The Second International Workshop on Regional Innovation Studies (IWRIS2010)

Final Technical Program

**Workshop Room**: Media Hall, University Research Hall II (1F), Mie University

Oral Presentation: 10 min. +Q&A: 5min, Total: 15 min.

Bell: 8min., 10min., 14min.

1. **FIRST DAY : OCTOBER 14 (THURSDAY)**

10:00 Opening Speech

Workshop General Chair: Shinji Tsuruoka

**Session 1 Biomedical-science for Regional Innovation 10:05-11:35**

**Session chairs:** Katsuzumi Okumura, Takeo Yano

(1) 10:05 The Relationship Between the Affinity and the Kinetics of Cellulase for Its Substrate  
Misa Kanie1, Shuichi Karita1  
1 Graduate School of Regional Innovation Studies, Mie University, Japan

(2) 10:20 Characterization of Family 3 Carbohydrate-binding Module from *Clostridium Josui*Shunsuke Ichikawa1, Shuichi Karita1  
1 Graduate School of Regional Innovation Studies, Mie University, Japan

(3) 10:35 Dynamic Epigenetic Regulation of *OsLTP2* Gene Expression during Seed Development of Rice  
Yuma Takeuchi1, Tatsuya Murakami2, Mina Noborikawa1, Yuhko Kobayashi1,

Issei Kobayashi1  
1 Graduate School of Regional Innovation Studies, Mie University, Japan  
2 Faculty of Bioresources, Mie University, Japan

(4) 10:50 Molecular Characterization of the Subgroup Differentiation in Binucleate *Rhizoctonia* AG-Ba, Causal Agents of Rice Sclerotial Diseases  
Shingo Urushizaki1, Kimiharu Inagaki2, Issei Kobayashi1 , Masao Arakawa2  
1 Graduate School of Regional Innovation Studies, Mie University, Japan   
2 Faculty of Agriculture, Meijo University, Japan

(5) 11:05 Introduction of Computerized Detection Method to Breast Cancer Screening in Mie Prefecture  
Akiyoshi Hizukuri1, Ryohei Nakayama2, Nobuo Nakako2, Naoki Nagasawa2,

Shigeki Kobayashi2, Kan Takeda2, Shinji Tsuruoka3   
1 Graduate school of Engineering, Mie University , Japan  
2 Department of Radiology, Mie University School of Medicine, Japan  
3 Graduate School of Regional Innovation Studies, Mie University, Japan

(6)11:20 Computerized Identification Method for Current Dental Intraoral Radiographs Based on the Arranged Previous Dental Intraoral Radiographs  
Akiyoshi Hizukuri1, Ryohei Nakayama2, Nobuo Nakako2, Takanori Ogino2, Hiroharu Kawanaka1, Haruhiko Takase1, Shinji Tsuruoka3  
1 Graduate school of Engineering, Mie University , Japan  
2 Department of Radiology, Mie University School of Medicine, Japan  
3 Graduate School of Regional Innovation Studies, Mie University, Japan

**Session 2 Invited Lectures for Regional Innovation 13:30-14:30**

**Session chairs:** Norihiro Nishimura

(I-1) 13:30-14:30 Outline of Shenyang Pharmaceutical University and  
Regulation of Tumor Metastasis by Ganglioside GD1a in Mouse Osteosarcoma FBJ Cells   
Tatsuya Yamagata1, Sadako Yamagata1

1Department of Life Sciences, Shenyang Pharmaceutical University, China

**Session 3 Social System for Regional Innovation 14:45-15:45**

**Session chairs:** Issei Kobayashi, Shuichi Karita

(7) 14:45 Why did Executives of Local Companies Enter Graduate School of Local University?   
Norihiro Nishimura1, Yoshiyuki Omura1, Satoko Hasegawa1, Tokuyoshi Maruyama1, Tomohide Ogura1, Junpei Kawajiri1, Hisayo Fujieda1, Masanori Ito1, Tadashi Okuda1, Daizou Morikane1, Yutaka Ochiai1, Hiroyuki Sakaki1, Toshikatsu Kawada1, Nobuo Matsuura1, Liqing Zang1, Tomomi Yamada1  
1 Graduate School of Medicine, Mie University, Japan

