00 KEYNOTE SPEAKER 5.

Objective measures for device fitting and coding strategy optimization

Norbert Dillier, Wai Kong Lai

Laboratory of Experimental Audiology, ENT Department, University Hospital, Zurich, Switzerland

14:25 Use of electrically elicited auditory brain stem responses, electrically elicited stapedial reflex thresholds and aided cortical assessment in programming of 2 paediatric auditory brainstem implant users

Julie Kosaner¹, Yildirim Bayazit², Ayca Ciprut³, Svetlana Bayguzina¹, Muammer Gultekin¹, Kerem Gonullu¹

¹*Meders Hearing and Speech Center, Istanbul, Turkey*

²*Department of Otolaryngology, Faculty of Medicine, Medipol University, Istanbul, Turkey*

³*Marmara Univ. Hosp., Istanbul, Turkey*

14:35 Recovery characteristics for ECAP measurement utilizing short pulse intervals

M. Hey¹, H. Hessel², J. Müller-Deile³, M. Killian⁴

¹*ENT Clinic, UKSH Kiel, Germany*

²*CochlearDeutschland GmbH & Co. KG*

³*Audiology Consultant Kiel, Germany*

⁴*Cochlear Technology Center, Mechelen, Belgium*

14:45 Correlation between psychometric data and threshold obtained from auditory response telemetry

S. Hoth¹, P. Spitzer², M. Praetorius¹

¹*Univ.-HNO-Klinik Heidelberg, Germany*

²*MED-EL Company Innsbruck, Austria*

14:55 Clinical validation of a personalized model of the electrically stimulated auditory nerve

W. Nogueira¹, A. Büchner¹, I. Akhoun³, C. Frohne-Büchner³, G. Ashida²

¹*Hearing4all, Dept. of Otolaryngology, Hannover Medical University, Hannover, Germany,*

²*Hearing4all, Dept. of Neuroscience, University of Oldenburg, Germany,*

³*Advanced Bionics European Research Center, Hannover, Germany,*

15:05 An advanced method to determine C-levels via Stapedius reflex measurements

Sandro Burdo

Children Hospital Buzzi, Milan, Italy

15:15 Comparison of cochlear implant fitting procedures - Preliminary results of a multicenter study

J. Müller-Deile¹, A. Mewes², A. Büchner³, N. Dillier⁴, N. Neben⁵, F. Junge⁵, M. Hey²

¹*Audiology consultant, Kiel*

²*Cochlear Implant Centrum Schleswig-Kiel, Kiel*

³*ENT Clinic, Medizinische Hochschule Hannover, Hannover*

⁴*Experimental Audiology, UniversitätsSpital Zürich, Zürich*

⁵*Cochlear Deutschland GmbH & Co. KG, Hannover*

15:25 Pilot study with a new Electrode Voltage Telemetry tool for the Nucleus cochlear implant

M. Leblans¹, A. De Bolster², A. Plasmans², F. Vanpoucke², A. Zarowski¹

¹*ENT Department, Sint-Augustinus Antwerp, European Institute For ORL, Belgium*

²*Cochlear Technology Center, Mechelen, Belgium*



15:40 BREAK

16:00 - 18:10 FITTING II.

(Free paper section IV. H)

Chairs: J.Müller-Deile, Olivier Macherey, Vera Matievics

- 16:00 **The underlying mechanism of preventing facial nerve stimulation by triphasic pulse stimulation in cochlear implant users assessed with objective measure.**

Andreas Bahmer¹, Uwe Baumann²

¹University of Würzburg, Clinic for Otolaryngology, Comprehensive Hearing Center, Würzburg

²University of Frankfurt Main, Clinic for Otolaryngology, Audiological Acoustics, Frankfurt

- 16:10 **Electrically-evoked Compound Action Potentials Recorded Intra- or Post-Operatively in Adult Cochlear Implant Users: Correlations with Demographics, Performances and Estimation of Most Comfortable Level**

CA.Joly¹, H.Thai-Van², V.Péan³, E.Truy¹

¹Neuroscience Research Center of Lyon - Impact Team, CRNS - France;

Edouard Herriot Hospital - Cochlear Implant Fitting Center

²Neuroscience Research Center of Lyon - Waking Team, CRNS - France;

