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The anatomy of the CAPTUS™ 2000 begins with a powerful brain

High-resolution 800x600 SVGA graphics enhance displays of all programs, especially the full spectrum visible during all counting procedures.

Menu-driven applications programs perform Thyroid Uptake, Wipe Testing, Bio Assay, Blood Volume (1125 or Cr51), RBC Survival and Schilling Test (standard and Dicopac).

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Speed and accuracy in radioisotope quality assurance, quality control, wipe tests, purity measurements and clinical uses is accomplished with the built-in well detector system. FDA clearance has been received for clinical use.

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The power of the latest 486 processor technology is the heart of the new CAPTUS 2000 Thyroid Uptake System. Capintec has matched a high level MCA board and latest windows-based software with easy to use applications programs.

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Combining a Macintosh® computer with 486 power, and a Multi-Channel Analyzer, the NEW ATOMLAB™ 950 THYROID UPTAKE SYSTEM from Biodex is both powerful and easy to use. The system features:

- Thyroid Uptake Studies
- Thyroid Bioassay
- Wipe Tests
- Schilling Tests
- RBC Survival
- Blood Volume

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Biodex Medical Systems, Inc. • Brookhaven R & D Plaza • 20 Ramsay Road • Box 702 • Shirley, New York • 11967-3702 • 516-924-9000 • Fax 516-924-9241

Circle Reader Service No. 12
CARDIOLITE fills in information gaps to provide you with a complete clinical picture. For identifying and localizing ischemia and infarction, CARDIOLITE provides you with much more. Through expanded uses, CARDIOLITE is the only single agent to provide perfusion and function information with gated wall motion or first pass. CARDIOLITE fills in scheduling gaps, too. By uncoupling the time of injection from the time of imaging, patients can be stressed one after another, then imaged at any time... up to 4 hours after injection, eliminating camera downtime.

Get superior information and throughput. Fill in the gaps with CARDIOLITE.

Cardiolite
Kit for the preparation of Technetium Tc99m Sestamibi

Fills in the gaps...with clarity that lasts

Please see next page for brief summary of prescribing information.
DESCRIPTION: Each 5ml vial contains a sterile, non-pyrogenic, lyophilized mixture of:
Tetraakis (2-methoxy isobutyl) isocyanide (Copper I) tetrachloroaurate - 1.0mg
Sodium Selenocyanate - 2.6mg
L-Cysteine Hydrochloride Monohydrate - 1.1mg
Mannitol - 20mg
Stannous Chloride, Dihydrate, minimum (SnCl2+2H2O) - 0.025mg
Stannous Chloride, Dihydrate, (SnCl2+2H2O) - 0.075mg
Tin Chloride (Stannous and Stannic) Dihydrate, maximum (as SnCl2+2H2O) - 0.086mg
Polyethylene glycol is contain in the pH is 5.5-6.0. 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, oxoid-free Sodium Perchlorate 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)3+, where MIBI is 2-methoxy isobutyl isocyanide.

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 areas, 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 monitor and treat any arrhythmia or other abnormalities in the cardiovascular system and to provide the patient with appropriate reassurance and supportive measures.

The most frequent exercise stress test endpoints, which resulted in the 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%
- Palpitations 1%

Carcinogenesis, Mutagenesis, Impairment of Fertility

In comparison with most other diagnostic technetium labeled radiopharmaceuticals, the radiation dose to the ovaries (1.15rad/30mCi at rest, 1.2 rad/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)]BF4, was evaluated for genotoxic potential in a battery of five tests. No genotoxic activity was observed in the Ames, CHO/HGPRT and mouse chromosomal exchange tests (all negative). In chromosome aberrations (2-24/23Gy), an increase in cells with chromosome abnormalities was observed in the in vivo human lymphocyte assay. [Cu(MIBI)]BF4 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 × human dose).

Pregnancy Category C

Animal reproduction and teratogenicity studies have not been conducted with Technetium Tc99m Sestamibi. It is 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.

Technetium Tc99m Perchotenate 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 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 severe occurring shortly after administration of the agent: transient arthritis in the wrist joint; and severe hypertension, which was characterized by hypoaesthesia, hypotension, bradycardia, asthma and vomiting within two hours after a second injection of Technetium Tc99m Sestamibi.

DOSAGE AND ADMINISTRATION: The dose suggested range for IV. administration in a single dose to be given in properly prepared 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 ischemia, 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. Radioactivity should be checked after all 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

<table>
<thead>
<tr>
<th>Organ</th>
<th>2.0 hour void</th>
<th>4.8 hour void</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>rad/mC/mGy</td>
<td>mGy/1110MBq</td>
</tr>
<tr>
<td></td>
<td>30mCi</td>
<td>1110MBq</td>
</tr>
<tr>
<td></td>
<td>rad/mC/mGy</td>
<td>mGy/1110MBq</td>
</tr>
<tr>
<td></td>
<td>30mCi</td>
<td>1110MBq</td>
</tr>
<tr>
<td>Breasts</td>
<td>0.2</td>
<td>2.0</td>
</tr>
<tr>
<td>Glandar Wall</td>
<td>2.0</td>
<td>20.0</td>
</tr>
<tr>
<td>Small Intestine</td>
<td>3.0</td>
<td>30.0</td>
</tr>
<tr>
<td>Large Intestine</td>
<td>5.4</td>
<td>55.5</td>
</tr>
<tr>
<td>Heart Wall</td>
<td>3.9</td>
<td>40.0</td>
</tr>
<tr>
<td>Liver</td>
<td>0.6</td>
<td>6.1</td>
</tr>
<tr>
<td>Heart Wall</td>
<td>0.5</td>
<td>5.1</td>
</tr>
<tr>
<td>Kidneys</td>
<td>2.0</td>
<td>20.0</td>
</tr>
<tr>
<td>Liver</td>
<td>0.6</td>
<td>5.8</td>
</tr>
<tr>
<td>Lungs</td>
<td>0.3</td>
<td>2.8</td>
</tr>
<tr>
<td>Bone Surfaces</td>
<td>0.7</td>
<td>6.8</td>
</tr>
<tr>
<td>Thyroid</td>
<td>0.7</td>
<td>7.0</td>
</tr>
<tr>
<td>Ovaries</td>
<td>1.5</td>
<td>15.5</td>
</tr>
<tr>
<td>Testes</td>
<td>0.3</td>
<td>3.4</td>
</tr>
<tr>
<td>Red Marrow</td>
<td>0.5</td>
<td>5.1</td>
</tr>
<tr>
<td>Urinary Bladder Wall</td>
<td>2.0</td>
<td>20.0</td>
</tr>
<tr>
<td>Total Body</td>
<td>0.5</td>
<td>4.8</td>
</tr>
</tbody>
</table>

Radiator pharmacologic Internal Dose Information Center, July 1990, Oak Ridge Associated Universities, P.O. Box 117, Oak Ridge, TN 37831, (1) 457-3400.

HOW SUPPLIED: Du Pont Radiopharmaceuticals’s CARDIOLITE®, Kit for the Preparation of Technetium Tc99m Sestamibi, is supplied as a lyophilized kit 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 is lyophilized and stored under nitrogen. Store at 15-25°C before and after reconstitution.

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 35.206 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 DuPont Radiopharmaceuticals Division
The DuPont Merck Pharmaceutical Co.
331 Treble Cove Road
Billerica, Massachusetts, USA 01826
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NEW
Breakthrough in cancer detection...

