SIEMENS

7500 Orbiter

MaxDELTA

W.A.M. enhanced image on MicroDELTA
MaxDELTA 3000 is the latest high-speed, 32-bit computer from Siemens. Configured with a stand-alone camera, or as an add-on to any existing system, MaxDELTA 3000™ gives you powerful turnkey capability, and flexible expansion with instant connectivity to additional DELTA family computer products, such as MicroDELTA™ and DELTAmanger.™

The pulse of the MaxDELTA 3000 is controlled by a new Operating program that sharpens your technical edge, assuring the highest staff productivity and best patient management, while providing you with the diagnostic confidence you expect from Siemens…world leader in nuclear medicine!

MaxDELTA 3000 Systems feature:
• High-speed, multi-task 32-bit MicroVAX 3300®
• Simultaneous acquisition and processing, including SPECT™
• Ethernet expandability.
• Large storage capacity with 150 Mbyte Winchester Disk.
• System Manager display terminal.
• CLINIC™, SPECT™ and Systems Manager software.

MaxDELTA 3000…the beat gets stronger!

Siemens Medical Systems, Inc.
2501 Barrington Road
Hoffman Estates, IL 60195
(708) 304-7252

Siemens…technology in caring hands

See us at RSNA in Chicago
Booth 1106

Circle Reader Service No. 75
Introducing the Capintec CRC-15R Dose Calibrator, from the company that makes it themselves.

Top line technology...bottom line affordability

From the company that for 25 years has developed and manufactured over 30 different models of state-of-the-art calibrators, sold more than 15,000 units and created the most comprehensive technical service and support system available.

- The CRC-15R is the most advanced dose calibrator available at any price.
- Fastest activity measurement.
- Large, easy-to-read display indicating:
  - Nuclide Name and Number – Activity – Unit of Measure.
- Preset and user defined radionuclide keys.
- Over 200 radionuclide selections available.
- Unique decay calculation provides activity measurement pre and post calibration.
- Complete built-in dose calibration QC and self diagnostics.
- Upgradeable
- Optional printer allows for printed results on a syringe/vial label.
- Backed by the most comprehensive service and support program in the industry.

For more information about how the CRC-15R can raise department standards at low cost, call today:
(201) 825-9500, TOLL FREE: 1-800-631-3826
NRC REQUIREMENT:

“A licensee shall survey for removable contamination, once each week, all areas where radiopharmaceuticals are routinely prepared for use, administered or stored.”

NUCLEAR REGULATORY COMMISSION
Publication 10CFR35, “Medical Use of By-Product Material,” Paragraph 35.70, “Surveys for Contamination and Ambient Radiation Exposure Rate.”

DELUXE WIPE TEST COUNTER

Specically designed so you can EASILY and QUICKLY comply with ALL NRC and State Regulatory Requirements for Wipe Test Counting!

- Digital LED readout plus pass/fail lights.
- Can be calibrated for all important isotopes, including sealed sources.
- Can be used as a scaler displaying counts up to 999 x 10^5.
- Easy to use, low in cost.
- Includes a ^{137}Cs, 1 μCi test source, plus 200 pre-numbered 1/2” diameter wipes.

Circle Reader Service No. 60

Phone or Write Today for FREE Bulletin 4071-35

NUCLEAR ASSOCIATES
A Division of VICTOREEN, INC.
100 VOICE ROAD
CARLE PLACE, NY 11514-1593 U.S.A.
(516) 741-6360
FAX (516) 741-5414
Beyond each imaging modality and support service we offer there is a commitment to be in touch with the state of your art...and with you, the professionals who practice it. Once a year the RSNA gives us that opportunity.

A time for professional enrichment. The exchange of ideas. A welcome chance to learn more about your requirements for tomorrow. And the opportunity to show you the technological advancements and services we have today.

Computed tomography • PACS • Lithotripsy • Linear accelerators • Magnetic resonance • Therapy planning • Mobile image intensifier • Diagnostic ultrasound • X-ray mammography • R/F systems • Data management • Education programs • Digital imaging • Therapy simulator • Uro-radiology • Mobile MR • Nuclear medicine • Site planning • Service plans • Mobile CT • Cardiakvascular imaging • Financial services • Mobile X-ray • Preventive maintenance • Special procedures • Health physics • Diagnostic imaging centers • In-service education • Positron emission tomography • Mobile cath. lab
Focused energy. 
Where brilliance begins.
Digital robotics. 
How sophycamera precision imaging takes shape.

Precision body contouring. 
Digital precision. Without compromise. That's the secret to the sophycamera's unsurpassed image quality. 
We start with advanced robotics. The system follows each patient's actual body contour with 0.1mm precision, automatically maintaining optimal patient-to-detector distance in SPECT and whole-body exams. So resolution is maximized at the earliest point in the detection process.

Unsurpassed resolution, linearity, and uniformity. 
Robotic precision is only the beginning. With proprietary digital electronics, sophycamera detectors provide earlier and more accurate digitization, resulting in the industry's highest performance characteristics. 
Including 3.4mm spatial resolution, 2.5% uniformity, and 0.36 linearity (UFOV).

That's precision control. Digital robotics, digital detection— inherently, no other system can match sophycamera image quality.

A sophycamera for every application. 
sopha now offers four sophycamera systems. 
In addition to the sophycamera DSX rectangular and sophycamera DS7 circular systems, we now offer the sophycamera DSX bodyTrak dual-head system and the sophycamera mobile system. 
So it's easy to select the right sophycamera for every imaging requirement.
32 to the FORTH.  
sophy computers raise performance to a new order of magnitude.

The industry leader in 32-bit technology.  
sophy computers are up to two times as efficient as other systems in most operations.  
Up to eight times with available options.  
Why? With 32-bit processors, specialized electronics, a proprietary FORTH operating system, and efficient FORTH programs, sophy computers provide a unique high-speed processing environment.  
And that means more comprehensive data analyses. Faster data transfer and archiving. And the power to drive tomorrow’s most intensive applications.  
The power of FORTH.  
A new level of performance. That’s the result of combining sopha’s 32-bit technology with FORTH programming.  
FORTH is a powerful, highly compact language which executes with unparalleled speed. Our engineers can write, modify, and test new FORTH programs instantly, reducing development time by a factor of three. New tools are available sooner, and it’s feasible to tailor software for specialized needs.  
What types of tools? Factorial analysis, volume quantification, gated SPECT—FORTH will help us make these advanced capabilities practical in the near future.  
Universal compatibility.  
sophy systems can process and store data from 14 other computers, centralizing data in multivendor departments.  
And, our state of the art token-ring network provides marked efficiency and cost advantages over earlier networks. So even smaller departments can acquire sophisticated network capabilities.
Gated SPECT Programs  sophy computer series  Factorial Analysis Programs
100% commitment. Why sopha is the growth leader in nuclear medicine.

Nuclear medicine is our world.
At sopha medical, we focus all our energies on nuclear medicine.
As a result, we have a higher sensitivity and responsiveness, not only to nuclear imaging but to specific applications such as cardiology, oncology, internal medicine, and neurology.
This has led to rapid growth. sopha is the world leader in nuclear computers, and has established a primary position in gammacameras. Along with global sales, service, and support, we maintain R&D and manufacturing facilities in Europe and the United States. All dedicated to nuclear medicine.
That's focused energy. And that's where brilliance begins.
Now introducing the *all-new* Thyroid Rectilinear Scanner...

Specifically designed for functional evaluation of the thyroid gland, the all-new ATOMLAB Scanner is characterized by its ease of operation, multitasking capabilities, and reproducible clinical results.

The Scanner features precise image quality utilizing a high-resolution, full-color display with a 1:1 organ-to-image ratio. A powerful combination of color scaling and background threshold options provides complete flexibility of display. The Scanner supplies objective and quantified data and its dedicated computer ensures reliable studies.

Call or write today for the all-new ATOMLAB Computerized Rectilinear Scanner Brochure.

See us at RSNA in Chicago
Booth 6709

Circle Reader Service No. 6
QUALITY ASSURANCE
Resource Manual for Nuclear Medicine

This new publication from the Technologist Section is a comprehensive guide to implementing and maintaining a quality assurance program in any size hospital or medical center.

The QA Manual is both a teaching tool and a guidebook. It features:

• Sample QA Plan
• Sample Data Collection Forms
• Training Exercises

Learn how to identify and document QA problems, monitor activities, and take corrective action through the QA process.

Develop plans for medical staff and technologists to work in tandem to produce the highest level of QA.

Receive invaluable aid in preparing for external QA reviews, including strategies for compliance with JCAHO QA standards.

THE SOCIETY OF NUCLEAR MEDICINE • Book Order Department
136 Madison Avenue, New York, NY 10016 • (212) 889-0717 • Fax: (212) 545-0221

Name

Institution

Address

City

State/Province/Country Zip/Postal Code

Amount Enclosed: $______

□ Member $18 (plus S & H*) *Shipping & Handling: $2.50/copy

□ Nonmember $25 (plus S & H*) Canada: $5/copy

Other Foreign: $20/copy

□ Check Enclosed □ Purchase Order Enclosed □ Charge to Credit Card

Visa # Expiry Date

MasterCard # Expiry Date

Signature

If ordering bulk quantities, contact Order Dept. for postage. Prepayment is required in US funds drawn on US banks. For payments made in US funds, but drawn on a foreign bank, add a bank processing fee of $4.50 for Canadian bank drafts, $40 for other foreign bank drafts. Check, Credit Card authorization or purchase order must accompany all orders.
IN A FOG??

