## CADET Workshop 2009 Timetable

## 2009/03/28 (SAT)

| 8:00-          | Reception                                                                  |
|----------------|----------------------------------------------------------------------------|
| 8:30-9:00      | Opening Ceremony                                                           |
| 9:00-10:00     | Biomagnetic and Neuromagnetic Approaches to the Study of Epilepsy          |
| Invited Talk 1 | Prof. Shoogo Ueno, Kyushu University, Japan                                |
|                |                                                                            |
|                | Session Chair: Prof. Michiyasu Suzuki, Yamaguchi University                |
| 10:00-10:15    | Coffee break                                                               |
| 10:15-11:15    | What's the difference between EEG and MEG in practice?                     |
| Invited Talk 2 | Prof. Nobukazu Nakasato, Kohnan Hospital/Tohoku University, Japan          |
|                | Session Chair: Prof. Toshimitsu Musha, Brain Functions Laboratory, Inc.    |
| 11:15-11:30    | Coffee break                                                               |
| 11:30-12:30    | Comparative and Combined MEG-EEG Source Modeling in Epilepsy Evaluations   |
| Invited Talk 3 | Prof. John S. Ebersole, The University of Chicago, U.S.A                   |
|                |                                                                            |
|                | JAA 1 days                                                                 |
|                | Session Chair: Prof. Masami Fujii, Yamaguchi University                    |
| 12:30-13:30    | Lunch                                                                      |
| 13:30-14:30    | Source analysis of interictal spikes in EEG and MEG                        |
| Invited Talk 4 | Prof. Michael Scherg, MEGIS Software GmbH, Germany                         |
|                | Session Chair: Prof. Takeshi Yamakawa, Kyushu Institute of Technology      |
| 14:30-14:45    | Coffee break                                                               |
| 14:45-15:45    | Neuronal Abnormality Topography(NAT)                                       |
| Invited Talk 5 | Prof. Toshimitsu Musha,Brain Functions Laboratory, Inc., Japan             |
|                | Session Chair: Prof. Yuji Owada, Yamaguchi University                      |
| 15:45-16:00    | Coffee break                                                               |
| 16:00-17:00    | Realistic modeling and interpretation of depth-EEG signals recorded during |
| Invited Talk 6 | inter-ictal to ictal transition in temporal lobe epilepsy                  |
|                | Prof. Fabrice Wendling, Universite de Rennes, France                       |
|                | Session Chair: Prof. Kunihiko Fukushima, Kansai University                 |

## 2009/03/29 (SUN)

| 8:15-9:15      | Combining EEG and fMRI to study the epileptic focus                 |
|----------------|---------------------------------------------------------------------|
| Invited Talk 7 | Prof. Jean Gotman, McGill University, Canada                        |
|                |                                                                     |
|                | Session Chair: Prof. Shun-ichi Amari, RIKEN Brain Science Institute |
| 9:15-9:30      | Coffee break                                                        |

