Nephroflow®

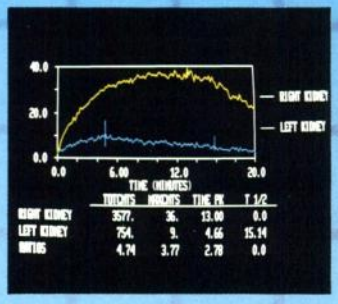
Iodohippurate Sodium I123 Injection

Move into the future... Why settle for anything less!

CLINICAL TASK: Evaluate differential renal function in a patient with multiple bladder and ureteral surgeries, still having recurring urinary tract infections.[1]

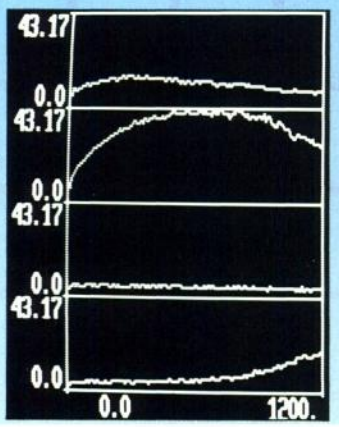
2–4 min.

6–8 min.



10–12 min.

20–24 min.



I123 Renogram

CONCLUSION: Right hydronephrosis in a somewhat chronically obstructive appearing pattern. Small, poorly functioning left kidney contributing approximately 14% to total renal function.

Better Data Density–Better Statistics–Higher Detector Efficiency

[1]Courtesy St. Joseph Hospital, Orange, Calif.

Nephroflow®

For the past 20 years you have used I131 Iodohippurate for your renal studies. Now I123 Iodohippurate is available for your use. Use Nephroflow – The physics are better, the statistics are better and the detection efficiency is better. Move into the future.

Comparison of I123 and I131

Characteristic	*I123*	*I131*
Mode of Decay	Electron capture	Beta⁻
Half-Life	13.2 hours	193 hours
Principal Gamma Energy (keV)	159	364
Intensity	84%	82%
Half-Value layer, lead, cm	0.037	0.24
Detection Efficiency: ¼" NaI (Tl) crystal	74.5%	22.5%

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NEPHROFLOW®
IODOHIPPURATE SODIUM I 123 INJECTION

For complete prescribing information consult package insert, a brief summary of which follows:

DESCRIPTION: Nephroflow® is supplied as a sterile, apyrogenic, aqueous, isotonic sodium chloride solution for intravenous administration. Each milliliter of the solution contains 37 megabecquerels (1 millicurie) Iodohippurate Sodium I 123 at calibration time, 2 milligrams Iodohippurate Sodium, 1 percent benzyl alcohol (as a preservative), 9 milligrams sodium chloride for isotonicity, and up to 0.1 percent alcohol. The solution is buffered with 1.2 milligrams per milliliter sodium phosphate, monobasic and 0.05 milligrams per milliliter sodium phosphate, dibasic (at time of manufacture) and the pH is adjusted to 7.0–8.5 with sodium hydroxide or hydrochloric acid. The radionuclidic composition at calibration time is not less than 94.7 percent I 123, not more than 4.8 percent I 124, and not more than 0.5 percent all others (I 125, I 126, I 130, Na 24, Te 121). The radionuclidic composition at expiration time is not less than 85.5 percent I 123, not more than 12.9 percent I 124, and not more than 1.6 percent all others. The ratio of the concentration of I 123 to I 124 changes with time.

INDICATIONS AND USAGE: Nephroflow is a diagnostic aid in determining renal function, renal blood flow, and urinary tract obstruction, and as a renal imaging agent.

CONTRAINDICATIONS: None Known.

WARNINGS: None Known

PRECAUTIONS:

General

The contents of the vial are radioactive. Adequate shielding of the preparation must be maintained at all times.

Do not use after the expiration time and date (24 hours after calibration time) stated on the label.

The prescribed Iodohippurate Sodium I 123 dose should be administered as soon as practical from the time of receipt of the product (i.e., as close to calibration time as possible) in order to minimize the fraction of radiation exposure due to relative increase of radionuclidic contaminants with time.

The dose to the bladder wall will be reduced significantly if the patient is encouraged to void within 2 hours after the drug is administered. The dose to the other target organs will also be substantially reduced.

Iodohippurate Sodium I 123, as well as other radioactive drugs, must be handled with care and appropriate safety measures should be used to minimize radiation exposure to clinical personnel. Care should also be taken to minimize radiation exposure to the patient consistent with proper patient management.

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

No long-term animal studies have been performed to evaluate carcinogenic potential, mutagenic potential, or effects on fertility in male or female animals.

Pregnancy Category C

Animal reproduction studies have not been conducted with this drug. It is also not known whether Iodohippurate Sodium I 123 can cause fetal harm when administered to a pregnant woman, or can affect reproductive capacity. Iodohippurate Sodium I 123 should be given to a pregnant woman only if clearly needed.

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

Nursing Mothers

Since Iodine 123 is excreted in human milk, formula-feeding should be substituted for breast-feeding if the agent must be administered to the mother during lactation.

Pediatric Use

Safety and effectiveness in children have not been established.

ADVERSE REACTIONS: As with all organic iodine containing compounds, the possibility of allergic reactions must be kept in mind. Nausea, vomiting, and fainting have been reported in conjunction with the administration of Iodohippurate Sodium I 123.

HOW SUPPLIED: Nephroflow is supplied in nominal 3.5 ml vials as a sterile, apyrogenic, aqueous, isotonic sodium chloride solution for intravenous injection. Each milliliter contains 37 megabecquerels (1 millicurie) of Iodohippurate Sodium I 123 at calibration time.

It is available, in individual vials, in the following sizes:
MPI Catalog No. 2041; 1 ml and 37 megabecquerels (1 mCi) per vial,
MPI Catalog No. 2042; 2 ml and 74 megabecquerels (2 mCi) per vial.

