## 蛋白芯片制作与应用(5)一生物芯片大公司简介

http://www.affymetrix.com/

http://www.gsilumonics.com/

http://imaging.brocku.ca/FrameSet1.html

http://www.probes.com/

http://arrayit.com/biochip4/

http://www.gatconsortium.org/

http://www.spotfire.com/of\_2\_0.htm

http://www.genomesystems.com/

http://www.biorobotics.com/

http://www.cartesiantech.com/

http://www.ias.com/

http://www.biodot.com/index.htm

http://www.genemachines.com/index.html

http://www.biodiscovery.com/

http://www.xeno.com/

http://www.cellrobotics.com/

http://www.ultranet.com/~radius/

http://www.incyte.com/about/management.html

http://www.packardinstrument.com/prod\_serv/biochiparrayer.htm

http://www.sigenetics.com/

http://www.genetix.co.uk/Instruments.htm

http://www.esit.com/

Array or Slide Companies

http://www.superarray.com/

http://www.ultranet.com/~radius/

http://www.resgen.com/

http://www.scimatrix.com/

http://www.mergen-ltd.com/

http://dnamicroarray.com/

http://arrayit.com/

http://www.clontech.com/ (soon)

http://www.operon.com/ss2b1/home.html

http://www.phase1tox.com/

http://www.nenlifesci.com/

http://www.genomesystems.com/

http://www.displaysystems.com/

http://www.s-and-s.com/index.htm

http://www.biochip.com/tech\_uk.html

http://www.cmt.corning.com/

http://www.surmodics.com/

http://www.gracebio.com/

简介

ACLARA BioSciences, Inc., (used to be called Soane Biosciences) Hayward, California (Plastic chips and microfluidic systems based on "Lab-On-A-Chip" microfluidics US Patent 5,750,015: "Method and device for moving molecules by the application of a plurality of electrical fields") Wins NIST ATP Award in "Tools for DNA Diagnostics" for Project: Multiplexed Sample Preparation Microsystem for DNA Diagnostics

Affymetrix, Inc., Santa Clara, California (The technology leader; manufactures the widely used GeneChip®arrays, including HIV, p450, p53, Rat Toxicology U34 arrays, etc.)

Alexion Pharmaceuticals Inc., New Haven, Connecticut

AlphaGene, Inc., Woburn, Massachusetts (full length cDNA FLEX? and MicroFLEX library construction; High Throughput Gene Expression Profiling; High Throughput DNA Sequencing; Bioinformatics)

Applied Precision, Inc., ssaquah, Washington. ArrayWoRx is a wide field light source based microarray scanner, combines limitless wavelength possibilities with automation

and image processing software.

ArrayIt, Making DNA chip.

Axon Instruments, Inc., Foster City, California (GenePix 4000 Integrated Microarray Scanner and Analysis Software, simultaneously scans microarray slides at two wavelengths using a dual laser scanning system, displays images from two wavelengths and a ratio image as they are acquired in real time; US\$50,000)

AxyS Pharmaceuticals, La Jolla, California: Wins NIST ATP Award in "Tools for DNA Diagnostics" Project: Liquid Array Technology Development

**BioChip Technologies** 

bioDevice Partners, Cohasset, MA. Provides consulting services to the micorarraying community in the area of optics and instrumentation

BioDiscovery, Inc., Los Angeles, California (ImaGene?, special image processing and data extraction software)

Biomedical Photometrics, Inc., (MACROscope? for reading genetic microarrays, in collaboration with Canadian Genetic Microarray Consortium)

bioMerieux, in vitro diagnostics

BioRobotics Ltd., Comberton, Cambridge, UK (MicroGrid, for arraying oligonucleotides or cDNA clones on glass slides and plastic chips)

Brax, Cambridge, UK

Cadus Pharmaceutical Corp., Tarrytown, New York (yeast living chip)

Caliper Technologies Corp., Palo Alto, California: LabChips? based on microfluidics. Awarded \$2 million contract by NIST to develop high-throughput DNA diagnostic platform. Project: Reference Laboratory LabChip? DNA Diagnostics System

Cartesian Technologies, Inc., Irvine, CA. PixSys PA Series: for Automated liquid handling system for creating high-density arrays for genomics research. Scan Array 3000: A Fluorescent Imaging System for microarray biochips.

Celera, Rockville, Maryland

Cellomics, Inc., Pittsburgh, Pennsylvania (ArrayScan?, cell-based "High Content Screening" (HCS) for drug discovery)

Cepheid Sunnyvale, California (microfluidics)

Ciphergen Biosystems, Palo Alto, California. ProteinChip? Arrays for the investigation of proteins on the femtomole scale directly from their "native" environments. Based on Surface-Enhanced Laser Desorption/Ionization (SELDI?).

