若手研究者インターナショナル・トレーニング・プログラム(ITP) バイオインフォマティクスとシステムズバイオロジーの国際連携教育研究プログラム ワークショップ参加レポート

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Title: IBSB2012 Report

Workshop report:

I participated in the 12th International Workshop on Bioinformatics and Systems Biology on July 22-26 at Boston University, Boston, U.S.A. This is an annual workshop originally developed in a joint research program between Boston University in Boston, Humboldt University in Berlin, and Kyoto University in Kyoto. The focus of the workshop is to provide students an opportunity to present research projects to an international community of bioinformatics research. The detailed agenda will be found in the web site: http://www.bu.edu/bioinformatics/news/international-workshop-on-bioinformatics-and-systems-biology/.

I gave a thirty-minute oral presentation and a poster presentation titled "Phylogenetic analysis of eicosanoid biosynthesis enzymes". In the presentations I reported my recent work on phylogenetic approach to search for cyclooxygenase ortholog candidates in vertebrate and invertebrate species with complete genomes and an accompanying protein family analysis of peroxidases with a focus on their published X-ray structures. A



few questions and suggestions were posed to my presentations by faculty members and students, which were very helpful as a guide to my future work.

The first three days were scheduled for student presentation sessions and a poster session. Some presentations focused on statistical analyses on high-throughput data such as the RNAseq data on human diseases. Others focused on the methodology on the development of bioinformatics tools. There were also presentations on protein 3D structure analyses and modeling based systems biology. I found many presentations very interesting in a way that they developed the projects to obtain biologically meaningful results. I also learned a lot about constructing oral presentations in a highly organized manner. The last day of the workshop was devoted to lectures from faculty members, in which brief introductions to their research institutes and projects were presented. Among others, talks from Professor Thomas Kepler from Boston University and Professor Ernst-Walter Knapp from Freie University were very informative to me.

Finally, the workshop provided tours to the city of Boston, which was a valuable experience for me to meet and communicate with other participants. From the five-day stay at the university town I found it a very safe and clean area, which provided us with a perfect environment to visit and stay for the workshop.

