

# SIEMENS

## Head-to-head, nobody outperforms Siemens.

*"I've used many different brands of nuclear imaging equipment, but none live up to Siemens." —Nuclear Physician*

*"In this day and age, you need their kind of stability." —Chief Technologist*

*"Service is a Siemens high point. It's one of the main reasons we buy their nuclear medicine equipment." —Administrator*

Leadership technology. Rock-solid reliability. Service that keeps uptime up. These doctors and administrators are all talking about one thing: value in nuclear medicine equipment.

And they find it all in one company: Siemens.

Simply put, people depend on our equipment. The new Integrated DIACAM™ System continues to set the standard. And our second generation MULTISPECT™ Systems extend that reputation. Features like the revolutionary ICON™ interface bring interactive ease and flexibility to nuclear studies. And the new Integrated Console saves the two things most valuable in a nuclear department—space and time.

Advanced features, sensible designs, continuous improvements. At Siemens, we use our heads to keep you ahead in nuclear medicine.

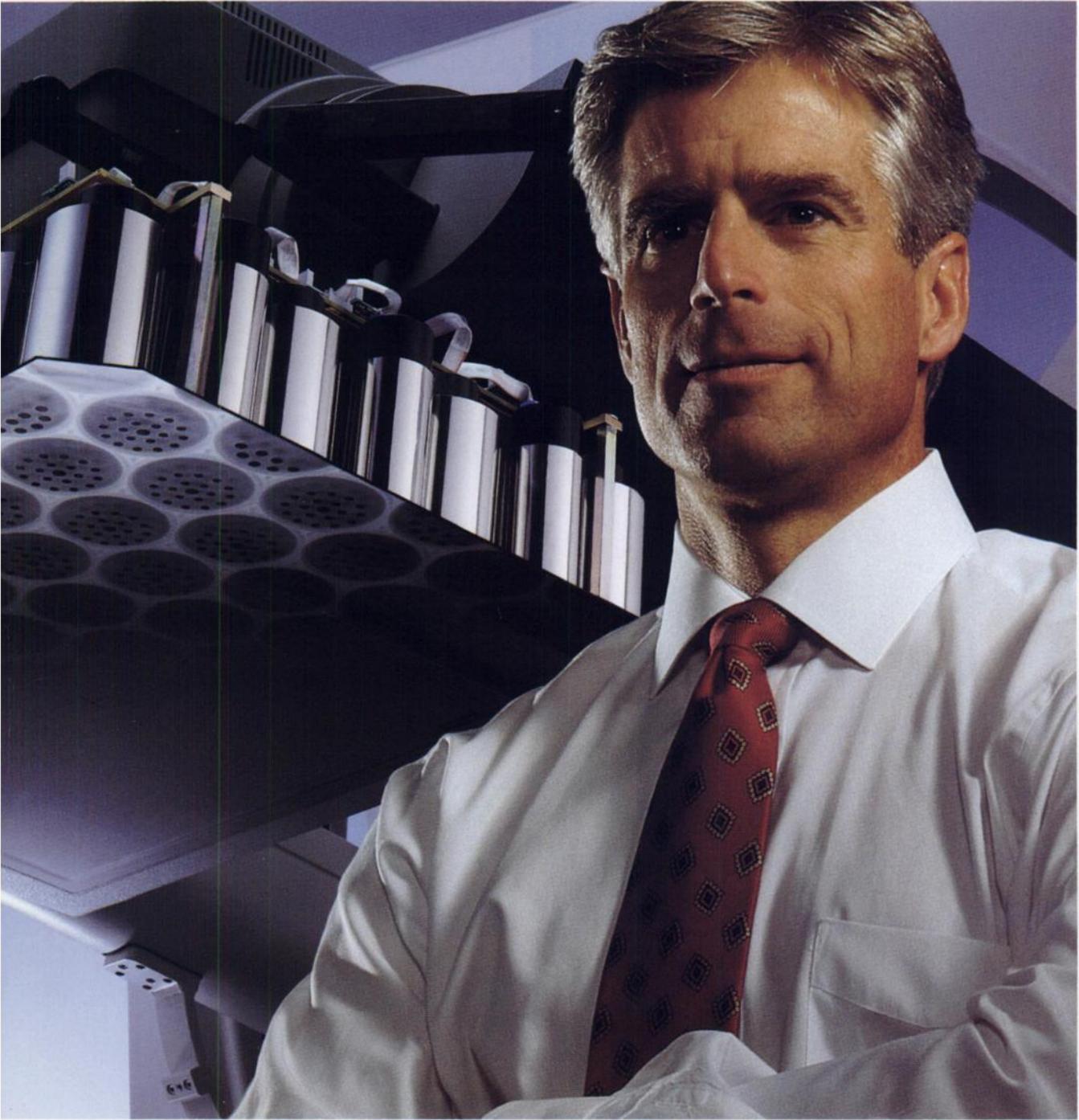


### **Siemens Medical Systems, Inc.**

2501 North Barrington Road  
Hoffman Estates, IL 60195  
Telephone: 708-304-7252

**Siemens . . .  
technology in caring hands.**





# Freedom of choice

begins here

and here.



For all the thyroid uptake tests you need to handle quickly and accurately, there's really only one system capable of being compared to our computer-based, Capintec System 1000. It's our fast, accurate and economical CAPTUS® 500. Both feature on-screen prompts and spectrums, hard-copy printouts, and with the addition of a well detector let you do a variety of laboratory and wipe tests efficiently and easily. In fact, the only difficulty you'll ever have is simply choosing the system best suited to your needs. For more information, please call (800) 631-3826 today.



**CAPINTEC, INC.**

6 Arrow Road, Ramsey, NJ 07446

(800) 631-3826 In NJ: (201) 825-9500

Fax: (201) 825-1336 Telex: 642375 (Capintec Rasy)

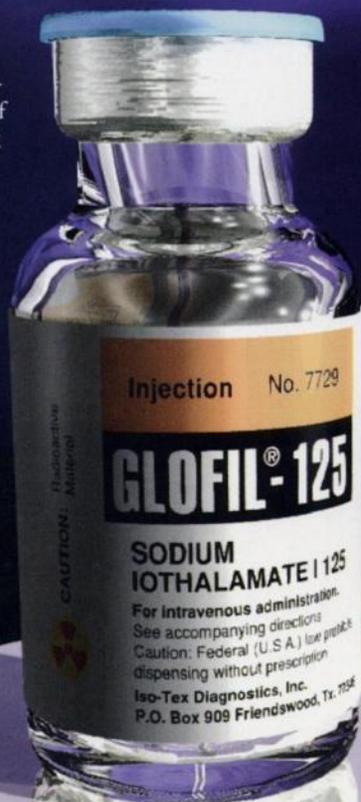
# The Two Standards In Glomerular Filtration Rate Measurement

## THE PLATINUM STANDARD

Glofil-125 Sodium Iothalamate I-125 Injection

Labelled Sodium Iothalamate has been used by many investigators and clinicians as an alternative to Inulin for evaluation of renal function. The renal clearance of sodium iothalamate is known to closely approximate that of inulin. Like Inulin, the compound is cleared by glomerular filtration without tubular reabsorption or reabsorption. GFR is measured by sampling of blood and urine collected from the patient after injection of Glofil-125. Protocols employing either intravenous injection or continuous infusion are available for use.

A 4.0ml vial of Glofil-125 contains a quantity of approximately 4mg Sodium Iothalamate associated with 40.7 megabecquerels (1.1mCi) of activity at the time of manufacture. The product is sterile, non-pyrogenic and is preserved with 0.9% benzyl alcohol. Batches are produced the first Saturday of every month and each lot has a 45 day shelf life.

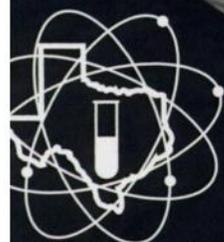


## THE GOLD STANDARD

Inulin and Sodium Chloride Injection, USP

Inulin clearance has become the standard to which other methods of determining glomerular filtration rate (GFR) are compared. Inulin is an ideal substance for determining GFR since it is filtered by the glomerulus, is not absorbed or excreted by the tubules, is not metabolized, causes no known toxic effects, and can be measured by a simple chemical procedure following withdrawal of urine and blood specimens.

This product is available in 50ml vials containing 5.0g inulin and 0.9% sodium chloride in water for injection. It is sterile and non-pyrogenic. Shelf life from time of manufacture is 13 months.



ISO-TEX  
DIAGNOSTICS, INC.

Ordering  
Information:  
**(800) 477-4839**

P.O. Box 909 • Friendswood, TX 77546 • Phone (713) 482-1231 • FAX (713) 482-1070

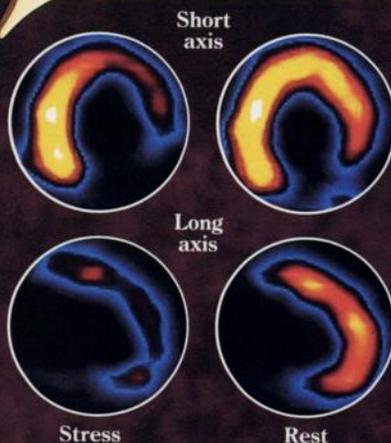
*Some cardiac  
imaging agents  
leave something out  
of the picture...*

**INFORMATION  
& THROUGHPUT**

# MORE

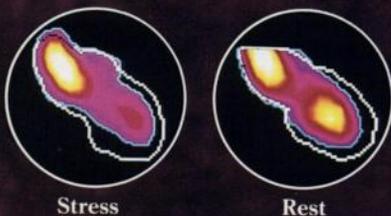
# INFORM

## Perfusion Study— Identifying Ischemic Areas



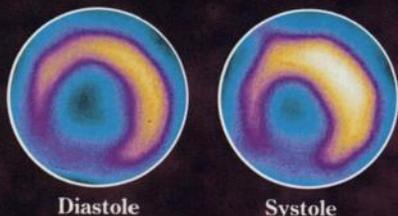
A patient was imaged with CARDIOLITE for perfusion and first pass-function assessment. These tomographic slices show a fixed inferolateral perfusion defect in the territory of old inferior myocardial infarction. There is also a reversible anterolateral defect in the territory of a diagonal branch of the LAD. Coronary angiography showed a totally occluded RCA and a tight proximal stenosis of a large first diagonal branch of the LAD.

## First Pass— Function



End-diastolic perimeter (white line) and end-systolic image acquired following rest injection of CARDIOLITE show LV dilatation with reduced (30%) LVEF and inferior hypokinesis. Stress perimeter and image acquired following exercise injection show decreased anterolateral wall motion, which corresponds anatomically to the perfusion defect seen on the perfusion scans above.

## Gated Study (SPECT)— Wall Motion



Gated short axis SPECT studies (imaged with CARDIOLITE) of a 64-year-old male with hypertensive cardiomyopathy demonstrate an inferoseptal myocardial infarction. The increased color intensity from diastole to systole represents myocardial wall thickening.

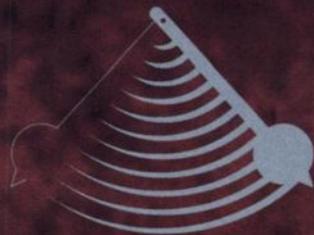
Please see last page of advertisement for Brief Summary of Prescribing Information.

*New expanded uses  
fill in the gaps with more  
myocardial information*

# ATION

From identifying ischemia to localizing infarction, CARDIOLITE now fills in all the gaps for a complete clinical picture. With a CARDIOLITE study, you can assess the perfusion status of your patients...and much more. CARDIOLITE can also fill in myocardial information that is missing from thallium imaging—wall motion from gated studies and evaluation of function with the first-pass technique.

And, image after image, you won't find any gaps in quality, because CARDIOLITE provides the superior clarity of technetium.



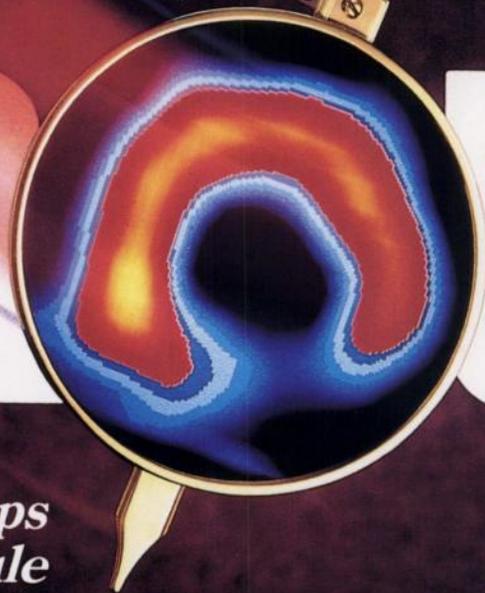
## Cardiolite<sup>®</sup>

Kit for the preparation of Technetium Tc99m Sestamibi

*Fills in the gaps...with clarity that lasts*

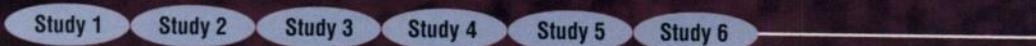
DU PONT  
PHARMA  
Radiopharmaceuticals

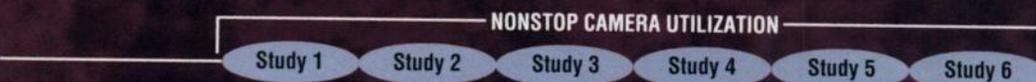
# GREATER THROUGH



*CARDIOLITE fills in gaps  
in your imaging schedule*

## *CARDIOLITE: Institution 1*

Stress 

Camera 

## *Thallium: Institution 2*

Stress 

Camera 

0 hr      1 hr      2 hrs      3 hrs      4 hrs      5 hrs

Due to the lack of clinically significant redistribution and the slow washout of CARDIOLITE, patients can be batched for stress injection, then imaged one after another over a broader period of time. In comparison, imaging with thallium must take place almost immediately; therefore the camera is frequently idle.

