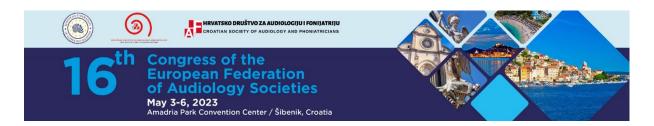
# REPORT ON EFAS 2023 CONGRESS Professor Robert Trotic, MD, PhD



16<sup>th</sup> European Federation Audiology Societies Congress 2023 (EFAS 2023) was organized by the Croatian Society of Audiology and Phoniatrics and the Croatian Society for Cochlear Implantation on May 3 – 6, 2023 in Convention Centre Sibenik, Croatia. The president of the congress was Robert Trotic, Head of the Croatian Society of Audiology and Phoniatricians, Director of the Otology and Neuro-otology Department in the University Hospital Center Sestre milosrdnice Zagreb and Academic Professor at the University of Zagreb, Croatia. The EFAS congresses are the most comprehensive, innovative and inclusive events of their kind, and they promote modern audiology based on unity, evolution, efficiency and innovation. Our bi-annual EFAS congress, based on clinical and basic science in audiology, is one of the key ways to achieve the best in European audiology and related sciences.



EFAS 2023 participants at the Opening Ceremony

Sibenik lies almost in the middle of the eastern Adriatic coast. The town was founded in the 10<sup>th</sup> century. UNESCO World Heritage site, the Cathedral of St James in Sibenik, is an outstanding and unique building in which Gothic and Renaissance forms have been successfully blended.



Cathedral of St James in Sibenik

Amadria Convention Centre Sibenik is the largest convention centre in Croatia and Adriatic region. A world-class venue offering 11 state-of-the-art meeting halls, spread out over three easy-to-navigate levels, each floor serving a different function. It is located in a very nice area and it has excellent conditions to host an event of this size with numerous conference rooms.



Amadria Convention Centre Sibenik

### **FIRST DAY OF EFAS 2023**

Before the EFAS 2023 started, EFAS Board held the meeting. The current situation in EFAS was discussed, as well as the work of the EFAS congress in the next four days.



EFAS Board meeting

EFAS provides the framework for focused working groups, usually consisting of 10 to 20 active members in the respective field that are established and terminated as needed. Their task usually is to coordinate work directed to specific problems in audiology across different European countries, to come up with reports, consensus statements, or recommendations for further coordinated actions. On the Day 1 of EFAS 2023, four working groups presented their work in EFAS: working group for school hearing screening (Jan Wouters), working group on auditory processing disorders (Vasiliki Vivian Iliadou, Hung Thai-Van), working group on standardized data formats for big data in audiology (Andreas Büchner, Birger Kollmeier, Liat Kishon-Rabin, Jan Wouters) and Hearing4All: Precision audiology for the future (Birger Kollmeier, Thomas Lenarz, Andreas Büchner, Volker Hohmann). We also had PRESAGE: The French-German project on genotype-phenotype relations for untimely age-related hearing loss (Paul Avan, Carsten Buhl, Birger Kollmeier, Kemberlee Bonnet, Anna Warzybok, Hung Thai-Van).



EFAS working group

Opening ceremony started in the main hall with welcome words of Liat Kishon-Rabin, Robert Trotic and Burcu Davarci. Robert Trotic, President of the EFAS 2023 Organized Committee, opened the 16<sup>th</sup> European Federation Audiology Societies Congress 2023.



Liat Kishon-Rabin, EFAS Chairperson

Welcome reception of EFAS 2023 was held at the Mediterranean Square in Sibenik, on the Adriatic coast. Ana Opacak, a well-known Croatian pop-chanson music singer from Split, awarded with Croatian music award Porin, made EFAS 2023 Opening Reception perfect.



Welcome reception



Ana Opacak, pop-chanson singer

# **SECOND DAY OF EFAS 2023**

Day 2 of EFAS 2023 started with MED-EL Mini-Symposium, conducted by Bernd Katzbauer and chaired by Georg Mathias Sprinzl. Participants were Jakov Ajduk, Ivana Marinac, Milan Urik, Anita Kastelic, Lukas Varga and Thomas Keintzel.



MED-EL Mini-Symposium

After MED-EL Mini-Symposium, and after words of welcome of Liat Kishon-Rabin and Robert Trotic, it was time for the first keynote speaker, Wouter Dreschler. Wouter Dreschler from Amsterdam, The Netherlands, is Full professor, specialist in Clinical & Experimental Audiology, Head of the Department of Clinical & Experimental Audiology of the Academic Medical Center in Amsterdam. The focus of his research is in psychoacoustical tests of the pathological ear and in auditory rehabilitation with hearing instruments and cochlear implants. Special emphasis was on problems in the working environment, including the prevention of noise-induced hearing loss. In 2005 he was awarded with the Förderpreis 2005 of the Stiftung Forschungsgemeinschaft Deutscher Hörgeräte Akustiker. Memberships: American Auditory Society (AAS), American Society of Acoustics (ASA), American Speech and Hearing Association (ASHA), Dutch Society of Acoustics (NGA), Dutch Society of Audiology (NvA), Dutch Society of Clinical Physicists (NVKF), Dutch Society of E.N.T. (KNO-vereniging), German Audiological Society (DGA), International Collegium of Rehabilitative Audiology (ICRA) and International Society of Audiology (ISA). His keynote lecture was *TOWARDS AN AUDITORY PROFILE IN CLINICAL AUDIOLOGY,* chaired by Birger Kollmeier.



Wouter Dreschler, keynote speaker

After the first keynote speaker, a Structured Session *COVID-19 – HOW HAS IT AFFECTED AUDIOLOGY* was held in the central hall of the venue, led by Liat Kishon-Rabin and De Wet Swanepoel. Participants were Liat Kishon-Rabin (Israel), De Wet Swanepoel (South Africa), Riki Taitlbaum-Swead (Israel), and Louise Hickson (Australia).



Louise Hickson in Structured Session 1

The further program took place in parallel halls: Free Papers 1: CI in children (PART I), Free Papers 2: Hearing Screening & Pediatric Audiology, and Free Papers 3: Age Related Hearing Loss (PART I). After the coffee break, it was time for the second keynote speaker; Luis Lassaletta from Spain. Luis Lassaletta is Professor of Otolaryngology-Head & Neck Surgery, Head Section of Otology, Auditory Implants and Skull Base, Director of the Facial Paralysis Unit, Department of Otorhinolaryngology La Paz University Hospital in Madrid, Spain, researcher in European project PI FP7-PEOPLE2013-IAPP Marie Curie Industry-Academia Partnerships and Pathways 612261, main researcher in five National Research Grants (FIS), co-researcher in six National Research Grants (FIS), Director of research group "Research in Otoneurosurgery" IdiPAZ (La Paz Research Institute); main areas of interest: hearing loss, auditory implants, vestibular schwannoma, oncogenetics. His keynote lecture was *BIOMARKERS IN VESTIBULAR SCHWANNOMA – ASSOCIATED HEARING LOSS*, chaired by Stefan Stenfelt.



Luis Lassaletta, keynote speaker

Lunch was held in the hall with the sponsors. It was an opportunity to exchange experiences in one place, learn about news in the audio industry and make new acquaintances and new plans for the future.



Lunch and coffee breaks with sponsors

In the afternoon, two Structured Sessions were held on the second day of EFAS 2023: *AUDIOLOGY ACROSS THE LIFESPAN*, chaired by Jan Wouters and Lana Kovac Bilic, and *PRECISION TREATMENT IN AUDIOLOGY*, chaired by Birger Kollmeier.



Lana Kovac Bilic and Jan Wouters in Structured Session 2

A Structured Session AUDIOLOGY ACROSS THE LIFESPAN was held in the central hall of the venue, led by Lana Kovac Bilic and Jan Wouters. Participants were Jan Wouters (Belgium), Isabelle Mosnier (France), Lana Kovac Bilic (Croatia), Mark Laureyns (Belgium) and Limor Lavie (Israel). A Structured Session *PRECISION TREATMENT IN AUDIOLOGY* was held in the central hall of the venue too, led by Birger Kollmeier. Participants were Christine Petit (France), Birger Kollmeier (Germany) and Stephan Launer (Switzerland). The further program took place in parallel halls: Free Papers 4: CI Outcomes (PART I), Free Papers 5: Clinical Audiology Diagnostics, Free Papers 6: Balance & Tinnitus, Free Papers 7: CI in Different Population (PART I), Panel 1: Audiology in Southeast Europe, and Free Papers 8: Quality of Life.