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

- Shielded for Xe 127 and Xe 133 (radiation profile available on request).
- World’s only system that allows you to study patients on Ventilators.
- Largest and most efficient Xenon trap with a built-in monitor alarm system.
- Built-in O₂ monitor with digital display and control.
- A rebreathing system that saves Xenon.
- Low breathing resistance so you can study sick patients.
- Semi-automatic operation.
- Remote Control Capability.

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

Also available, Model 2000.

For more information, please call or write,

DIVERSIFIED DIAGNOSTIC PRODUCTS, INC.
11603 Windfern
Houston, TX 77064
713-955-5323
IT'S TIME TO TAKE THE NEXT STEP ...

NUCLEAR MEDICINE INFORMATION SYSTEMS ©
(Software Package)

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

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

PHONE: 412/932-5840/5430  FAX: 412/932-3176

Circle Reader Service No. 63
You’ll Never Look At Nuclear The Same Way Again.
As you can see, we've brought the future of nuclear imaging into sharper focus. Almost twice as sharp as ever before.

This kind of definition will give you a new view of what you can accomplish with nuclear. And help you diagnose with greater accuracy and confidence.

With the 7 mm resolving power of the Toshiba GCA-9300A three-detector SPECT, you can evaluate metabolic functions of the brain, heart and liver with unprecedented detail and precision.

You can image an object as small as the caudate nucleus. And clearly define functional anatomy in ways that were impossible until now.

In addition, with the integrated microprocessor camera/computer system, you can perform up to four critical functions simultaneously. Which should change your view of efficiency and throughput.

Toshiba's revolutionary Optotune™ Detector Performance Optimization Electronics System dramatically improves imaging performance by constant regulation of the detector electronics. The response is optimally maintained, resulting in higher-resolution images with increased diagnostic content. Optotune was first introduced as a design innovation for the GCA-9300A. Now, it's built into Toshiba's entire line of nuclear imaging systems.

Toshiba. A whole new way to look at nuclear medicine.
Toshiba America Medical Systems, 2441 Michelle Drive, P.O. Box 2068, Tustin, California 92681-2068, (714) 730-5000, (800) 421-1968.
NOT EVERYONE CAN BE PUT TO THE TEST

OPENING THE WAY TO DIAGNOSTIC IMAGING

See us at RSNA in Chicago Booth 7717

Circle Reader Service No. 115

Fujiwara Pharmaceutical Company
3 Parkway North Center
Deerfield, Illinois 60015

© 1990 Fujiwara Pharmaceutical Company
This new revised edition of the popular SPECT Primer integrates the newest SPECT techniques with the fundamental concepts and procedures presented in the first edition. The addition of clinical studies greatly enhances the value of this edition. The authors present procedures for routine and initial evaluation of a SPECT system as well as protocols for commonly imaged organ systems.

The protocols and procedures are deliberately presented in a generic fashion to offer the greatest flexibility to both the novice and the more experienced practitioner. Each chapter contains a summary of the covered topic, study questions, and a recommended reading list. This format ensures a thorough exposure to each topic and allows the reader to focus on areas of special interest.

Part I of the text gives the technologist a solid grounding in SPECT theory and protocols. Part II builds on this knowledge and introduces the reader to SPECT studies of various organs. The brain is discussed first because it is by far the most technically difficult organ to image. The reader will see realistic clinical images of acceptable and flawed transaxial slices for each study. The Appendix has been updated to include a discussion on Ramp filters and their correlation with additional filters such as Shepp, Logan, Hamming, Hann, and Butterworth.

A chapter is devoted to each of the following subjects:

- Image Reconstruction
- Quality Control Requirements
- Acquisition Parameters
- Processing Techniques
- Clinical Applications
- SPECT Performance Evaluation
- SPECT of the Brain
- Myocardial Perfusion SPECT
- Liver, Bone, and Gallium SPECT

**Ordering Information:**
Checks should be made payable to: The Society of Nuclear Medicine.
Prices: $20 members, $25 non-members. Add $2.50/copy for shipping and handling ($5/copy for Canada, $20/copy for all other foreign). Add $4.50 for Canadian Bank drafts, $40 for all other foreign drafts. Payment must be in U.S. dollars. For information on bulk order discounts, call The Society of Nuclear Medicine's Book Dept. at (212) 889-0717.

☐ Check enclosed  ☐ Purchase Order Enclosed  ☐ Charge to Credit Card

☐ Visa ☐ Mastercard  # ________________________ Expires: ______/____

Signature: __________________________________________________________

Name: ______________________________________________________________

Institution: __________________________________________________________

Address: ____________________________________________________________

Mail to: The Society of Nuclear Medicine, Book Order Dept., 136 Madison Avenue, New York 10016-6760. Fax #: (212) 545-0221.
The 1991 Scientific Program Committee, Scientific Exhibits Subcommittee, and the Scientific & Teaching Sessions Committee solicit the submission of abstracts from members and nonmembers of The Society of Nuclear Medicine for the 38th Annual Meeting in Cincinnati, OH. Abstracts accepted for the program 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
- CLINICAL SCIENCE APPLICATIONS
  - Bone/Joint
  - Cardiovascular (clinical and basic)
  - Endocrine
  - Gastroenterology
  - Neurology (clinical and basic)
  - Oncology (non-antibody)
  - Immunology (antibody)
  - Pediatrics
  - Pulmonary
  - Renal/Electrolyte/Hypertension
  - Hematology/Infectious Disease

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

Deadline for receipt of abstracts for Scientific Papers is Tuesday, January 8, 1991.

Deadline for receipt of abstracts for Scientific Exhibits is Tuesday, January 15, 1991.

The official abstract form may be obtained from the October 1990 issue of the JNM or by calling or writing:

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

If you've ever left a film badge on a hot dashboard, you know they can't take the heat.

Panasonic TLD badges, on the other hand, won't wilt even at 350°C. And they're still reliable after 200 uses.

To learn more about today's only completely integrated TLD product line, call 1-800-848-3979. Or write Panasonic Industrial Company, Radiation Measurement Systems, Two Panasonic Way (7E-4), Secaucus, NJ 07094.
Introducing a new renal agent that gives you both...

Renal images.

Renal tubular function measurements.
With the convenience of a cold kit.

For the first time, there's a technetium-based renal agent that not only gives you high-quality images, but renal function measurements as well. It's TECHNESCAN MAG3™.

Superior imaging quality
TECHNESCAN MAG3™ will redefine quality renal imaging for you. In comparative studies with I-131 OIH (iodohippurate sodium I-131 injection), image quality with TECHNESCAN MAG3™ was uniformly superior.¹² TECHNESCAN MAG3™ offers high renal extraction efficiency and minimal extrarenal excretion.

The first Tc99m-based tubular function agent
The renal clearance of TECHNESCAN MAG3™ is similar to that of iodohippurate, which makes it a suitable alternative to I-131 OIH for renal function studies. Renogram curves obtained with TECHNESCAN MAG3™ were comparable to those seen with I-131 OIH in comparative studies.¹²

The advantages of technetium
As a technetium-labeled agent, TECHNESCAN MAG3™ offers key advantages over I-123 OIH or I-131 OIH. These include ready availability in cold-kit form, much shorter half-life (6.02 hours, vs 13.13 hours for I-123 and 8.04 days for I-131), and lower radiation dose per mCi administered. (Total body absorbed dose [rad/mCi]: Tc99m = 0.0027, I-131 = 0.039, I-123 = 0.023.) The typical dose of TECHNESCAN MAG3™ required in renal function and imaging studies is 5 to 10 mCi.

Complete imaging with one agent
If you've been looking for a renal imaging agent that combines the safety and convenience of technetium with the physiological properties of iodohippurate, TECHNESCAN MAG3™ is for you. No other renal agent can match its versatility.

NEW
TECHNESCAN
MAG3™

Kit for the Preparation of Technetium Tc99m Mertiatide

Circle Reader Service No. 43 Please see the following page for references and brief summary of prescribing information.
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 1 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)


I will need hotel reservations for ________________ Sunday and Monday night/only Monday night.
I will need a ________________ single/__________ double room.

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

Name ______________________
Address _____________________
City/State/Zip ________________
Office Phone (_____) __________
________ work address ________ home address

Registrations and payment should be sent to:
Lisa Ann Tambiah
SPECT Brain Imaging Fellowship Coordinator
Nuclear Medicine Division
Medical College of Wisconsin
8700 W. Wisconsin Avenue
Milwaukee, WI 53226 (414)257-5068

TECHNESCAN™
Kit for the Preparation of Technetium Tc99m Mertiatide

INDICATIONS AND USAGE
Technetium Tc 99m mertiatide is a renal imaging agent. In addition, it is a diagnostic aid in providing renal function, split function, renal angiograms and renogram curves for whole kidney and renal cortex.

CONTRAINdications None known.

WARNINGS None known.

PRECAUTIONS
General
The contents of this kit are not radioactive. However, after sodium pertechnetate Tc 99m is added, adequate shielding of the final preparation must be maintained.

Contents of the reaction vial are intended only for use in the preparation of technetium Tc 99m mertiatide and are NOT to be administered directly to the patient.

To help reduce the radiation dose to the bladder, as well as other target organs, the patient should increase his or her fluid intake (unless medically contraindicated) and void as often as possible after the injection of technetium Tc 99m mertiatide for six hours after the imaging procedure.

Technetium Tc 99m mertiatide should not be used more than six hours after preparation.

The components of this kit are sterile and nonpyrogenic. It is essential that the user follow the directions carefully and use aseptic procedures normally employed in making additions and withdrawals from sterile, nonpyrogenic containers during the addition of pertechnetate solution and preparation of dosis for patient administration.

