2017 IBMI

2017 INTERNATIONAL BIOMEDICAL INTERFACE SYMPOSIUM

March 4, 2017 - March 5, 2017
2017IBMI

2017 INTERNATIONAL BIOMEDICAL INTERFACE SYMPOSIUM

March 4 (Sat.), 2017 - March 5 (San.), 2017
Taipei Medical University, Taipei City, Taiwan
Host
University Research Administration Center (URAC), Tokyo University of Science (TUS)

Co-host
Taipei Medical University (TMU), University of the Ryukyus (UR)

Organizing Committee
Chair: Kohei Soga (TUS)
Co-chair: Hidehiro Kishimoto (UR)

Symposium Secretariat
Madoka Suzuki
URAC, TUS
1-3, kagurazaka, Shinjuku-ku, Tokyo 162-8601, Japan
E-Mail: smadoka@admin.tua.ac.jp

Shin-Yi Peng
CBME, TMU
250 Wuxing St., Taipei 11031, Taiwan
E-Mail: bimd1211@tmu.edu.tw

Date: March 4, 2017 – March 5, 2017
Venue: Taipei Medical University, Taipei City, Taiwan
Web: http://www.sogalabo.jp/2017IBMI/
Guide & Information

Reception desk: Taipei Medical University Lectures Hall Lobby
(4th Floor, United Medical Building (Front Building))

Symposium: Taipei Medical University Lectures Hall
(4th Floor, United Medical Building (Front Building))

CAMPUS MAP

Roads & Streets
A. 220 Lane, WuXing Street
B. Wusing Street(WuXing Street)
C. 284 Lane, WuXing Street
D. 22 Alley, 284 Lane, WuXing Street

Buildings
1. Health Science Building
2. Auditory
3. United Medical Building (Front Building)
4. United Medical Building (Back Building)
5. Oral Medicine Building
6. Instruction Building
7. Medical Laboratory Science and Biotechnology Building A
8. Medical Laboratory Science and Biotechnology Building B
9. Morphology Building
10. Gymnasium
11. Mushan Dormitory
12. First Building, Taipei Medical University Hospital
13. Second Building, Taipei Medical University Hospital
14. Third Building, Taipei Medical University Hospital

Banquet: Spring Of Shang Hai (春申食府)
地址: 台北市大安區仁愛路四段 66 號
電話: (02)2707-3555
PROGRAM
March 4th, 2017

9:00-9:10 Registration

9:10-9:20 Opening Remark
Akira FUKUSHIMA (Director, University Research Administration Center, Tokyo University of Science)
Chih-Hwa CHEN (Dean, Professor, College of Biomedical Engineering, Taipei Medical University)
Kohei SOGA (Professor, Faculty of Industrial Science and Technology, Tokyo University of Science)

Symposium A: An intersection of pharmaceutical, medicinal and material sciences
Chair: Shin AOKI, TUS, Japan; Chih Hao YANG, TMU, Taiwan

9:20-9:40 Self-assembling bubble carrier system for oral protein delivery
A-1 Er-Tuan CHUANG
Assistant Professor, Graduate Institute of Biomaterials and Tissue Engineering, Taipei Medical University

9:40-10:00 Highly oriented langmuir-blodgett film of silver cuboctahedra as an effective matrix-free sample plate in surface-assisted laser desorption/ionization mass spectrometry
A-2 Tsung-Rong KUO
Assistant Professor, Graduate Institute of Nanomedicine and Medical Engineering, Taipei Medical University

10:00-10:20 Development of Convenient and Efficient Methods for Detection, Isolation, and Growth of Anomalous Cells in Blood
A-3 Shin AOKI
Professor, Faculty of Pharmaceutical Sciences, Tokyo University of Science

10:20-10:40 Aquaporins provide new insights into the molecular mechanisms to maintain water homeostasis and to decrease inflammatory response, as a target of Oriental medicines
A-4 Yoichiro ISOHAMA
Professor, Faculty of Pharmaceutical Sciences, Tokyo University of Science