Christine Petit in Structured Session 3

Panel 1: Audiology in Southeast Europe gave a cross-section of audiology work in that area of Europe and showed compatibility with the trends and work of European audiology. The panel was led by three eminent experts from the region: Sanja Spiric, Branka Mikic and Maja Jovanovic. Participants in the Panel 1 were Sanja Spiric (Bosnia and Herzegovina), Branka Mikic (Serbia), Maja Jovanovic (Montenegro), Ivana Aras (Croatia), Marija Dokoska (North Macedonia), Saba Battelino (Slovenia), and Ljiljana Cvorovic (Serbia).



Panel 1: Audiology in Southeast Europe

The last events of the second day of EFAS 2023 were: posterviewing in the Poster Exhibition, Free Papers 9: CI in Children (PART II), Free Papers 10: CI in Different Population (PART II), and EFAS General Assembly.



EFAS General Assembly 2023

On EFAS General Assembly Liat Kishon-Rabin talked about the greatness of meeting in person and reported on the work of the EFAS Board. Dorothe Veraguth reported on the finances for 2022-2023. Robert Trotic gave a short report on the ongoing congress in Sibenik. Georg Sprinzl reported on the preparation for the EFAS Vienna congress in 2025. Liat Kishon-Rabin presented the awardee for the lifetime award, Stig Arlinger (Sweden), and the three scholarship recipients for attending and presenting at the EFAS 2023 Congress. Each scholarship worth of 1000 euros. The three recipients were: Yossi Bugannim (Israel), Cato Philips (Belgum), and Lea-Christin Feld (Germany). The GA elected Vinay Swarnalatha Nagaraj from Norway as a new Vice Chairperson. A new search committee was elected by the GA. Its members are Jan Wouters (Belgium), Birger Kollmeier (Germany), and Françoise Sterkers Artieres (France). In the new Board for EFAS 2023-2025 are: Chair Robert Trotic (Croatia), past Chair Liat Kishon-Rabin (Israel), Vice Chair Vinay Swarnalatha Nagaraj (Norway), Secretary General Stefan Stenfelt (Sweden), and Treasurer Dorothe Veraguth (Switzerland). GA elected Piotr Skarzynski (Poland) and Astrid van Wieringen (Belgum) as Auditors. GA also elected the bid from Denmark to host the 2027 EFAS conference in Odense, Denmark. Tobias Neher will be the president of the EFAS 2027 conference in Denmark. The following provided short reports from the working groups: Jan Wouters for working group on school-age hearing screening, Hung Thai-Van for working group on auditory processing disorders, Birger Kollmeier for working group on audiology education in Europe, and for working group on standardized data formats for big data in audiology. Liat Kishon-Rabin presented Tel Aviv, Israel, as the venue for the next GA,  $30^{th} - 31^{st}$  of May, 2024.



Delegates on EFAS General Assembly

## THIRD DAY OF EFAS 2023

Day 3 of EFAS 2023 started with COCHLEAR Mini-Symposium, conducted by Allan Novakovich and chaired by Thomas Köster. Participants were Damir Kovacic, Cas Smits, and Roland Nagy.



COCHLEAR Mini-Symposium

After the mini-symposium, a Structured Session 4 was held in the main congress hall: *NEUROELECTRONIC INTERFACES; FROM BASICS TO CLINICS*, chaired by Damir Kovacic (Croatia) and Chris James (France). Participants were: Carolina Mora Lopez (Belgium), Victoria Hunniford (Germany), Myles Mc Laughlin (Belgium), Olivier Macherey (France) and Iwan Roberts (United Kingdom). The further program took place in parallel halls: Free Papers 11: Hearing Aids, Poster Session 1: Pitch presentations, and Panel 2: *COMMUNICATION DISORDERS*.



Participants in Structured Session 4

Panel 2: *COMMUNICATION DISORDERS* was led by experts from Croatia and Slovenia: Darija Birtic, Nina Bozanic Urbancic and Lana Kovac Bilic. The following participated in the panel: Diana Marzic (Croatia), Liat Kishon-Rabin (Israel), Marija Hribar (Slovenia), and Nenad Arsovic (Serbia).



Panel 2: Communication Disorders

The panel showed how closely related audiology and communication disorders are. This is clearly shown on a number of examples, and guidelines are given on what to do next. At the end of the morning session of the congress, the third keynote lecture was held: FROM THE NOBEL PRIZE TO THE CURRENT RESEARCH OF THE INNER EAR - 60 YEARS OF PROGRESS IN AUDIOLOGY by Andro Kosec from Croatia, chaired by Liat Kishon-Rabin. Andro Kosec is Otorhinolaryngologist and Audiologist, MD, Ph.D. scientific associate of the School of Medicine University of Zagreb, training in Landesklinikum Graz, St. Pölten, Weill-Cornell seminars, Salzburg, Austria, Prosper-Hospital Klinik für HNO-Heilkunde, Recklinghausen, Germany, Diakonessenhuis and Antoni Van Leeuvenhoek Clinic in Amsterdam, the Netherlands, Institute for Head and Neck Surgery, Cleveland Clinic, Cranial Base Surgery Center, University of Pennsylvania, House Ear Institute, Los Angeles, and the Michigan Ear Institute in Ann Arbor, USA. To date, his publication record includes more than 40 scientific papers, nine book chapters and an active reviewer status in 12 scientific journals, with a junior editor appointment in the International Journal of Pediatric Otorhinolaryngology. He is a member of the Collegium Oto-Rhino-Laryngologicum Amicitiae Sacrum, European Academy of Otology and Neuro-otology, Croatian Society of Audiology and Phoniatricians, Croatian Society of Otorhinolaryngology & Head and Neck Surgery, and elected as an Associate Fellow of the American College of Surgeons in 2019. His areas of professional and scientific interest are audiology, otology, vestibular disorders, translational research in medicine and academic medicine.



Andro Kosec, keynote speaker

In the afternoon, two Structured Sessions were held on the third day of EFAS 2023: Structured Session 5: *BIMODAL HEARING* chaired by Dorothe Veraguth and Robert Trotic, and Structured Session 6: *ACOUSTIC IMPLANTS HEARING & BC DEVICES* chaired by Stefan Stenfelt and Martin Kompis. Participants in Structured Session 5 were Tim Jürgens (Germany), Christof Stieger (Switzerland), Mathias Dietz (Germany), Georg Sprinzl (Austria), and Mihael Ries (Croatia).



Mihael Ries in Structured Session 5

Participants in Structured Session 6 were Filip Asp (Sweden), Martin Kompis (Switzerland), Stefan Stenfelt (Sweden), and Hannes Maier (Germany).



Stefan Stenfelt and Martin Kompis in Structured Session 6

The further program took place in parallel halls: Free Papers 12: CI Outcomes (PART II), Free Papers 13: Age Related Hearing Loss (PART II), Poster Session 2: Pitch presentations, Free Papers 14: Rehabilitation, Free Papers 15: Noise and Music, and Poster Session 3: Pitch presentations.



Astrid Van Wieringen in Free Papers

Between the two Structured Sessions, Liat Kishon-Rabin and Robert Trotic presented the awardee for the EFAS Lifetime Award, Stig Arlinger (Sweden). Stig Arlinger is one of the founders of EFAS and was the EFAS Chair between 1992 and 1997. He was a professor and audiologist in the Department of Technical Audiology, Linköping, Sweden. He has been an avid clinician and researcher for over 40 years and has published more than 250 articles in the areas of audiological diagnosis, rehabilitation, hearing aids, and noise protection, and served for 10 years in the role of editor or coeditor for Scandinavian Audiology. European Federation of Audiology Societies is proud to award Stig Arlinger with the EFAS Lifetime Award.



Stig Arlinger, the awardee for the EFAS Lifetime Award

After receiving the EFAS Lifetime Award, Stig Arlinger gave a presentation to the participants of the EFAS Congress. In his lecture, he emphasized his work in the field of audiological diagnosis, rehabilitation, hearing aids, and noise protection. As the first

elected EFAS Chairman, he also emphasized the importance of the work of European Federation of Audiology Societies (EFAS) and its contribution to European audiology, both in the past and in the present. Stig Arlinger finished his lecture with words: " ... The Past is easy for me – I was there but many/most of you were not. The Present is less easy for me but should be for you because you are in the middle of it. The Future is everyone's best guessing (and efforts)...".

The end of the third working day of the congress belonged to the keynote speaker Daphna Ari-Evenroth, with the lecture *CONGENITAL CYTOMEGALOVIRUS-RELATED HEARING LOSS: IDENTIFICATION, TREATMENT AND HABILITATION,* chaired by Dorothe Veraguth. Daphna Ari-Evenroth is Doctor of Philosophy (Ph.D.), Communication Sciences and Disorders, Audiologist – Newborn Hearing Screening coordinator of Chaim Sheba Medical Center, Head of Department of Communication Disorders, Steyer School of Health Professions Sackler Faculty of Medicine, and senior lecturer at the Department of Communication Disorders, Tel Aviv University, Israel. Research focuses on two main fields: learning and plasticity in the auditory system, and early detection of hearing loss in neonates and its clinical implications.