The technetium Tc 99m labelling reactions involved in preparing Technescan MAG3™ depend on maintaining the stannous ion in the reduced state. Any oxidant present in the sodium pertechnetate Tc 99m may adversely affect the quality of the radiopharmaceutical. Therefore, sodium pertechnetate Tc 99m containing oxidants should not be employed.

As in the use of any radioactive material, care should be taken to insure minimum radiation exposure to the patient and to occupational workers.

Radiopharmaceuticals should be used only by physicians who are qualified by specific training in the safe use and handling of radionuclides produced by nuclear reactor or particle accelerator and whose experience and training have been approved by the appropriate governing body.

Cardiovascular, Metabolic, Impairment of Fertility No long term animal studies have been performed to evaluate carcinogenic or mutagenic potential, or whether this drug affects fertility in males or females.

Pregnancy Category C Animal reproduction studies have not been conducted with technetium Tc 99m mertiatide. It is also not known whether this drug can cause fetal harm when administered to a pregnant woman or can affect reproduction capacity. Technetium Tc 99m mertiatide 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 Tc 99m is excreted in human milk during lactation, therefore, formula feedings should be substituted for breast feeding.

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

ADVERSE REACTIONS None known.

RADIATION DOSIMETRY The estimated radiation doses1 to the average adult (70 kg) from an intravenous administration of 185 MBq (5 mCi) and 370 MBq (10 mCi) technetium Tc 99m mertiatide are presented in Table 1. These radiation absorbed dose values were calculated using the Medical Internal Radiation Dose Committee (MIRD) Schema.

Table 1:

<table>
<thead>
<tr>
<th>Organ</th>
<th>mCi/185 MBq</th>
<th>(rad/5 mCi)</th>
<th>mCi/370 MBq</th>
<th>(rad/10 mCi)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urinary Bladder Wall</td>
<td>24</td>
<td>2.4</td>
<td>48</td>
<td>4.8</td>
</tr>
<tr>
<td>Upper Large Intestine</td>
<td>0.94</td>
<td>0.094</td>
<td>1.9</td>
<td>0.19</td>
</tr>
<tr>
<td>Gallbladder Wall</td>
<td>0.81</td>
<td>0.081</td>
<td>1.6</td>
<td>0.16</td>
</tr>
<tr>
<td>Lower Large Intestine</td>
<td>1.6</td>
<td>0.16</td>
<td>3.3</td>
<td>0.33</td>
</tr>
<tr>
<td>Kidneys</td>
<td>0.72</td>
<td>0.072</td>
<td>1.4</td>
<td>0.14</td>
</tr>
<tr>
<td>Small Intestine</td>
<td>0.81</td>
<td>0.081</td>
<td>1.6</td>
<td>0.16</td>
</tr>
<tr>
<td>Ovaries</td>
<td>1.3</td>
<td>0.13</td>
<td>2.6</td>
<td>0.26</td>
</tr>
<tr>
<td>Kidneys</td>
<td>0.18</td>
<td>0.018</td>
<td>0.36</td>
<td>0.036</td>
</tr>
<tr>
<td>Liver</td>
<td>0.24</td>
<td>0.024</td>
<td>0.48</td>
<td>0.048</td>
</tr>
<tr>
<td>Testes</td>
<td>0.81</td>
<td>0.081</td>
<td>1.6</td>
<td>0.16</td>
</tr>
<tr>
<td>Total Body</td>
<td>0.33</td>
<td>0.033</td>
<td>0.67</td>
<td>0.067</td>
</tr>
</tbody>
</table>

1 Assuming patient voids at 4.9 hour intervals

References:

©1990 Mallinckrodt Medical, Inc.
Circle Reader Service No. 43

Changing the look of medicine.™
Revolution, not Evolution!

A BOLD STATEMENT OF THE IMPACT WE HAVE HAD ON NUCLEAR MEDICINE THROUGH OUR REVOLUTIONARY TRIAD AND BIAD SYSTEMS

TRIAD
THREE DETECTOR SYSTEM

CLINICALLY PROVEN RELIABILITY:
• OVER 40 TRIADS AT LEADING INSTITUTIONS
• THOUSANDS OF HOURS OF USE IN MULTIPLE CLINICAL ENVIRONMENTS
• THOUSANDS OF PATIENT STUDIES COVERING ALL AREAS OF SPECT
• MOST EXTENSIVE APPLICATIONS SOFTWARE IN THREE DETECTOR SPECT
• WHOLE BODY SPECT
• 3 VIEW WHOLE BODY PLANAR IMAGING

Introduced May 1988

BIAD
ULTRA WIDE DUAL DETECTOR SYSTEM

BIAD REVOLUTIONIZES YOUR ENTIRE NUCLEAR MEDICINE CLINIC:

TOTAL BODY IMAGING
• TWO ULTRA WIDE DETECTORS
• SINGLE PASS ANTERIOR AND POSTERIOR WHOLE BODY
• TWO DETECTOR SPECT
• TWO VIEW LARGE AREA PLANAR
• WHOLE BODY SPECT
• "BODY TRAK" WHOLE BODY CONTOURING

CLINICAL EFFICIENCY
• OVER 25 BIADS AT LEADING INSTITUTIONS
• SEPARATE SPECT AND WHOLE BODY SCAN PALLETS
• CONVENIENT PALLLET STORAGE AND EXCHANGE SYSTEM
• APPLICATIONS SOFTWARE PROVEN BY TRIAD
• SMALL ROOM

Introduced November 1989

TRIONIX RESEARCH LABORATORY, INC.
1666 Enterprise Parkway
Twinsburg, Ohio 44087

Telephone: (800) 442-7017
Telephone: (216) 425-9055
FAX: (216) 425-9059

©TRIONIX 1990

Printed in U.S.A.

Please See Us At RSNA Booth 5350.

Circle Reader Service No. 83
MARKET YOUR NUCLEAR MEDICINE SERVICES EFFECTIVELY WITH AIMS.

Achieving maximum utilization of your Nuclear Medicine practice requires effective communication with referring physicians, as well as hospital administrators.

The New ACNP Program — A.I.M.S. — provides you with the proper tools to make presentations and explain the clinical benefits to increase referrals from physicians, and the cost effectiveness to hospital administrators to assure department funding.

Developed under the auspices of the ACNP Professional and Public Information Program, A.I.M.S. discusses clinical case examples and advantages of each procedure through:

- slides and accompanying script
- videos
- fact sheets
- reference material

ORDER FORM

<table>
<thead>
<tr>
<th>QTY.</th>
<th>MODULE</th>
<th>ACNP MEMBER</th>
<th>NON-MEMBER</th>
<th>AVAILABLE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>BONE SCINTIGRAPHY</td>
<td>$50</td>
<td>$90</td>
<td>3/88</td>
</tr>
<tr>
<td></td>
<td>GATED CARDIAC STUDIES:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>¾&quot; VHS TAPE</td>
<td>$65</td>
<td>$105</td>
<td>3/88</td>
</tr>
<tr>
<td></td>
<td>¾&quot; U-MATIC TAPE</td>
<td>$80</td>
<td>$120</td>
<td>3/88</td>
</tr>
<tr>
<td></td>
<td>COST JUSTIFICATION ANALYSIS FOR NUCLEAR MEDICINE EQUIPMENT</td>
<td>$50</td>
<td>$90</td>
<td>Winter/89</td>
</tr>
<tr>
<td></td>
<td>RENAL</td>
<td>$50</td>
<td>$90</td>
<td>7/88</td>
</tr>
<tr>
<td></td>
<td>GI/LIVER</td>
<td>$50</td>
<td>$90</td>
<td>Winter/89</td>
</tr>
<tr>
<td></td>
<td>GALLIUM/INDIUM</td>
<td>$50</td>
<td>$90</td>
<td>Spring/90</td>
</tr>
<tr>
<td></td>
<td>THALLIUM</td>
<td>$50</td>
<td>$90</td>
<td>Spring/90</td>
</tr>
<tr>
<td></td>
<td>SAVV! Complete A.I.M.S. Series (Includes 7 modules &amp; choice of video tape format below)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>¾&quot; VHS TAPE</td>
<td>$315</td>
<td>$555</td>
<td>as above</td>
</tr>
<tr>
<td></td>
<td>¾&quot; U-MATIC TAPE</td>
<td>$330</td>
<td>$570</td>
<td>as above</td>
</tr>
</tbody>
</table>

TOTAL $_____

Name ___________________________
Hospital _________________________
Address ___________________________
City/State/Zip ___________________

Mail form with check to: American College of Nuclear Physicians, Attn: A.I.M.S. Program, Department 4084, Washington, D.C. 20061-4084
(202) 857-1191
Coming soon from DuPont...

I.V. PERSANTINE®
(dipyridamole USP)

Persantine® is a registered trademark of Boehringer Ingelheim International GmbH. I.V. Persantine® is manufactured and distributed by DuPont under license from Boehringer Ingelheim Pharmaceuticals, Inc.
AMR's AccuSync provides R-wave detection with precision and reliability. The finest R-wave Triggering device available for computerized gated cardiac studies.

**AccuSync-5L Features**
- Isolation Amplifier for Patient Safety.
- Digital CRT Monitor.
- ECG Strip Chart Recorder.
- Heart Rate/R-R int.
- Trigger Pulse LED.
- Trigger Control for Ease of Lead Placement and Precise Location of Trigger Pulse.
- R-Trigger Output, Compatible with all Computers.
- No Delay.
- ECG Output
- Playback Mode. (optional)
- Event Marker. (optional)
- Audio Indicator.

