

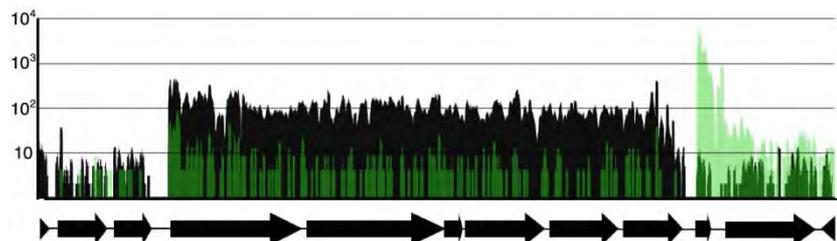
## Capability/Need

- Unbiased and quantitative profiling of gene expression pattern in prokaryotic and eucaryotic cells
- Uses next-generation sequencing technology (RNA-Seq) with barcoding for high-throughput
- Greatly enhances EMSL proteomics, metabolomics and systems biology capabilities



## Science/Users

- Enables “experimental annotation” of microbial genomes and systems biology
- Allows quantification of cell response to environmental change
- Primary users will be genomics science and systems biology communities



## EMSL Strategy Alignment; Specifics

- Science themes: Biological Interactions and Dynamics
- Cross-cutting challenges: Predict Biological Function; Linking Theory/Experiment
- EMSL capability area: Cell Isolation and Systems Analysis
- Anticipated availability: April 2010
- Technical POC: Bryan Linggi/Steven Wiley