Daphna Ari-Evenroth, keynote speaker

The third day of the EFAS 2023 ended with a Networking Event. Dishes from Dalmatia were served and the guests were entertained by Ivana Kindl, a famous Croatian singer from Zagreb. It was a great opportunity to make new acquaintances and strengthen existing ones after the Covid-19 isolation, an opportunity to contract new projects and deepen cooperation in European audiology. We were together long into the night, which was warm and cozy, and made for such great Networking Event.



Networking Event



Ivana Kindl, one of the best Croatian vocalists

### FOURTH DAY OF EFAS 2023

The fourth day of the congress started with a new keynote speaker, Cas Smits from the Netherlands. Cas Smits is a clinical physicist-audiologist at the Department of Otolaryngology Head and Neck Surgery in Amsterdam UMC. In his clinical work he is involved in care for adults and children with hearing aids or cochlear implants. His research focuses are on understanding and measuring speech recognition in noise abilities. He developed the digits-in-noise hearing screening test in the early 2000s. This test is known as the National Hearing Test. He is an expert on digits-in-noise tests and worked on many related projects including the development of similar tests in other languages, improving the efficiency of these tests and the introduction of these speech-in-noise tests in clinical practice for children, CI users and via eHealth technology. He is a member of the steering group who guided the WHO in the development of the HearWHO, a digits-in-noise test which was launched worldwide. Cas Smits gave us a keynote lecture SPEECH-BASED HEARING SCREENING, DETECTING AND PROFILING OF HEARING LOSS WITH NEW TECHNOLOGIES, chaired by Lana Kovac Bilic.



Cas Smits, keynote speaker

The last, seventh Structured Session of the congress, *NEW TECHNOLOGY FOR HEARING AIDS*, was chaired by Birger Kollmeier and Karolina Smeds. Participants were Karolina Smeds (Sweden), Tobias Neher (Denmark), Jan Rennies-Hochmuth (Germany), and Birger Kollmeier (Germany).



Karolina Smeds in Structured Session 7

In the same time, in three other halls, the following was held: Free Papers 16: BC Implants & Clinical Audiology Treatment, Free Papers 17: Objective Measurements, and Poster Session 4: Pitch presentations.



Posters on EFAS 2023

The last keynote lecture of the congress went to the host of our next EFAS congress, Georg Mathias Sprinzl. Georg M. Sprinzl is Professor of Otolaryngology, Head & Neck Surgery and leads the implant team of Department in St. Poelten. He is the head of the Department of Otolaryngology, Head & Neck Surgery in St. Poelten, Lower Austria. He focuses on stapes surgery, surgery of active middle ear implants and cochlear implantation as well as neuro-otologic and oncologic skull base surgery. Prof. Sprinzl is PI of several clinical trials in the field of hearing implants. He pays special interest to sound localization and speech perception in bilateral users of Vibrant Sound Bridge. Additionally he has established a novel animal cochlea implant model in sheep. His main research interests are on the development of new atraumatic cochlea implant electrodes for the restoration of residual hearing, and the development of new bone anchored hearing aids. In recent years he focuses on clinical applied translational research in otology and hearing implant surgery. Prof. Sprinzl has published more than 90 articles in peer-reviewed journals. He was the host of the 14<sup>th</sup> ENT Danube Symposium, an international meeting held in June 2018 in Krems, Lower Austria, with more than 300 participants from 27 countries. He will host the 17<sup>th</sup> EFAS Congress in 2025 in Austria. Georg Mathias Sprinzl gave us a keynote lecture TOWARDS TO THE BETTER HEARING PRESERVATION IN EAR SURGERY, chaired by Robert Trotic.



Georg Mathias Sprinzl, keynote speaker

In summary, the 16<sup>th</sup> EFAS Congress in Croatia was a successful platform for widening knowledge, improving practical skills, and introducing new information of audiology into everyday practice. Participants were 346 specialists from 46 countries from Europe, Asia, North and South America, Africa, and Australia attended the first in-person post Covid-19 pandemic EFAS congress. It was an opportunity to renew meetings and get together with colleagues for whom audiology is a life-long work preoccupation.



ISA / WCA / IJA Team on EFAS 2023

EFAS 2023 had 158 oral lectures in 17 thematic units and 56 poster presentations in four groups in five halls:

#### FREE PAPERS 1 – CI IN CHILDREN PART I

1. Olga Borovnica, Marica Radulovic (Serbia): Children with cochlear implant – the search for additional factors of success

2. Kelly Mattstedt, Karin Bauer, Stefano Morettini, Alexander Möltner, Rudof Hagen (Germany): Remote Support for First- and Follow-Up-Fittings of MED-EL Cochlear

3. Milan Vracar, Anica Jezdic (Serbia): Cochlear implant, autism and parental burnout – a case study

4. Sandra Stojanovic, Jovana Jecmenica, Rade Kosanovic (Serbia): The development of auditory perception in children with cochlear implants during four years after implantation

5. Luis Lassaletta, Miryam Calvino, Alejandro Zuazua, Isabel Sánchez Cuadrado, Javier Gavilán (Spain): Music evaluation in different age groups following cochlear implantation

6. Jovana Jecmenica, Sandra Stojanovic, Rade Kosanovic (Serbia): Examination of the characteristics of the brainstem auditory evoked potentials in children with hearing impairment due to infectious diseases

7. Divan Du Plessis, Faheema Mahomed Asmail, Talita Le Roux, Marien Alet Graham, Tersia De Kock, Jeannie Van Der Linde, De Wet Swanepoel (South Africa, USA): mHealth-Supported Hearing Health Training for Early Childhood Development Practitioners: An Intervention Study

8. Olga Borovnica, Milan Vracar (Serbia): Cochlear Implantation in Children with Autism: The Challenges of Evaluation and Psychological Support

9. Luis Lassaletta, Miryam Calvino, Isabel Sánchez Cuadrado, Javier Gavilán (Spain): The effect of the Anatomy Based Fitting in postlingually deaf cochlear implant users

10. Gaziz Tufatulin, Inna Koroleva (Russia): Additional disabilities in hearing impaired children and their influence on the start of rehabilitation



Sandra Stojanovic in Free Papers 1

#### FREE PAPERS 2 – HEARING SCREENING & PEDIATRIC AUDIOLOGY

1. Caitlin Frisby, Ilze Oosthuizen, Vinaya Manchaiah, Shelly Chada, De Wet Swanepoel (South Africa): Evidence for combined hearing and vision screening: a scoping review

2. Weronika Swierniak, Piotr Henryk Skarzynski, Elzbieta Gos, Natalia Czajka, Henryk Skarzynski (Poland): Hearing screening program of the first class students in primary schools from the Mazovia Region in Poland

3. Weronika Swierniak, Natalia Czajka, Rita Zdanowicz, Ewelina Bukato, Aleksandra Kolodziejak, Piotr Henryk Skarzynski, Henryk Skarzynski (Poland): Application of questionnaires in hearing screening

4. Peter Böttcher, Wassi Adjibabi, Mohamed Kéïta, Bay Karim Diallo, Manuela Yeboue, Stephanie Unterrieder (Germany): Quality criteria in newborn hearing screening – three identical project approaches in French-speaking African countries – three different outcomes

5. Nikolaos Trimmis, Sofia Manika (Greece): Application of a Hearing Screening Tool for Amusia

6. Margaret Regan Glenney (USA): Back to the Startle: Identifying auditory processing delays in infants and young children

7. Yen Jung Pan, Mei Jui Huang, Chi Ching Lin, Kuan Ju Chen, Kuan Hua Chen, Kuang Chao Chen (Taiwan): Assessment of Behavioral Performances in Children: A view of caregivers

8. Gaziz Tufatulin, Inna Koroleva, Elizaveta Mefodovskaya, Ekaterina Garbaruk, Sergey Levin, Tatyana Markova, Maria Lalayants, Oxana Ryzhkova, Alexander Polyakov (Russia): The case of auditory neuropathy in child with mutations in TWNK gene



Mei Jui Huang in Free Papers 2

#### FREE PAPERS 3 – AGE RELATED HEARING LOSS PART I

1. Limor Lavie, Tobia Nawras, Slav Zarfati Neta, Castel Shefi, Banai Karen (Israel): What hearing aids can and can't do for older adults? A systematic review of hearing aids and balance

