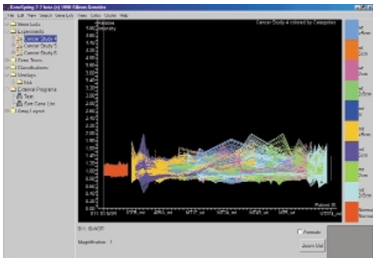
Autumn's picks

September's harvest includes analytical software, micromanipulators and expandable microtitre plates.

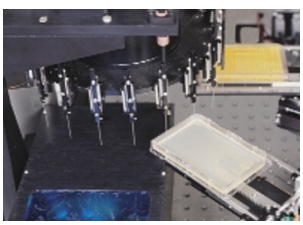
Wondering what to do with all that expression data? The GeneSpring™ 2.1 software package from **Silicon Genetics** enables visualization and analysis of genomic expression experiments. GeneSpring™ uses data from experiments that generate quantitative expression values, such as microarrays and SAGE. Data can be supplied as relational databases, flat files or spreadsheets. GeneSpring™ 2.1 can organize data by parameters such as physical position, gene function or pathway, and expression patterns can be clustered and annotated. The software can interface with web links for automatic data mining, and analyses can be saved in HTML to facilitate web posting. GeneSpring™ 2.1 is compatible with Windows, Mac and Unix operating systems, and the manufacturer will customize the program (if necessary) to fit your database needs.



Differential gene expression in a 1,200 patient cancer study visualized by GeneSpring™ 2.1 from Silicon Genetics.

Another means by which to analyse microarray data is provided by MicroArray Suite from **Scanalytics, Inc**. MicroArray Suite provides image analysis and fully normalized quantitation in an integrated software environment. It also features automated image capture and analysis, a gridwork overlay for multiple array comparisons, gene databasing capabilities and 'structural data extraction' to locate specific data. The software is compatible with a variety of array systems, laser scanners and printers, and is fully integrated with Scanalytics's existing 'IPLab' image acquisition and analysis package. MicroArray Suite is available for the Mac operating system.

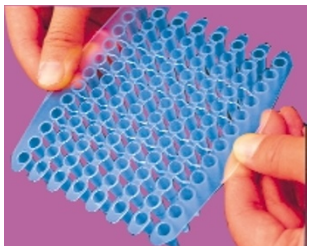
PREMIER Biosoft International updates their primer design software line with Primer Premier Pro Version 4.1. The latest release optimizes design of primers for long PCR (up to 50 kb), along with the existing capabilities of designing PCR and sequencing primers, and hybridization probes. Other features include design of nested/multiplex and degenerate primers, checks for hairpin, primer-dimer and false-priming and primers for site-directed mutagenesis. Restriction enzyme analysis is also supported, with multiple output formats, and an order form addressed to the vendor of choice can be automatically created. Primer Premier Pro Version 4.1 is available for the Mac or Windows operating systems, and, if you'd like to have it this immediately, you can download it from the company website.



Rotisserie-style bacterial colonies with the Gel-2-Well™ from GeneMachines.

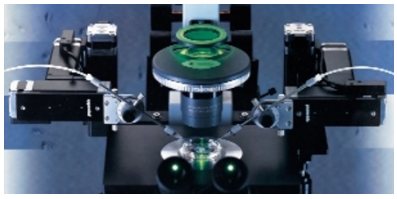
To capture digital images from gels, **Ultra-Lum, Inc**. introduces the DigiPix™ Digital Camera, which the manufacturer claims is the most economical camera for gel documentation and image analysis presently available. The camera features 1.2 million pixel resolution, 24-bit colour and monochrome imaging and a variety of lenses (fixed-focus, manual and motorized zoom). A PCI or PCMCIA card interface captures images and relays them to a computer, and a TWAIN driver enables image acquisition directly to popular analysis programs. The DigiPix™ Digital Camera is compatible with many models of transilluminator, and the system is Mac- and Windows-compatible.

Got the urge to do some high-throughput picking? Gel-2-Well™ from **GeneMachines** can apparently pick up to 2,000 plaques or bacterial colonies in an hour without user intervention. The 'picker' features a rotating turret of needles, which are washed and sterilized, dipped into target colonies/plaques, and then plunged into growth medium. The input system can handle up to 100 square petri dishes of plaques or colonies simultaneously; an onboard camera and several modes of lighting allow consistent identification of targets, which can be selected for roundness, proximity and intensity. Output is on 84 separate microtitre plates, and the system comes with a graphical interface and integrated computer for controlling the picking process.



Embi Tec's Morph expands 96-well horizons.

Not all 96-well plates are created equally spaced. **Embi Tec** subscribes to this concept with the Morph™ expandable plate. The Morph™ plate is in a standard 96-well format, compatible with most thermal cyclers, but it can be expanded by pulling on the sides to facilitate applications where the 96-well spacing differs, such as loading automated sequencers. The manufacturer claims that the system can reduce the loading time of a 96-lane sequencer to 10 minutes and that it reduces the repetitive motion needed to load the gel.



Precise micromanipulation with Eppendorf's Transferman™ NK.

The Transferman™ NK, from **Eppendorf**, offers another innovation in micromanipulation technology. Using 'New Kinetics', which offer increased control of proportionality between joystick and capillary movement, the system is designed to combine precise mechanics and sensitive electronics. Coarse and fine modes of manipulation are available. Applications include intracytoplasmic sperm injection, embryonic stem cell transfer, microinjection and microdissection. The Transferman NK is adaptable to commonly used inverted microscopes.

Notes compiled by Michael Ronemus

For more information, call:

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