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On June 9, 1992, The Society of Nuclear Medicine raises the curtain on its 39th Annual Meeting in Los Angeles. Join the cast of thousands, more than 7,000, in fact, of nuclear medicine professionals at the largest and most important meeting of its kind. Learn about the most recent advances in the science and practice of nuclear medicine, and gain valuable technical knowledge from our supporting cast of commercial producers of nuclear medicine products and services.

**Continuing Education Courses**
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.

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This year's presentation of over 1,000 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 presentations.

**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 basic, intermediate, and advanced studies. This program will broaden expertise and enhance the technologist’s contribution to nuclear medicine.

**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.

**Audiovisuals, 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.

**Registration**

<table>
<thead>
<tr>
<th>Registration Type</th>
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</tr>
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<td>$275</td>
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<tr>
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</tr>
<tr>
<td>Nonmembers</td>
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<td>$275</td>
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</tbody>
</table>

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Please see reverse for brief summary of prescribing information.
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Brief Summary

Cardiolite®

Kit for the preparation of Technetium Tc99m Sestamibi

FOR DIAGNOSTIC USE

DESCRIPTION: Each 5 mL vial contains a sterile, non-pyrogenic, lyophilized mixture of:

- Sestamibi (2-mercapto isobutyl isonitrile) Copper (II) tetraferricoborate - 1.0 mg
- Sodium Citrate Dihydrate - 2.6 mg
- L-Cystine Hydrochloride Monohydrate - 1.0 mg
- Stannous Chloride - 20 mg
- Sodium Chloride - 0.2 mg
- Sodium Chloride, Dihydrate (SnCl2·2H2O) - 0.075 mg
- Tin Chloride (Sannsous and Dianic chloride) maximum (as SnCl2·2H2O) - 0.066 mg

Prior to lyophilization the pH is 5.3 to 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 (0.0-4.0). No bacteriostatic preservative is present.

The precise structure of the technetium complex is Tc99m[MIBI]2+, where MIBI is 2-mercapto isobutyl isonitrile.

INDICATIONS AND USAGE: CARDIOLITE® Kit for the preparation of Technetium Tc99m Sestamibi is a myocardial perfusion agent that is useful in distinguishing normal from abnormal myocardium, and in the localization of the abnormality, in patients with suspected myocardial infarction. It is also useful in the evaluation of myocardial function using the first-pass technique.

CONTRAINDICATIONS: None known.

WARNINGS: In studying patients in whom cardiac disease is known or suspected, take care to assure continuous monitoring and treatment in accordance with safe, accepted clinical procedure.

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 (as outlined in the full prescribing information).

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 patient 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 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.

Carcinogenesis, Mutagenesis, Impairment of Fertility

In comparison with most other diagnostic technetium-labeled radiopharmaceuticals, the radiation dose to the ovaries (2.5 rads/30 mCi) is high. Minimal exposure (ALARA) is necessary in women of childbearing capability. (See Dosimetry subsection in DOSAGE AND ADMINISTRATION section.)

The active intermediate, CuMIBI/HF, was evaluated for genotoxic potential in a battery of five tests. No genotoxic activity was observed in the Ames, CHO/HGPRT and asper catalyzed exchange tests (all in vitro). At cytotoxic concentrations (≥ 20 μg/mL), an increase in cells with chromosome aberrations was observed in the in vitro human lymphocyte assay. CuMIBI/HF did not show genotoxic effects in the in vivo mouse micronucleus test at a dose which caused systemic and bone marrow toxicity (9 mg/kg, > 600 x maximal human dose).

Pregnancy Category C

Animal reproduction and teratogeneity 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.

Ideally, examinations using radiopharmaceuticals, especially those elective in nature, of a woman of childbearing capability, should be performed during the first few (approximately 10) days following the onset of menses.

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. One patient demonstrated signs and symptoms consistent with seizure, 8 to 10 minutes after administration of the drug. No other adverse reactions specifically attributable to the use of Technetium Tc99m Sestamibi have been reported.

DOSEAGE AND ADMINISTRATION: The suggested dose range for I.V. administration to be employed in the average patient (70 kg) is:

- up to 110 MBq (3 mCi) for 20 to 60 minutes
- up to 340 MBq (9 mCi) for 14 to 30 minutes

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 (see also CLINICAL PHARMACOLOGY section in full prescribing information).

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 room temperature (15 to 30°C) before and after reconstitution.

RADIATION DOSIMETRY: Table 4 shows the radiation doses to organs and tissues of an average patient (70 kg) per 110 MBq (3 mCi) of Technetium Tc99m Sestamibi injected intravenously.