ONCOSCIENT® CR/OV
Satumomab Pendetide (1mg/2mL)

A new diagnostic tool that can assist decision making in patients with colorectal or recurrent ovarian adenocarcinoma

Please see last page for brief summary of prescribing information.
NEW

OncoScint® CR/OV
Satumomab Pendetide (1mg/2mL)

To enhance decision making in the management of patients

The first monoclonal antibody-based in determining both the location and

Reveals malignancy with tumor-targeted accuracy—specifically targets the cell-surface antigen, TAG-72, common to colorectal and ovarian adenocarcinomas,\(^1,2\) making it possible—with the use of existing nuclear medicine equipment—to detect extrahepatic abdominal and pelvic lesions.\(^3,4\)

Provides information beyond the scope of standard diagnostic modalities—when interpreted in conjunction with a review of information obtained from other appropriate tests

Found to be beneficial in these difficult situations:

- determining the source of a rising serum tumor marker in patients with an otherwise-negative workup\(^2,4,5\)

- determining extrahepatic abdominal and pelvic involvement in patients thought to have isolated and resectable recurrence\(^2,4\)

- differentiating disease from postsurgical or postradiation anatomic changes\(^4\)

**OncoScint** is a registered trademark of CYTOGEN Corporation.

Please see last page for brief summary of prescribing information.
with colorectal or recurrent ovarian cancer... 
imaging agent effective extent of disease

Assists decision making in patient management\textsuperscript{2-5}—enhanced medical/surgical management in difficult colorectal\textsuperscript{3,4} and recurrent ovarian cases.\textsuperscript{2,5}

Excellent safety profile*—with generally minor and transient side effects occurring in less than 4% of patients studied (most frequently reported: fever, chills and clinically insignificant changes in blood pressure).\textsuperscript{2}

*See Adverse Reactions section of brief summary on following page.

For further information, please call 1-800-833-3533.

\textbf{OncoScint\textsuperscript{®} CR/OV} 
Satumomab Pendetide (1mg/2mL) 
Tumor-targeted cancer detection
OncoScint® CR/OV Kit (saturnomab pendetide)

Kit for the Preparation of indium In 111 saturnomab pendetide

For Intravenous Use Only

Brief summary of prescribing information

INDICATIONS AND USAGE
OncoScint® CR/OV (indium In 111 saturnomab pendetide) is a diagnostic imaging agent that is indicated for determining the extent and location of extrahepatic malignant disease in patients with known colorectal or ovarian cancer. Clinical studies suggest that this agent may be used after completion of standard diagnostic tests when additional information regarding disease extent could aid in patient management. The diagnostic images acquired with OncoScint® CR/OV-In should be interpreted in conjunction with a review of other appropriate tests.

OncoScint® CR/OV-In is not indicated as a screening test for ovarian or colorectal cancer.

Administration of OncoScint® CR/OV-In may result in falsely elevated values from in vitro immunoadsorbents, including tests for carcinoembryonic antigen (CEA) and CA 125. Because this interference may persist for months, the clinical laboratory should investigate for assay interference in patients who develop elevated CEA or CA 125 subsequent to imaging with OncoScint® CR/OV-In (see Drug/Laboratory Test Interactions). Due to insufficient safety and efficacy data regarding repeat administration of this product, this imaging agent is limited to single use only.

CONTRAINDICATIONS
OncoScint® CR/OV-In (indium In 111 saturnomab pendetide) should not be used in patients who are hypersensitive to this or any other product of murine origin or to indium In 111 chloride.

WARNINGS
Allergic reactions, including anaphylaxis, can occur in patients who receive murine antibodies. Although serious reactions of this type have not been observed in clinical trials after OncoScint® CR/OV-In (indium In 111 saturnomab pendetide) administration, medications for the treatment of hypersensitivity reactions should be available during administration of this agent.

PRECAUTIONS
General: The components of the kit are sterile and pyrogen free and contain no preservative. OncoScint® CR/OV-In (indium In 111 saturnomab pendetide) should be used within 8 hours of radiolabeling; it is essential to follow the directions for preparation carefully and to adhere to strict aseptic procedures during preparation of the radiolabeled product.

Each OncoScint® CR/OV kit is a unit of use package. The contents of the kit are to be used only to prepare OncoScint® CR/OV-In, unlabeled OncoScint® CR/OV should NOT be administered directly to the patient. After radiolabeling with indium-111, the entire OncoScint® CR/OV-In dose must be administered to the patient for whom it was prescribed. Reducing the dose of either component may adversely impact imaging results, and, therefore, is not recommended.

The contents of the kit are not radioactive. However, after the indium In 111 chloride is added, appropriate shielding of OncoScint® CR/OV-In must be maintained. Care should be taken in the administration exposure to patients and medical personnel, consistent with proper hospital and patient management procedures.

In addition, radiopharmaceuticals should be used only by physicians and other professionals who are qualified by training and experience in the safe use and handling of radionuclides.

Information for Patients
Murine monoclonal antibodies are foreign proteins, and their administration can induce human anti-murine antibodies (HAMA). While limited data exist concerning the clinical significance of HAMA, the presence of HAMA may interfere with murine-antibody based immunoadsorbents, could compromise the efficacy of diagnostic or therapeutic murine antibody-based agents, and may increase the risk of adverse reactions. For these reasons, patients should be informed that the use of this product could affect the future use of other murine-based products, including OncoScint® CR/OV-In, and should be advised to discuss prior use of murine-antibody based products with their physicians (see Heterologous Protein Administration).

Heterologous Protein Administration
Murine monoclonal antibodies (MAbs) are heterologous proteins, and their administration can induce human anti-murine antibodies (HAMA). OncoScint® CR/OV-In has been shown to induce HAMA to murine IgG after single administration in about 40% of patients in tumor imaging trials. HAMA levels became negative (undetectable or < 400 ng/mL) in approximately half of such patients at 4 to 12 months after radiolabeling.

While limited data exist concerning the clinical significance of HAMA, detectable HAMA levels can alter the clearance and tissue biodistribution of MAbs. In patients who develop persistent elevated serum HAMA levels, the efficacy of diagnostic or therapeutic murine antibody-based agents may be compromised.

When considering the administration of OncoScint® CR/OV-In to patients who have previously received murine antibody-based products, physicians should be aware of the potential for HAMA to alter clearance and biodistribution. The quality of serum results obtained with the imaging study may be compromised. Therefore, prior to administration of murine antibodies, including OncoScint® CR/OV-In, the physician should review the patient history to determine whether the patient has previously received such products.

Preliminary data are available from repeat-administration studies of OncoScint® CR/OV-In in 69 patients who have received 105 repeat doses. However, there are insufficient data to determine the safety and efficacy of this product after repeat administration (see ADVERSE REACTIONS).

Drug/Laboratory Test Interactions: The presence of HAMA in serum may interfere with two-site murine antibody-based immunoadsorbents, including assays for carcinoembryonic antigen (CEA) and CA 125. When present, this interference generally results in falsely high values. If HAMA is known or suspected to be present, the clinical laboratory should be notified and appropriate measures taken to avoid such interference. These methods include the use of non-murine immunoadsorbents, or HAMA removal by adsorption, blocking, or heat inactivation.