Vials are packaged in individual lead shields with plastic outer container.

Circle Reader Service No. 1

RADIOISOTOPE RECORD

Date: Jul 16, 1984
Time: 8:11 A.M.
Isotope: Tc-99m
Sample # 1
Activity: 798. mCi
Volume: 20.0 ml
Conc: 39.9 mCi/ml
99Mo: 27.8 uCi
Mo/Tc: .034 uCi/mCi

RADIOISOTOPE RECORD

Date: Jul 16, 1984
Time: 8:12 A.M.
Isotope: Tc-99m
Sample # 1
Dose: 5.00 mCi

Isotope Decay Chart

8:30 A.M.
38.5 mCi/ml
.13 ml
Mo: .036 uCi/mCi

9:00 A.M.
36.3 mCi/ml
.14 ml
Mo: .038 uCi/mCi

9:30 A.M.
34.3 mCi/ml
.15 ml
Mo: .040 uCi/mCi

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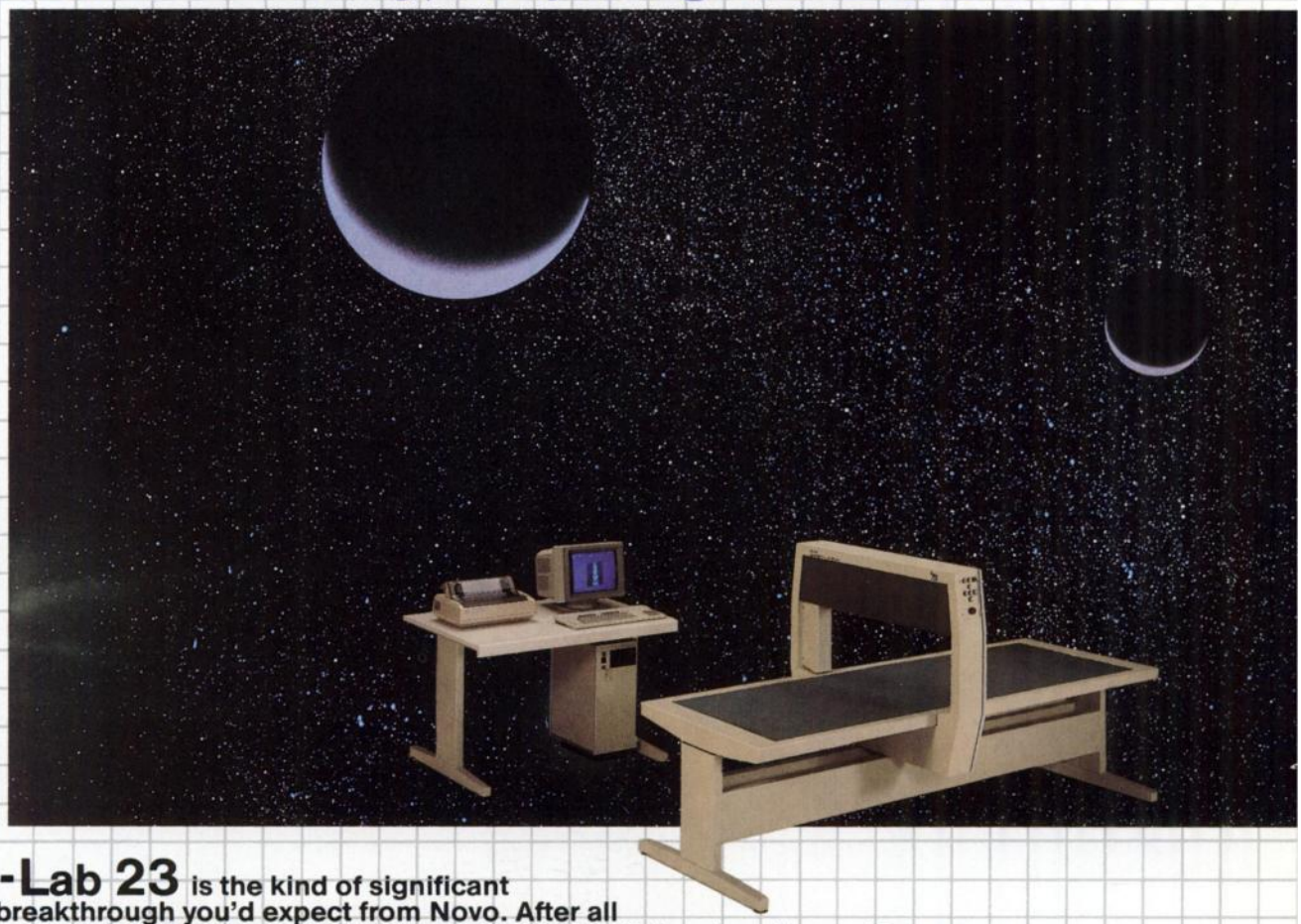

