

56th NIBB Conference Neocortical Organization

Organizing Chair: Tetsuo Yamamori

March 12 (Fri)-14 (Sun), 2010

The neocortex is a unique structure in mammals and thought to be the center that directs their perceptions and behaviors. As such it has been a main focus in neuroscience for over a hundred years. However, only recently have we been able to study the mechanisms for the formation and function of the neocortex at the molecular level. I therefore decided that it was a good time to organize a meeting in such a way that it could serve as a catalyst for interaction between the following two aspects of research on Neocortical Organization. One was as a venue for studies on the functional and genetic organization of the neocortex. The other was that it would also serve as an opportunity for interaction between leading Japanese and international researchers who are carrying out cutting-edge research in the field.

The symposium was organized into the following five sessions.

Session 1: Formation of Cortical Neural Specificity

Session 2: Functional Organization of Cortical Networks in the Visual and Auditory Systems

Session 3: Functional Organization of Cortical Networks in Primates and Humans

Session 4: Motion Control and the Anatomical and Physiological Basis

Session 5: Higher Cognition and Representation

The symposium was a success, and I would like to share the concluding remarks as presented by Prof. Michael Stryker (<http://www.nibb.ac.jp/conf56/report.html>) during the final session of the symposium. Here, I only cite his last two remarks.

“International meetings can be enormously useful, as well as pleasant. This meeting gives us much more than a similar investment of time

spent reading one another’s papers. For one, we have the chance to ask and answer questions about points we may have misunderstood, or points for which we don’t find the published evidence convincing. The result of such discussions may be more experiments, a different analysis, or sometimes just a clarification. In addition, we get to hear and understand and discuss plans for future directions, which can improve all our future work. We also learn about new tools that our colleagues have created. Finally, the Poster Sessions in particular give us foreigners the opportunity to meet many brilliant and energetic young Japanese student scientists, and they to meet us, forming a basis for future scientific exchanges and postdoctoral fellowships.

Finally

Let us end with an expression of thanks to the National Institute of Basic Biology and to Professor Yamamori for this stimulus to progress in neuroscience, and for this celebration of Community between Japanese and Western science.

Arigato

Michael Stryker, Professor, UCSF”

(Tetsuo Yamamori)



Speakers

Harris, Kenneth (Imperial London College), Hensch, Takao (Harvard Univ.), Kennedy, Henry (INSERM, U846), Macklis, JeffreyD. (Massachusetts General Hospital), Rubenstein, JohnL.R. (UCSF), Stryker, Michael (UCSF), Sur, Mriganka (MIT), Watanabe, Takeo (Boston Univ.)

Fujita, Ichiro (Osaka Univ.), Isa, Tadashi (NIPS), Kawaguchi, Yasuo (NIPS), Kawato, Mitsuo (ATR), Komatsu, Hidehiko (NIPS), Mori, Kensaku (Univ.of Tokyo), Nambu, Atsushi (NIPS), Osumi, Noriko (Tohoku Univ.), Sakai, Kuniyoshi (Univ.of Tokyo), Sakano, Hitoshi (Univ.of Tokyo), Taira, Masato (Nihon Univ.), Takada, Masahiko (Kyoto Univ.), Tanaka, Keiji (RIKEN), Tanifuji, Manabu (RIKEN), Tannji, Jun (Tamagawa Univ.), Tsumoto, Tadaharu (RIKEN), Yamamori, Tetsuo (NIBB), Yoshimura, Yumiko (NIPS)

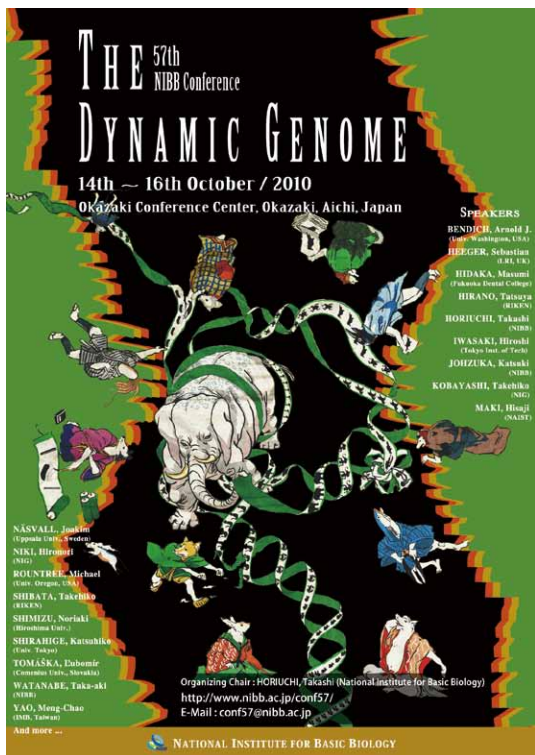
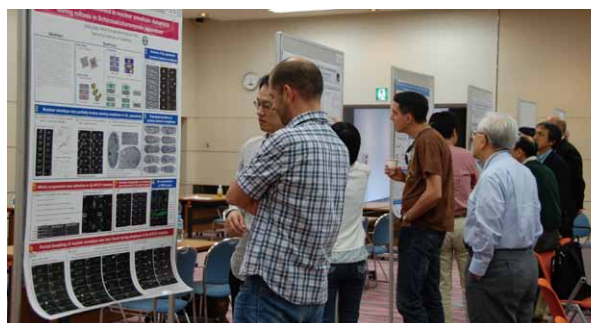
57th NIBB International Conference The Dynamic Genome

Organizer: Takashi Horiuchi

October 14 (Thu)-16 (Sat), 2010

There are two forms of environmental change that affect living organisms. One is environmental change which organisms regularly experience, such as fluctuations in temperature, availability of food sources, etc. and the other are those they have not experienced before. In the former case, organisms rely on their program or genetic network which has been constructed during evolution to adapt to the changes and survive. On the other hand, when they are exposed to environmental changes they have never developed responses for (for example new pesticides), they may be virtually eradicated or only a very small percentage of them survive by developing tolerance to the severe environment. The mechanisms induced in this case are dynamic genome changes, such as recombination and mutation which probably play a central role in biological evolution. Thus, with this in mind, we titled this conference “The Dynamic Genome”, and we provided an opportunity

for a discussion with more than forties international researchers active in this field. These discussions covered more complex process, such as gene amplification and mechanisms involved in proteins, such as cohesin and condensin, and gene evolution.



Speakers

Bendich, Arnold (Univ. Washington), Heeger, Sebastian (London Res. Inst.), Näsvall, Joakim (Uppsala Univ.), Rountree, Michael (Univ. Oregon), Tomaska, Lubomir (Comenius Univ.), Yao, Meng-Chao (Inst. Mol. Biol., Taiwan)
Hidaka, Masumi (Fukuoka Dental Col.), Hirano, Tatsuya (RIKEN), Horiuchi, Takashi (NIBB), Iwasaki, Hiroshi (Tokyo Inst. Tech.), Johzuka, Katsuki (NIBB), Kobayashi, Takehiko (NIG), Maki, Hisaji (NAIST), Niki, Hironori (NIG), Sekiguchi, Mutsuo (Fukuoka Dental Col.), Shibata, Takehiko (RIKEN), Shimizu, Noriaki (Hiroshima Univ.), Shirahige, Katsuhiko (Univ. Tokyo), Watanabe, Taka-aki (NIBB)