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>Breasts</td>
<td>0.25 mGy/MBq</td>
<td>0.20 mGy/MBq</td>
</tr>
<tr>
<td>Gallbladder Wall</td>
<td>0.27 mGy/MBq</td>
<td>0.20 mGy/MBq</td>
</tr>
<tr>
<td>Small Intestine</td>
<td>0.07 mGy/MBq</td>
<td>0.03 mGy/MBq</td>
</tr>
<tr>
<td>Upper Large</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intestine Wall</td>
<td>0.5 mGy/MBq</td>
<td>0.4 mGy/MBq</td>
</tr>
<tr>
<td>Stomach Wall</td>
<td>0.6 mGy/MBq</td>
<td>0.4 mGy/MBq</td>
</tr>
<tr>
<td>Heart Wall</td>
<td>0.5 mGy/MBq</td>
<td>0.3 mGy/MBq</td>
</tr>
<tr>
<td>Kidneys</td>
<td>0.6 mGy/MBq</td>
<td>0.4 mGy/MBq</td>
</tr>
<tr>
<td>Liver</td>
<td>0.5 mGy/MBq</td>
<td>0.3 mGy/MBq</td>
</tr>
<tr>
<td>Lungs</td>
<td>0.5 mGy/MBq</td>
<td>0.3 mGy/MBq</td>
</tr>
<tr>
<td>Bone Surfaces</td>
<td>0.5 mGy/MBq</td>
<td>0.3 mGy/MBq</td>
</tr>
<tr>
<td>Thyroid</td>
<td>0.7 mGy/MBq</td>
<td>0.5 mGy/MBq</td>
</tr>
<tr>
<td>Ovaries</td>
<td>1.5 mGy/MBq</td>
<td>1.2 mGy/MBq</td>
</tr>
<tr>
<td>Testes</td>
<td>0.3 mGy/MBq</td>
<td>0.2 mGy/MBq</td>
</tr>
<tr>
<td>Red Marrow</td>
<td>0.5 mGy/MBq</td>
<td>0.4 mGy/MBq</td>
</tr>
<tr>
<td>Urinary Bladder</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wall</td>
<td>2.0 mGy/MBq</td>
<td>1.4 mGy/MBq</td>
</tr>
<tr>
<td>Total Body</td>
<td>0.5 mGy/MBq</td>
<td>0.4 mGy/MBq</td>
</tr>
</tbody>
</table>


HOW SUPPLIED: Du Pont’s CARIDOLITE® Kit for the preparation of Technetium Tc99m Sestamibi is supplied as a 5 mL 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 and 5.9. The contents of the vials are lyophilized and stored under nitrogen. Store at room temperature (15 to 30°C) before and after reconstitution. Technetium Tc99m Sestamibi contains no preservatives. Included in each two (2) vial kit is one (1) package insert, five (5) vial shield labels and five (5) radiation warning labels. Included in each five (5) vial kit is one (1) package insert, five (5) vial shield labels and five (5) radiation warning labels. Included in each thirty (30) vial kit is one (1) package insert, thirty (30) vial shield labels and thirty (30) radiation warning labels.

The US Nuclear Regulatory Commission has approved this reagent kit for distribution to persons licensed to use byproduct material identified in 35, 100 and 300 of the 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.

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INDICATIONS AND USAGE: Thallium Chloride Ti 201 may be useful in myocardial perfusion imaging for the diagnosis and localization of myocardial perfusion defects. It may also have prognostic value regarding survival in patients with unstable angina. Clinical information to be gained from an acute myocardial infarction to assess the site and size of the infarct defect.

Thallium Chloride Ti 201 should be given by intravenous injection only. The use of intramuscular or subcutaneous injection is contraindicated.

Thallium Chloride Ti 201 is indicated also for the localization of sites of parathyroid hyperactivity in patients with elevated serum calcium and parathyroid hormone levels. It may also be used as pre-operative screening to locate extrathyroidal and mediastinal sites of parathyroid hyperactivity and for post-surgical re-surveillance.

Thallium Chloride Ti 201 has not been adequately demonstrated to be effective for the localization of normal parathyroid glands.

CONTRAINDICATIONS: None known.

WARNINGS: In studying patients in whom myocardial infarction or ischemia is known or suspected, care should be taken to assure continuous clinical monitoring and treatment in accordance with safe, acceptable practice. Pressure and stress testing should be performed only under the supervision of a qualified physician and in a laboratory equipped with appropriate resuscitation and support apparatus.

PRECAUTIONS: Data are not available concerning the effect of marked alterations in blood glucose, insulin, or pH (such as is found in diabetes mellitus) on the quality of Thallium Chloride Ti 201 scintigrams. Attention is directed to the fact that thallium is a potassium analog, and since the transport of potassium is affected by these factors, the possibility exists that the thallium may likewise be affected.

GENERAL: Do not use after the expiration time and date (5 days maximum after calibration time) stated on the package.

Do not use contents that are turbid.

The Thallium Chloride Ti 201 should be measured by a suitably radiotracer calibration system immediately prior to administration.

