

Schedule

<December 1>

13:30 - 13:40 Opening remarks for the 12th Auditory Research

Forum Japan

Hiroshi Riquimaroux

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

(at Seminar Room 5, the 1st FL. KAKUTAI-KAN)

(Chair: *Hiroshi Riquimaroux*)

13:40 - 14:00

Ryosuke Tachibana, Masuzo Yanagida and Hiroshi Riquimaroux

Formation of audiomotor mapping for manual control of tone pitch

14:00 - 14:20

Yoshimasa Seki and Kazuo Okanoya

Sex differences in the audiovisual discrimination learning

by Bengalese finches (*Lonchura striata var. domestica*)

14:20 - 14:40

*Tatsuro Hosokawa, Yu Watanabe, Yu Shiori, Shizuko Hiryu,
Hiroshi Riquimaroux and Yoshiaki Watanbe*

**Doppler-shifts in receiving echoes caused by the alternating pinna
movement of *Rhinolophus ferrumequinum nippon***

14:40 - 15:00 Break

15:00 - 16:00 Oral Presentation (2)

(at Seminar Room 5, the 1st FL. KAKUTAI-KAN)

(Chair: *Walter Metzner*)

15:00 - 15:30

James A. Simmons

Target-ranging and transition from approach to terminal stages

by Big Brown Bats

15:30 - 16:00

Dolores Bozovic

The active process in hair cells of the inner ear

16:00 - 18:00 Poster Session

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

- [P0-D] *Ken-ichiro Yabu, Tohru Ifukube and Shigeru Aomura*
A speech synthesis device for articulation substitutes using a touch-pad interface
- [P1] *Masataka Nishimura and Wen-Jie Song*
Latency based examination of tone-evoked activity in guinea pig auditory cortex with *in vivo* optical recording
- [P2] *Hiroyuki Tanaka, Shunji Sugimoto and Junsei Horikawa*
Optical imaging of auditory cortical activities induced by an alternating sequence of high- and low-frequency tones
- [P3] *Shinsuke Ohshima, Hiroaki Tsukano, Yamato Kubota, Kuniyuki Takahashi and Katsuei Shibuki*
Transcranial flavoprotein fluorescence imaging of neural activities in the mouse auditory cortex after sound discrimination learning
- [P4] *Masaya Tsuji and Hiroshi Riquimaroux*
The effect in neural auditory response pattern of the gerbil by logarithmic rising speed of constant frequency
- [P5] *Kohei Nishiyama and Hiroshi Riquimaroux*
Responses of auditory cortical neurons to sFM communication sounds of Mongolian gerbil
- [P6] *Akihiro Usami and Hiroshi Riquimaroux*
Selectivity to FM rate and direction in the inferior collicular neurons of the Mongolian gerbil
- [P7] *Yoichi Suwa and Hiroshi Riquimaroux*
Responses to FM tones of the auditory cortical neurons in Mongolian gerbils: Selectivity to FM rate and direction

- [P8] *Peter M. Narins and Urban B. Willi*
Middle ear adaptations for seismic detection in the golden mole
- [P9] *Kohta Kobayasi, Steffen Hage, Jie Ma and Walter Metzner*
How the vocal motor nucleus and laryngeal dynamics affect call frequency in horseshoe bats
- [P10] *Kazuhiro Goto and Hiroshi Riquimaroux*
Tonotopical organization of inferior collicular units of Japanese house bat (*Pipistrellus abramus*)
- [P11] *Shizuko Hiryu, Hajime Shimamoto, Mary Bates, Sarah Stamper, James A. Simmons and Hiroshi Riquimaroux*
Jamming avoidance response for own reverberant echoes by FM echolocating bats (*Eptesicus fuscus*) during flight
- [P12] *Yu Watanabe, Yu Shiori, Tatsuro Hosokawa, Shizuko Hiryu, Hiroshi Riquimaroux and Yoshiaki Watanabe*
Compensation for pulse duration by free-flying CF-FM bat, Japanese horseshoe bat (*Rhinolophus ferrumequinum nippon*)
- [P13] *Yuto Furusawa, Hajime Shimamoto, Shizuko Hiryu and Hiroshi Riquimaroux*
The vocalization patterns of FM echolocating bats under jamming condition
- [P14] *Michihiro Fukuda, Naotaro Hirade, Shizuko Hiryu, Hiroshi Riquimaroux and Yoshiaki Watanabe*
Ultrasonic scanning technique in FM echolocating bats (*Miniopterus fuliginosus*) during flight observed with microphone array system
- [P15] *Shigeki Mantani, Emyo Fujioka, Michihiro Fukuda, Shizuko Hiryu, Hiroshi Riquimaroux and Yoshiaki Watanabe*
Echolocation strategy during foraging activity of FM bats: 3-D measurements by the microphone array in the field

