

# What's New

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## Cardiac Module

Picker's Cardiac Module is a clinical accessory for the Dyna Camera 4, Special Purpose Camera, or Dyna Mo. It has been designed to perform specific diagnostic real time routines for nuclear cardiology including; left ventricular ejection fraction (LVEF); left ventricular ejection



time; left ventricular gated time-activity curve; and multi-gated ejection cycle images to demonstrate heart wall motion. Heart wall motion is easily visualized on  $8 \times 10$  film showing up to 48 gated images integrated over the R-to-R interval.

The Nuclear Cardiac Module provides results within one minute. The operator can obtain instant on-line, 30-sec sequential ejection fraction, indicated on an LED display, with corroborative hard copy strip chart recordings.—*Picker Corp., 12 Clintonville, Rd., Northford, CT 06472.*

## Video Processor

The Model 200-D Graphics and Imaging Video Processor is self-contained on a printed circuit board that fits into any standard Data General NOVA or ECLIPSE series computer

and generates scanned, refresh, graphics, and imaging displays up to  $512 \times 512$  pixels in monochrome or  $256 \times 256$  pixels in 16 level gray scale or color. A feature of the Model 200-D is its "Writable Control Store," enabling all the image processing and data formatting routines to be modified under program control from the host computer. This allows instantaneous reallocation of refresh memory between the size of display and the levels of intensity displayed.

Applications anticipated for the Model 200-D include CT scanners and emission tomography.—*Lexidata Corp., 215 Middlesex Tpke., Burlington, MA 01803.*

## Particle Sizing Scope

The PSS-10 is a  $10\times$  monocular microscope for measuring particles. A hemacytometer grid in the eyepiece allows particles to be sized on a standard glass slide. It is suggested for use in quality control where particle size is essential.—*General Radioisotope Products, 3120 Crow Canyon Rd., San Ramon, CA 94583.*

## Real-Time Scanner

The ADR Ultrasound Real-Time Scanner has been updated by the addition of two features. New, completely electronic calipers make it possible to measure and record images as they are being viewed on the scanner screen. A second new feature, a high-frequency transducer, permits additional diagnostic applications by providing greater resolu-

tion for imaging small structures such as thyroid and peripheral vasculature.—*ADR Ultrasound, 2224 S. Priest Drive, Tempe, AZ 85282.*

## SEM X-Ray Data Computer

Semiquantitative data can be obtained with the new NIM module introduced by Ortec Inc. Occupying three standard NIM-bin spaces, the new Model 755 Data Processor provides semiquantitative or, in some instances, quantitative analysis capability. The Model 755 operates in any of three analytical modes: counts per



second, which yields net integral intensity of selected energy peaks; ratio, which provides the ratio of net integral intensities of selected peaks to a reference peak; and concentration, which calculates the percentage of each selected element in the sample, using the net integral intensities and linear working curve data (slope and intercept).—*Ortec Inc., 203 Midland Rd., Oak Ridge, TN 37830.*

## Lab Computer System

The new TP-50 Lab Computer System provides a full range of capabilities in pulse height analysis, instrument control, and general computation. Based on the LSI-11 micro-computer, the TP-50 offers such features as flicker-free display, push-button control panel, an alphanumeric keyboard and a numeric keypad, a minifloppy disk unit for storage of data and programs, and an optional 40-column impact printer. The manufacturer has coupled the TP-50 with a multi-user software operating system, which allows several users to acquire data and perform general purpose programming functions simultaneously.—*Tennecomp Systems, Inc., 785 Oak Ridge Tpke., Oak Ridge, TN 37830.*

## Patient Transfer Mattress

The "TransMat" Patient Transfer Mattress enables medical personnel to lift and slide patients on and off gurneys, stretchers, and examination tables faster and with less physical effort by the patient and the technologist. It consists of a radiolucent leatherette mat that is placed on a gurney, stretcher, or bed before the patient gets on. From then on, the mat travels with the patient to and from the examination table. The patient never has to leave the mat, thereby eliminating the rolling, pulling, and pushing. The 26 in. × 72 in. mat is compatible with all stretchers, beds, and tables.—*Nuclear Associates Inc., 100 Voice Rd., Carle Place, NY 11514.*

## Transportable CT

EMI Medical Inc. is offering a complete neuro-scanning system that can be moved from one location to another. Essentially a compact hospital scanning system on wheels, this new unit will allow neuro-diagnostic CT services to be made more readily available to a larger segment of the

population by allowing several smaller hospitals to share a computerized x-ray machine.

The van is equipped with an EMI CT1010 head scanner and a separate control room for the operator.



The shared service concept is expected to increase accessibility and equality of health care, restrain increases in health care costs, and prevent unnecessary duplication of diagnostic and treatment facilities.—*EMI Medical Inc., Northbrook, IL.*

## Echoflow

Diagnostic Electronics Corp. introduces the Echoflow™, a Doppler imaging system that produces a color scan of arterial blood flow. A primary application is to the imaging of the bifurcation of the carotid artery and, thereby, to early diagnosis of surgically correctable stenotic lesions.

Utilizing a position-sensing probe and logic circuitry, a picture of the carotid arteries is built up with each heart beat. Contrasting colors indicate increased flow rate through stenosed sections and indications are available on the display to guide the operator in optimum probe orientation. Scanning is continued until a satisfactory image is obtained.