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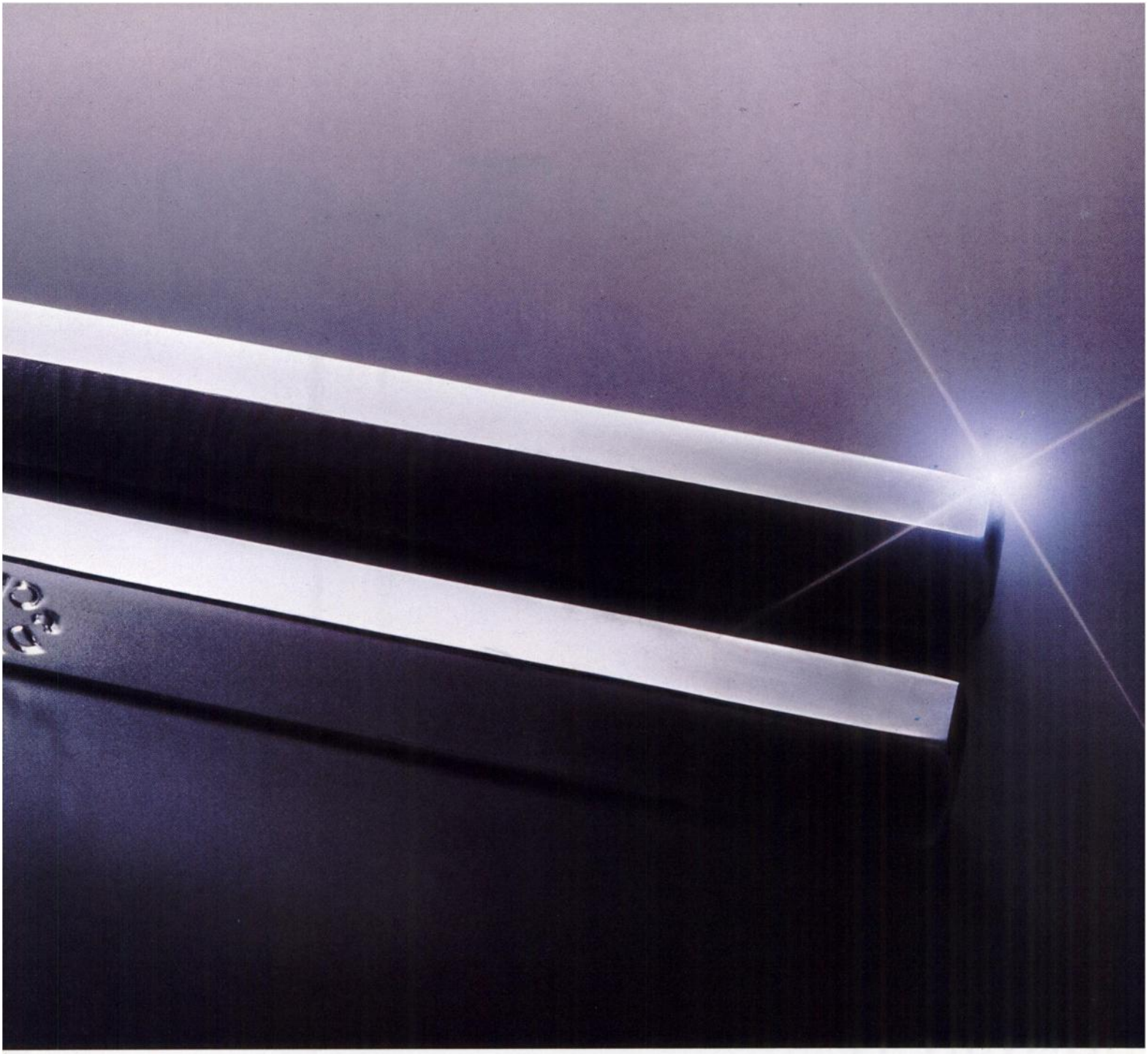

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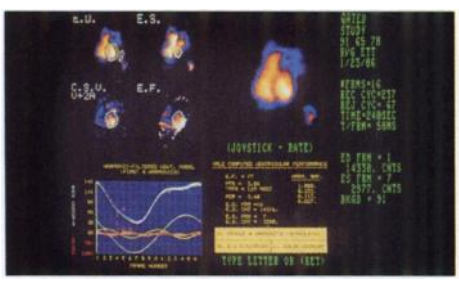

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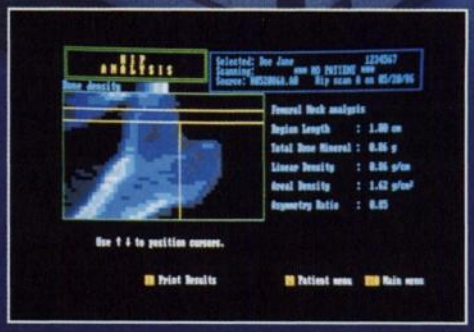

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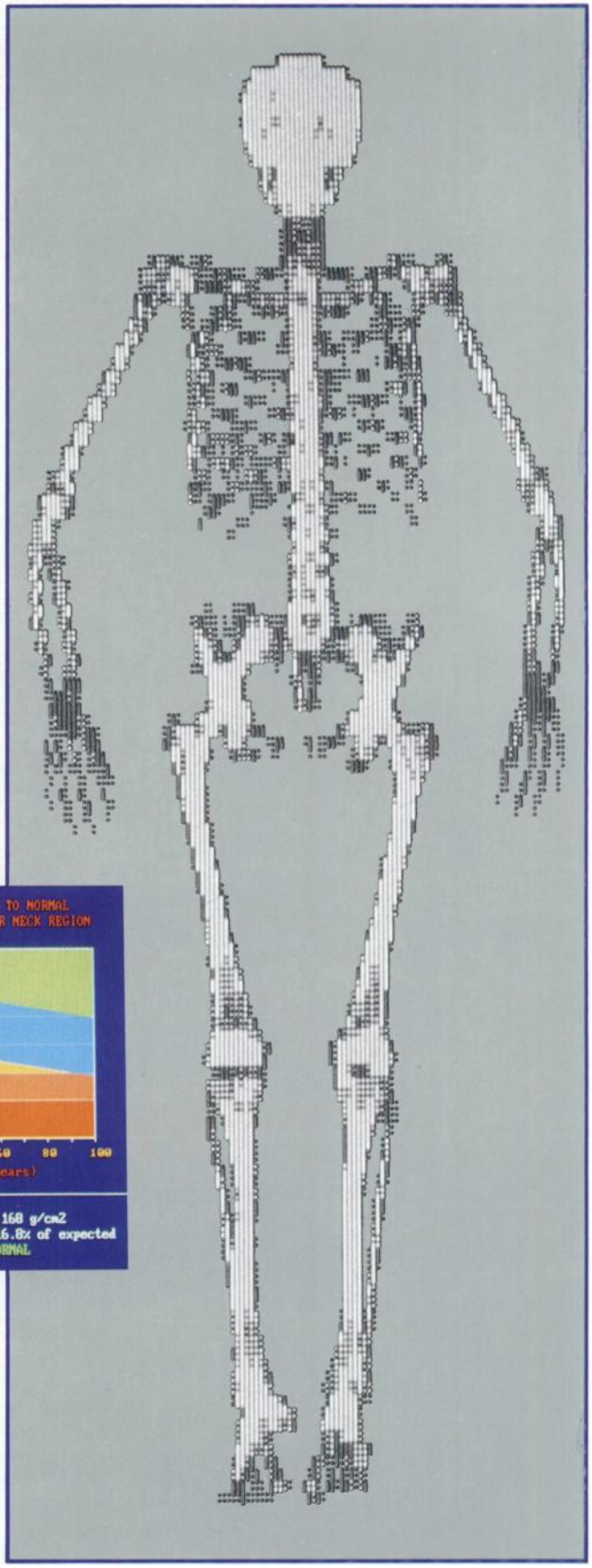

