

JUNE 10 – 12, 2024 UBC ROBSON SQUARE VANCOUVER, CANADA

Presenter Schedule as of March 22, 2024

MONDAY, JUNE 10th

9:00AM	THEATRE	THE AAGE MØLLER DISTINGUISHED LECTURE ON TINNITUS: WHERE ARE WE NOW? WHERE ARE
		WE GOING?
		Speaker: Dr Pawel Jastreboff, Professor Emeritus at Department of Otolaryngology, Emory University
		School of Medicine, and Visiting Professor <i>sine die</i> at University College London, London, UK.
10:30AM	THEATRE	SYMPOSIUM: SOUND TOLERANCE DISORDERS AND TINNITUS: INVESTIGATING HYPERACUSIS AND
		MISOPHONIA
		Chair: Fatima Husain, University of Illinois Urbana-Champaign, United States
		Speakers:
		Julia Campbell, University of Texas at Austin, Texas, USA - The hyperacusis versus misophonia controversy
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		Dave Eddins, University of Central Florida, USA - A transitional treatment for hyperacusis
		Fatima Husain, University of Illinois Urbana-Champaign, USA - Electrophysiological measures of
		hyperacusis, misophonia and tinnitus
		Arnaud Norena, Aix-Marseille University, France - The putative neural mechanisms of noise-induced
		tinnitus and hyperacusis studied in guinea pigs (voir courriel)
		Zach Rosenthal, Duke University, United States;
10:30AM	C400/C420	ORAL PAPERS: ANIMAL RESEARCH
		Chun-Jen Hsiao, Alexander Galazyuk, <i>Depolarization shift in the resting membrane potential underlies hyperactivity of inferior colliculus neurons induced by an acoustic trauma.</i>
		Chul Ho Jang, Gwang-Won Cho, Changjong Moon [,] Ilyong Park, <i>Neuroprotective Effect of Valproic Acid on Salicylate-Induced Tinnitus</i>
		Yoonjai Lee, Won Jun Noh, Jae-Jin Song, Forest for the Trees: Preliminary results of novel sigmoid sinus resurfacing in subjects with sigmoid sinus dehiscence and adjacent broad-based diverticulum
		Kyu-Yup Lee, Da-Jung Jung, Sang-Heun Lee, Study on protective effect of novel chemical compound against acquired hearing loss
		Norena, A., The putative neural mechanisms of noise-induced tinnitus and hyperacusis studied in guinea pigs (voir courriel)
		Jinsheng Zhang, Po Hung Chiang, Paul Morse, Tasnim Arroum, Maik Huttemann, <i>Near-Infrared (NIR)</i> Light Treatment of Tinnitus
1PM	THEATRE	SYMPOSIUM: REAL WORLD EVIDENCE FOR MULTIMODAL TREATMENT APPROACHES FOR TINNITUS
	HILAINE	Chair: Emily McMahan, Alaska Hearing and Tinnitus Center
		Superplaces:
		Speakers:
		Sven Vanneste, Trinity College Institute for Neuroscience, & School of Psychology, Trinity College Dublin, Ireland - Exploring Transcutaneous Stimulation of Peripheral Nerves as a Source of
		Transcranial Electrical Stimulation Effects

