Recent advances in neuroscience opened up new technical possibilities – mind-reading of the living human, neuro-enhancement using electromagnetic brain stimulation or neuro-feedback system or application of brain-machine-interface into everyday life, as well as the advent of new powerful psychotropic drugs. In addition to the conventional problems in bioethics, such as informed consent, neuroscience technology produced new terrains of ethical questions. For example, *laissez-faire* neurological enhancement may have the risk of increasing the social gap between the rich and the poor, if a wealthy person can easily become smarter without tedious effort. Is it Brave New World of human techno-enhancement?

The mission of neuroethics is to examine the ethical, legal and social implications of neuroscience today. More ambitious neuroethicists may claim that the unprecedented breakthrough in the neuro-theology or neuro-philosophy is coming nearby. We cannot predict the future of neuroscience, but, at least, we could say that scientific and objective approach to mind-brain problem cannot avoid having the connotations in more delicate topics in humanities, such as the privacy, morality, subjectivity, personality or responsibility.

In this international symposium open to the public, we would like to put these neuroethical questions in the context of bioethics and discuss the recent advances in the brain-machine-interface in an interdisciplinary way.
Opening remarks by Prof. Hidenao Fukuyama (Kyoto University).

10:00-11:00 (50 min talk, 10 min discussion)
Prof. James Childress, University of Virginia will give a special lecture on “Neuroethics: Principles and Dilemmas”

11:00-12:00 (50 min talk, 10 min discussion)
Prof Mikhail Lebedev, Duke University will give a special lecture on the “Brain-machine interfaces: past, present and future”

Topics of Japanese speakers will be as follows
(presentation and discussion in Japanese with English translation)
13:30-16:20
“Current status of neuroscience and neuroethics in Japan”
(Prof. Tadashi Isa, National Institutes of Physiological Sciences)

“Do we have to regulate the brain science?”
(Prof. Kiyoshi Muraoka, Bukkyo University)

“Philosophy of enhancement”
(Prof. Osamu Kanamori, Tokyo University)

“TLS (Totally Locked-in State) as the Metaphor of ALS: With over 13 years experience in home care for my mother in severe communication disorders”
(Ms. Yumiko Kawaguchi, The director of Non-Profitable Organization ALS/MND support center SAKURA. The director of Japan ALS Association)

16:30-18:00
General discussion

Further information
http://hbrc.kuhp.kyoto-u.ac.jp/nourinri/IS_neuroethics.html