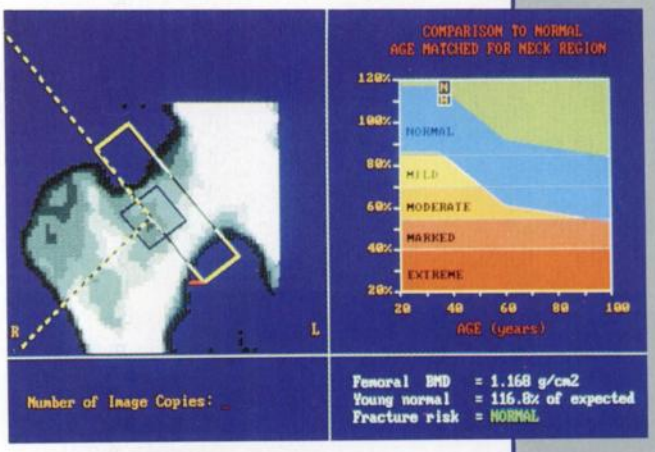

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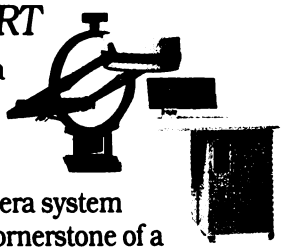

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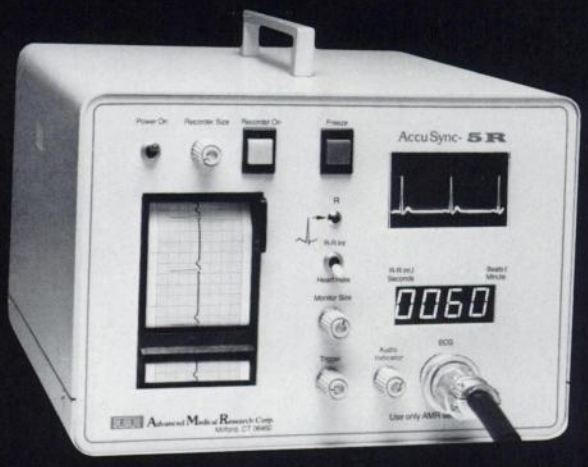

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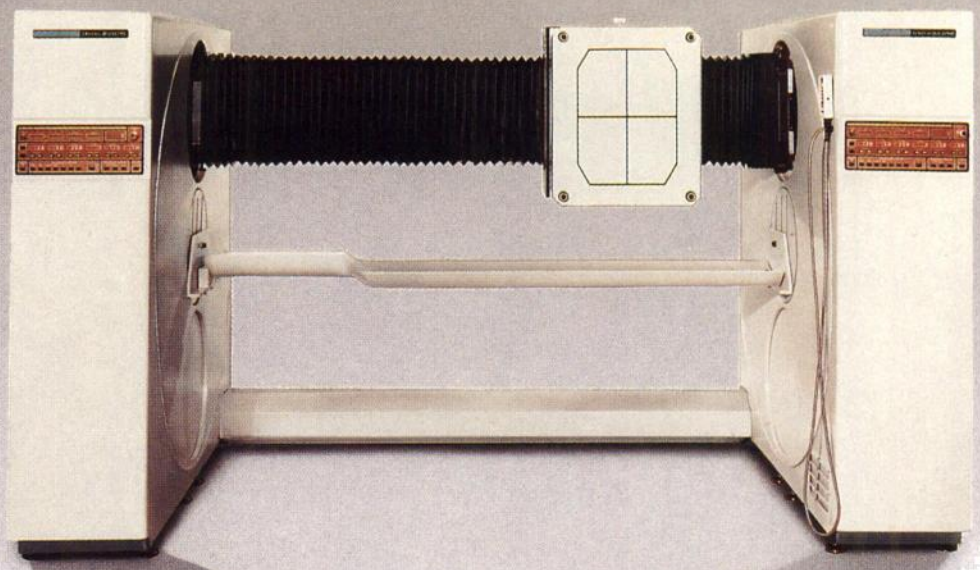
A new star