		Emily McMahan, Founder of Alaska Hearing and Tinnitus Center - A Hybrid Approach to Tinnitus Care: Utilizing Bimodal Neuromodulation
		Craig Kasper, Founder and Managing Director of New York Hearing Doctors – Institute for Hearing and Balance, New York, U.S.A and Brian Fligor – Co-Founder and Clinical Strategic Advisor at Lantos Technologies. President and Owner of Tobias and Battite Inc, Boston, Massachusetts, U.S.A Bimodal Neuromodulation for the Treatment of Tinnitus: Real-World Clinical Outcomes & Outliers
		Stefan Schoisswohl, Universität der Bundeswehr München, Munich, Germany - The Effects of Combining Transcranial Magnetic Stimulation with Auditory Stimulation on Tinnitus Symptoms
		Milena Engelke, Universitätsklinikum Regensburg, Germany - Collecting real world evidence on tinnitus symptom dynamics through Ecological Momentary Assessment
2:00PM	C460	WORKSHOP: EVIDENCE-BASED PRACTICE IN AUDIOLOGY: AN INTRODUCTION Speaker: Dr Sylvie Hébert, Professor and Program Director of Audiology, Université de Montréal
2:30PM	C460	SPONSOR SESSION: HYPERACUSIS RESEARCH, LIMITED Speaker: Steven Barad, M.D., Director, Hyperacusis Research, Limited
3:00PM	THEATRE	ORAL PAPERS: SOUND THERAPY
		Min Young Kwak, Seung Yeon Jeo, Jung Ho Choi, Sun Seong Kang, Yong-Hwi An, Hyun Joon Shim, Personalized Neuromodulation: A Novel Strategy for Improving Tinnitus Treatment
		Anne W. Wendrich, Kelly K.S. Assouly, Jan A. A. van Heteren, Jeroen P. M. Peters, Wilko Grolman, Robert J. Stokroos, Huib Versnel, Adriana L. Smit, <i>Effect of cochlear implant, bone conduction device and contralateral routing of sound hearing aid on tinnitus in SSD</i>
		Jose Lopez Santacruz, Emile de Kleine, Pim van Dijk, Hearing aid amplification schemes adjusted to tinnitus pitch: an RCT
		Nina Wunder, Winfried Schlee, Sex effects in sound therapy for tinnitus
		Xinghao Wang, Qian Che, Jing Sun, Jia Li, Zhenghan Yang, Han Lv, Zhenchang Wang, <i>Transformer Model Based on DTI to Predict the Effect of Music Masking Therapy in Patients with Tinnitus</i>
		Gianfranco C. Velasco, MD; Jaclyn Leigh E. Vidal, MD; Min Chae Jun, MD; Chan Mee Lee, MD; Jae Sang Han, MD, PhD; Jae Hyun Seo, MD, PhD; Shi Nae Park, MD, Clinical Characteristics of Cured Sensorineural Tinnitus Patients After Tinnitus Retraining Therapy - A Large Case Series
		Dongmei Tang, Yunfeng Wang, Shan Sun, Huawei Li, Effect of modified tinnitus relieving sound (MTRS) for tinnitus treatment - a multicenter randomized clinical trial
3:30PM	POSTER HALL	Jeon Mi Lee, Hyun Jin Lee, Gilmoon Lee and Jae-jin Song, Auditory experience, for a certain duration, is a prerequisite for tinnitus
		Ho Yun Lee, Seung-Ho Shin, Oak-Sung Choo, Jae Yong Byun, Jae Ho Chung, <i>Analysis of Loudness Discomfort Level Tests in Tinnitus Patients</i>
		Han Lv, Qian Chen, Zuozhen Zhang, Zhaodi Wang, Shusheng Gong, Junzhong Ji, Zhenchang Wang, Jinduo Liu, Functional-guided reinforcement learning effective connectivity indicates effectiveness of sound therapy in tinnitus patients
		Dave Korotkov, Tinnitus Distress and the Steeling/Sensitization Hypotheses: A Secondary
		Andréia Aparecida de Azevedo, Ricardo Rodrigues Figueiredo, Eliana Ferreira Vilela, Jeanne Oiticica, correlation between tinnitus severity and the big five personality traits
		correlation between tinnitus severity and the big five personality traits

Min Young Kwak, Yong Tae Cho, Yong-Hwi An, Hyun Joon Shim, Relation of Sound Level Tolerance to Tinnitus in Human: A Comparative Analysis of Unilateral, Bilateral, and Control Groups

Fournier, P., Valentin, O., Z., Walsh, Z., Zendel, B.R. & Lehmann, A., Association between cannabis and tinnitus: could loud music listening under cannabis influence be the missing link?

Cosima F. Lukas, Paul Wilknitz, Prof. Dr. Orlando Guntinas-Lichius, Dr. Daniela Ivansic, Prof. Dr. ChristianDobel, Prof. Dr. Manuela Nowotny, *Occupational noise exposure: Early audiological and physiological signs of noise-induced hearing loss and mental health*

Lieber Po-Hung Li, Cheng-Ta Li, Jen-Chuen Hsieh, Steady-state auditory evoked fields reflect long-term effects of repetitive transcranial magnetic stimulation in tinnitus

Sneha Uttakalika¹, Manya Fangaria , Ashwini Tidole², Kamalakannan Karupaiah³, Prashanth Prabhu, Prevalence of somatosensory tinnitus in individuals with tinnitus