Edouard Herriot Hospital - Audiology and Orofacial exploration

³Vibrant Med-El Hearing Technology - France

- 16:20 **Use of Electrically Evoked Compound Action Potentials for Cochlear Implant fitting, a Systematic Review**

J.J. Briaire¹, J.J. de Vos¹, J.D. Biesheuvel¹, P.S. Boot¹, M.J. van Gendt¹, O.M. Dekkers², J.H.M. Frijns¹

¹ENT-department, Leiden University Medical Center, Leiden, The Netherlands

²Department of Clinical Epidemiology, Leiden University Medical Center, Leiden, The Netherlands

- 16:30 **Electrococchleography using HiRes90K® Cochlear Implant - A tool for Objective Estimation of Electro-Acoustic Interactions**

Kanthaiah Koka, Leonid Litvak

Advanced Bionics Corporation

- 16:40 **Wireless ABR measurements via mini Tek&Vibrant Soundbridge with Device optimized Chirp Stimulus**

Mario Cebulla¹, Samuel Blanc², Ute Geiger¹, Andreas Radeloff¹

¹Department of Otorhinolaryngology, Plastic, Aesthetic and Reconstructive Head and Neck Surgery, University of Würzburg, Germany

²MED-EL, Business Unit Vibrant, Innsbruck, Austria

- 16:50 **Can square-wave modulated high-rate pulse trains be used to predict cochlear implant thresholds using eABR?**

Olivier Macherey¹, Pierre Stahl¹, Bastien Intartaglia², Daniele Schön², Stéphane Roman^{2,3}

¹Laboratoire de Mécanique et d'Acoustique, CNRS UPR7051, Centrale Marseille, AixMarseille Univ., Marseille, France

²Institut de Neurosciences des systèmes, Inserm UMR1106, Aix-Marseille Univ., Marseille, France

³Dept. of Pediatric Otolaryngology and Neck Surgery, Aix-Marseille Univ., Marseille, France

- 17:00 **Impedance measures for subject-specific optimization of spatial selectivity**

Quentin Mesnildrey¹, Olivier Macherey¹, Philippe Herzog¹, Frédéric Venail²

¹Laboratoire de Mécanique et d'Acoustique, Marseille, France

²UniversityHospital, Gui de Chauliac, Montpellier, France



17:10 **Predicting the nature of electrode using objective measures in children with Auditory Brainstem Implant**

Rajeswaran, R.¹, Kameswaran, M.²

¹MERF Institute of Speech and Hearing, Chennai, India.

²Madras ENT Research Foundation (P) Ltd, Chennai, India.

17:20 **Use of aided cortical assessment in programming of difficult to fit paediatric cochlear implant users**

Svetlana Bayguzina, Julie Kosaner, Muammer Gultekin, Laurie Behar, Kerem Gonullu

Meders speech and Hearing Clinic, Kadıkoy, İstanbul, Turkey

17:30 **Estimating Coupling Efficiency of VSB Middle Ear Implant System using ABR/ASSR methods**

Ute Geiger, Mario Cebulla, Wafaa Shehata-Dieler, Rudolf Hagen, Andreas Radeloff

Department of Otorhinolaryngology, Plastic, Aesthetic and Reconstructive Head and Neck Surgery, University of Würzburg, Germany

17:40 **Electrically evoked auditory steady-state responses to multiple sequential electrode stimulation in cochlear implant users**

Robin Gransier¹, Michael Hofmann¹, Hanne Deprez^{1,2}, Marc Moonen², Astrid van Wieringen¹, and Jan Wouters¹

¹KU Leuven, ExpORL, Department of Neurosciences, Herestraat 49 bus 721, 3000 Leuven, Belgium

²KU Leuven, STADIUS, Department of Electrical Engineering (ESAT), Kasteelpark Arenberg 10, 3001 Leuven, Belgium

17:50 **Recording Auditory Steady State Responses in a patient implanted with the NeurelecDigisonic® SP/Saphyr® SP cochlear implant system**

V. Attina^{1,2}, F. Mina^{1,2}, Y. Duroc², E. Veuillet^{1,2,3}, E. Truy^{1,2,4}, H. Thai-Van^{1,2,3}

¹Centre de Recherche en Neurosciences de Lyon, Inserm U1028 CNRS UMR5292 France

²Université Claude Bernard Lyon 1, France

³Service d'Audiologie & d'Explorations Orofaciales– Hospices civils de Lyon, France