*Please see last page of advertisement for Brief Summary of Prescribing Information.*

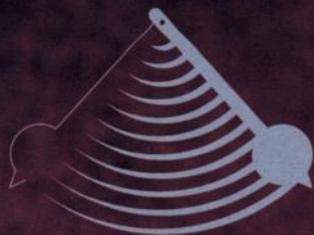
*Improved  
camera utilization  
fills in scheduling gaps  
for greater throughput*

CARDIOLITE virtually eliminates the gaps of time between camera use often associated with thallium. That's because CARDIOLITE allows you to uncouple the

# THROUGHPUT

time of injection from the time of imaging. Patients can be batched for stress, then imaged at any time... up to 4 hours after injection. So your patients are ready and waiting for the camera, not the other way around.

As seen in the diagram, this permits the camera schedule to be filled all day...so there are no gaps in productivity.



**Cardiolite<sup>®</sup>**  
Kit for the preparation of Technetium Tc99m Sestamibi

*Fills in the gaps...with clarity that lasts*

DU PONT  
PHARMA  
Radiopharmaceuticals

# SUPERIOR

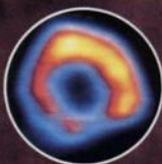
INFORMATION  
& THROUGHPUT



*Filling in the gaps  
with the superior  
clarity of technetium*



CARDIOLITE



Thallium

Rest studies of a 37-year-old male with a 45-inch chest circumference and slightly elevated left hemidiaphragm using CARDIOLITE and thallium-201 as the imaging agents. The images with CARDIOLITE are of superior quality, with less regional variation in count density and less hemidiaphragmatic attenuation.

CARDIOLITE fills in the information gaps to provide more information...all with the superior image clarity of technetium. Through new, expanded uses, CARDIOLITE gives you a complete CAD picture... from ischemia to infarction. CARDIOLITE also fills in the gaps in your imaging schedule through the ability to uncouple the time of injection from the time of imaging. Patients can be batched, then imaged one after the other...virtually eliminating downtime for your camera.

More information. Greater throughput.  
CARDIOLITE fills your cardiac imaging needs.



# Cardiolite

Kit for the preparation of Technetium Tc99m Sestamibi

*Fills in the gaps...with clarity that lasts*

**DU PONT  
PHARMA**  
Radiopharmaceuticals

*Please see last page of advertisement for Brief Summary of Prescribing Information.*

Brief Summary

# Cardiolite

Kit for the preparation of Technetium Tc99m Sestamibi



## FOR DIAGNOSTIC USE

**DESCRIPTION:** Each 5ml vial contains a sterile, non-pyrogenic, lyophilized mixture of:  
 Tetrakis (2-methoxy isobutyl isonitrile) Copper (I) tetrafluoroborate - 1.0mg  
 Sodium Citrate Dihydrate - 2.6mg  
 L-Cysteine Hydrochloride Monohydrate - 1.0mg  
 Mannitol - 20mg  
 Stannous Chloride, Dihydrate, minimum (SnCl<sub>2</sub>•2H<sub>2</sub>O) - 0.025mg  
 Stannous Chloride, Dihydrate, (SnCl<sub>2</sub>•2H<sub>2</sub>O) - 0.075mg  
 Tin Chloride (Stannous and Stannic) Dihydrate, maximum (as SnCl<sub>2</sub>•2H<sub>2</sub>O) - 0.086mg

Prior to lyophilization the pH is adjusted with HCl to 5.3-5.9. The contents of the vial are lyophilized and stored under nitrogen.

This drug is administered by intravenous injection for diagnostic use after reconstitution with sterile, non-pyrogenic, oxidant-free Sodium Pertechnetate Tc99m Injection. The pH of the reconstituted product is 5.5 (5.0-6.0). No bacteriostatic preservative is present.

The precise structure of the technetium complex is Tc99m[MIBI]<sub>6</sub><sup>-</sup> where MIBI is 2-methoxy isobutyl isonitrile.

**INDICATIONS AND USAGE:** CARDIOLITE, Kit for the preparation of Technetium Tc99m Sestamibi is a myocardial perfusion agent that is useful in the evaluation of ischemic heart disease. CARDIOLITE, Kit for the preparation of Technetium Tc99m Sestamibi is useful in distinguishing normal from abnormal myocardium and in the localization of the abnormality, in patients with suspected myocardial infarction, ischemic heart disease or coronary artery disease. Evaluation of ischemic heart disease or coronary artery disease is accomplished using rest and stress techniques.

CARDIOLITE, Kit for the preparation of Technetium Tc99m Sestamibi, is also useful in the evaluation of myocardial function using the first pass technique.

Rest-exercise imaging with Tc99m Sestamibi in conjunction with other diagnostic information may be used to evaluate ischemic heart disease and its localization.

In clinical trials, using a template consisting of the anterior wall, inferior-posterior wall and isolated apex, localization in the anterior or inferior-posterior wall in patients with suspected angina pectoris or coronary artery disease was shown. Disease localization isolated to the apex has not been established. Tc99m Sestamibi has not been studied or evaluated in other cardiac diseases.

It is usually not possible to differentiate recent from old myocardial infarction or to differentiate recent myocardial infarction from ischemia.

**CONTRAINDICATIONS:** None known.

**WARNINGS:** In studying patients in whom cardiac disease is known or suspected, care should be taken to assure continuous monitoring and treatment in accordance with safe, accepted clinical procedure. Infrequently, death has occurred 4 to 24 hours after Tc99m Sestamibi use and is usually associated with exercise stress testing (See Precautions).

**PRECAUTIONS:**

**GENERAL**

The contents of the vial are intended only for use in the preparation of Technetium Tc99m Sestamibi and are not to be administered directly to the patient without first undergoing the preparative procedure.

Radioactive drugs must be handled with care and appropriate safety measures should be used to minimize radiation exposure to clinical personnel. Also, care should be taken to minimize radiation exposure to the patients consistent with proper patient management.

Contents of the kit before preparation are not radioactive. However, after the Sodium Pertechnetate Tc99m Injection is added, adequate shielding of the final preparation must be maintained.

The components of the kit are sterile and non-pyrogenic. It is essential to follow directions carefully and to adhere to strict aseptic procedures during preparation.

Technetium Tc99m labeling reactions involved depend on maintaining the stannous ion in the reduced state. Hence, Sodium Pertechnetate Tc99m Injection containing oxidants should not be used.

Technetium Tc99m Sestamibi should not be used more than six hours after preparation.

Radiopharmaceuticals should be used only by physicians who are qualified by training and experience in the safe use and handling of radionuclides and whose experience and training have been approved by the appropriate government agency authorized to license the use of radionuclides.

Stress testing should be performed only under the supervision of a qualified physician and in a laboratory equipped with appropriate resuscitation and support apparatus.

The most frequent exercise stress test endpoints, which resulted in termination of the test during controlled Tc99m Sestamibi studies (two-thirds were cardiac patients) were:

Fatigue	35%
Dyspnea	17%
Chest Pain	16%
ST-depression	7%
Arrhythmia	1%

**Carcinogenesis, Mutagenesis, Impairment of Fertility**

In comparison with most other diagnostic technetium labeled radiopharmaceuticals, the radiation dose to the ovaries (1.5rads/30mCi at rest, 1.2 rads/30mCi at exercise) is high. Minimal exposure (ALARA) is necessary in women of childbearing capability. (See Dosimetry subsection in DOSAGE AND ADMINISTRATION section.)

The active intermediate, [Cu(MIBI)<sub>6</sub>]<sup>+</sup>, was evaluated for genotoxic potential in a battery of five tests. No genotoxic activity was observed in the Ames, CHO/HPRT and sister chromatid exchange tests (all *in vitro*). At cytotoxic concentrations (≥ 20µg/ml), an increase in cells with chromosome aberrations was observed in the *in vitro* human lymphocyte assay. [Cu(MIBI)<sub>6</sub>]<sup>+</sup> did not show genotoxic effects in the *in vivo* mouse micronucleus test at a dose which caused systemic and bone marrow toxicity (9mg/kg, > 600 × maximal human dose).

**Pregnancy Category C**

Animal reproduction and teratogenicity studies have not been conducted with Technetium Tc99m Sestamibi. It is also not known whether Technetium Tc99m Sestamibi can cause fetal harm when administered to a pregnant woman or can affect reproductive capacity. There have been no studies in pregnant women. Technetium Tc99m Sestamibi should be given to a pregnant woman only if clearly needed.

**Nursing Mothers**

Technetium Tc99m Pertechnetate is excreted in human milk during lactation. It is not known whether Technetium Tc99m Sestamibi is excreted in human milk. Therefore, formula feedings should be substituted for breast feedings.

**Pediatric Use**

Safety and effectiveness in children below the age of 18 have not been established.

**ADVERSE REACTIONS:** During clinical trials, approximately 8% of patients experienced a transient metallic or bitter taste immediately after the injection of Technetium Tc99m Sestamibi. A few cases of transient headache, flushing and non-itching rash have also been attributed to administration of the agent. Cases of angina, chest pain, and death have occurred (See WARNINGS and PRECAUTIONS). The following adverse reactions have been rarely reported: signs and symptoms consistent with seizure occurring shortly after administration of the agent; transient arthritis in the wrist joint; and severe hypersensitivity, which was characterized by dyspnea, hypotension, bradycardia, asthenia and vomiting within two hours after a second injection of Technetium Tc99m Sestamibi.

**DOSAGE AND ADMINISTRATION:** The suggested dose range for I.V. administration in a single dose to be employed in the average patient (70kg) is:  
 370-1110MBq (10-30mCi)

The dose administered should be the lowest required to provide an adequate study consistent with ALARA principles (see also PRECAUTIONS).

When used in the diagnosis of myocardial infarction, imaging should be completed within four hours after administration.

The patient dose should be measured by a suitable radioactivity calibration system immediately prior to patient administration. Radiochemical purity should be checked prior to patient administration.

Parenteral drug products should be inspected visually for particulate matter and discoloration prior to administration whenever solution and container permit.

Store at 15-25°C before and after reconstitution.

**RADIATION DOSIMETRY:** The radiation doses to organs and tissues of an average patient (70kg) per 1110MBq (30mCi) of Technetium Tc99m Sestamibi injected intravenously are shown in Table 4.

**Table 4. Radiation Absorbed Doses from Tc99m Sestamibi**

Organ	Estimated Radiation Absorbed Dose			
	2.0 hour void		4.8 hour void	
	rads/30mCi	mGy/1110MBq	rads/30mCi	mGy/1110MBq
Breasts	0.2	2.0	0.2	1.9
Gallbladder Wall	2.0	20.0	2.0	20.0
Small Intestine	3.0	30.0	3.0	30.0
Upper Large Intestine Wall	5.4	55.5	5.4	55.5
Lower Large Intestine Wall	3.9	40.0	4.2	41.1
Stomach Wall	0.6	6.1	0.6	5.8
Heart Wall	0.5	5.1	0.5	4.9
Kidneys	2.0	20.0	2.0	20.0
Liver	0.6	5.8	0.6	5.7
Lungs	0.3	2.8	0.3	2.7
Bone Surfaces	0.7	6.8	0.7	6.4
Thyroid	0.7	7.0	0.7	6.8
Ovaries	1.5	15.5	1.6	15.5
Testes	0.3	3.4	0.4	3.9
Red Marrow	0.5	5.1	0.5	5.0
Urinary Bladder Wall	2.0	20.0	4.2	41.1
Total Body	0.5	4.8	0.5	4.8

Organ	Stress			
	2.0 hour void		4.8 hour void	
	rads/30mCi	mGy/1110MBq	rads/30mCi	mGy/1110MBq
Breasts	0.2	2.0	0.2	1.8
Gallbladder Wall	2.8	28.9	2.8	27.8
Small Intestine	2.4	24.4	2.4	24.4
Upper Large Intestine Wall	4.5	44.4	4.5	44.4
Lower Large Intestine Wall	3.3	32.2	3.3	32.2
Stomach Wall	0.5	5.3	0.5	5.2
Heart Wall	0.5	5.6	0.5	5.3
Kidneys	1.7	16.7	1.7	16.7
Liver	0.4	4.2	0.4	4.1
Lungs	0.3	2.6	0.2	2.4
Bone Surfaces	0.6	6.2	0.6	6.0
Thyroid	0.3	2.7	0.2	2.4
Ovaries	1.2	12.2	1.3	13.3
Testes	0.3	3.1	0.3	3.4
Red Marrow	0.5	4.6	0.5	4.4
Urinary Bladder Wall	1.5	15.5	3.0	30.0
Total Body	0.4	4.2	0.4	4.2

Radiopharmaceutical Internal Dose Information Center, July 1990, Oak Ridge Associated Universities, P.O. Box 117, Oak Ridge, TN 37831, (615) 576-3449.

**HOW SUPPLIED:** Du Pont Radiopharmaceutical's CARDIOLITE\*, Kit for the Preparation of Technetium Tc99m Sestamibi is supplied as a 5ml vial in kits of two (2), five (5) and thirty (30) vials, sterile and non-pyrogenic.

