# Trends and Technology: Fall 2004

## MARY JANE GORE

### ONLINE

Greatlabdeals.com is a site of potential interest to laboratories that are seeking discounted equipment. I have not ordered from this site, nor can I vouch for it, but it appears to be a customerfriendly site, with many opportunities for smaller, private laboratories or hospital laboratories on tight budgets. BestLabDeals is an e-commerce site at which clinical laboratory scientists, researchers, educators, safety and industrial professionals, and others can purchase laboratory equipment and supplies at low prices, "typically 50 to 70% less than retail", according to the site. "Inventory is made up of brand-name overstocked, gently used, or cosmetically challenged merchandise" from leading industry manufacturers, they note. My search of the ten available clinical analyzers showed this to be true-names like Kodak, Nova Biomedical, and Dade appeared. The product descriptions don't say (or I didn't see easily) whether the items are new and marked down or previously

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The Trends and Technology section seeks to publish product and technology information (including black-and-white glossy photographs), news items (such as FDA approvals), and information about laboratory resources of all kinds. The intent of this section is to provide a cutting-edge, one-stop shop tailored to the current practical needs and concerns of clinical laboratory practitioners. Let us hear from you with suggestions on how to improve this section. Direct inquiries and information to Mary Jane Gore, CLS Trends and Technology Editor, c/o ASCLS, 6701 Democracy Blvd., Suite 300, Bethesda, MD 20814, clstt@aol.com. Please send all materials clearly marked NEW PRODUCTS.

used. Items are categorized on a leftside frame alphabetically, e.g., analyzers, clinical. Typically available are instruments, equipment, supplies, workstations, and chemicals used by research laboratories; diagnostic instruments, test materials, and related products for clinical laboratories; monitoring apparatus, protective clothing, and other materials for controlled environments and occupational health and safety applications; and teaching aids for science education. Online purchasing is available with a shopping cart mechanism. The site lists its bricksand-mortar location as a 32,000square-foot facility in Raleigh, NC. The company welcomes appointments: phone number is (919) 661-8030.

## NEW PRODUCTS

To enhance general competence and user skills for Mettler Toledo products, the company has introduced Insight! 2004, an educational program for laboratory scientists. The broad range of application seminars and courses is designed equally for users of both the company's and other companies' instrumentation. The seminars are held in convenient locations across North America. For more information, contact Tom Butta at (800) 638-8537, x 7168.

The new Mettler Toledo XP precision balance delivers QM effectiveness and the higher resolution performance needed by laboratory environments. Built in applications allow the balance to control calibration, testing, and optimization, while the extremely quick weighing cycle increases laboratory productivity. The color touch-screen's

configurable display allows customization for individual users, while optional hands free sensors allow users to work according to application demands. When using the Mettler Toledo SmartSens sensors, sample, batch, and up to two other identification numbers can be stored. All displayed information can be easily printed out utilizing an optional printer or wireless technology. Accuracy of the XP Balance can be checked at any time using the Reprocheck feature. Contact Sheila St. Jean at (614) 438-4936.

ESA Inc., a leader in bio-analytical instrumentation, has successfully utilized its flagship electrochemical (EC) systems in conjunction with a Mass Spectrometer (MS) to greatly expand the number and types of molecules for analysis. The EC systems (Coulochem", CoulArray", or the new DiscovArray', easily integrated into virtually any Mass Spectrometer or LCMS system) can be used as a powerful tool to oxidize/ionize many different types of compounds. For more information, contact John Christensen, ESA Inc, (978) 250-7175 or email info@esainc.com; visit www.esainc.com.

The new, full-color, 864-page VWR Production Supplies for Controlled Environments Catalog offers over 13,300 products for a wide range of industries and applications – from research laboratories to production facilities. This selection of production chemicals and supplies is one of the most extensive available, representing more than 228 leading manufacturers and showcasing over 8,300 new products. The catalog features a complete selection of apparel, packaging, chemicals, gloves, housekeeping products, tape and labels, media, safety products, sterility solutions, swabs, tubing, wipers, hand tools, static control products, and much more. Contact Kendro Laboratory Products at (828) 658-2856 or visit www.kendro.com.