⁴Service ORL - Hospices civils de Lyon, France

18:00 **Objective Fitting in Children**

Julie Kosaner

Meders speech and Hearing Clinic, Kadıkoy, İstanbul, Turkey

20:00 **CLOSING DINNER**



Session B

16:00 - 17:50 POSTER SECTION

(Free paper section IV. HH)

Chairs: George Tavartkiladze, Ingo Todt, Attila Nagy

- 16:00 **Quantification of the effect of physiological condition on the sound transmission via the malleus-incus complex**
Christof Rösli¹, Ivo Dovrev¹, Sebastian Ihrle², Rahel Gerig¹, Albrecht Eiber², Alexander M Huber¹, Jae Hoon Sim¹
¹University Hospital Zurich, University of Zurich, Zurich, Switzerland
²University of Stuttgart, Stuttgart, Germany
- 16:05 **Experiences with the NRT-ratio in slim straight Nucleus electrodes - a Multi-Center Study**
P. Mittmann, A. Ernst, G. Rademacher, S. Mutze, S. Lang, D. Arweiler-Harbeck, F. Christov, I. Todt
Department of Otolaryngology, Head and Neck Surgery, Unfallkrankenhaus Berlin, Germany
- 16:10 **Revision surgery in cochlear implant patients with electrode migration**
P. Mittmann, A. Ernst, I. Todt
Department of Otolaryngology, Head and Neck Surgery, Unfallkrankenhaus Berlin, Germany
- 16:15 **Across-channel variability assessed with electrically evoked auditory steady-state responses in adult cochlear implant users**
Robin Gransier, Robert Luke, Astrid van Wieringen, Jan Wouters
KU Leuven, ExpORL, Department of Neurosciences, Herestraat 49 bus 721, 3000 Leuven, Belgium
- 16:20 **Epidural Recordings in Cochlear Implant Users**
S. Haumann^{1,3}, G. Bauernfeind^{1,3}, M. Bleichner^{2,3}, M. Teschner^{1,3}, S. Debener^{2,3}, T. Lenarz^{1,3}
¹ENT Department, Medical School Hannover
²Neuropsychology, Carl-von-Ossietzky-University of Oldenburg
³Cluster of Excellence Hearing4All
- 16:25 **Physiological and Psychometric Characterization of Ipsilateral Masking between Acoustic and Electric Stimulation through Cochlear Implants**
Waldo Nogueira¹, Benjamin Krüger¹, Kanthaiah Koka², Andreas Büchner¹
¹Medical University Hannover, Cluster of Excellence "Hearing4all", Hannover, Germany
²Advanced Bionics, LLC, Research & Technology, Valencia, CA USA
- 16:30 **Investigation of the sheep middle ear transfer function and intracochlear pressure**
Pfiffner E, Péus D; Dobrev I; Prochazka L; Thoele K; Sim JH; Gerig R; Dalbert A; Harris F; Walraevens J; Rösli C; Huber AM
University Hospital Zurich, University of Zurich, Zurich, Switzerland
- 16:35 **A comparison of EABR and NRI recordings in CI users**
George Tavartkiladze¹, Idrick Akhoun², Patrick Boyle², Vigen Bakhshinyan¹, Tatiana Chugunova¹, Oleg Belov¹
¹National Research Center for Audiology and Hearing Rehabilitation, Moscow, Russia
²Advanced Bionics European Research Centre, Hanover, Germany



