

Date: November 30th (Sun) – December 2nd (Tue)

Place: Hyatt Regency San Francisco

5 Embarcadero Center,
San Francisco, California, USA 94111
Tel: +1 415 788 1234 Fax: +1 415 398 2567

<http://sanfranciscoregency.hyatt.com/hyatt/hotels/>

November 30th (Sun.), 2008

Opening Reception in Hospitality Room at Hyatt Regency San Francisco. 18:00-20:00

December 1st (Mon.), 2008

Opening Remark 8:30-8:45 (in Room Bayview B)

Yoshihisa Kurachi (MEI center, Osaka University, Japan)

Chikaosa Tanimoto (Osaka University San Francisco Center) Activities of Osaka University San Francisco Center

Session 1. 9:00-10:40

Platforms for Physiome & Systems Biology I

Chair: Taishin Nomura (Osaka University)

James B. Bassingthwaite (University of Washington), The UW Physiome Project: Tools, tutorials, techniques and tactics in integrative multiscale modeling of physiology

Poul F. Nielsen (University of Auckland), Physiome modelling languages: concepts and meaning

Michael Hucka (California Institute of Technology), SBML, SBGN, and more: An overview of several standardization efforts for computational systems biology

Session 2. 11:00-12:20

Platforms for Physiome & Systems Biology II

Chair: James B. Bassingthwaite (University of Washington)

Yoshiyuki Asai (Osaka University), Multiscale modeling with insilicoML1.0 and insilicoIDE

Justin M. Marsh (University of Auckland), Towards the CellML IDE

Erik A. Butterworth (University of Washington), JSim: A Software Tool for Physiome Modeling

Session 3. 13:30-14:40

Platforms for Physiome & Systems biology III

Chair: Shigeo Wada (Osaka University)

Huayu Mi (SRI International), PANTHER Pathway, an evolutionary view of genes, proteins, and pathways

Gary M. Raymond (University of Washington), Reusable Modular Code for Multi-scale Physiological Systems Modeling

Session 4. 15:00-16:40

Drug-Protein Interaction & Cell Signaling

Chair: Andrew D. McCulloch (University of California San Diego)

Narutoshi Kamiya (Osaka University), Brownian dynamics simulation of hERG potassium ion channel and development of an accurate molecular docking method for protein and ligand

Shingo Murakami (Osaka University), Modeling of L-type Ca²⁺ channel inactivation in the heart

Andrew D. McCulloch (University of California San Diego), Multi-Scale Modeling and Systems Biology of Cardiac Regulatory Mechanisms

Session 5. 16:40-17:40

Discussion

Chair: Masao Tanaka (Osaka University)

Taishin Nomura (Osaka University), Toward Concerted Efforts

Followed by Round Discussion for 40 min

December 2nd (Tue.), 2008

Session 6. 8:30-11:10 (in Room Bayview B)

Modeling and Prediction in Dentistry I

Chair: Kenji Takada (Osaka University)

Carroll Ann Trotman (University of Maryland)

Elizabeth Dianne Rekow (New York University), Modeling and Prediction in Dentistry: Opportunities and Challenges

Kohtaro Yashiro (Osaka University), Modeling for Dynamics of the Human Jaw: A Critical Review

Julian Faraway (University of Bath, Department of Mathematical Sciences), Statistical analysis of data from facial motion capture with application to cleft lip and palate

Chihiro Tanikawa (University of Maryland, Osaka University), Mathematical modeling of mouth and face

Session 7. 11:25-13:15

Modeling and Prediction in Dentistry II

Chair: Kenji Takada (Osaka University)

Carroll Ann Trotman (University of Maryland)

Dan Grauer (University of North Carolina), (Part1) Airway Volume and Shape from Cone-Beam CT: Relationship to Facial Morphology, (Part2) Commercial Software Applications for Clinical Management of Craniofacial DICOM images

Masakazu Yagi (Osaka University), In silico modeling of expert decisions about faces

Satoshi Yamaguchi (Osaka University), Dental Haptic Simulator to Train Hand Skill of Student

Session 8. 14:20-15:20 (in Room Marina)

Poster Session

Chair: Masakazu Yagi (Osaka University)

Yoshiyuki Asai (Osaka University)

Session 9. 15:30-16:30

Biomechanical modeling

Chair: Masao Tanaka (Osaka University)

Shigeo Wada (Osaka University), Biomechanical modeling in Physiome: Integration of Multiscale Mechanics from Cell to Organ

Masanori Nakamura (Osaka University), Multi-scale Modeling of Blood Flow for the Establishment of Hemolysis Simulator on the basis of the Deformation Analysis of an Individual Red Blood Cell

Closing Remark 16:30-16:45

Kenji Takada (Osaka University)

Sponsored by

The Center for Advanced Medical Engineering and Informatics, Osaka University
Global COE program 'A center of excellence for an in silico medicine-oriented worldwide open platform', Osaka University, MEI center

Co-sponsored by

Supporting Center for Clinical Education and Research (In silico Human Research)

Supported by

Consulate General of Japan in San Francisco
Physiological Society of Japan
The Japanese Pharmacological Society
Japanese Society for Medical and Biological Engineering
Osaka University San Francisco Center

Physiome and Systems Biology for Integrated Life Sciences and Predictive Medicine

The 3rd MEI International Symposium

Registration for participation

Registration Fee: Free

Please send your information (Name, Affiliation) to the conference office (meis2008@physiome.jp) via e-mail.