

**Progress Report in Japan (Osamu Sakura, Ph.D. University of Tokyo,  
Alternative representative Norihiro Sadato, MD, Ph.D., NIPS)  
International Neuroethics Network @ SFN 2009, Chicago, IL**

**Progress Report in Japan (November 2008 – October 2009)**

**1. Academic Society Achievement**

- **February 8, 2009.** The Japan Neuroscience Society (JNS) revised Guidelines for Ethics-related Problems with Non-invasive Research on Human Brain Function (<http://www.jnss.org/english/society/rinri.html>). Works were carried out by the Subcommittee of Non-invasive Research on Human Brain Function (chair: Norihiro Sadato, MD, PhD).

**2. Academic Conference Achievement**

- **November 3, 2008.** Miyako Takagi, a former PI of 2007NEDO DBS-ethics project gives a presentation at 9<sup>th</sup> Asian Bioethics Conference (ABC2008) in Yogyakarta, Indonesia. She is going to organize symposium about Japanese Neuroscience and Neuroethics at 10<sup>th</sup> Asian Bioethics Conference in July 2010.
- **November 5, 2008.** University of Tokyo invited Dr. Eric Racine (Institut de recherches cliniques de Montréal) and he gave a talk “Neuroethics in Canada: Emerging research on the ethics of cognitive enhancement and neuroimaging”.
- **November 6, 2008.** “Neuroethics: East and West” at the off-year workshop The International Society for the History, Philosophy and Social Studies of Biology (ISHPSSB) in Kobe, Japan. <http://www.econ.osaka-cu.ac.jp/~aseto/ISH/>
- **November 30, 2008.** “Neuroethics in Europe: Deep Brain Stimulation as Psychiatric Treatment” at 19<sup>th</sup> Annual Meeting of Japan Association for Bioethics, Fukuoka, JAPAN.
- **December 20, 2008.** Jinsuke Matsumoto Health Promotion Foundation Symposium “Ethical and Social Issues in Advanced Neuroscience Research”, Kyoto, JAPAN.
- **March 1, 2009,** Research project of University of Tokyo "A Theoretical Foundation of Neuroethics" held their second open conference.
- **July 25, 2009,** Research project of University of Tokyo "A Theoretical Foundation of Neuroethics" held symposium about “Social Brain”.
- **September 16, 2009.** JNS-SfN-FENS-ANS special symposium “Neuroscience and

**Progress Report in Japan (Osamu Sakura, Ph.D. University of Tokyo,  
Alternative representative Norihiro Sadato, MD, Ph.D., NIPS)  
International Neuroethics Network @ SFN 2009, Chicago, IL**

Society: Global Perspectives” at 32<sup>nd</sup> Annual Meeting of Japan Neuroscience Society, Nagoya, JAPAN.

- **September 18, 2009.** Young Researcher symposium “Understanding and Utilizing Human Brain Function - Their Technologies and Ethics -” at 32<sup>nd</sup> Annual Meeting of Japan Neuroscience Society, Nagoya, JAPAN.
- **September 26, 2009.** Panel discussion “Neuroethics in Asia: Current situation and future views” at BRAIN matters: New Directions in Neuroethics, Halifax, CANADA.
- **October 31, 2009.** Workshop “Neuroscience and Normative Ethics” 47<sup>th</sup> Annual Meeting of The Society of Philosophy Japan, Tokyo, JAPAN.
- **April, 2009.** Startup of the Interdisciplinary Research Unit of Neuroethics, The University of Tokyo, organizing a seminar (Jun 2009) and scientific cafes (Sep, Oct, and Dec 2009).

### **3. Funding Achievement**

- **May, 2008 – March, 2013.** MEXT (Ministry of Education, Culture, Sports, Science and Technology) has started a research propulsive project of BMI as an important research area of neuroscience for five years, and two neuroethics-related projects (PIs: Osamu Sakura and Akira Akabayashi) have started from July 2008.

**Osamu Sakura, PI:** the team of technological development of input and output devices for BMI and neuroethical investigation

**Akira Akabayashi, PI:** IRB and ethical guideline for human brain research

- **June, 2007 – March, 2013.** MEXT (Ministry of Education, Culture, Sports, Science and Technology) funded Global Center of Excellence (GCoE) program budget to University of Tokyo Center for Philosophy UTCP (Principal Investigator: Yasuo Kobayashi, Ph.D., Professor, Philosophy of Science, University of Tokyo).
- **July, 2008 – March, 2013.** MEXT (Ministry of Education, Culture, Sports, Science and Technology) funded Global Center of Excellence (GCoE) program budget to

**Progress Report in Japan (Osamu Sakura, Ph.D. University of Tokyo,  
Alternative representative Norihiro Sadato, MD, Ph.D., NIPS)  
International Neuroethics Network @ SFN 2009, Chicago, IL**

Tamagawa University Brain Science Institute (PI: Masamichi Sakagami). The program hires a full-time dedicated research associate working for Neuroethics (Sayaka Oki, Ph.D) since June 2009.

- **June, 2008 -March, 2011.** MEXT (Ministry of Education, Culture, Sports, Science and Technology)/JSPS funds "A Theoretical Foundation of Neuroethics" (Principal Investigator: Yoshikazu Hirono, Ph.D., Professor, Philosophy of Science, University of Tokyo).
- **June, 2009 -March, 2012.** MEXT (Ministry of Education, Culture, Sports, Science and Technology)/JSPS funds Grant-in-Aid for Scientific Research(B) for "Designing Interaction of Neuroscience and the Public" (Principal Investigator: Osamu Sakura, Ph.D., Professor, Interfaculty Initiative in Information Studies, University of Tokyo).