- 16:40 **Age-related and noise-induced hearing loss in *Bhmt* null mice: electrophysiological, histological and gene expression longitudinal analysis**
Giacomo Mandruzzato^{1,2}, Silvia Murillo-Cuesta^{2,3,4}, Lourdes Rodríguez de la Rosa^{2,3,4}, Néstor Vallecillo², María Ángeles Pajares^{2,4}, Steven Zeisel⁵, Isabel Varela-Nieto^{2,3,4}
¹Research and Development, MED-EL GmbH, Innsbruck Austria
²Institute for Biomedical Research "Alberto Sols" CSIC-UAM. Madrid, Spain
³Centre for Biomedical Network Research on Rare Diseases (CIBERER). Institute of Health Carlos III (ISCIII). Madrid, Spain
⁴Hospital La Paz Institute for Health Research (IdiPAZ). Madrid, Spain
⁵Department of Nutrition, School of Public Health, University of North Carolina, Chapel Hill, North Carolina, USA.
- 16:45 **Effect of different cochlea electrode types and postinsertional factors on the intracochlear pressure**
I. Todt, M. Mittmann, A. Ernst, P. Mittmann
Department of Otolaryngology, Head and Neck Surgery, Unfallkrankenhaus Berlin, Germany
- 16:50 **Evaluation of the current distribution of the hybrid common groundstimulation in cochlear implants**
Kai Dang^{1,2}, Pierre Stahl², Clair Vandersteen³, Nicolas Guevara³, Dan Gnansia², Maureen Clerc¹
¹ATHENA Project Team, INRIA Sophia Antipolis-Méditerranée Research Centre, Sophia Antipolis, France
²Oticon Medical CI Scientific Research, Vallauris, France
³Head and Neck Surgery University Institute, Nice University Hospital, Nice, France
- 16:55 **An Objective estimation of air-bone-gap in Cochlear Implant Recipients with Residual hearing using Electrocochleography**
Kanthaiah Koka¹, Joseph Attias^{1,2}, Aniket Saoji¹, Leonid Litvak¹
¹Advanced Bionics Corporation
²University of Haifa, Israel
- 17:00 **Bimodal processing with AEP recordings, part I: evidence from the Auditory Brainstem Response**
Van Yper L.N.^{1,2}, Dhooge I.J.M.^{1,2}, Vermeire K.³, De Vel E.F.J.², Beynon A.J.⁴
¹Department of Otorhinolaryngology, Ghent University, De Pintelaan 185, 1P1, B-9000 Ghent, Belgium
²Department of Otorhinolaryngology, Ghent University Hospital, De Pintelaan 185, 1P1, B-9000 Ghent, Belgium
³Long Island Jewish Hospital, 430 Lakeville Road, New Hyde Park, New York 11040, USA
⁴Radboud University Medical Centre, Donders Institute for Brain, Cognition and Behaviour Centre for Neuroscience, Department of Otorhinolaryngology, Head and Neck Surgery, Philips van Leijdenlaan 15, 6525 EX Nijmegen, The Netherlands
- 17:05 **Influence of Stimulation Intensity on Firing Properties of ECAP response assessed using a Fine-Grain Recording Paradigm and Convolution Model**
Lutz Gärtner¹, Andreas Büchner¹, Thomas Lenarz¹, Stefan B. Strahl², Konrad E. Schwarz²
¹Hannover Medical School, Department Of Otolaryngology, Hannover, Germany
²R&D MED-EL GmbH, Innsbruck, Austria
- 17:10 **First experience with the Cochlear CI532 Slim Modiolar electrode array and comparison to the Contour Advance in terms of electrode placement, objective measures and programming levels**
Ralf Greisiger¹, Marie Bunne¹, Greg Eigner Jablonski¹
Department of Otolaryngology, Oslo University Hospital, Norway
- 17:15 **Objective vestibular assessment following cochlear implantation**
János Jarabin, Ádám Perényi, Edit Kollár, Ferenc Tóth, László Rovó, József Géza Kiss
Department of Otorhinolaryngology and Head-Neck Surgery, University of Szeged, Hungary