Prior to lyophilization the pH is between 5.3-5.9. The contents of the vials are lyophilized and stored under nitrogen. Store at 15-25°C before and after reconstitution. Technetium Tc99m Sestamibi contains no preservatives. Included in each two (2) vial kit are one (1) package insert, six (6) vial shield labels and six (6) radiation warning labels. Included in each five (5) vial kit are one (1) package insert, six (6) vial shield labels and six (6) radiation warning labels. Included in each thirty (30) vial kit are one (1) package insert, thirty (30) vial shield labels and thirty (30) radiation warning labels.

The U.S. Nuclear Regulatory Commission has approved this reagent kit for distribution to persons licensed to use byproduct material pursuant to section 35.11 and section 35.200 of Title 10 CFR Part 35, to persons who hold an equivalent license issued by an Agreement State, and, outside the United States, to persons authorized by the appropriate authority.

Marketed by  
 Du Pont Radiopharmaceutical Division  
 The Du Pont Merck Pharmaceutical Co.

331 Treble Cove Road  
 Billerica, Massachusetts, USA 01862  
 For ordering Tel. Toll Free: 800-225-1572  
 All other business: 800-362-2668

(For Massachusetts and International, call 508-667-9531)

# AccuSync

## *The Finest Cardiac Gate Available for Nuclear Cardiology*

The AccuSync series cardiac gates, designed to provide precise R-Wave detection with no delay . . .

### ***Quality***

In addition to continually updating all our instruments through the use of state-of-the-art technology, our dedication to a top quality product is the basis of our policy.

### ***Compatibility***

R Trigger output is compatible with all computers including ADAC, DEC, ELSCINT, GE, MDS, PICKER, RAYTHEON, TECHNICARE, TOSHIBA, MEDASYS, SOPHA, SIEMENS, SUMMIT, AND TRIONIX.

### ***Customer Service***

Our service personnel respond to most repairs within 24 hours to meet the urgent needs of all our customers.

### ***AccuSync Products***

The 5L represents the top of the line in the AccuSync series. Other AccuSync models include the 6L, 1L, 3L, and 4L; each designed with different options according to the customer's requirements.

### ***Warranty***

All models are backed by a one year warranty on parts and labor. Extended warranty is available.

### ***Accessories***

All models include patient cable, lead wires, BNC to BNC cable, and A/C line cord. These accessories, as well as chart paper are available.



*The model 5L features CRT monitor for visual display with freeze action capability as well as a Strip Chart Recorder for recording R-Wave activity.*

### **All models feature:**

- Isolation Amplifier for Patient Safety
- Trigger Pulse LED • No Delay
- ECG Output • Audio Indicator
- Trigger Control for Precise Location of Trigger Pulse
- Compatible R Trigger Output

*Call or write us today for more information on any of the AccuSync products listed below.*

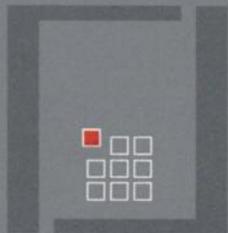
- AccuSync 5L
- AccuSync 6L • AccuSync 1L
- AccuSync 3L • AccuSync 4L



**Advanced Medical Research Corporation**  
148 Research Drive • Milford CT 06460 • Phone (203) 877-1610 • Fax (203) 877-8972

**OVER 2,000  
PEOPLE  
IN NUCLEAR  
MEDICINE  
WANTED MORE.**

**HERE'S HOW  
THEY GOT IT.**



s o p h a m e d i c a l

---

**SUPERIOR CLINICAL PERFORMANCE.  
PROVEN UPGRADEABILITY. TAILORED  
SERVICES. ALL FROM SOPHA MEDICAL.**

***REAL PERFORMANCE ADVANTAGES***

Cameras with higher image resolution than any other systems. The industry's most efficient and easy to use computers. Modern clinical software. Real performance advantages for any clinical service.

***PROVEN UPGRADEABILITY***

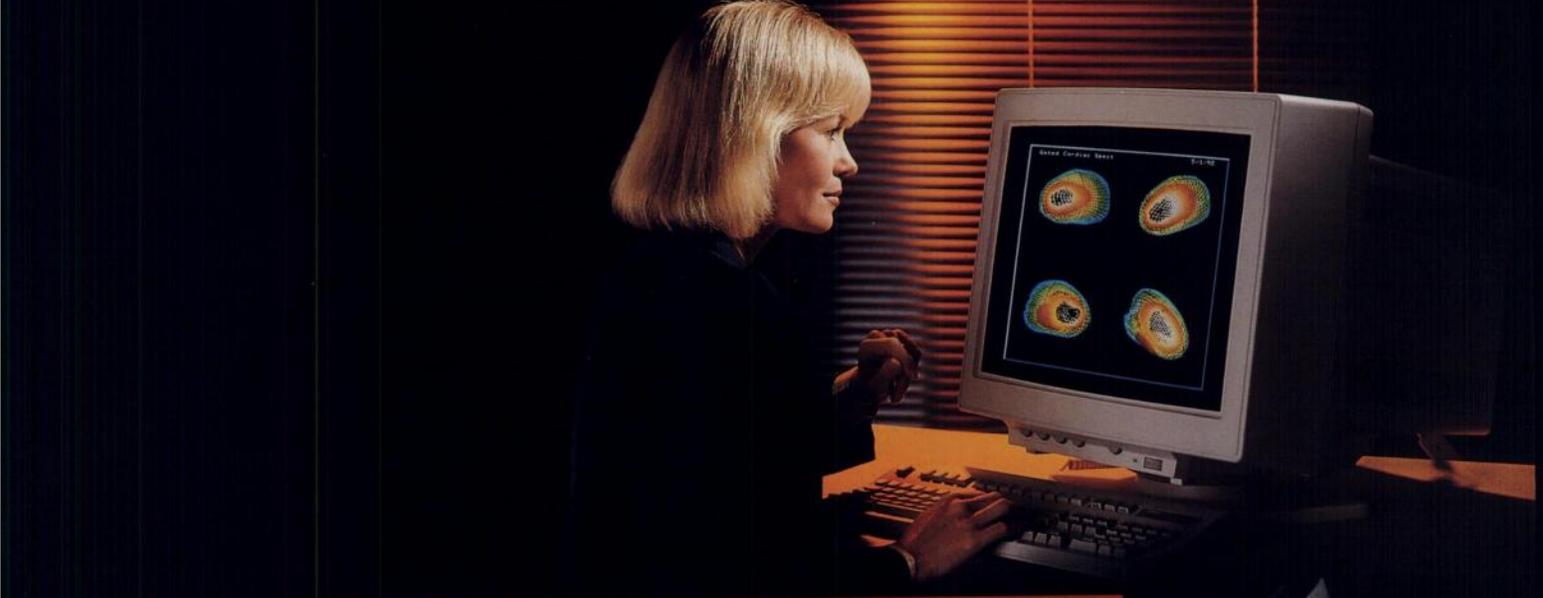
sopha has developed special architectures and adopted a unique corporate philosophy that make upgradeability an inherent feature for all sopha products. So you're assured of having the best technology available today. And a clear path to the technology of tomorrow.

***SERVICES TAILORED FOR NUCLEAR MEDICINE***

Field engineers dedicated only for nuclear medicine. Local parts. Real-time customer helplines. Extensive training programs for physicians, technologists, or biomedical engineers. Programs that combine to give sopha customers premier service and support.

**OVER 2,000 PEOPLE WANTED MORE.  
THEY GOT IT WITH SOPHA MEDICAL.**

sopha medical USA 410-290-0100  
sopha medical France (worldwide headquarters) 33.1.30.84.91.00



NOW AVAILABLE

# Computers in Nuclear Medicine: A Practical Approach

Kai Lee, PhD

Computers have become an indispensable tool in nuclear medicine. This is the book for those who wish to acquire a basic understanding of how computers work and the processing techniques used to obtain diagnostic information from radionuclide images. The text gives a thorough description of the hardware components of a nuclear medicine computer system and explains the principles behind many common image processing techniques. The following topics are discussed in detail:

- Functions and components of a computer system
- Mass storage devices
- Input and output devices
- Computer software
- Nuclear medicine image acquisition methods
- Methods of qualitative image analysis
- Quantitative image analysis
- Nuclear cardiology
- Quantitative data analysis
- Single-photon emission computed tomography
- Selecting a computer for nuclear medicine

The book is illustrated throughout to help the reader conceptualize the topics as they are discussed.

**290 pp, 6 × 9, softcover**

**\$30 member (+ \$2.50) Total \$32.50**

**\$45 nonmember (+ \$2.50) Total \$47.50**

**In Canada, add \$5.00; elsewhere, add \$20.00 for shipping and handling**

**To order, send payment to:**

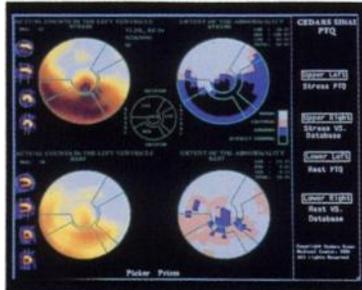
**Bookmasters**

**State Rt. 42, RD11**

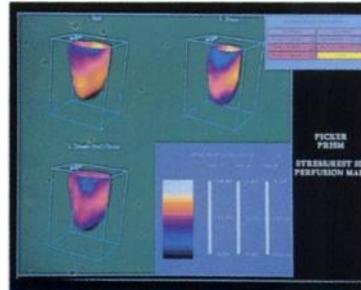
**Mansfield, OH 44903**

**1 (800) 247-6553**

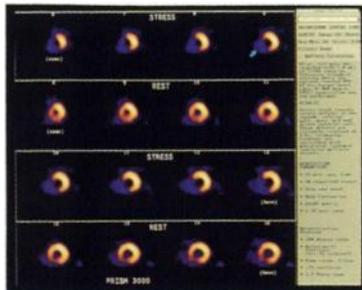
# TO GET SOFTWARE THIS GOOD,



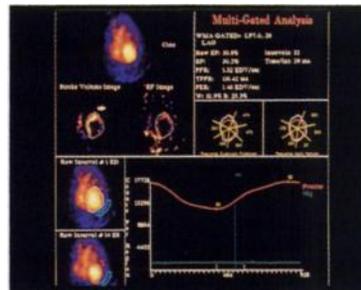
Cedars - Sinai PTQ™ Program



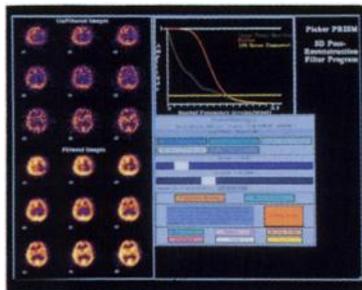
3-D Perfusion/Motion Map™



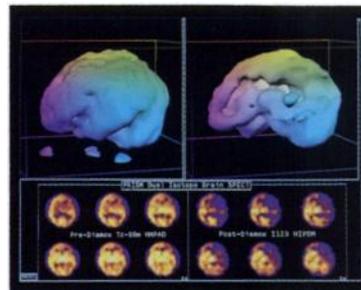
Oblique cardiac slices at stress and re-distribution



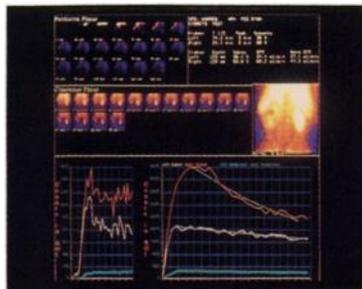
MGA+ (multi-gated analysis) Program



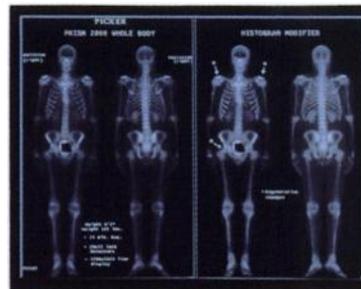
3-D Post-Reconstruction Filter Program



Dual Isotope 3-D images and slices



Renogram analysis time activity curves



Anterior and posterior dual - intensity whole - body study

# YOU HAVE TO GO ON AN ODYSSEY.™



ODYSSEY software, running on the ODYSSEY Supercomputer - a PRISM™ Series standard - provides a complete range of nuclear imaging programs. This powerful software collection includes protocols like 3-D Perfusion/Motion Map™, a unique program for cardiac SPECT studies. ODYSSEY programs not only deliver exquisite images, but also a wealth of clinical information.

Once you go on an ODYSSEY, no

other imaging system will give you the same easy operation. Because no other imaging system can run software this good.

For more information on the PRISM Series, call us at 1-800-323-0550.

Or write Picker International, Inc., 595 Miner Road,  
Dept. CC,  
Cleveland,  
OH 44143.