- [P16] *Naotaro Hirade, Michihiro Fukuda, Shizuko Hiryu, Hiroshi Riquimaroux and Yoshiaki Watanabe*
Telemetry measurements of pulse-echo pair in FM echolocating bats (*Miniopterus fuliginosus*) during landing flight
- [P17] *Ryota Shimazawa, Shizuko Hiryu and Hiroshi Riquimaroux*
Temporal change in frequency components of ultrasonic communication pulse emitted by Japanese horseshoe bats (*Rhinolophus ferrumequinum nippon*) during walking to the other
- [P18] *Ikuo Matsuo*
A computational model for discrimination of multiple objects by using the linear period modulation signal
- [P19] *Shunsuke Horai, Ikkyu Aihara and Kazuyuki Aihara*
Visualizing interactive calling data of Japanese tree frogs by cross recurrence plots
- [P20] *Ikkyu Aihara*
Synchronization through sound interaction in calling behavior of Japanese Tree Frogs
- [P21] *Takashi Doi and Hiroshi Riquimaroux*
Representation of species specific communication sounds of Mongolian gerbil by activities on self-organizing map
- [P22] *Yuki Nagata and Hiroshi Riquimaroux*
Sensitivity of Mongolian gerbils to FM sounds: FM rates and directions
- [P23] *Chisato Suzuki, Yuki Nagata, Yasunari Sasaki and Hiroshi Riquimaroux*
Behavioral responses to frequency modulated sounds in Mongolian gerbils: Analysis of reaction time
- [P24] *Shogo Tani, Chisato Suzuki, Yuki Nagata, Yasunari Sasaki and Hiroshi Riquimaroux*

Comparison between behavioral responses to upward and downward FM sounds in Mongolian gerbils

[P25] *Shinji Ishino and Hiroshi Riquimaroux*

Acoustic characteristics of vocalization emitted by starved Mongolian gerbils

[P26] *Naoko Tokimoto, Atsushi Iriki and Kazuo Okanoya*

Acoustic communication in the social rodent, degu (*Octodon degu*): Vocal repertoire and vocal control

[P27] *Emi Igari, Shunji Sugimoto and Junsei Horikawa*

MEG analysis of the effects of spatial selective auditory attention

[P28] *Kentaro Ono, Akinori Nakamura, Kenji Yoshiyama, Takeshi Kinkori, Masahiko Bundo and Kengo Ito*

Effects of musical experience on the automatic auditory feature processing

[P29] *Kuniyuki Takahashi, Tadashi Wada and Sugata Takahashi*

Cochlear implantation and critical periods for recovery in speech recognition

[P30] *Kaori Nakao*

Perception of tonal pattern in Osaka Japanese

[P31] *Mika Murao, Yasunari Sasaki and Hiroshi Riquimaroux*

Effects of auditory repetition priming and word familiarity on perception of degraded words

[P32] *Takahiro Yorino and Hiroshi Riquimaroux*

Absolute tempo? : Self adjustment of tempo

18:00 - 20:00 Dinner

21:00 - Poster session (cont.)

<December 2>

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

9:30 - 10:30 Oral Presentation (3)

(Chair: *James A. Simmons*)

9:30 - 10:00

Motoi Kudo

Immunohistochemical detection of L-DOPA-derived dopamine within serotonergic fibers in the striatum and the substantia nigra pars reticulata in parkinsonian model rats

10:00 - 10:30

Hiroaki Tsukano, Yamato Kubota, Masaharu Kudoh, Ryuichi Hishida and Katsuei Shibuki

Transcranial fluorescence imaging of cortical responses to harmonic and inharmonic sounds in the mouse auditory cortex

10:30 - 10:45 Break

10:45 - 11:15 Oral Presentation (4)

(Chair: *Kenzo Itoh*)

Kazuyuki Aihara

Mathematical modelling and nonlinear analyses on neuronal dynamics

11:15 - 11:50 General Discussion

(Chair: *Peter Narins*)

11:50 - 12:00 Closing Remarks

Hiroshi Riquimaroux

12:00 - 13:00 Lunch

13:00 Adjourn