**MODEL**
- AccuSync-6L
- AccuSync-IL
- AccuSync-3R
- AccuSync-4R

**FEATURES**
- All AccuSync-5L features with the exception of the Strip Chart Recorder.
- All AccuSync-5L features with the exception of Digital CRT Monitor.
- All AccuSync-IL features with the exception of the Strip Chart Recorder and Playback Mode.
- All AccuSync-3R features with the exception of the Heart Rate/R-R int. display.

ADVANCED MEDICAL RESEARCH CORP.

148 Research Drive/P.O. Box 3094
Milford, CT 06460/Telephone: (203) 877-1610
Circle Reader Service No. 5
Don't expect a film badge to make delicate radiation measurements. Or to continue working in extreme environments.

The nuclear power industry learned this long ago. That's why they've made Panasonic their vendor of choice for TLD badges, readers and software.

The entire Panasonic product line has been designed to help you pass NVLAP and DOELAP certification with ease. To learn more call 1-800-848-3979. Or write Panasonic Industrial Company, Radiation Measurement Systems, Two Panasonic Way (7E-4), Secaucus, NJ 07094.

Panasonic
Radiation Measurement Systems
Nuclear Medicine: Self-Study Program I

Syllabus and Questions—Emphasize essential, clinically related topics, with annotated references to more detailed information on each subject. Questions are formulated to approximate the level of difficulty of those found in specialty exams.

NUCLEAR MEDICINE: SELF-STUDY PROGRAM I
Edited by Barry A. Siegel, MD, and Peter T. Kirchner, MD

SECTION ONE: Radiobiology and Radiation Protection
Richard L. Witcofski, PhD, Chairman

SECTION TWO: Pulmonary Nuclear Medicine
Daniel R. Biello, MD, (Deceased), Co-Chairman
Tom R. Miller, MD, PhD, Co-Chairman

SECTION THREE: Gastrointestinal Nuclear Medicine
Alan H. Maurer, MD, Chairman

SECTION FOUR: Skeletal Nuclear Medicine
Edward B. Silberstein, MD, Chairman

Answers and Critiques—Correct answer for each question is followed by a discussion of the rationale for correct and incorrect answers. Additional tables, illustrations and references ensure that you gain an in-depth understanding of each topic.

Nuclear Medicine: Self-Study Program I covers the advances in nuclear medicine since the publication of the Nuclear Medicine Review Syllabus, and features many of the same contributors.

You will find that Nuclear Medicine: Self-Study Program I is unsurpassed in helping you keep abreast of the lastest advances and is an excellent resource for your teaching responsibilities. It is, of course, invaluable as preparation for board and recertification exams.

If you are a physician, scientist or technologist who needs to review his knowledge of nuclear medicine, or one who wants to know more about this cutting edge of medicine, order your copy today.

ACT NOW!
The Society of Nuclear Medicine
SSPI
136 Madison Avenue
New York, NY 10016-6760

Name
Institution
Address
City/State/Province Zip/Postal Code

- $90 Member - $115 Non-member - Check Enclosed
- $75 Resident/Technologist - Charge to Credit Card - Purchase Order Enclosed

Visa 
MasterCard 

Expiry Date 
Expiry Date 

Signature
Nutronics Imaging Inc.
The Security Of Protecting Your Investment.
Nutronics Imaging is the Engineering company behind the product. Special attention with quality engineering. We will accommodate YOUR needs as appropriated. We are not a broker.
Nutronics is your source for:

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

* RENOVATED GAMMA CAMERAS
  - Cardiac Small FOV (37 PMT).
  - Stand alone Large FOV (37 PMT).
  - Analog & Digital Cameras.
  - Spect.
  - Excellent Mobile Cameras.

* COLLIMATORS—Used & New
  - Pinhole, Slant holes.
  - Low, Medium & High Energy
  - Repair & Recore.
  - Exchange.

* MULTI-IMAGERS, FORMATTERS
  - Analog & Digital.
  - Composite Video.

* COMPUTERS
  - Large variety of computers to fit your needs.

* SERVICE T&M OR CONTRACT

We support: Elscint Dymax & Apex Lines, Searle, Microdot, Old Picker MDS, Matrix Multi-Imagers, Up-take Units, Dose calibrators, Nova com. Consultation on your premises.
P.O Box 425, Old Bethpage, NY 11804
(516) 753-3001 FAX: (516) 753-3002
We buy, sell, trade and lease at a competitive price.

USE THE SPECIALIZED TOUCH

---

SNM 38th Annual Meeting
Critical Dates

<table>
<thead>
<tr>
<th>ITEM</th>
<th>FORM INCLUDED IN JNM</th>
<th>DUE DATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abstract Form</td>
<td>October Issue</td>
<td>1/08/91</td>
</tr>
<tr>
<td>Scientific Papers</td>
<td></td>
<td>1/15/91</td>
</tr>
<tr>
<td>Scientific Exhibits</td>
<td></td>
<td>4/15/91</td>
</tr>
<tr>
<td>Works-in-Progress</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Registration Form</td>
<td>November Issue</td>
<td>5/17/91</td>
</tr>
<tr>
<td>Housing Form</td>
<td>December Issue</td>
<td>5/17/91</td>
</tr>
</tbody>
</table>

DON'T FORGET THE MID-WINTER MEETING IN TAMPA, FL

| TITLE:          | New Horizons in SPECT, PET and Computers |
| DATE:           | February 4–5, 1991                      |
| LOCATION:       | Hyatt Regency Westshore, Tampa, Florida |
| SPONSOR:        | The Computer and Instrumentation Council|
The Core of the Future is Here Today.

The Precision MICRO-CAST COLLIMATOR by NUCLEAR FIELDS

Representing a quantum advance in collimator core design. A new standard in imaging performance by all critical criteria.

Reduces Common Artifacts Before Entering the System

- Reduced penetration and scatter
- Perfect non-polarization
- Improved linearity
- Uniform tunnel angularity
- Improved resolution and edge definition

Micro-cast solid core construction yields up to 50% increased sensitivity over traditional foil fabricated collimators, without loss of resolution.

Special Prices Available on Re-Coring Unused or Damaged Collimators

Models available for all Gamma Cameras
- Parallel
- Slant-Hole
- Diverging
- Converging
- Pin-Hole
- Thyroid
- Point-Focusing
- Fan-Beam
- Bone-Densitometry
- Prototype designs

NUCLEAR FIELDS
320 N. MICHIGAN AVE. SUITE 2100 • CHICAGO, ILLINOIS 60601 • TELEPHONE (312) 743-2680
• FAX (312) 743-2786

Circle Reader Service No. 62

Attention... TECHNICARE® and PICKER® USERS

Diagnostix Plus is your Source for:

- Reconditioned Cameras
  - Large Field (37 and 61 PMT's)
  - Small Field Cardiac Cameras
  - Mobile and SPECT Cameras

- Collimators
  - Upgrade to Hexagonal Hole
  - Insert Collimators, 30° Slant Hole
  - Collimator Repairs/Re-Cores
  - A large selection of used collimators

- Camera Performance Upgrades
  - Uniformity Correction (DUFC)®, MicroZ™
  - Resolution
  - Crystal Replacement
  - Thin Crystal Performance Upgrades
  - High Resolution Multi Imagers and Formatters

- Computers
  - ADAC®, MDS®, Picker®, Elscint®, Technicare®, General Electric®

We buy, sell and trade equipment. Innovative rental programs available.

Diagnostix Plus, Inc.
P.O. Box 437 • New Hyde Park, NY 11040 USA • (516)742-1939
Telex: 226078 (AEGIS UR) • FAX: (516)742-1803

Cost Effective Diagnostic Imaging Products

Circle Reader Service No. 22
Picture the possibilities
With Star-quality versatility, anything’s possible

When it comes to handling the full range of nuclear studies, nothing outperforms a Starcam system.

Picture the possibilities soon. For details, call us toll-free at:

1-800-433-5566.

GE Medical Systems
THE SOCIETY OF NUCLEAR MEDICINE

BOOK ORDER DEPARTMENT
136 MADISON AVENUE
NEW YORK, NY 10016-5760
TELEPHONE: 212-889-0717
FAX: 212-545-0221

Name (please type or print)
Institution
Address
City
Province/State
Postal Code/Zip
Telephone #  FAX #

<table>
<thead>
<tr>
<th>PUBLICATIONS</th>
<th>Member</th>
<th>Non-Member</th>
<th>Quantity</th>
<th>Sub-Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPECT: A Primer, 2nd Ed., 1990. English &amp; Brown.</td>
<td>$20.00</td>
<td>$25.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quality Assurance Resource Manual for Nuclear Medicine, 1990. Gilbert et al.</td>
<td>$18.00</td>
<td>$25.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MIRD: Radionuclide Data and Decay Schemes, 1989. Weber et al.</td>
<td>$45.00</td>
<td>$60.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nuclear Medicine: Self-Study Program I, 1988. Siegel &amp; Kirchner, eds. (price includes postage) *$75 for Residents and Technologists.</td>
<td>$90.00*</td>
<td>$115.00*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The Scintillation Camera, 1988. Simmons et al.</td>
<td>$30.00</td>
<td>$35.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MIRD Primer for Absorbed Dose Calculations, 1988. Loewinger et al.</td>
<td>$35.00</td>
<td>$50.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fundamentals of Nuclear Medicine, 2nd Ed., 1988. Alazraki &amp; Mishkin.</td>
<td>$15.00</td>
<td>$15.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low-Level Radiation Effects: A Fact Book, 1982. (includes 1985 updates) Brill</td>
<td>$20.00</td>
<td>$20.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Laboratory Manual for Nuclear Medicine Technology, 1984. Hibbard &amp; Lance.</td>
<td>$10.00</td>
<td>$10.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Items (not listed)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A Patient's Guide to Nuclear Medicine (minimum order: 100 copies) plus $2.50 U.S. postage and handling</td>
<td></td>
<td></td>
<td></td>
<td>$32/copy</td>
</tr>
<tr>
<td>Guidelines for Patients Receiving Radiiodine Treatment (minimum order: 25 copies) plus $2.50 U.S. postage and handling</td>
<td></td>
<td></td>
<td></td>
<td>$30/copy</td>
</tr>
</tbody>
</table>

U.S. postage and handling: Add $2.50 for 1 book; $5.00 for 2-5 books; $7.50 for 6 or more books.
Outside U.S.: For shipments to Canada, add $5.00 to above amounts; for shipments outside U.S. or Canada, add $20.00 to above amounts.