2. Bo Engdahl, Lisa Aarhus (Norway): Explaining better hearing in Norway

3. Jelena Vukelic, Diana Marzic, Dubravka Matesa Anic, Marko Velepic, Ivan Sosa (Croatia): Age related clinical characteristics in sudden sensorineural hearing loss

4. Ariane Laplante Lévesque, Satish Mishra (Denmark): Technical support provided by the World Health Organization to advocate and strengthen ear and hearing care

5. Isabelle Mosnier, Raquel Manrique Huarte, Mathieu Marx, Joël Belmin, Angel Ramos Macias, Riad Khnifes, Ohad Hilly, Roberto Bovo, Domenico Cuda, Chris J. James (France): Healthy Aging in Elderly Cochlear Implant Recipients: A Multinational Observational Study

6. Sophie Boucher, Fabienne Wong Jun Tai, Paul Avan, Crystel Bonnet, Christine Petit (France): Monogenic forms of Age-related hearing loss

7. Hung Thai Van, Pierre Reynard, Charles Alexandre Joly, Maxime Damien, Marie Thérèse Lenormand, Evelyne Veuillet (France): Age-Related Dichotic Listening Skills in Impaired and Non-Impaired Readers: A Comparative Study

8. Tahereh Afghah, Razan Alfakir, Markus Meis, Lisette M. van Leeuwen, Sophia E. Kramer, Kathleen Lea, Mahmoud Hammady, Mostafa Youssif, Mohamed Abd Al-Ghaffar, Kirsten C. Wagener (Germany): Hearing loss and resulting communication disability self-assessment via an ICF-based questionnaire; Introducing the HEAR-COMMAND Tool

9. Lukas Varga, Silvia Borecka, Diana Ugorova, Zuzana Kabatova, Marek Sklenar, Dimitrios Paouris, Daniela Gasperikova, Milan Profant (Slovakia): Audiological features of hereditary hearing loss: what the audiograms may tell us about the etiology of deafness?



Bo Engdahl in Free Papers 3

#### FREE PAPERS 4 – CI OUTCOMES PART I

1. Joseph Attias, Suhail Habiballah, Chen Chen (Israel): Evoking and recording brain potentials directly through the cochlear implant: Part I – Acoustic stimulation

2. Joseph Attias, Suhail Habiballah, Chen Chen (Israel): Evoking and recording brain potentials directly through the cochlear implant: Part II – Electrical stimulation

3. Emilie Heuninck, Paul Van De Heyning, Vincent Van Rompaey, Griet Mertens, Vedat Topsakal (Belgium): Long-term audiological outcomes of robot-assisted cochlear implant surgery

4. Anne Hast, Ulrich Hoppe (Germany): Benefit of cochlear implantation for speech recognition in noise in subjects with asymmetric hearing loss

5. Chris J. James, Marie Laurence Laborde, Carol Algans, Marjorie Tartayre, Mathieu Marx (France): Barriers to progress in speech recognition in quiet and in noise by cochlear implant users

6. Renato Torres, Wenxi Gu, Hannah Daoudi, Ghizlene Lahlou, Olivier Sterkers, Evelyne Ferrary, Yann Nguyen, Isabelle Mosnier (France): Similar auditory outcomes of scala vestibuli compared to scala tympani insertions 1-year after cochlear implantation

7. Oana Astefanei, Luminita Radulescu, Alina Ivanov, Sebastian Cozma, Cristian Martu (Romania): Outcomes of Auditory Implants in Asymmetric Hearing Loss and Single Sided Deafness

8. Guido Reetz, Alexandra Stein, Ulrike Bockmuehl (Germany): Speech perception with ECAP-based fitting and with conventional fitting in adult users of MED-EL cochlear implants

9. Thomas Wesarg, Iris Kuntz, Susan Arndt, Antje Aschendorff, Konstantin Wiebe (Germany): Sound Localization in Bilateral and Single-Sided Deafness Cochlear Implant Users as a Function of Microphone Directionality Setting

10. Martina Brendel, Anne Mueller, Smita Agrawal, Laure Arnold, Patrick Boyle (Germany): Evaluation of Automatic Features in the Naída Marvel Hearing System



Joseph Attias in Free Papers 4

#### FREE PAPERS 5 – CLINICAL AUDIOLOGY DIAGNOSTICS

1. Chen Xu, Lena Schell Majoor, Birger Kollmeier (Germany): Development and Verification of Self-Supervised Smartphone-Based Methods for Assessing Pure-Tone Audiometry and Loudness Growth Function

2. Sigrid Polspoel, Finn Holtrop, Arjan J. Bosman, Sophia E. Kramer, Cas Smits (The Netherlands): Word Lists for Speech Audiometry: A Comparison Between Human and Synthetic Speech

3. Tobias Raffelsberger, Lisa Niederwanger, Kathrin Lauss, Thomas Keintzel (Austria): Adjustment of phase duration in the ECAP stimulation pulse allows for loudness optimization

4. Samira Saak, Angelika Kothe, Mareike Buhl, Birger Kollmeier (Germany): Comparison of user interfaces for measuring the matrix sentence test on a smartphone

5. Laura Jacxsens, Lana Biot, Annick Gilles, Vincent Van Rompaey, Carles Escera, Willem De Hertogh, Marc J. W. Lammers (Belgium): Frequency-Following Responses in Subjects With Sensorineural Hearing Loss: A Systematic Review

6. Mark Laureyns, Katrien Cambier, Tine Bijnens, Liesl Callay, Laure Van Baren, Valerie Van De Wouwer (Belgium): Evaluation of a new E-profile questionnaire for audiology practice

7. Hung Thai Van, Charles Alexandre Joly, Samar Idriss, Evelyne Veuillet, Eugen Ionescu, Pierre Reynard (France): Online digital audiometry vs. conventional audiometry: a multi-centre comparative clinical study

8. Hanin H. Rayes (Saudi Arabia): The Development of the Hearing Evaluation Reference



Chen Xu in Free Papers 5

#### FREE PAPERS 6 – BALANCE & TINNITUS

1. Hanne Gommeren, Joyce Bosmans, Julie Moyaert, Griet Mertens, Patrick Cras, Sebastiaan Engelborghs, Angelique Van Ombergen, Annick Gilles, Erik Fransen, Raymond Van De Berg, Sebastien Janssens de Varebeke, Vincent Van Rompaey (Belgium): Accelerated Cognitive Decline associated with Hearing Loss and Bilateral Vestibulopathy: Insights from a Prospective Cross-Sectional Study using the RBANS-H in the DFNA9 Population

2. Mateo Cukman, Iva Kelava, Mihael Ries, Andro Kosec, Lucija Simudvarac, Jakov Ajduk (Croatia): Correlation between severity of hearing impairment and permanent vestibular disorder in patients with Meniere's disease

3. Bojana Bukurov, Ana Jotic, Nenad Arsovic (Serbia): Peripheral vestibulopathy in cochlear implant recipients

4. Joyce Bosmans, Hanne Gommeren, Annick Gilles, Griet Mertens, Angelique Van Ombergen, Patrick Cras, Sebastiaan Engelborghs, Luc Vereeck, Marc Lammers, Vincent Van Rompaey (Belgium): Evidence of vestibular and balance dysfunction in patients with Mild Cognitive Impairment and Alzheimer's disease

5. Spela Kordis, Domen Vozel, Manja Hribar, Nina Bozanic Urbancic, Nejc Steiner, Saba Battelino (Slovenia): Vertigo and balance impairment in patients with idiopathic sudden sensorineural hearing loss

6. Justyna Jolanta Kutyba, Piotr Henryk Skarzynski, Wieslaw Wiktor Jedrzejczak, Danuta Raj Koziak (Poland): Use of a mobile application in the sound therapy of tinnitus

7. Ljiljana Cvorovic (Serbia): Patients with vascular tinnitus: diagnostic approaches and treatment outcomes

8. Laura Jacxsens, Joke De Pauw, Emilie Cardon, Annemarie Van Der Wal, Laure Jacquemin, Annick Gilles, Sarah Michiels, Vincent Van Rompaey, Marc J. W. Lammers, Willem De Hertogh (Belgium): Brainstem evoked auditory potentials in tinnitus: A best-evidence synthesis and meta-analysis



Bojana Bukurov in Free Papers 6

#### FREE PAPERS 7 – CI IN DIFFERENT POPULATION PART I

1. Cato Philips, Laure Jacquemin, Marc JW Lammers, Vincent Van Rompaey, (Belgium): Listening effort and fatigue among cochlear implant users: a scoping review

2. Ilona Anderson, Ellen Andries, Artur Lorens, Griet Mertens, Miryam Calvino, Dayse Tavora Viera, Edda Amann (Austria): The ICF and cochlear implant indications

