## Program of Joint meeting of 9th Annual meeting of the Society for Bioacoustics and 18th meeting of Inner ear distortion research group of Japan Audiological Society

第9回生物音響学会年次研究発表会・第18回日本聴覚医学会内耳ひずみ研究 会合同発表会プログラム

Venue: International University of Health and Welfare Odawara Campus Room 502/503

会場 国際医療福祉大学小田原保健医療学部キャンパス502・503号教室

## Guidance of program ご案内

Day 1 is joint program of the Society for Bioacoustics and 18thmeeting of Inner ear distortion research group of Japan Audiological Society. Anyone who pre-applicated to Google Forms below can view all program on Day 1. All programs are presented in Japanese with English slides.

1日目は生物音響学会・日本聴覚医学会内耳ひずみ研究会の合同プログラムとして、スライドのみ英語で発表は日本語で行われます。1日目のすべてのプログラムは下記のGoogle Forms より事前申し込みをすることで会員に限らずどなたでもオンラインで視聴ができます。1日目は英語スライドを用いて日本語で発表が行われます。

Google Forms for pre-application (オンライン視聴申し込み用 Google Forms のリンク)

https://docs.google.com/forms/d/e/1FAIpQLSdjNRa3b9HApc0zuEh3lpY9hAJvGvqHU0kpQKqKXdQP5S04QA/viewform?usp=sf\_link

Program in Day 2 is limited to the members of the Society for Bioacoustics and preregistered participants. Except for symposium. Symposium 2 is open to public who applied with Google Form as program in Day 1. Program in Day 2 are mainly presented in English.(General assembly of the Society for Bioacoustics is held in Japanese).

2日目のプログラムはシンポジウムを除き、生物音響学会員および事前登録を 行った参加者のみが参加・オンライン視聴できます。シンポジウム2は1日目同 様、Google Formsで事前申し込みした人はどなたでもオンライン視聴ができま す。総会を除き、基本的に英語で行われます。 Day1 Saturday, 3 December 2022

13:00 -

13:30-14:00 Opening remark and lecture from the Committee chairman

"Bioacoustics for Hearing Clinicians" (聴覚臨床家にとっての生物音響学)

Tatsuhiko Harada

14:15-15:15 Panel Discussion

"What can we do for assessing cochlear synaptopathy from now?"

(Cochlear synaptopathy の評価のためにこれから何ができるか?)

- 1. Current research trend in overseas: Takashi Morimoto (Rion Co. Ltd)
- 2. From viewpoint of Electrophysiology: Auditory brainstem response to paired click stimulation as a marker of cochlear synaptopathy in human

Haruna Fujihira (NTT Communication Science Laboratories and Japan Society for the Promotion of Science)

3. From viewpoint of Acoustic measurement: Utilization of novel measurement technique for middle ear muscle reflex

Tatsuhiko Harada (International University of Health and Welfare)

4. From viewpoint of Psychoacoustics: What is "Hearing difficulty?

Yasuhide Okamoto (Tokyo Saiseikai Central Hospital)

Additional remarks:

Shigeto Furukawa (NTT Communication Science Laboratories)

Kimitaka Kaga (National Hospital Organization Tokyo Medical Center)

15:30-17:00 Symposium 1

Comparative anatomy of vertebrate ABR and brainstem auditory pathways

(脊椎動物のABRと脳幹聴覚伝導路の比較解剖)

Planner: Kimitaka Kaga (National Hospital Organization Tokyo Medical Center)

1. The Auditory Brainstem Response (ABR) in Five Vertebrate Cases (Fish, Amphibian, Reptile, Bird and Mammalian)

Kimitaka Kaga

2. Histological Findings of the Telencephalon, Midbrain, and Brainstem Related to the Evolution of Auditory Function in Five Vertebrates

Ryohei Akiyoshi (National Hospital Organization Tokyo Medical Center and Dokkyo Medical University Saitama Medical Center)

3. Role of bony cribriform structures at the bottom of Internal auditory canal in human and other mammalians

Shinsaku Matsuda <sup>(</sup>National Hospital Organization Tokyo Medical Center and Nerima Hikarigaoka Hospital)

4. Audiology and Molecular biology in the Primate Model animals: From the gene expression patterns to Auditory Brain Stem Responses

Makoto Hosoya (Keio University, School of Medicine)

Day2 Sunday, 4 December 2022

9:00 – 10:00 Oral Session 1

9:00 – 9:20 O1: Ahn Jiwon (The University of Electro-Communications)

An Influence of Probes over ossicular mobility measurements

9:20 – 9:40 O2: Anna Uenishi (Tokyo City University)

Under water panoramic beam forming

9:40 – 10:00 O3: Karin Ono (Kansai University)

Dual-band operation of bat's basilar membrane for echolocation

10:00 - 10:10 Break

10:10 – 10:50 Oral Session 2

10:10 – 10:30 O4: Masaki Ichimura (Osaka University)

User-friendly bioacoustics toolkit of audio signal processing including sound source separation and its application to frog chorus analysis

10:30 – 10:50 O5: Takeru Kodama (Kyushu University)

Analyzing calling song of cicada *Meimuna opalifera*; relation between the acoustic features and abiotic variables

10:50 - 11:00 Break

11:00 – 12:30 Symposium 2

Approaches to the neural networks that underlie our auditory perception

Planner: Shigeto Furukawa (NTT Communication Science Laboratories)

Shigeto Furukawa (chair):

Introduction

Hirokazu Takahashi (Graduate School of Information Science and Technology, University of Tokyo):

Neural mechanism of beat synchronization in rats

Amit Yaron (Graduate School of Information Science and Technology, University of Tokyo):

Recording mismatch responses beyond oddball paradigm

Sho Otsuka (Center for Frontier Medical Engineering, Chiba University):

Descending modulation of peripheral auditory responses and its roles in human perception

Takuya Koumura (NTT Communication Science Laboratories):

Artificial neural network as a computational model to explain neuronal tuning properties in the ascending auditory pathway

12:30-13:45 Lunch

13:45-14:25 Oral Session 3

13:45–14:05 O6:Takuma Takanashi (Forestry and Forest Products Research Institute)

Exploitation of vibration sensing for pest control in whiteflies on tomatoes

14:05–14:25 O7: Wen-Jie Song (Kumamoto University)

Towards specific manipulation of the auditory thalamocortical activity

14:25-14:40 Break

14:40–15:30 General meeting of the Society for Bioacoustics (生物音響学会総会)

15:30–16:00 Award ceremony and General Discussion

16:00 Closing remark