Schedule

<December 14>

13:00—13:10  Opening remarks for the 18th Auditory Research Forum  
              Hiroshi Riquimaroux

13:10—14:10  Oral Presentation (1)  
              (at Seminar Room 5, the 1st FL. KAKUTAI-KAN)  
              (Chair: Junsei Horikawa)

13:10—13:30  ◎ Shota Murai, Kohta I. Kobayasi and Hiroshi Riquimaroux  
              Relationships between performance for listening test of the  
              noise-vocoded speech sounds and changes in neural activities

13:30—13:50  ◎ Hidetaka Yashiro, Ichiro Nakahara, Kohta I. Kobayasi, Kazuo Funabiki and  
              Hiroshi Riquimaroux  
              Optical imaging of the auditory response in the mouse’s inferior  
              colliculus using a micro-endoscope

13:50—14:10  ◎ Eri Takahashi, Kiri Hyomoto, Kazuma Hase, Yoshiaki Watanabe,  
              Hiroshi Riquimaroux, Tetsuo Ohta and Shizuko Hiryu  
              Changes in acoustic characteristics of echolocation pulses emitted by FM bat under artificial jamming conditions

14:10—14:20  Break

14:20—15:20  Oral Presentation (2)  
              (at Seminar Room 5, the 1st FL. KAKUTAI-KAN)  
              (Chair: Hiroshi Riquimaroux)

14:20—14:50  ◎ James A. Simmons, Michaela Warnecke and Victoria Flores  
              Target shape perception and clutter rejection use the same mechanism in bat sonar
14:50—15:20  ○ Walter Metzner
Different forms of auditory-vocal feedback control in echolocating bats

15:20—15:30  Break

15:30—16:00  Oral Presentation (3)
(at Seminar Room 5, the 1st FL. KAKUTAI-KAN)
(Chair: Hiroshi Riquimaroux)

15:30—16:00  ○ Motoi Kudo, Fuduki Inoguchi, Kousuke Taki, Tomoko Kimura, Junko Okano, Yoshinari Aimi and Jun Udagawa
Parcellation of the inferior colliculus in cat, mole and rat: the rostral pole exists as a separate entity

16:00—18:00  Poster Session
(at Seminar Rooms 1, 2, 3, 4, the 1st FL. KAKUTAI-KAN)

[P1]  ○ Satoko Ono, Kazuo Okanoya and Yoshimasa Seki
Variability of auditory response to the birds' own song in neurons of the songbird auditory forebrain area

[P2]  ○ Takafumi Furuyama, Kohta I. Kobayasi and Hiroshi Riquimaroux
The role of vocal-tract characteristics for identifying individuality in Japanese macaques

[P3]  ○ Shinya Isaji, Kazuo Ueda and Yoshitaka Nakajima
Effects of frequency-band elimination on identification of noise-vocoded Japanese syllables

[P4]  ○ Takashi Noguchi, Takeshi Morimoto, Takafumi Furuyama, Kohta I. Kobayasi and Hiroshi Riquimaroux
Sound induced visual illusions in Japanese macaques
[P5] ○ Shota Murai, Marina Takabayashi, Yuki Nakayama, Kohta I. Kobayasi, Jan Auracher and Hiroshi Riquimaroux
Perceived correspondence between acoustic characteristics of phonemes and abstract semantic concepts: An fMRI study

[P6] ○ Hiroki Terashima and Masato Okada
Pitch cells as a computational analogue to complex cells of visual cortex

[P7] ○ Kazuo Ueda, Yoshitaka Nakajima and Takuya Fujioka
Factor analyses of power fluctuations in spoken sentences: Applying cepstral analysis

[P8] ○ Kentaro Ono, Christian Altmann, Masao Matsuhashi, Tatsuya Mima and Hidenao Fukuyama
Effects of the regularity in a tone sequence on the processing of sound omission in musicians and nonmusicians

[P9] ○ Hiroyuki Fujita, Shunji Sugimoto and Junsei Horikawa
An ERP study of parsing mechanisms on the basis of Japanese theme-rheme frame

[P10] ○ Minori Iwata, Kohta I. Kobayasi and Hiroshi Riquimaroux
Comparative study on subjective differences in impression between sounds generated by Japanese and Western wind instruments

[P11] ○ Marina Takabayashi, Kohta I. Kobayasi and Hiroshi Riquimaroux
Are pitch accents in noise-vocoded vowels created by a change in amplitude?

