## LABEL-FREE BIOSENSORS SYSTEM

The DRX 2400 system is a new tool for the measurement of molecular interactions and for the biophysical characterization of proteins. It is based on Dynamic Biosensors' proprietary switchSENSE technology and is the first and only dynamic biosensor system, as it uses actuated DNA layers to actively move the analyte on the surface of the biochip. Even minimal changes in this movement can be detected and used to determine binding affinity and kinetics and allows researchers to analyze a multitude of additional parameters such as molecular size, aggregation, conformational changes, and much more. The DNA nanolevers are electrically actuated at high frequency on microelectrodes, while their orientation is monitored by time-resolved single-photon counting. The binding of analyte molecules slows the switching dynamics in a characteristic way. Hence, the switchSENSE system offers an unprecedented wealth of information at superior sensitivity, all in one label-free measurement.

**Dynamic Biosensors GmbH**
For info: +49-(0)-89-89-74-544-0 | www.dynamic-biosensors.com

## MICROCARRIER CELL CULTURE

A new method of using microcarriers with the ambr micro bioreactor enables scientists to produce uniform microcarrier samples and perform automated media exchange to rapidly optimize parameters for culturing adherent cell lines on microcarriers, thus shortening timelines for successfully scaling up manufacturing of vaccines and cell therapies. Scientists at TAP have utilized the ambr workstation to develop an automated method for providing highly consistent dispensing of microcarriers to multiple 10–15 mL ambr microbioreactors. This means scientists can then rapidly test up to 24 cell-specific culture parameters in parallel including stirring, media formulation, or feed strategies to determine the optimum conditions for cell attachment, growth rate, and vaccine titre, for example. The new method, which has been developed using Vero adherent cells attached to Cytodex 1 microcarriers, allows a 20% media exchange to be performed at any time of the day or night on 24 ambr vessels in approximately four hours.

**TAP Biosystems**
For info: +44-(0)-1763-227200 | www.tapbiosystems.com

## SAMPLE STORAGE SYSTEMS

The new, next generation automated systems are designed for sample and biological storage and include standardized control software that offers a best-in-class user experience. The sample storage platform's flexibility comes from its modular architecture and control software. Each system has six bays that can be populated with the industry's widest range of modules for picking, imaging, and input/output functions. Additional sample banks can be added to the initial system via an internal bridge for future expansion. The control software offers simplified operation and installation. This versatility makes the platform easy to configure and operate, plus highly scalable to meet changing customer requirements. Built-in Dynamic Storage Optimization technology allocates storage space whenever samples are loaded, eliminating the need to predefine the mix of sample containers. High-density trays increase tube storage up to 65% in the same footprint versus 96-tube racks. A high throughput configuration can process over 100,000 tube picks per day.

**Brooks Automation**
For info: 978-262-2400 | www.brooks.com

## VIAL/TUBE HANDLERS

BioMicroLab is introducing a new labeling module for Tube and Vial Handling Instruments. Integrated with the XL100, XL20, or XL9, the new XL LabelPro offers tube and vial labeling automation alongside current modules: barcode decoding, weighing, decapping screw cap vials, recapping screw cap vials, and liquid handling. Integrated labeling offers laboratories even more applications for increasing vial handling throughput. The instrument applies labels to tubes and vials while processing print on demand with unique ID, date, and data; prints 1-D and 2-D barcodes; prints human readable text; labels up to 180 vials per hour; has a 3,000 label capacity; and offers 300 and 600 dpi print modes for crisp text and barcodes. The automated system offers project-based or LIMS-driven sample labeling, integrates with other robotics, has a small footprint (10" x 14"), and is easy to use. It is compatible with common vials and freezer or cryo type labels.

**BioMicroLab**
For info: 925-689-1200 | www.biomicrolab.com

## DNA FRAGMENT SELECTION

The new Microlab NIMBUS Select workstation with Ranger Technology workstation provides a faster and more economical automated solution to agarose gel selection of DNA fragments, generating high-quality material for downstream use in next generation sequencing, cloning, and gene synthesis applications. Ranger Technology targets DNA and isolates fractions with high sensitivity and accuracy; recovery yields typically exceed 80% of the intrinsic content in the targeted range. Agarose gel size selection is a key component in sample preparation and quality control used throughout the life sciences. By automating pipetting steps, the system eliminates manual gel preparation, which is considered one of the most labor-intensive and error-prone steps. In an average two-hour run, the workstation can accurately process up to 96 samples and then place the fragments in destination labware. The NIMBUS Select Workstation with Ranger Technology offers numerous performance and quality control benefits over manual processing and other automated platforms.

**Coastal Genomics**
For info: 604-620-1332 | www.coastalgenomics.com

Electronically submit your new product description or product literature information! Go to **www.sciencemag.org/products/newproducts.dtl** for more information. Newly offered instrumentation, apparatus, and laboratory materials of interest to researchers in all disciplines in academic, industrial, and governmental organizations are featured in this space. Emphasis is given to purpose, chief characteristics, and availability of products and materials. Endorsement by *Science* or AAAS of any products or materials mentioned is not implied. Additional information may be obtained from the manufacturer or supplier.

Science

## New Products

*Science* **343** (6174), 1029.
DOI: 10.1126/science.343.6174.1029-a