Contact SNM for bulk rates or overnight delivery charges

<table>
<thead>
<tr>
<th>AUDIOVISUALS</th>
<th>Program Number</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Please add $20.00 per program if not a member. Thus, a $65.00 program is non-member priced at $85.00.

FORMAT:
[ ] Slide/tape  [ ] VHS  [ ] Beta  [ ] ¼" U-matic

For shipping: In U.S., please add $5.00 for one program; $7.50 for 2-5 programs; $10.00 for 6 or more programs.
Outside U.S., please add $10.00 per program.

Postage $ 

Audiovisual Total $ 

GRAND TOTAL $ 

Rev. 890
MIRD:
Radionuclide Data and Decay Schemes

This new publication from the MIRD committee compiles decay schemes and output tables for 242 radionuclides.

Detailed information on the intensities and energies of radiations and the mean energy emitted per nuclear transition in the decay of radionuclides in this publication provides the data needed for:

- The calculation of absorbed dose
- The assay of radioactivity
- The evaluation of radionuclide purity
- The determination of suitability of a radionuclide's decay scheme for clinical imaging, RIA, radiation therapy, and other biomedical applications.

THE SOCIETY OF NUCLEAR MEDICINE • Book Order Department
136 Madison Avenue New York, NY 10016 • (212)889-0717 • Fax: (212)545-0221

Name
Institution
Address
City
State/Province/Country
Zip/Postal Code

$45 Member (+ $2.50) Total $47.50
$60 Non-Member (+ $2.50) Total $62.50
* Shipping and Handling (For Canada, add $5; other foreign, add $20.)
□ Check Enclosed □ Purchase Order Enclosed □ Charge to Credit Card

Visa #
MasterCard #

Expiry Date
Expiry Date

Signature

If ordering bulk quantities, contact Order Dept. for postage. Prepayment is required in US funds drawn on US banks. For payments made in US funds, but drawn on a foreign bank, add a bank processing fee of $4.50 for Canadian bank drafts, $40 for other foreign bank drafts. Check, Credit Card authorization or purchase order must accompany all orders.
Fundamentals of Nuclear Medicine

2nd Edition

Edited by Naomi P. Alazraki, MD and Fred S. Mishkin, MD

Table of Contents

Radiation in Perspective
1. Basic Science of Nuclear Medicine
2. Radiation and Dose
3. Radiation Effects
4. Radiopharmaceuticals
5. Imaging of Radiation

2. The Diagnostic Process and Nuclear Medicine
3. Sensitivity, Specificity, and Predictive Value

Organ Imaging with Radionuclides
4. Endocrinology
5. Cardiovascular System
6. Pulmonary System and Thromboembolism
7. Liver and Gastrointestinal Tract
8. Biliary Tract
9. Skeletal System
10. Central Nervous System

Imaging Disease Process
11. Trauma
12. Inflammatory and Infectious Process
13. Cancer

Nonimaging Diagnostic Techniques
14. Nonimaging Procedures

Appendix
Glossary
Index

To Order:

Single copies of Fundamentals of Nuclear Medicine, 2nd Edition, are available for $15.00 plus $2.50 postage and handling for each book ordered. Payment must be made in U.S. funds drawn on U.S. banks only. For payment made in U.S. funds, but drawn on a foreign bank, add a bank processing fee of $4.50 for Canadian bank drafts or $40.00 for all other foreign bank drafts. Check or purchase order must accompany all orders. Make checks payable to The Society of Nuclear Medicine.

SPECIAL STUDENT OFFER: Bulk quantities of Fundamentals of Nuclear Medicine, 2nd Edition, are available for instructors to introduce medical and technologist students to nuclear medicine. Accredited instructors may purchase a minimum of 10 copies at $4.00 each (includes shipping).

The Society of Nuclear Medicine
136 Madison Avenue, Dept. 588J
New York City, NY 10016-6760
MIRD Primer for Absorbed Dose Calculations

Prepared by
Robert Loevinger
Thomas F. Budinger
Evelyn E. Watson

In Collaboration with the MIRD Committee

The MIRD Primer for Absorbed Dose Calculations was prepared by the MIRD Committee to provide a fresh explanation of the MIRD schema with examples designed to illustrate applications.

The text is divided into four parts: the Primer, Examples of the Use of the MIRD Schema, The Collected Absorbed Dose Estimate Reports, and Appendices.

Part 1 offers a detailed explanation of the MIRD method.

Part 2 amplifies this explanation with examples designed to illustrate applications beginning with relatively simple problems and working up to more complex ones.

Part 3 contains previously published MIRD absorbed dose estimates, now readily assembled in one book, that have been revised and edited for this publication.


The MIRD Primer also contains a substantive index, a detailed glossary and list of symbols, and for your handy reference calculation tables on the inside front and back covers; 128 pp.

This text is an invaluable reference tool for everyone who is involved in nuclear medicine research and practice!

ORDER NOW!
$35.00 per copy for members; $50.00 for non-members. Add $2.50 postage and handling for each book ordered. If ordering in bulk quantities, contact the Order Dept. for postage fees. Prepayment is required in US funds drawn on US banks only. No foreign funds are accepted. For payments made in US dollars but drawn on a foreign bank, add a bank processing fee of $4.50 for Canadian bank drafts or $40.00 for all other foreign bank drafts. Check or purchase order must accompany all orders. Make checks payable to:

The Society of Nuclear Medicine, Book Order Dept.
136 Madison Avenue, New York, NY 10016-6760
(212)889-0717
Nuclear Medicine Physician: Faculty Position Available:

The Department of Radiology at the Brigham and Women's Hospital/Harvard Medical School has an opening for a one-year fellowship, and an optional second year, in brain SPECT imaging. The department has a dedicated program for brain imaging and a rotating-head GE unit. The department does approximately 1,500 brain SPECT examinations per year, including perfusion, tumor imaging, and other indications. Ongoing research includes dementia, substance abuse, tumor detection, and cerebral vascular disease. Please send curriculum vitae to: B. Leonard Holm, MD, Chairman, Department of Radiology, Brigham and Women's Hospital, 800 Washington St., Boston, MA 02115. Brigham and Women's Hospital/Harvard Medical School is an affirmative action/equal opportunity employer.

Research/Nuclear Cardiology Fellowship Available:

Must have two or more years of clinical cardiology fellowship completed. Fellowship is for two years. Provides training in nuclear cardiology, sufficient exposure to nuclear imaging, involving experience in all current clinical and several investigational modalities. Provides specific didactic training in research methodology and research publication experience in clinical and preclinical areas of coronary artery disease, valvular disease and heart failure. Send CV to: Jeffrey S. Bornman, PhD, Send CV to: Nuclear Cardiology, Cornell University Medical Center, 525 E. 68th St., Room 467, New York, NY 10021. EOE, AA, M/F/H/V.

Physician

Nuclear Medicine Physician. The Permanente Medical Group's Santa Clara facility is currently seeking a Nuclear Medicine Physician for this full-time position to join our staff of two MDs. Our teaching hospital has academic affiliation with Stanford University, and is active in SPECT. We require experience in thyroid disease. For more information, call Norton Snyder, MD, at (408) 236-4590 or send your CV to: Kaiser Foundation Hospital, 900 Kirts Blvd., Santa Clara, CA. EOE, M/F. NUCLEAR MEDICINE PHYSICIAN. Position immediately available for BC/BE NUCLEAR PHYSICIST in active nuclear medicine department located in a large tertiary care hospital with active cardiac program. Virtually all new imaging equipment and computer, including three SPECT cameras. Beautiful area in which to live. Send CV and references to: Gary F. Gates, MD, Director of Nuclear Medicine Dept., St. Vincent Hospital & Medical Center, 9205 SW Barns Rd., Portland, OR 97223.

Nuclear Medicine Physician: Immediate opening. Active sophisticated community hospital practice in Los Angeles area. ABNM required. Send CV to: The Society of Nuclear Medicine, Box 116, Madison Avenue, New York, NY 10016.

Nuclear Medicine Director—Roswell Park Cancer Institute is seeking a Director of Nuclear Medicine with interests in the clinical and research aspects of multimodality cancer imaging and immunodiagnostics. The Director of Nuclear Medicine and Nuclear Medicine Departments includes plans for a long-term Jr. and Sr. Fellowships for clinical research. Excellent opportunity. Roswell is an NCI designated comprehensive cancer center and is currently entering a period of renewed growth in all aspects of our programs. Opportunities for research and academic activity are outstanding. A candidate must qualify for a faculty appointment at the Assistant Professor level in the School of Medicine and Biomedical Sciences, SUNY at Buffalo. Curriculum vitae should be submitted to: Nicholas J. Petrelli, MD, Associate Chief, Department of Surgical Oncology, Roswell Park Cancer Institute, Elm and Carlton Streets, Buffalo, New York 14263. Roswell Park is an Affirmative Action/Equal Opportunity Employer.
in nuclear medicine technology. Must be certified or eligible. Full range of in vivo procedures and active cardiovascular imaging section utilizing modern instrumentation. Responsibilities include clinical instruction in Nuclear Medicine Technology Program. Excellent career opportunity with competitive salary and comprehensive benefits package. Send resume or contact John Bricker, Division of Nuclear Medicine, University of Iowa Hospitals and Clinics, Iowa City, Iowa 52242. Phone collect: (319) 356-2348. The University of Iowa is an equal opportunity-affirmative action employer.