[P12] ○ Genki Asaka, Shota Murai, Kohta I. Kobayasi and Hiroshi Riquimaroux
Synchronous rhythm sensation measured with synchronization tapping task
[P13] ○ Yuki Nakayama, Kyohei Nozawa, Shota Murai, Shohei Hisano, Kohta I. Kobayasi, Junsei Horikawa and Hiroshi Riquimaroux
Comparison between inductive and deductive reasonings through vocalized sentences by mean of activities in cortical areas

[P14] ○ Masataka Nishimura and Wen-Jie Song
Quantitative examination of frequency representation in the guinea pig primary auditory cortex

[P15] ○ Yuki Torigoe, Kohta I. Kobayasi and Hiroshi Riquimaroux
Brain activities related to communication sounds in Mongolian gerbils, *Meriones unguiculatus*

[P16] ○ Tomoko Uekita
The effects of partner on vigilance behavior in *Octodon degus*

[P17] ○ Naoya Akiyama, Kohta I. Kobayasi, Tomoko Uekita and Hiroshi Riquimaroux
Inactivation of the auditory cortex with muscimol disrupts discrimination of different temporal pattern of noise in the Mongolian gerbil

[P18] ○ Tetsu Watanabe, Shunji Sugimoto and Junsei Horikawa
Spectral and temporal processing in the auditory cortex of guinea pigs: responses to species-specific vocalization

[P19] ○ Ayako Nakayama, Hidetaka Yashiro, Kohta I. Kobayasi and Hiroshi Riquimaroux
Hearing sensitivity for constant frequency sounds and frequency modulated sounds in Mongolian gerbils

[P20] ○ Yuta Shiromi, Masataka Nishimura, Yuta Oshima and Wen-Jie Song
Identification and characterization of a new vocalization of male guinea pig

[P21] ○ Hisayuki Ojima, Eriko Tachi and Masato Taira
Sound recognition by guinea pigs: spectral and temporal cues and interval changes

[P22] ○ Yuka Nakatani, Shokei Boku, Kohta I. Kobayasi, and Hiroshi Riquimaroux
Responses corresponding to the auditory induction in the cochlear microphonics

[P23] ○ Hiroshi Onodera, Kohta I. Kobayasi and Hiroshi Riquimaroux
Intra-cranially recorded cochlear microphonics and compound action potentials responding to amplitude modulated tones and repetitive clicks in Mongolian gerbils

[P24] ○ Takeshi Morimoto, Shokei Boku, Kohta I. Kobayasi and Hiroshi Riquimaroux
Processing to create periodicity pitch in the cochlea: the cochlear microphonics in Mongolian gerbil

[P25] ○ Suguru Matsui, Takeshi Morimoto, Shokei Boku, Kohta I. Kobayasi and Hiroshi Riquimaroux
Optical stimulation of the round window generates the compound action potentials in the auditory neurons

[P26] ○ Shin Kawai, Shokei Boku, Kohta I. Kobayasi and Hiroshi Riquimaroux
Noise induced damage in hair cells of Mongolian gerbils evaluated by cochlear microphonics

[P27] ○ Takayuki Kato, Kazuhisa Fujita and Yoshiki Kashimori
Neural mechanism of extracting target information in the inferior colliculus in echolocating bat

[P28] ○ Ryosuke O. Tachibana, Neal A. Hessler and Kazuo Okanoya
Neural basis for adaptive adjustment of local temporal structure of birdsong

[P29] ○ Ikkyu Aihara, Emyo Fujioka, Yasufumi Yamada and Shizuko Hiryu
Mathematical and experimental studies on prey pursuit by echolocating bats

[P30] ○ Ikuo Matsuo, Alyssa Wheeler, Laura Kloepper, Jason Gaudette and James A. Simmons
3D acoustic tracking of bats in clutter environments from microphone arrays

[P31] ○ Daiki Goto, Hana Tsuji, Shizuko Hiryu, Kohta I. Kobayasi and Hiroshi Riquimaroux
Echo extraction using purposely created beats by overlapping emitted pulses of multiple CF-FM bats during flight

[P32] ○ Shinichi Tateiwa, Arie Oka, Yasufumi Yamada, Yoshiaki Watanabe, Hiroshi Riquimaroux, Tetsuo Ohta and Shizuko Hiryu
Real-time obstacle avoidance algorithms for autonomous vehicles based on bat’s echolocation system

