

Opening Address:

It is our pleasure to welcome you at the RIKEN Symposium on Neuroinformatics Research in Vision. Thanks to the supports* from RIKEN and the MEXT, we are pleased to welcome this excellent forum of researchers. The purpose of the symposium is to present achievements of the NRV project and discuss the future perspectives of Neuroinformatics. As a memorable achievement of the NRV project, we open the initial version of the Visiome Platform to the public.

Recalling the origin - in a recent report from the OECD Megascience Forum the new field of neuroinformatics (NI) was defined as "the combination of neuroscience and information sciences to develop and apply advanced tools and approaches essential for major advancement in understanding the structure and function of the brain". In the context of these and international activities, the present symposium will discuss a possible scope of impact of NI related areas on the study of nervous system functions with closer focus on the visual sub-system.

An emerging trend in modeling and understanding the brain processes is that understanding the brain at one level can be greatly enhanced by considering the embedded processes. Equally important is consideration of complexities of neuronal processes operating in much detailed sub-systems. The aim of this symposium is to bring together scientists in experimental, computational and theoretical areas. Span across multiple research activities should provide an opportunity for interaction between methodological and phenomenological approaches.

Significant goal is to explore relationships across different levels of abstractions, e.g. the pathways from molecular to system levels. Another critical goal is to discuss the disposition of the computational approaches to support effective modeling. It is our belief, that the very nature of this symposium shall provide a base for fruitful discussions, expression of novel concepts and ideas, and expansion of future collaboration.

Speaking of the very nature of this symposium, allow us to mention a few remarks regarding the session organization:

The morning session aims at summarizing achievements made during the period of the NRV project. After the opening remarks it starts by highlighting the "Perspectives on Neuroinformatics". We then present the overview of the NRV Project, Visiome Platform, and "the roles of neuroinformatics in visual neurophysiology research".

During the lunch time, the project members present their posters and demonstrate achievement on the Visiome Platform. All the participants are welcome to engage in personal discussions.

In the afternoon session, several friends from US, EU and Japan introduce their viewpoints. Dr. Ted Carnevale presents a practical perspective on neuroinformatics and neuroscience, and mentions potential interoperability between the Visiome Platform and ModelDB. Dr. Eric de Schutter remarks on data sharing policies. Dr. Raphael Ritz introduces "A pilot study for the OECD Neuroinformatics internet portal and related activities". Dr. Takashi Gojobori touches upon the topic of evolution of brain and CNS from the viewpoint of genome and gene expression profile. Finally, we have a general discussion on establishing and organizing future national and international neuroinformatics collaborations.

In the name of organizers, we wish you a great time. We sincerely hope you will find the participation in this symposium exciting and useful.

Organizers: Shun-ichi Amari and Shiro Usui

Coordinators: Shiro Usui (PI), Masahiro Sokabe and Hiroyoshi Miyakawa

Staffs: Yoshimi Kamiyama, Kazutsuna Yamaji, Peter Geczy, Toshihiro Aoyama, Kazunori Nagata, Hiroyuki Sakai and Yoshihiro Okumura

Secretariats: Hitomi Okano and Kyoko Takahashi

*The sponsorship comes from RIKEN and the grant for "Target Oriented Research and Development for Brain Science" under the Special Coordination Funds Promoting Science and Technology, by the MEXT (Ministry of Education, Culture, Sports, Science and Technology), JAPAN.