**MORE THAN IMAGES. INSIGHT.**

## JOIN YOUR COLLEAGUES IN TORONTO, CANADA

**40<sup>th</sup>** The Society of Nuclear Medicine's  
40th Annual Meeting

Tuesday, June 8–Friday, June 11, 1993  
Toronto, Canada

In 1992, more than 4,700 professionals  
attended the Society's Meeting  
in Los Angeles, CA

- Attend the continuing education courses—  
over 45 to choose from, specifically  
designed for physicians, scientists  
and technologists;
- Learn about the products of more than 100  
major Nuclear Medicine  
suppliers—cameras,  
computers, radiopharmaceuticals,  
accessories, plus much more;
- Meet with your colleagues—Nuclear  
Medicine experts from around the world;
- Listen to presentations of the latest scien-  
tific breakthroughs in Nuclear Medicine—  
nearly 100 sessions, over 500  
presentations;
- For more information, use the coupon  
below, or write:

The Society of Nuclear Medicine  
Dept. of Meeting Services  
136 Madison Avenue  
New York, NY 10016  
FAX: (212) 545-0221; Or call, (212) 889-0717

Please send me information on SNM's 39th Annual Meeting:

Name \_\_\_\_\_

Degree \_\_\_\_\_

Institute \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_

State/Province \_\_\_\_\_

Zip/Postal Code \_\_\_\_\_

The Society of Nuclear Medicine  
Dept. of Meeting Services  
136 Madison Avenue  
New York, NY 10016  
FAX: 212/545-0221  
Phone: 212/889-0717

**HOW  
MUCH  
WILL  
IT  
COST  
TO  
UPGRADE  
YOUR  
NUCLEAR  
MEDICINE  
DEPART-  
MENT?**

# SPECT BRAIN IMAGING CLINICAL FELLOWSHIP

Department of Radiology  
Section of Nuclear Medicine



## BENEFIT:

This program is designed for nuclear medicine physicians, radiologists, technologists and referring physicians. It is intended to educate participants about the clinical utility of SPECT brain imaging with agents such as SPECTamine® and Ceretec®.

## Objectives include:

- Development of interpretation skills for brain images.
- Appreciation of clinical applications of SPECT brain imaging.
- Knowledge of image acquisition and reconstruction.
- Appreciation of factors that influence image quality.
- Knowledge of quality control techniques for SPECT.

## SPONSORSHIP:

This program is sponsored by the Medical College of Wisconsin.

## TUITION:

The tuition fee of \$650 includes the course syllabus, handouts, breaks, breakfasts, lunches, and other amenities involved in making this a pleasant learning experience. Maximum enrollments have been established. Cancellations prior to the course will be refunded, less a \$30 administrative fee.

## CREDIT:

The Medical College of Wisconsin is accredited by the Accreditation Council for Continuing Medical Education to sponsor continuing medical education for physicians.

Accordingly, the Medical College of Wisconsin designates this continuing medical education activity as meeting the criteria for 13.00 hours in Category I toward the Physician's Recognition Award of the American Medical Association.

Nuclear Medicine Technologists who attend the SPECT Brain Imaging Clinical Fellowship are eligible for 1.0 VOICE credit.

Register me for the following dates: (Please indicate a second choice)

- March 8-9, 1993  
 September 13-14, 1993  October 18-19, 1993  
I will need hotel reservations for \_\_\_\_\_ Sunday and Monday night/  
\_\_\_\_\_ only Monday night.  
I will need a \_\_\_\_\_ single/ \_\_\_\_\_ double room.

A check in the amount of \$650 should accompany this registration form and be made payable to the Medical College of Wisconsin. Telephone registrations must be confirmed by check within 10 days.

Name \_\_\_\_\_

Address \_\_\_\_\_

City/State/Zip \_\_\_\_\_

Office Phone (\_\_\_\_) \_\_\_\_\_

\_\_\_\_\_ work address \_\_\_\_\_ home address

Registrations and payment should be sent to:

LisaAnn Trembath  
SPECT Brain Imaging Fellowship Coordinator  
Nuclear Medicine Division  
Medical College of Wisconsin  
8700 W. Wisconsin Avenue  
Milwaukee, WI 53226 (414) 257-7867

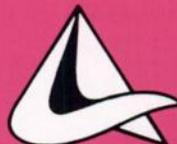
# LESS THAN YOU THINK.

For less than you think, you can own a late model high quality remanufactured gamma camera.

In ten years of operation **ENCORE MEDICAL SYSTEMS** has perfected its own process for remanufacturing SPECT and planar gamma cameras. Each step of **ENCORE'S QUALITY PROCESS** has been carefully studied and applied to provide a device that meets or exceeds original specifications. This coupled with our warranty and support have made **ENCORE** the world's largest remanufacturer of gamma cameras.

**ENCORE** provides models of G.E., Siemens and ADAC planar and SPECT gamma cameras at very competitive prices. A variety of credit options make buying easy.

**WHEN YOU THINK REMANUFACTURED  
NUCLEAR MEDICINE SYSTEMS,  
THINK ENCORE.**



**ENCORE**  
M E D I C A L  
S Y S T E M S

**ENCORE  
MEDICAL  
SYSTEMS**

702 S. VERMONT ST.  
PALATINE, IL 60067  
PHONE: 708/359-4400  
FAX: 708/359-6519

**HERE IS YOUR DEAL!**

**NUTRONICS IMAGING INC.  
The**

**Security Of Protecting Your Investment.**

Nutronics Imaging is the Engineering company behind the product. We are specialists in equipping Nuclear Medicine Facilities and buying used equipment.

Nutronics is your source for:

**\* UPGRADES**

- . Replacement of crystals.
- . Add computerized technology to your system.
- . Upgrade your camera performance by using the Engineering touch.

**\* RENOVATED GAMMA CAMERAS**

- . Cardiac small FOV.
- . Stand alone LFOV.
- . Spect Cameras.
- . Excellent Mobile Cameras.

**\* We support:** Siemens , General Electric , Picker , Elscint, ADAC and Matrix Imagers.

**...AND THE BEST PART IS THE PRICE !!!**

P.O Box 425 , Old Bethpage, NY 11804  
(516)753-3001 FAX: (516)753-3002

We buy,sell,trade and lease at a competitive price.

**\* COLLIMATORS-Used & New**

- . Pinhole,Slant holes.
- . Low,Medium & High Energy.
- . Repair & Recore.
- . Exchange.

**\* MULTI-IMAGERS (Formatter)**

**\* COMPUTERS**

- . Large variety of computers to fit your needs.

**\* SERVICE CONTRACT**

**We Sell** *Refurbished*  
**"ADAC"**

*Customer Satisfaction is Our #1 Priority*

- . GENESYS Spect Camera
- . ARC 3000 Spect Camera
- . Rebuilt ARC Heads
- . PEGASYS Computer
- . DPS-3300 Computer
- . DPS-3300 Micro Computer
- . In business over 6 years

NATIONWIDE SERVICE  
ADAC, SIEMENS

JD TECHNICAL SERVICES

CALL "THE GOOD GUYS"  
JERRY AND DAVE

"We Do What's Right for You!"

1-800-345-9920



No need to call anywhere else ... We've got the best prices!

**EUROPEAN ASSOCIATION OF  
NUCLEAR MEDICINE  
CONGRESS 1993**

Congress President: Prof B. Delaloye  
LAUSANNE, Switzerland  
at Palais de Beaulieu  
10-14 OCTOBER 1993

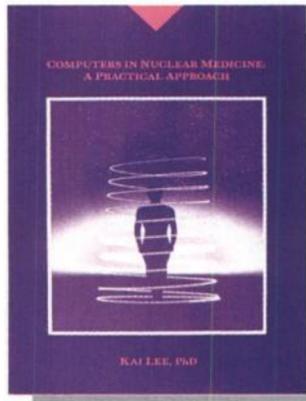
Information: Prof. B. Delaloye  
Division Autonome de Médecine Nucléaire  
Centre Hospitalier Universitaire Vaudois  
CH-1011 LAUSANNE  
phone : 41-21-314 42 47 • fax: 41-21-314 42 49

**Deadline for submission of  
abstracts:  
April 20, 1993**

*Forms available from the above  
address*

## New and Recent Books from The Society of Nuclear Medicine

Make sure the information you need is close at hand. Recently published books from The Society of Nuclear Medicine provide authoritative, up-to-date discussion of key subjects. Adding to your professional library has never been easier. Simply call the toll-free number below for fast, efficient service. **Recent and forthcoming titles include:**

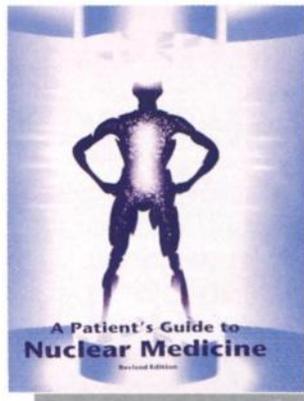


**Kai Lee, PhD**  
Softcover, 290 pp.  
**\$30** members  
**\$45** nonmembers. 1992

### Computers in Nuclear Medicine: A Practical Approach

This illustrated guide explains both how computers work and how processing techniques obtain diagnostic information from radionuclide images. Coverage includes

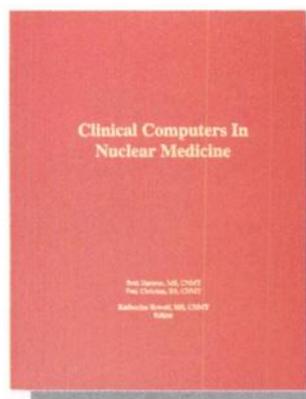
- Hardware components in nuclear medicine computer systems. Principles behind common image processing techniques.
- How nuclear cardiology and SPECT highlight the interaction of hardware and software in nuclear medicine.



Patient Pamphlet, 17 pp.  
Members and nonmembers,  
**\$0.40** (100 copies, minimum order). 1992

### A Patient's Guide to Nuclear Medicine, Revised Edition

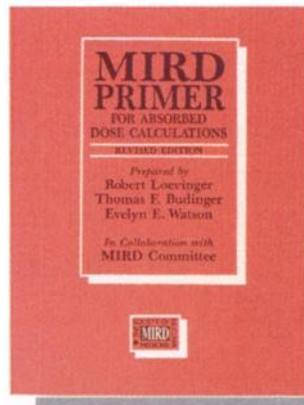
This popular pamphlet explains nuclear medicine procedures in clear, concise language, helping to allay patient anxieties. Format includes common questions and answers; step-by-step descriptions of procedures; and photographs showing patients undergoing imaging. An update of the highly successful patient pamphlet in use since 1983.



**Katherine L. Rowell, MS, CNMT, Editor**  
Hardcover, 86 pp.  
**\$35** members  
**\$50** nonmembers. 1992

### Clinical Computers in Nuclear Medicine

A companion text to *Computers in Nuclear Medicine*, this survey traces the evolution of nuclear medicine computer technology. Featured chapters describe how nuclear medicine study protocols have been radically altered through the use of computers; the revolutionary impact of computers on quality assurance; and the development of software and hardware for the gamma camera. An essential guide for staff operating computers in clinical settings.



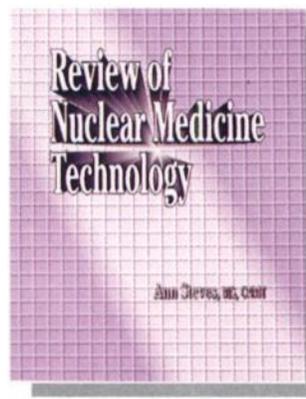
### MIRD Primer for Absorbed Dose Calculations Revised Edition

Prepared by **Robert Loveinger, Thomas F. Budinger, and Evelyn E. Watson**

Hardcover, 128 pp.

**\$35** members  
**\$50** nonmembers. 1991

A newly revised edition of the widely requested Primer.



**Ann M. Steves, MS, CNMT**  
Softcover, 176 pp.  
**\$30** members  
**\$45** nonmembers. 1992

### Review of Nuclear Medicine Technology

Both an overview of the latest techniques in nuclear medicine technology as well as an authoritative study guide, this practical handbook is a valuable addition to the libraries of students and specialists alike. Informative appendices cover

- Preparation for certification exams.
- Test-taking techniques.
- Sample questions and answers
- Pertinent NRC regulations.

### Now Available

Curriculum Guide for Nuclear Medicine Technologists, 2nd Edition

Wanda M. Mundy, EdD, CNMT

**\$15.95** Member • **\$19.95** Nonmember

An invaluable tool for educators and program administrators, this new edition of the *Curriculum Guide* also serves continuing education aims for those already working in the field.

Thoroughly revised in response to the latest advances in nuclear medicine technology. Five units reflect the structure of the NMTCB exam and the curricula of hospital-based certificate programs.

**TO ORDER, CALL TOLL-FREE,  
BOOKMASTERS, INC.**

**1-800-247-6553**

(Outside the U.S. 419-281-1802)

# ADAC

ADAC LABORATORIES

## Clinical Development Grants in Nuclear Medicine

ADAC LABORATORIES has announced support of development grants to advance CLINICAL nuclear medicine. Several grants from \$5,000 to \$50,000 will be awarded. Funds can be used for equipment and personnel support for 12 month projects.

Preference will be given to CLINICAL nuclear medicine applications that include the development of new procedures improving medical care.

The applications will be reviewed by an independent review committee of nuclear medicine professionals.