Luciana Lozza de Moraes Marchiori, Licia Sayuri Tanaka, Daiane de Almeida Soares Ciquinato, Glória de Moraes Marchiori, Braulio Henrique Magnani Branco, *Analysis between subjective sleep quality and level of intensity of the tinnitus in people post COVID-19*

Kritika Nayyar, Sweety Chauhan, Neha Surkund, Swaham Mohanty, Kajal Bhatiwal, Suman Penwal, Kamalakannan Karupaiah, Prashanth Prabhu, *Prevalence of misokinesia and misophonia among adult population in India*

Jae Sang Han, Minho Lee, Hyeon-Chun Park, So Young Park, Yeun-Jun Chung, Shi Nae ParL, Identification of SNPs Associated with Chronic Sensorineural Tinnitus in the Korean Population

Kyu-Yup Lee, Da-Jung Jung, Sang-Heun Lee, Study on protective effect of novel chemical compound against acquired hearing loss

TUESDAY, JUNE 11th

8:00AM	THEATRE	OPENING SESSION: MEASURING TINNITUS IN THE CLINIC AND FOR RESEARCH
		Speaker: Richard S. Tyler, Ph.D., Department of Otolaryngology-Head and Neck Surgery and Communication Sciences and Disorders, Iowa City, IA, The University of Iowa
9:00AM	THEATRE	ROUND TABLE: HYPERACUSIS AND OTHER SOUND TOLERANCE DISORDERS
		Facilitator: Dr Arnaud Norena
		Panellists: TBA
9:00AM	C400/C420	ORAL PAPERS: BIOMARKERS OF TINNITUS
		Bérangère Villatte, Alain Vinet, Sayeed Devraj-Kizuk, Sylvie Hébert, A study on stress reactivity under acute stress and noise exposure in tinnitus individuals
		Kurt Steinmetzger, Benjamin Boecking, Petra Brueggemann, Laura Basso, Matthias Rose, Birgit Mazurek, Eva M. J. Peters, <i>Angiotensin II and -(1–7) concentrations in human hair samples reflect the degree of tinnitus-related distress</i>
		Licia Sayuri Tanaka, Luciana Lozza de Moraes Marchior2, Daiane de Almeida Soares Ciquinato, Denilson deCastro Teixeira, Glória de Moraes Marchiori, Braulio Henrique Magnani Branco, Regina Célia Poli-Frederico, Comparative study of Tumor Necrosis Factor Alfa (TNF-α) and impact of Tinnitus on the quality of life of older adults
		Shagun Ajmera, Ivan Abraham, Fatima Husain, Harmonizing resting state functional MRI data to find markers of tinnitus in brain connectivity using deep learning
10:30AM	THEATRE	SYMPOSIUM: HOW SHOULD WE MEASURE THE SUCCESS OF TINNITUS TRIALS AND INTERVENTIONS?
		Chair: Hazel Goedhart, Tinnitus Hub, The Netherlands
		Speakers:
		Hazel Goedhart, Tinnitus Hub, the Netherlands - Outcome measures that tinnitus patients care about
		Inge Stegeman, University of Utrecht, The Netherlands - Outcome measures in tinnitus research: the methodological perspective
		• Adriana Smit, University of Utrecht, The Netherlands - <i>Tinnitus outcome measure; what it brought us, where it leaves us in tinnitus care.</i>
		Joel Berger, University of Iowa, USA - The potential for objective testing of tinnitus in humans.
		 Laura Basso, University Hospital Regensburg, Germany - The 83 Symptoms of Tinnitus: Content Overlap of Commonly Used Scales for Tinnitus Distress
10:30AM	C400/C420	ORAL PAPERS: HETEROGENIETY OF TINNITUS
		Mie Lærkegård Jørgensen, Torsten Dau, <i>Tinnitus subgroups based on supra-threshold hearing characteristics</i>
		Tanit Sanchez, Long term total remission of tinnitus: fact or myth?
		Jing Sun, Zhenchang Wang, Han Lv, Causal Associations of Genetically Determined Tinnitus with Neuroimaging Traits: Evidence from a Mendelian Randomization Study