Hawaii! NUCLEAR MEDICINE TECHNOLOGIST. The Queen's Medical Center, a 506-bed acute care teaching facility located in downtown Honolulu, has an immediate full-time position available. Qualified candidate must be registered (ARRT, NMTCB) or registry eligible Nuclear Medicine Technologist. Our large, progressive department offers state-of-the-art equipment including multiple SPECT/CT/931 camera/computer systems. Enjoy all your outdoor activities year-round with our warm and temperate climate. We offer relocation assistance and temporary housing. Interested applicants may call collect, Ann Hisamoto, Employment Specialist, (808) 547-4730, or send resume to: The Queen's Medical Center, Personnel Services Division, 1301 Punchbowl St., Honolulu, HI 96826. EOE.

NUCLEAR MEDICINE TECHNOLOGIST. Full-time position available in private office. Single technologist working w/soft ABNM certified MD. Moderate but challenging caseload. Excellent working conditions, ample time to enjoy living in paradise. Peter S. Robbins, MD, 1399 Punahou St. A19C, Honolulu, HI 96826. (808) 955-3335.

NUCLEAR MEDICINE TECHNOLOGIST: Appointment for 1991, pending residency status. A vacancy exists at the Prince of Wales Hospital for a qualified Nuclear Medicine Technologist. The department provides a service to the Prince of Wales, Prince Henry, and Prince of Wales Children's Hospitals and other facilities within the Eastern Sydney Area Health Service, and offers a wide variety of Nuclear Medicine procedures. Applicants must be accredited, or eligible for accreditation by the Australian and New Zealand Society of Nuclear Medicine and must also be prepared to participate in on-call services as well as become involved in research projects. The Prince of Wales Hospital is a major teaching hospital and is situated not far from the city centre and close to Sydney's eastern suburbs and beaches. For further information please contact Jenny Dixon, Chief Technologist, Prince of Wales Hospital on (02) 399 2220. Written applications should be directed to: The Human Resources Manager, Eastern Sydney Area Health Service, Cnr. High and Avoca Streets, Randwick NSW 2031, Australia. The names of two professional references should be included. The Eastern Sydney Area Health Service is an Equal Opportunity Employer and supports a smoke-free workplace.

Training Programs
NUCLEAR MEDICINE TRAINING PROGRAMS, State University of New York at Buffalo. The Department of Nuclear Medicine at SUNY/Buffalo offers the following training programs: 1) two-year nuclear medicine residency; 2) fellowships in nuclear oncology/monoclonal antibody research; 3) one-year nuclear medicine program for qualified radiologists; and 4) five-year track programs combining nuclear medicine with radiology or internal medicine leading to board eligibility in both specialties. The programs offer a comprehensive exposure to all aspects of nuclear medicine and allied imaging fields and research. For further information and applications for July 1, 1991, please contact: Joseph Prezio, MD, SUNY/Buffalo Nuclear Medicine, 105 Parker Hall, 3435 Main Street, Buffalo, NY 14264. AA/EOE.

Positions Wanted

Pharmacy
Diagnostic Photon Corp. RADIOPHARMACY LIQUIDATION. Must sell Building, Equipment, Inventory, and Supplies—$1.5 million. Call Mrs. Levine at (305) 972-5006.

Equipment
For sale: Technician 420/550, ADC's vertical CDS, system 1, system III, DPS 2800. We offer the highest prices for all types of nuclear medicine cameras & computers. Call Franklin at Imaging Solutions (415) 924-9055.
The 1991 Nuclear Imaging Surveys
Joint cooperative surveys of the
American College of Nuclear Physicians
College of American Pathologists
Society of Nuclear Medicine

Transmission Imaging Simulator (TA)—Series 1
PA view of a child’s pelvis
The 1991 spring submission consists of a PA view of a child’s pelvis with multiple low contrast targets simulating neoplastic involvement of various bone structures. Imaging the simulator requires the use of a Tc 99m liquid flood source, or a Co 57 planar radioactivity source. Targets in this simulator should be evaluated according to the degree of certainty the reader has in deciding whether a target exists in each of the “square cells” or subregions of the device. Because of the target’s location in the center of the “cells,” the reader is not required to locate the target, but merely detect its presence. Participants’ results will be analyzed using the ROC procedure.
Price: $420.00  Shipping date: April 22, 1991

Nuclear Medicine Applications Specialist
Sophia medical systems, a leading nuclear medicine medical manufacturer, has immediate openings for Applications Specialists based at our headquarters facility in Columbia, Maryland.

The responsibilities of the Applications Specialist include: Training customers (physicians and technologists) in the use of the camera and computer systems, demonstrating equipment at trade shows (national and regional), supporting customer calls on the 800# help-line and assisting with the in-house technologist program and documentation projects. This position requires the applicant to be a CNMT, minimum of 3 years experience (preferably with sophia equipment) and with a strong background in tomography. 80-90% travel is involved. AA or BS degree a plus. The applicant must have a professional appearance and demonstrate excellent verbal and written communication skills. We offer an outstanding salary and a benefits package.

Send your résumé to:
Gayle Thepaut, Customer Accounts Manager
sophia medical systems, inc.
7155 Columbia Gateway Drive
Columbia, MD 21044
301-290-1367

PHYSICIAN
NUCLEAR MEDICINE
A Nuclear Medicine physician is immediately required for the Nuclear Medicine Department at the Plains Health Centre, Regina, Saskatchewan, a 503-bed teaching referral centre affiliated with the College of Medicine, University of Saskatchewan. The hospital also serves as the major Cardiology and Neurosurgery Facility for the southern half of the Province of Saskatchewan. The successful applicant should have competence in all aspects of Diagnostic and Therapeutic Nuclear Medicine. Applicants must be FRCP (C) in Nuclear Medicine or be eligible to take the examinations. In accordance with the Canadian Immigration Requirements, preference will be given to Canadian citizens. Please submit curriculum vitae and references to:
Dr. M. Malik
c/o Administration
Plains Health Centre
4500 Wascana Parkway
Regina, Saskatchewan S4S 5W9

Inquiries about the position may be directed to Dr. Malik at (306) 359-2360.
The Medical Center of Central Massachusetts is the largest health care system in central Massachusetts. At our campuses, we offer our patients clinical excellence and compassionate care with state-of-the-art technology.

**MEMORIAL**

**Nuclear Medical Technologist**

Our Nuclear Medicine Department has an immediate vacancy for a Nuclear Medical Technologist. The Department performs a full range of procedures including scanning, SPECT and RIA. This 40-hour per week position in an interesting, varied teaching environment offers clinical challenges and opportunity for personal and professional growth. Our salary range is competitive and is complemented by a generous fringe benefits package. Must be licensed or license eligible.

Call Cynthia L. Carlson, Recruiter, at (508) 793-8401 or submit a resume for prompt consideration to her at the Memorial Campus, The Medical Center of Central Massachusetts, 119 Belmont Street, Worcester, MA 01605.

An Equal Opportunity Employer.

**NUCLEAR MEDICINE TECHNOLOGIST**

Wausau Hospital Center, a 315-bed acute care regional trauma center located in central Wisconsin, has an immediate opening for a full-time Staff Nuclear Medicine Technologist that will include rotating shifts and rotating call on weekends & holidays.

**Responsibilities:** planar and spect imaging, radiopharmaceutical preparations and computer processing.

**Required:** registered or registry eligible.

We offer an excellent salary and flex benefits. For details call: (715)847-2800, long distance call: 1-800-283-2881.

**WAUSAU HOSPITAL CENTER**

333 Pine Ridge Blvd., Wausau, WI 54401

For additional opportunities, call the Employment Opportunity Line at (715)847-2727.

Equal Opportunity Employer

---

**Diagnostic Imaging**

**STAFFING SPECIALISTS**

Specializing in Diagnostic Imaging and Nuclear Medicine Personnel

- **Temporary Staffing Service**
- **Nationwide Recruitment Service**

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

For information regarding the services call 813-461-9642

**RAOS**

RADIOPHROIGRAPHY SERVICE, INC.

---

**Become an Integral Part of an Innovative Department.**

**Nuclear Medicine Technologist**

Kaiser Permanente, Los Angeles

Kaiser Permanente is one of the nation's leading health care organizations. Our 652-bed tertiary care medical center in Los Angeles is constructing a new 10,000 square foot Nuclear Medicine Department. This department will feature six Gamma cameras, and will perform a broad variety of procedures.

We are currently seeking a Nuclear Medicine Technologist to prepare and assay radiopharmaceuticals for administration to patients; perform in vivo and in vitro studies; assist the physician in the administration of radioisotopes and the development of new techniques and procedures; perform safety monitoring procedures and equipment calibrations; perform SPECT imaging studies and other related functions.

Qualified candidate will be California State Health Services certified or eligible and have 1 year of experience. Must be a graduate of an approved Nuclear Medicine Training Program and possess knowledge of radiation safety, nuclear cardiology and SPECT imaging. Skills for in vivo and in vitro studies are required.

