Argonne NATIONAL LABORATORY | Biosciences

Key Facts About the Institute for Genomics & Systems Biology

Mission

The Institute for Genomics & Systems Biology (IGSB) is a joint institute of the University of Chicago and Argonne whose mission is to accelerate the translation of basic discoveries in genome science into practical benefits for society.

IGSB is an engine for discovery that utilizes the latest approaches in genome analysis, high throughput screening, and biological computation.

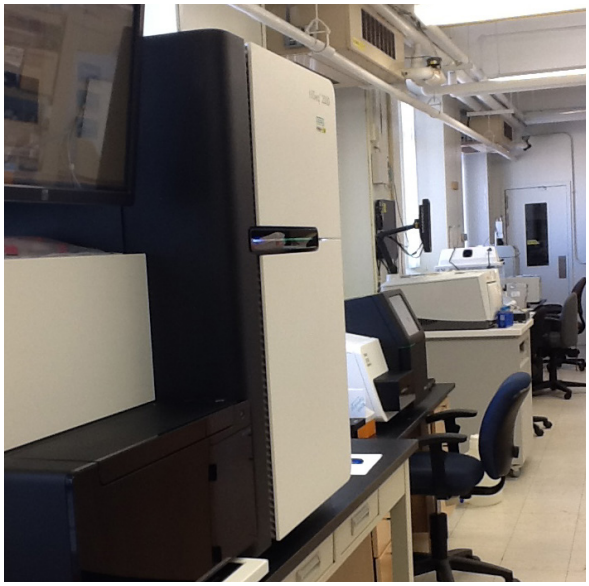
Research Thrusts at Argonne

IGSB unites world-leading researchers from several departments and divisions at the University of Chicago and Argonne. IGSB fellows at Argonne focus on environmental research.

- **Microbial ecology:** understanding the Earth's geochemical cycles, specifically, the microbial cycling of carbon, which has links to global warming.
- **Microbiology:** describing both the structure and function of microbial communities in subsurface and topsoil systems.
- **Metagenomics:** studying communities of microbial organisms directly in their natural environments, in order to improve strategies for monitoring the impact of pollutants on ecosystems and for cleaning up contaminated environments.

Basic Facts

Director: Kevin White, University of Chicago
Associate Director: Folker Meyer, Argonne
Users: 8 core faculty, 50 students and staff, and over 60 faculty fellows
Funding: DOE, NIH, NSF, and the Alfred P. Sloan Foundation
Web site: www.igsb.anl.gov



The IGSB-NGS Core Facility houses the latest Next-Generation Sequencing Technology, the Illumina HiSeq2000 and Illumina MiSeq.

User facilities

The following user facilities and resources are available to IGSB Fellows and their collaborators:

High-Throughput Genome Analysis Core: offers advanced high-throughput sequencing services.

Cellular Screening Center: offers a high-throughput facility for chemical and genetic cell screening.

MG-RAST: an open-source, cloud-based bioinformatics platform that contains a data repository and a data analysis pipeline for annotating metagenome samples.

Bionimbus: a cloud-based system for managing, analyzing, and sharing genomic data, and Sector/Sphere, a cloud-based system for data-intensive computing.

U.S. DEPARTMENT OF ENERGY
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