For application forms and information please write to

**Advanced Clinical Research Program  
ADAC LABORATORIES  
540 Alder Drive  
Milpitas, CA 95035**

Application Deadline: March 15, 1993

Funding Announcements: June 7, 1993  
(Society of Nuclear Medicine Meeting)

Funding Availability: July 1, 1993

**Leadership • Technology  
BETTER HEALTH CARE**

# Did You Receive

the  
**Registration**

**AND**

**Housing Forms**  
in the Preview Mailing

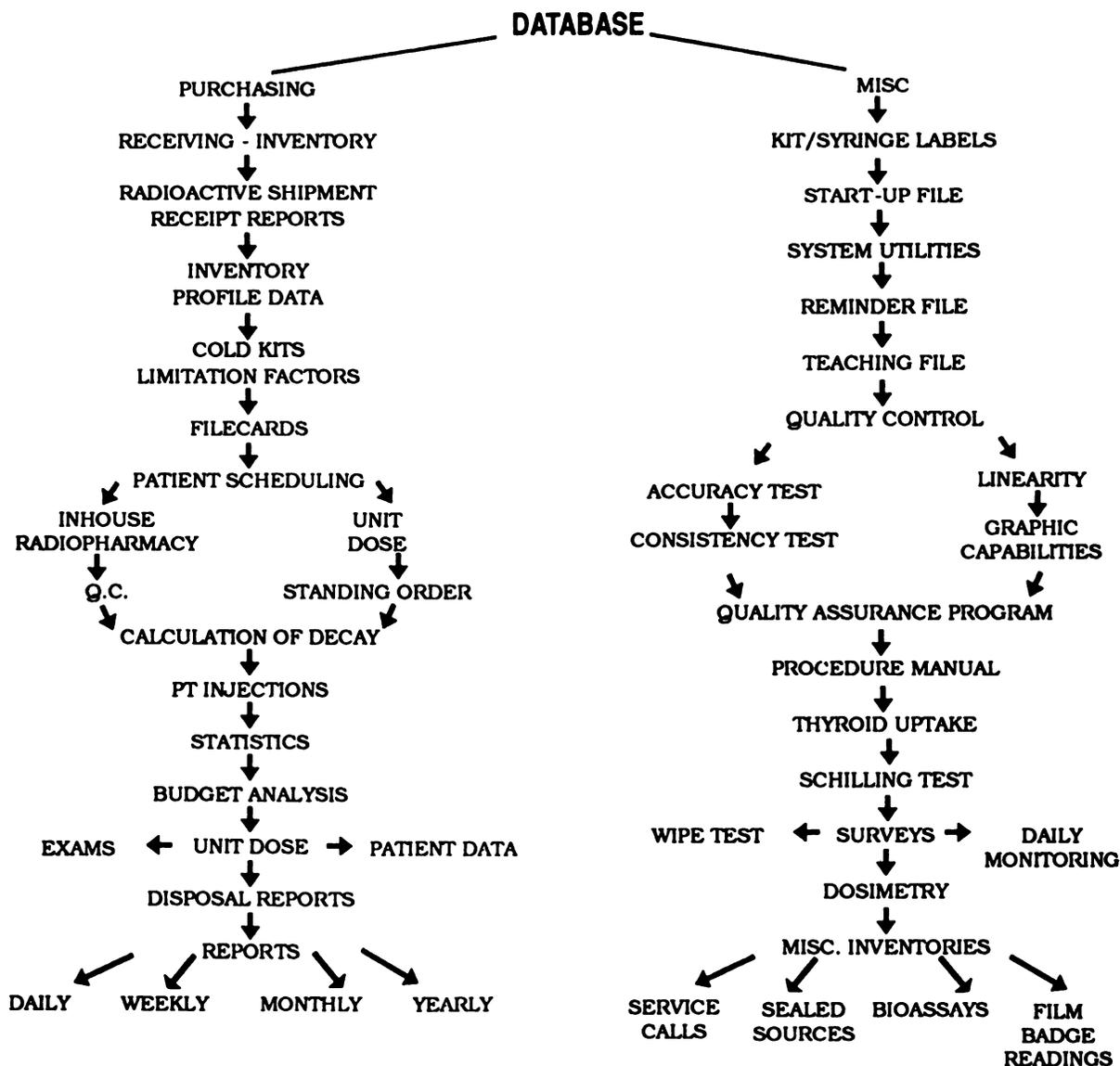
If you have missed any of these forms,  
or require additional information,  
please contact us  
at the phone number, fax number  
and/or address given below.

Call or write

**The Society of Nuclear Medicine  
Meeting Services Dept.  
136 Madison Avenue  
New York, NY 10016  
(212) 889-0717  
Fax: (212) 545-0221**

# IT'S TIME TO TAKE THE NEXT STEP ...

## NUCLEAR MEDICINE INFORMATION SYSTEMS © (Software Package)



This Program and a Personal Computer is the answer to meeting your management needs  
... and much more.

**NUCLEAR MEDICINE CONSULTING FIRM**  
P.O BOX 824, GREENVILLE, PA 16125

PHONE: 800/682-2226 FAX: 412/932-3176

*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 or by The Society of Nuclear Medicine.*

### Disposable DPTA System



Biodex Medical Systems is offering the Venti-Scan II, a disposable radioaerosol administration system designed for patient comfort and operator convenience. This allows for ventilation studies to be performed leisurely or even in another room. By using a standard intravenous support scan or the new Table Top Stand, the loaded Venti-Scan II shielded canister slides along the IV pole to a comfortable patient level and locks into position. The system provides direct aerosol delivery with resistance-free breathing. Exhaled radioaerosol is trapped by the bacteria filter in the lead shielded canister to provide safe administration with minimal exposure to the technologist. The system is completely disposable and is set aside for a 3-day decay period prior to disposal in the department's radioactive waste container. **Biodex Medical Systems, Inc., P.O. Box 702, Shirley, New York 11967-0917. (516) 924-9000 ext. 230. Fax: (516) 924-9241.**

### Portable Portal Monitor

Victoreen, Inc. introduces its PORTARAD, Model 190PR Portable Portal Monitor. This new monitor is designed to indicate radioactivity passing near the detector assembly. Although it is rugged in its design, it is also portable and lightweight. Its small size and flexible detector assembly provide for easy mounting into standard door frames. The Model 190PR features all

of the internal and user programmable features of the Model 190 plus the capability to be powered from AC with a 9 volt DC power converter. Audio and visual alarms can be set at any level via the Model 190-1A communicator. The detector assembly is contained within a flexible plastic sheath which may be attached to door frames and other surfaces with ordinary Velcro™. **Victoreen, Inc., 6000 Cochran Road, Cleveland, OH 44139-3395.**

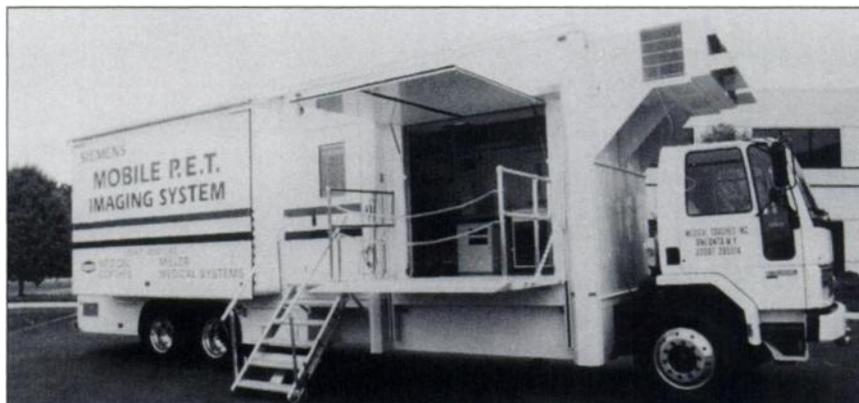
### Bone Densitometer

The Lunar Corporation announces the unveiling of its new forearm bone densitometer, the DPX-F. The DPX-F is a compact densitometer for estimation of bone mineral density in the distal forearm. Software upgrades for AP spine, lateral spine, femur, orthopedics, pediatrics and small animal studies are available as options to increase the range of applications. The DPX-F now makes forearm scanning even simpler. Sophisticated analysis algorithms yield precise, accurate and sensitive forearm results

with minimal operator input. Measurements in normal subjects are performed with a precision error of approximately 1% on the distal radius and radius shaft. DPX-F software automatically locates regions at four forearm sites: ultradistal, 33% shaft, 10% shaft and 5 mm separation. Scans are performed with radiation dose of less than 0.3 mrem. **LUNAR Corporation, 313 West Beltline Highway, Madison, WI Wisconsin 53713. (608)274-2663. FAX: (608) 274-5374.**

### Wheaton Plastic Containers

Wheaton introduces its new line of plastic bottles and closures to protect and maintain the purity of products during shipping and storing. These bottles feature a unique double seal that has been leak tested under stringent vacuum and pressure conditions and proven to remain tight over extended periods of time. Another special feature, No-Drip Pour Lip, facilitates safe dispensing and keeps the product from running down the outside of the container. The wide mouth design is available in natural, white and amber high density polyethylene, natural low density polyethylene and natural polypropylene ranging from 30 ml to 500 ml. The narrow mouth design is also available in these colors and constructions but comes in sizes ranging from 4 ml to 1000 ml. **The Wheaton Agency, 1301 North 10th Street, Millville, NJ 08332. (609) 825-1100. Fax: (609) 825-9035.**



### Mobile PET System

Siemens Medical Systems, Inc. has developed the world's first mobile positron emission tomography (PET) imaging system designed to specifically meet the application needs of mobile imaging. The mobile system will help move PET technology from research labs to community hospitals by allowing several hospitals to share one system which can be driven from location to

location as needed. The system features a Siemens ECAT™ EXACT PET scanner with display workstation. The complete mobile imaging center is about the size of a standard moving van. The mobile PET scanner was developed by Siemens Medical Systems, Inc. and Miller Medical and Medical Coaches. **Siemens Medical Systems, Inc. 186 Wood Avenue South, Iselin, NJ. (201) 321-4500.**

**Policy**—The Journal of Nuclear Medicine accepts classified advertisements from medical institutions, groups, suppliers, and qualified specialists in nuclear medicine. Acceptance is limited to Positions Open, Positions Wanted, and Equipment. We reserve the right to decline, withdraw, or modify advertisements.

**Rates for Classified Listings**—\$21.00 per line or fraction of line (approx. 50 characters per line, including spaces). Please allow 28 characters for the first line which will appear in capital letters. Special rates for SNM members on Positions Wanted. \$10.00 per line. *Note: Box numbers are available for the cost of the 2 lines required.*

**Rates for Display Ads**—Agency commissions are offered on display ads only

Full page	\$1500	Quarter page	\$650
Half Page	900	Eighth page	500

**Publisher-Set Charges**—Page \$100; half page \$75; quarter page \$40; eighth page \$25.

**Terms**—Payment must accompany order. Make checks payable, in U.S. dollars on U.S. banks only, to: The Society of Nuclear Medicine.

**Deadline**—First of the month preceding the publication date (January 1 for February issue). Please submit classified listings typed double spaced. No telephone orders are accepted.

**Send Copy to:**

Classified Advertising Department  
The Society of Nuclear Medicine  
136 Madison Avenue  
New York, NY 10016-6760  
(212) 889-0717  
FAX: (212) 545-0221

## Positions Available

**Radiopharmacist**

Carolinas Medical Center, a 777-bed acute care facility, is currently seeking a radiopharmacist for combined responsibilities in our Nuclear Pharmacy and PET Radiochemistry lab. Working with other lab/pharmacy personnel, we offer the unique opportunity to work and maintain skills in both areas. Experience with radiopharmacy practice to include distribution required. Experience with PET pharmaceutical production beneficial but not essential. Candidates must hold a BS in pharmacy, hold authorized user status for radioactive materials and meet requirements for the NC Board of Pharmacy license. Reply: Pam Buennemeyer, Allied Health Recruiter, Carolinas Medical Center, Post Office Box 32861, Charlotte, NC 28232, (704) 355-2101 or (800) 942-6898. EOE.

**Biomedical Physicist/Engineer**

**BIOMEDICAL PHYSICIST/ENGINEER.** The Department of Radiology and Radiological Sciences of Vanderbilt University Medical Center is seeking applications for a PET physicist/engineer. Qualifications should include Board certification or Board eligibility and a PhD in physics, medical physics, engineering or related fields. Previous PET and/or nuclear medicine experience with strong computer skills is preferred. Duties will include but are not limited to direction and support of PET quality assurance, physics and computer support of clinical PET, applications programming, participation in the Department's Nuclear Medicine Technology program, education of staff/residents, and research in PET, nuclear medicine and correlative modalities. The position is available immediately. Faculty rank and salary will be based on previous experience. Qualified individuals should direct a letter stating the applicant's suitability for the position and a current curriculum vitae to: Ronald R. Price, PhD, Department of Radiology and Radiological Sciences, Vanderbilt University Medical Center, 21st Avenue South, Nashville, TN 37232-2675. Vanderbilt University is an Equal Opportunity/Affirmative Action Employer

**Fellowship**

**FELLOWSHIP IN BRAIN SPECT IMAGING.** The Department of Radiology at the Brigham and Women's Hospital/Harvard Medical School, has an opening for one year fellowship, and an optional second year, in brain SPECT imaging. The department has a high-resolution SPECT system dedicated to brain imaging, four rotating-head gamma cameras capable of SPECT imaging and workstations for MRI/CT/SPECT super imposition. The department does approximately 1000 brain SPECT examinations per year, including perfusion, tumor seeking, and blood pool studies. Ongoing research areas include dementia, substance abuse, tumor detection and therapy, and cerebrovascular disease. Please send curriculum vitae to: B. Leonard Holman, MD, Chairman, Department of Radiology, Brigham and Women's Hospital, 75 Francis Street, Boston, MA 02115. Brigham and Women's Hospital/Harvard Medical School is an affirmative action/equal opportunity educator and employer.

**Fellowship & Residency**

**NUCLEAR MEDICINE FELLOWSHIP (1) and ACGME approved RESIDENCY (1) positions** are available at the University of Missouri-Columbia beginning July 1, 1993. The program provides comprehensive training and experience in state-of-the-art imaging and is particularly strong in nuclear cardiology and oncologic applications. Please contact Amolak Singh, MD, director of Nuclear Medicine, University of Missouri Hospital and Clinics, One Hospital Drive, DCO69.00, Columbia, MO 65212. Phone (314) 882-7955. UMC is an affirmative action/equal opportunity employer.

