

## 1st Conference on BioMedical Imaging

Date : Sat, Mar 15, 9:50 - 17:10

Place : Icho Kailan, Osaka University Saita Campus

Contact Person : Ryo Haraguchi, Ph.D. biomedimg-office@umin.ac.jp

Opening			
9:50 - 10:00			
<b>Session 1 Chair: Yuichi Kimura (Kindai Univ.)</b>			
1 10:00 - 10:20	Visualization of the history of the brain activity using manganese-enhanced MRI	Satomi Kikuta (Tohoku University), Yukio Nakamura (Tokushima University), Yukio Yamamuro (Tokushima University), Yuchio Yanagawa (Gunma University), Noriyasu Homma (Tohoku University), Jiro Kasahara (Tokushima University), Makoto Osanai (Tohoku University)	マンガン造影 MRI を用いて神経活動の履歴を可視化する
2 10:20 - 10:40	Bimodal imaging of atherosclerotic plaque using CRS-SHG microscopy system	Harsono CAHYADI (Osaka Univ.), Tomoyo TAO (Osaka Univ.), Hirohiko NIIKOYA (Osaka Univ.), Shuichiro FUKUSHIMA (Osaka Univ.), Tsutomu ARAKI (Osaka Univ.), Mamoru HASHIMOTO (Osaka Univ.)	Bimodal imaging of atherosclerotic plaque using CRS-SHG microscopy system
3 10:40 - 11:00	Computer assisted measurement based on automation of Patlak Plot method for mean cerebral blood flow on dynamic scintigrams.	Katsuaki Yamazaki (Gifu University), Takeshi Hara (Gifu University), Hiroshi Tago (Japanese Red Cross Gifu Hospital), Daisuke Fukuoka (Gifu University), Tetsuro Katafuchi (Gifu University of Medical Science), Hiroo Goto (Japanese Red Cross Gifu Hospital), Hiroshi Fujita (Gifu University)	脳血流シンチグラムにおけるパトラックプロット法の自動化に基づく平均脳血流量の計測支援システム
4 11:00 - 11:20	Multi-colored cathodoluminescence/up-conversion luminescence bioimaging with rare-earth doped nanophosphors	Shoichiro Fukushima (Osaka University), Taichi Furukawa (Osaka University), Hirohiko Niioka (Osaka University), Masayoshi Ichimiya (Osaka University), Jun Miyake (Osaka University), Masaaki Ashida (Osaka University, Osaka Dental University), Tsutomu Araki (Osaka University), and Mamoru Hashimoto (Osaka University)	希土類ナノ蛍光体を用いたマルチカラーカソードルミネッセンス・アップコンバージョン生体観察
5 11:20 - 11:40	Three-dimensional reconstruction of blood vessel network using automatic point registration among multiple ultrasound volumes	Tuan Hung PHAN, Shinya ONOGI and Kohji MASUDA (Tokyo University of Agriculture and Technology)	3次元超音波画像の自動点対応レジストレーションによる血管網情報の再構築
11:40 - 12:50 Lunch (70 minutes)			
<b>Session 2 Chair: Akinobu Shimizu (Tokyo Univ. of Agri. and Tech.)</b>			
6 12:50 - 13:10	Non-invasive pathological analysis of solid cancer cell by using MR	Jin Nakatani (Shiga University of Medical Science), Tomoko Katoh (Shiga University of Medical Science), Sakae Fujimoto (Gumma Prefectural Cancer center), Shigehiro Morikawa (Shiga University of Medical Science), Toshiro Inubushi (Shiga University of Medical Science)	MRを用いた癌の非侵襲病理学的解析
7 13:10 - 13:30	Simulation-based Patient-specific Prediction of Good Guidewire Shape in Catheterization	Shunta Hirayama (Osaka University), Toshiyuki Okada (Osaka University), Keigo Osuga (Osaka University), Masatoshi Hori (Osaka University), Yen-Wei Chen (Ritsumeikan University), Noriyuki Tomiyama (Osaka University), Yoshinobu Sato (Osaka University)	カテーテル法における患者固有の最適ガイドワイヤ形状推定