Ortho-Clinical Diagnostics, a Johnson & Johnson company, is launching its VITROS 350 Chemistry System. This system introduces several new features that enhance laboratory productivity while reducing labor requirements. The VITROS 350 System will feature a new flat panel, touch sensitive monitor with adjustable positions for increased operator ergonomics and ease of use. Additional software updates are expected to provide improved throughput and greater levels of productivity. The VITROS 350 System software will support the VITROS Chemistry Products dHDL Slides. Contact Mary Richardson at (267) 679-4220.

Dade Behring has announced that it has established a partnership with Tecan, a leading participant in the healthcare supply industry, to co-market Tecan's Genesis FE 500 pre-analytical workstation. The partnership will enable Dade Behring customers to automate essential steps in the pre-analytical work area for samples entering the laboratory. Contact Melissa Ziriakus at (847) 236-7038.

Carstens Inc, a leading provider of medical charting systems, now has available an optional wire storage basket to further increase the point-of-care efficiency of its WALKaroo III mobile PC cart. Carstens WALKaroo III mobile PC cart is expressly designed to help healthcare facilities more efficiently and effectively implement point-of-care computerized patient charting and secure expensive electronic charting equipment. To guard against theft and tampering, yet allow convenient access for authorized maintenance, the PC notebook is secured under WALKaroo III's large work surface by a high-security tubular locking system. After the notebook has been locked in place, a full-sized, adjustable keyboard tray allows for easy, userfriendly documentation entry. The gray, epoxy-coated wire basket is easily attached to the base column of WALKaroo III and provides a convenient way for keeping ringbinder chartholders, equipment, and other supplies easily accessible at the pointof-care. Visit www.carstens.com.

A study determined that use of the Dade Behring Stratus<sup>®</sup> CS Acute Care<sup>TM</sup> Diagnostic System for cardiac troponin I testing in the coronary care and cardiac short stay units, versus testing done in the central laboratory, demonstrated significant cost savings when the instrument was used in those settings, with a mean 25% reduction among all charge variables. A poster detailing the product was presented at the 2004 American Association for Clinical Chemistry meeting in July. Contact Melissa Ziriakus at (847) 236-7038.

Leica Microsystems has introduced a new level of sectioning precision, the Leica RM2245 semi-automated rotary microtome. This microtome embodies the latest technological innovations in microtomy for the modern highthroughput histology laboratory. Contact Molly Lundberg at (847) 405-0123 or visit www.leica-microsystems.com.



Leica RM2245 rotary microtome

## FDA NEWS

Roche Diagnostics received clearance from the U.S. Food and Drug Administration (FDA) for the Elecsys® Troponin T STAT test as an aid in the differential diagnosis of acute coronary syndrome, for risk stratification in patients with acute coronary syndrome, and for cardiac risk in patients with chronic renal failure. The test may also be useful for the selection of more intensive therapy and intervention in patients with elevated levels of cardiac Troponin T. The Elecsys Troponin T test measures the level of Troponin T, a cardiac-specific protein, in a patient's blood. Troponin T is released into the blood when heart cells die, and its presence can help a physician diagnose heart attack. Contact Lori LeRoy at (317) 521-7159.

In late July, Dade Behring Holdings received FDA clearance to sell its NTproBNP (N-terminal pro brain natriuretic peptide) assay in the U.S. NTproBNP is a key cardiac marker, which will be used on the company's Dimension® instruments as an aid in the diagnosis of individuals suspected of having congestive heart failure. Contact Pattie Overstreet-Miller at (847) 267-5426.

