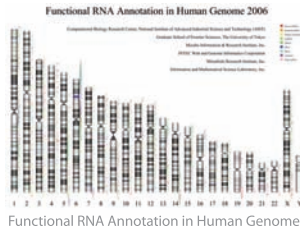


Current Projects at CBRC (FY2006)

NEDO Functional RNA Project



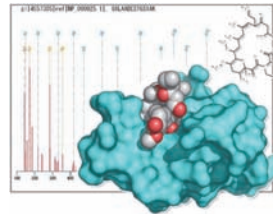
Functional RNA Annotation in Human Genome

[Members]

- Mathematical Model Team, CBRC
- Kiyoshi ASAI (Leader)
- Taishin KIN (Research Scientist)
- Hisanori KIRYU (AIST Research Staff)
- Michiko YAMANA (AIST Research Staff)

The Functional RNA Project was launched in 2005. We are in charge of the bioinformatics group enrolled for development of RNA-specific novel sequence analysis algorithms, comprehensive prediction of novel functional RNAs, and development of functional RNA database. Eighteen research members are actively committing the research activity. The team consists of multi-organizations including CBRC, the University of Tokyo, and three private research firm.

NEDO Chemical Biology Project

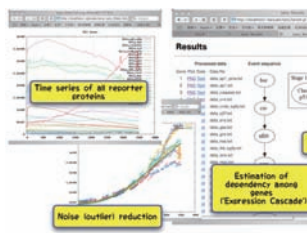


[Members]

- Molecular Modeling & Design Team, CBRC
- Takatsugu HIROKAWA (Leader)
- Nobuyuki UCHIKOGA (UBIC)
- High Performance Computing Team, CBRC
- Yutaka AKIYAMA (Leader)

The Chemical Biology Project aims to develop a consistent support base for projects that range from maximum utilization of full-length cDNA resources and technology platform for protein interaction analysis, and integration of excellent domestic technologies for improved accuracy, to exploration of compounds that regulate biological phenomena including diseases. CBRC contributes to the fields of mass spectrometry data analysis, and *in silico* screening technology.

NEDO Cell Array Project

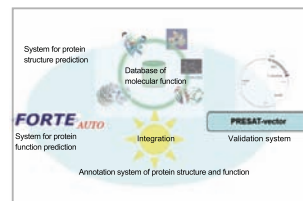


[Members]

- Biological Network Team, CBRC
- Katsuhisa HORIMOTO (Leader)
- Daisuke TOMINAGA (Research Scientist)
- Sachiyo ABURATANI (Research Scientist)
- Koji NAKAGAWA (AIST Research Staff)
- Fuyan SUN (Technical Staff)
- High Performance Computing Team, CBRC
- Yutaka AKIYAMA (Leader)

The Cell Array Technology continuously observes gene expression levels and phenotypes of living cells. The Project, entrusted by NEDO, conducts technological development of experiments and information processing aiming at drug discovery. A total of 10 research institutions, including The University of Tokyo, The Japanese Foundation for Cancer Research, Kyowa Hakko Kogyo Co., Ltd., and Kanebo Trinity Holdings, Ltd. participate in the Cell Array Project, with RICE and CBRC (AIST) playing a central role.

JST BIRD Development of a protein structure-function prediction method and application to human genome sequence



[Members]

- Sequence Analysis Team, CBRC
- Kentaro TOMI (Research Scientist)
- Protein Function Team, CBRC
- Tamotsu NOGUCHI (Leader)
- Nozomi NAGANO (Research Scientist)

We are engaged in research on protein structure-function prediction in collaboration with external research groups. CBRC is developing an automated protein structure prediction method and preparing an enzyme active-site database, for future application to human genome sequence analysis.

MEXT SCF Bioinformatics Training Course



[Head]

Yutaka AKIYAMA (Director, CBRC)

[Staff]

- Kiyonobu YOKOTA
- Yoshifumi OKADA
- Tomoko TERADA
- Hiroko SAKAI
- Kentaro MIZUTANI
- Yoshiko TAMANUKI

We offer Bioinformatics Introductory Courses (I and II), Pharmaco-informatics Training Course, and Leader Training Course to provide systematic as well as time-saving learning opportunities for busy working people. Full-time instructors in each of these courses cooperate in training together with many researchers from inside and outside of CBRC.

JST BIRD INOH Pathway Database



[Members]

- Biological Network Team, CBRC
- Kenichiro FUKUDA (Research Scientist)
- Satoko YAMAMOTO (JST)
- Noriko SAKAI (JST)

We are working on the establishment of an ontological framework on which to build a database of intracellular processes and other pathway information, data extraction from literature by manual curation, and we are working on an international pathway data exchange format as a core member of the BioPAX working group.

* NEDO - New Energy and Industrial Technology Development Organization

* JST - Japan Science and Technology Agency, BIRD - Institute for Bioinformatics Research and Development

* MEXT - Ministry of Education, Culture, Sports, Science and Technology, SCF - Science and Technology Promotion and Adjustment Fund