Carcinogenesis, Mutagenesis, Impairment of Fertility
Long-term animal studies have not been performed to evaluate the carcinogenic or mutagenic potential of OncoScint® CR/OV-In or to evaluate its effect on fertility in males or females. Preliminary data in female animal reproduction studies have not been conducted with OncoScint® CR/OV-In. It is also not known whether OncoScint® CR/OV-In can cause fetal harm when administered to a pregnant woman or can affect reproduction capacity. OncoScint® CR/OV-In should not be administered to a pregnant woman unless, in the opinion of the physician, the information to be gained outweighs the potential risks. MAb B72.3 has been shown to react with fetal gastrointestinal tissues. In general, examinations using radiopharmaceuticals in women of childbearing potential should be performed during the first few days (approximately 10) following the onset of menses.

Nursing Mothers and/or Lactating Women
It is not known whether OncoScint® CR/OV-In is excreted in human milk and, if so, for how long. Because many drugs are excreted in human milk, caution should be exercised when OncoScint® CR/OV-In is administered to a nursing woman.

OncoScint® CR/OV-In has not been administered to lactating females and therefore should not be administered to nursing mothers unless, in the opinion of the physician, the information to be gained outweighs the potential risk. In such cases, formula feedings should be substituted for breast feedings.

Pediatric Use
The safety and effectiveness of OncoScint® CR/OV-In in children have not been established.

ADVERSE REACTIONS
After administration of over 500 single i.v. doses of OncoScint® CR/OV-In (indium In 111 saturnomab pendetide) to patients in clinical trials, adverse reactions were observed in less than 4% of patientsLeak deaths attributable to OncoScint® CR/OV-In administration were reported. The most common adverse reactions were fever, which occurred in less than 2% of patients. Other adverse reactions, each of which occurred in less than 1% of patients, were assessed in order of decreasing frequency: chills, hypotension, hypertension, rash, pruritus, sweating, nausea, arthralgia, asthma, chest pain, headache, hypothyroidism, pain, flushing, diarrhea, confusion, dizziness, nervousness, crying, and angioedema. Although causality was not determined, the occurrence of reversible thrombocytopenia was observed in a patient who received OncoScint® CR/OV-In in clinical trials.

OVERDOSAGE
The maximum amount of OncoScint® CR/OV-In (indium In 111 saturnomab pendetide) that can be safely administered has not been determined. In clinical trials, single doses of 100mg/2mL of OncoScint® CR/OV-In were administered to 64 patients with various types of epithelial cancers; the type and frequency of adverse reactions at this dose were similar to those observed with lower doses.

DOSAGE AND ADMINISTRATION
The dose of OncoScint® CR/OV-In (saturnomab pendetide) is 1 mg radiolabeled with 5 mcCi of indium In 111 chloride. Each dose is administered intravenously over 5 minutes and should not be mixed with any other medication during its administration. The patient dose of the radiolabel should be measured in a dose calibrator prior to administration. Each OncoScint® CR/OV kit is a unit dose package. After radiolabeling with indium-111, the entire OncoScint® CR/OV-In dose should be administered to the patient. Reducing the dose of either component may adversely impact imaging results, and, therefore, is not recommended.

HOW SUPPLIED
The OncoScint® CR/OV kit (NDC No. 0044-0579-01) for the preparation of indium-111 labeled OncoScint® CR/OV includes one 1mg vial containing 1 mcCi of saturnomab pendetide per 2 mL of sodium phosphate buffered saline and one 2 mL vial of sodium acetate buffer solution, 0.5 M. These solutions are sterile and pyrogen free and contain no preservative. Each kit also includes one sterile 0.22 µm Millipore® GV filter, prescribing information, and two identification labels.

U.S. Patent Nos. 6,619,958 and 4,741,900

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Revised 2/1993

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A True Digital SPECT Camera?

Some cameras digitize the combined analog signals by the Anger principle. A few even use several ADCs for X, Y, energy and ratio circuits.

A true digital SPECT camera digitizes each photomultiplier tube within the detector, but further, it digitally optimizes the performance at all energies.

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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).
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Nuclear Medicine Week—October 3 through 9—is the prime time to demonstrate pride in your profession—and to make the profession’s presence known both among the public and other health care professionals.

Under the sponsorship of the Society of Nuclear Medicine and SNM’s Technologist Section, Nuclear Medicine Week offers an excellent opportunity to educate, to stimulate, and to promote the successes of nuclear medicine. This week also gives you a specific time to spotlight your facility to referring physicians, potential patients, and to anyone else in your community who could benefit from nuclear medicine.

To help enhance the visibility of nuclear medicine facilities, Mallinckrodt Medical, in association with the Technologist Section, has designed a striking new poster to mark this year’s event. Buttons, stickers, and guidelines are also available to assist you with your celebration. We guarantee that this year’s sensational design—carried over on all three items—will draw attention and spur positive comment.

P.S. Don’t Forget Syncon’s Media Stars Contest—details in the Guidelines.
CELEBRATE NUCLEAR MEDICINE WEEK

The following materials are available for promoting Nuclear Medicine Week in your area.

Posters — $5.00 each, 4-9 posters are $4.50 each, 10 or more $4.00 each.
   I would like __________ posters $ ______
   × $ ______

Buttons — $1.00 each
   I would like to order ______ buttons $ ______

Stickers — $.25 each (same design as the button)
   I would like to receive ______ stickers.
   (Minimum order is 10 stickers) $ ______
   Total $ ______

☐ I would like to order a free set of “Guidelines for promoting Nuclear Medicine Week.”

Payment must be enclosed with your order. Payments must be made in U.S. dollars drawn on U.S. banks. No foreign funds will be accepted. Make checks payable to:

The Society of Nuclear Medicine

Orders will be sent out by 1st class mail or UPS. Orders received after September 1, 1993 will be assessed a 15% surcharge, payable before shipment, to ensure timely delivery.

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Hospital/Company__________________________________________________________

Address______________________________

City___________________________ State __________ Zip __________

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Nuclear Medicine Week
The Society of Nuclear Medicine
136 Madison Avenue
New York, NY 10016-6760
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1. Place a 5 mCi point source of Tc-99m at least 15 feet away from the collimator face and collect 1 million counts with your collimator. Defects to be noted are: Linear streaks and cold defects.

2. The next evaluation is with a line source filled with 100 uCi of Tc-99m making an image at 8, 10, and 12 inches from the collimator face. Note defects.

3. Another evaluation can be done by imaging a SPECT phantom filled with 10 mCi Tc-99m. Defects to be noted: Ring artifacts.

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CALL FOR APPLICANTS
Editor, Journal of Nuclear Medicine Technology

The Publications Committee of the Technologist Section, Society of Nuclear Medicine, is accepting applications for Editor of the Journal of Nuclear Medicine Technology.

Technologist Section members are urged to take this opportunity to influence the Journal's direction. The editorship of the Journal is a three-year appointment and involves commitment to a very demanding, but immensely rewarding, position. The current JNMT Editor is now completing a second three-year term; Technologist Section Bylaws limit the JNMT Editor to no more than two three-year terms.

Interested individuals should send an application to Jim Wirrell, Chair, TS Publications Committee. The application should consist of the following:

1. A current curriculum vitae, with emphasis on publishing experience and Technologist Section activities.
2. A description of access to office facilities and secretarial assistance.
3. A letter of support from candidate's immediate supervisor, which includes candidate's availability during working hours and access to office support, supplies, equipment, and secretarial assistance.
4. An overview of candidate's vision for the JNMT; approach to fulfilling the obligations and responsibilities of the Editor; recommendations for significant changes; and operational strategy and procedure. Please limit these comments to two pages.

Applications must be submitted by December 31, 1993. The selection of the new Editor will be made in June 1994, and the term will begin on January 1, 1995.