| 9:30-10:30      | Distributed Source Imaging of High Density EEG in Epilepsy                                                                                |
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| Invited Talk 8  | Prof. Christoph M. Michel, University Hospital of Geneva, Switzerland                                                                     |
|                 | Session Chair: Prof. Minoru Tsukada, Tamagawa University                                                                                  |
| 10:30-10:45     | Coffee break                                                                                                                              |
| 10:45-11:45     | High-definition displays of brain activity give access to order parameters that                                                           |
| Invited Talk 9  | underlie epileptic seizures                                                                                                               |
|                 | Prof. Walter J. Freeman, UC Berkeley, U.S.A                                                                                               |
|                 | Session Chair: Prof. Ryoji Suzuki, Kanazawa Institute of Technology                                                                       |
| 11:45-12:45     | Lunch                                                                                                                                     |
| 12:45-13:15     | Focal brain cooling suppresses epileptic discharges in experimental models of                                                             |
| CADET Project 1 | epilepsy                                                                                                                                  |
| ·               | <sup>1</sup> Masami Fujii, <sup>1</sup> Hiroshi Fujioka, <sup>1</sup> Takayuki Oku, <sup>1</sup> Nobuhiro Tanaka, <sup>1</sup> Hirochika  |
|                 | Imoto, <sup>1</sup> Sadahiro Nomura, <sup>1</sup> Eiichi Suehiro, <sup>1</sup> Hirosuke Fujisawa, <sup>2</sup> Ichiro Kunitsugu,          |
|                 | <sup>3</sup> Takahiro Yamashita, <sup>3</sup> Takashi Saito, <sup>4</sup> Zimin Lev Grigorievich, <sup>4</sup> Takeshi                    |
|                 | Yamakawa and <sup>1</sup> Michiyasu Suzuki                                                                                                |
|                 | <sup>1</sup> Departments of Neurosurgery, <sup>2</sup> Public Health and <sup>3</sup> Applied Medical Engineering                         |
|                 | Science, Graduate School of Medicine Yamaguchi University.                                                                                |
|                 | <sup>4</sup> Graduate School of Life Science and Systems Engineering, Kyushu Institute of                                                 |
|                 | Technology                                                                                                                                |
|                 | Session Chair: Prof. Takeshi Yamakawa, Kyushu Institute of Technology                                                                     |
| 13:15-13:45     | Focal Brain Cooling as an Alternative Therapy for Intractable Epilepsy                                                                    |
| CADET Project 2 | <sup>1</sup> Hiroshi Fujioka, <sup>1</sup> Masami Fujii, <sup>1</sup> Hirochika Imoto, <sup>1</sup> Eiichi Suehiro, <sup>1</sup> Sadahiro |
|                 | Nomura, <sup>1</sup> Hirosuke Fujisawa, <sup>2</sup> Takashi Saito, <sup>3</sup> Takeshi Yamakawa, and                                    |
|                 | ¹Michiyasu Suzuki                                                                                                                         |
|                 | <sup>1</sup> Departments of Neurosurgery and <sup>2</sup> Department of Applied Medical Engineering                                       |
|                 | Science, Graduate School of Medicine Yamaguchi University.                                                                                |
|                 | <sup>3</sup> Graduate School of Life Science and Systems Engineering, Kyushu Institute of                                                 |
|                 | Technology                                                                                                                                |
|                 | Session Chair: Prof. Takeshi Yamakawa, Kyushu Institute of Technology                                                                     |
| 13:45-14:00     | Coffee break                                                                                                                              |
| 14:00-14:30     | Design and development of microelectrodes and dedicated circuits for IC-EEG                                                               |
| CADET Project 3 | measurement and electric stimulation                                                                                                      |
|                 | Toshitaka Yamakawa                                                                                                                        |
|                 | Department of Electrical and Electronics Engineering, Faculty of Engineering,                                                             |
|                 | Shizuoka University                                                                                                                       |
|                 | Session Chair: Prof. Michiyasu Suzuki, Yamaguchi University                                                                               |
| 14:30-15:00     | Plasticity Destruction of polar Excitations in Frog Sciatic Nerve Using                                                                   |
| CADET Project 4 | Semiconductor Pulse Laser Irradiation                                                                                                     |
|                 | Yuya Hirayama, Takeshi Yamakawa, Satoru Ishizuka and Zimin Lev Grigorievich                                                               |
|                 | Department of Brain Science and Engineering, Kyushu Institute of Technology                                                               |
|                 | Session Chair: Prof. Michiyasu Suzuki, Yamaguchi University                                                                               |

| 15:00-15:30     | Cryogenic probe for brain surgery                                           |
|-----------------|-----------------------------------------------------------------------------|
| CADET Project 5 | Zimin Lev Grigorievich and Takeshi Yamakawa                                 |
|                 | Department of Brain Science and Engineering, Kyushu Institute of Technology |
|                 | Session Chair: Prof. Michiyasu Suzuki, Yamaguchi University                 |

## 2009/03/30 (MON)

| 8:00-10:00 | Confidential Meeting |  |
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