(8) 15:00 A Study of Regional Innovation: Shifting to the Endogenous Development Paradigm   
Yoshiji Hamada1 , Takeo Yano1 , Takashi Mishima1 , Norihiro Nishimura2  
1Graduate school of Regional Innovation Studies, Mie University, Japan  
2 Graduate School of Medicine, Mie University, Japan

(9) 15:15 Production and Sales of the Ethanol for the Vehicle Fuel Using the Biomass in Mie Prefecture  
Noriaki Takebayashi1, Norihiro Nishimura2, Takashi Mishima1, Shuichi Karita1, Masaaki Bannai1, Takeo Yano1  
1 Graduate school of Regional Innovation Studies, Mie University, Japan  
2 Graduate School of Medicine, Mie University, Japan

(10) 15:30 Nitrogen- neutral” Relate to Using Sea-plant  
Hiroshi Kitamura1, Takeo Yano1, Takashi Mishima1, Shuichi Karita1,

Norihiro Nishimura2  
1 Graduate School of Regional Innovation Studies, Mie University, Japan  
2 Graduate School of Medicine, Mie University, Japan

**Session 4 Information Exchange for Regional Innovation 16:00-17:00**

**Session chairs:** Katsuyuki Hagiwara, Takashi Mishima

(11) 16:00 Diagnostic Method of Corporate Innovation Based on Organizational Cybernetics － Analytical framework and Practical Method –  
Masaya Hikita1, Katsuyuki Hagiwara1, Shinji Tsuruoka1  
1 Graduate School of Regional Innovation Studies, Mie University, Japan

(12) 16:15 The Effect of a Regional Information Transmitted from a Specific Region Using Internet Media: Web News “Ise-Shima Keizai Shinbun” to Different Regions  
Yoshiyuki Ito1, Hideki Ogawa1, Shinji Tsuruoka2   
1 Globe Data Incorporation, Japan  
2 Graduate School of Regional Innovation Studies, Mie University, Japan

(13) 16:30 Interface to Grasp Misunderstandings for Teachers in Quiz  
Taisuke Nakamura1, Haruhiko Takase2, Hiroharu Kawanaka2, Shinji Tsuruoka1  
1 Graduate School of Regional Innovation Studies, Mie University, Japan  
2 Graduate School of Engineering, Mie University, Japan

(14) 16:45 Accelerate Learning Processes by Avoiding Inappropriate Rules in Transfer Learning for Actor-Critic  
Toshiaki Takano1, Haruhiko Takase1, Hiroharu Kawanaka1, Shinji Tsuruoka2  
1 Graduate School of Engineering, Mie University, Japan  
2 Graduate School of Regional Innovation Studies, Mie University, Japan

**SECOND DAY: OCTOBER 15 (FRIDAY)**

**Session 5 Human Interface for Regional Innovation 10:00-11:00**

**Session chairs:** Masaaki Bannai, Haruhiko Okumura

(15) 10:00 Selection of a Similar Writer for Personal Handwritten Character Recognition  
Takuya Kimura1, Masahiro Hattori2, Shinji Tsuruoka1, Hiroharu Kawanaka2, Haruhiko Takase2, Yasuji Miyake2  
1 Graduate School of Regional Innovation Studies, Mie University, Japan  
2 Graduate School of Engineering, Mie University, Japan

(16) 10:15 Feature Selection and Integration in Automatic Classification of Japanese Texts  
Akihiro Kokawa1, Lazaro S.P. Busagala2, Wataru Ohyama1, Tetsushi Wakabayashi1, Fumitaka Kimura1  
1 Graduate school of Engineering, Mie University , Japan  
2 Sokoine University of Agriculture, Kenya

(17) 10:30 Performance Improvement of Automatic Facial Midline Detection by Chain-coded Merlin-Farber Hough Transform  
Wataru Ohyama1, Daichi Okamoto2, Tetsushi Wakabayashi1, Fumitaka Kimura1   
1 Graduate school of Engineering, Mie University , Japan  
2 SEIKO EPSON CORPORATION, Japan