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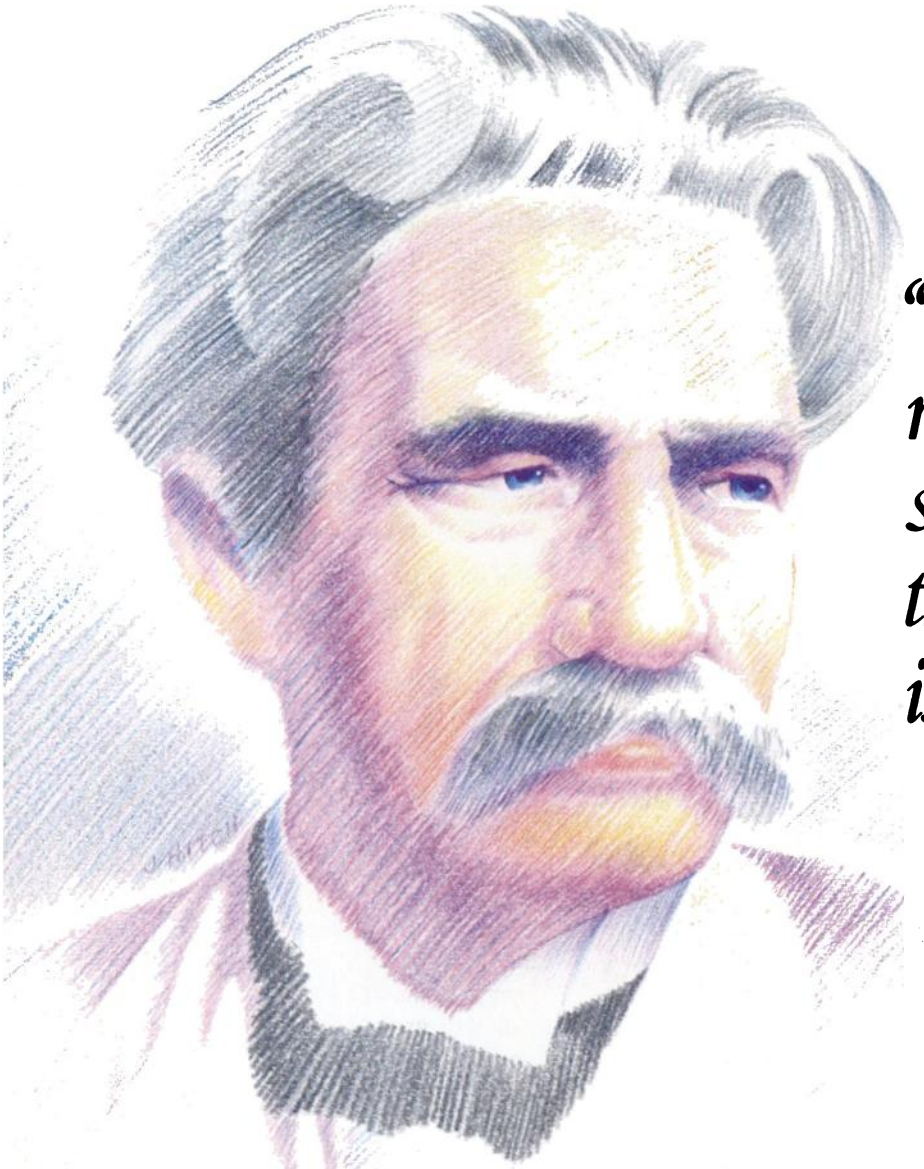

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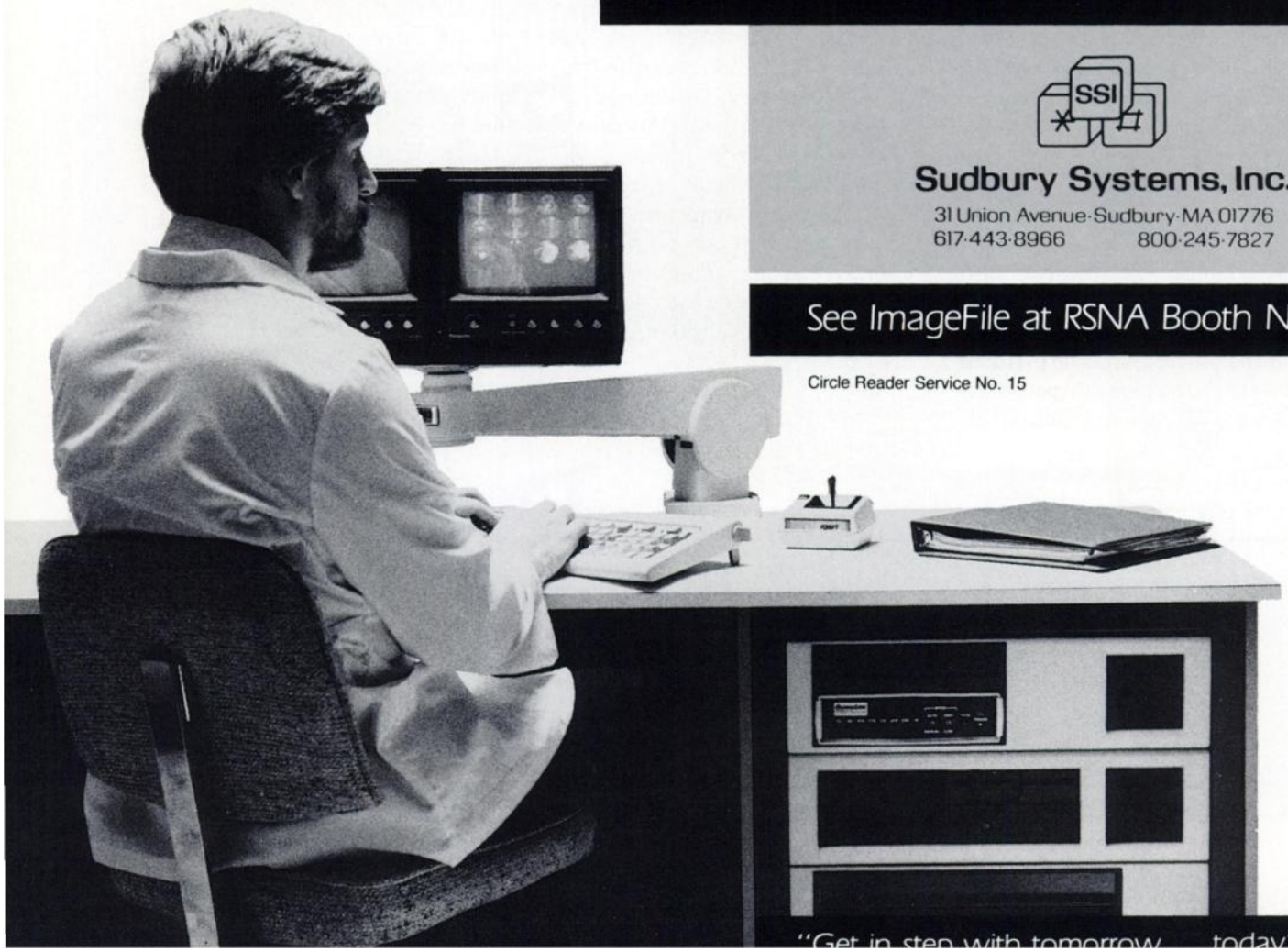