3. Isabelle Mosnier, Hannah Daoudi, Evelyne Ferrary, Yann Nguyen, Olivier Sterkers, Ghizlène Lahlou (France): Candidacy for cochlear implantation in prelingual profoundly deaf adult patients

4. Angela Nikolic Margan, Marijana Tuta Dujmovic (Croatia): Challenges in verbotonal hearing therapy of pediatric and adult cochlear implant users during the COVID-19 pandemic

5. Emilie Heuninck, Vedat Topsakal (Belgium): Anatomy-based fitting in unexperienced cochlear implant users

6. Hung Thai Van, Pierre Reynard, Virginie Attina, Samar Idriss, Ruben Hermann, Claire Barilly, Evelyne Veuillet, Charles Alexandre Joly (France): Effect of Serious Gaming on Speech-in-Noise Intelligibility in Adult Cochlear Implantees: A Randomized Controlled Study

7. Medhat Yousef, Farid Alzhrani, Salman Alhabib (Saudi Arabia): Speech performance and subjective satisfaction of middle ear implant in congenital aural atresia

8. Karl Ludwig Bruchhage, Anke Leichte, Leonhard Imhäuser, Rolf Bader, Tim Jürgens, Daniela Hollfelder (Germany): Towards improving music perception for cochlear implant users with musical training

9. Astrid Van Wieringen, Andrea Bussé, Sara Magits, Mira Van Wilderode, Tom Francart, Jan Wouters (Belgium): Towards a holistic care path: efficacy of aural rehabilitation for persons with listening difficulties



Hung Thai-Van in Free Papers 7

#### FREE PAPERS 8 – QUALITY OF LIFE

1. Louise Hickson, Joseph Montano, Barbra Timmer, Nerina Scarinci, Monique Waite, Carly Meyer, Mansoureh Nickbakht, Katie Ekberg (Australia): Stigma experiences of adults with hearing loss and their families (Part 1)

2. Joseph Montano, Louise Hickson, Barbra Timmer, Nerina Scarinci, Monique Waite, Carly Meyer, Mansoureh Nickbakht, Katie Ekberg (USA): Clinical management of stigma for adults with hearing loss and their families (Part 2)

3. Astrid Ytrehus Jørgensen, Lisa Aarhus, Bo Engdahl, Bernt Bratsberg, Vegard Fykse Skirbekk, Ingrid Sivesind Mehlum (Norway): Hearing loss, sick leave, and disability pension: a follow-up study

4. Golda Grinblat, Hadas Braude Dagan, Isaac Shoghat (Israel): Relation between Presbyacousis, Cognitive decline and Depression, a Relational Study

5. Ana Jotic, Zorana Radin, Ana Opankovic, Bojana Bukurov, Ljiljana Cvorovic, Mina Nikolic (Serbia): Correlation of hearing, quality of life and psychological disturbances in chronic otitis media

6. Julie Moyaert, Annick Gilles, Griet Mertens, Marc Lammers, Hanne Gommeren, Nicolas Verhaert, Sam Denys, Sebastien Janssens De Varebeke, Erik Fransen, Vincent Van Rompaey (Belgium): Interaural and sex differences in the natural evolution of hearing levels in pre-symptomatic and symptomatic carriers of the p.Pro51Ser variant in the COCH gene

7. Vinaya Manchaiah, Thais Morata, Ross Roeser (USA): Global Audiology: An effort to develop a Global Resource for Audiology

8. Andreas Thulin, Milijana Malmberg, Kim Kähäri (Sweden): Hearing Health – the development and evaluation of an online hearing loss prevention program

9. Mark Laureyns (Belgium): How can we leverage the WHO World Report on Hearing to minimize the impact of untreated hearing loss?

10. Milijana Malmberg, Katja Anióse, Johanna Skans, Marie Öberg (Sweden): Clinically implementing online hearing support

DASS-21 COMQ-12

Ana Jotic in Free Papers 8

## FREE PAPERS 9 – CI IN CHILDREN PART II

1. Dagmar Herrmannova (Austria): Situation of deaf children – CI users – in developing countries and international awareness campaign #BecauselhearIlive

2. Marija Dokoska, Sonja Nikolova (R. N. Macedonia): Importance of preoperative assessment in pediatric cochlear implantation

3. Marc Lammers, Vincent Van Rompaey, Anouk Hofkens, Griet Mertens, Ellen Cochet, Paul Van Den Heyning, An Boudewyns (Belgium): Cochlear implantation for Single-sided deafness in children: the importance of age and etiology 4. Alice Benatti, Cristina Brandolini, Lisa De'siena, Giorgio Rossi, Livio Presutti (Italy): Incidence and prognostic role of audiological risk factors in neonatal hearing loss

5. Sofia Manika, Nikolaos Socrates Trimmis (Greece): Amusia hearing screening test results among learning-disabled and normal children

6. Arnaud Coez, Natalie Loundon, Nathalie Boddaert (France): Arterial spin labeling brain MRI (ASL-MRI) study to evaluate the impact of deafness on cerebral perfusion in 79 children before cochlear implantation

7. Verena Müller, Jasmin Krause, Heinz Dieter Klünter, Barbara Streicher, Ruth Lang Roth (Germany): Speech perception in noise and sound localization using different microphone modes in pediatric bilateral cochlear implant users

8. Manja Hribar, Dušan Šuput, Špela Kordiš, Nejc Steiner, Nina Bozanic Urbancic, Saba Battelino, Andrej Vovk (Slovenia): Structural brain alterations in congenitally deaf

9. Dmitrii Kliachko, Vladislav Kuzovkov, Serafima Sugarova, Yana Scherbakova (Russia): Using synthetic animal voices to test hearing in children with cochlear implant



Dagmar Herrmannova in Free Papers 9

### FREE PAPERS 10 - CI IN DIFFERENT POPULATION PART II

1. Katarina Pavicic Dokoza, Tonka Vranic, Ivona Ištvanfi (Croatia): Involving parents in the assessment of children with cochlear implant

2. William Kuan Hua Chen, Mei Jui Huang, Yen Jung Pan, Chi Ching Lin, Kuan Ju Chen, Joshua Kuang Chao Chen (Taiwan): Benefits of bilateral cochlear implantation in adolescent and adult patient

3. Anita Obrycka, Artur Lorens, Adam Walkowiak, Piotr Henryk Skarzynski, Henryk Skarzynski (Poland): Benefits of binaural integration after cochlear implantation in patients with Single-Sided Deafness and residual hearing in the implanted ear

4. Anita Obrycka, Justyna Witkowska, Artur Lorens, Malgorzata Fludra, Piotr Henryk Skarzynski, Henryk Skarzynski (Poland): Perception of social support by adults scheduled for cochlear implantation

5. Cato Philips, Laure Jacquemin, Marc J W Lammers, Kristien Wouters, Julie Moyaerts, Olivier Vanderveken, Vincent Van Rompaey (Belgium): The impact of hearing impairment and cochlear implantation on productivity and social wellbeing in a professionally active but severely hearing-impaired group: protocol of the "Hear again, work again" longitudinal prospective cohort study

6. Adam Walkowiak, Michal Karwat, Artur Lorens, Anita Obrycka, Piotr H Skarzynski, Henryk Skarzynski (Poland): Loudness growth function in patients with cochlear implant related facial nerve stimulation

7. Guido Reetz, Peter Roeser, Ulrike Bockmuehl (Germany): Effects of wind noise reduction on speech perception with the MED-EL Sonnet cochlear implant audio processor

8. Mareike Buhl, Kristina Richardt, Anna Warzybok, Birger Kollmeier (Germany): Model-based interpretability of different speech tests across languages – towards combined analysis of clinical-audiological databases using a speech-based Hearing Loss Index



Marc Lammers in Free Papers 10

# FREE PAPERS 11 – HEARING AIDS

1. Caitlin Frisby, Robert Eikelboom, Faheema Mahomed Asmail, Hannah Kuper, Tersia De Kock, Vinaya Manchaiah, De Wet Swanepoel (South Africa): Communitybased adult hearing care provided by community healthcare workers using mHealth technologies

2. Megan Clarissa Knoetze, Vinaya Manchaiah, Bopane Mothemela, De Wet Swanepoel (South Africa): Factors influencing hearing help-seeking and hearing aid uptake in adults: A systematic review of the past decade

3. Megan Clarissa Knoetze, Eldre Beukes, Vinaya Manchaiah, Ilze Oosthuizen, De Wet Swanepoel (South Africa): Reasons for Hearing Aid Uptake in Users from the United States: A Large-scale Qualitative Study

4. Caitlin Frisby, Karina De Sousa, Robert Eikelboom, Faheema Mahomed Asmail, Hannah Kuper, David Moore, Tersia De Kock, Vinaya Manchaiah, De Wet Swanepoel (South Africa): Validity of smartphone facilitated in-situ hearing aid audiometry for community-based hearing testing