Complete alphanumeric keyboard and a dual display with attached camera provide a patient record consisting of color-coded images of the qualitative measurement of blood velocity through both the left and right carotid arteries along with patient ID data on a single picture.—*Diagnostic Electronics Corp., Box 580, Lexington, MA 02173.*

## What's New in Radioimmunoassay

### Pasteur Pipet Support Rack

Isolab introduces an adjustable rack for positioning disposable Pasteur pipets vertically above receiving vessels. The rack permits use of Pasteur pipets as miniature chromatographic columns after they have been prefilled with a suitable separation reagent.

Each Pasteur pipet rack holds up to 20 standard (15 cm), long-tipped Pasteur pipets (two rows of ten) with tip suspended above appropriate receivers. Bottom support is continuously adjustable and can be set to correct height for selected receivers. Column tip height can be varied from 35 to 100 mm above lab bench surface.

No special rack is needed for the receivers if scintillation vials, Erlenmeyer flasks, volumetric flasks, or other flat-bottom vessels are used. If the user wishes to collect eluates in small test tubes or in 12-ml centrifuge tubes, matching racks for these receivers are also available from Isolab.—*Isolab Inc., Drawer 4350, Akron, OH 44321.*

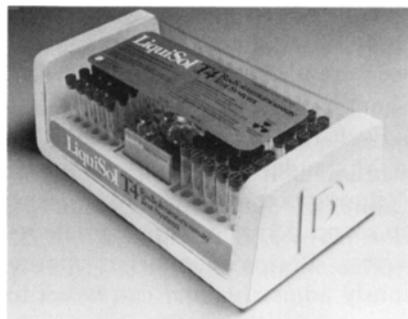
### RIA T<sub>4</sub> Neonatal

Meloy Laboratories announces a neonatal T<sub>4</sub> by RIA—Immunospot™ T<sub>4</sub>—that is specific for the quantitation of thyroxine in filter paper whole blood spots.

According to the manufacturer, the assay is capable of measuring T<sub>4</sub> in 1.3 μl of serum from a dried blood spot. Features include whole blood standards as well as whole blood tri-level controls, separation of bound and free hormone, ready to use reagents, and the choice of an overnight assay procedure or results in less than 3 hr. The kit utilizes standards which have been adjusted to the hematocrit of newborns.—*Meloy Laboratories, Inc., 6715 Electronic Dr., Springfield, VA 22151.*

#### T<sub>4</sub> RIA Test System

The LiquiSol™ test system measures total serum thyroxine (T<sub>4</sub>) by RIA. The system features encapsulation of a known amount of antibody in liquid solution, within semi-permeable nylon microcapsules. A thin-walled nylon membrane effectively traps a controlled amount of antibody inside, while excluding in-



terfering serum proteins. The lower molecular weight T<sub>4</sub> antigen moves through the membrane in order to bind to the antibody.

The LiquiSol T<sub>4</sub> RIA test system is a liquid phase system at the time of antibody/T<sub>4</sub> interaction. Upon completion of binding and attainment of equilibrium, centrifugation separates bound from unbound T<sub>4</sub> antigen. The nylon microcapsules are separated from the supernatant because of their density. During separation of bound and unbound T<sub>4</sub>, the LiquiSol system becomes a solid phase system. An identifying red dye is also encapsulated within the microcapsules. This provides identification of T<sub>4</sub> components and assures capsule integrity, since capsule rup-

ture would release the red dye and color supernatant. The number of microcapsules can be counted, to assure precise and reproducible quantity of antibody.—*Damon Diagnostics Div., Damon Corp., 115 Fourth Ave., Needham Heights, MA 02194.*

#### Aldosterone Kit

Diagnostic Products Corp. introduces an <sup>125</sup>I Aldosterone kit, which requires no chromatography and features a simple extraction method. The sensitivity extends to 5 pg/tube and the range is 25–800 pg/ml. The kit yields a straight line when plotted on the log logit graph paper included in the kit.—*Diagnostic Products Corp., 12306 Exposition Blvd., Los Angeles, CA 90064.*

#### Neo-T<sub>4</sub> and Neo-TSH

Nuclear Medical Systems has developed a neonatal T<sub>4</sub> RIA test kit which measures T<sub>4</sub> levels on small amounts of whole blood collected on filter paper, similar to PKU. The kit features value correlation with serum T<sub>4</sub> and results in 4 hr.

To complement its Neo-T<sub>4</sub> RIA kit, a Neo-TSH RIA has been developed to confirm the presence of primary hypothyroidism in newborns. The test uses a drop of blood as in PKU double antibody separation, and needs no standard curve.—*Nuclear Medical Systems, Inc., 1531 Monrovia Ave., Newport Beach, CA 92663.*

#### Clinical Chemistry

Ortho Diagnostics Inc. announces the publication of the first issue of the Ortho™ Clinical Chemistry *Catalyst*, prepared especially for clinical chemists and other laboratorians with a professional interest in clinical chemistry. Presenting articles about the Ortho Diagnostics clinical chemistry control product line, the first issue features articles written by scientists in the field of clinical chemistry.

The intent of the *Catalyst* is to expand communication between Ortho Diagnostics and clinical chemists by providing interesting, thought-provoking materials not available elsewhere. Clinical chemists are invited to have their names added to the *Catalyst* mailing list.—*Ortho Diagnostics Inc., Raritan, NJ 08869.*