		Qian Chen, Yan Huang, Xinghao Wang, Lining Dong, Thalamic multimodal quantitative MRI feature explains the different outcomes in tinnitus patients after sound therapy
		Gianfranco Velasco, Hyun Jae Cho, Young Jun Seo, Ji Hyung Lim, Jae Sang Han, Jae Hyun Seo, Shi Nae Park, The Size Analysis of Stapedius and Tensor Tympani Muscles in CT scan in Patients with Middle Ear Myoclonic Tinnitus
		Cosima F. Lukas, Daniela Ivansic, Gerlind Schneider, Orlando Guntinas-Lichius, Christian Dobel, Short and sweet: Long-lasting therapy success after interdisciplinary tinnitus treatment - a 5-year follow-up study
10:30AM	C460	ORAL PAPERS: PULSATILE TINNITUS
		Nicole M. Cancelliere, Gurnish Sidora, Zainab Hussain, David Steinman, Vitor Mendes Pereira, Utilization of Transcanal Recordings for Objectification of Pulsatile Tinnitus
		Gurnish Sidora, Nicole Cancelliere, Anna Haley, Vitor Mendes Pereira, David Steinman, <i>Understanding</i> the Sound Production Mechanism of Pulsatile Tinnitus Using Computational Fluid Dynamics
		Minakshi Gupta, Yatin Mahajan, Pulsatile Tinnitus: A case report of assessment and management
		Jae-Hyun Seo, Jae Sang Han, Shi Nae Park, The Application of Distortion Product Otoacoustic Emission for the objective measurement of Vascular Pulsatile Tinnitus Dave Korotkov - Living with Pulsatile Tinnitus: A Self-Narrative Using McAdam's Levels of Personality
		Model Shi Nae Park, Min Chae Jeon, Chan Mee Lee, Jae Sang Han, Jae Hyng Seo, Clinical Management of Myoclonic Tinnitus for A Cure: From Botox Injection to Surgery
1:00PM	THEATRE	AFTERNOON SESSION: WAR ON TINNITUS Speaker: Dr Dirk de Ridder, Professor of Neurosurgery at the Dunedin School of Medicine, University of Otago in New Zealand and co-runs a private neuromodulation clinic in Belgium
2:00PM	THEATRE	ORAL PAPERS: HYPERACUSIS
		Charlotte Bigras, Victoria Duda, Sylvie Hébert, Exploring the Multidimensional Nature of Loudness Perception
		Namitha Jain, Shagun Ajmera, Gibbeum Kim, Howard Berenbaum, Fatima T Husain, Auditory Emotion Processing in Hyperacusis and Misophonia: A Comprehensive Behavioral and fMRI Study
		Philippe Fournier, Pierre Bourez, Claudia Côté, Arnaud J. Noreña, Loudness and affective responses to natural sounds in hyperacusis
		Pierre Bourez, Guillaume T. Vallet, Nathalie Gosselin, François Bergeron, Philippe Fournier, Experimentally measuring the functional impact of noisy environments on individuals with and without hyperacusis
2:00PM	C460	WORKSHOP: CONTRIBUTION OF MIDDLE EAR AND MULTIMODAL PLASTICITY TO TINNITUS AND HYPERACUSIS.
		Speaker: Dr Arnaud Norena, Aix-Marseille University, France
3:30PM	THEATRE	ORAL PAPERS: NEW IDEAS IN TINNITUS
		Grant D Searchfield, There is where I hear tinnitus.
		Mehdi Abouzari, Hamid R. Djalilian, Migraine Enhances Tinnitus Perception Leading to Loud Tinnitus

