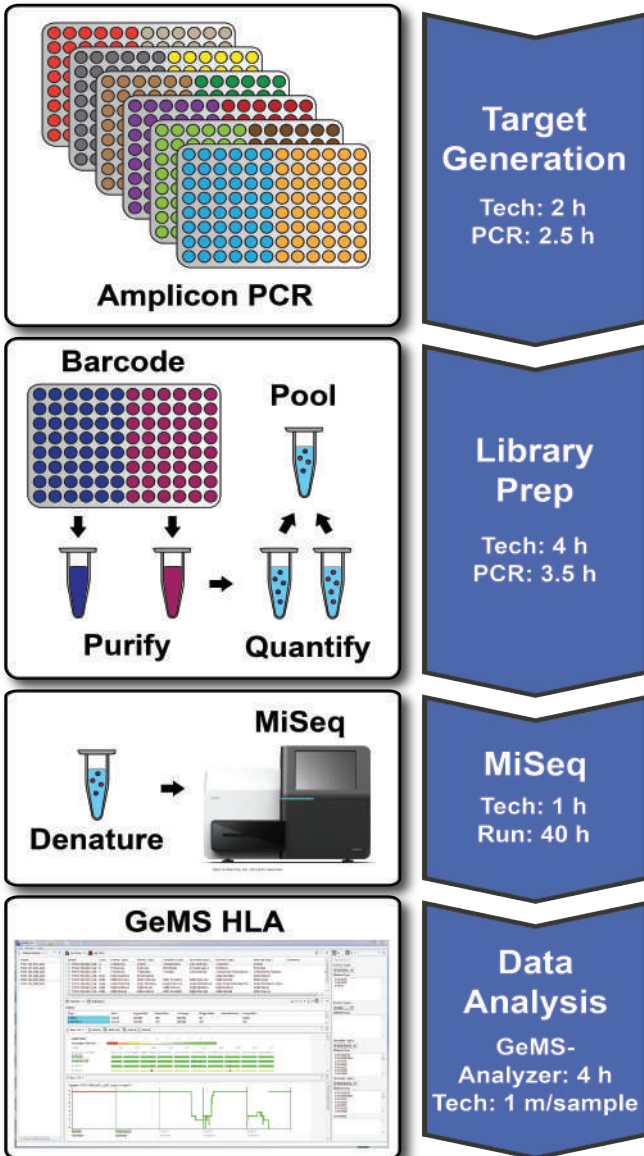


INTEGRATED GENOTYPING SYSTEM

**NEXT-GENERATION
SEQUENCING**

HLA KIR CHIMERISM



The Integrated Genotyping System (IGS) merges targeted PCR amplification and library preparation with the GeMS analysis and reporting software. This combination forms a simple and scalable laboratory workflow for high-resolution results.

Transitioning your laboratory to Next-Generation Sequencing (NGS) has never been easier.

- High-Throughput across multiple loci
- Phased genotypes in heterozygous specimens
- Improved genotype resolution
- Easy implementation of simple workflows
- Low labor and reagents costs

SCISCO GENETICS IGS includes:

- Reagent Kits:
 - HLA-Class I
 - HLA-Class II
 - KIR
 - Chimerism
- Protocols
- GeMS Analysis Software
- Training Workshops

Typing for MHCI and II completed in 3-4 days
 Total hands on technologist time is 8 hours
 Sample numbers from 48 to 384 for a single run
 Robot automation reduces tech time to 3 hours

IGS REAGENT KITS

All IGS kits involve similar workflow structures, and are designed to be used with the Illumina MiSeq. 48- and 96-sample kits are available.

All HLA and KIR can be sequenced in the same MiSeq run. As many as 384 samples with all loci can be combined on a single run.