Thallium Chloride Ti 201, as all radioactive materials, must be handled with care and used with appropriate safety measures to minimize external radiation exposure to professional personnel. Care should also be taken to minimize radiation exposure to patients in a manner consistent with proper patient care.

Carotidgrams, Metageneas, Biomentations: No long-term animal studies have been performed to evaluate carcinogenicity of radioactive materials and whose experience and conclusions have been approved by the appropriate governmental agency authorized to license the use of radioactive materials.

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

Radioisotopes should be used only by physicians who are qualified by training and experience in the handling of radioactive materials. Radioisotopes should not be handled without the approval of the appropriate governmental agency authorized to license the use of radioactive materials.

ADVERSE REACTIONS: A single adverse reaction to the administration of Thallium Chloride Ti 201 has been reported of supraventricular bradycardia accompanied by proptosis and a diffuse rash which responded to antihistamines and steroids within one hour.

HOW SUPPLIED: Thallium Chloride Ti 201 for intravenous administration is supplied as sterile, non-pyrogenic solution containing at calibration time 37 MBq/1ml (1 MBq/ml) of Thallium Chloride Ti 201, suspended in sodium chloride, and Sigma's benzyl alcohol. The pH is adjusted with hydrochloric acid and sodium hydroxide solution. Vials are available in the following quantities of radioactive activity: 81.4, 122.7, 183.2, 244.2, 325.6 and 366.3 MBq (2.2, 3.3, 4.4, 6.6, 8.8 and 9.5 MBq) of Thallium Chloride Ti 201.

Store at room temperature (15-30°C).

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8. Data on file, Boehringer Ingelheim Pharmaceuticals, Inc.
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CELEBRATE NUCLEAR MEDICINE WEEK

October 4 – 10
Continuing Medical Education Primary Focus of The Society of Nuclear Medicine's 39th Annual Meeting
June 9-12, 1992
Los Angeles, California

The 39th Annual Meeting of The Society of Nuclear Medicine will be held in Los Angeles, California on Tuesday, June 9 through Friday, June 12, 1992. The Los Angeles Convention Center 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 11 categorical seminars and 41 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 8 from 8:30 am-2:30 pm. All other continuing education sessions will occur over the dates of the meeting.

This year, for the first time, 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.

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 1991's record-breaking meeting.

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This year's special innovation is a hands-on brain SPECT workshop for physicians desiring to optimize their practice and interpretative skills in this area. These workshops will be offered twice each day on Wednesday and Thursday, June 9-10, 1992, 8:30 am - 10:00 am and 3:30 pm - 5:00 pm. This workshop will have a maximum of 30 registrants for each session, so early sign-up is strongly suggested. Registration materials for this SPECT workshop will be included in the matrix mailing.

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
Computers have become an indispensible 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.

Approx. 180 pp, 6 × 9, softcover
Price:
$30 member (+ $2.50) Total $32.50
$45 nonmember (+ $2.50) Total $47.50
Projected publication date: Fall 1991
Policy — The Journal of Nuclear Medicine accepts classified advertisements from medical institutions, groups, suppliers, and others in need of services. The acceptance is limited to Positions Open, Positions Wanted, and Equipment. We reserve the right to decline, withdraw, or modify advertisements.

Rates for Classified Listings — $19.00 per line or fraction thereof on the first line (up to 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 or Positions Wanted: $10.00 per line. Note: Box numbers are available for the cost of the 2 lines required.

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Position Available

Chemist
ORGANIC CHEMIST. The positron emission tomography radiochemistry group has an entry level opening for an organic chemist with experience using short lived isotopes in labeling. A PhD in organic and/or medicinal chemistry is required. Experience with stereochemistry and nitrogen heterocyclics is desirable. The position is at the Research Assistant Professor level and is funded through grants. Submit CV to: Ken Krohn, PhD, Imaging Research Lab, RC-05, University of Washington, Seattle, WA 98195. Equal Opportunity/Affirmative Action Employer.

Faculty
FULL-TIME FACULTY — DEPARTMENT OF RADIOLOGY: The George Washington University Medical Center is seeking either an ABR certified Diagnostic Radiologist with an interest in Nuclear Medicine or a board certified ABNM Nuclear Medicine Physician, with record of commitment to clinical care, medical education and clinical research. This is a full-time, possible tenure track, Assistant Professor to Professor position. Salary and rank will be commensurate with experience. Applications will be accepted at least until June 12, 1992. Letter of inquiry accompanied by a curriculum vitae should be sent to: David O. Davis, MD, Professor and Chairman, Department of Radiology, The George Washington University Hospital, 901 23rd Street, NW, Washington, DC 20037. The George Washington University is an Equal Opportunity/Affirmative Action Employer.

