

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 報告書

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Title: The 12th International Workshop on Bioinformatics and Systems Biology (IBSB2012)

Workshop report:

I have participated in the 12th International Workshop on Bioinformatics and Systems Biology (IBSB2012) held from 22nd to 25th of July 2012 at Life Science and Engineering Building, Boston University, USA, and faculty lab presentations on 26th. During the conference, the weather was almost fine, cooler and less humid than Kyoto although it sometimes rained, and we were able to stay comfortable. I have presented a poster entitled “Protein complex prediction via improved verification methods using constrained domain-domain matching” by Y. Zhao, M. Hayashida, J.C. Nacher, H. Nagamochi, and T. Akutsu from 14:30 on 23rd July. In this poster, we proposed an improved method for enhancing prediction accuracy of protein complexes. The method makes use of structural constraints of protein domains, that is, it can be assumed that one domain interacts with at most one other domain. The assumption can reduce false interactions between proteins in a protein complex. Our method predicts complexes by approximately maximizing the size of the



Venue (Life Science and Engineering Building)



Poster Session on 23rd July 2012

largest connected component. In the poster presentation, I heard that a new database for protein docking has been developed in the group of Prof. Walter Knapp. Many reliable domain-domain interactions progress my researches. I hope that it can lead to collaborative study in future. In addition, Kamada has presented our poster entitled “Prediction of protein residue-residue contacts using conditional random field based on residue coevolution” by M. Kamada, M. Hayashida, J. Song, and T. Akutsu. The poster session was conducted only one day. I think that we could do more sufficient discussion if more sessions are planned. Also in oral presentation, many interesting talks were given, and I obtained useful ideas for my own study. After all the sessions of 25th finished, we attended a free outdoor concert at Charles bank park together with other participants of IBSB under students’ guidance of Boston University. Many citizens enjoyed classic music. I experienced American customs and culture, and changed my thought for American people. Finally, I would like to thank for giving me this opportunity to attend the conference and to present my research.