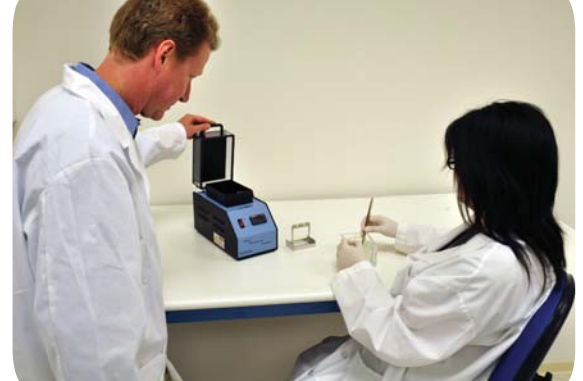


Mastering the aCGH Workflow

Comprehensive Laboratory Course for Performing Microarray-Based Cytogenetic Tests

Course Description

Participants perform proven bench methods for superior microarray test reproducibility over three days, under the guidance of microarray technology experts. Learn how to prepare high quality fluorescently labeled gDNA then set up, hybridize and wash microarrays ready for analysis. Microarrays and required reagents are provided. Participants may provide their own samples or use supplied gDNA. Training materials including a detailed Training Guide and reagent and equipment specifications for manual, partially automated and fully automated processing. At the conclusion of the course, each participant receives a Certificate of Completion and the microarray data from each of the samples analyzed.



Learn techniques for improving microarray methods.

New to aCGH?

The aCGH Workflow training program can minimize the time, effort and frustration of learning how to set up and perform microarray-based tests. Microarrays are expensive so learning the right techniques from the start to obtain high quality results will help you avoid the high start up costs normally experienced with this test method.

Whether you plan to analyze just a few clinical samples per week or to scale up to large numbers of samples, participants learn how to perform both manual and automated procedures using SciGene equipment. The step-by-step training guide provided will also be an valuable reference and training tool for other lab personnel.

Already Using aCGH?

The aCGH training program can help streamline the workflow in laboratories already running aCGH tests for improved test reliability and lower costs per test. Participants will be shown how to perform new, faster methods as well as a variety of tips and subtle improvements to existing techniques that will enhance microarray results.

During the three-day course, participants will analyze control and (optionally) clinical DNA samples that they provide. At the conclusion of the course, data files for each sample are provided for further analysis. In addition to learning improvements to manual methods, participants will also learn how to automate their laboratory workflow using SciGene equipment.



Perform manual and automated procedures under the direction of microarray technology experts.

Course Contents

Participants learn how to perform:

- Quality assessment and fragmentation of gDNA
- Fluorescent labeling/purification of DNA targets
- Preparation and loading of hybridization samples
- Post-hybridization slide washing and drying

Materials Provided

- Detailed Training Guide
- Reagents and buffers
- Microarrays
- Labware and equipment
- Array data DVD
- Certificate of Completion



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Day One Activities

— Morning Session —

- Lecture on the aCGH test method
- Analyze and fragment control and participant-provided genomic DNA

— Afternoon Session —

- Fluorescently label DNA with random priming and Klenow fragment
- Magnetic bead purification of labeled DNA
- Preparation of hybridization cocktail with purified, labeled, target DNA
- Loading and sealing arrays for hybridization

Day Two Activities

— Morning Session —

- Analyze and fragment control and participant-provided genomic DNA
- Fluorescently label DNA with random priming and Klenow fragment

— Afternoon Session —

- Magnetic bead purification of labeled DNAs
- Preparation of hybridization cocktail with purified, labeled target DNA
- Loading and sealing arrays for hybridization

Day Three Activities

— Morning Session —

- Post-hybridization processing of arrays
- Array scanning
- Array feature extraction and analysis

— End of Course —



Training is performed in Sunnyvale, California, USA.

The Microarray Training Center

The Microarray Training Center is located at SciGene's headquarters in the City of Sunnyvale in Northern California between San Jose and San Francisco. The facility includes a 2,500 square foot laboratory and adjoining meeting room and office space. The center is fully equipped for training small groups in the practice of using microarrays including all necessary sample incubation, processing and scanning equipment.

Program Director: Michael Herrler, Ph.D.



The director of the Training Center is Dr. Michael Herrler, SciGene Director of Platform Development. Dr. Herrler has 16 years experience in research and product development with small sample genomic analysis methods and products including microarray based methods. Dr. Herrler formerly held Director positions at Applied Imaging and NuGEN Technologies, Inc.

Ordering Information

Catalog No.	Description
2000-90-1	Mastering the aCGH Workflow 3 Day Course. <i>Microarrays and reagents are supplied.</i>

Contact SciGene Customer Service for DNA sample requirements at custserv@scigene.com.