8 13:30 - 13:50	Development of application software for 3D medical images using the Natural User Interface	Shun Kana (Tokyo City University), Kyomi Niki (Tokyo City University)	ナチュラルユーザーインターフェースを用いた3D医用画像用アプリケーションソフトウェアの開発
9 13:50 - 14:10	Current situation and problems of interactive medical image teleconference using open source software	Kazuhiro Ito (Kyoto Yamashiro Medical Center, Kyoto Prefectural University of Medicine), Junichi Shimada (Kyoto Prefectural University of Medicine), Daishiro Kato (Kyoto Prefectural University of Medicine), Masanori Shimomura (Kyoto Prefectural University of Medicine), Hiroaki Tsuneyuka (Kyoto Prefectural University of Medicine)	オープンソースソフトウェアを利用した双向性遠隔医療画像カンファレンスの現状と問題
<b>Invited Lecture Chair: Yoshinobu Sato (Osaka Univ.)</b>			
10 14:10 - 15:00	[Invited Lecture] Imaging Techniques in Interventional MRI	Kagayaki Kuroda (Tokai University)	[特別講演] インターベンショナルMRIにおける画像計測技術
15:00 - 15:10 Break (10 minutes)			
<b>Session 3 Chair: Ryo Haraguchi (National Cerebral and Cardiovascular Center)</b>			
11 15:10 - 15:30	Development of a Colonoscope Robot with Multiple Propulsion Modes Using Pneumatic Soft Actuators	Yasuhiko Kuramata (Osaka University), Yuki Horise (Osaka University), Fumiyo Miyazaki (Osaka University), Toshikazu Kawai (Osaka Institute of Technology), Atsushi Nishikawa (Shinshu University)	空気圧ソフトアクチュエータを用いた複数の走行モードを有する大腸内視鏡ボットの開発
12 15:30 - 15:50	Adaptive Method for Robust Onset Detection in Surface-Electromyography Signals	Claudia Sichting (Bauhaus-University Weimar, Osaka University), Yoshihiro Kuroda (Osaka University), Kiyoshi Kiyokawa (Osaka University), Haruo Takemura (Osaka University)	Adaptive Method for Robust Onset Detection in Surface-Electromyography Signals
13 15:50 - 16:10	Multi-atlas and sparse modeling based liver segmentation from a CT volume	Shun Umetsu (Tokyo Univ. of Agri. and Tech.), Akinobu Shimizu (Tokyo Univ. of Agri. and Tech.), Hidefumi Watanabe (Tokyo Univ. of Agri. and Tech.), Shigeru Nawano (International University of Health and Welfare)	マルチアトラスとスパースモデリングに基づく3次元CT像からの肝臓セグメンテーション
14 16:10 - 16:30	Multi-atlas based multi-organ segmentation from an abdominal CT volume	Kohei Yamashita (Tokyo Univ. of Agri. and Tech.), Akinobu Shimizu (Tokyo Univ. of Agri. and Tech.), Hidefumi Watanabe (Tokyo Univ. of Agri. and Tech.), Shigeru Nawano (International University of Health and Welfare)	マルチアトラス法による3次元腹部CT像からの複数臓器同時認識
15 16:30 - 16:50	Lung segmentation based on neighbor constraints from a CT volume of a postmortem body	Satoshi Okata (Tokyo Univ. of Agri. and Tech.), Akinobu Shimizu (Tokyo Univ. of Agri. and Tech.), Hidefumi Watanabe (Tokyo Univ. of Agri. and Tech.), Seiji Yamamoto (AI information Center), Shigeru Nawano (International University of Health and Welfare)	近傍制約に基づく死体のCT像からの肺野認識
16 16:50 - 17:10	Improvement of bone fracture detection algorithm from a CT volume of a postmortem body	Yusuke Takata (Tokyo Univ. of Agri. and Tech.), Akinobu Shimizu (Tokyo Univ. of Agri. and Tech.), Hidefumi Watanabe (Tokyo Univ. of Agri. and Tech.), Seiji Yamamoto (AI information Center)	死体のCT像からの骨折検出アルゴリズムの改良

If any question, please contact biomedimg-office@umin.ac.jp