We offer a competitive salary and a comprehensive benefits package. For consideration, please call Lisa Hendey at (213) 667-5924, or send your resume to: Kaiser Permanente, Dept. J0U-108-11/01/90, 1515 N. Vermont Ave., 2nd Floor, Los Angeles, CA 90027. Equal Opportunity Employer.
NUCLEAR MEDICINE TECHNOLOGIST

Newport Hospital currently has a full-time Day Shift position available in its' progressive Nuclear Medicine Department. Duties will include the performance of a wide range of imaging procedures including SPECT.

Position requires CNMT or ARRT [N.M.]. Registration and registry-eligible candidates are welcome to apply.

Position offers a competitive salary, a comprehensive benefit package, and the opportunity for professional growth in a progressive department with state-of-the-art equipment. In addition, Newport Hospital is located in scenic Newport, Rhode Island, a seaside resort community offering an outstanding cultural and recreational environment.

To apply, please send resume or contact: Employee Services Department, Newport Hospital, Friendship Street, Newport, RI 02840. We are an equal opportunity employer.

---

Nuclear Medicine Technologists

The University of Texas M.D. Anderson Cancer Center, one of the world's leading comprehensive cancer institutions, is seeking registered or registry eligible candidates in Nuclear Medicine to work in our fully computerized and highly automated Division of Diagnostic Imaging.

We offer an outstanding salary/benefits package, reimbursement for interviewing expenses, interest free loans, relocation assistance, and Texas residents do not pay state income tax. For confidential consideration, please send your resume to: M.D. Anderson Cancer Center, 1515 Holcombe Blvd., HMB 205, Houston, Texas 77030, ATTN: Debora Melancon, or call collect (713)792-8025.

THE UNIVERSITY OF TEXAS
MD ANDERSON CANCER CENTER

Equal opportunity/affirmative action employer. Smoke-free environment.

---

ST. VINCEN'T'S HOSPITAL, SYDNEY

NUCLEAR MEDICINE TECHNOLOGISTS
Permanent Residency.
Two or three year work visas.
Closing date: 13th December, 1990.

The Department of Nuclear Medicine requires 3 Nuclear Medicine Technologists. St. Vincent's Hospital is willing to sponsor suitable applicants for permanent residency or two or three year work visas. Where possible, applicants will be interviewed at major centres in their country of origin.

Commencement date will be early 1991.

The Department caters for the needs of a 500 bed teaching hospital, Cardiac Transplant patients from the South Pacific area, as well as privately and publicly referred outpatients. It offers a comprehensive range of Nuclear Medicine techniques, has a radiopharmacy and major research commitment in bone mineral densitometry.

Equipment includes a GE400 ACT, Toshiba GCA402 and two mobile cameras, a Searle LEM and a GE300M Starcam. Computer systems are DEC PDP11/34 and two 11/73's. Bone mineral studies are carried out on Lunar Radiation Corp. SP2, DP3 and DPX and hologic.

Applicants should have experience in a wide range of nuclear medicine procedures and the use of computers. The successful applicants would be responsible to the Director of Nuclear Medicine and the Chief Technologist.

Candidates who intend to migrate are preferred but longer term temporary two or three year employment will also be considered. The hospital will assist as far as possible with application for work visa or immigration.

Working conditions include payment for on-call, Government Financed Health Insurance, 10 days paid sick leave if required, ½ weeks leave per annum plus 9 public holidays.

Written applications should be directed to Personnel Manager, St. Vincent's Hospital, Victoria Street, Darlinghurst, Sydney, New South Wales 2010, Australia. Please include your phone or fax number with your application.

Further information may be obtained from the Chief Nuclear Medicine Technologist, Mrs. J. Wilks on ISD (61) (2) 361 2753.

St. Vincent's is a non-smoking institution.

ST. VINCEN'T'S HOSPITAL, VICTORIA STREET, DARLINGHURST NSW 2010 AUSTRALIA.

---

Nuclear Medicine Technologist

Saint Joseph Hospital & Health Care Center, a 500-bed acute care teaching hospital, has an immediate position available. We offer a competitive salary, Sign-On-Bonus and a beautiful lake front location. AART, NMTCB, or ASCP registry or eligible, and qualifications for State of Illinois licensure.

For consideration, send resume to:

Barbara Pratt
Human Resources Recruiter

2900 N. Lake Shore Drive, Chicago, Illinois 60657

Saint Joseph Hospital & Health Care Center

Member of DAUGHTERS OF CHARITY NATIONAL HEALTH SYSTEM

Equal Opportunity Employer M/F
The New England Chapter—SNM/TS announces "The Job Hotline," a national toll-free, hotline for nuclear medicine. The hotline is designed to provide a quick link for technologists seeking jobs and for hospitals seeking technologists. Institutions seeking technologists should call the hotline number, leave the name of the institution, title of the job opening, and name and number of the contact person; data are then stored for three months in a database for anyone who calls the hotline seeking employment. Technologists seeking employment should call the hotline number, specify state(s) which are of interest, specify type of job desired, and leave name and address. A listing will then be sent out in 48 hours; all inquiries are kept confidential. If an opening has not been filled within three months, the institution should call again to have it listed. The institution should also call if an opening has been filled so that it can be deleted from the database. The hotline numbers are 1-800-562-6387 (1-800-JOB-NETS) or 1-990-4212 in Maine. Questions or comments should be directed to: Tom Starno, Manager, Job Hotline, New England Chapter—TS at (207) 945-7186.

The Mideastern Chapter—SNM/TS will provide a referral network for technologists seeking employment and for hospitals in need of technologists. Interested individuals should call Cathy Gonzalez at (301) 855-1712. Please leave your name, address, phone number and a brief description of your request.

NOTE: SNM chapters are invited to submit job referral service listings for publication. Pertinent information—name and brief description of the service, telephone number and/or address, name or number of contact person for inquiries—should be sent to:

Joan Hiam, Section Editor, JNM/JNMT The Society of Nuclear Medicine, 136 Madison Avenue New York, NY 10016-6760.

---

**RADIOCHEMIST**

**University of Minnesota**

**Minneapolis VA Medical Center**

The Veterans Administration/University of Minnesota PET Program is seeking an experienced, research-oriented radiochemist with proven expertise in synthetic organic chemistry. The successful applicant will join an established PET group working in a state-of-the-art facility in close proximity to the University of Minnesota. This position is ideally suited for an ambitious, career-oriented individual who wishes to maintain a university affiliation/appointment. Competitive salary and benefits.

Send curriculum vitae and bibliography in confidence to:

David A. Rottenberg, M.D.
Director, PET Imaging Service (11P)
Veterans Administration Medical Center
One Veterans Drive
Minneapolis, MN 55417

An Equal Opportunity Employer
THE FEE before 12/20 On/After 12/20

<table>
<thead>
<tr>
<th></th>
<th>Physicians/Scientists</th>
<th>Members</th>
<th>$175.00</th>
<th>$220.00</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Nonmembers</td>
<td>205.00</td>
<td>250.00</td>
</tr>
<tr>
<td>Technologists</td>
<td></td>
<td>Nonmembers</td>
<td>110.00</td>
<td>140.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Members</td>
<td>80.00</td>
<td>110.00</td>
</tr>
<tr>
<td>Students</td>
<td></td>
<td>Students</td>
<td>70.00</td>
<td>70.00</td>
</tr>
</tbody>
</table>

ALL PRE-REGISTRATIONS MUST BE RECEIVED BY JANUARY 15, 1991

NEW HORIZONS IN SPECT, PET AND COMPUTERS
Hyatt Regency Westshore, Tampa, Florida • Monday, February 4 — Tuesday, February 5, 1991

PLEASE ENROLL THE FOLLOWING (use copies for additional registrants):

Name (as it should appear on badge)

Affiliation

Address

City State Zip

Phone

MAIL TO:
THE SOCIETY OF NUCLEAR MEDICINE
COMPUTER AND INSTRUMENTATION SYMPOSIUM
Department of Meeting Services
136 Madison Avenue
New York, NY 10016-6760 • (212) 889-0717
Information for Classified Advertisers—1990

POLICY: The Journal of Nuclear Medicine and the Journal of Nuclear Medicine Technology accept classified advertisements from medical institutions, groups, suppliers, and qualified specialists in nuclear medicine. Acceptance is limited to Positions Open, Positions Wanted, Equipment Available, Equipment Wanted, and Seminars. We reserve the right to decline, withdraw, or modify advertisements that are not relevant to our readership.

LINE-ADS: $17.00 (JNM) or $15.00 (JNMT) per line or fraction of line (approx. 50 characters per line, including spaces). Please allow 28 characters for the first line which will appear in capital letters. Special Positions Wanted rate for SNM members: $10.00 per line. Note: Box numbers are available for the cost of the two lines required.