11:00-11:10 Break

Symposium B: Immunology
Chair: Masato KUBO, TUS, Japan; Jen-Chang YANG, TMU, Taiwan

11:10-11:30 The Role of Radiotherapy in the Era of Immuno-Oncology
B-1 Long-Sheng LU
Assistant Professor, Graduate Institute of Biomaterials and Tissue Engineering, Taipei Medical University

11:30-11:50 A Master Role of Glycogen Synthase Kinase-3 in Human Inflammatory Diseases
B-2 Chiu-Feng LIN
Professor, Department of Microbiology and Immunology, College of Medicine, Taipei Medical University

11:50-12:10 The role of Dectin-1 in the homeostasis of the intestinal immune system
B-3 Yoichiro IWAKURA
Professor, Research Institute of Biomedical Sciences, Tokyo University of Science

12:10-12:30 Dysregulation of skin homeostasis and new approach for understanding atopic dermatitis (AD)
B-4 Masato KUBO
Professor, Research Institute of Biomedical Sciences, Tokyo University of Science

12:30-14:00 Lunch
(Lunch on Meeting)
### Symposium C: Medical device and Medical image Processing

**Chair:** Akihiko KIKUCHI, TUS, Japan; Chih-Hwa CHEN, TMU, Taiwan

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Speaker</th>
<th>Affiliation</th>
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<tbody>
<tr>
<td>14:00-14:20</td>
<td>A Novel Fast-setting Root Canal Filling Material</td>
<td>Jen-Chang YANG 23</td>
<td>CBME Professor and Director, Graduate Institute of Nanomedicine and Medical Engineering</td>
</tr>
<tr>
<td>14:20-14:40</td>
<td>Formulation of smart anticancer drug-loaded nanoparticles for magnetic resonance imaging</td>
<td>Ahmed Atef Ahmed ALI 25</td>
<td>COM Postdoctoral Researcher of Department of Radiology, School of Medicine and Research Center of Translational Imaging, College of Medicine, Taipei Medical University</td>
</tr>
<tr>
<td>14:40-15:00</td>
<td>Medical Application of OTN-NIR Wavelength Range for Optical Imaging</td>
<td>Kohei SOGA 28</td>
<td>Professor, Faculty of Industrial Science and Technology, Tokyo University of Science</td>
</tr>
<tr>
<td>15:00-15:20</td>
<td>Preparation of biodegradable particles and hydrogels for biomedical applications</td>
<td>Akihiko KIKUCHI 30</td>
<td>Professor, Faculty of Industrial Science and Technology, Tokyo University of Science</td>
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### Symposium D: Materials for Biomedical Applications

**Chair:** Hiroshi TAKEMURA, TUS, Japan; Hsiang-Ho CHEN, TMU, Taiwan

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<tr>
<td>15:50-16:10</td>
<td>Versatile Biophotonics Platform for Biomedical Applications: Single Cell Micro/nano-Technologies</td>
<td>Tzu-Sen YANG 32</td>
<td>CBME Associate Professor, Graduate Institute of Nanomedicine and Medical Engineering, Taipei Medical University</td>
</tr>
<tr>
<td>16:10-16:30</td>
<td>Assessment of Thalamo-cortical White Matter Abnormalities using MRI in Mild Traumatic Brain Injury</td>
<td>Hua-Shan LIU 34</td>
<td>CBME Assistant Professor, School of Biomedical Engineering, Taipei Medical University</td>
</tr>
<tr>
<td>16:30-16:50</td>
<td>Hands-free Interface for Surgical Procedures Based on Foot Control</td>
<td>Yuuji NISHIZAWA 38</td>
<td>Department of Colorectal Surgery, National Cancer Center Hospital East</td>
</tr>
<tr>
<td>16:50-17:10</td>
<td>Developing ‘Just-Enough’ Technologies to Fulfill Unmet Needs</td>
<td>Bing-Shiang YANG 40</td>
<td>D-4 Associate Professor, Department of Mechanical Engineering, National Chiao Tung University</td>
</tr>
<tr>
<td>17:10-17:30</td>
<td>Regulatory Considerations for Early-stage Medical Device Startups</td>
<td>Tyra Chiu RAC 42</td>
<td>D-5 Director, IntelRac Consulting Ltd.</td>
</tr>
<tr>
<td>17:30-17:50</td>
<td>Optimal Orthosis with integration of user’s perspective and medical application</td>
<td>Penny Yu-Tang WEN 44</td>
<td>D-6 Chief Executive Officer, Breath Living Tech</td>
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18:30-20:30 Banquet At the Spring Of Shang Hai
### Symposium E: Cancer Diagnosis and Therapy

