



Helping
Researchers Find
What They Need,
When They Need It

Finding Information Faster Speeds Time to Discovery

Project Name: CBRASS: Canadian Bioinformatics Resources as Semantic Services

Project Lead: University of British Columbia

CANARIE Contribution: \$927,000

Participants:

- Carleton University, Ottawa, ON
- University of New Brunswick, St John, NB

What is CBRASS?

The CBRASS project is developing a common framework for Canada's online biological and bioinformatics resources. CBRASS aims to simplify access to diverse biological data and sophisticated bioinformatic analysis services so researchers will find it easier to locate and use data and services. This, in turn, will accelerate data-intensive investigations.

CBRASS enables data and services from different sources to be seamlessly combined by exploiting new machine-understandable descriptions. These descriptions are crafted using formal ontologies, which capture the essence of biological knowledge, and are readily accessible to both machines and experts analyzing and conducting the research.

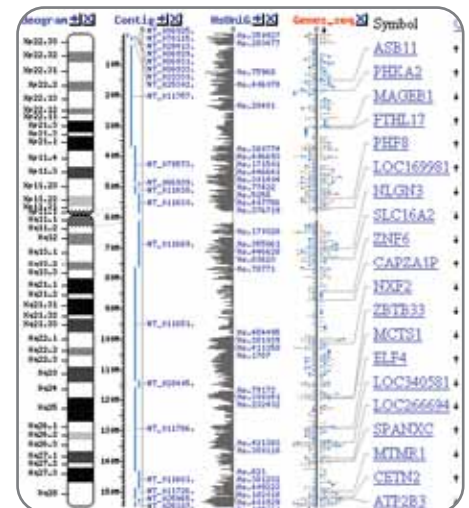
Using the CANARIE high-speed network, users can access service-oriented, flexible software interfaces and tools, making biological resources easier to discover, use and integrate.

Value to Research and to Canada:

- Efficient access to, and re-use of, data and tools for health scientists reduces costs and maximizes both legacy investments and new R&D expenditures
- Empowering bioinformatics service-providers nationwide with these emergent technologies will propel Canada to the forefront
- Novel software created is easily portable to other research domains, reducing future research costs

Did you know?

The SHARE web client allows you to ask questions about data that doesn't yet exist – it identifies and invokes the necessary analytical services to automatically generate the data to answer the question!



Map of human X chromosome. Assembly of the human genome is one of the greatest accomplishments of bioinformatics. Source: National Center for Biotechnology Information

Bioinformatics (n.) – the application of computer science and information technology to the field of biology