EXAMPLES

<table>
<thead>
<tr>
<th>NUCLEAR MEDICINE TECHNOLOGIST</th>
<th>Estimate 28 characters</th>
<th>Estimate 50 characters</th>
</tr>
</thead>
<tbody>
<tr>
<td>WITH BOX NUMBER</td>
<td>COST: 6 lines × $17.00 = $102.00 (JNM)</td>
<td>6 lines × $15.00 = $90.00 (JNMT)</td>
</tr>
</tbody>
</table>

DISPLAY ADS DIMENSIONS:

<table>
<thead>
<tr>
<th>FULL PAGE</th>
<th>1/2 PAGE VERTICAL</th>
<th>1/2 PAGE HORIZONTAL</th>
<th>1/4 PAGE</th>
<th>1/8 PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>6½” wide × 9½” high</td>
<td>3½” wide × 9½” high</td>
<td>6½” wide × 4½” high</td>
<td>3½” wide × 4½” high</td>
<td>3½” wide × 2½” high</td>
</tr>
</tbody>
</table>

RATES:

<table>
<thead>
<tr>
<th>JNM</th>
<th>JNMT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full page</td>
<td>$1,200</td>
</tr>
<tr>
<td>Half page</td>
<td>$710</td>
</tr>
<tr>
<td>Quarter</td>
<td>$470</td>
</tr>
<tr>
<td>Eighth</td>
<td>$400</td>
</tr>
</tbody>
</table>

*Publisher-set charges: page $100; half page $75; quarter page $40; eighth page $25.

TERMS: Payment or an authorized Purchase Order must accompany order. Make check payable, in U.S. dollars on U.S. banks only, to: The Society of Nuclear Medicine. Note: 15% agency commission is offered on display ads only.

FREQUENCY: The Journal of Nuclear Medicine is a monthly and the Journal of Nuclear Medicine Technology is a quarterly, published in March, June, September, and December.

SEND COPY TO: Classified Advertising Department The Society of Nuclear Medicine 136 Madison Avenue, 8th Floor New York, NY 10016-6760 FAX: (212)545-0221
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.

Rectangular Carboy

Nalge Company introduces the Nalgene DOT-34-5 Rectangular Carboy, which conforms to DOT Regulation 34, including a minimum wall thickness of .045 in, a 0.1% UV light inhibitor and ability to withstand a top-load of 600 lb. The carboy and closure are 100% virgin high-density polyethylene and designed to work as a system to provide a leakproof seal. There is no closure liner to wear out or fall out. The carboy features a nominal neck O.D. of 70 mm and a minimum neck I.D. of 50 mm, which allows easier filling and retrieving of chemicals. Jorge Pardo, Marketing Communications, Nalge Company, Box 20365, Rochester, NY 14602. (716) 586-8800.

Circle Reader Service No. 101

Print Spooler Capability for MIG

Vortech Data has announced the availability of an important Print Spooler enhancement to its Medical Imaging Gateway (MIG). The Print Spooler allows multiple vendor and multiple modality diagnostic imaging devices to share a common printer. The MIG provides direct digital ACR-NEMA connections to equipment from all major modality manufacturers. The Print Spooler feature supports any modality that can export windowed and leveled data, third-party, ACR-NEMA workstations, displays, and archives. It speeds up printing from all of these peripheral devices whether the images are retrieved from optical storage or are printed from soft copy displays. Vortech Data, Inc., 1891 Preston White Drive, Reston, VA 22091. (703) 264-0020 or (800) 869-9998.

Circle Reader Service No. 102

Spectrometer Measures CD From Far to Visible UV

Jasco, Inc. has developed a spectrometer, Model J-720, that collects circular dichroism (CD) data from far ultraviolet (UV) of 170 nm to 800 nm in the visible UV. The instrument can be used as a stand-alone or configured in a hyphenated system such as Stopped Flow-CD or HPLC-CD. The J-720 has an exceptional S/N ratio, ~5 times superior to any previously available system. Baseline thermal stability and internal N2 purge have also been greatly improved. Eleven scanning speeds are available in wavelength, time, or temperature modes. A step-scan feature allows rapid-sweeping between wavelengths of interest. The software is menu-driven and allows full-function arithmetics, peak picking, derivatives, and FFT smoothing to enhance spectral data. Self-diagnosics assure peak performance and data reliability. Jasco, Inc., 314 Commerce Drive, Easton, MD 21601. (800) 333-5272.

Circle Reader Service No. 103

Immunophenotyping System Receives In Vitro Diagnostic Product Status

Becton Dickinson Immunocytometry Systems announced that the Food and Drug Administration has cleared its cytometric system for marketing as an in vivo diagnostic product (IVDP). The new product is the first complete flow cytometric system for the enumeration of lymphocyte subsets. The system provides an objective, quantitative means of assessing changes in the immune system that can be
used to monitor a patient’s response to therapy or to identify disease progression. One clinical application is using the system for the diagnostic and prognostic assessment of patients with AIDS. The Becton Dickinson Immunochemistry System is based on the FACScan Flow Cytometer, an instrument that performs cell analysis; the Simultest IMK Plus™ Software, used on the FACScan Flow Cytometer to automate the identification and quantification of cell populations; and the Simultest IMK Plus Kit, a matched set of monoclonal antibody reagents that identify specific functional groups of lymphocytes. These products provide a complete identification of the major functional classes of human immune cells, including T-cells, B-cells, and Natural Killer cells. The system gives the clinician the ability to perform timely analysis of the immune system without using cumbersome and difficult-to-interpret manual tests. Debora Demarest, Marketing Services Manager, Becton Dickinson Immunocytometry Systems, 2350 Qume Drive, San Jose, CA 95131. (408) 954-2169.

Circle Reader Service No. 104

**Bioassays on a Silicon Chip**

Adeza Biomedical has developed proprietary methods combining silicon, immunochemistry, and laser technology to produce diagnostic tests. The new biosensor for DNA probes and immunoassays marks the beginning of a new era in diagnostic testing. The technology is applicable to any immunodiagnostic DNA probe test. Adeza intends to apply the technology in the areas of infectious disease, cardiology, fertility, drugs, high risk pregnancy, food, and environmental testing. Don Borsick, Marketing Director, Adeza Biomedical, 1240 Elko Drive, Sunnyvale, CA 94089. (408) 745-0975.

Circle Reader Service No. 105

**Gamma Spectroscopy Software for PCs**

Canberra has introduced SAMPO 90, a software for personal computer gamma spectroscopy. The new software is based on SAMPO algorithms and techniques. Using a sophisticated macro language, the technician can define fully automated counting sequences as required in production counting rooms. The spectroscopist can look at peak residual displays, interactively insert suspected peaks, and recalculate statistical peak fits to verify results. Laboratory personnel no longer need to rely on intuitive interpretation of results. SAMPO 90 is compatible with both Canberra's AccuSpec and System 100 PC-based Multichannel Analyzers. The software can also read and analyze data files generated from the MCAs of most other manufacturers. Sales Dept., Canberra Industries, Inc., One State Street, Meriden, CT 06450. (203) 238-2351.

Circle Reader Service No. 106

**Removable Disk Acquisition and Reader**

Agfa Matrix, a division of Agfa Corporation, has introduced an electronic image capturing device, the Matrix® Removable Disk System™ (RDS), designed to replace the camera used in a traditional ultrasound cart. The Matrix RDS allows the images from several scanners to be digitized and stored on a transportable hard disk, which can then be processed at a convenient imaging center. Developed for use with ultrasound, DSA, and nuclear medicine, the system can improve department productivity by eliminating unnecessary time spent carrying the cassettes to the darkroom for film loading and processing. The Matrix RDS consists of an acquisition unit, transportable hard disk cartridges, and a reader unit connected to a Matrix Mini — a self-contained integrated imager with daylight film processing and a built-in automatic film handling system. Tom Colucci, Agfa Matrix Division, Agfa Corporation, 100 Challenger Road, Ridgefield Park, NJ 07660. (201) 440-2500.

Circle Reader Service No. 107

**Urological C-Arm Table**

Atomic Products has designed a Urological C-Arm Table that accommodates all urological procedures with exclusive radiographic and fluoroscopic capabilities while maintaining patient comfort. The design allows use with either floor-mounted, ceiling-suspended, or portable X-ray equipment without sacrificing radiographic quality. The wide range of utility, complete portability, and battery-powered operation allow the table to support such applications as stone manipulations, basketing procedures, temporary and permanent pacemaker implants, and heart catheterizations. The table can be maneuvered into any of its positions at the touch of a button on either the hand or foot controls. Atomic Products Corporation, P.O. Box 702, Shirley, NY 11967. (516) 924-9000.

Circle Reader Service No. 108

**New Products**
Positron Emission Tomography is a revolutionary imaging modality that will give your institution a diagnostic advantage!

A PET system from Siemens will give you the advantage of diagnostic confidence. Confidence in the largest installed PET base. Confidence in ten's of thousand's of PET studies, and most importantly, confidence in a PET system, offered by the world's largest supplier of medical equipment!

**Not another generation... but a whole new dimension for PET IMAGING!**

The ECAT® from Siemens is a PET imaging system, so simply superb, it's unsurpassed in the realm of cardiac, neurologic, oncologic and psychiatric applications!

▲ Smallest commercial detectors provide:
   • Superior image quality with 5 mm 3D resolution
   • Highest volume sampling with 31 image planes over 10.8 cm FOV
   • Accurate quantification with reduced partial volume effect

▲ Scatter subtraction and pulse pile-up rejection for superior image quality

▲ Built in detector diagnostics guaranteeing reliability and performance

▲ Sun® 4/60 SPARCstation 1™ provides:
   • Multiwindow capability for simultaneous acquisition, reconstruction, and analysis
   • 12.5 MIPS processing power
   • Flexible Networking

ECAT, the Heart and Mind of Medicine's Future!

**Siemens Medical Systems, Inc.**
2501 Barrington Road  Hoffman Estates, IL 60195
(708) 304-7252

*Siemens... technology in caring hands*

Image courtesy of R. Frackowiak, M.D.
London, England
cardiac evaluation  diagnostic assessment

interventional therapy  post therapeutic monitoring

SQUIBB Diagnostics

EXAMINE EVERY ANGLE OF PATIENT MANAGEMENT

EVERY ANGLE MANAGEMENT