**Residency**

**NUCLEAR MEDICINE RESIDENCY.** The Mount Sinai Medical Center offers a two-year residency position, available July 1993. Training is supervised by four full-time physicians, a PhD Chemist and a PhD Physicist. Active department offers intensive training in all fields of nuclear medicine. New SPECT equipment and a PET camera to arrive shortly. Please contact: Josef Machac, MD, Division of Nuclear Medicine, Box 1141, The Mount Sinai Medical Center, One Gustave L. Levy Place, New York, NY 10029-6574. Or call (212) 241-7888. An Equal Opportunity Employer.

**Faculty**

Case Western Reserve University and University Hospitals of Cleveland are seeking a Board certified or Board eligible nuclear physician with special interest in nuclear cardiology for a full time **FACULTY POSITION.** This position involves responsibilities in patient care and resident teaching as well as research. Facilities include a PET Facility with cyclotron, a three-headed SPECT scanner, and a state-of-the-art medical image

processing facility. Applicants should send a letter of applications along with a curriculum vitae to Floro Miraldi, MD, ScD, Vice Chairman, Department of Radiology, University Hospitals of Cleveland, 2074 Abington Road, Cleveland, Ohio 44106. University Hospitals of Cleveland and Case Western Reserve University are equal opportunity employers.

**Technologist**

**NUCLEAR MEDICINE TECHNOLOGIST.** UT Bowld Hospital is recruiting for a Staff Exempt Nuclear Medicine Technologist. Must be a graduate of a CAHEA (Committee on Allied health Education and Accreditation) approved Nuclear Medicine Technology program. Must be registered by NMTCB or ARRT or registry eligible. Excellent benefits package. Apply for position #747. UT-Memphis, 178 Walnut, Memphis, TN 38163. Applications accepted Mon.-Fri., 8am-3pm. The University of Tennessee is an EEG/AA/Title IX/Section 504/ADA employer.

Full-time position available in busy Cardiology practice in Waukesha, Wisconsin. Flexible hours; no weekends; no on-call. Must have Cardiology experience and be certified. Please reply with resume and references to: Office Manager, Waukesha Heart Institute, 1111 Delafield St., Suite 215, Waukesha, WI 53188.

**NUCLEAR MEDICINE TECHNOLOGIST positions** available nationwide. Confidential searches. All fees employer-paid. Dunhill of Bel Air, P.O. Box 267, Bel Air, MD 21014; (800) 753-6693; Fax: (410) 836-0953; EOE.

## Equipment for Sale

One current model GE Starcam 4000XRT. Extra large field of view rectangular head cameras with integrated computer systems. Detector heads 2 1/2 years old, 486 based computer and chassis, 1 year old collimators, software included. Each system listed for \$380,000 when new. Equipment maintained under GE service contract. Meets new equipment specifications. Price \$200,000.00 call (615) 495-8689 for details.

## Positions Wanted

ABNM certified MD, trained from highly prestigious medical school. Experience includes thyroid, cardiology, SPECT. Some background in medicine and radiology. Write Box 201, The Society of Nuclear Medicine, 136 Madison Avenue, New York, NY 10016-6760.

# MORE BENEFITS

Did you know StarMed Staffing offers more benefits? The Golden Wings benefits program offers travelers the most comprehensive pay, bonus and insurance package in the industry. Plus, paid travel, furnished housing, career support, a choice of hospitals throughout the U.S., and flexible assignment lengths from as little as two weeks to 13 weeks. If you're qualified in diagnostic imaging, clinical labs, respiratory therapy, or surgical technology, call StarMed today for your travel



**STAR-MED**  
STAFFING

Toll-free 1-800-STARMED (782-7633)



# WHEN YOU WANT TO CONSULT WITH THE EXPERTS, JUST WALK DOWN THE HALL.

At Burroughs Wellcome Co., we are proud of the talented and dedicated individuals who have made us what we are today—one of the leading research-based pharmaceutical firms in the world. Amazing things happen in an environment of mutual respect and support. Come work with our experts; join us at Burroughs Wellcome Co.

## Research Scientist III/IV

This individual will radiolabel monoclonal antibodies for cancer radioimmunotherapy. Position will be filled at the Research Scientist III or Research Scientist IV level. The level of responsibility to be assigned will depend on the individual applicant's background and experience level.

**Research Scientist III:** Candidates must have a BS in Biology or Chemistry or a related discipline or a four-year college curriculum with a major concentration in Biology/Chemistry or a related discipline PLUS seven years of experience in nuclear pharmacy/radioimmunotherapy OR a Pharmacy degree PLUS seven years of experience in nuclear pharmacy/radioimmunotherapy OR a Master's degree in a related discipline PLUS five years of experience in nuclear pharmacy/radioimmunotherapy OR a Ph.D. in nuclear pharmacy, biochemistry or a related discipline PLUS two years of experience in nuclear pharmacy/radioimmunotherapy. Candidates selected for interview will take an on-site writing assessment.

**Research Scientist IV:** Candidates must have a BS in Biology or Chemistry or a related discipline or a four-year college curriculum with a major concentration in Biology/Chemistry or a related discipline PLUS nine years of experience in nuclear pharmacy/radioimmunotherapy OR a Pharmacy degree PLUS nine years of experience in nuclear pharmacy/radioimmunotherapy OR a Master's degree in a related discipline PLUS seven years of experience in nuclear pharmacy/radioimmunotherapy OR a Ph.D. in nuclear pharmacy, biochemistry or a related discipline PLUS four years of experience in nuclear pharmacy/radioimmunotherapy.

At Burroughs Wellcome Co., you will enjoy a compensation and benefits package that is among the best in the pharmaceutical industry, along with the advantages of being part of an innovative pharmaceutical leader. Please send your resume, indicating POS. #64382-29 in your cover letter, by **March 1, 1993**, to: **Burroughs Wellcome Co., Recruiting and Staffing, 3030 Cornwallis Road, Research Triangle Park, NC 27709.**

For information on other job opportunities with Burroughs Wellcome Co., call our Job Information Line at **(919) 248-8347.**



Wellcome

BURROUGHS WELLCOME CO.

An Equal Opportunity Employer.

# • Transmission Imaging Educational Series



Educational challenges designed to enhance reporting uniformity through interlaboratory comparison and increase knowledge of stroke/dementia neuroanatomy and pulmonary embolism are available through the 1993 Transmission Imaging Simulator Series, a joint effort of the Society of Nuclear Medicine, the American College of Nuclear Physicians, and the College of American Pathologists.



## • Lung Ventilation/Perfusion Study - Survey IM-A

You will receive a transmission device with two changeable inserts simulating a Ventilation/Perfusion (V/Q) Scintigraphic Study, and will identify and locate perfusion and ventilation defects to characterize as V/Q matches, mismatches, and reverse mismatches. After submitting responses you will receive a summary of imaging techniques and interpretive criteria used by peers in the scintigraphic assessment of pulmonary embolism.

## • Coronal Brain Planar Study - Survey IM-B

The transmission device includes two changeable inserts simulating two coronal SPECT brain scan images to be scanned in the planar mode. After submitting responses you will receive a summary of SPECT brain imaging techniques and interpretive criteria used by peers in the emission tomographic assessment of some brain abnormalities.



## • To Participate

Orders must be received at the College of American Pathologists by March 24 for Survey IM-A and by August 18 for IM-B. The price of each Survey is \$354. For more information call the CAP at 800-323-4040, option 3.

*Subscribe by March 24*

## ST. LUKE'S - ROOSEVELT

A University Hospital of Columbia University  
College of Physicians & Surgeons

St. Luke's-Roosevelt Hospital Center is one of NY's most comprehensive teaching facilities, an affiliate of Columbia University, and a pacesetter in community care services. We are currently seeking the following to join the growing Nuclear Medicine division at our 1315-bed facility:

### **ASSISTANT IMAGING SUPERVISOR NUCLEAR CARDIOLOGY**

The selected candidate will supervise both technical and administrative functions of the Laboratory and coordinate daily operations of the Nuclear Cardiology section of the Department. We require at least 2 years Cardiac SPECT experience, a Bachelor's or Associates degree, 1-2 years supervisory experience, and ARRT/CNMT certification.

### **NUCLEAR MEDICINE TECHNOLOGIST**

Will have primary responsibilities in the Nuclear Cardiology Lab and some in general Nuclear Medicine. Candidates must be certified (NMTCB or ARRT) with at least 2 years Nuclear Cardiology and SPECT experience.

We offer highly competitive compensation, full benefits, and rewarding opportunities in brand new, fully state-of-the-art facilities on NY's dynamic Upper West Side. For immediate consideration, please send resume indicating position of interest to: Marylee Davis, Human Resources Department, St. Luke's-Roosevelt Hospital Center, 1111 Amsterdam Avenue, New York, NY 10025. An Equal Opportunity Employer M/F/D/V.

## **MAKE A DIFFERENCE!**

Syncor International is offering you the opportunity to make an impact as a member of our team of

### **TECHNICAL SPECIALISTS, CLINICAL**

We are interviewing motivated Board Certified Nuclear Medicine Technologists, looking to take that next career step, for positions in the Western, Northeast, Mid-Atlantic, Southeast, and Ohio Valley sections of the U.S. Travel (in excess of 50%) will be necessary to provide support to our customers in using new products, developing new procedures, enhancing schedules, implementing quality improvement programs and providing continuing education.

With three to five years experience and strong cardiology background, you will apply your expertise and excellent interpersonal, communication, and analytical skills while working for a leader in the radiopharmaceutical field. Department management/teaching experience is beneficial.

Don't hesitate! Make that move! Send your resume with salary history to Syncor International, Human Resources DHT, 20001 Prairie Street, Chatsworth, CA 91311.



*The Service Difference*

EOE M/F/D/V

# Diagnostic Imaging

## STAFFING SPECIALISTS

Specializing in Diagnostic Imaging  
and Nuclear Medicine Personnel

- Temporary Staffing Service
- Nationwide Recruitment Service

- ✓ highly qualified, experienced technologists on a PRN basis
- ✓ recruiting services for permanent positions at a fraction of your recruiting costs
- ✓ assistance in eliminating revenue loss due to staffing shortages

For information  
regarding the services call  
**813-461-9642**

**RADS**™  
RADIOGRAPHY SERVICE, INC.

## We Bring It All Together To Celebrate Life

Compassion. Innovation. And a wonderful, seaside location. New Hanover Regional Medical Center brings together all the best advantages in a healthcare career. Our 628-bed regional referral and teaching center offers an outstanding array of specialties and clinical challenges, in an environment that's strong on human-to-human caring. Come to a medical center that brings it all together. Currently, an opportunity exists for:

■ **NUCLEAR MEDICINE TECHNOLOGIST** – Previous nuclear cardiology experience required. Day shift plus call.  
\*Sign-on Bonuses and New Clinical Career Ladder

Our salaries and benefits are highly competitive, and our living environment places you minutes from some of the most beautiful beaches on the East Coast. To learn more, call or send your resume to: **Employment Manager, New Hanover Regional Medical Center, 2131 S. 17th Street, Wilmington, NC 28402. 1-800-822-6470 or (919) 343-7049.** An Equal Opportunity Employer.



CELEBRATING LIFE

Nuclear Medicine Service  
Memorial Sloan-Kettering Cancer Center  
New York, NY  
is pleased to announce

## FELLOWSHIPS

in  
Positron Emission Tomography

available 1 July 1993 in our expanded clinical and research programs in PET Imaging and cyclotron-radiochemistry laboratory operation.

