

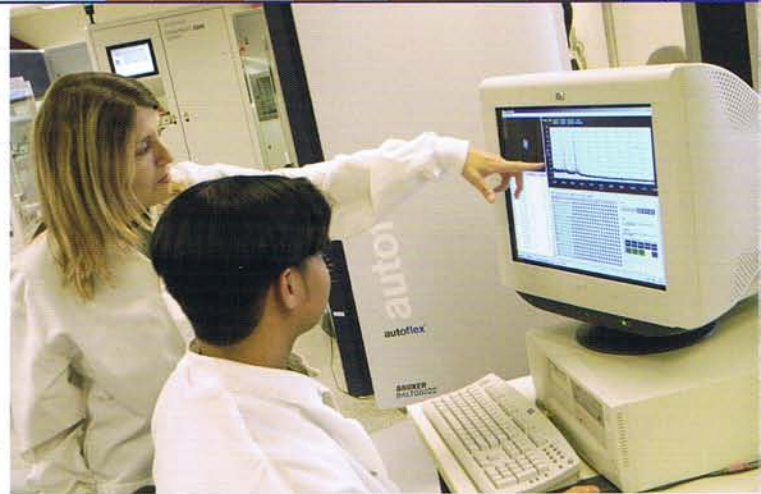
■ Genotyping Services

Choose the Leader in Fine Mapping

Sequenom's iPLEX™ biochemistry for multiplexed SNP genotyping is used by the most prestigious research institutions worldwide. Sequenom's genetic services team utilizes our recognized experience and excellence in genetic studies. The team's experience extends over a wide variety of applications: fine-mapping studies and candidate gene analysis in human genetics, livestock traceability, population stratification and seed enhancement studies are in our area of expertise.

With a throughput capacity of 1 million genotypes a day Sequenom's Genetic Services Laboratory (GSL) is designed to handle a vast array of different project types:

- "one-off" projects from a few thousand to millions of genotypes
- "recurring projects" utilizing a panel of SNPs with samples received on a regular basis
- "Custom Panel Development" projects that require building assays to meet a specified set of performance criteria.



The iPLEX™ assay used in the GSL is based on proven primer extension biochemistry in combination with matrix-assisted laser desorption / ionization time-of-flight (MALDI TOF) mass spectrometry.

This assay format provides superior yields for *in silico* assay design and conversion in combination with highly robust, accurate and reproducible call rates.

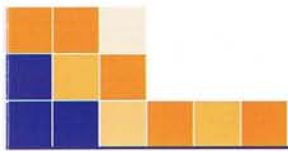
All assays are designed by automated high-throughput design software. This process guarantees a superior turnaround time even for complex studies.

The MassARRAY software designs assays towards standardized reaction conditions and does not require labeled or purified oligonucleotide primers.

■ Testimonial

"I am impressed by the data quality and turnaround time we experienced with Sequenom's SNP Genotyping Services."

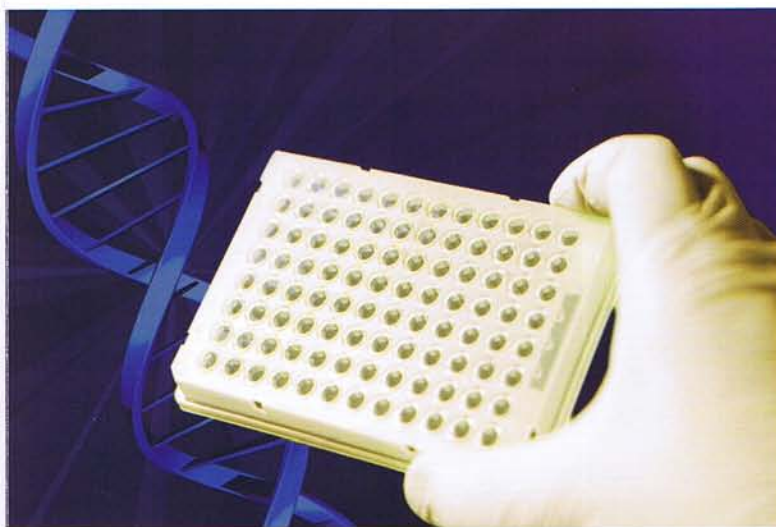
Mark Walker
Technical Manager for GeneMark
Livestock Improvement Corporation
140 Riverlea Road, Hamilton, New Zealand