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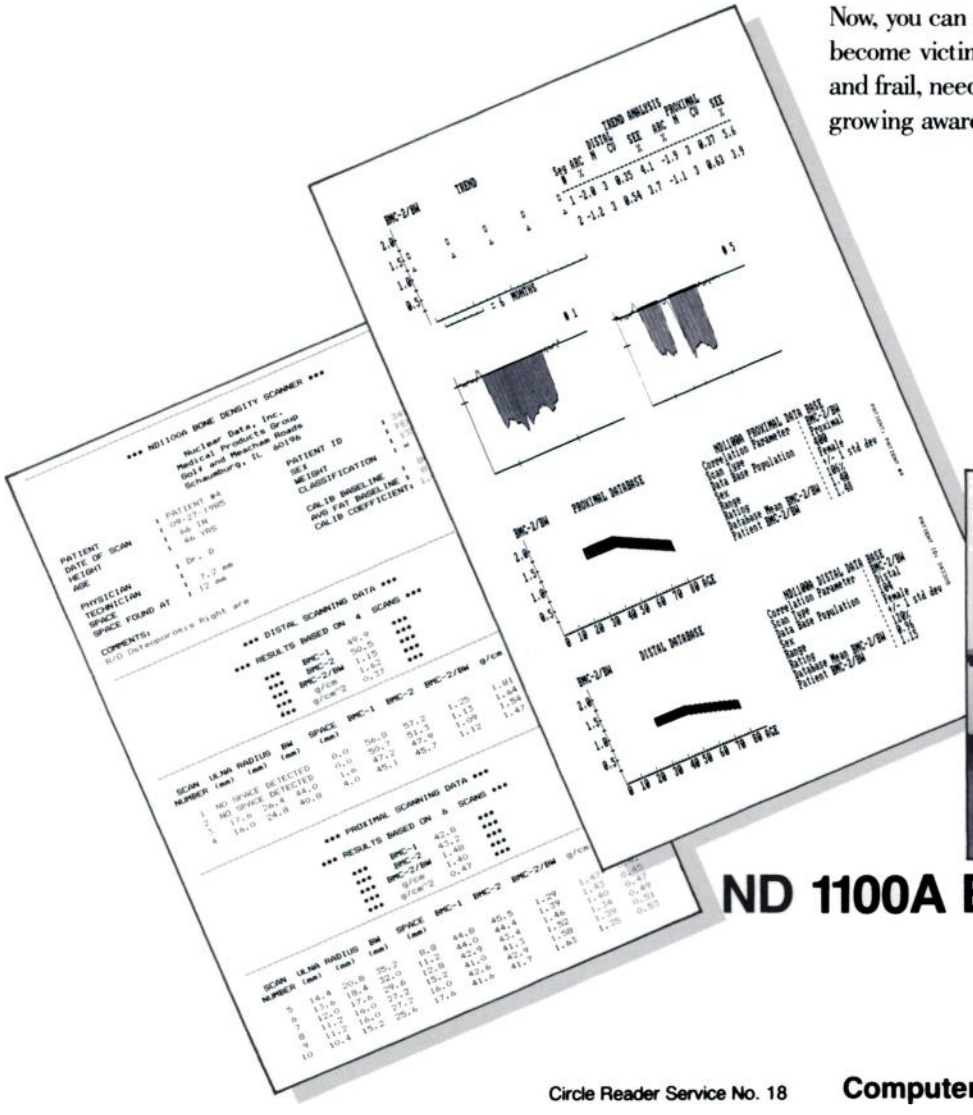
Yet, with the development of clinical bone densitometry instruments, nuclear medicine may now move into a new era of service—the identification and management of those persons most at risk to develop osteoporosis and other bone disorders and diseases. You can support attending physicians in their efforts to prevent crippling osteoporosis by identifying patients at risk and by participating in effective management programs.

No greater opportunity exists to practice preventive medicine. Now, you can contribute to the day when proud people need not become victims of their own bodies, need not become stooped and frail, need not live in fear of falling. You can contribute to the growing awareness that osteoporosis is preventable.



ND 1100A Bone Density Scanner

Single photon absorptiometry
1 percent precision
For distal/proximal forearm scans
Rectilinear scanning
Computer-assisted site search for serial studies

Circle Reader Service No. 18

See us at Booth 5222
72nd Annual RSNA Meeting
Chicago, IL—November 30–December 5

Dual Photon?

Both?