- 17:20 **Comparative analysis of electrophysiological and psychophysical parameters in cochlear implant users with and without known genetic background of hearing loss**
Attila Nagy^{1,2}, Gréta Csorba¹, Ferenc Tóth¹, Alice Szamosközi¹, László Rovó¹, József Géza Kiss¹
¹*Department of Oto-Rhino-Laryngology and Head-, Neck Surgery, University of Szeged, Szeged, Hungary,*
²*Department of Medical Physics and Medical Informatics, University of Szeged, Szeged, Hungary*
- 17:25 **Connexins and Kir2.1 ion channels modulated in hearing loss patients before cochlear implantation**
Viktoria Szuts¹, Pirooska Fazekas², András Kovács^{1,2}, Attila Nagy^{2,3}, Péter Deák^{1,4}, János Jarabin², Ferenc Ötvös¹, Csaba Vágvolgyi⁵, Mihály Szécsi⁶, Katalin Halasy⁷, László Rovó², József Géza Kiss²
¹*Department of Plant Biology and Biochemistry, BRC, Hungarian Academy of Sciences, Szeged, Hungary*
²*Department of Otorhinolaryngology–Head and Neck Surgery, Faculty of Medicine, University of Szeged, Szeged, Hungary*
³*Department of Medical Physics and Medical Informatics, Faculty of Medicine and Faculty of Sciences and Informatics, University of Szeged, Szeged, Hungary*
⁴*Department of Food and Engineer, Faculty of Engineering, University of Szeged, Szeged, Hungary*
⁵*Department of Microbiology, Faculty of Sciences and Informatics, University of Szeged, Szeged, Hungary*
⁶*1st Department of Internal Medicine, Faculty of Medicine, University of Szeged, Szeged, Hungary*
⁷*Department of Anatomy and Histology, Faculty of Veterinary Sciences, Szent Istvan University, Budapest, Hungary*
- 17:30 **Speech performance of Greek children with intellectual disability after successful cochlear implantation** 17
Kyriafinis G.², Geramas I.¹, Tsalighopoulos M.², Maragoudakis P.¹, Nikolopoulos T.¹
¹*2nd Academic ENT Department, Athens University of Thessaloniki, Attikon Hospital, Athens, Greece*
²*1st Academic ENT Department, Aristotle University of Thessaloniki, AHEPA Hospital, Thessaloniki, Greece*
- 17:35 **Comparing the development of linguistic abilities between children using cochlear implants with those using hearing aids.**
Kyriafinis G.², Stagiopoulos P.¹, Aidona S.², Vital V.², Tsalighopoulos M.²
¹*School Adviser for Primary Education at Department of Education, Central Macedonia, Greece*
²*1st Academic ENT Department, Aristotle University of Thessaloniki, AHEPA Hospital, Thessaloniki, Greece*
- 17:40 **Benefits of unilateral cochlear implantation on Quality of Life of children and adults**
Kyriafinis G., Aidona S., Stagiopoulos P., Vital V., Tsalighopoulos M.
¹*1st Academic ENT Department, Aristotle University of Thessaloniki, AHEPA Hospital, Thessaloniki, Greece*
- 17:45 **A simple stethoscope for cochlear implants users**
Kyriafinis G., Stavarakas M., Tsalighopoulos M.
¹*1st Academic ENT Department, Aristotle University of Thessaloniki, AHEPA Hospital, Thessaloniki, Greece*



17:50 Pre-operative measurement of auditory evoked cortical responses in adult cochlear implant candidates

R.G. Mathew¹, J. Undurraga^{1,2}, G. Li¹, D.Vickers¹

¹*UCL Ear Institute, 332 Grays Inn Road, London, WC1X 8EE, UK*

²*Department of Linguistics, The Australian Hearing Hub, 16 University Avenue, Macquarie University, NSW 2109, Australia*

20:00 CLOSING DINNER

Saturday, June 18

Session A

08:00 INDUSTRY SYMPOSIUM

09:00 - 10:10 DATA LOGGING

(Structured section V. I)

Chairs: Norbert Dillier, Andreas Buechner, István Sziklai

09:00 KEYNOTE SPEAKER 6.

The benefit of the DATA-Logging Function with modern CI processors

Andreas Buechner

Department of Otolaryngology, Hannover Medical School, Germany

09:35 Objective assessment of CP910/CP920 sound processor usage for SSD CI recipients via datalogging

T. Wesarg, S. Brenne, A. Aschendorff, R. Laszig, S. Arndt

Department of Oto-Rhino-Laryngology, Medical Center - University of Freiburg, Germany

09:45 The need and feasibility of capturing datalogs at higher granularity

Saji Maruthurkkara

Cochlear Ltd, Sydney Australia

09:55 Coaching with Data Logging: empowering approach to clinical conversations with recipients and parents using hearing implant DATA Logging

Eulalia Juan^{1,2}, Clare Sheridan¹

¹*Cochlear Europe Limited, Addlestone, UK*

²*ENT deptment. Hospital Son Llàtzer, Palma de Mallorca, Spain*

19

10:10 BREAK

10:40-12:45 OUTCOMES AND PROBLEMS

(Free paper section V. J)

Chairs: Andy J. Beynon, József Géza Kiss

10:40 KEYNOTE SPEAKER 7.