ASSISTANT PROFESSOR, DIVISION OF NUCLEAR MEDICINE — University of Kentucky, Lexington is seeking applicants in Nuclear Medicine. Candidates should be board certified or eligible in Nuclear Medicine. The successful candidate will be expected to have expertise in the clinical activity of the division as well as participation in the training of residents. The successful applicant will also have autonomy in patient care as well as resident and medical student teaching. In addition, the candidate should have an established record of research grant support. Applicants should have at least one year of experience as a faculty member at a major academic institution. Interested candidates should send curriculum vitae, letters of recommendation, and a list of publications to: Dr. Frank Y. Berman, Department of Radiology, University of Kentucky, 800 Rose Street, Lexington, KY 40536-0084. US is an Equal Opportunity/Affirmative Action Employer.

Physician
TEMPLE UNIVERSITY SCHOOL OF MEDICINE is seeking a part-time CERTIFIED NUCLEAR MEDICINE PHYSICIST for a full-time faculty position in the section of nuclear medicine and radiation oncology. The candidate will be expected to have demonstrated clinical competence in nuclear medicine and participate in the education of residents and medical students. He/she should have a strong interest in the clinical activities of nuclear medicine, and expertise in the physical sciences and physical medicine. The candidate will work closely with the residents and medical students as well as the clinical faculty. M.D. and Ph.D. degrees are necessary. Interested applicants should contact Dr. Robert A. Baker, Department of Radiology, Temple University, Philadelphia, PA 19140-2080. Temple University is an Affirmative Action/Employer.

MEDICAL DIRECTOR. Department of Nuclear Medicine Radiology Millen HealthCare has an immediate opening for a full-time Nuclear Medicine Department Director. Candidates should be certified in nuclear medicine and must have minimum of five years experience in Nuclear Medicine. We are an Equal Opportunity/Affirmative Action Employer.

WE ARE SEEKING A FULL-TIME NUCLEAR MEDICINE PHYSICIAN. The University of Washington School of Medicine and a world-renowned research institution in nuclear medicine, the Pacific Northwest Research Institute, is seeking a Staff Nuclear Physician to join our busy and growing nuclear medicine group. Please contact: Dr. Robert A. Baker, Department of Radiology, Temple University, Philadelphia, PA 19140-2080. Temple University is an Affirmative Action/Employer.

M.D. or equivalent with a subspecialty in nuclear medicine is required. Experience in nuclear medicine, including diagnostic and therapeutic procedures, and supervisory experience is desirable. The successful candidate will participate in the education of residents and medical students. M.D. and Ph.D. degrees are necessary. Interested applicants should contact Dr. Robert A. Baker, Department of Radiology, Temple University, Philadelphia, PA 19140-2080. Temple University is an Affirmative Action/Employer.

MEDICAL DIRECTOR, Department of Nuclear Medicine Radiology Merrick HealthCare has an immediate opening for a full-time Nuclear Medicine Department Director. Candidates should be certified in nuclear medicine and radiology with special competence in nuclear medicine. Merrick HealthCare is a large, 320 bed hospital and a radiology staff of eight. The nuclear medicine department has five gamma cameras (four with spectroscopy capability) including the Primate Triple Head. The technical staff consists of nine technologists. Current volumes annually are 7300 imaging and 30000 procedures. Please send curriculum vitae to: Ronald J. Ross, Director, Department of Radiology, Merri- c Hank HealthCare, 6780 Mayfield Road, Cleveland, OH 44124. (216) 445-4595.

Oroem Health Sciences University, Portland, Oregon invites applications for a FACULTY POSITION available immediately or at a later date either NUCLEAR MEDICINE or full time. University of Washington, Department of Radiology, 97206-3098. OHSU is an affirmative action equal opportunity employer.

NUCLEAR MEDICINE PHYSICIAN. The University of Oklahoma Health Sciences Center is seeking an ABNM certified Nuclear Medicine Physicist for a full-time faculty position in the section of nuclear medicine of the department of radiological sciences. The individual filling this position will be responsible for teaching and service in the sections of nuclear medicine at the University of Oklahoma Medical Center, Children's Hospital of Oklahoma, and the Department of Veterans Affairs Medical Center. The program is integrated among these three interconnected hospitals and offers exceptional opportunities in adult and pediatric nuclear medicine. Educational programs include a nuclear medicine residency, clinical radiology residency, medical student rotations and a graduate medical education program. The position requires clinical expertise in the field of nuclear medicine and the ability to lead in the instruction of medical students, residents, and nuclear medicine fellows. The successful candidate should have a history of research and publication in the field of nuclear medicine and an interest in teaching and research. Travel is required.

The University of Oklahoma Health Sciences Center, 1200-1, 23rd Street, Oklahoma City, OK 73104. The University of Oklahoma is an Equal Opportunity/Affirmative Action Employer. Equal Opportunity/Affirmative Action Employer.