Clinical Micro Sensors, Inc., Pasadena, California: DNA microchip-based medical diagnostics; detection of directly detect DNA via electron transfer. Wins NIST ATP Award in "Tools for DNA Diagnostics" Project: DNA Diagnostics for the Point of Care Using Electronic Nucleic Acid Detection

## Clontech

Corning Science Products Division, Acton, MA provides the (Corning Microarray Technology) CMT-GAPS amino silane coated slides and CMT-Hybridization chamber. Corvas International, Inc., (2D gel, proteomics)

CuraGen Corp., New Haven, Connecticut. GeneCalling? and Quantitative Expression Analysis (QEA?), CuraMode, CuraTox

diaDexus, LLC, Santa Clara, California. joint venture between SmithKline Beecham Corp. and Incyte Pharmaceuticals, Inc.. Specialized in using microarray technology for molecular diagnostics

DNAmicroarray.com. offers complete "made to order" high density DNA microarray synthesis and analysiss services. Prices, availability, and turnaround time seem impressive.

## Gel biochip

Gene Logic, Inc., Columbia, Maryland (Flow-thru ChipTM: has hundreds of thousands of discrete microscopic channels that pass completely through it. Probe molecules are attached to the inner surface of these channels, and target molecules flow through the channels, coming into close proximity to the probes. This proximity facilitates hybridization. READS?, Restriction Enzyme Analysis of Differentially-expressed Sequences, for capturing and analyzing the overall gene expression profile of a given cell or tissue type to identify drug targets)

GeneData AG (Basel, Switzerland), analysis of genomics and proteomics data: GeneData WorkBench, GeneData Expressionist.

Genemachines Genomic Instrumentation Services, Inc., Menlo Park, California

(OmniGrid, glass slides or nylon membranes, similar to Dr. Pat Brown's)

General Scanning Inc., Watertown, Massachusetts (laser scanning and micropositioning, manufactures MicroArray Biochip Scanning System: ScanArrayTM). Now called GSI Lumonics

GeneScreen, Inc., The Genetics Profiling Company

GeneTrace Systems

Genetic Analysis Technology Consortium (GATC)

Genetic MicroSystems Inc., Woburn, Massachusetts (instrumentation for DNA microarray-based analysis)

Genetix Ltd., Christchurch, Dorset, UK (Q-Bot, Q-Pix)

Genome Systems Inc., St. Louis, MO, a wholly owned subsidiary of Incyte Pharmaceuticals, Inc., GDA: Gene Discovery Array

Genometrix Inc., The Woodlands, Texas (Bioscanner?, GeneView®, Universal Arrays?, Risk-Tox)

Genomic Solutions, Ann Arbor, Michigan (Flexys? modular robotic system, GeneTAC? and Genomic Integrator? array analysis products automates the imaging and analysis of gene microarrays.)

Genosys Biotechnologies, Inc., The Woodlands, Texas (Panorama?E. coli Gene Arrays, 4,290 genes per array)

GENSET, Paris, France (specialized in pharmacogenomics)

Genzyme Molecular Oncology (SAGE®: Serial Analysis of Gene Expression)

HP GeneArray Scanner (used by Affymetrix and others)

Hyseq Inc., Sunnyvale, California (Sequencing By Hybridization. HyX platform and Gene Discovery, HyGnostics, and HyChip? modules)

Illumina, Inc., San Diego, California. utilizes fiber optics, microfabrication, and advanced information processing to create arrays where 250,000 discrete sensors fit on a probe the diameter of the head of a pin.

I.M.A.G.E. Consortium: "Sharing resources to achieve a common goal - the discovery of all genes"

Imaging Research, Inc., St. Catharines, Ontario, Canada. The company writes

software, develops detection technologies, and integrates systems for image analysis. Its PC-based ArrayVisionTMsystem has been widely used for rapid and automated analysis of genome arrays.

Incyte Pharmaceuticals, Inc., Palo Alto, California (GEM Microarrays, GeneJetTM array, LifeSeq® Database with estimated 100,000 genes, and LifeArray Microarray Software)

Intelligent Bio-Instruments, Cambridge, Massachusetts

JMAR's Precision Systems, Inc., Chatsworth, CA. Designer and manufacturer of UV exposure and mask aligner systems specifically designed for bio-chip manufacturers. Also produces custom micropositioning systems for micro-spotting equipment and high resolution dimensional metrology and defect inspection systems for quality assurance of bio-chips and DNA micro-arrays.

Labman AutomationLtd., North Yorkshire, TS9 5JY, UK (HDMS: Labman High-Density Microarray Spotter)

Lifecodes Corp., Stamford, Connecticut (Lifecodes MicroArray System: LMAS)

Micronics, Inc., Redmond, Washington. microfluidics based systems for application to clinical laboratory diagnostics: Microcytometer?, H-Filter?, T-Sensor?, and O.R.C.A.  $\mu$ Fluidics.