5. Nabeelah Desai, Vinaya Manchaiah, Faheema Mahomed Asmail, Eldre Beukes, De Wet Swanepoel (South Africa, USA, India): User perspectives on hearing aids and changes for improved use

6. Hanin Karawani, Samira Anderson (Israel): Neural adaptation to hearing aids

7. Jane Cumming, Vinaya Manchaiah, Faheema Mahomed Asmail, Eldre Beukes, De Wet Swanepoel (South Africa, USA): Understanding hearing aid non-use in adults: A qualitative content analysis

8. Sreeram Kaithali Narayanan, Sabina Storbjerg Houmøller, Anne Wolff, Dan Dupont Hougaard, Michael Gaihede, Jesper Hvass Schmidt, Dorte Hammershøi (Denmark): Adoption and outcome for adult hearing aid users one-year post fitting

9. Gaziz Tufatulin, Sergey Levin, Inna Koroleva (Russia): The influence of protective and fixing tools for hearing aids and cochlear implants on the microphone input signal



Caitlin Frisby in Free Papers 11

#### FREE PAPERS 12 - CI OUTCOMES PART II

1. Sabine Hochmuth, Andreas Radeloff (Germany): Impact of frequency and timing mismatch on sound source localization ability of single-sided deaf Cochlear Implant users – a longitudinal study of a clinical cohort

2. Unai Martinez De Estibariz, Ersin Avci, Tim Nauwelaers, Patrick Boyle (Germany): Real-time monitoring of cochlear implant surgery via AIM for optimal and atraumatic electrode insertion

3. Marijana Tuta Dujmovic, Sanja Vlahovic (Croatia): Hearing development dynamics of the second implanted ear

4. Janez Rebol, Jana Dragar, Domen Guzelj, Petra Povalej Brzan, Tina Gabrovec (Slovenia): Comparison of perioperative electrophysiological measurements and postoperative results in cochlear implantation with a slim straight electrode

5. Sergey Levin, Levina Elena, Serafima Sugarova, Andrey Lilenko, Sergey Ilyin, Viktor Voronov (Russia): Fitting a cochlear implant processor based on the anatomy of the cochlea

6. Adam Walkowiak, Kornelia Zawistowska, Artur Lorens, Anita Obrycka, Piotr Henryk Skarzynski, Henryk Skarzynski (Poland): Hearing benefit after cochlear implantation during Covid-19 pandemic

7. Pushkar Deshpande, Lindsey Van Yper, Christian Brandt, Stefan Debener, Tobias Neher (Denmark): Cortical responses reflecting comprehension abilities evoked with auditory, visual, and visual-then-auditory stimuli: Normal-hearing participants vs. cochlear implant users

8. Elena Levina, Sergey Levin, Vladislav Kuzovkov, Serafima Sugarova, Andrey Lilenko (Russia): "Non-auditory" sensations after cochlear implantation



Pushkar Deshpande in Free Papers 12

## FREE PAPERS 13 – AGE RELATED HEARING LOSS PART II

1. Åsa Winzell Juhlin, Ulf Rosenhall, André Sadeghi, Ingmar Skoog (Sweden): Hearing loss in nonagenarians and the feasibility of using standardized pure-tone audiometry in a home setting for this age group

2. Sreeram Kaithali Narayanan, Sabina Storbjerg Houmøller, Sören Möller, Anne Wolff, Katja Lund, Dan Dupont Hougaard, Michael Gaihede, Jesper Hvass Schmidt, Dorte Hammershøi (Denmark): The pattern of hearing use in daily life situations in an adult Danish population

3. Hanna Göthberg, Johan Skoog, Tomas Tengstrand, Maria Hoff, Timothy Hadarsson Bodin, Ulf Rosenhall, Ingmar Skoog, André Sadeghi (Sweden): The association between central auditory function in old age and specific cognitive domains

4. Tatiana Marques, João Castelhano, Isabel Catarina Duarte, Carla Moura, Miguel Castelo Branco, António Miguéis (Portugal): Activation patterns for speech decoding in age-related hearing loss 5. Lucretia Petersen, Sarah Alexander, Ladine Boshoff, Athraa Chilwan, Zoe Coetzee, Eugene Matshusa, Siphesihle Nzuza (South Africa): A systematic review of ototoxicity management guidelines for cancer treatment throughout the lifespan

6. Maria Huber, Lisa Reuter, Lennart Weitgasser, Belinda Pletzer, Sebastian Roesch, Angelika IIIg (Austria): On the association between bilateral adult onset hearing loss, depressive symptoms and cognition of younger and older adults

7. Jovana Jecmenica, Sandra Stojanovic, Rade Kosanovic (Serbia): Hearing impairment and comorbidity

8. Ulrich Hoppe, Anne Hast, Thomas Hocke (Germany): Asymmetry in hearing causes reduced speech recognition

9. Adrian Fuente (Canada): Self-reported listening performance in solventexposed workers: Beyond pure-tone thresholds



Adrian Fuente in Free Papers 13

#### **FREE PAPERS 14 – REHABILITATION**

1. Lea Feld, Lena Schell Majoor, Jessica Koschate, Sandra Hellmers, Andreas Hein, Tania Zieschang, Birger Kollmeier (Germany): Detection of gait disturbances with hearing aids and other mobile devices: Preliminary results

2. Karina C De Sousa, Vinaya Manchaiah, David R Moore, Marien A Graham, De Wet Swanepoel (South Africa): Effectiveness of an over-the-counter self-fitting hearing aid compared to an audiologist-fitted hearing aid: A randomized clinical trial

3. Ilze Oosthuizen, Vinaya Manchaiah, De Wet Swanepoel (South Africa): Exploring hearing aid outcomes: Natural Language Processing analysis of open-ended text responses

4. Josef Seebacher, Viktor Koci, Joachim Schmutzhard, Tobias Raffelsberger, Thomas Keintzel, Philipp Zelger (Austria/Denmark): The Effect of a Notch Filter in Sound Pre-processing of Active Middle Ear Implants on Speech Perception

5. Yael Zaltz, Liat Kishon Rabin, Avi Karni, Ari Even Roth Daphne (Israel): The developmental trajectory of generalization following auditory training depends on the tested aspect

6. Milijana Malmberg, Jennie Hagberg (Sweden): Synchronous remote fine-tuning and follow-up within aural rehabilitation

7. Rodrigo Ordoñez, Katja Lund, Jens Bo Nielsen, Stine Christiansen, Sabina Storbjerg Houmøller, Jesper Hvass Schmidt, Dorte Hammershøi (Denmark): Value propositions of public adult hearing rehabilitation in Denmark

8. Jeanane M Ferre (USA): Effectiveness of computer-based auditory training for reducing/resolving specific central auditory processing deficits among school-age children



Josef Seebacher in Free Papers 14

#### FREE PAPERS 15 – NOISE AND MUSIC

1. Elien Van den Borre, Lea Zupan, Nina Bozanic Urbancic, Gaziz Tufatulin, Limor Lavie, Vinay Swarnalatha Nagaraj, Emre Gurses, Inga Holube, Jan De Laat, Sam Denys, Astrid Van Wieringen, Jan Wouters (more countries): Sound-in-noise screening: Towards an internationally applicable school-entry hearing screening test

2. Julia Zimmer, Laura Hartog, Dirk Oetting, Henri Pöntynen, Mathias Dietz (Germany): Loudness and lateralization of binaural broadband noise in subjects with asymmetric hearing loss

3. Yossi Bugannim, Liat Kishon Rabin (Israel): Sentence recognition in noise across the life span using the Matrix test

4. Renato Torres, Jonathan Flament, Daniele De Seta, Francesca Yoshie Russo, Julie Bestel, Olivier Sterkers, Evelyne Ferrary, Yann Nguyen, Isabelle Mosnier (France): Pure-tone audiometry and speech recognition in quiet to predict the response of Matrix test in noise in cochlear implant recipients 5. Mark Laureyns, Katrien Cambier, Lotte Dutré, Kirsten Cloots Van De Wouwer, Anke Verbist (Belgium): The relation between self-reported hearing functionality, acceptable noise level and burn-out

6. Huib Versnel, Bernard M. Vonck, Jan A. Van Heteren, Robert J. Stokroos, Marc J. Lammers (The Netherlands): The acoustic change complex can predict speech perception in noise

7. Megha Manikandan A, Dr. Nisha K V, Dr. Prashanth Prabhu (India): Effect of competency among singers on auditory processing abilities