Send application to:

James J. Wirrell, CNMT
Allied Health Department
Methodist Hospital
1701 North Senate Blvd.
Indianapolis, IN 46202

SNM
41ST ANNUAL MEETING

Critical Dates

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DON'T FORGET THE MID-WINTER MEETING IS IN SEATTLE, WASHINGTON

TITLE: Dedicated Instruments and Computer Processing Techniques for Cardiac and Brain Imaging

DATE: February 7-8, 1994

LOCATION: Westin Hotel, Seattle, WA

SPONSOR: The Computer and Instrumentation Council
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)
☐ 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.

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Address __________________________
City/State/Zip _______________________
Office Phone (_______)
_________ work address  ___________ home address

Registrations and payment should be sent to:
LisaAnn Trombath
SPECT Brain Imaging Fellowship Coordinator
Nuclear Medicine Division
Medical College of Wisconsin
6700 W. Wisconsin Avenue
Milwaukee, WI 53226 (414) 257-7087

CALL FOR ABSTRACTS FOR SCIENTIFIC PAPERS AND SCIENTIFIC EXHIBITS
The Society of Nuclear Medicine
41st Annual Meeting
June 5- June 8, 1994
Orlando, Florida

The 1994 Scientific Program Committee, Scientific Exhibits Subcommittee and the Scientific & Teaching Sessions Committee solicits the submission of abstracts from members and nonmembers of The Society of Nuclear Medicine for the 41st Annual Meeting in Orlando, Florida. Accepted Scientific Paper and Scientific Exhibit abstracts will be published in a special supplement to the May issue of the Journal of Nuclear Medicine and accepted Technologist Section abstracts will be published in the June issue of the Journal of Nuclear Medicine Technology. Original contributions on a variety of topics related to nuclear medicine will be considered, including:
• Instrumentation and Data Analysis
• Radioassay
• Radiopharmaceutical Chemistry
• Dosimetry/Radiobiology
• Nuclear Magnetic Resonance Chemistry
• Clinical Science Applications:
  • Bone/Joint
  • Cardiovascular (clinical, basic, and PET)
  • Endocrine
  • Gastroenterology
  • Neurosciences: Basic, Neurology and Psychiatry
  • Pediatrics
  • Pulmonary
  • Renal/Electrolyte/Hypertension
  • Hematology/Infectious Disease
  • Oncology Diagnosis (antibody)
  • Oncology Diagnosis (non-antibody)
  • Oncology/Therapy

Authors seeking publication for the full text of their papers are strongly encouraged to submit their work for immediate review to JNM, and for the technologist section, to JNMT.

There are two abstract forms for the annual meeting. The Scientific Paper abstract form can be obtained in the October 1993 JNM. The Scientific Exhibits abstract form is only available by calling or writing to:
The Society of Nuclear Medicine
Attn: Abstracts
136 Madison Avenue
New York, NY 10016-6760
Tel: (212)889-0717 • FAX: (212)545-0221

DEADLINE FOR RECEIPT OF ABSTRACTS FOR SCIENTIFIC PAPERS IS WEDNESDAY, JANUARY 5, 1994.
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Computers in Nuclear Medicine: A Practical Approach
by Kai Lee, PhD

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

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Wanda M Mundy, EdD, CNMT, Gregory Passmore, MS, CNMT

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Thoroughly revised in response to the latest advances in nuclear medicine technology, this new edition of the Curriculum Guide covers all key educational program areas

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- Nonimaging Procedures
- Clinical Education

Coverage targets curricula of hospital-based certificate programs with a structure aimed at the NMTCB examination. Curriculum can be easily supplemented for associate and baccalaureate degree programs.

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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.

Multipurpose Camera

Siemens Medical has entered into the private imaging market with the introduction of its new Orbiter™ SP. Designed as a total nuclear cardiology imaging package, the Orbiter SP is affordably priced to make nuclear cardiac imaging capability more accessible to the smaller imaging center. In competition with over 3,000 camera systems, the Orbiter SP is being touted as an affordable, stand-alone, multipurpose camera/computer system to provide basic nuclear imaging capability. The system includes the Orbiter 37 ZLC®/Digitrac® gamma camera with digital operator’s terminal (DOT), choice of a high-resolution or LEAP collimator, motorized SPECT bed and pallet, a Macintosh® Centris 650 personal computer with 20” color monitor, extended keyboard and mouse, CD-ROM drive and acquisition and processing software. The Orbiter SP can perform single, sequential, time series, gated and SPECT imaging studies and can store up to 16 sets of user-defined study protocols on the system’s 230 MB hard drive. Images are stored in the Nuclear Mac™ format, as well as the standard PICT, TIFF and INTERFILE formats. Siemens Medical Systems, Inc. Nuclear Division, 2501 Barrington Rd., Hoffman Estates, IL 60195-7372. (708) 304-7256.

Remote-Head Camera

The Electronics Division of Cohu, Inc. has introduced the 8280 and 8380 Series High-Performance Color Mini-Remote-Head CCD Cameras in response to the growing need for smaller remote-head cameras. The camera head is designed to fit comfortably into the operator’s hand or integrate with other equipment. The new Mini-Remote-Head Cameras feature dramatically increased sensitivity by utilizing on-chip microlens technology. This design positions a tiny light-focusing lens over each pixel to gather, concentrate and focus the incoming light precisely toward the active imaging area of the photosensor. The resolution is 460 horizontal lines. COHU, Inc., Electronics Division, P.O. Box 85623, San Diego, CA 92186-5623. (619) 277-6700. Fax: (619) 277-0221.

MedVision Viewer™

Evergreen Technologies, Inc. has released the MedVision Viewer™, the newest addition to their medical visualization product line which will provide remote viewing on both the Apple Macintosh and PC/Windows computer platforms. The MedVision Viewer was designed to meet the specialized image viewing needs of the clinician. Basing the software design on standard, off the shelf components allows expansion and the ability to take advantage of new technologies without disrupting or abandoning existing systems. Additionally, data is compatible across the two platforms allowing users to easily access centralized files from either platform. This allows the software to be readily used for accessing databases of images, such as collections on CD-ROM or from standards based PACS. Evergreen Technologies, Inc., Diamond Farm Office Park, 849-M Quince Orchard Blvd., Gaithersburg, MD 20878. (301) 948-1800. Fax: (301) 990-6844.

New Nalgene™ Catalog

The Nalge Company has released its new 1993 Nalge Labware catalog which features product, pricing and technical information for the complete line of Nalge labware. The 200-page, color catalog is in a new easy-to-use alphabetical format. Nalge Company, Box 203655, Rochester, NY 14602-0365. (716) 586-8800. Fax: (716) 586-3294.

Panoramic Imaging Table

Biodex Medical Systems, Inc. has redesigned its Panoramic 980 XYZ Imaging Table for nuclear imaging. The table now features a 78 3/4” x 24” viewing area to accommodate even taller patients. The table now also offers crank handle selection either above or below the table top surface, according to user preference. One remarkable feature of the imaging table is the flush-mounted plexiglass top that allows the camera to be positioned flush beneath the patient’s imaging surface. The sleek design makes it possible for the camera, or the table, to move without interference. The table has 19º of head to toe (X) travel and 10º side to side (Y) for increased flexibility in all planar imaging techniques. When the camera is positioned beneath the table, it can extend freely out of all four sides. Biodex Medical Systems, Inc., Box 702, Shirley, NY 11967-0702. (516) 924-9000. Fax: (516) 924-9241.
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.