		Wrzosek, M., Gil, M., Klemens, W., Puzio, A., Józefowicz-Korczyńska, M., Relation between dominant time perspectives and tinnitus annoyance
		Inge Stegema, Prediction models in tinnitus research: how we do it, and what we need to create impact
		Benjamin Boecking, Kurt Steinmetzger, Birgit Mazurek, <i>A schema mode-model approach for understanding chronic tinnitus-related distress</i>
3:30PM	POSTER HALL	Ho Yun Lee, Seung-Ho Shinm, Exploring the Origins of Decreased Sound Tolerance in Tinnitus Patients
		June Choi, Hong Jin Kim, Ye Hwan Lee, Young Han Chung, Kang Hyeon Lim, Sang Yeop Kim, Yong Jun Jeong, Analysis of auditory brain stem response and otoacoustic emission in unilateral tinnitus patients with normal hearing
		Sung Il Cho, Mohammad Mokhatrish, Wonyong Baek, Gi-Sung Nam, Tinnitus characteristics in patients with idiopathic sudden sensorineural hearing loss and acute tinnitus
		Bourez, P.H. Vallet, Guillaume, T., Fournier, P., <i>Improving audiology student training by clinical simulation of tinnitus: a glimpse of tinnitus lived experience</i>
		Fournier, P., Lessard-Dostie, H., Bigras, J., McDonald, T., Noreña, A.J., Lagacé, J., Hyperacusis and associated symptoms among conference interpreters
		Denise Fuchten, Kelly K.S. Assouly, Inge Stegeman, Adriana L. Smit, <i>An ICF based content analysis of the overlap between tinnitus and depression questionnaires</i> Eun Bit Bae1, 2* - Low hearing frequency affecting hearing device use
		Sneha Uttakalika, Diya ES Dinesh, Abhishek Jain, Kajal Bhatiwal, Suman Penwal, <i>Prevalence of hyperacusis and misophonia among individuals with tinnitus</i>
		Glória de Moraes Marchiori, Licia Sayuri Tanaka, Victor Augusto Santos Perli, Luciana Lozza de Moraes Marchiori, Braulio Henrique Magnani Branco, Comparative study of olfactory and otoneurological symptoms among people post COVID-19
		Zahra Jafari, David Baguley, Bryan E. Kolb, and Majid H. Mohajeran, A systematic review and meta- analysis of extended high-frequency hearing thresholds in tinnitus with a normal audiogram
		Jiwon Kwak, Soo Jeong Choi, Jiwon Chang, Gi Jung Im, Euyhyun Park, Is Zinc Deficiency a Risk Factor for Tinnitus?: An Analysis from Chronic Idiopathic Tinnitus Patients with Normal Hearing
		Sang Hoon Kim, Association between tinnitus and inflammatory bowel disease: A national cohort study

WEDNESDAY, JUNE 12th

8:00AM	THEATRE	OPENING SESSION: TINNITUS ASSESSMENT AND COMORBIDITIES
		Speaker: Dr Sylvie Hébert, Professor and Program Director of Audiology, Université de Montréal
9:00AM	THEATRE	ORAL PAPERS: TINNITUS AND COGNITION
		Max Scheepers, Elke Devocht, Erwin George, Assessing Listening Effort in disRuptive Tinnitus (the ALERT study)
		Sarah Van Genuchten, Annick Gilles, Griet Mertens, Ellen Andries, Emilie Cardon, Vincent VanRompaey, Marc J.W. Lammers, Olivier M. Vanderveken, Laure Jacquemin, <i>Tinnitus suppression by means of cochlear implantation: does it affect cognition?</i>
		Patrick Neff, Nick Sommerhalder, Zbynek Bureš, Oliver Profant, Tobias Kleinjung, Martin Meyer, Speech Comprehension and Executive Dysfunction in Tinnitus
		Lise Hobeika, Anna Skrzatek, Sophie Dupont, Alain Londero, Séverine Samson, <i>A comprehensive</i> evaluation of attentional and executive functions deficits linked to tinnitus
9:00AM	C400/C420	ORAL PAPERS: ELECTROPHYSIOLOGY
		Victoria Duda, Brandon Paul, Boutheina Jemel, Sylvie Hébert, Cortical Responses to Tinnitus-Like Stimuli: Electrophysiological Insights
		Emilie Cardon, Fien Aben, Laure Jacquemin, Vincent Van Rompaey, Marc J.W. Lammers, Olivier M.Vanderveken, Annick Gilles, <i>P300 latency correlates with subjective tinnitus severity on a between-subjectand within-subject basis</i>
		Simon San Martin, Constantino Dragidevic, Cristina De Gatica, Vicente Medel, Christ Devia1,3, Paul, Dynamics of EEG and Otoacoustic Emissions During Acoustic Residual - Inhibition in Tinnitus
		Payam S. Shabestari, Stefan Schoisswohl, Zino Wellauer, Tobias Kleinjung, Martin Meyer, Martin Schecklmann, Berthold Lanngguth, Patrick Neff, <i>Prediction of Acoustic Tinnitus Suppression: A computationally assisted approach</i>
9:00AM	C460	WORKSHOP: MISOPHONIA AND TINNITUS
		Speaker: Dr Margaret Jastreboff
9:30AM	C460	WORKSHOP: THE SUCCESSFUL TINNITUS AUDIOLOGIST, A PRACTITIONER'S GUIDE
3.30AI1	0400	WORKSHOP. THE SUCCESSI OF HINNINGS ADDIOEOGIST, A PRACTITIONER'S COIDE
		Speaker: Ms Carol Lau, Sound idEARS Hearing Clinic, Vancouver, Canada
10:30AM	THEATRE	SYMPOSIUM: TINNITUS AND PHYSICAL LINKS
		Chair: Sarah Michiels, Hasselt University, Belgium
		Speakers:
		Mr. Robin Guillard, University of Grenoble Alpes, France - Tinnitus, dreams and awakening: new
		insights and theoretical implications
		 Mr. Antonios Chalimourdas, Hasselt University, Belgium - Can Physical Activity Decrease the Tinnitus Severity? -A Longitudinal Observational Study
		 Ms. Sara Demoen, Hasselt University, Belgium - Health-related Quality of life in patients with somatic
		tinnitus: A cross sectional study
		Dr. Annemarie van der Wal, ACTA Academic Center for Dentistry, Amsterdam, The Netherlands - The effect of orofacial treatment on tinnitus complaints in patients with somatosensory tinnitus

