

## Schedule

<December 8>

**13:30 - 13:40**    **Opening remarks for the 17<sup>th</sup> Auditory Research Forum**

*Hiroshi Riquimaroux*

**13:40 - 14:20**    **Oral Presentation (1)**

(at Seminar Room 5, the 1<sup>st</sup> FL. KAKUTAI-KAN)

(Chair: *Walter Metzner*)

13:40 - 14:00

*Keiichi Morikawa, Shizuko Hiryu, Kohta I. Kobayasi and Hiroshi Riquimaroux*

**How to extract echolocation information during flight with multiple conspecifics evaluated in CF-FM bats with onboard wireless microphone system**

14:00 - 14:20

*Keizo Fukushima, Kohta I. Kobayasi, Andrea M. Simmons, James Simmons, and Hiroshi Riquimaroux*

**The effects of noise exposure on temporary damage in hair cells of Mongolian gerbils evaluated by the cochlear microphonics**

**14:20 - 14:30**    **Break**

**14:30 - 15:30**    **Oral Presentation (2)**

(at Seminar Room 5, the 1<sup>st</sup> FL. KAKUTAI-KAN)

(Chair: *Hiroshi Riquimaroux*)

14:30 - 15:00

*Fumiaki Nin, Jonathan AN Fisher, Tobias Reichenbach, Recathy C Uthaiyah, AJ Hudspeth*

**The spatial pattern of cochlear amplification**

15:00 - 15:30

*Mei-Hong Lu, Makoto Takemoto, Masataka Nishimura, Ken Watanabe, Wen-Jie Song*

**Deficiency of sphingomyelin synthase-1 but not sphingomyelin synthase-2 causes hearing impairments in mice**

**15:30 - 18:00 Poster Session**

(at Seminar Rooms 1, 2, 3, 4 , the 1<sup>st</sup> FL. KAKUTAI-KAN)

- [P1] *Kazuki Etou and Takuji Koike*  
**Vibration analysis of basilar membrane in cochlea of horseshoe bat**
- [P2] *Maia Okayasu and Takuji Koike*  
**Development of measurement system for object velocity mimicking echolocation**
- [P3] *Shokei Boku, Kohta I. Kobayasi and Hiroshi Riquimaroux*  
**Reduction of Cochlear Microphonics Responses to Repetitive Stimulus Sounds in Awake Gerbil**
- [P4] *Hiroto Uejima, Kohta I. Kobayasi and Hiroshi Riquimaroux*  
**Transcranial recordings of cochlear microphonics in Mongolian gerbils; *Meriones unguiculatus***
- [P5] *Hiroki Furutani and Hiroshi Riquimaroux*  
**What type of sound produces the best time resolution, for measurement of duration?**
- [P6] *Tatsuhiko Harada*  
**Threshold detection of olivo-cochlear and middle ear muscle reflex to contralateral noise**
- [P7] *Fuduki Inoguchi, Tomoko Kimura, Miki Nishimura, Toshihiro Tamagawa, Kousuke Taki and Motoi Kudo*  
**Dual System of Ascending Auditory Pathways: Projection from External Nucleus of Inferior Colliculus to Pretectum and Midbrain Reticular Formation**
- [P8] *Naoya Akiyama, Kohta I. Kobayasi and Hiroshi Riquimaroux*  
**Modification of auditory perception by transcranial near infrared laser irradiation to the auditory cortex**

- [P9] *Akihito Kashiwagi, Kohta I. Kobayasi and Hiroshi Riquimaroux*  
**Distribution of best frequency and latency of responses of inferior collicular neurons in Mongolian gerbil**
- [P10] *Hidetaka Yashiro, Ichiro Nakahara, Kohta I. Kobayasi, Kazuo Funabiki, and Hiroshi Riquimaroux*  
**In vivo calcium imaging of the mouse's inferior colliculus using micro-endoscope**
- [P11] *Makoto Takemoto, Masataka Nishimura and Wen-Jie Song*  
**Mouse insular auditory field receives projections from the ventral division of the medial geniculate body**
- [P12] *Masataka Nishimura and Wen-Jie Song*  
**Visuo-auditory interaction in the primary visual cortex**
- [P13] *Takahiro Shinohara and Hiroshi Riquimaroux*  
**Recognition of lags between lip movement and vocalization**
- [P14] *Takeshi Morimoto and Hiroshi Riquimaroux*  
**The ventriloquism effect in Japanese macaques**
- [P15] *Takeshi Yamamoto and Hiroshi Riquimaroux*  
**Experiences in time lagged visual and auditory stimuli modify sensibility to the lag between visual and auditory stimuli**
- [P16] *Takanori Hiramatsu, Kohta I. Kobayasi and Hiroshi Riquimaroux*  
**Relationships of time lag between auditory and visual stimuli in double flash illusion**
- [P17] *Akihiro Tsuda and Hiroshi Riquimaroux*  
**Synchronization in perception of rhythm between auditory and visual stimuli**
- [P18] *Makio Torigoe, Kohta I. Kobayasi and Hiroshi Riquimaroux*  
**The effect of visual attention on the auditory continuity illusion**