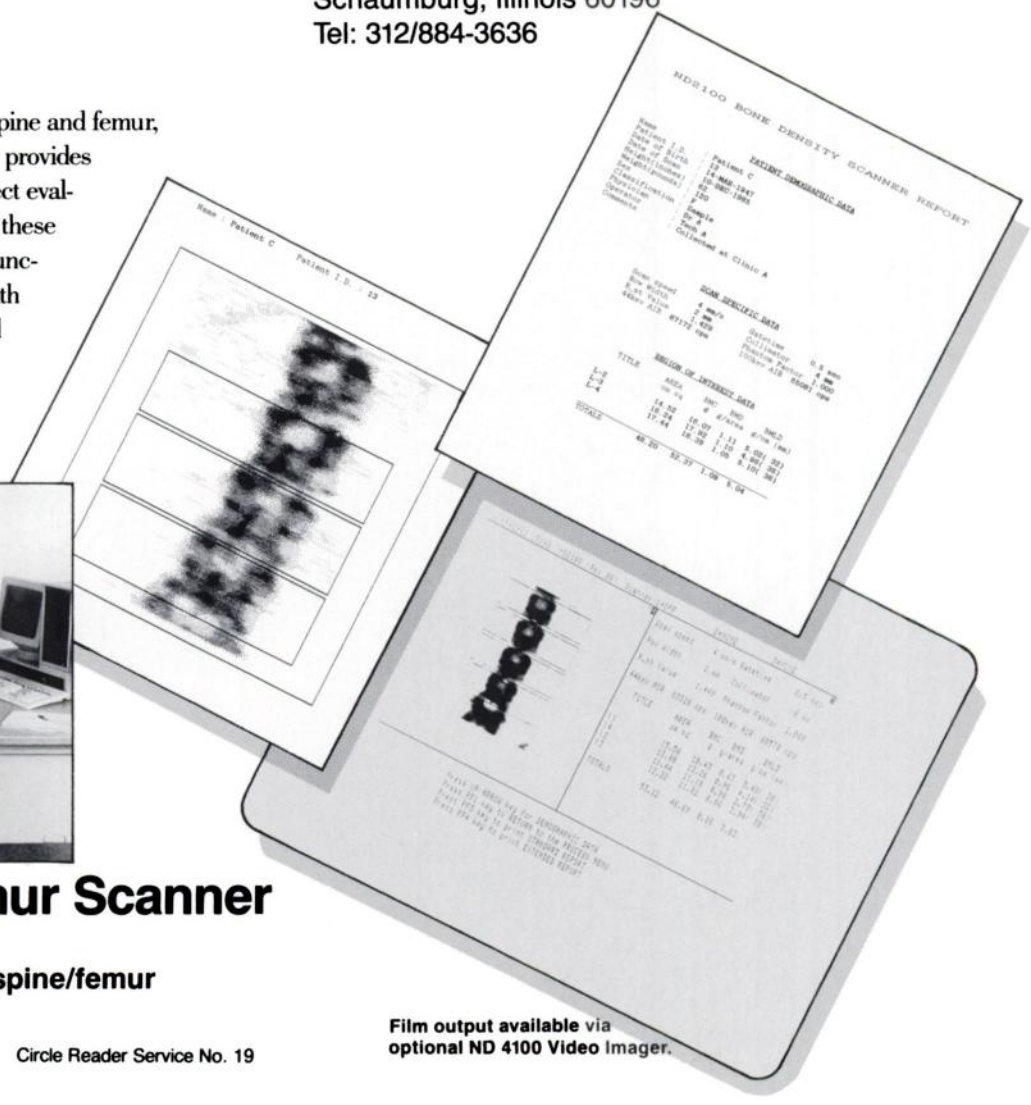
The Choice Is Yours

For precise measurement of bone mineral content (to within 1%) of both cortical and trabecular bone, the ND 1100A single photon bone densitometer is unsurpassed. This instrument utilizes rectilinear scanning of the distal forearm for precise determination of very slight changes in bone mineral content over relatively short periods. Computer-assisted site search assures reproducibility of the results, no matter how much time elapses between measurements, permitting long-term evaluation of minute changes in bone mineral content.

Committed to Imaging Excellence

Nuclear Data, Inc.
Instrumentation Division
ND Medical Products
Golf and Meacham Roads
Schaumburg, Illinois 60196
Tel: 312/884-3636

For site-specific visualization of the lumbar spine and femur, the ND 2100 dual photon spine scanner provides clear, high resolution images permitting direct evaluation of the state of the trabecular bone in these crucial areas. Featuring a powerful multifunctional computer, fast data processing with large storage capacity, and sophisticated softwear, the ND 2100 densitometer is ideal for the clinical environment.



ND 2100 Spine/Femur Scanner

Dual photon absorptiometry
Accurate visualization of lumbar spine/femur
Unparalleled image quality
Permits direct evaluation

Circle Reader Service No. 19

Film output available via optional ND 4100 Video Imager.

A Dose Of Common Sense.

Buying a dose calibrator which is specifically designed to save you both time and money, while maintaining the highest standards of quality and accuracy, is common sense. Radcal dose calibrators are designed exactly that way.

MODEL 4045

MODEL 4050

Radcal dose calibrators have advanced, state-of-the-art features which are standard. They are microprocessor-based, with auto-ranging digital controls (no knobs or dials), have wide dynamic ranges, easy-to-read LCD displays, Ci-Bq selection available, remote sensors, splash-proof lab-tough designs, built-in self-testing, moly breakthrough shield and high-protection sensor shielding.

Model 4050— For meeting low cost requirements. Features an optional electronic bias supply — requires no batteries and has an RS-232 interface for remote monitoring.

Model 4045 — Is designed for the lab requiring a full range of self-generating records at a moderate price. This system has two printers — one, a self-contained patient dose and inventory printer and a second, larger printer which summarizes daily transactions. Its 80-key typewriter-style keyboard allows for quick, complete dose and inventory recording. An electronic bias supply is standard.

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All systems feature a one-year warranty and are UL approved.

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Circle Reader Service No. 20

The Sixth Conjoint Winter Meeting is sponsored by the SNM Computer, Instrumentation and Radiopharmaceutical Science Council.

Abstracts of original contributions are welcome from members of the Society and nonmembers. All abstracts are to be presented orally and will be published in a subsequent issue of the *JNM*.