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Positions Available

Fellowship

The Imaging Sciences Division of the Crump Institute for Biological Imaging and the Department of Pharmacology, UCLA School of Medicine, invites candidates to apply for a postdoctoral fellowship with special emphasis on development of instrumentation for imaging small laboratory animals. Candidates should have a Ph.D. in physics, engineering or related field with experience in and interest in PET, SPECT, nuclear electronics or nuclear instrumentation. Familiarity with image reconstruction techniques and computer programming would be beneficial. Salary dependent on experience. Submit curriculum vitae, bibliography and 3 supporting letters to: Simon R. Cherry, PhD, Crump Institute for Biological Imaging, Department of Pharmacology, UCLA School of Medicine, Room B2-086 CHS, Los Angeles, CA 90024-1721. Equal Opportunity/Affirmative Action Employer

Physician

NUCLEAR MEDICINE PHYSICIAN (BE/BC) The Dayton VA Medical Center and Wright State University School of Medicine are seeking a BE/BC Nuclear Medicine physician for the position of Assistant Chief, Nuclear Medicine Service. Applicant must be eligible for faculty appointment at WSUOM. Competitive salary and benefits. New hospital with state-of-the-art equipment including two SPECT cameras. Opened in June 1992. All applications received by September 30, 1993 will be considered. Applications received after that time will be considered if the position has not been filled. Send CV and three references to: Lawrence A. Gilbert, MD, Chief, Nuclear Medicine Service (115), VA Medical Center, 4100 West Third St., Dayton, OH 45428. Equal Opportunity Employer.

NUCLEAR MEDICINE PHYSICIAN Position available for ABNM board certified or board eligible nuclear medicine physician beginning July, 1994. This is a full-time position in a hospital-based practice with university affiliation. Clinical responsibilities include scan interpretation in a busy general nuclear medicine practice which includes both adult and pediatric patients as well as teaching responsibilities to both radiology and nuclear medicine residents. Send CV to Ronald J. Rosenberg, MD, 85 Seymour Street, Suite 404, Hartford, CT 06106

Physicist

PHYSICIST Yale Brain Imaging research group is seeking a Ph.D. in Physics/Electrical Engineering to work on signal quantitation in SPECT and PET, including algorithms for scatter and attenuation correction. Position (postdoctoral fellow or Assoc. Res. Scientist) and salary ($35-50,000) are dependent upon experience. Send CV and names of three references to Robert B. Innis, MD, PhD, Yale University & VA Med. Ctr/116A2, 950 Campbell Ave., West Haven, CT 06516.

Residency

NUCLEAR MEDICINE RESIDENCY, JULY 1994 Comprehensive imaging/RIA/therapy program in three hospitals (private, county, VA) with 2500 total beds. Mobile imaging for over 200 ICU beds. Large pediatric population. Strong cardiovascular emphasis. State-of-the-art instrumentation including SPECT and computer processing. Training includes introductory rotation in PET. Contact: Warren H. Moore, MD, Department of Radiology, Baylor College of Medicine, One Baylor Plaza, Houston, TX 77030, 713/791-3126. Baylor College of Medicine is an EOAA employer.

Positions Wanted

Radiologist

Radiologist with Nuclear Medicine/Cardiology interests, skills. ABNM & ACR certified. Have skills and experience in XR, CT, MRI. US. Reply to: Box 901, The Society of Nuclear Medicine, 136 Madison Avenue, New York, NY 10016.

Physician


Now Available

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Ann Steves, MS, CNMT

Build a solid foundation as you prepare for the NMTCB Examination. Increase the effectiveness of your study time.

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Nuclear Medicine Physicist
Radioimmunoassay Scientist

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Conditions of Appointment:
Salaries: Total monthly salaries will be within the following scales according to qualifications and experience (1 KD=1.9 St. Pd., US $3.5 approximately). Increment per year 20 KD.

Professor:
• With clinical appointments .......................... KD. 1210-1370 (8 increments)
• Medically qualified with PhD in Medical Science. .......................... KD. 1140-1300 (8 increments)
• Non-medically qualified .......................... KD. 1070-1230 (8 increments)

Associate Professor:
• With clinical appointments .......................... KD. 989-1149 (8 increments)
• Medically qualified with PhD in Medical Science. .......................... KD. 932-1092 (8 increments)
• Non-medically qualified .......................... KD. 875-1035 (8 increments)

Assistant Professor:
• With clinical appointments .......................... KD. 768-928 (8 increments)
• Medically qualified with PhD in Medical Science. .......................... KD. 724-884 (8 increments)
• Non-medically qualified .......................... KD. 680-840 (8 increments)

Other Allowances:
• Social Allowance will be paid in addition to the monthly salary as per the University regulations. Furnished accommodation, provided with water and electric power, against deducted sum from the social allowance.
• Clinical Allowances from the Ministry of Public Health for 10 months a year (i.e. the University academic year from September to end of June) for clinical service commitments as follows:
  Professor .......................... KD. 400/-
  Associate Professor .......................... KD. 300/-
  Assistant Professor .......................... KD. 200/-

Other Benefits:
Conference attendance. Free medical treatment in Kuwait. Free annual round trip air tickets from country of citizenship or permanent residence for self and family, up to three dependent children. Baggage and freight allowance. Education fees for maximum three children in Kuwait from elementary through high school. No taxation. Currency is transferable without restriction. 60 days paid annual leave.

Method of Application:
Curriculum vitae in duplicate which should include the names of 3 references; personal particulars; copy of the relevant pages of passport; qualifications with dates, career history with dates; teaching experience, research accomplishments and where appropriate clinical experience, should arrive no later than October 31, 1993 to:

THE VICE DEAN ADMINISTRATION
(Recruitment Office)
Faculty Of Medicine, University Of Kuwait
P.O. Box 24923
13110 Safat, Kuwait
FAX # 965/531-8454
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Searle, a global leader in the pharmaceutical industry, is seeking a Research Biologist who shares our commitment to developing new frontiers in pharmaceutical research.

This is an excellent opportunity for a professional skilled in the operations of a gamma scintigraphy camera who can adapt clinical nuclear medicine techniques to preclinical research applications.

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The University of Tennessee Medical Center at Knoxville seeks a talented chemist to assist in all phases of radiochemistry and radiopharmaceutical manufacture and production. Key responsibilities include: overseeing laboratory and lab technicians; supervising preparation of patient doses; performing tests for radiopharmaceutical purity; and managing inventory of supplies and chemicals.

A Master's in Chemistry and a proven record in synthetic organic chemistry are essential. Experience preparing positron-emitting radiolabels is highly desirable. We offer an attractive salary, excellent benefits and a challenging setting. For consideration, send your resume to: Personnel Services, The University of Tennessee Medical Center at Knoxville, 1924 Alcoa Highway, Knoxville, TN 37920. UTMC is an EEO/AA/Title IX/Section 504/ADA Employer.

TECHNOLOGIST STAFF POSITION

Immediate opening for full-time, temporary (not to exceed one year). ABIM and ABNM eligible/certified preferred. Relocation expenses are authorized.

Contact: Jerry Glowniak, MD, Acting Chief, Nuclear Medicine, VA Medical Center, PO Box 1034, Portland, OR 97207. Phone (503) 273-5846. EOE.

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Academic Nuclear Pharmacist

New England Medical Center, the principal teaching hospital for Tufts University School of Medicine, is seeking a full-time Nuclear Pharmacist. A Master's degree in Nuclear Pharmacy and clinical experience in a hospital setting are preferred, but not required.