Area	Minimum Requirements
Imaging, clinical and investigative	MD, completed nuclear medicine residency
Image reconstruction, quantitative analysis	PhD
Pharmacokinetics	PhD
Radiochemistry, radiopharmacy	PhD

### Faculty:

Steven M. Larson, MD (Chief),  
Stanley J. Goldsmith, MD (Clinical Director),  
Samuel Yeh, MD,  
Chaitan Divgi, PhD,  
Ronald Finn, PhD (Director, Radiochemistry),  
Gene DeResta, PhD (Technical Director),  
Ronald Blasberg, MD,  
Martin Graham, PhD,  
Farhad Daghighian, PhD,  
Keith Pentlow, MS,  
George Sgouros, PhD,  
John Kalagian, MS

*Send curriculum vitae,  
statement defining goals, interests, skills and  
letters of recommendation to:*

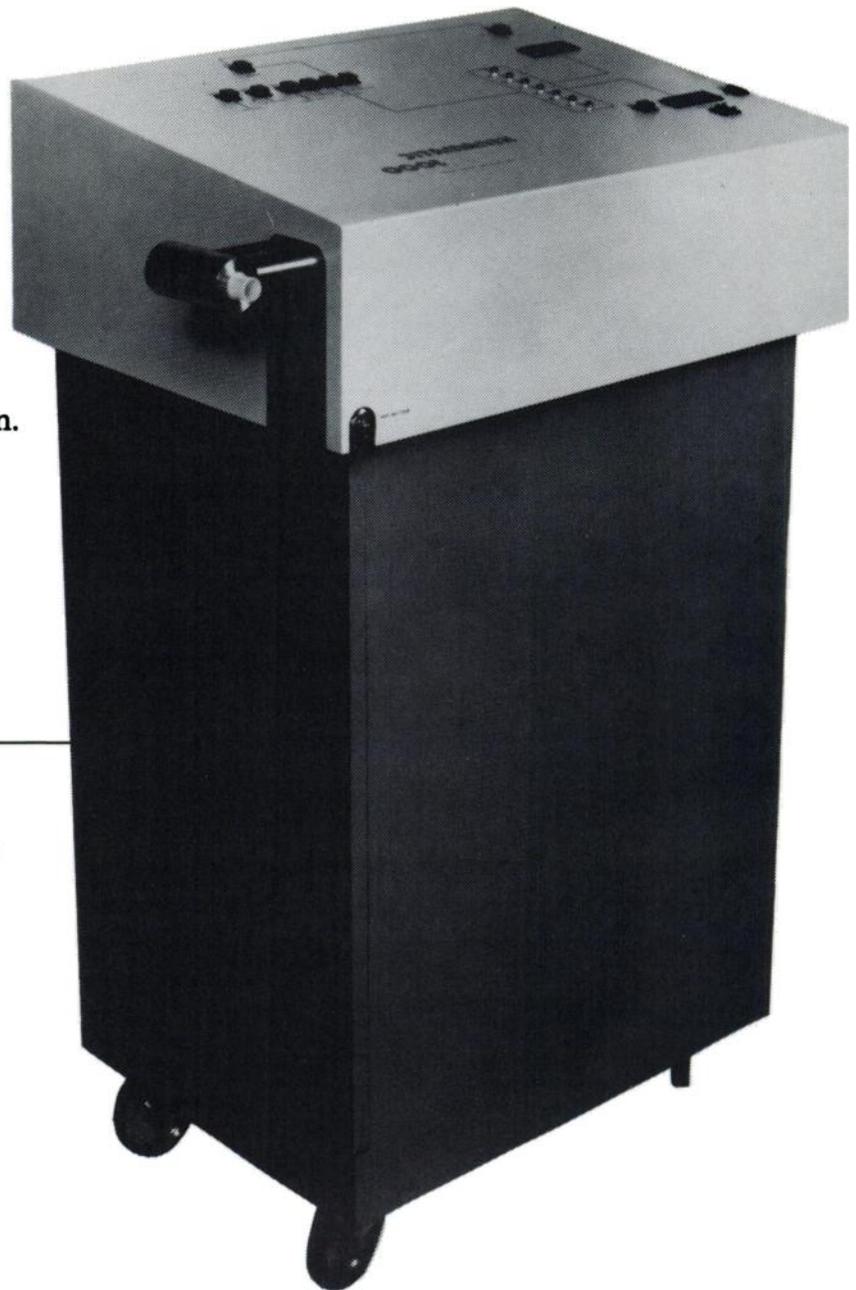
Steven M. Larson, MD,  
Nuclear Medicine Service,  
Memorial Sloan-Kettering Cancer Center,  
1275 York Avenue,  
New York, NY 10029

# IN A FOG??

*using aerosols to determine the patency of the pulmonary airway system? Use a gas (that's what the airway system is for), and Xenon (127 or 133) are gases which are safe, economical and easy to administer with the XENAMATIC™ 3000.*

---

- Shielded for Xe 127 and Xe 133 (radiation profile available on request).
- World's only system that allows you to study patients on Ventilators.
- Largest and most efficient Xenon trap with a built-in monitor alarm system.
- Built-in O<sub>2</sub> monitor with digital display and control.
- A rebreathing system that saves Xenon.
- Low breathing resistance so you can study sick patients.
- Semi-automatic operation.
- Remote Control Capability.



---

Get out of the FOG-making business, and call today for more information on putting gases where gases belong, with the XENAMATIC.

Also available, Model 2000.

*For more information, please call or write,*

**DIVERSIFIED DIAGNOSTIC PRODUCTS, INC.**  
11603 Windfern  
Houston, TX 77064  
713-955-5323

**Continuing Medical Education Primary Focus  
of The Society of Nuclear Medicine's  
40th Annual Meeting  
June 8-11, 1993  
Toronto, Ontario, Canada**

**The 40th Annual Meeting of The Society of Nuclear Medicine will be held in Toronto, Ontario, Canada on Tuesday, June 8 through Friday, June 11, 1993. The Toronto Convention Centre is the site of most of the educational activities for this meeting.**

**CONTINUING EDUCATION ACTIVITIES**

A primary focus for every SNM Annual Meeting is the Continuing Education activities that are offered for physicians, scientists, pharmacists, and technologists.

This year we are pleased to offer 12 categorical seminars and 45 continuing education courses. There will also be a Nuclear Medicine Review Course which is geared for the nuclear medicine resident preparing for the ABNM boards and others who wish to refresh their knowledge for practice in nuclear medicine.

All of the categorical seminars will take place on Monday, June 7 from 8:30 a.m. - 2:30 p.m. All other continuing education sessions will occur over the dates of the meeting.

Once again, continuing medical education credits will be offered along with VOICE credits for technologist programs. The Scientific and Teaching Sessions Committee invites all physicians to participate.

*The Society of Nuclear Medicine is accredited by the Accreditation Council for Continuing Medical Education (ACCME) to sponsor continuing medical education for physicians.*

*The Society of Nuclear Medicine is approved by the American Council on Pharmaceutical Education as a provider of continuing pharmaceutical education.*

*Technologist Section courses are approved for continuing education credit by the Technologist Section of The Society of Nuclear Medicine under the criteria and guidelines established by the Council on the Continuing Education Unit.*

*For further information contact:*

**The Society of Nuclear Medicine  
Department of Meeting Services  
136 Madison Avenue  
New York, New York 10016-6760  
(212) 889-0717  
Fax: (212) 545-0221**

**TECHNICAL EXHIBITS**

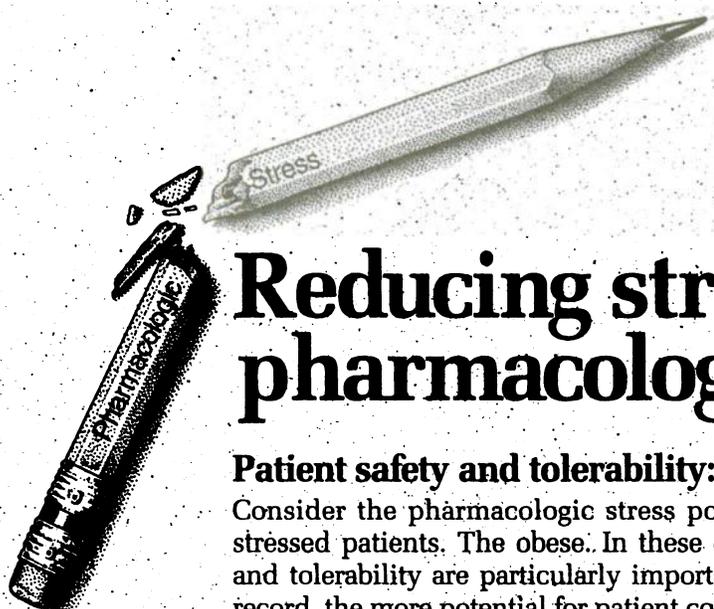
Another important component of the meeting is the technical exhibition, where the most advanced products and services for the nuclear medicine practitioner will be displayed. Attendees will have the opportunity to speak with technical experts and to see demonstrations of new equipment in an atmosphere free from the pressures of their busy practices.

Suppliers to the nuclear medicine community traditionally take advantage of the Society's Annual Meeting to showcase the innovations developed over the past year and to introduce new products. They make their greatest effort to impress and influence their most important customers—our attendees.

This year will be no different: several long-time exhibitors have increased their space, and we anticipate an even larger show, with more exhibitors than 1992's record-breaking meeting.

**SPECT BRAIN IMAGING PRACTICA**

Once again, the Brain Imaging Council will be offering a hands-on brain SPECT workshop for physicians desiring to optimize their practice and interpretative skills in this area. These workshops will be offered three times each day on Wednesday and Thursday, June 9-10, 1993, 8:30 a.m. - 10:00 a.m., 1:00 p.m. - 2:30 p.m. and 3:30 p.m. - 5:00 p.m. This workshop will have a maximum of 50 registrants for each session, so early sign-up is strongly suggested. Registration materials for this SPECT workshop were included in the preview mailing in January.



# Reducing stress in pharmacologic stress testing

## Patient safety and tolerability: the stress factors

Consider the pharmacologic stress population. Old patients. Frail patients. Submaximally stressed patients. The obese. In these often vulnerable or compromised patient types, safety and tolerability are particularly important. The more certain an agent's safety and tolerability record, the more potential for patient comfort and physician confidence. Use of a pharmacologic stress agent with a proven record can help reduce physician anxiety...or emotional "stress."

## A safety record that spans more than a decade

I.V. Persantine® (dipyridamole USP) has a safety profile established in over a decade of clinical testing.<sup>1,2</sup> Just as in exercise stress testing, there is always some risk of serious adverse events.<sup>3</sup> However, based on information from over 400,000 patient studies, I.V. Persantine is generally well tolerated.<sup>2†</sup> Such an established record in pharmacologic stress creates a standard by which to compare other agents.

## Generally well-tolerated stress begins with smooth, gradual onset of effect

Pharmacologic stress with I.V. Persantine takes effect with a 4-minute infusion, followed within 5 minutes with the appropriate thallium dose. This allows most patients to become accustomed to the "stressing" process gradually. Additionally, the time is short enough to allow an expedient, relatively uncomplicated imaging procedure.

## Convenient, easy-to-follow protocol minimizes procedural frustrations

The procedural logistics of pharmacologic stress can be another source of emotional stress to the physician or staff. With I.V. Persantine, there's a flexible, easy-to-follow protocol. No infusion pump needed. No need for site-specific injection. And no extra I.V. line for the imaging agent.

## When you stress more assured, you can rest more assured

Based on its proven safety profile and generally well-tolerated effect, I.V. Persantine sets a solid foundation to help reduce the emotional stress that can sometimes be associated with administering pharmacologic stress.

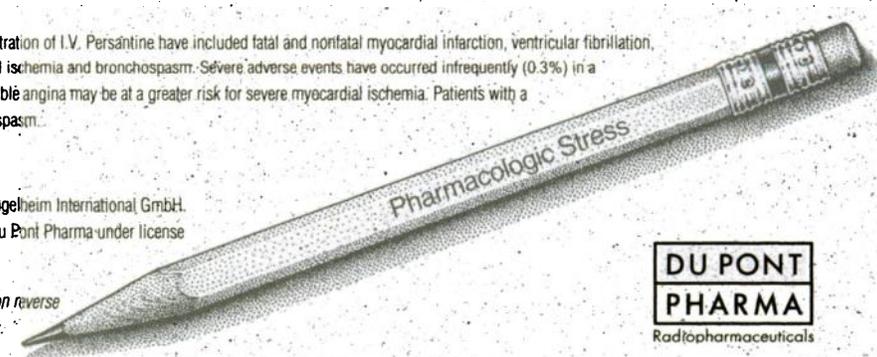
*Stress the facts in pharmacologic stress...call the Du Pont Pharma Nuclear Cardiology Hotline at 1-800-343-7851 for further information and discussion about the proven safety profile of I.V. Persantine.*

\* Serious adverse reactions associated with the administration of I.V. Persantine have included fatal and nonfatal myocardial infarction, ventricular fibrillation, symptomatic ventricular tachycardia, transient cerebral ischemia and bronchospasm. Severe adverse events have occurred infrequently (0.3%) in a study of 3911 patients. Patients with a history of unstable angina may be at a greater risk for severe myocardial ischemia. Patients with a history of asthma may be at a greater risk for bronchospasm.

† Du Pont Merck Post-Marketing Safety Surveillance.

Persantine® is a registered trademark of Boehringer Ingelheim International GmbH. I.V. Persantine® is manufactured and distributed by Du Pont Pharma under license from Boehringer Ingelheim Pharmaceuticals, Inc.

Please see brief summary of prescribing information on reverse for contraindications, warnings, and adverse reactions.



# I.V. PERSANTINE®

(dipyridamole USP) Injection 5mg/ml

References: 1. Ranhosky A, Kempthorne-Rawson, J., et al. *Circulation*, 1990;81:1205-1209. 2. Data on file, Boehringer Ingelheim Pharmaceuticals, Inc., Ridgefield, Conn.

## I.V. PERSANTINE®

(dipyridamole USP) Injection 5mg/ml

### Brief Summary of Prescribing Information

#### CONTRAINDICATIONS

Hypersensitivity to dipyridamole.

**WARNINGS** Serious adverse reactions associated with the administration of intravenous Persantine® (dipyridamole USP) have included fatal and non-fatal myocardial infarction, ventricular fibrillation, symptomatic ventricular tachycardia, transient cerebral ischemia, and bronchospasm.

In a study of 3911 patients given intravenous Persantine as an adjunct to thallium myocardial perfusion imaging, two types of serious adverse events were reported: 1) four cases of myocardial infarction (0.1%), two fatal (0.05%); and two non-fatal (0.05%); and 2) six cases of severe bronchospasm (0.2%). Although the incidence of these serious adverse events was small (0.3%, 10 of 3911), the potential clinical information to be gained through use of intravenous Persantine thallium imaging must be weighed against the risk to the patient. Patients with a history of unstable angina may be at a greater risk for severe myocardial ischemia. Patients with a history of asthma may be at a greater risk for bronchospasm during IV Persantine use.

