# Scientific Program

## May 10, 2014

### 9:00-10:00 Basic science of microbubble agents Ⅰ

**Chairs: Shin-ichiro Umemura** (Graduate School of Biomedical Engineering, Tohoku University)
**Yoshitaka Mine** (Toshiba Medical Systems Corporation)

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| **S1-1** | **Bubble behaviors with different bubble-specific imaging** | Naohisa Kamiyama | Ultrasound Engineering, GE Healthcare Japan |
| **S1-2** | **Enhancement of molecular targeting in CEUS using volumic acoustic radiation force** | Nicolas Rognin | Toshiba Medical Research Institute USA, Inc., Seattle, WA, USA |
| **S1-3** | **Microbubble-Enhanced focused ultrasound: Application for brain drug delivery** | Hao-Li Liu | Department of Electrical Engineering, Chang Gung University |
| **S1-4** | **The biological and sonochemical effects of microbubbles: Impact of formulation** | Mariame Ali Hassan | Department of Radiological Sciences, Graduate School of Medicine and Pharmaceutical Sciences, University of Toyama |

### 10:10-11:10 Basic science of microbubble agents Ⅱ

**Chairs: Katsuro Tachibana** (Department of Anatomy, Fukuoka University School of Medicine)
**Chih-Kuang Yeh** (National Tsing Hua University)

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| **S2-1** | **Quantification in ultrasound molecular imaging using VEGF targeting contrast agent, BR55** | Katsutoshi Sugimoto | Department of Gastroenterology & Hepatology, Tokyo Medical University |
| **S2-2** | **Microbubble mediated gene and drug delivery** | Hak Jong Lee | Department of Radiology, Seoul National University College of Medicine, Seoul National University Bundang Hospital |
| **S2-3** | **Enhancement of ultrasound-facilitated gene transfer using nanoparticles** | Wen-Shiang Chen | Department of Physical Medicine & Rehabilitation, National Taiwan University Hospital & College of Medicine / Division of Medical Engineering Research, National Health Research Institute |
| **S2-4** | **Cavitation-assisted delivery of gold nanoparticles for photothermal therapy** | Pai-Chi Li | Institute of Biomedical Electronics and Bioinformatics, Department of Electrical Engineering, National Taiwan University |

## 11:20-12:20 Diagnosis of various organ diseases

**Chairs: Jiro Hata** (Department of Laboratory Medicine, Kawasaki Medical School)
**Seung Hyup Kim** (Seoul National University Hospital)

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| **S3-1** | **Contrast-enhanced ultrasonography using Sonazoid® for breast cancer** | Takashi Nakamura | Mie University Hospital Breast Center |
| **S3-2** | **Real-time shear wave elastography on the application for distinguishing inflammatory from fibrotic stenosis in Crohn's disease** | Xiao Yan Xie | First Afilliaded Hospital of Sun Yat-sen University |
| **S3-3** | **Contrast-enhanced endoscopic ultrasound in pancreatobiliary diseases** | Masayuki Kitano | Department of Gastroenterology and Hepatology, Kinki University Faculty of Medicine |
| **S3-4** | **Real-time ultrasound contrast imaging as guidance for traget biopsy of prostate cancer** | Dae Chul Jung | Yonsei University College of Medicine, Severance Hospital |

## 12:35-13:20 Technical note Ⅰ -Development in imaging technology-

**Chairs: Kazushi Numata** (Gastrointestinal Department, Yokohama City University Medical Center)
**Hitoshi Maruyama** (Department of Gastroenterology and Nephrology, Chiba University Graduate School of Medicine)

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| **TN-1** | **〔GE Healthcare Japan〕**<br>**Think bubbly on LOGIQ ultrasound** | Hiroshi Hashimoto | Ultrasound Engineering, GE Healthcare Japan |
| **TN-2** | **〔Hitachi Aloka Medical, Ltd.〕**<br>**Technical approach to advanced contrast-enhanced ultrasonography** | Tatsuya Hayashi | System Section 1, Products R&D Department, Hitachi Aloka Medical, Ltd. |
| **TN-3** | **〔Simens Japan K.K.〕**<br>**Technical advances in contrast enhanced ultrasound** | John Benson | Siemens Medical Solutions, Inc. USA, Ultrasound Division |