HLA

HLAI v1.0: Exons 2-4

HLAI v2.0: Exons 1-7

HLA-A/B/C

HLAII v1.0: Exons 2-3

HLAII v2.0: Exons 1-4

DRB1/3/4/5, DQA1, DQB1, DPA1, DPB1

KIR

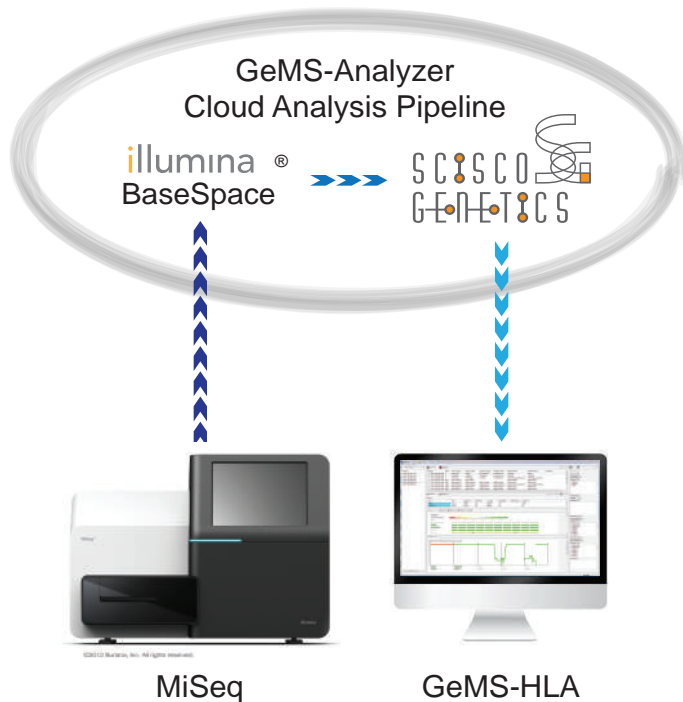
Haplotyping and Allele Typing

Chimerism

24 hour turnaround

GeMS SOFTWARE

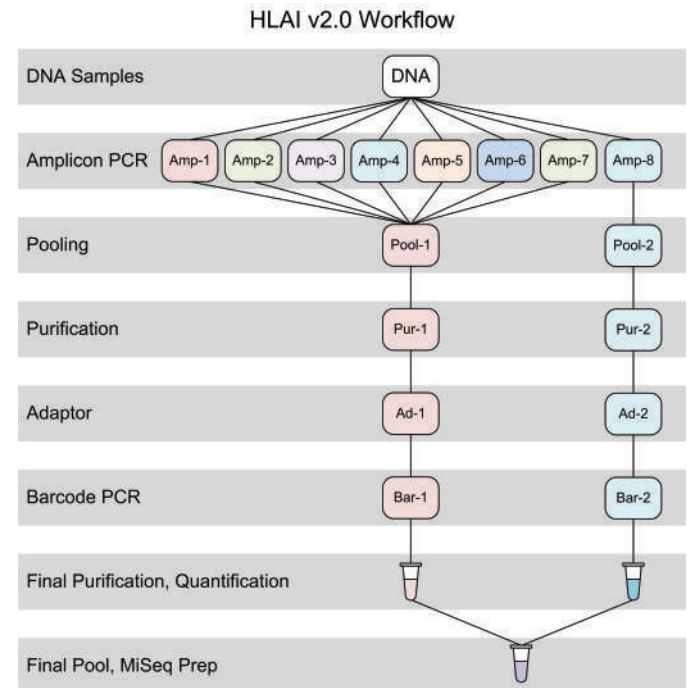
Sequencing data is managed via Illumina BaseSpace and typed using the Scisco GeMS-Analyzer App running in the cloud



Typing reports are reviewed and edited using the Scisco GeMS-HLA desktop application.

PROTOCOLS

Step-by-step procedure manuals guide the user through the laboratory bench work and GeMS data analysis.



The HLA, KIR, and chimerism workflows are technically very similar and can be executed in parallel or in series to allow any combination of class I, class II, and KIR to be combined on a single MiSeq run. The Chimerism workflow is designed to allow completion within a 7 hour MiSeq run to enable 24 hour total turnaround time.

TRAINING WORKSHOPS

Our training sessions will ensure that the Integrated Genotyping System is tailored to your specific needs, personnel, and facilities.

Sign up for a workshop now, and bring your samples for typing. At the end of a two day lab session, samples will be loaded on the MiSeq device. Afterwards, the data will be analyzed on the cloud and results can be downloaded directly to your computer for visualization and editing.

Workshops will run during the second week of every month starting in January of 2015. On site visits to your laboratory are also available. Send us an inquiry for specific dates available and book your NGS future now!