- [P19] *Maki Yazaki and Toshimasa Matsuhira*  
**Difference in auditory temporal resolution between young and elderly women revealed by gap detection tests and word recognition in continuous and interrupted noise**
- [P20] *Shota Murai and Hiroshi Riquimaroux*  
**How do activated areas change during training process for the noise-vocoded speech sounds?**
- [P21] *Taro Kasahara, Shunji Sugimoto and Junsei Horikawa*  
**Psychophysiological analyses on the sensibility evaluation of comfortable/uncomfortable sounds by EEG using noise-like sounds with controlled physical and psychological properties**
- [P22] *Tetsu Watanabe, Sachiko Okumura, Shunji Sugimoto and Junsei Horikawa*  
**Spectral processing in the auditory core fields of guinea pigs: responses to species-specific vocalization**
- [P23] *Yuki Torigoe, Kohta I. Kobayasi and Hiroshi Riquimaroux*  
**Auditory evoked potentials related to category of communication sounds of Mongolian gerbils: Differences in Mismatch negativity between before and after trainings**
- [P24] *Ayako Nakayama, Kohta I. Kobayasi and Hiroshi Riquimaroux*  
**Hearing sensitivity of high frequency range in Mongolian gerbils**
- [P25] *Takafumi FURUYAMA, Kohta I. Kobayasi and Hiroshi Riquimaroux*  
**How do Japanese macaques identify caller of morphed Coo calls?**
- [P26] *Takeshi Mizumoto, Hiromitsu Awano, Ikkyu Aihara, Takuma Otsuka and Hiroshi G. Okuno*  
**Visualization of Male Frog Choruses and Female Phonotaxis**

- [P27] *Hiromitsu Awano, Takeshi Mizumoto, Ikkyu Aihara, Takuma Otsuka and Hiroshi G. Okuno*  
**Visualizing Frog Choruses of Two Species Separately using Spectral Difference**
- [P28] *Ikkyu Aihara, Takeshi Mizumoto, Hiromitsu Awano, Takuma Otsuka and Hiroshi G. Okuno*  
**Spatial-Temporal Structures in Frog Choruses**
- [P29] *Ryosuke O. Tachibana, Neal Hessler and Kazuo Okanoya*  
**Reinforced adjustment of inter-syllable gap duration in birdsong**
- [P30] *Suguru Matsui, Kohta I. Kobayasi and Hiroshi Riquimaroux*  
**Vocalizations generated by electrical stimulation to the periaqueductal gray in the Mongolian gerbils, *Meriones unguiculatus***
- [P31] *Ikuo Matsuo*  
**Characteristics of the small ultrasound loudspeaker**
- [P32] *Daiki Ogata, Yuki Kinoshita, Ikkyu Aihara, Yoshiaki Watanabe, Hiroshi Riquimaroux, Tetsuo Ohta and Shizuko Hiryu*  
**Prey selection of CF-FM bats: Investigation of pulse direction and flight path based on acoustic analysis and mathematical modeling**
- [P33] *Arie Oka, Yasufumi Yamada, Yoshiaki Watanabe, Hiroshi Riquimaroux, Tetsuo Ohta and Shizuko Hiryu*  
**Relationship between acoustic gaze and flight direction during obstacle avoidance in *Pipistrellus abramus*, *inopterus fuliginosus* and *Rhinolophus ferrumequinum***
- [P34] *Miwa Sumiya, Shotaro Watanabe, Emyo Fujioka, Ikkyu Aihara, Yoshiaki Watanabe, Hiroshi Riquimaroux, Tetsuo Ohta and Shizuko Hiryu*  
**Experimental and mathematical investigations of sonar strategy of FM bats during approaching multiple preys in the field**

- [P35]        *Hana Tsuji, Kohta I. Kobayasi, Shizuko Hiryu, and Hiroshi Riquimaroux*  
**Changes in strategy of CF-FM bats against jamming signals according to number of companions in flight**
- [P36]        *Kiri Hyomoto, Eri Takahashi, Yoshiaki Watanabe, Hiroshi Riquimaroux, Tetsuo Ohta and Shizuko Hiryu*  
**Measurements of acoustic characteristics of echolocation sound in *Pipistrellus abramus* under artificial jamming sound condition**
- [P37]        *Naoya Makihara, Shizuko Hiryu, Kohta I. Kobayasi and Hiroshi Riquimaroux*  
**Audiogram of Japanese house bat, *Pipistrellus abramus***
- [P38]        *Junki Nakamura, Kohta I. Kobayasi and Hiroshi Riquimaroux*  
**An inhibition of bicuculline induced epileptic neural activities by near-infrared laser irradiation in Mongolian gerbil**

**18:00 - 20:00    Dinner**

**21:00 -            Poster session (cont.)**

**<December 9>**

**7:30 - 9:00 Breakfast & Poster Session (cont.)**

**9:00 - 10:00 Oral Presentation (3)**

*(Chair: Motoi Kudo)*

9:00 - 9:30

*Steffen R. Hage, Tinglei Jiang, Sean Berquist, Walter Metzner*

**Ambient noise induces independent shifts in call frequency and amplitude within the Lombard effect in echolocating bats**

9:30 - 10:00

*Cynthia F. Moss, Genvieve Spanjer Wright, Wei Xian and Chen Chiu*

**Social and sonar interactions in bat pairs**

**10:00 - 10:15 Break**

**10:15 - 11:15 Oral Presentation (4)**

*(Chair: Junsei Horikawa)*

10:15 - 10:45

*Rolf Müller, Mittu Pannala, Sajjad Z. Meymand*

**A Biomimetic Approach to Dynamic Beamforming Baffles in Horseshoe Bats**

10:45 - 11:15

*Jose L. Pena*

**The biased owl**

**11:15 - 11:45 General Discussion**

*(Chair: Wen-Jie Song)*

**11:45 - 12:00 Closing Remarks**

*Hiroshi Riquimaroux*

**12:00 - 13:00 Lunch**

**13:00 Adjourn**