

## Lab automation



### Rail connection

The SampleRail, from Bruker BioSpin, enables fully automated sample preparation and delivery for NMR. An interfaced liquid handling robot prepares the samples in NMR tubes and

transports them on a rail system to the magnet. The liquid handler is synchronized with the NMR experiments for just-in-time sample preparation, ideal for unstable samples requiring analysis immediately after preparation. The SampleRail is compatible with all Bruker BioSpin Avance NMR spectrometers, and is controlled by Bruker's SampleTrack laboratory information management system software.

<http://www.bruker-biospin.com/>

### Automated 2-D electrophoresis

NextGen Sciences' a2DEoptimizer allows researchers to create customized gradient gel profiles; the gels are then cast automatically by the system, giving the same result every time that particular profile is recalled. The bench-top system provides complete PC control and monitoring of 2D processes, runs high-speed IEF at up to 10,000 V and casts multiple gels simultaneously. It is supplied with convenient

ready-to-use reagents and is compatible with a wide range of commercially available 2D equipment and NextGen Sciences' own suite, including the autocast12 large-format multi-gel caster, a flatbed IEF system, and an SDS PAGE running tank.

<http://www.nextgensciences.com/>

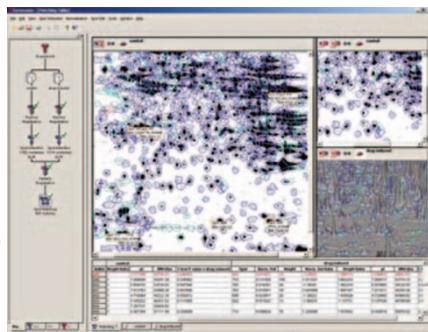


### Plate processing

Matrix Technologies' WellMate Stacker allows microplates to be automatically transferred from storage chimneys to the microplate dispenser head using a simple linear mechanism. The stacker chimneys are removable and can accommodate up to 25 or 50 microplates. The WellMate Stacker unit works with new instruments or can be retrofitted onto existing instruments.

<http://www.matrixtechcorp.com/>

## Genomics & proteomics



sequence references current for in-house bio-sequence investigation. The network broadcasts sequence content from repositories including NCBI, EMBL and DDBJ (DNA Data Bank of Japan), and more than 9.6 million patented sequences. The information is cross-referenced and indexed before being broadcast directly to customer servers, where it can be combined with in-house and third party data sources.

<http://www.gene-it.com/>

### Workflow management

LS\*LIMS software, from Applied Biosystems, integrates, automates and manages laboratory data and workflows in genomics and proteomics laboratories by reducing errors and quickly pinpointing problems and data bottlenecks. Users can create, edit and track their projects using hierarchical levels of project folders, while pre-defined and reusable lists of activities, protocols and workflows help to quickly build experimental methods on screen. Other useful features include customized reports that detail plate genealogies, sequencing runs, chains of custody, sample locations and laboratory efficiency. Configurable security options help labs meet data security standards and assist with FDA 21 CFR Part 11 requirements.

<http://www.appliedbiosystems.com/>

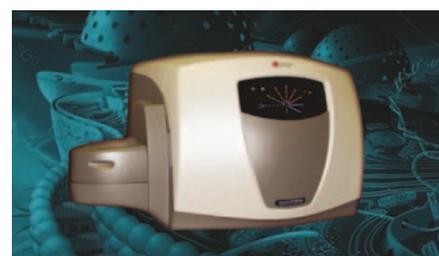
### Time-saving software

From Syngene, Dymension software allows scientists to increase their proteomics research productivity by accurately analyzing 2D gels in seconds. In addition, Dymension has a spot-finding algorithm for superb spot detection, resulting in minimal post editing, and a completely automatic gel alignment process. The entire imaging process, through to results and report generation, takes just a few minutes.

<http://www.syngene.com/>

### Broadcasting genomes

GenomeCast is a new 'genomic broadcast network' meant to address the problem of keeping the vastly growing biological and patent



### Flow cytometry control

Beckman Coulter's new 21 CFR Part 11 software for the Cytomics FC 500 MPL flow cytometer automates tube and microplate-based assays for increased throughput in a secure and validated environment. A multi-platform loader enables cellular and bead-based analysis of samples in tubes or a variety of 24- and 96-well plates. The 21 CFR Part 11 module offers password-enforced login and inactivity timeouts, complete audit trails, data archival/retrieval and electronic signatures.

<http://www.beckmancoulter.com/>