## 13:30-14:00 Technical note Ⅱ -Development in imaging technology-

**Chairs: Hiroko Iijima** (Depertment of Internal Medicine, Division of Hepatobiliary and Pancreatic Diseas / Depertment of Ultrasound Imaging Center, Hyogo College of Medicine)
**Kazunobu Aso** (Department of Medicine Division of Metabolism and Biosystemic Science Asahikawa Medical University)

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| **TN-4** | **〔Toshiba Medical Systems. Co.〕**<br>**Ultrasound diagnosis using Aplio500** | Xiao Yan Xie | First Affiliated Hospital of Sun Yat-sen University |
| **TN-5** | **〔Philips Electronics Japan, Ltd.〕**<br>**EPIQ: An ultrasound platform designed for Sonazoid microbubble contrast imaging** | Hiroaki Ikeshima | US Application Specialist, Philips Electronics Japan, Ltd. |

## 14:10-15:10 IVR & CEUS

**Chairs: Yasuharu Imai** (Department of Gastroenterology, Ikeda Municipal Hospital)
**Min Hua Chen** (Department of Ultrasound, Key Laboratory of Carcinogenesis and Translational Research (Ministry of Education), Peking University Cancer Hospital & Institute)

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| **S4-1** | **Fusion imaging and CEUS-guided RFA of HCCs** | Min Woo Lee | Samsung Medical Center, Sungkyunkwan University School of Medicine |
| **S4-2** | **Irreversible electroporation (IRE, NanoKnife®) and CEUS** | Fuminori Moriyasu | Department of Gastroenterology & Hepatology, Tokyo Medical University |
| **S4-3** | **Simulation and navigation with CEUS for detection and ablation therapy of liver cancer** | Dirk-André Clevert | Department of Clinical Radiology, University of Munich- Grosshadern |
| **S4-4** | **Therapeutic response evaluation in hepatic tumor model using Dynamic Contrast-Enhanced US (DCE-US)** | Jung Hoon Kim | Department of Radiology and Institute of Radiation Medicine, Seoul National University College of Medicine |

## 15:20-16:05 Quantification and parametric imaging of CEUS

**Chairs: Akiko Saito** (Institute of Gastroenterology, Tokyo Women's Medical University)
**Nobuki Kudo** (Graduate School of Information Science and Technology, Hokkaido University)

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| **S5-1** | **Parametric imaging for diffuse liver diseases** | Yasukiyo Sumino | Toho University Ohmori Medical Center |
| **S5-2** | **Contrast-enhanced US quantitatively detects changes of tumor perfusion in a breast cancer model after treatment with adriamycin** | An Hua Li | Cancer Center Sun-Yas sen University, Guangzhou |
| **S5-3** | **Qualitative and quantitative analysis of contrast-enhanced ultrasound (CEUS) in Crohn's disease to discriminate patients with different severity of lesions** | Hui Xiong Xu | Department of Medical Ultrasound, Shanghai Tenth People's Hospital of Tongji University |

## 16:15-17:15 Guideline of CEUS
**(Co-sponsored by: DAIICHI SANKYO CO., LTD.)**

**Chairs: Masatoshi Kudo** (Department of Gastroenterology and Hepatology, Kinki University Faculty of Medicine)
**Byung Ihn Choi** (Department of Radiology, Seoul National University Hospital)

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| **S6-1** | **Current status of US contrast agents and relevant researches in Taiwan** | Yi-Hong Chou | Department of Radiology, Taipei Veterans General Hospital / National Yang Ming University |
| **S6-2** | **Guidelines for CEUS in China** | Min Hua Chen | Department of Ultrasound, Key Laboratory of Carcinogenesis and Translational Research (Ministry of Education), Peking University Cancer Hospital & Institute |
| **S6-3** | **Diagnostic accuracy of contrast-enhanced ultrasonography with perfluorobutane in macroscopic classification and histological differentiation of nodular hepatocellular carcinoma** | Takashi Kumada | Department of Gastroenterology and Hepatology, Ogaki Municipal Hospital |
| **S6-4** | **The World and European Federations of Societies for ultrasound in medicine and biology: Guidelines and good clinical practice recommendations for contrast enhanced ultrasound** | David Cosgrove | Imperial and King's Colleges, London, UK |