Molecular Applications Group, Palo Alto, CA. Stingray? is integrated software and database products for gene expression, gene function, and gene sequence analysis from microarray data. It is integrated with and dependent upon the use of Affymetrix's GeneChip® system and its Expression Data Mining Tool (EDMT) software.

Molecular Dynamics, Inc., Sunnyvale, California (Storm® and FluorImager®

Molecular Tool, Inc., Baltimore, Maryland. Genetic Bit Analysis, GBA®, Genomatic?. Acquired by Orchid Biocomputer on September 14, 1998.

Nanogen, San Diego, California (Electronic Addressing, Concentration, and Hybridization)

NEN Life Science Products, Boston, MA (MICROMAX? Human cDNA Microarray System I for differential gene expression analysis)

Oncormed Inc., (acquired by Gene Logic in July, 1998) characterizes genes to

establish their clinical relevancy and provides molecular profiling of patients for pharmacogenomic and therapeutic purposes

Orchid Biocomputer, Inc., Princeton, New Jersey (a Sarnoff company) microfluidic chips; applying microfabrication processes in glass, silicon, and other materials to create three dimensional structures. Contained within these devices are small capillary channels less than a millimeter wide. Wins NIST ATP Award in "Tools for DNA Diagnostics" Project: Polymerase Signaling Assay for DNA Variation Detection on Universal Processor Arrays It also has a Web site on single nucleotide polymorphisms (SNPs).

Packard Instrument Company, Meriden, Connecticut. (BioChip Arrayer)

Partek, Inc., St. Peters, Missouri. Provider of pattern recognition and data visualization software for science and engineering. Its Partek Pro 2000 system has been used by companies to analyze microarray gene expression data.

PE Applied Biosystems, Wins NIST ATP Award in "Tools for DNA Diagnostics" for project: Integrated, Micro-Sample Preparation System for Genetic Analysis

PharmaSeq, Inc., Monmouth Junction (near Princeton), NJ. Developer of microtransponder-based technology for DNA diagnostic assays. Wins NIST ATP Award in "Tools for DNA Diagnostics" for project: Multiplex DNA Diagnostic Assay Based on Microtransponders

Phase-1 Molecular Toxicology, Inc., Santa Fe, New Mexico. Molecular and high throughput toxicology using gene chips (Licensed from Xenometrix)

Proteome, Inc.

Protogene Laboratories, Palo Alto, California (Surface tension array on glass substrate; "Printing" reagents using drop-on-demand technology)

Radius Biosciences, Medfield, Massachusetts

Research Genetics, Huntsville, Alabama (GeneFilter)

Rosetta Inpharmatics, Kirkland, Washington.

Scanalytics, Inc., Fairfax, VA. Its MicroArray Suite enables researchers to acquire, visualize, process, and analyze gene expression microarray data. Developed by scientists at the NIH's National Human Genome Research Institute.

Sequana Therapeutics (merged with Arris Pharmaceutical to become AxyS Pharmaceuticals), La Jolla, California

Sequenom, Hamburg, Germany, and San Diego, California (DNA MassArray, BiomassPROBE, Biomass SIZE, BiomassSEQUENCE, BiomassSCAN, BiomassINDEX, and SpectroChip)

Silicon Genetics, Redwood City, California (GeneSpring workbench for analyzing experiments based upon genomic expression experiments)

Spotfire, Inc., Cambridge, Massachusetts. Offers advanced data visualization capabilities including the ability to perform gene cluster analysis and metabolic pathway mapping. The Spotfire Array Explorer is ideal for any researcher performing microarray analysis.

Synomics Ltd., Cambridge, UK (bioinformatics)

Synteni, Inc., Fremont, California (acquired by Incyte Pharmaceuticals, Inc. in January 1998) (UniGEM? Gene Expression Microarray)

TeleChem International, Sunnyvale, California (offers whole system parts: ChipMaker, SmartChips, ArrayIt, Hybridization Cassette, ScanArray 3000, ImaGene Quantification Software)

Virtek Vision International Inc. (Ontario, Canada) ChipReader? is a high-sensitivity laser confocal system for rapid imaging of the DNA microarrays.

Vysis, Inc., Downers Grove, Illinois (CGH-Comparative Genomic Hybridization)

Xanthon, Research Triangle Park, North Carolina. develops microplate based mini-arrays for high throughput screening of compounds for their effects on gene expression.

Xenometrix, Inc., Boulder, CO (Gene Profile Assay and bioinformatics for gene induction profile analysis; a demo is available)