Bayer HealthCare LLC Diagnostics notes that its BNP test has received FDA clearance for two additional claims – prediction of survival in patients after

(continued on inside back cover)

#### Teaching strategies

Using Cooperative Learning in Clinical Laboratory Science Education. 12. RR

### Text selection

A Student-tested Process for Textbook Selection. 79. AB

#### Threadworm infection

Threadworm Infection: What Does it Take to 'Sew Up' a Diagnosis. 139. AB

## Thrombin inhibitors

Direct Thrombin Inhibitors. 118. FO Thrombocytopenia

Acute Thrombocytopenia following Administration of Lovenox and Aggrastat. 138. AB

#### Topography

Topography as a Contextual Variable in Infectious Disease Transmission. 95. RS

#### TRALI

Transfusion-related Acute Lung Injury (TRALI). 133. CP

## (Trends and Technology continued)

myocardial infarction and assessment of heart failure severity in patients diagnosed with congestive heart failure. The test is available for use on the ADVIA Centaur and ACS:180 Immunoassay Systems. Contact Linda Langendonk at (914) 366-1816.

#### CUTTING EDGE

Genstruct Inc, a knowledge-driven discovery company, presented findings from one of its independent discovery programs at IBC Life Sciences' 9th Annual Drug Discovery Technology World Congress held August 8-13 in Boston. Dexter Pratt, project leader for Genstruct's Oncology Program, outlined the program's findings describing both probable molecular causes and mechanisms involved in androgendependent prostate carcinoma. To define the molecular causes of prostate carcinoma, Genstruct has utilized its Molecular Epistemics<sup>TM</sup> discovery platform to build and interrogate an Oncology Knowledge Assembly<sup>TM</sup> model

#### Transfusion Virus testing Implementing Automation in the Transfu-Rapid Detection of West Nile Virus in Birds sion Service. 138. AB Using the VecTest® WNV Antigen Assay. Transfusion-related Acute Lung Injury 218. RS (TRALI). 133. CP Web education Faculty Members Acceptance of Web-based Troponin The Role of Cardiac Troponin in the Recent Education. 88. RR Redefinition of Acute Myocardial Infarction. West Nile virus 50. FO Modes of Transmission for West Nile Virus. Tularemia 56. LE Francisella tularensis: Possible Agent in Rapid Detection of West Nile Virus in Birds Bioterrorism. 36. FO Using the VecTest® WNV Antigen Assay. 218. RS Urinalysis Preparing a Digital Video Examination of Yersinia pestis Urinary Sediments. 4. CP Yersinia pestis: Still a Plague in the 21st Cen-Urine preservative tury. 25. FO Young Scholar

The Use of Chlorhexidine/*n*-Propyl Gallate as a Urine Preservative. 149. RR

#### TRENDS AND TECHNOLOGY

using computer-aided causal reasoning. The model includes the knowledge of cell cycle, cell signaling, vesicle trafficking, metabolism, and gene regulation. It is the largest and most complete computable model of prostate carcinoma ever assembled. Contact Karen Higgins at (610) 831-5723 or khiggins@aandecomm.com.

With more than \$20 billion distributed to states and localities to help them upgrade their security efforts, and another \$1 billion earmarked by the interagency Technical Support Working Group as seed funding for technology projects around the country, the homeland security effort has fostered a new wave of technological innovations. Many of these new technologies were the subject of discussion and on display at The McGraw-Hill Companies' Homeland Security Summit & Exposition in Washington DC. From biodetectors and biometrics to wearable computers and "what-if" scenario

software, nearly 100 companies displayed their products and services. Information is available at PERLINK www.mcgraw-hill.com or contact Mary Skafidas at (212) 512-2826.

Young Scholar Program - Professional Vis-

ibility. 79. AB

During the opening ceremony at the International Analytica Trade Fair in Munich, Germany, the German Society for Biochemistry and Molecular Biology awarded the "Molecular Bioanalytics" prize for 2004. This year, the prize went to American Dr Stephen PA Fodor, British Professor Sir Edwin Southern, and Russian Professor Andrei Mirzabekov (posthumously) for their fundamental contributions to the development of microarray technology (DNA chip). Individual DNA segments are affixed to a glass surface, thereby functioning as so-called probes. Each probe detects a specific gene sequence. The sequences bind to the probe by hybridization. Gene chips are a premier example of miniaturization and automation in bioanalytics and medicine.