The University of California, San Francisco (UCSF) is seeking a CHIEF OF NUCLEAR MEDICINE. The candidate will be appointed at the level of Associate Professor or Professor of Radiology in Residence (depending on qualifications) and will also serve as Vice-Chairman of the Department of Radiology at UCSF. The University of California must have a demonstrated national reputation in Nuclear Medicine research and in PET imaging, be an excellent teacher, and an experienced administrator who is capable of teaching and research programs in Nuclear Medicine at UCSF and Mt. Zion Hospital and Medical Center in San Francisco. Institutional certification in Nuclear Medicine, certification in Nuclear Medicine with a California medical license is also required. The University of California is an Equal Opportunity/Affirmative Action Employer. Minority and handicapped individuals are encouraged to apply. Send CV to: Roy A. Pily, MD, Chair, Search Committee, Department of Radiology, UCSF, San Francisco, CA 94143-0028.

DIRECT RESPONSE

(See Page 46A to learn more about this month's advertisers.)
Fellowships In
Diagnostic Radiological Research.

The Diagnostic Radiology Research Program of the National Institutes of Health is accepting applications for two-year fellowship positions beginning in July 1992 and July 1993. This program provides an excellent opportunity for individuals who plan a research career in radiological sciences.

The fellowship training program emphasizes basic research in all aspects of imaging and image processing. Fellows will have no clinical responsibilities unless they are related to their project. The imaging laboratories of the Diagnostic Radiology Research Program include: state-of-the-art 0.5 and 1.5 Tesla MR units; a newly developed image analysis program with hardware support; ultrafast CT; and an experimental angiography suite. The facilities in the In Vivo NMR Research Center, the PET and monoclonal antibody programs of the Nuclear Medicine Department, and other laboratories on the NIH campus will be made available to the fellow, providing an opportunity to develop expertise in areas related to imaging research. Basic research in functional or metabolic imaging, contrast agents, biochemistry, biology, chemistry, immunology, physics and physiology will be encouraged. Laboratories are being developed which will include "hot" and "cold" wet labs and tissue culture facilities. Collaboration with other scientists on the NIH campus will be encouraged.

Applicants should hold the MD or PhD degree and should have completed clinical training in diagnostic radiology or nuclear medicine. Applications from individuals currently in US residency programs may also be considered for research fellowship positions. US citizenship or permanent residency is required for this full-time appointment.

Candidates should submit a Curriculum Vitae, at least two letters of reference and a preliminary statement concerning their area of research interest to Dr. Joseph A. Frank, Acting Director.

National Institutes Of Health
Diagnostic Radiology Research Program
9000 Rockville Pike, Building 10, Room 1C660, Bethesda, MD 20892 • FAX 301-496-9933
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NUCLEAR MEDICINE COORDINATOR

Northridge Hospital Medical Center, a 433-bed acute care facility with 4 Gamma Cameras including state-of-the-art SPECT equipment is currently seeking a full-time Nuclear Medicine Coordinator.

The Coordinator will be responsible for the coordination of the Nuclear Medicine activities, maintain state and JCAHO regulatory requirements, and perform nuclear medicine scans.

Requirements include a California State Nuclear Medicine License, ARRT and/or NMTCB and previous supervisory experience.

We offer a competitive salary and benefits package. For more information, please call or send resume to: Julie Viola, Human Resources, Northridge Hospital Medical Center, 18300 Rosoce Blvd., Northridge, CA 91328 (818) 885-5316.

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RAD'S RADIOGRAPHY SERVICE, INC.

Manager of Nuclear Radiology and Oncology Radiation

A leading pediatric medical center has an opening for someone to manage the technical activities of the Divisions of Nuclear Radiology and Radiation Oncology. Duties include establishing policies, procedures, standards, and objectives for the provision of radiological services; evaluating performance; maintaining quality assurance; and coordinating with other departments to provide maximum levels of service to patients. Requires graduation from an accredited program in Nuclear Radiology or Radiation Therapy with AART(N) or NMTCB and CRT Radiation Therapy certification, AS degree or BS degree in radiology or business and five years of experience including two years in a supervisory capacity. Send your resume in confidence to: Childrens Hospital Los Angeles, Employment, 1534 N. Vermont, Box 37, Los Angeles, CA 90027. EOE/AA.

ChildrensHospital
Los Angeles

We're South Shore Hospital, a 340-bed acute care facility, serving 23 Southeastern Massachusetts communities. Our Radiology Department features state-of-the-art instrumentation and nuclear medicine computers including SPECT technology.

NUCLEAR MEDICINE TECHNOLOGIST

Under the direction of the Supervisor of Nuclear Medicine, your primary responsibilities will include performing a full range of Nuclear Scans, preparing radioactive isotopes for administration, operating the gamma camera and related computers, and maintaining records. This position requires completion of an approved Nuclear Medicine program, certification by the N.M.T.C.B. and possession of a Massachusetts state license. The preferred candidate will offer 1-2 years' experience plus prior experience with Nuclear Medicine computers. This position requires on-call availability every other week.