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		Prof. dr. Tanit Ganz Sanchez, University of Sao Paulo, ENT Department, School of Medicine, Brazil -
		Somatosensory tinnitus: who gets total remission?
10:00AM	C460	SPONSOR SESSION: NAVIGATING OTICON'S TINNITUS SOUND SUPPORT IN GENIE 2.0 – A STEP-BY- STEP GUIDE WITH A REVIEW OF CLINICIAN AND PATIENT RESOURCES, INCLUDING THE NEW OTICON COMPANION APP.
		Speaker: Lia Best Au.D., R.AUD, R.HIP. Aud(C), Audiology Field Trainer Oticon Canada
2:00PM	THEATRE	ORAL PAPERS: REMOTE CARE
		Khodayar Goshtasbi, Mehdi Abouzari, Pooya Khosravi, Adwight Risbud, Elaine C. Martin, Hamid R. Djalilian, Smartphone-Based Cognitive Behavioral Therapy and Customized Sound Therapy for Tinnitus: A Randomized Controlled Trial
		Jason Zhang, Pranavi Sammidi, Brandon Nie, Bryan Nie, Kaibao Nie, <i>Development and Testing of Online Sound Therapy Platform</i>
		Grace Conchas, Yezihalem Mesfin, Abigail Heiller, Yuan He, Ali Stockness, Hubert H.Lim, Meredith E. Adams, Peggy Nelson, <i>Pilot Tinnitus Study Investigating Bimodal Neuromodulation with Virtual Sessions and Additional User-Controlled Settings</i>
		Ann Perreau, Rich Tyler - Acceptability and Effectiveness of Remote Counseling for Tinnitus
2:00PM	C440/420	ORAL PAPERS: CLINICAL APPLICATIONS
		Pete Vernezze, The effectiveness of a 6-week live, online mindfulness-based intervention for tinnitus distress
		Adriana L Smit, Comparison of clinical practice guidelines regarding treatment recommendations for chronic tinnitus in adults
3:00PM	THEATRE	ROUND TABLE: HETEROGENIETY OF TINNITUS Facilitator: Dr Philippe Fournier Panellists: TBA
3:00PM	C400/C420	ORAL PAPERS: EPIDEMIOLOGY
0.00111	0400/0420	Hobeika, L, M.Roy, M. Fillingim, A.Londero, E.Vachon-Presseau, S.Samson,
		Socio-demographic, psychological, and health factors in tinnitus: predictorsof awareness and distress across nine years
		Denise Fuchten, Inge Stegeman, Yinan Mao, Robert H. Eikelboom, Adriana L. Smit, <i>Risk factors for the development of tinnitus and change of impact – Results from the Busselton Healthy Ageing Study</i>
		Eun Bit Bae, What next after tinnitus? Based on a 10-year Korea National Health andNutrition Examination Survey (2008-2018)
		Jia Li, Zhengli Shi, Pengfei Zhao, Jing Sun, Xinghao Wang, Chunli Liu, Zhenchang Wang, Han Lv, Flavonoids can lower the incidence and relieve the severity of tinnitus in older people: National Health and Nutrition Examination Survey 2005–2018