■ Quantitative DNA Methylation Analysis Services

Explore New Dimensions

Sequenom's new proprietary EpiTYPER™ biochemistry allows to quantitatively analyze multiple CpG sites in amplicons of up to 600 bp. This method provides our customers with a cost effective solution to obtain high-quality data from methylation studies on any choice of target genes.



■ Testimonial

"Sequenom's Methylation Analysis service provided us with high-quality data that will advance our prostate cancer research, great technology, outstanding service!"

Albert Dobi, Ph.D.

Chief, Section for Gene Regulation and Bioinformatics

Center for Prostate Disease Research

Department of Surgery

Uniformed Services University

1530 East Jefferson Street

Rockville, Maryland 20852, USA

Our Genetic Services Laboratory (GSL) utilizes the EpiTYPER™ assay and software to provide a superior and convenient DNA methylation analysis service. In addition, our validated bisulfite treatment procedures, SOPs and QC methods guarantee premium results and consistent data quality.

With a throughput capacity of 61,000 analyzed CpG sites a day Sequenom's GSL is designed to handle a vast array of different project types:

- "one-off" projects from a few thousand to millions of CpG sites
- "recurring projects" utilizing a panel of genes with samples received on a regular basis
- "Custom Panel Development" projects that require building assays to meet a specified set of performance criteria.

The new MassARRAY EpiTYPER™ assay is based on proven bisulfite conversion biochemistry. The bisulfite treatment is followed by PCR and a proprietary base-specific cleavage process.

The resulting cleavage pattern depends on the presence of methylated cytosine in the original genomic DNA. The cleavage products are automatically and quantitatively analyzed by MALDI-TOF mass spectrometry.

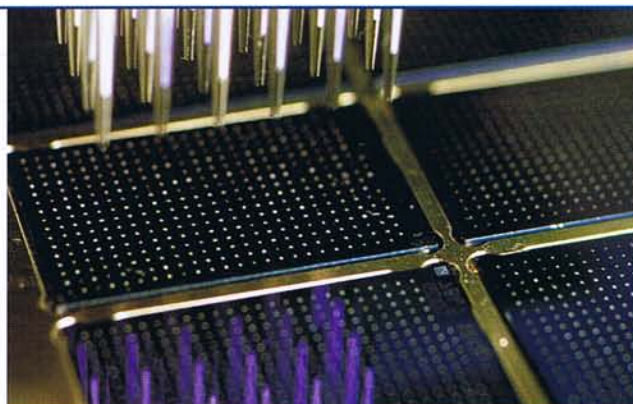
■ Gene Expression Analysis Services

Harness the Power of Multiplexing

Sequenom's MassARRAY QGE Technology offers a precise, robust and cost-effective method for accurate gene expression measurement. The ability to multiplex assays up to the 24-plex level makes this the ideal panel development and microarray follow up technology.

Our advanced services include: allele-specific gene expression and quantitative splice variant analysis. In addition, Sequenom offers a data normalization service that includes identification of the most stable reference genes in the respective samples of interest. This offering greatly improves the reliability of data comparison between individual samples.

The Gene Expression service is available for a wide variety of species and materials!



