

GSAS

Joint meeting of 2<sup>nd</sup> IS-AS and 3<sup>rd</sup> IS- IFS

FSC

## International Symposium on Recent Advances in Animal Science

### IS-RAAS



**Tohoku University**  
**Graduate School of Agricultural Science**  
(GSAS)  
& **Field Science Center**  
(FSC)  
**Sendai, Japan**

**16 - 18 November, 2005**

*Tentative Program(V.4\_1)*

### International Symposium on Recent Advances in Animal Science

The International Symposium on Recent Advances in Animal Science (IS-RAAS) is the joint meeting of the 2<sup>nd</sup> International Symposium of Agricultural Science (IS-AS) and the 3<sup>rd</sup> International Symposium of Integrated Field Science (IS-IFS) held under the auspices of the GSAS and FSC, respectively, Tohoku University, Sendai, Japan. The aim of IS-RAAS is to develop an advanced proposal for sustainable animal production associated with environmental issues, which include animal health, management and breeding as well as nutrition and physiology. IS-RAAS incorporates the fields of fundamental and applied animal science to address their integration. Participants can actively discuss and learn about the latest research results in animal science and gain access to the latest techniques.

#### Symposium Site

IS-RAAS will be held in Sendai, Japan. The Opening Ceremony will be held at the *Mitsui Urban Hotel Sendai*, 13<sup>th</sup> floor Renga House (tel 022-265-3132). Symposium Lectures will be given at the *141-Building (Ichibancho, Aoba-ku)*, 5<sup>th</sup> floor Seminar Hall at the L-Park (tel 022-268-8300).

#### Symposium Organization

Day 1 begins with the Opening Ceremony. Day 2 of the symposium will have sessions on topics related to animal disease control, grazing management, and animal breeding. A poster session will be held around lunch time. Recent progress in cell biology and growth regulation and environmental adaptation will be discussed on Day 3.

#### Symposium Chair

Professor Takahiro Yamaguchi  
Graduate School of Agricultural Science (GSAS)  
Professor Yutaka Nakai  
Field Science Center (FSC)  
Tohoku University, Sendai 981-8555, Japan  
gfjoint@bios.tohoku.ac.jp

### Symposium Advisors

Prof Y. Akiba, Dean, GSAS, Tohoku Univ., Japan  
Prof M. Saigusa, Director, FSC, Tohoku Univ., Japan

### Invited Speakers

Akira Nishida, GSAS, Tohoku Univ., Japan  
Kazuaki Takahashi, GSAS, Tohoku Univ., Japan  
Haruki Kitazawa, GSAS, Tohoku Univ., Japan  
Md. Jahurul Karim, Bangladesh Agricultural Univ.,  
Bangladesh  
Shin-ichiro Ogura, FSC, Tohoku Univ., Japan  
Mark S. Rutter, Institute of Grassland and Environ.  
Research (IGER), UK  
Masayuki Hojito, National Institute of Livestock and  
Grassland Science (NILGS), Japan  
Byong-Tae Joen, Chungju Campus, Kon-Kuk Univ.,  
Korea  
Masahiro Sato, National Institute of Agrobiological  
Sciences, Japan  
Keiichi Suzuki, GSAS, Tohoku Univ., Japan  
Paul Arthur, Elizabeth Macarthur Agricultural  
Institute, Australia  
Qing-Xiang Meng, China Agricultural Univ.,  
P.R.China  
Yoshiaki Obara, GSAS, Tohoku Univ., Japan  
Hisashi Aso, GSAS, Tohoku Univ., Japan  
Yoshiharu Takayama, NILGS, Japan  
Michael T. Rose, Institute of Rural Sciences, Univ. of  
Wales, U K  
Tomoyuki Yoshida, GSAS, Tohoku Univ., Japan  
Rodriguez-Martinez, Dept. of Experimental Medicine,  
Swedish Univ. of Agric. Sciences, Sweden  
Stefania A. Nottola, Univ. of Rome 'La Sapienza', Italy  
Macchiarelli, G. Univ. of L'Aquila, Italy  
Kazuo Katoh, GSAS, Tohoku Univ., Japan  
Johan Buyse, Katholieke Univ. Leuven, Belgium  
Sang-Gun Roh, Shinshu Univ., Japan  
Kan Sato, GSAS, Tohoku Univ., Japan  
Chollada Buranakarl, Chulalongkorn Univ., Thailand  
Kunioki Hayashi, Kagoshima Univ., Japan

**International Symposium on  
Recent Advances in Animal Science  
Sessions**

- X Plenary Session 1 & 2**
- A Immunology and Disease Control**
- B Grazing Management**
- C Selective Breeding**
- D Cell Biology**
- E Growth and Adaptation**

**16 November (Day 1)**

(18:00-20:00) Opening Ceremony and Welcome Reception

**17 November (Day 2)**

(8:50 – 9:30) Registration

(9:30 – 10:00)

**Plenary Session X-1**

Nishida, A. (Tohoku Univ.) Genetic improvement of resistance to chronic diseases in swine  
(Chaired by Saigusa, M.)