#### **4. Public Engagement Achievement**

- **November 23, 2008.** "Connecting Brain to Machine? Let's think together with neuroscientists" at Science Agora, 2008 (Japanese information available via <http://scienceportal.jp/scienceagora/agora2008/081123/1-4.html>)
- **Since 2009,** KOMABA Brain Cafe is organized by the University of Tokyo Center for Philosophy UTCP. they have held the cafe 4 times.
- **May 23, 2009.** Symposium "Neuroscience Literacy" at University of Tokyo Komaba Campus (Japanese information available via <http://hps.c.u-tokyo.ac.jp/news/2009/04/ristex/index.php>)
- **June 20, 2009.** Open Class to public "Neuroethics" at Shinsyu University (Japanese information available via <http://sleep.cocolog-nifty.com/blog/2009/06/post-91c4.html>)
- **September 18, 2009. Neuroscience2009 Satellite Social "Knowing Brain and Beyond."** (Cafe scientifique with the theme of BMI and other related topics. Presenters included neuroscientists, philosopher, science communicators. Japanese information available via <http://www.congre.co.jp/neurosci2009/japanese/index.html>)

**Progress Report in Japan (Osamu Sakura, Ph.D. University of Tokyo,  
Alternative representative Norihiro Sadato, MD, Ph.D., NIPS)  
International Neuroethics Network @ SFN 2009, Chicago, IL**

**5. Future Funding and Governance Perspectives in Japan**

- Since November, 2007, MEXT (Ministry of Education, Culture, Sports, Science and Technology) has started the committee of Neuroscience in which future direction of neuroscience research and development including ethics and human resource would be discussed. In June 2009 The committee published the first proposal of future direction of neuroscience research and development.
  
- In February 2009, Japan Neuroscience Society Ethics Committee published guidelines for ethics-related problems with “non-invasive research on human brain function”. The new guidelines are available in English via <http://www.jnss.org/english/society/rinri.html>
  
- In July 2009, the Japanese Government started the preparation for the 4<sup>th</sup> Science and Technology Basic Plan starting FY2011. The MEXT Division of Life Science works actively to put importance of Bioethics in the plan statement.

**6. International/Asian Cooperation Achievement**

- Academic research project of Neuroethics has launched in South Korea and Taiwan. On November 21, Taiwan National University will held International symposium of Neuroethics (Eric and Tamami are invited). Osamu and Tamami are also invited to Neuroethics workshop in South Korea in December 2009. Please consider to invite appropriate researchers from these countries to INN community.

**Taiwan (from Dr. Kevin Chin-Chaen Wu at National Taiwan University College of Medicine and Terrence Hua Tai at National Cheng Kung University)**

- Since 2007, the ELSI division of the National Research Project for Genomic Medicine (NRPGM) has officially named neuroethics as one important grant topic
- Hoping for the future: From genome to brainome
- In 2009, three famous neuroethicists and neurophilosophers were invited to Taiwan to conduct workshops hosted by the NRPGM (More than a hundred scholars and practitioners attended these workshops)

Taiwan National Science Council shows an interest in Neuroethics.

- Calling for Proposals to set up and manage devices of functional MRI and magnetoencephalography (MEG) for humanity and social sciences researches
- The Council will sponsor the fees for construction and management of the

**Progress Report in Japan (Osamu Sakura, Ph.D. University of Tokyo,  
Alternative representative Norihiro Sadato, MD, Ph.D., NIPS)  
International Neuroethics Network @ SFN 2009, Chicago, IL**

luxurious devices if the proposal team is the best among the competitors in interdisciplinary integration, research agenda elaboration, and location and manpower design

**South Korea (from Dr. Sungook Hong at Seoul National University)**

- The 21C Frontier R&D Program in Neuroscience began to support its 4-year ELSI program in 2009 (2009-2012).
- The ELSI Project for Brain Science and Neuroscience was established in April, 2009 (Project manager: Prof. Sungook HONG (STS, Seoul National University), Co-researcher: Prof. Daeyk JANG (Philosophy of Science, DWU). The ELSI Project organized a multi-disciplinary group, named "Neuro-Humanities" The Group is currently editing a volume on ethical, social and legal issues in brain science for the general public.
- The Group consists of 15 researchers and graduate students working on bioethics, philosophy & sociology of science, law, natural science, and meets every month and organizes Neuroethics Forum
  - 1st Forum: Prof. Dae-Yul Lee (Yale University School of Medicine)  
on "Decision Making and the Brain" (7 August 2009)
  - 2nd Forum is scheduled in October
  - 3rd Forum is scheduled in December (Prof. Sakura Osamu)
- In 2010, the Neuro-Humanities Group will organize a nation-wide symposium on ELSI issues in neuroscience (& will invite a few foreign researchers working on this topic)
- In 2011 or 2012, the ELSI program will organize the first international workshop on neuroethics in Korea
- Problems to be Solved
  - ✓ Small budget for the ELSI program (\$50,000 for 2009)
  - ✓ Relatively little interest in ELSI issues among neuroscientists
  - ✓ Lack of continuous and neutral organization to support neuroethics activity
  - ✓ Creating East-Asian & international networks between Korean researchers and foreign researchers on neuroethics

**Progress Report in Japan (Osamu Sakura, Ph.D. University of Tokyo,  
Alternative representative Norihiro Sadato, MD, Ph.D., NIPS)  
International Neuroethics Network @ SFN 2009, Chicago, IL**