

## GENOMICS CORE FACILITY

The Genomics Core Facility at the Center for Genetic Medicine provides a wide range of high quality services to the investigators at the Feinberg School of Medicine, the Robert H. Lurie Comprehensive Cancer Center (RHLCCC), Northwestern University and external researchers. Services include low, medium and high density SNP analysis; high and low density gene expression profiling, high through-put DNA extraction and DNA sequencing. In addition, the Genomics Core helps maintain a high level of knowledge amongst Northwestern University and Chicagoland area investigators by sponsoring educational talks and seminars to introduce and update new technologies.

Ensuring that the facility remains at the forefront of DNA sequencing technology, the Genomics Core recently unveiled two new instruments:

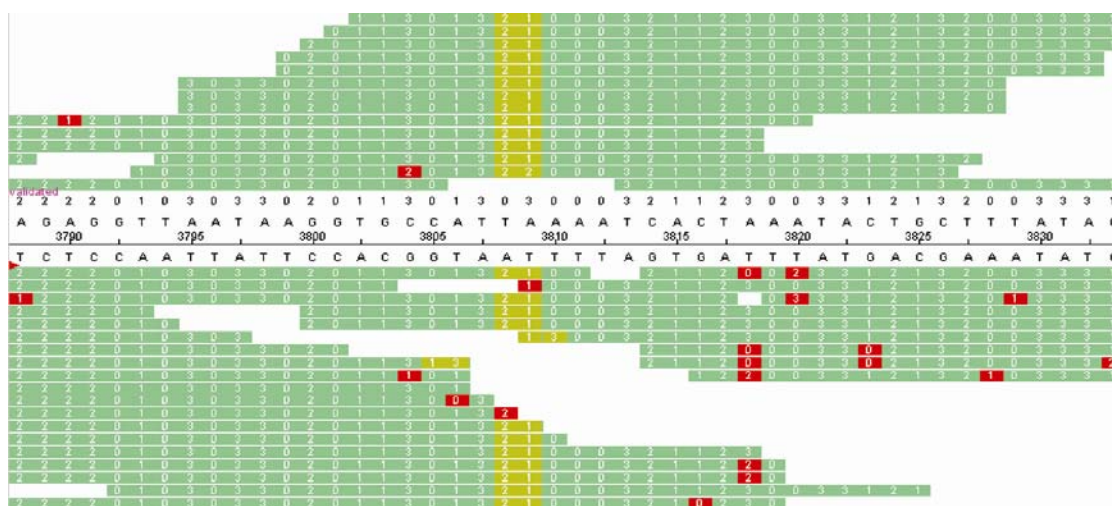
The new **SOLiD System, a next generation sequencer**, from Applied Biosystems was acquired through a generous donation from Northwestern trustee and Feinberg School benefactor, Ms. Ann Lurie.

The SOLiD System is a genetic analysis platform that enables massively parallel sequencing of clonally amplified DNA fragments linked to beads.

The sequencing methodology is based on sequential ligation with dye-labeled

oligonucleotides. The system is a "short reader," meaning

it can read between 25 and 35 bases at a time and sequence up to nine gigabases per run. The applications include Targeted Resequencing, Gene Expression, MicroRNA Discovery, Chromatin Immuno-precipitation (ChIP-Seq) and Whole Genome Sequencing. The Genomics Core will dedicate a technician to run and maintain the new sequencer to ensure the timeliness and quality of service. It also plans to hire a data manager and a bioinformaticist to offer high-level analysis. The system will be available for use by the end of this summer.



The facility has also acquired a **Biomek ArrayPlex NX automated workstation**, purchased with grant funds awarded by the vice president for research's Shared Facilities Program. The workstation will automate the setup sequencing reactions which will increase productivity.



Biomek ArrayPlex NX automated work-

The Genomics Core operates under the guidance of facility director, Nadereh Jafari, PhD, five research technicians and a program assistant. Visit the facility website at [www.medschool.northwestern.edu/cgm/genomics/](http://www.medschool.northwestern.edu/cgm/genomics/) for more information on services and upcoming seminars.