(18) 10:45 Reinforcement Learning with Dual Tables for a Partial and a Whole Space  
Nobuo Shibata1, Hirokazu Matsui1  
1 Graduate School of Engineering, Mie University, Japan

**Session 6 Biomedical Engineering for Regional Innovation 13:30-14:30**

**Session chairs:** Masataka Kubo, Sahoko Ichihara

(19) 13:30 Extraction Method of Retinal Border Lines for Optical Coherence Tomography by Using One Directional Active Net  
Ai Yamakawa1, Dai Kodama1, Shinji Tsuruoka2, Hiroharu Kawanaka1, Haruhiko Takase1, Yukitaka Uji3, Hisashi Matsubara3, Fumio Okuyama4  
1 Graduate School of Engineering, Mie University, Japan  
2 Graduate School of Regional Innovation Studies, Mie University, Japan  
3 Graduate School of Medicine, Mie University, Japan  
4 Graduate School of Health Science, Suzuka University of Medical Science, Japan

(20) 13:45 A Proposal of Measuring Method for the Size of Abnormal Part Using Correlation Coefficient on Intensity Distribution from Optical Coherence Tomography Images  
Dai Kodama1, Ai Yamakawa1, Shinji Tsuruoka2, Hiroharu Kawanaka1, Haruhiko Takase1, Yukitaka Uji3, Hisashi Matsubara3, Fumio Okuyama4   
1 Graduate School of Engineering, Mie University, Japan  
2 Graduate School of Regional Innovation Studies, Mie University, Japan  
3 Graduate School of Medicine, Mie University, Japan  
4 Graduate School of Health Science, Suzuka University of Medical Science, Japan

(22) 14:00 R&D Electronic Document Management System for Pharmaceuticals  
Kimihide Yokouchi1  
1 Total Solutions Div., Hitachi Ltd., Japan

\*\*Note (21) and (22) were exchanged by the presenters.

(21) 14:15 Extraction Method of Abnormal Parts in Retina Layers from 3D Optical Coherence Tomography Image  
Mohd Fadzil bin Abdul Kadir1, Ai Yamakawa2, Dai Kodama2, Shinji Tsuruoka3, Hiroharu Kawanaka1, Haruhiko Takase1, Yukitaka Uji4, Hisashi Matsubara4, Fumio Okuyama5  
1 Graduate School of Engineering, Mie University, Japan  
 and University of Darul Iman Malaysia, Malaysia  
2 Graduate School of Engineering, Mie University, Japan  
3 Graduate School of Regional Innovation Studies, Mie University, Japan  
4 Graduate School of Medicine, Mie University, Japan   
5 Graduate School of Health Science, Suzuka University of Medical Science, Japan

**Session 7 Information Technology for Regional Innovation 14:45-15:30**

**Session chairs:** Shinji Tsuruoka, Hiroharu Kawanaka

(23) 14:45 Creating a Virtual-entertainment Field in a Real Commercial Shopping Complex: Customer-trajectory Analysis of Experimental Event “HIKARINO Magical Quest”  
Akinori Asahara1, Koichi Seto2, Akihiro Shimura3, Shigetaka Yamakawa3  
1 Hitachi Ltd., Central Research Laboratory, Tokyo, Japan  
2 Hitachi Ltd., Information & Telecommunication Systems, Tokyo, Japan  
3 Dentsu Inc. Kansai, Osaka, Japan

(24) 15:00 Training Software of Input Device Operation of Personal Computers for Crippled Children with Intellectual Disabilities  
Kengo Yoshikawa1, Kenzo Maeda2, Takuya Matsumoto2, Hidehiko Kita1  
1 Graduate School of Engineering, Mie University, Japan

2 Faculty of Engineering, Mie University, Japan

(25) 15:15 A Programming Practice System with Function of Grasping Progress of Students' Program Writing and It's Experimental Use  
Masayuki Itomi1, Kouki Takahashi1, Yusuke Kojima1, Tadashi Ogawa1,   
Daisuke Nishiguchi2, Hidehiko Kita1  
1 Graduate School of Engineering, Mie University, Japan

2 Faculty of Engineering, Mie University, Japan

【Closing Ceremony】

Workshop General Chair: Shinji Tsuruoka

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