In addition to clinical duties in the Nuclear Pharmacy, major responsibilities will include continuing education of technologists and physicians as well as participation in institutional committees and research activities. The successful candidate will be considered for a Medical School faculty appointment.

Please respond with curriculum vitae and salary history to: Jack Simpson, Administrative Director, Division of Nuclear Medicine, Department of Radiology, New England Medical Center, NEMC #404, 750 Washington Street, Boston, MA 02111. TTY for Hearing Impaired: (617) 956-4216. We are an equal opportunity employer.
The Society of Nuclear Medicine

Organization

The Society of Nuclear Medicine (SNM) is a multi-disciplinary organization of physicians, physicists, chemists, radiopharmacists, technologists, and others interested in the diagnostic, therapeutic, and investigational use of radiopharmaceuticals. Founded in Seattle, Washington in 1954, it is the largest scientific organization dedicated to nuclear medicine.

Objectives

Maintain an organization supported by professionals of varied backgrounds who have a common interest in the clinical and scientific discipline of nuclear medicine;

- Hold meetings and seminars to communicate new knowledge acquired and provide continuing medical education;
- Advance the highest standards in the practice of nuclear medicine;
- Disseminate information by means of journals, books, monographs, and audiovisuals;
- Promote and maintain the highest standards of education and research;
- Address socio-economic and governmental issues that may significantly affect the nuclear medicine profession.

Membership Categories

| FULL members are physicians or scientists with an advanced degree who have valid credentials indicating their professional interest: either medical, paramedical, investigational, or educational, in the scientific or clinical disciplines concerned with the use of radionuclides. Members have the right to vote and to hold elective office. |
| ASSOCIATE members are scientists or technologists with a BA or BS or equivalent qualifications as determined by the Committee on Credentials and Membership, and who have valid credentials indicating their professional interest, either paramedical, investigational, or educational, in the scientific or clinical disciplines concerned with the use of radionuclides. Associate members have the right to vote but may not hold elective office, unless otherwise provided. |
| TECHNOLOGIST members have valid credentials indicating their professional interest, either paramedical, investigational, or educational, in the technology of the scientific or clinical disciplines concerned with the use of radionuclides. Technologist members do not have the right to vote or to hold elective office, unless otherwise provided. They do, however, become automatic members of the Technologist Section and have voting rights in the Section. |
| AFFILIATE members are persons who have an active interest in the objectives of the Society and who are not qualified for other categories of membership. |
| IN-TRAINING members must present adequate documentation that they are in-training and qualify for a category of membership other than Affiliate. In-training members may not vote or hold elective office and pay annual dues at a reduced rate. Upon completion of an in-training program membership is automatically upgraded to that of a regular member. |

Chapters

The Society is composed of individuals who are members of 15 regional chapters throughout the United States and Canada. Those who do not reside within this geographic area are considered to be "Members-at-Large."

Benefits of Membership

- The Journal of Nuclear Medicine: a subscription to the official publication of The Society of Nuclear Medicine and the most prominent journal in the field. Published monthly, it provides the membership with up-to-date information on current developments in nuclear medicine.
- Annual Meetings: discounts to scientific, clinical, and continuing education presentations, as well as commercial exhibits, to keep abreast of the latest developments.
- Membership Directory: distributed annually, at no extra cost, to the entire membership.
- Books and Monographs: discounts on selected new topics published by the Society.
- Audiovisuals: discounts on slide/tape programs covering a wide variety of subjects designed for classroom use and self-instruction.
- Awards: presented to Society members for outstanding achievements and contributions to the field.
- Continuing Education Credits: for meeting courses, audiovisuals, and exhibits, approved for AMA Category 1 credit.
- Research and Fellowship Support: through SNM Education and Research Foundation.
- Effective Government Relations: through committees and lobbying efforts.
- Insurance Plans: disability income, and catastrophic major medical insurance programs.
- Car Rental: discounts on Avis car rentals.
- Credit Cards: MasterCard is available to eligible members.
SNM Councils

The Society has established special interest Councils to satisfy the needs of individual disciplines in nuclear medicine. Councils are available to all SNM members and function autonomously within the Society.

The **ACADEMIC COUNCIL** is composed of faculty members of nuclear medicine departments, divisions, or sections in accredited nuclear medicine schools, or those in AMA approved nuclear medicine residency programs in the U.S. or Canada.

The objectives of the Council are: (1) to promote medical education, research, and patient care related to nuclear medicine; (2) to develop better methods of undergraduate and graduate teaching of nuclear medicine; and (3) to provide a forum for discussion of problems of mutual interest and concern, as well as an informal exchange of ideas and programs. Within the Council there is a sub-group of directors of nuclear medicine residency training programs who confer at least annually with the ABNM on areas of mutual interest.

The **BRAIN IMAGING COUNCIL** was established to bring together those physicians and scientists with an interest in brain imaging using radiopharmaceuticals. The Council provides a forum whereby information relating to brain imaging may be discussed and disseminated and also provides a mechanism for the promotion and encouragement of basic brain imaging research and development.

The **CARDIOVASCULAR COUNCIL** consists of Society members interested in the performance and application of cardiovascular nuclear medicine procedures. It seeks to provide a forum for discussion and development of cardiac scintigraphic methods in an effort to realize the most beneficial applications. The Council actively seeks individuals who share this goal.

The newly combined **COMPUTER AND INSTRUMENTATION COUNCIL** is made up of Society members who have an interest in computers and their application in the diagnostic, therapeutic, and investigative areas of nuclear medicine. It provides a source of information relating to computer science and instrumentation to the Society membership through meetings and publications, as well as promoting the advancement and dissemination of knowledge in this area.

The **CORRELATIVE IMAGING COUNCIL** provides a structure in which clinicians and scientists can develop and disseminate information on the medical and physiological applications of various imaging modalities as they correlate to nuclear medicine.

The **NUCLEAR MAGNETIC RESONANCE (NMR) COUNCIL** is composed of those Society members with an interest in NMR and its associated techniques. The Council provides a forum whereby NMR can be discussed and information disseminated. It also provides a mechanism for the promotion and encouragement of basic NMR research and development.

The **RADIOASSAY COUNCIL** maintains the scientific, economic, and historic elements of the radioassay discipline within the Society.

The **RADIOPHARMACEUTICAL SCIENCE COUNCIL** provides a forum for discussion and dissemination of information relating to the radiopharmaceutical sciences and promotes and encourages basic radiopharmaceutical research and development within the Society. It publishes a newsletter and holds periodic meetings on special subjects.

The **PEDIATRIC IMAGING COUNCIL** provides a conduit for the dissemination of information relating to pediatric nuclear medicine. Individuals involved in pediatric scintigraphic imaging meet and discuss pertinent issues. The Council also serves as liaison to pediatric imaging organizations and to advance research and education.

### About the Technologist Section

The Technologist Section of the Society of Nuclear Medicine was formed in 1970 to meet the needs of the nuclear medicine technologist. It is a scientific organization formed with, but operating autonomously from, the Society to promote the continued development and improvement of the art and science of nuclear medicine technology.

The ongoing objectives of the organization are to enhance the development of nuclear medicine technology, to stimulate continuing education activities, and to develop a forum for the exchange of ideas and information. The Technologist Section provides nuclear medicine technologists with a mechanism to deal directly with issues that concern them (for example, special committees are devoted to continuing education, academic affairs, socioeconomic issues, and other issues of importance).

