

**The First International Symposium  
on the Project “Computational Anatomy”**  
funded by MEXT Grant-in-Aid for Scientific Research on Innovative Areas

February 7, 2010

Lecture Room L0111, Tokyo University of Agriculture and Technology (TUAT)  
Koganei, Tokyo, JAPAN

**Organizing Committee**

**Chair:** Hidefumi KOBATAKE, PhD (Tokyo Univ. of Agri. & Tech., Japan)  
Yoshitaka MASUTANI, PhD (Univ. of Tokyo, Japan)  
Yoshinobu SATO, PhD (Osaka Univ., Japan)  
Hiroshi FUJITA, PhD (Gifu Univ., Japan)  
Noboru NIKI, PhD. (Univ. of Tokushima, Japan)  
Kensaku MORI, PhD (Nagoya Univ., Japan)  
Akinobu SHIMIZU, PhD. (Tokyo Univ. of Agri. & Tech., Japan)  
Shoji KIDO, MD, PhD (Yamaguchi Univ., Japan)  
Makoto HASHIZUME, MD, PhD (Kyushu Univ., Japan)

**Local Arrangement**

Akinobu SHIMIZU, PhD (Tokyo Univ. of Agri. & Tech., Japan)

**Organizer**

Steering Committee of  
the Project “Computational Anatomy for Computer-Aided Diagnosis and Therapy  
— Frontiers of Medical Image Sciences —”,  
funded by MEXT Grant-in-Aid for Scientific Research on Innovative Areas



# Program

## Opening

**9:00 – 9:20**    **Opening Address**

Hidefumi Kobatake (Tokyo Univ. of Agri. & Tech.)

## Special Session

Chair: Kensaku Mori (Nagoya Univ.)

**9:20 – 10:50**    **Invited Talks**

(9:20– 10:05) Paper-1: Computer-Based Anatomical Models: Some Historical Notes and Application  
in Surgery Simulation

Karl Heinz Hoehne (Univ.of Hamburg)

(10:05 – 10:50) Paper-2: Towards Personalized Virtual Physiological Humans: The Role of Computational  
Anatomy and Physiology

Nicholas Ayache (INRIA)

## Coffee Break (10:50– 11:05)

## Session 1

Chair: Akinobu Shimizu (TUAT)

**11:05 – 12:35**    **Foundations of Computational Anatomy**

(11:05 – 11:35) Paper-3: Mathematical Foundations of Computational Anatomy

Yoshitaka Masutani (Univ. of Tokyo)

(11:35 – 12:05) Paper-4: Fundamental Technologies for Computational Anatomy

Yoshinobu Sato (Osaka Univ.)

(12:05 – 12:35) Paper-5: Model Construction for Computational Anatomy

Hiroshi Fujita (Gifu Univ.)

## Lunch Break (12:35 – 13:40)



**Session 2**

Chair: Yoshitaka Masutani (Univ. of Tokyo)

**13:40 – 15:10 Computer Aided Diagnosis and Therapy based on Computational Anatomy**

(13:40 – 14:10) Paper-6: Computer-Aided Diagnosis Based on Computational Anatomical Models

Noboru Niki (Tokushima Univ.)

(14:10 – 14:40) Paper-7: Fusion-Aid for Diagnosis and Surgery Based on Computational Anatomy Models

Kensaku Mori (Nagoya Univ.)

(14:40 – 15:10) Paper-8: Computer-Aided Diagnosis of Autopsy Imaging Based on Computational Anatomy

Akinobu Shimizu (TUAT)

**Coffee Break (15:10 – 15:30)**

**Session 3**

Chair: Yoshinobu Sato (Osaka Univ.)

**15:30 – 16:30 Clinical Application of Computational Anatomy**

(15:30 – 16:00) Paper-9: Computer-Aided Diagnosis of Computational Anatomical Model and Application of Computer-Aided Autopsy Imaging

Shoji Kido (Yamagushi Univ.)

(16:00 – 16:30) Paper-10: Clinical Application of the Diagnostic and Therapeutic Model Assisted by the Computational Anatomy

Makoto Hashizume (Kyushu Univ.)

**Session 4**

Chair: Hidefumi Kobatake (TUAT)

**16:30 – 17:00 Review**