With a throughput capacity of 128,000 data points a day Sequenom's Genetic Services Laboratory (GSL) is designed to handle a vast array of different project types for gene expression analysis:

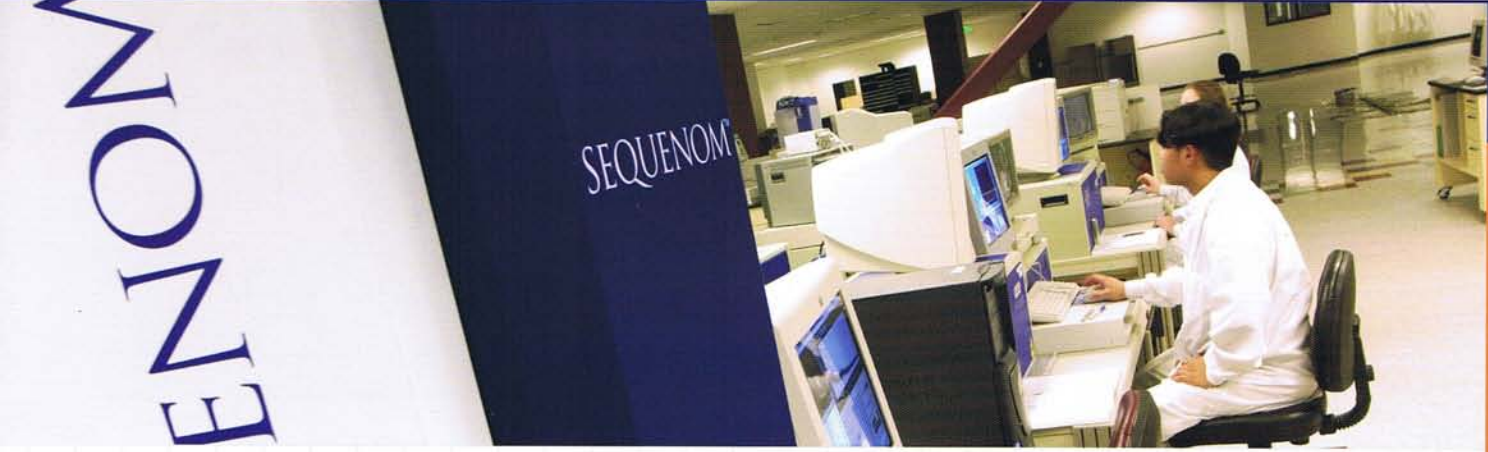
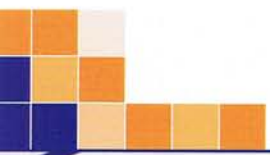
- "one-off" projects from a few thousand to millions of data points
- "recurring projects" utilizing a panel of genes with samples received on a regular basis
- "Custom Panel Development" projects that require building assays to meet a specified set of performance criteria.

The QGE iPLEX™ biochemistry utilizes the same primer extension protocols as employed for SNP genotyping. The quantity of specific transcripts is interrogated through the introduction of a synthetic "competitor" oligonucleotide, that serves as an internal standard. The competitor is specifically designed for each assay and has an identical sequence to the target except for an introduced one base difference. Due to this high level of sequence identity the competitor and cDNA target are amplified with the same efficiency and their ratio can be used to calculate absolute amounts of the target transcript.

■ Our Mission

"We are committed to provide the best data quality to our service customers. Our experience and state-of-the-art facility will ensure highest quality standards and fast turnaround time for all your studies."

Jeffrey M. Otto, Ph.D.
Director of Genetic Services
Sequenom, Inc.



■ Sequenom's Genetic Services Laboratory

Infrastructure:

Sequenom's state-of-the art, highly automated 20,000 square foot Genetic Services Laboratory (GSL) is dedicated to provide maximal customer flexibility. The facility consists of three separate laboratories for sample preparation, oligonucleotide management and PCR set up. The post-PCR facility operates 7 dedicated MassARRAY systems with a total capacity of over one million genotypes per day.

Flexibility:

Sequenom's dedicated GSL staff handles small and large projects with the greatest personal care and attention to detail while preserving lowest cost and fastest turnaround times.

Expertise:

Sequenom's GSL staff has over 50 years of combined experience in the field of molecular genetics and over 20 years of combined MassARRAY experience working for you.

Our scientists will aid in:

- Study Design
- Protocol Development
- Assay Design and optimization
- Data mining and analysis

