

The 2nd NIBB–Princeton Symposium "Imaging and Quantitative Biology"

Organizers: Michael S. Levine (Princeton Univ.), Danelle Devenport (Princeton Univ.), Kazuhiro Aoki (NIBB), Naoto Ueno (NIBB)

October 28 (Mon)–30 (Wed), 2019

The second NIBB-Princeton Joint Symposium, entitled 'Imaging and Quantitative Biology', was held on October 28-30th, 2019 at the Okazaki Conference Center. The National Institutes for Natural Sciences (NINS) and Princeton University have been conducting academic exchange and collaborative research in the life sciences based on an academic cooperation agreement that had been signed by these two parties in 2010.

This NIBB symposium was jointly organized not only with Princeton University, but also with the Division of Quantitative and Imaging Biology (QIB) at the International Research Collaboration Center (IRCC), NINS, the National Institute for Physiological Science (NIPS), the Institute for Molecular Science (IMS), and the Exploratory Research Center on Life and Living Systems (ExCELLS), and was supported by the Advanced Bioimaging Platform (ABiS).

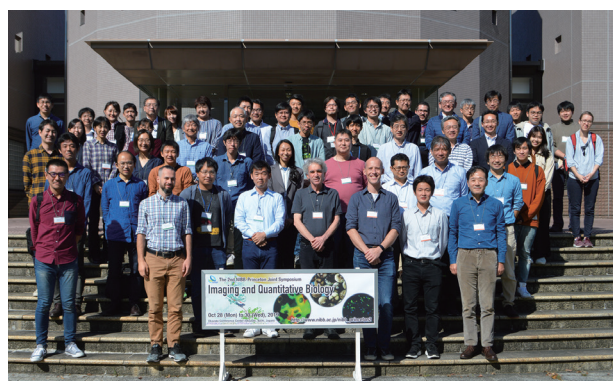
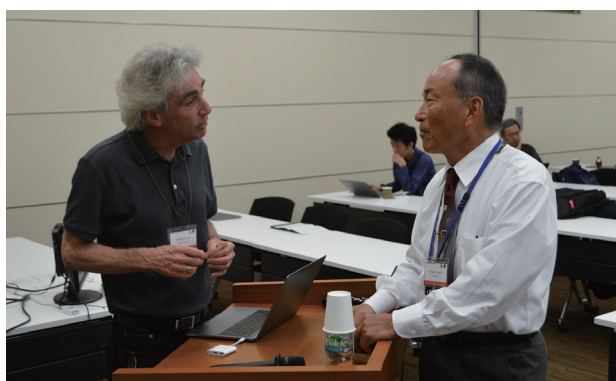
Although the scientific sessions covered a rather broad spectrum of biological phenomena such as molecular dynamics, cell biology, embryogenesis, symbiosis between organisms and viral infection, and information processing within the brain, the key concept 'Imaging and Quantitative Biology' was underlying all the presentations. The latest methodologies such as state of the art imaging technologies, optogenetics, single cell sequencing, mass spectrometry, liquid-liquid phase separation and machine learning presented

in the symposium were indeed a showcase of the recent technical advances in life sciences.

Eighty-five participants, who were researchers from the various institutes and research centers of NINS, as well as those from other universities enjoyed lively discussions during poster presentation sessions over the three days of this symposium. In particular, four professors from Princeton University gave insightful comments to the presenters and led the discussions.

In closing, we would like to note that the success of the symposium is something that proves the significant progress of the collaboration between NINS and Princeton University up until now. We would also like to express our gratitude to all participants for taking part in a variety of active discussions, and the IRCC-QIB, the Office of International Cooperation and the individuals from the organizer's laboratories for coordinating and cooperating with this symposium.

Kazuhiro Aoki, Naoto Ueno (On behalf of the organizers)



Speakers

Cristea, Ileana (Princeton Univ., USA), Levine, Michael S. (Princeton Univ., USA), Toettcher, Jared E. (Princeton Univ., USA), Yang, Haw (Princeton Univ., USA)

Aoki, Kazuhiro (NIBB/ExCELLS/IRCC-QIB, Japan), Chikazoe, Junichi (NIPS, Japan), Fujimori, Toshihiko (NIBB, Japan), Fukaya, Takashi (Univ. Tokyo, Japan), Go, Yasuhiro (NIPS/ExCELLS, Japan), Iino, Ryota (IMS/IRCC-QIB, Japan), Kinoshita, Noriyuki (NIBB, Japan), Kitadate, Yu (NIBB, Japan), Morita, Miyo T. (NIBB, Japan), Nemoto, Tomomi (ExCELLS/ NIPS, Japan), Ohsawa, Shizue (Nagoya Univ., Japan), Shigenobu, Shuji (NIBB, Japan), Shiina, Nobuyuki (NIBB/ExCELLS, Japan), Soyano, Takashi (NIBB, Japan), Takada, Shinji (NIBB/ExCELLS, Japan), Takahashi, Shunichi (NIBB, Japan), Uchihashi, Takayuki (ExCELLS/Nagoya Univ., Japan),