[P33] ○ Shotaro Ota, Daiki Ogata, Yoshiaki Watanabe, Hiroshi Riquimaroux, Tetsuo Ohta and Shizuko Hiryu
Investigations of pulse direction and directivity in CF-FM bats during artificial moth capture flight

[P34] ○ Naoya Makihara, Sizuko Hiryu, Kouta I. Kobayasi and Hiroshi Riquimaroux
Behaviorally obtained audiogram of Japanese house bats, Pipistrellus abramus

[P35] Lei Wang, Yanhong Xiao, Hongwei Wang, Guanjun Lu, Ying Liu,
○ Tinglei Jiang and Jiang Feng
Stereotypy and variability of social calls among huddling female Big-footed myotis: implications for individual recognition

[P36] ○ Aiqing Lin, Tinglei Jiang, Jagmeet S. Kanwal, Guanjun Lu, Jinhong
Luo, Xuewen Wei, Bo Luo and Jiang Feng

The microevolution of echolocation and communication calls in the Himalayan leaf-nosed bat

[P37] ○Shokei Boku, Suguru Matsui, Takeshi Morimoto, Kohta I. Kobayasi and Hiroshi Riquimaroux
Auditory sensitivity in Japanese house bat, *Pipistrellus abramus*

[P38] ○Chun-Jen Hsiao, Ching-Lung Lin and Chung-Hsin Wu
Comparative anatomy of cochlear structures between CF-FM and FM bats in Taiwan

[P39] ○Koki Yoshimura, Hiroki Yoshioka, Shotaro Watanabe, Kiri Hyomoto, Yoshiaki Watanabe, Hiroshi Riquimaroux, Tetsuo Ohta and Shizuko Hiryu
Direction and acoustic characteristics of pulses emitted by wild FM bats (*Pipistrellus abramus*) revealed by a super microphone array system

[P40] Hongjun Lin, ○Ying Liu and Jiang Feng
Vocal communication in adult greater tube-nosed bats (*Murina leucogaster*)

[P41] ○Hana Tsuji, Shizuko Hiryu, Kohta I. Kobayasi and Hiroshi Riquimaroux
Changes in pulse emissions of Japanese horseshoe bats according to relative position in acoustically jammed conditions

18:00—20:00   Dinner

20:00—21:00   Oral Presentation (4)
(at Seminar Room 5, the 1st FL. KAKUTAI-KAN)
(Chair: James A. Simmons)

20:00—20:30 ○Daniel Margoliash and Timothy P. Brawn
A new model for sleep dependent auditory memory consolidation

20:30—21:00 ○ Peter Narins
A novel middle ear adaptation in the Central African frog Petropedetes parkeri (Ranidae)

21:00— Poster session (cont.)
<December 15>
7:30—8:30  Breakfast & Poster Session (cont.)

8:30—9:30  Oral Presentation (5)
(at Seminar Room 5, the 1st FL. KAKUTAI-KAN)
(Chair: Walter Metzer)

8:30—9:00  ○ Rolf Müller, Mittu Pannala, Naren Ramakrishnan and Hongxiao Zhu
Information-theoretic analysis of the pinna dynamics in horseshoe bats

9:00—9:30  ○ Andrea M. Simmons, Michaela Warnecke, Erika E. Alexander and Andrew Stephens-Smith
Flow sensing behaviors in amphibian tadpoles

9:30—9:45  Break

9:45—10:45 Oral Presentation (6)
(at Seminar Room 5, the 1st FL. KAKUTAI-KAN)
(Chair: Dan Margoliash)

9:45—10:15  ○ Kazuo Funabiki
Development of micro-endoscope for in vivo Ca and FRET imaging in freely moving animal

10:15—10:45  ○ Go Ashida, Kazuo Funabiki, Jutta Kretzberg and Catherine E. Carr
Phase-locked inputs and binaural information processing

10:45—11:00  Break

11:00—11:30  Oral Presentation (7)
(at Seminar Room 5, the 1st FL. KAKUTAI-KAN)
(Chair: Kazuo Ueda)
11:00—11:30  ○ Tatsuhiko Harada
   Effects of contralateral sound to wide band reflectance of the ear
   - A novel detecting tool for olivocochlear bundle reflex separated
     from middle ear muscle reflex

11:30—11:55  General Discussion
   (Chair: Peter Narins)

11:55—12:00  Closing Remarks
   Hiroshi Riquimaroux

12:00—13:00  Lunch

13:00  Adjourn