8. Katya Guglielmi Marcondes Freire (Brazil): Innovations towards Preserving the Hearing of Musicians

9. Ina Molaug, Bo Engdahl, Ingrid Sivesind Mehlum, Zara Ann Stokholm, Henrik A. Kolstad, Lisa Aarhus (Norway): Job exposure matrix-based occupational noise and long-term hearing decline: A prospective study



Huib Versnel in Free Papers 15

#### FREE PAPERS 16 - BC IMPLANTS & CLINICAL AUDIOLOGY TREATMENT

1. Milan Urík, Dagmar Hošnová, Sona Šikolová (Czech Republic): Two Bonebridge bone conduction hearing implant generations: audiological benefit and quality of hearing in children

2. Martin Kompis, Michael Zbinden, Tom Gawliczek, Alexander Huber, Marco Caversaccio, Wilhelm Wimmer (Switzerland): Performance with a new bone conduction implant audio processor in patients with single-sided deafness

3. Carolina Der, Mario Zernotti, Sofia Bravo, María Fernanda Di Gregorio (Chile): Active bone conduction implant and adhesive bone conduction device: A comparison of audiological performance and subjective satisfaction

4. Javier Gavilan, Fernanda Pedrero, Laura Cavalle, Jose Manuel Morales, Luis Lassaletta (Spain): ADHEAR versus passive bone conduction implants in patients with aural atresia

5. Faris Brkic, Wolf Dieter Baumgartner, Melina Schlott, David Liu, Thomas Thurner, Dominik Riss, Wolfgang Gstöttner, Erich Vyskocil (Austria): Bonebridge 602 implantation with use of lifts seems feasibly, safe, and effective

6. Bopane Godwin Mothemela, De Wet Swanepoel, Faheema Mahomed Asmail, Vinaya Manchaiah (South Africa): Predictors of hearing aid outcomes including social networks, mental health and service delivery models

7. Bopane Godwin Mothemela, De Wet Swanepoel, Faheema Mahomed Asmail, Vinaya Manchaiah (South Africa): Factors influencing hearing aid use, benefit and satisfaction in adults: A systematic review of the past decade

 Thais Catalani Morata, Angela C. Garinis, James R. Debacker, Dawn L. Konrad Martin, Carmen C. Brewer, Khaya D. Clark, Lucretia Petersen, Peter S. Steyger, Gayla
Poling, Adrian Fuente (Canada): International Ototoxicity Management Group (IOMG): A global initiative to expand and improve ototoxicity management 9. Diana Ugorová, Jana Antalová, Zuzana Pospíšilová, Milan Profant, Lukáš Varga (Slovakia): Audiological outcomes after surgery for cholesteatoma with semicircular canal dehiscence

10. Nejc Steiner, Nina Božanić Urbančič, Špela Kordiš, Manja Hribar, Saba Battelino (Slovenia): Effect of cyberknife treatment of vestibular schwanoma on inner ear function



Faheema Mahomed Asmail in Free Papers 16

#### FREE PAPERS 17 – OBJECTIVE MEASUREMENTS

1. Maria Teresa Almela Rojo, Sheila Templado Aguilera, Antonio Galindo Fernández, Laura Espinosa Fernández, Joaquín Gadea Martos, Francisco García Purriños (Spain): Description of Auditory Brainstem Responses in porcine model

2. Philipp Zelger, Josef Seebacher, Sonja Rossi (Austria): An approach to quantify subjective loudness perception by objective brain measures

3. Iva Kelava, Mihael Ries, Jakov Ajduk, Andro Košec, Robert Trotić (Croatia): The usefulness of wideband absorbance in differentiating otosclerosis and ossicular chain discontinuity

4. Thomas Rosner, Russell Spencer William Higgs (Germany): Recording Otoacoustic Emissions (OAE) with Adaptive Noise Cancellation (ANC)

5. Mei Jui Huang, William Kuan Hua Chen, Yen Jung Pan, Joshua Kuang Chao Chen (Taiwan): Clinical application of electrically-evoked stapedial reflex threshold (eSRT)

6. Maria Hoff, Johan Skoog, Timothy Hadarsson Bodin, Tomas Tengstrand, Ulf Rosenhall, Ingmar Skoog, André Sadeghi (Sweden): Hearing loss and cognitive function in early old age: Comparing subjective and objective hearing measures

7. Carolina Köstler, David Herrmann, Kristen Rak, Rudolf Hagen, Mario Cebulla (Germany): Coupling efficiency in active middle ear implants for different types of couplers using auditory brainstem responses

8. Vija Vainutiene, Justinas Ivaška, Tatjana Ivaškiene, Eugenijus Lesinskas (Lithuania): Examination of hearing in systemic vasculitis population

9. George A Tavartkiladze, Maria R Lalayants, Vigen V Bakhshinyan (Russia): Electrically-evoked ABR in children with auditory neuropathy spectrum disorder



Iva Kelava in Free Papers 17

## **POSTER SESSION 1**

1. Silvia Di Bonaventura (United Kingdom): The impact of Idiopathic Sudden Sensorineural hearing loss on patients' Quality of Life

2. Ramida Dindamrongkul (Thailand): Prediction of pure-tone thresholds by speech recognition threshold in elderly with hearing loss

3. Maximilian Karl Scharf, Birger Kollmeier, Sabine Hochmuth, Anna Warzybok (Germany): A goodness of fit measure for remote psychometric testing

4. Jasenka Broz Frajtag, Lana Kovac Bilic (Croatia): Quality of life, communication problems and tinnitus people with hearing loss

5. Dong Hee Lee, Heil Noh (South Korea): Consideration for wearing a hearing aid in the worse ear only in cases with asymmetrical hearing loss

6. Klaudia Edinger Andersson, Tobias Neher, Jeppe Høy Christensen (Denmark): Momentary heart rate is associated with listening intent and interacts with real-world acoustics in young normal-hearing adults 7. Shangqiguo Wang, Lena Wong (Hong Kong SAR, China): The relationship between reading span and speech perception in noise measured using different test materials among older hearing aid users

8. Pernilla Kjær Andersen, Lukas Jürgensen, Florian Denk, Tobias Neher (Denmark): Audiological Evaluation of a Prototype for a Hearing Aid Demonstrator

9. Lavinia Slabu, Grégory Gerenton, Céline Quinsac, Guillaume Andéol, Paul Avan (France): Characteristics of the acoustic absorbance of the wide band tympanometry

10. Marion Lièvre, Cédric Annweiler, Sophie Boucher (France): Association between presbyvestibulopathy and gait disorders in fallers aged 75 and over

11. Elvira Kereković Mašić, Iva Bašić, Gordana Varošanec Škarić, Siniša Stevanović (Croatia): Mom, why is everyone laughing at me? Unrecognized laryngeal web – a case report

12. Justyna Jolanta Kutyba, Piotr Henryk Skarzynski, Malgorzata Buksinska (Poland): Screening tests for self-assessment of smell and taste at the patient's home

13. Justyna Jolanta Kutyba, Piotr Henryk Skarzynski, Elzbieta Gos, Wieslaw Wiktor Jedrzejczak (Poland): Self-help interventions chosen by patients with chronic tinnitus

14. Hanin Karawani, Anadel Khalaila (Israel): Speech in Noise Perception and Neural Auditory Processing of Speech among School-Age Children



Elvira Kerekovic in Poster Session 1

### **POSTER SESSION 2**

1. Rosa Linde Fischer, Schmitt Rüth Stephanie, Sczogiel Susanne, Graber Lukas, Williger Bettina (Germany): Adaptive strategies as indicators of successful ageing with hearing loss – A factor analysis approach based on the hearing-related application of the SOC model

2. Julie Moyaert, Annick Gilles, Griet Mertens, Marc Lammers, Hanne Gommeren, Nicolas Verhaert, Sam Denys, Sebastien Janssens De Varebeke, Erik Fransen, Vincent Van Rompaey (Belgium): Evolution of speech perception in quiet and noise in pre-symptomatic and symptomatic carriers of the p.Pro51Ser variant in the COCH gene

3. Eduardo Pessoa Moraes, Ana Paula Bruner (Brasil): Acoustic reflex and peripheral facial palsy: a retrospective study in a teaching hospital in São Paulo – SP

4. Anamarija Sestak, Siniša Maslovara, Zeljko Zubcic, Andrijana Vceva (Croatia): Influence of vestibular rehabilitation on semicircular canals and otolith organs in patients with unilateral vestibular hypofunction

5. Celine Quinsac, Simona Caldani, Marta Campi, Arnaud Coez, Gregory Gerenton, Lavinia Slabu, Hung Thai Van, Sylvette Wiener Vacher, Paul Avan (France): From monogenic age-related hearing loss to a battery of objective audiovestibular diagnostic tests

