



Contractor-Grantee Workshop III

Washington, D.C.

February 6–9, 2005

Prepared for the
U.S. Department of Energy
Office of Science
Office of Biological and Environmental Research
Office of Advanced Scientific Computing Research
Germantown, MD 20874-1290

Prepared by
Genome Management Information System
Oak Ridge National Laboratory
Oak Ridge, TN 37830
Managed by UT-Battelle, LLC
For the U.S. Department of Energy
Under contract DE-AC05-00OR22725

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Welcome to Genomics:GTL Workshop III

Welcome to the third Genomics:GTL Contractor-Grantee workshop. GTL continues to grow—scientifically, in DOE relevance, and as a program that needs all your diverse scientific, technical, and intellectual efforts to make it a success. GTL is attracting broad and enthusiastic interest and support from scientists at universities, national laboratories, and industry; colleagues at other federal agencies; Department of Energy leadership; and Congress.

GTL's challenge to the scientific community is to further develop and use a broad array of innovative technologies and computational tools to systematically leverage the knowledge and capabilities brought to us by DNA sequencing projects. The goal is to seek a broad and predictive understanding of the functioning and control of complex systems in individual microbes and microbial communities. GTL's prominent position at the interface of the physical, computational, and biological sciences is both a strength and a challenge. Microbes remain GTL's principal biological focus. In the complex "simplicity" of microbes, we find capabilities needed by DOE and the nation for clean and secure energy, cleanup of environmental contamination, and sequestration of atmospheric carbon dioxide that contributes to global warming. An ongoing challenge for the entire GTL community is to demonstrate that the fundamental science conducted in each of your research projects brings us a step closer to biology-based solutions for these important national energy and environmental needs.

This year brings two important milestones for GTL. First is the development of a roadmap that will help guide and justify the GTL program to a broad audience of scientists, policymakers, and the public. In the coming weeks we will be calling on many of you to provide critical review of this important document. Second is an important step forward in developing GTL user facilities: we are beginning the process of engineering and designing the Facility for Production and Characterization of Proteins and Molecular Tags.

GTL workshops are high-energy events that provide an opportunity for all of us to discuss, listen, and learn about exciting new advances in science; identify research needs and opportunities; form research partnerships; and share the excitement of this program with the broader scientific community. We look forward to a stimulating and productive meeting and offer our sincere thanks to all the organizers and to you, the scientists, whose vision and efforts will help us all to realize the promise of this exciting venture.



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