### The Technologist Section

#### Membership Categories

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>REGULAR</strong></td>
<td>Membership in the Section will be open to any member of the Society, regardless of category, who can provide evidence of training and/or experience in nuclear medicine technology satisfactory to the Membership Committee of the Section. Members pay dues, receive the official publication of the Section, have the right to vote on all issues presented to the membership, and may serve on the National Council or as an officer of the Section.</td>
</tr>
<tr>
<td><strong>STUDENT/MEMBERS IN-TRAINING</strong></td>
<td>Persons enrolled in a training program in nuclear medicine technology and certified as students by the director of training for that institution. They pay reduced rates, receive all publications of the Section, and may hold office by appointment only.</td>
</tr>
</tbody>
</table>

#### Benefits of Membership

- **Journal of Nuclear Medicine Technology**: A quarterly subscription.
- **The right to vote** and hold elective office in the Section.
- **Local networking** with regional chapters and representation through the National Council.
- **Legislative representation** on both local and national issues.
- **Enrollment** in the computerized continuing education accounting system, VOICE.
- **Annual Meetings**, which include scientific and continuing education sessions, workshops, and scientific exhibits at member discounts.
- **Books, educational aids, and audiovisuals** at member discounts.
- **Awards** for outstanding achievements and contributions to technologist meetings, publications, and exhibits.

Any individual interested in membership in the SNM and its Technologist Section can apply by filling out the application form included in the brochure. Any SNM member may become a member of the Section by calling or writing the Membership Department in the Central Office.

For further information please contact:

**Membership Department**

**THE SOCIETY OF NUCLEAR MEDICINE**

136 Madison Avenue

NY, NY 10016-6784

(212) 889-0717 • FAX (212) 545-0221
<table>
<thead>
<tr>
<th>First Name</th>
<th>Dr, Mr, Mrs, Ms, Miss (CIRCLE ONE)</th>
<th>Middle Initial</th>
<th>Last Name</th>
<th>Jr, Sr, I, II, III (circle one)</th>
</tr>
</thead>
</table>

Check Degree(s) Earned:  
MD _____ PhD _____ MA _____ MS _____ BA _____ BS _____ AA _____ AS _____ Other _____

Indicate Board Certification(s):  
☐ ABNB  ☐ ABR  ☐ ABP  ☐ ABIM  ☐ ABSNM  ☐ ABHP  ☐ NMTCB  
☐ ASCP  ☐ ARRT(N)  ☐ ARRT(T)  ☐ ARRT(R)  ☐ Other _____

Please choose ONLY ONE of the following categories of membership for which you wish to be considered. (Categories of membership are described on the front page of this application and should be reviewed carefully before your choice is made.)  
☐ Full  ☐ Associate  ☐ Technologist  ☐ Affiliate

Please check ONE box for preferred mailing address, but complete both columns for our files:

☐ Institutional  ☐ Home Address

DIVISION  
DEPARTMENT  
INSTITUTION OR COMPANY  
STREET ADDRESS  
CITY  STATE/PROVINCE/COUNTRY  ZIP CODE  
AREA CODE  TELEPHONE NO.

IN-TRAINING STATUS  
☐ YES  ☐ NO

Projected Completion Date:  
PROGRAM DIRECTOR’S TELEPHONE NO.

Would you like to join the TECHNOLOGIST SECTION?  
☐ Yes  ☐ No  
(Note: Technologist members automatically become technologist section members)

COUNCIL MEMBERSHIP (OPTIONAL)  
☐ Academic Council  ☐ Computer/Instrumentation Council  ☐ Radioassay Council  
☐ Brain Imaging Council  ☐ Correlative Imaging Council  ☐ Radiopharmaceutical Council  
☐ Cardiovascular Council  ☐ Nuclear Magnetic Resonance Council  ☐ Pediatric Imaging Council

NAME OF SNM MEMBER WHO SUGGESTED THAT YOU JOIN  

APPLICANT’S SIGNATURE  
DATE  

APPLICATION FEE  

FOR OFFICE USE ONLY

☐ MF  ☐ TS  CHAIRMAN, MEMBERSHIP COMMITTEE (sign)

☐ MA  ☐ IT  TECHNOLOGIST SECTION DESIGNEE (sign)

APPLICATION FEE  

CHAPTER  

ML  

10/92
Instructions to Application for Membership

1. Complete and sign the enclosed application form, either printing or typing the information. Make sure you have completed all information requested in order to avoid unnecessary delays in processing.

2. The membership category you select will be reviewed based on the information you provide and in accordance with Society By-laws.

3. To be eligible for "In-Training" status, at least 90 days must be remaining in your formal training program and your application must be accompanied by a letter signed by your program director confirming your student status. No application processing fee is required.

4. Upon acceptance by the Society, you will automatically become a member of the regional chapter that covers your area of residence. If you wish membership in another chapter submit a request with your application. This pertains only to members who live in the United States and Canada. All other members are classified as Members-at-Large.

5. Forward the completed application with a $10.00 non-refundable processing fee.

6. Receipt of your application will be acknowledged. Allow 4-6 weeks for processing and for receipt of journals.

*DO NOT* prepay your dues. An invoice will be sent to you upon approval of your application.

Guide to Membership Dues—1993

**Categories of Membership** — There are four basic categories of membership in the Society of Nuclear Medicine. (Descriptions are located on the front page of this application.)

- **Students** — Students are considered In-Training and are charged half the regular membership rate in the appropriate membership category.

- **Doctorate Degrees** — Members with Doctorate Degrees (MD, DO, PhD) who also belong to the Technologist Section are charged a different rate from those without Doctorate Degrees.

- **Technologist Section** — All members of the Technologist Section must belong to the Society of Nuclear Medicine. All dues paid by Technologist Section members who do not possess a Doctorate Degree are credited to the Technologist Section.

<table>
<thead>
<tr>
<th>Membership Categories</th>
<th>Society</th>
<th>Technologist Section</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full (MD, DO, PhD)</td>
<td>$145.00</td>
<td>—</td>
<td>$145.00</td>
</tr>
<tr>
<td>Full-in-training</td>
<td>65.00</td>
<td>—</td>
<td>65.00</td>
</tr>
<tr>
<td>Full with Tech Section</td>
<td>75.00</td>
<td>$33.00</td>
<td>108.00</td>
</tr>
<tr>
<td>Full-in-training with Tech Section</td>
<td>55.00</td>
<td>16.50</td>
<td>71.50</td>
</tr>
<tr>
<td>Associate</td>
<td>120.00</td>
<td>—</td>
<td>120.00</td>
</tr>
<tr>
<td>Associate-in-training</td>
<td>52.50</td>
<td>—</td>
<td>52.50</td>
</tr>
<tr>
<td>Associate with Tech Section</td>
<td>50.00</td>
<td>33.00</td>
<td>83.00</td>
</tr>
<tr>
<td>Associate-in-training with Tech Section</td>
<td>25.00</td>
<td>16.50</td>
<td>41.50</td>
</tr>
<tr>
<td>Technologist</td>
<td>35.00</td>
<td>33.00</td>
<td>68.00</td>
</tr>
<tr>
<td>Technologist-in-training</td>
<td>17.50</td>
<td>16.50</td>
<td>34.00</td>
</tr>
<tr>
<td>Affiliate</td>
<td>145.00</td>
<td>—</td>
<td>145.00</td>
</tr>
<tr>
<td>Affiliate with Tech Section</td>
<td>50.00</td>
<td>33.00</td>
<td>83.00</td>
</tr>
</tbody>
</table>

- **Chapters** — Society and Technologist Section chapter dues are additional and vary by chapter. A chapter dues table is available upon request.