We offer a competitive salary and benefits package, free parking, and a smoke-free environment. To apply, please send resume with salary requirements to Jeff Snow, Employment Specialist, South Shore Hospital, 55 Fogg Road, South Weymouth, MA 02190. Affirmative Action/Equal Opportunity Employer.
Nuclear Cardiology Technologist

Explore a unique opportunity to become a contributing staff member in the University of Virginia Health Sciences Center's Nuclear Cardiology Department. The UVa Health Sciences Center is a 750-bed Level I tertiary care facility offering a challenging environment for professional advancement. The selected applicant will gain unparalleled experience using the latest technologies, to include SPECT imaging, and will participate in the development of new protocols for heart imaging agents.

Charlottesville, VA offers outstanding cultural and recreational activities, close proximity to several metropolitan areas and Atlantic beaches, and all the advantages of a university setting.

We provide competitive compensation/generous benefits, interview/relocation assistance, continuing education and child care facilities.

For more information, please contact: Jonette Aughenbaugh, Manager of Allied Health Recruitment, University of Virginia, Dept. of Human Resources, Carruthers Hall, P.O. Box 9007, Charlottesville, VA 22906 or call toll-free 1-800-882-3010.

EEO/AA

Nuclear Medicine Technology Program Director

Position available for Program Director for Nuclear Medicine Technology Education Program. The individual recruited for this position will be responsible for the organization, administration and general effectiveness of a quality educational program in Nuclear Medicine Technology. The Program is one of four programs in the Division of Radiation Science Technology Education at the University of Nebraska Medical Center in Omaha, Nebraska.

The successful candidate must have current national nuclear medicine technology certification; a masters degree or equivalent in years of teaching and service; a minimum of three years teaching experience; and demonstrated leadership and administrative skills. Salary and faculty appointment commensurate with experience and qualifications.

Interested candidates should send a letter of application, curriculum vitae and three letters of reference to:

Reba A. Benschoter, Ph.D., Associate Dean
School of Allied Health Professions
University of Nebraska Medical Center
600 South 42nd Street
Omaha, NE 68198-5150

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Minorities and Women are Encouraged to Apply

Product Support Specialist

ADAC Laboratories, a leader in the design and development of medical electronics image processing and information management systems, is currently seeking a highly motivated Product Support Specialist for our Nuclear Medicine Division. Join us in supporting the most innovative nuclear medicine imaging systems in the industry.

Responsibilities vary from engineering support during product development to telephone support of customers after product delivery. This is a home office position at our Milpitas (San Jose, CA) facility. Little or no travel is required.

Applicant should have 3+ years clinical experience as a Certified Nuclear Medicine Technologist. Experience with a broad range of imaging procedures, including SPECT, is required. Experience with ADAC camera and computer systems is a definite plus.

We offer an outstanding salary and a benefits package that is among the finest in the industry. Please send or FAX your resumé to:

ADAC Laboratories
Dept. ST
540 Alder Drive
Milpitas, CA 95035
Fax (408) 945-5995 or (408) 321-9659

Equal Opportunity/Affirmative Action Employer
HEALTH PHYSICIST

The Harry S. Truman VA Hospital has an immediate opening for a Health Physicist. Minimum requirements include:

1. A PhD or Masters in physics, biological or radiation physics or related field.
2. Fulfillment of requirements for the RSO position as required by the NRC.

Preference will be given to individuals who demonstrate teaching experience and are board certified. The HSTVH hospital is affiliated with the University of Missouri-Columbia and actively participates in training of resident physicians and a number of allied health professionals. In addition to providing expertise and didactic instruction to the students matriculating through the training programs, the candidate can participate in a number of current research projects, or develop an individual research area. Interested candidates should contact Amolak Singh, MD (314) 443-2511 ext. 6675, 800 Hospital Drive, Columbia, MO 65201.

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NUCLEAR MEDICINE WEEK

October 4 to 10, 1992

CARDIOVASCULAR LEARNING AND RESEARCH CENTER Presents
NUCLEAR CARDIOLOGY LEVEL I

CONCEPT:
This program is designed to provide physicians, technologists, and nurses with direct hands-on experience in acquiring, processing, and interpreting clinical nuclear cardiovascular studies (myocardial perfusion imaging, infarct-avid imaging, and radionuclide ventriculography). In the process of reviewing actual patient studies, participants gain a strong clinico-pathophysiologic framework for selecting, performing, and interpreting diagnostic imaging studies. Case studies are used as the framework for additional technical and clinical discussions. Clinical protocols emphasize “practice” and “real-world” constraints as well as theory. Special emphasis is placed on quality control requirements and techniques for SPECT myocardial perfusion imaging studies with thallium, CardioTec, and CardioTec performed with exercise and with pharmacologic (I.V. Adenosine and I.V. Dipyridamole) stress.