Simultaneous Recording of ECAPs and EABRs using the Advanced Bionics RspOM™ and the Echodia Elios™ system

Thierry Van-den-Abbeele¹, Idrick Akhoun², Florian Sadreux³, Alexandre Gault³, Thierry Hassoun⁴

¹*Hopital Robert-Debré, Paris, France*

²*Advanced Bionics European Research Center, Hanover.*

³*Advanced Bionics France, Bron, France*

⁴*Echodia, Clermont-Ferrand, France*

11:05 Vestibular assessment in CI: high-frequency head impulse recordings supersedes caloric irrigation?

Andy J. Beynon

*Radboud University Medical Centre, Donders Institute for Brain, Cognition and Behaviour
Centre for Neuroscience, Department of Otorhinolaryngology, Head and Neck Surgery, Philips
van Leijdenlaan 15, 6525 EX Nijmegen, The Netherlands*



- 11:15 **The effect of cochlear implantation on tinnitus in adults with single-sided deafness: a systematic review**
Aimée van Loo
Zuyd Hogeschool Speech Therapy, Zuyd Hogeschool, the Netherlands Clinical Health Sciences, Faculty of Medicine, University Utrecht, the Netherlands
- 11:25 **Improvement in nerve synchronisation with electrical stimulation over time in patients with auditory nerve anomalies**
Neevita Narayan¹, Prabhask Kumar², Ameet Kishore³
¹*SpHear Speech & Hearing Clinic, New Delhi, India*
²*Indraprastha Apollo Hospital, New Delhi, India*
- 11:35 **Tone decay in cochlear implant recipients**
R.H.M. van Eijl¹, J.W. Wasmann^{1,2}, H. Versnel¹, G.A. van Zanten¹
¹*Department of Otorhinolaryngology and Head & Neck Surgery, University Medical Center Utrecht, Utrecht, the Netherlands*
²*Department of Otorhinolaryngology, Head, and Neck Surgery, Radboud University Medical Center, Nijmegen, the Netherlands*
- 11:45 **Speech perception testing without the sound booth**
Saji Maruthurkkara
Cochlear Ltd, Sydney Australia
- 11:55 **Spatial Hearing by EAS-CI and Bilateral CI users**
Sebastián Ausili¹, Martijn Agterberg², Stefan Brill³, Emmanuel Mylanus², John van Opstal¹
¹*Department of Biophysics, Donders Institute of Neuroscience, Radboud University Nijmegen*
²*Department of Otorhinolaryngology Head and Neck surgery, Radboudumc*
³*MED-EL Elektromedizinische Geräte Deutschland GmbH*
- 12:05 **‘Power stapes’: surgical solution for moderate or severe mixed hearing loss with stapes fixation – first experiences at the Department of Otorhinolaryngology, University of Pécs**
Tamás Tóth, András Burián, Imre Gerlinger
Department of Otorhinolaryngology, University of Pécs, Hungary
- 12:15 **Spatial Hearing in EAS L19isteners**
Snandan Sharma¹, Lucas H.M. Mens², Marc M. van Wanrooij¹, Ad F.M. Snik², A. John van Opstal¹
¹*Dept. of Biophysics, Radboud University, Donders Institute of Brain Cognition and Behaviour, Nijmegen, The Netherlands.*
²*Dept. of Otorhinolaryngology, RadboudUMC, Nijmegen, The Netherlands.*
- 12:25 **The use of medical image reconstruction in the preparation of the surgery of the ear – sparing the facial nerve**
Attila Nagy^{1,2}, Ádám Perényi¹, Ferenc Tóth¹, László Rovó¹, József Géza Kiss¹
¹*Department of Oto-Rhino-Laryngology and Head-, Neck Surgery, University of Szeged, Szeged, Hungary,*
²*Department of Medical Physics and Medical Informatics, University of Szeged, Szeged, Hungary*
- 12:35 **Importance of intraoperative objective measurements and the CI422, CI522 and CI512 implants**
Ádám Enreiter¹, Gábor Répássy¹, Marianna Küstel¹, Ferenc Tóth², László Tamás¹
¹*Semmelweis University, Department of Otorhinolaryngology, Head and Neck Surgery, Budapest, Hungary*
²*University of Szeged, Department of Otolaryngology, Head and Neck Surgery, Szeged, Hungary*

12:45 **CLOSING AND AWARD CEREMONY**