- **Councils** — Council dues vary between $5.00 and $10.00.

- **Prorated Dues** — Dues for those applicants joining during the year are prorated to the following January.

Contributions or gifts to the Society of Nuclear Medicine, Inc. are not deductible as charitable contributions for federal income tax purposes. Dues payments are deductible by members as an ordinary and necessary business expense.
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.

Price: $30 member $45 nonmember

To order, call toll-free, Bookmasters, Inc., 1-800-247-6553
(Outside the U.S. 419-281-1802).
The rule of thumb in stress perfusion imaging

In myocardial perfusion imaging, the quality of information is directly related to the level of exercise, as measured by the percentage of maximal predicted heart rate achieved by the patient at the time of tracer injection. This is because myocardial oxygen demand is mainly determined by the heart rate. When oxygen demand is increased by exercise, the disparity in coronary blood flow caused by the presence of significant CAD produces perfusion defects, which allow for lesion detection. This provides valuable physiological information for CAD diagnosis.\(^1\)\(^2\)

A rule of thumb governs the exercise stress test. Patients are asked to exercise to 85% of their maximal predicted heart rate. This rule has been determined from a review of exercise ECG studies where diagnostic information has been considered inconclusive at heart rates below 85% of the maximal predicted heart rate.\(^3\)\(^4\)

**When to bend it**

However, not all patients will achieve 85% of their maximal predicted heart rate. Some may reach diagnostic endpoints in testing. Others will have physical limitations or may be on beta blockers that prevent them from achieving the optimal level.

To maximize diagnostic certainty and avoid the risk of false-negative test results, suboptimal stress should be avoided.

**Pharmacologic stress: The measure of success in imaging after suboptimal exercise**

In images taken after patients have failed to reach 85% of their maximal predicted heart rate, defects may go undetected.\(^5\)\(^6\) I.V. Persantine\(^\text{™}\) (dipyridamole USP) can help salvage potentially nondiagnostic perfusion studies where patients have achieved suboptimal exercise levels. This form of pharmacologic stress, administered when the patient's heart rate has returned to baseline, allows for reliable results and may result in a higher yield of useful imaging information.\(^6\)

In addition, I.V. Persantine offers a proven safety record,\(^*\)\(^\text{™}\) gradual onset, and a convenient, easy-to-follow protocol. In pharmacologic stress, it's the rule by which all other agents are measured. In perfusion imaging, anything less diminishes diagnostic certainty.

**Ask questions about pharmacologic stress with I.V. Persantine.**

Call the Du Pont Pharma Nuclear Cardiology Infoline at 1-800-343-7851 for further information.

---

*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. Several adverse events have occurred infrequently (0.3%) in a study of 3914 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.

Persantine\(^\text{™}\) is a registered trademark of Boehringer Ingelheim International GmbH. I.V. Persantine\(^\text{™}\) 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.

**References:**
I. V. PERSANTINE®
(dipyridamole USP) Injection 5 mg/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 tachycardia, symptomatic ventricular tachycardia, transient cerebrovascular, 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, parental 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, parental 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 parental 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 parental 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 the reversal of the pharmacologic effects of PERSANTINE on the coronary circulation.

PRECAUTIONS See WARNINGS

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

Cardiovascular, Gastrointestinal, and Impairment of Fertility
In studies in which dipyridamole was administered in the fed 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 117 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) 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/agrania 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

<table>
<thead>
<tr>
<th>Event</th>
<th>Incidence (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chest Pain/Aggrania Pectoris</td>
<td>19.7</td>
</tr>
<tr>
<td>Headache</td>
<td>12.2</td>
</tr>
<tr>
<td>Dizziness</td>
<td>11.8</td>
</tr>
<tr>
<td>Electrocardiographic Abnormalities</td>
<td>7.5</td>
</tr>
<tr>
<td>Electrocardiographic Abnormalities/Extrasystoles</td>
<td>5.2</td>
</tr>
<tr>
<td>Hypotension</td>
<td>4.6</td>
</tr>
<tr>
<td>Nausea</td>
<td>4.6</td>
</tr>
<tr>
<td>Flushing</td>
<td>3.4</td>
</tr>
<tr>
<td>Electrocardiographic Abnormalities/Tachycardia</td>
<td>3.2</td>
</tr>
<tr>
<td>Dyspnea</td>
<td>2.6</td>
</tr>
<tr>
<td>Pain Unspecified</td>
<td>2.6</td>
</tr>
<tr>
<td>Blood Pressure Lability</td>
<td>1.6</td>
</tr>
<tr>
<td>Hypertension</td>
<td>1.5</td>
</tr>
<tr>
<td>Parasthesia</td>
<td>1.3</td>
</tr>
<tr>
<td>Fatigue</td>
<td>1.2</td>
</tr>
</tbody>
</table>
```

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), tamponade block unspecified (0.03%), cardiomyopathy (0.03%), edema (0.03%)

- Central and Peripheral Nervous System: Hypnotics (0.5%), hypertension (0.3%), nervousness/anxiety (0.2%), tremor (0.1%), abnormal coordination (0.1%), somnolence (0.1%), dysrythmia (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%), dyspepsia (0.1%), tenesmus (0.03%), appetite increased (0.03%)

- Respiratory System: Pharyngitis (0.3%), bronchospasm (0.2% see WARNINGS), hyperventilation (0.1%), diminished (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 (0.2%), arthralgia (0.2%), arthralgia (0.1%), rash (0.1%), pruritus (0.1%), vision abnormalities unspecified (0.1%), dyspepsia (0.1%), thirst (0.03%), depersonalization (0.03%), eye pain (0.03%), renal pain (0.03%), perineal pain (0.03%), breast pain (0.03%), intercostal claudication (0.03%), leg cramping (0.03%)

OVERDOSE
No cases of overdose in humans have been reported. It is unlikely that overdose 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.
Recently published books from SNM provide authoritative, up-to-date discussion of key subjects in nuclear medicine technology. Adding to your professional library has never been easier—simply call the toll-free number below for fast, efficient service.

**Clinical Computers in Nuclear Medicine**
Katherine L. Rowell
$35 members/$50 nonmembers. A companion text to *Computers in Nuclear Medicine*, this survey traces the evolution of nuclear medicine computer technology. An essential guide for staff operating computers in clinical settings.

**Computers in Nuclear Medicine: A Practical Approach**
Kai Lee
$30 members/$45 nonmembers. This illustrated guide explains both how computers work and how processing techniques obtain diagnostic information from radionuclide images.

**A Patient's Guide to Nuclear Medicine, Revised Edition**
Pamphlet, $0.40 (100 copies, minimum order). 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; photographs showing patients undergoing imaging. An update of the highly successful patient pamphlet in use since 1983.

**Curriculum Guide for Nuclear Medicine Technologists, 2nd Edition**
Wanda M. Mundy and Gregory Passmore
$15.95 members/$19.95 nonmembers. 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 latest advances in nuclear medicine technology.

**Review of Nuclear Medicine Technology**
Ann M. Steves
$30 members/$45 nonmembers. 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.

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* Sensitivity of 30 kcps/mCi/l in 7 mm FWHM resolution mode

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Phone: 33 1 44 53 04 00
Fax: 33 1 44 53 03 80

Copenhagen:
Medimatic A/S
Gersonsvej 7
DK-2900 Hellerup
Phone: 45 31 61 06 22
Fax: 45 31 61 07 49

*Ref: no 129, JNM suppl... Vol. 30, no 5