The Cardiovascular Learning and Research Center is a non-profit, tax-exempt facility located in North Dallas, specifically organized to provide continuing education for physicians, technologists, nurses, and other health professionals and to research, develop, and apply computer-related technology to clinical medicine. The Learning Center does not discriminate on the basis of color, sex, or religion.

SPONSORSHIP:
Appreciation is expressed to the following companies for educational grants in partial support of this program:

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Fujisawa, Inc.
Acuson Corporation
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CREDIT:
Physicians receive 18.75 hours in Category I toward Physician’s Recognition Award of the American Medical Association. Accreditation by The Society of Nuclear Medicine has been applied for 18.9 CEUs.

REGISTRATION FORM

Name: ____________________________
Institution: _______________________
Address: _________________________
Daytime Phone: ___________________
Degree/Certificate: _______________
FEE: $750

Register me for the following dates (please indicate a 2nd choice):

February 20-22 August 13-15
March 12-14 September 17-19
April 16-18 October 15-17
May 14-16 November 12-14
June 18-20 December 10-12
July 9-11

Once your registration form is received, you will be contacted with additional information regarding details and payment.

Registration should be sent to:
Jacqui L. Holmes, Coordinator
Cardiovascular Learning and Research Center
1630 Colt Road, Suite 204, Plano, Texas 75075
(214) 985-1641
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Versatile Scanner

Picker International announces the PQ-CT, a scanner designed to meet performance requirements of mid- and large-size hospitals, medical centers and free standing imaging clinics. The unit shares the same fourth-generation, low voltage slip-ring rotation, onboard generator, and 4,800 solid-state detectors as Picker’s PQ-2000. This common platform enables the PQ-CT to be field-upgraded to a PQ-2000, further increasing imaging quality and patient throughput. The system offers spatial resolution of 15 lp/cm, which sharply defines anatomical structures. A European-Style control console with an integrated storage cabinet features a 19-inch monitor mounted on a multi-position arm, permitting convenient viewing of images as well as an unobstructed view of the patient. The machine's 10-second cycle time in the dynamic scan and view mode is fast and user-flexible. The optional Advanced Dynamic Scan (ADS) package enables volume scanning for peak enhancement, acquiring a slice every four seconds. A second option, ZAP-16 (Z-axis protocol) enables volumetric scanning with continuous table feed in a single breath hold. In just 16 seconds, ZAP-16 can obtain 24 slices over 24 cm of longitudinal travel. Picker International, P.O. Box 739, Berea, OH 44017.

Image Transmitter

Advanced Video products introduces the TELEPRO 1024 ICU/CCU Link, a complete system for moving images from emergency or radiology rooms to a display station in ICU/CCU. Films are digitized on a high-performance laser scanner with a user-selectable resolution capability of 2048 × 2560 or 1024 × 1280 and 4096 gray shades. The TELEPRO Laser Scanner's light collection system creates a precise digital representation of the image information on the film. It is a flatbed scanner that accepts variable film sizes from 8" × 10" to 14" × 17". A preview monitor at the scanner allows error correction at the point of digitization, not after the image has been sent to ICU. A 100 Mbit/second fiber optic with point-to-point connection transmits images directly to the display station. This is the fastest communication link available, eliminating delayed films to ICU/CCU. Hundreds of images can be kept online for retrieval and review at any time in either location while the film is kept separate for permanent archiving. There are 330 Mbytes of storage at the scanner and 100 Mbytes of storage at the display station. Images are displayed in the ICU/CCU on a dual monitor workstation. Each monitor has a resolution of 1024 × 1280 by 8 bit (256 gray shades). The dual monitor configuration allows easy side-by-side comparison of images at full resolution. Once a patient's study is selected, the two most recent images appear and the rest of the study leads into "shadow memory" for fast scrolling through the entire study. There are no complicated commands or menus to learn. All functions of the unit's display station are performed with an easy-to-use keypad with clearly-labeled operations. Image processing includes window/level through the gray shades, magnification, and rotating the image 90 degrees. David Mahoney, National Sales Manager, Advanced Video Products, 543 Great Road, P.O. Box 1450, Littleton, MA 01460. (508) 486-0024.

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. To receive product information, see page 46A.
**Software for Scientists**

GraphPad Software introduces Version 4 of InPlot, a program for scientific graphing and data analysis. This upgrade features improved graphics editing, better fonts, capacity for larger data sets, user-defined equations and support for color printers. A network version is also available. InPlot is designed especially for scientists. The program is straightforward and simple so that first-time users can produce graphs in minutes. The program's features include curve fitting via nonlinear regression, mathematical transformation of X or Y values, linear regression, calculation of mean and error bars from replicate values, and the ability to properly handle data with missing values. Graphs are created, edited, and displayed exactly as they will be printed. Versatile graphics allow the user to move or re-size any portion of a graph (titles, labels, or a complete graph), plot any number of lines or curves on a single set of axes, plot data on logarithmic or discontinuous axes, and create histograms and bar graphs. InPlot also supports a complete set of scientific and international characters. GraphPad Software, 10855 Sorrento Valley Road, Suite 204B, San Diego, CA 92121. (619) 457-3909 or (800) 388-4723.