(10:00 - 11:30)

**Session A. Immunology and animal disease control**

(Chaired by Nakai, Y.)

- 1) Takahashi, K. (Tohoku Univ.) Nutritional control of inflammatory responses in broiler chicken
- 2) Kitazawa, H., Shimosato, T., Tohno, M., Saito, T. (Tohoku Univ., Japan) Swine intestinal immunity via Toll-like receptors and its advanced application to Food immunology
- 3) Karim, Md. (Bangladesh Agricultural Univ.) Recent advances in disease control by natural products in animals and birds in Bangladesh

**Lunch and Poster Session (11:30 – 13:30)**

(13:30 – 15:30)

**Session B. Grazing management for sustainable animal production**

(Chaired by Sato, S.)

- 1) Ogura, S. (Tohoku Univ., Japan) Heterogenous impacts of grazing animals and vegetational change in Japanese native

- pasture
- 2) Rutter, M. S. (IGER, UK) The role of diet selection in sustainable agriculture
  - 3) Hojito, M. (NILGS, Japan) Environmental impacts of grazing grassland
  - 4) Joen, B-T. (Kon-kuk University, Korea) A review of feeding systems for deer production

**Coffee Break (15:30-16:00)**

(16:00 – 18:00)

**Session C. Recent paradigm of selective breeding for farm animal**

(Chaired by Nishida, A.)

- 1) Sato, M. (NIAS, Japan) Recent advances in animal breeding theory
- 2) Suzuki, K. (Tohoku Univ., Japan) Challenges of pig breeding in Japan
- 3) Arthur, P. (Elizabeth Macarthur Agricul. Institute, Australia) Selection for growth and feed efficiency - The Australian experience
- 4) Meng, Q-X. (China Agricul. Univ., P.R.China) Functional characteristics of native Chinese cattle

**18 November (Day 3)**

(9:00 – 10:30)

**Session D. Recent progress in cell biology**

(Chaired by Aso, H. and Sasada, H.)

- 1) Aso, H. (Tohoku University, Japan) The winding road to candidate genes for marbling
- 2) Takayama, Y. (NILGS, Japan) Effects of bovine lactoferrin on the motile activity of fibroblasts
- 3) Rose, M. T., McConochie, H.R., (University of Wales, U K) The long road to a representative in vitro model of bovine lactation

**Coffee Break (10:30-10:45)**

(10:45 – 12:15)

- 4) Yoshida<sup>1</sup>, T., Sato<sup>1</sup>, E., Jose<sup>2</sup>, G., Matsuyama<sup>2</sup>, S. (<sup>1</sup>Tohoku Univ., Japan and <sup>2</sup>Case Western Reserve University, USA) A new inhibitor of cell death, Bax inhibiting peptide (BIP) derived from Ku70
- 5) Rodriguez-Martinez, H. (Swedish University of Agricultural Sciences, Sweden)
- 6) Nottola, S.A. (University La Sapienza, Italy) Ultrastructural morphology of the oocyte from its stem origin to fertilization
- 7) Macchiarelli, G. (Experimental Medicine, Univ. of L'Aquila,

Italy) Ovarian vascularization in mammals as seen by scanning electron microscopy

**Lunch and Pster Session (12:15 – 13:15)**

(13:15-13:45)

**Plenary Session X-2**

Obara, Y. (Tohoku Univ.) Developmental changes in digestive function and kinetics of glucose and urea in young calves  
(Chaired by Yamaguchi, T.)

(13:45 – 15:15)

**Session E. Regulation of growth and metabolism, and adaptation to environment**

(Chaired by Obara, Y. and Toyomizu, M.)

- 1) Katoh, K., Obara, Y. (Tohoku Univ., Japan) Effects of nutritional conditions on metabolic parameters and growth around weaning in young calves
- 2) Buyse, J. (Katholieke Universiteit Leuven, Belgium) Dietary and hormonal effects on growth performance and on plasma hormone and metabolite levels of broilers
- 3) Roh, S-G., Sasaki, S. (Shinshu Univ., Japan) The difference of fat metabolism in adipocytes between the ruminant and rodent

**Coffee Break (15:15 – 15:30)**

(15:30 – 17:00)

- 4) Sato, K., Akiba, Y. (Tohoku Univ., Japan) Nutritional manipulation of adipose tissue of broiler chickens
- 5) Buranakarl, C. (Chulalongkorn Univ., Thailand) Effects of hot environment on physiological traits and production of calf
- 6) Hayashi, K. (Kagoshima Univ., Japan) Effect of heat stress on performance of growth, protein and energy metabolism in broilers

**Closing Remarks: Nakai, Y.**

*Joint meeting of 2<sup>nd</sup> IS-AS and 3<sup>rd</sup> IS-IFS  
(2005)*

**Organizing Committee**

Katoh, K., Toyomizu, M., Aso, H., Ogura, S., Sasada, H., Suzuki, K., Yoneyama, H., Kitazawa, H., Nishida, A., Obara, Y., Sato, E., Sato, S.

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