When thallium myocardial perfusion imaging is performed with intravenous Persantine, parenteral aminophylline should be readily available for relieving adverse events such as bronchospasm or chest pain. Vital signs should be monitored during, and for 10-15 minutes following, the intravenous infusion of Persantine and an electrocardiographic tracing should be obtained using at least one chest lead. Should severe chest pain or bronchospasm occur, parenteral aminophylline may be administered by slow intravenous injection (50-100 mg over 30-60 seconds) in doses ranging from 50 to 250 mg. In the case of severe hypotension, the patient should be placed in a supine position with the head tilted down if necessary, before administration of parenteral aminophylline. If 250 mg of aminophylline does not relieve chest pain symptoms within a few minutes, sublingual nitroglycerin may be administered. If chest pain continues despite use of aminophylline and nitroglycerin, the possibility of myocardial infarction should be considered. If the clinical condition of a patient with an adverse event permits a one minute delay in the administration of parenteral aminophylline, thallium-201 may be injected and allowed to circulate for one minute before the injection of aminophylline. This will allow initial thallium perfusion imaging to be performed before reversal of the pharmacologic effects of Persantine on the coronary circulation.

#### PRECAUTIONS

See WARNINGS.

**Drug Interactions** Oral maintenance theophylline may abolish the coronary vasodilatation induced by intravenous Persantine® (dipyridamole USP) administration. This could lead to a false negative thallium imaging result.

**Carcinogenesis, Mutagenesis, Impairment of Fertility** In studies in which dipyridamole was administered in the feed at doses of up to 75 mg/kg/day (9.4 times\* the maximum recommended daily human oral dose) in mice (up to 128 weeks in males and up to 142 weeks in females) and rats (up to 111 weeks in males and females), there was no evidence of drug related carcinogenesis. Mutagenicity tests of dipyridamole with bacterial and mammalian cell systems were negative. There was no evidence of impaired fertility when dipyridamole was administered to male and female rats at oral doses up to 500 mg/kg/day (63 times\* the maximum recommended daily human oral dose). A significant reduction in number of corpora lutea with consequent reduction in implantations and live fetuses was, however, observed at 1250 mg/kg/day.

\*Calculation based on assumed body weight of 50 kg.

**Pregnancy Category B** Reproduction studies performed in mice and rats at daily oral doses of up to 125 mg/kg (15.6 times\* the maximum recommended daily human oral dose) and in rabbits at daily oral doses of up to 20 mg/kg (2.5 times\* the maximum recommended daily human oral dose) have revealed no evidence of impaired embryonic development due to dipyridamole. There are, however, no adequate and well controlled studies in pregnant women. Because animal reproduction studies are not always predictive of human responses, this drug should be used during pregnancy only if clearly needed.

\*Calculation based on assumed body weight of 50 kg.

**Nursing Mothers** Dipyridamole is excreted in human milk.

**Pediatric Use** Safety and effectiveness in children have not been established.

**ADVERSE REACTIONS** Adverse reaction information concerning intravenous Persantine® (dipyridamole USP) is derived from a study of 3911 patients in which intravenous Persantine was used as an adjunct to thallium myocardial perfusion imaging and from spontaneous reports of adverse reactions and the published literature.

Serious adverse events (fatal and non-fatal myocardial infarction, severe ventricular arrhythmias, and serious CNS abnormalities) are described previously (see WARNINGS).

In the study of 3911 patients, the most frequent adverse reactions were: chest pain/angina pectoris (19.7%), electrocardiographic changes (most commonly ST-T changes) (15.9%), headache (12.2%), and dizziness (11.8%).

Adverse reactions occurring in greater than 1% of the patients in the study are shown in the following table:

	Incidence (%) of Drug-Related Adverse Events
Chest Pain/Angina Pectoris	19.7
Headache	12.2
Dizziness	11.8
Electrocardiographic Abnormalities/ST-T changes	7.5
Electrocardiographic Abnormalities/Extrasystoles	5.2
Hypotension	4.6
Nausea	4.6
Flushing	3.4
Electrocardiographic Abnormalities/Tachycardia	3.2
Dyspnea	2.6
Pain Unspecified	2.6
Blood Pressure Lability	1.6
Hypertension	1.5
Paresthesia	1.3
Fatigue	1.2

Less common adverse reactions occurring in 1% or less of the patients within the study included:

**Cardiovascular System:** Electrocardiographic abnormalities unspecified (0.8%), arrhythmia unspecified (0.6%), palpitation (0.3%), ventricular tachycardia (0.2% see WARNINGS), bradycardia (0.2%), myocardial infarction (0.1% see WARNINGS), AV block (0.1%), syncope (0.1%), orthostatic hypotension (0.1%), atrial fibrillation (0.1%), supraventricular tachycardia (0.1%), ventricular arrhythmia unspecified (0.03% see WARNINGS), heart block unspecified (0.03%), cardiomyopathy (0.03%), edema (0.03%).

**Central and Peripheral Nervous System:** Hypothesis (0.5%), hypertonia (0.3%), nervousness/anxiety (0.2%), tremor (0.1%), abnormal coordination (0.03%), somnolence (0.03%), dysphonia (0.03%), migraine (0.03%), vertigo (0.03%).

**Gastrointestinal System:** Dyspepsia (1.0%), dry mouth (0.8%), abdominal pain (0.7%), flatulence (0.6%), vomiting (0.4%), eructation (0.1%), dysphagia (0.03%), tenesmus (0.03%), appetite increased (0.03%).

**Respiratory System:** Pharyngitis (0.3%), bronchospasm (0.2% see WARNINGS), hyperventilation (0.1%), rhinitis (0.1%), coughing (0.03%), pleural pain (0.03%).

**Other:** Myalgia (0.9%), back pain (0.6%), injection site reaction unspecified (0.4%), diaphoresis (0.4%), asthenia (0.3%), malaise (0.3%), arthralgia (0.3%), injection site pain (0.1%), rigor (0.1%), earache (0.1%), tinnitus (0.1%), vision abnormalities unspecified (0.1%), dysgeusia (0.1%), thirst (0.03%), depersonalization (0.03%), eye pain (0.03%), renal pain (0.03%), perineal pain (0.03%), breast pain (0.03%), intermittent claudication (0.03%), leg cramping (0.03%).

**OVERDOSAGE** No cases of overdosage in humans have been reported. It is unlikely that overdosage will occur because of the nature of use (i.e. single intravenous administration in controlled settings). See WARNINGS.

**Caution** Federal law prohibits dispensing without prescription.



**Boehringer  
Ingelheim**

Manufactured by Du Pont  
Pharmaceuticals  
Du Pont Merck Pharma  
Manati, Puerto Rico 00701

Licensed by  
Boehringer Ingelheim  
Pharmaceuticals, Inc.  
Ridgefield, CT 06877

Distributed by  
Du Pont Radiopharmaceutical Division  
The Du Pont Merck Pharmaceutical Co.  
Billerica, MA 01862

Under license from  
Boehringer Ingelheim  
International GmbH

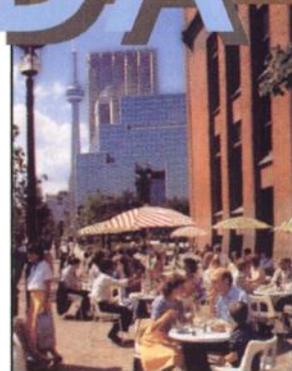


COME JOIN US IN

CANADA



Join more than 7500 of your colleagues in celebrating the 40th Annual Meeting of the Society of Nuclear Medicine at the World's Newest Great City, Toronto, Canada, June 8-11, 1993. Participate in the intensive educational program, review posters, discuss the most recent developments with colleagues, and join any of a host of much talked about extracurricular activities. Don't miss this opportunity to learn, mingle with your colleagues, and visit with the exhibitors.



Refresher and state-of-the-art continuing education courses in chemistry, physics, quality assurance, cardiovascular nuclear medicine, PET, SPECT and NMR will supply up-to-the-minute approaches and procedures for all clinical settings.

### SCIENTIFIC PAPERS

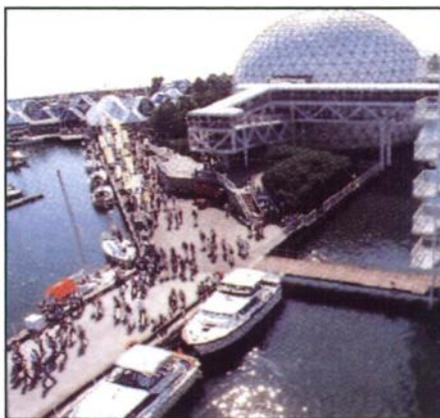
This year's presentation of over 900 scientific papers and posters includes a distillation of the latest advancements and finest work achieved by outstanding scientists and physicians in the field of nuclear medicine. These papers, presented by the original authors, with over 30 subjects to choose from, will provide a unique opportunity for enhancing your knowledge or exploring new avenues in correlative areas of nuclear medicine. Ample time is allotted at these presentations for questions and discussions.

An extensive display of scientific posters and exhibits will augment the presentation.

### TECHNOLOGIST PROGRAM

The ever-increasing importance of the role of the nuclear medicine technologist will be explored in our Technologist Program, and over 70 hours of clinical updates will provide chief and staff technologists with the latest in ba-

sic, intermediate, and advanced studies. This program will broaden expertise and enhance the technologist's contribution to nuclear medicine.



### AUDIOVISUAL, BOOKS, JOURNALS

The Society of Nuclear Medicine is continually adding to its library of audiovisuals, books, and other publications. A stop at the publications booth is well worth the time. Here you will find on display what the Society has to offer for year-round educational advancement.

Networking opportunities and job referral boards are available at special locations throughout the meeting as

well as membership information at our membership booth.

### EXPOSITION

All the major manufacturers of nuclear medicine products and services—more than 100 in all—will be on hand to explain and demonstrate the most technologically advanced equipment. Several companies will present User Meetings to give an in-depth understanding of their products.

### REGISTRATION

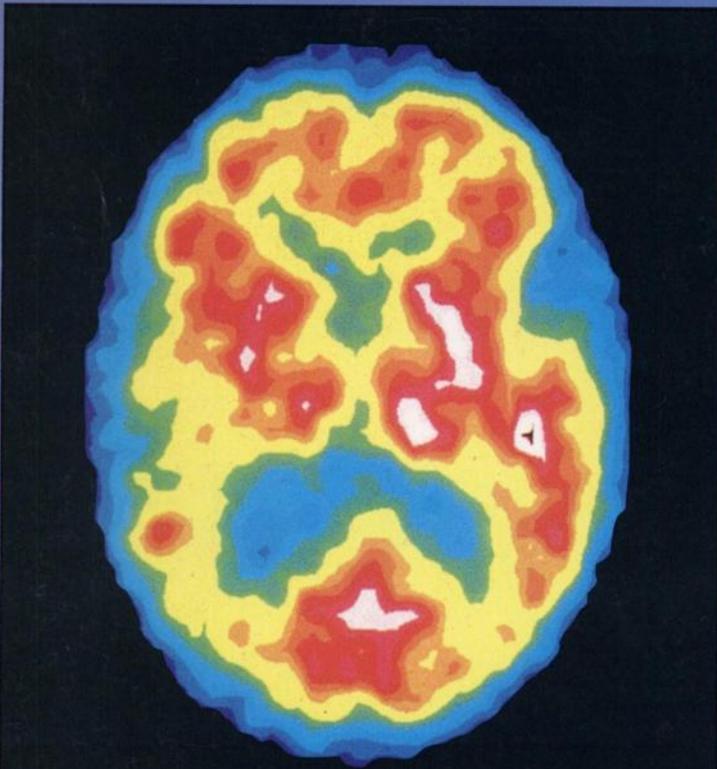
	On/ Before May 7	On/ After May 7
<b>Physicians/Scientists</b>		
Members	\$160.00	\$180.00
Non members	\$255.00	\$275.00
<b>Technologists</b>		
Members	\$130.00	\$150.00
Non members	\$255.00	\$275.00

*If you need further information, please contact:*

**The Society of Nuclear Medicine**  
Department of Meeting Services  
136 Madison Avenue  
New York, N.Y. 10016-6760  
**(212) 889-0717**  
**Fax: (212)545-0221**



# TOMOMATIC - dedicated brain SPECT manufactured by MEDIMATIC



Corticobasal degeneration with left alien hand syndrome. Note right sided reduced flow in basal ganglia, thalamus, and parietal lobe.  
From Drs R. Nyberg-Hansen & K. Rootwelt, Univ. of Oslo, Norway.

- \* Ability to visualize even a thought
- \* Dynamic repetitive four-min. quantitative flow recordings
- \* Ultra high sensitivity, allowing collimation to an accuracy of five mm

**TOMOMATIC - extremely competitive when compared to any other SPECT device in terms of price per unit of sensitivity. Call us for a quotation!**

Selection of 3 different models from the more than 40 current Tomomatic installations:



Tomomatic 564  
Dynamic SPECT



Tomomatic 232  
Mobile dynamic SPECT



Tomomatic 248  
Neonatal SPECT

**medimatic**

**Copenhagen:**  
Medimatic A/S  
Gersonsvej 7  
DK-2900 Hellerup, Copenhagen  
Phone: 31 61 06 22  
Fax: 31 61 07 49

**Paris:**  
Medimatic S.A.R.L.  
16, rue la Bruyère  
75009 Paris  
Phone: 44 53 04 00  
Fax: 44 53 03 80

**New York:**  
Medimatic Div. of M.I.D, Inc.  
952 Second Avenue  
New York, N.Y. 10022  
Phone: (212) 688-5620  
Fax: (212) 688-5703