**Computed Radiography Workstation**

Du Pont is expanding its LINX Clinical Review Workstation to include computed radiography. The improved system is designed to create more rapid turnaround of digitized images between critical care areas and radiology, allowing quicker patient treatment decision. The system's quick x-ray turnaround and standardized image quality can decrease repeat x-rays, reducing hospital costs. LINX Computed Radiography, using technology supplied by Fuji Photo Film Co., Ltd., laser reads images recorded on Fuji imaging plates. On-board micro-processors convert the analog image data to digital format, enhancing it to correct over- or under-exposed images. Resulting images of uniform, stable density are printed on laser film for radiologists' diagnoses and displayed on high-resolution monitors to assist referring physicians in patient care decisions. Image archival and retrieval are improved via local data storage. Debbie Dubois, Du Pont Medical Products, BMP 24-2158, Wilmington, DE 19898. (302) 992-4113.

**Gas Trap**

Victoreen, Inc. announces the Model 8303 Gas Trap for use with their Model 830A Gas Delivery System. The 15O trap provides for the collection of exhaust radioactive gas from the delivery system and the patient during a study. Exhaled air from the patient enters the trap and travels 567 feet through a delay chamber at a typical flow rate of 10 liters/minute. A bolus of 15O would take about 20 minutes—or 10 half-lives—to pass through the chamber, reducing the radioactivity of the gas by a factor of 1000. The gas trap consists of a breathing bag, desiccant cartridge, delay chamber, air pump, and control circuitry housed in a lead shielded cabinet. The delay chamber has a volume of 8.85 ft3 (250 liters) with a delay line length of 567 (173 meters). The pump has a maximum capacity of 0.39cfn (11 liters/min). Visual indicators are provided for power on, bag empty, pump on, and fault alarm conditions. Audible indication of a fault alarm condition is also provided. Victoreen, Inc., 6000 Cochran Road, Cleveland, OH 44139. (216) 240-9300.
### APPLICATION FOR MEMBERSHIP

**First Name** Dr, Mr, Mrs, Ms, Miss (CIRCLE ONE)  
**Middle Initial**  
**Last Name** Jr, Sr, I, II, III (circle one)

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### Check Degree(s) Earned: (please type or print clearly)

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### Indicate Board Certification(s):  

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- ABR
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- ABIM
- ABSNM
- ABHP
- NMTCB
- ASCP
- ARRT(N)
- ARRT(T)
- ARRT(R)
- Other

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### 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

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

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  - DIVISION  
  - DEPARTMENT  
  - INSTITUTION OR COMPANY

- [ ] Home Address  
  - STREET ADDRESS  
  - APT. NO.
  - CITY  
  - STATE/PROVINCE/COUNTRY  
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### PROJECTED COMPLETION DATE

- YES
- 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

---

### NAME OF SNM MEMBER WHO SUGGESTED THAT YOU JOIN (optional)

### APPLICANT’S SIGNATURE ___________________________ DATE __________

---

### FOR OFFICE USE ONLY

- [ ] MF
- [ ] TS
- [ ] MA
- [ ] IT

**CHAIRMAN, MEMBERSHIP COMMITTEE (sign)**

**TECHNOLOGIST SECTION DESIGNEE (sign)**

---

**APPLICATION FEE ________________ **

**CHAPTER ________________ ML**

**11/91**
In-Training
Total
120.00
71.50

Categories of Membership—There are four basic categories of membership in the Society of Nuclear Medicine. (Descriptions of these four categories 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>
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<tr>
<td>Full-in-training with Tech Section</td>
<td>55.00</td>
<td>16.50</td>
<td>71.50</td>
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<tr>
<td>Associate</td>
<td>120.00</td>
<td>—</td>
<td>120.00</td>
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<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>
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<td>Technologist-in-training</td>
<td>17.50</td>
<td>16.50</td>
<td>34.00</td>
</tr>
<tr>
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<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 charges vary between $5.00 and $10.00.

• Prorated Dues—Dues for those applicants joining during the year are prorated to January 1st.

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.
The Journal is testing a new method to enable you to get information on a more timely basis from our advertisers.

Listed below are the companies that have advertised in this issue, as well as those that have been mentioned in the New Products section. Simply fill out the form and FAX it to the Society (FAX: 212/545-0221), and we will send it to the advertiser.

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   b. 300-499 patients
   c. 200-299 patients
   d. 100-199 patients
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2. No

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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.
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- 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.

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

☐ May 11–12, 1992 ☐ April 6–7, 1992
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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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Registrations and payment should be sent to:
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