<table>
<thead>
<tr>
<th>Time</th>
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<tbody>
<tr>
<td>9:00-9:30</td>
<td>Registration</td>
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<tr>
<td>9:30-9:50</td>
<td>E-1 Metronomic chemotherapy, tumor stemness and immunity</td>
<td>Kelvin K. TSAI, Associate Professor and Principal Investigator, College of Medicine, Taipei Medical University</td>
</tr>
<tr>
<td>9:50-10:10</td>
<td>E-2 High Incidence of two vascular endothelial tumors, Kaposi's sarcoma and angiosarcoma, in Okinawa, Japan.</td>
<td>Kenzo TAKAHASHI, Professor, Department of Dermatology, Graduate School of Medicine, University of the Taiwan</td>
</tr>
<tr>
<td>10:10-10:30</td>
<td>E-3 Engineering Cancer Microenvironment by Arctigenin, a Major Active Principle of a Chinese Traditional Medicine <em>Arctium lappa</em> L Sensitizes Cancers to Treatment</td>
<td>Hiroyasu ESUMI, Professor, Research Institute for Biomedical Sciences, Tokyo University of Science</td>
</tr>
<tr>
<td>10:30-10:50</td>
<td>E-4 Imaging of Sentinel Lymph Nodes</td>
<td>Hirofumi FUJII, M.D., Division of Functional Imaging, Exploratory Oncology Research and Clinical Trial Center (EPOC), National Cancer Center</td>
</tr>
<tr>
<td>10:50-11:00</td>
<td>Break</td>
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### Symposium F: Regenerative Medicine

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<tr>
<th>Time</th>
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<th>Speaker(s)</th>
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</thead>
<tbody>
<tr>
<td>11:00-11:20</td>
<td>F-1 Multifaceted applications of blood products in regenerative medicine and cell therapy: from illusion to reality</td>
<td>Thierry BURNOUF, Professor and Chairman, Graduate Institute of Biomaterials and Tissue Engineering, Taipei Medical University</td>
</tr>
<tr>
<td>11:20-11:40</td>
<td>F-2 A disulfide bond-containing cell sheet engineering system</td>
<td>How TSENG, Professor, Department of Biochemistry and Molecular Cell Biology, College of Medicine, Taipei Medical University</td>
</tr>
<tr>
<td>11:40-12:00</td>
<td>F-3 Targeting of neuroregeneration in vivo to promote functional recovery after ischemic stroke</td>
<td>Chih Hao YANG, Assistant Professor, Department of Pharmacology, School of Medicine, Taipei Medical University</td>
</tr>
<tr>
<td>12:00-12:20</td>
<td>F-4 A survey to identify high-penetrant variants in psychiatric diseases for induced pluripotent stem cell study.</td>
<td>Gakuya TAKAMATSU, Graduate student, Department of Molecular &amp; Cellular Physiology, Graduate School of Medicine, University of the Ryukyu</td>
</tr>
<tr>
<td>12:20-12:40</td>
<td>F-5 Development of a new scaffold technology for regenerative therapy</td>
<td>Hiroshi SUNAMI, Research Associate, Advanced Medicine Research Center, School of Medicine, University of the Ryukyu</td>
</tr>
<tr>
<td>12:40-12:50</td>
<td>Closed Remark</td>
<td>Hidehiro KISHIMOTO (Graduate School of Medicine, University of the Ryukyu) Masayuki MATSUSHITA (Dean, Graduate School of Medicine, University of the Ryukyu)</td>
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</tbody>
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*March 5th, 2017*