

What's New

Each of the items on the following two pages was condensed from information supplied by its manufacturer. The items are published as a service to professionals working in the field of nuclear medicine. Their inclusion here does not in any way imply an endorsement by the Editorial Board of the JNMT or by the Society of Nuclear Medicine.

Multichannel Well Counting System

Collection of necessary data for the qualitative and quantitative analysis of all isotopes in a sample is performed by the Omega-1 multichannel analysis well counting system. Multiple channel counting allows the observation of the entire energy spectrum of a particular sample, facilitating selection of the proper isotope peak to be counted and recognition of any contaminants in



the sample. The system can perform spectrum background subtraction and spectrum normalization. The Omega-1 is portable, with a built-in power supply, and can thus be used for mobile monitoring, investigating isotope spills, and quality control and calibration of cameras, scanners, and counters. —*Canberra Industries, 45 Gracey Ave., Meriden, CT 06450.*

Chromatography for Radiopharmaceutical Quality Control

Six instant chromatography kits for the radiochemical determination of various radiopharmaceuticals have been introduced by Technical

Advancement. All kits take from 3 to 5 min to complete, use the same technique, and have all solvents, strips, and vials color coded. The kits: A 202 for ^{99m}Tc -labeled MAA, microspheres, sulfur colloid, polyphosphate, diphosphonate, pyrophosphate, DTPA, glucoheptanone, phytate, and methylene diphosphonate; B 303 for ^{99m}Tc -labeled DMSA and DHTA; B 313 for ^{99m}Tc -labeled HSA (double system); C 404 for aluminum ion concentration in ^{99m}Tc -pertechnetate eluate; D 505 for ^{131}I -, ^{125}I -, and ^{123}I -labeled sodium iodide, RISA, iodocholesterol, iodohippurate, and rose bengal; and E 606 for ^{111}In -DTPA and ^{169}Yb -DTPA. —*Technical Advancement Corp., P.O. Box 545, Lisle, IL 60532.*

Bone Imaging Agent

Pyrolite is a new ^{99m}Tc -pyrophosphate/trimetaphosphate-tin bone-imaging agent for delineating areas of altered osteogenesis. The kit is supplied as a set of 5 or 30 vials, each vial containing 10 mg of sodium pyrophosphate, 30 mg of sodium trimetaphosphate, and 1 mg of stannous chloride. —*New England Nuclear, Atomlight Place, North Billerica, MA 01862.*

Display Monitor

The model 607 variable persistence storage display monitor of Tektronix stores images for up to 50 min, and produces them with less deterioration than any other variable persistence monitor, according to the manufacturer. The 607 writes at 0.8

div/ μs , has an x and y axes bandwidth of 3 MHz, and a y axis bandwidth of 5 MHz. Monitor persistence may be adjusted so that the image fades at a rate consistent with the event being monitored. —*Tektronix, Inc., PO Box 500, Beaverton, OR 97077.*

Imaging Aids for Dyna Camera

The Clinical Image Processor (CIP) is an accessory system to the Picker Dyna Camera 4 that is capable of simulating, with the aid of a high-resolution electronic memory, black-and-white or color films in a positive or negative format. It can also display single, multiple format, or whole-body images with background suppression, contrast enhancement, and isocontour control. Quantification of count densities is possible. Image storage is on a video disk.

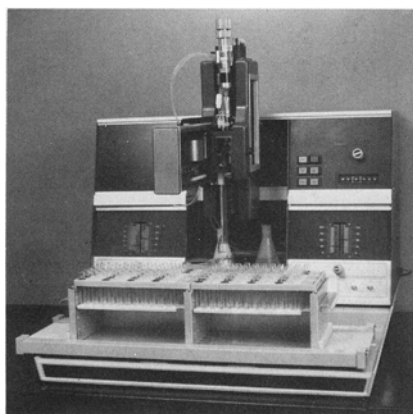
Picker has also introduced an image programmer (PIP) which allows multiple Dyna Camera images on a single piece of film. The images may be either multiple static views or time frames of a dynamic study. Image magnification is available for expansion of the center section of the camera's detector.

Finally, a Clam Shell collimator system for the Dyna Camera 4/15 allows quick exchange of hand-held, low-energy, 15-in. collimators. It includes a line of collimators, a collimator shielding and mounting frame, a collimator storage rack, and a frame storage cart. —*Picker Corporation, 12 Clintonville, Rd., Northford, CT 06472.*

Radioimmunoassay

Sample Preparation Station

A new automated RIA sample preparation station, capable of handling up to 248 samples per hour, has been introduced by Searle Analytic. The model 1600 is compatible with all scintillation RIA systems and can accommodate kits from various suppliers. The station transfers fixed



quantities of up to four liquids into the sample tubes in a single cycle; it can be used for both single and duplicate dilutions and for reagent additions. —*Searle Analytic, Inc., 2000 Nuclear Dr., Des Plaines, IL 60018.*

Digoxin

The SPAC is a new solid-phase RIA system for digoxin. Among its advantages is a new sectionally processed, antibody-coated tube which allows a more uniform antibody concentration, reactive surface area, and binding tenacity. The antibody is covalently bonded in coatings on each plastic section of the reaction tube. After the antigen-antibody

reaction, the reaction tubes can be simply decanted and the digoxin concentration is determined by comparing the percentage of the labeled digoxin bound to the antibody in the tube. —*Mallinckrodt/Nuclear, 675 Brown Rd., Hazelwood, MO 63042.*

Another digoxin kit, the DIGI-TAB-RIA, uses tableted charcoal as a separating agent. Five human serum standards (normal values of 0, 0.5, 1.5, 3.0, and 5.0 ng digoxin/ml) and a representative standard curve for each reagent lot are provided. —*Nuclear-Medical Laboratories, Inc., 8700 N. Stemmons Frwy., PO Box 47864, Dallas, TX 75247.*

HB_sAg

Also from Nuclear-Medical comes the HEPA-TAB-G (RIA) for the measurement of HB_sAg. This kit is designed for high test volumes and uses predispensed antibody-coated pellets. A confirmatory test is also available. —*Nuclear-Medical Laboratories, Inc., same address as above.*

Folate

Improved stability of labeled folate is accomplished through the use of a ⁷⁵Se-folate derivative in a new RIA kit for assaying folate in the clinical evaluation of anemia. A porcine binder insures the equivalent binding of serum ⁵N-MTHF and PGA analogs, removing the need for critical pH considerations. The test is quality controlled to give a standard deviation of 0.15 ng/ml or less. —*Amersham/Searle Corp., 2636 S. Clearbrook Dr., Arlington Hgts., IL 60005.*

FSH

Reagents covering an approximate range of 0-300 mIU/ml of the 2nd International Reference Preparation of Human Menopausal Gonadotrophins are part of a new follicle-stimulating hormone (FSH) RIA kit. The antigen used is ¹²⁵I-FSH, assuring consistent results for up to a 6-week shelf life, according to the manufacturer. Incubation time is only 16-24 h at room temperature. —*Amersham/Searle Corp., same address as above.*

Aminoglycoside Controls

Three level controls have been introduced by Diagnostic Products to complement their line of RIA kits for Amikacin, Gentamicin, and Tobramycin. The vials supplied contain the aminoglycosides at low, medium, and high levels of the therapeutic range. The controls are lyophilized and can be shipped at ambient temperatures. —*Diagnostic Products Corp., 12306 Exposition Blvd., Los Angeles, CA 90064.*