6. Sam Denys, Jan Wouters (Belgium): Sensitized Digit Triplet Tests with differential test format

7. Lavinia Slabu, Celine Quinsac, Gregory Gerenton, Paul Avan (France): Properties of Auditory-evoked Brainstem Responses from human ears in the presence of medium-level broadband masking allowing removal of low-threshold fiber contributions

8. Weronika Swierniak, Elzbieta Gos, Piotr Henryk Skarzynski, Natalia Czajka, Henryk Skarzynski (Poland): The accuracy of parental suspicion of hearing loss in children

9. Ivan Kristic, Sinisa Maslovara (Croatia): Diagnostic of Post-COVID-19 Vestibular Disorders

10. Weronika Swierniak, Elzbieta Gos, Piotr Henryk Skarzynki, Danuta Raj Koziak, Henryk Skarzynski (Poland): Prevalence of tinnitus in a sample of 43,064 children in Warsaw, Poland

11. Mislav Knežević, Siniša Stevanović, Andro Košec, Melanija Obraz (Croatia): Vocal cord suture lateralization as a treatment for paralysis following total thyroidectomy 12. Henryk Skarzynski, Weronika Swierniak, Natalia Czajka, Krzysztof Kochanek, Henryk Skarzynski (Poland): Hearing loss among 1st and 6th grade children of primary school in Warsaw, Poland – cohort study

13. Marine Hauchère, Catherine Sarret, Fabrice Giraudet, Denis Ardid, Elise Gazzano (France): Contributions of high-frequency distortion products in a pediatric population with different otologic diseases

14. Mirjana Grebenar Cerkez, Darija Birtic, Zeljko Zubcic, Stjepan Juric, Jelena Saric Juric (Croatia): The inner ear function in patients with an obstructive sleep apnea



Mirjana Grebenar Cerkez in Poster Session 2

### **POSTER SESSION 3**

1. Lana Biot, Huib Versnel, Bernard M D Vonck, Geerte J J Ramakers, Laura Jacxsens, Marc J W Lammers (Belgium): Electrically evoked auditory brainstem responses and acoustic change complexes in adolescent cochlear implant users with long inter-implant intervals

2. Maja Lakus Ivancek, Bojan Sotirov (Croatia): Bimodal hearing fitting

3. Ronit Priner, Devora Brand (Israel): Attitudes and Practices of Hearing Protection Use by Israeli College Music Students

4. Marisa Klancnik, Petar Ivanisevic, Nikola Kolja Poljak, Petra Mikulic (Croatia): Analysis of clinical parameters as predictors of hearing recovery in patients with sudden sensorineural hearing loss

5. Gaziz Tufatulin, Mariya Boboshko, Ekaterina Garbaruk, Ekaterina Zhilinskaya, Oleg Markelov (Russia): Audiological profile analysis of the elderly hearing aid users

6. Andro Tarle, Boris Ivkic, Andro Kosec, Sinisa Stevanovic: (Croatia): Accidental Removal of Glottic Carcinoma During Direct Laryngomicroscopy and Follow-up Bronchoscopy: A Case Report

7. Shinya Morita, Atsushi Fukuda, Kimiko Hoshino, Akihiro Homma (Japan): Cochlear implantation in otitis media with antineutrophil cytoplasmic antibodyassociated vasculitis

8. Fabrice Giraudet, Aurélien Mulliez, Luciana Macedo De Resendea, Ludivine Beaud, Igor Tauveron, Paul Avan (France): Hearing monitoring allows identification of hidden auditory neural dysfunctions in type-2 diabetes mellitus with normal hearing sensitivity

9. Yana Shcherbakova, Spartak Megrelishvili, Vladislav Kuzovkov, Dmitrii Kliachko (Russia): Quality Of Life And Psychological Health In Adults With Acquired Single-Sided Deafness

10. Ludivine Beaud, Paul Avan, Fabrice Giraudet (France): Development of an electrophysiological diagnostic indicator auditory neural damage in individuals exposed

11. Fuad Brkic, Erdem Yildiz, David Liu, Alen Harcinovic, Almir Salkic, Wolf Dieter Baumgartner, Faris Brkic (Bosnia and Herzegovina): Preoperative computer

tomography assisted measurement of cochlear duct length in pediatric cochlear implant candidates: the interobserver variability highlights the need for radiologic training in otorhinolaryngology residency

12. Dina Lelic, Florian Wolters, Nadja Schinkel Bielefeld (Denmark): Measuring hearing aid satisfaction in everyday listening situations: Retrospective and in-situ assessments complement each other

13. Tatiana G Markova, Natalia N Alekseeva, Mariia R Lalayants, Svetlana S Chibisova, Olga L Shatokhina, Oksana P Ryzhkova, Aleksander V Polyakov, Vigen V Bakhshinyan, George A Tavartkiladze (Russia): Epidemiology of hereditary mild, moderate, and moderate-to-severe bilateral hearing loss in Russia

14. Anna Argelaguet Parra, Gabriela Convertini Ortega, Janette Gambettola Lorenzo, Natalia Coll Alsina, Elisa Dieguez Gonzalez, Maria Antonia Claveria Puig (Spain): Long-term clinical follow-up of a patient diagnosed with congenital Auditory Neuropathy Spectrum Disorder (ANSD)



Faris Brkic in Poster Session 3

#### **POSTER SESSION 4**

1. Jenny Haggstrom, Per Östberg, Esma Idrizbegovic, Christina Hederstierna (Sweden): Association between central auditory processing dysfunction and cerebrospinal fluid markers for dementia

2. Dario Sos, Daria Birtic, Antonija Brlic, Ivan Abicic (Croatia): Influence of agerelated hearing loss on emotions

3. Branislava Fides Bercíková, Zofia Frajková, Milan Profant, Lukáš Varga (Slovakia): Slovak adopted subjective hearing performance questionnaires for patients after cochlear implantation

4. Sumru Keçeli (Sweden): How should we auscultate pulsatile tinnitus?

5. Petar Drvis, Håkon Lohne, Radana Drvis Ninkovic (Croatia): Neural plasticity in long-term single-sided hearing aid users

6. Jan Wouters, Tinne Goossens, Ehsan Darestani Farahani, Astrid Van Wieringen (Belgium): Speech perception across the adult lifespan

7. Weronika Swierniak, Piotr Henryk Skarzynski, Elzbieta Gos, Natalia Czajka, Henryk Skarzynski (Poland): Pilot hearing screening among school age children in Nigeria, Lagos

8. Mateja Denovic, Elena Kliseska, Lana Kovac Bilic (Croatia): Which parameters might affect the onset and duration of postoperative hearing improvement in children with chronic otitis media with effusion

9. Dmitrii Kliachko, Sergei Surma, Boris Shchegolev, Elena Ogorodnikova (Russia): Exposure of weak magnetic fields on auditory nerve of patients with moderate to severe sensorineural hearing loss

10. Lana Biot, Laura Jacxsens, Emilie Cardon, Huib Versnel, Annick Gilles, Vincent Van Rompaey, Marc Lammers (Belgium): The Acoustic Change ComplEx Predictive validaTion (ACCEPT) study to predict speech perception: Protocol of a validation study

11. Sreeram Kaithali Narayanan, Sabina Storbjerg Houmøller, Anne Wolff, Dan Dupont Hougaard, Michael Gaihede, Jesper Hvass Schmidt, Dorte Hammershøi (Denmark): Do Hearing Aids Help in Real-Life Work-Related Situations?

Barbara Konjevic, Andro Kosec, Mirta Pecek, Siniša Stevanovic (Croatia):
Management of Implant Extrusion Following Thyroplasty for Vocal Fold Paralysis – A
Case Report

13. Danuta Raj Koziak, Elzbieta Gos, Weronika Swierniak, Natalia Czajka, Piotr Henryk Skarzynski, Henryk Skarzynski (Poland): Symptoms of auditory processing disorders in children with tinnitus

14. Hanin Karawani, Hanin Karah (Israel): Auditory perceptual exercises in adults adapting to the use of hearing aids



Sreeram Kaithali Narayanan in Poster Session 4

Such a large EFAS congress would not be possible without our sponsors, to whom we sincerely thank for their partnership and support. They are: Advanced Bionics, Cochlear, City of Sibenik, Med-EI, Neuroth and Path Medical. We also thank the ISA, WCA and IJA organizations for their partnership and collegial cooperation in the field of international audiology. Our thanks also go to the PCO organization TOPKON, for their efforts and commitment to the EFAS 2023 Congress. The EFAS 2025 Congress will be in Vienna, Austria, under the chairmanship of Georg Mathias Sprinzl, and EFAS 2027 Congress will be in Odense, Denmark, under the chairmanship of Tobias Neher.



Organizers of the EFAS 2023 Congress in Sibenik, Croatia