New Products

Each description of the products below was condensed from information supplied by the manufacturer. The reviews are published as a service to the professionals working in the field of nuclear medicine and their inclusion herein does not in any way imply an endorsement by the Editorial Board of the Journal of Nuclear Medicine Technology *or by The Society of Nuclear Medicine.*

New Dynamic Cardiac Phantom

The dynamic cardiac phantom facilitates the quality control needed to perform gated blood-pool studies for noninvasive determination of ventricular ejection fraction. It mimics the anatomic and physiologic characteristics of the heart, yet it is simple to use and provides reproducible data. It makes an excellent training aid for all nuclear cardiology personnel.

The phantom consists of three sections: the mechanical unit, a cardiac ventricle phantom, and a background phantom. The hollow cardiac chamber, when filled with a radioactive solution, simulates the right and left ventricles. Wall motion and stroke volume changes are achieved by the movement of metal jaws above the cardiac chamber. The jaws open and close, simulating the beating heart. This movement attenuates the peripheral activity of the chambers.

Any of three values of ventrical ejection fractions is pushbutton selected, and each can be easily adjusted to any desired value from approximately 30%-80%. Similarly, pushbuttons select any one of three heart rates, each of which can be adjusted from 40-160 bpm. Stopping the jaw motion and measuring activity at end diastole and end systole provides accurate EF calibration for each of the selectable values. *—Nuclear Associates, 100 Voice Rd., Carle Place, NY 11514-1593.*

Circle Reader Service No. 30

Optical Disk Storage System for Nuclear Medicine

ImageFile is an optical disk storage, retrieval, and display manipulation system that digitally archives 8,000 nuclear medicine studies on a single optical disk. The system can interface with all major nuclear medicine computers, and is the most cost-effective method available for storage of nuclear medicine images.

The optical disk is ideal for archival storage of medical images. The disk is two-sided, with a capacity of one gigabyte (1,000 megabytes) per side. This gives the user on-line access to approximately 4,000 studies. With easy disk replacement, there is quick access to five or more years of on-line storage. Studies cannot be erased, lost, or misfiled.

ImageFile accepts data from all major nuclear medicine computers. ImageFile's standard configuration also copies digital studies from floppy disk onto the optical disk. The formats of the various nuclear medicine cameras are converted to a common format, which enables standardized image manipulation regardless of the type of computer used. Any study can be accessed in seconds with ImageFile's rapid search directory.

With ImageFile, significant cost savings over film and floppy storage are provided. A nuclear medicine department can eliminate its file room, as well as the expenses related to film processing, supplies, and equipment.*—Sudbury Systems, Inc., 31 Union Ave., Sudbury, MA 01776.*

Circle Reader Service No. 31

New Multichannel Analyzer for Nuclear Spectroscopy

The new EG&G Ortec "ACE" card, when plugged into an IBM PC instantly transform the PC into an advanced multichannel analyzer. While collecting data in 4,000 channels, the user can either view the data in real time or use the PC independently for any of its conventional purposes.

After collection, the data can be quickly analyzed and displayed because of the easy-to-use software package supplied with the ACE.

The hardware portion consists of a high-performance, successive-approximation ADC (2K or 4K). Z80A microprocessor and data memory on an IBM-standard long-shot option card. The software is a version of EG&G Ortec's ADCAM MCA emulation program.

The ACE can be used with any IBM PC (XT, AT), or compatible personal computer, and as many as four ACE cards may be installed within a single PC. *—EG&G Ortec, 100 Midland Rd., Oak Ridge, TN 37830.*

Circle Reader Service No. 32

New Iodine-125 Direct RIA for Urine THC

Amersham Corporation has introduced a new ^{125}I direct RIA for urine THC which offers quantitative or screening protocols.

Employing ready-to-use liquid reagents, standards, and controls to detect cannabinoids in the range of 0-100ng/ml, this test yields quantitative results with a single 15-minute incubation.

This new ^{125}I direct RIA for urine THC has a sensitivity of 0.8ng/ml. A cutoff as low as 10ng/ml can be employed.*—Amersham Corporation, 2636 South Clearbrook Dr., Arlington Heights, IL 60005.*

Circle Reader Service No. 33