Please check appropriate boxes:

This abstract represents:
- ☐ a scientific or technical paper
- ☐ a clinical paper

Please indicate Council classification of paper:

- ☐ Computer
- ☐ Instrumentation
- ☐ Radiopharmaceutical
- ☐ none of the above

Topic classification:
- ☐ Brain Perfusion
- ☐ Heart Perfusion
- ☐ Other Perfusion
- ☐ other

Send original and four (4) photocopies of abstract and supporting data (if supporting data is submitted, must be limited to one (1) page) to:

Michael M. Graham, Ph.D., M.D.
Program Chairman
Society of Nuclear Medicine
Attn: Abstracts
136 Madison Avenue
New York, NY 10016-6784

(212) 889-0717
Society of Nuclear Medicine

(206) 548-4240
University of Washington

Abstract Form for Scientific and Technical Papers for the SNM Winter Meeting

Perfusion Imaging: Instrumentation, Modeling, and Radiopharmaceuticals

Monday, February 2 – Wednesday, February 4, 1987

Hyatt Regency on the River Walk **San Antonio, Texas**

Do Not Fold or Bend this Form

TYPE ABSTRACT HERE: (BE SURE TO STAY WITHIN BORDER)

TYPE FULL NAME OF AUTHOR
PRESENTING PAPER

List the name, address, and telephone number of the principal author who should receive all correspondence.

Name _____

Institution _____

Division or Dept. _____

Street _____

City _____ State _____ Zip _____

Phone Number (_____) _____
AREA CODE

Abstracts must be received (*not postmarked*) by Wednesday, November 26, 1986

SPECIFIC INSTRUCTIONS

Abstract forms

Abstracts must be typed inside the blue rectangle on the first page of this form. Additional forms are available from the Society of Nuclear Medicine, 136 Madison Avenue, New York, NY 10016-6784, (212)889-0717. Photocopies of the abstract form cannot be accepted as originals.

Supporting data

Supporting data may be submitted if, in the opinion of the contributor, the reader's understanding will be enhanced. Supporting data are not required, however, if submitted, supporting data must be limited to one page and stapled to each of the photocopies of the abstract to ensure that each reviewer has all of the information available.

Format for title and body

USE ALL CAPS for TITLE. **Use initials, rather than full spelling, for authors' first and middle names.** Single space all typing, but leave a space between the title block and the body of the text. Indent each paragraph three spaces. Do not indent title. Draw special symbols in black India ink.

Make title brief, clearly indicating the nature of the investigation. Then state authors' names and institutional affiliation. Omit degrees, titles, institutional appointments, street address, and zip code.

Organization of body of abstract

Organize the body of the abstract as follows:

A statement of the purpose of the study (preferably one sentence).

A statement of the methods used.

A summary of the results presented in sufficient detail to support the conclusions.

A statement of the conclusions reached. It is not satisfactory to state, "The results will be discussed" or "other data will be presented", unless a scientific exhibit is being submitted.

Do not use subtitles, e.g., Methods, Results.

IMPORTANT

All abstracts accepted for the program will be considered for publication. To ensure quality printing, the instructions must be followed completely for all abstracts. Abstracts that do not conform will be either retyped by the publisher at a cost of $40.00 to the author or will not be printed.

Send original and four (4) photocopies of abstract and supporting data (if supporting data is submitted, must be limited to one (1) page) to:

Michael M. Graham, Ph.D., M.D.
Program Chairman
Society of Nuclear Medicine
Attn: Abstracts
136 Madison Avenue
New York, NY 10016-6784

(212) 889-0717 Society of Nuclear Medicine
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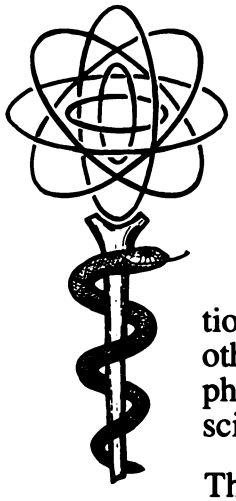

You are cordially invited to join

The Society of Nuclear Medicine

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

The objectives of the Society are to:

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

Hold meetings and seminars to communicate recently acquired knowledge and provide continuing medical education;

Advance the highest standards in the practice of nuclear medicine;

Disseminate information by means of journals, books, monographs, and audiovisuals;

Promote and maintain the highest standards of education and research.

Benefits of Membership

- Journals: 12 issues of *The Journal of Nuclear Medicine* (plus one year's subscription to *Journal of Nuclear Medicine Technology* at a reduced rate).
- Publications: discounts on books, educational aids, and audiovisuals.
- Local networking: with regional chapters and representation through the National Council.
- Research and Fellowship Support: through SNM Education and Research Foundation.
- Annual Meetings: discounts to scientific, clinical, and continuing education presentations.
- Effective Government Relations: through committees and lobbying efforts.
- Awards: for outstanding achievements and contributions to the field.
- Continuing Education Credit: for meeting courses, audiovisuals, and exhibits, approved for AMA Category 1 credit.

For more information, contact the Membership Department at:

The Society of Nuclear Medicine
136 Madison Avenue
New York, NY 10016
(212)889-0717

THE SOCIETY OF NUCLEAR MEDICINE

Application for Membership

(see reverse side for instructions)

Last Name Dr, Mr, Mrs, Ms, Miss (CIRCLE ONE) **First Name** **Middle Initial**

Check Degree(s) Earned:

MD ___ PhD ___ MA ___ MS ___ BA ___ BS ___ AA ___ AS ___ Other _____

Indicate Board Certification(s): ☐ ABNM ☐ ABR ☐ ABP ☐ ABIM ☐ ABSNM ☐ ABHP ☐ NMTCB

☐ ASCP ☐ ARRT(N) ☐ ARRT(T) ☐ ARRT(R) ☐ Other _____

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

☐ Institutional

DIVISION

DEPARTMENT

INSTITUTION OR COMPANY

STREET ADDRESS

CITY STATE/PROVINCE/COUNTRY ZIP CODE

AREA CODE BUSINESS TELEPHONE NO. EXT.

☐ Home Address

STREET ADDRESS APT. NO.

CITY STATE/PROVINCE/COUNTRY ZIP CODE

AREA CODE TELEPHONE NO.

PRESENT POSITION (TITLE)

DATE OF BIRTH

IN-TRAINING STATUS

☐ YES ☐ NO

Projected Completion Date: _____ month/year

Program Director _____

PROGRAM DIRECTOR'S TELEPHONE NO.

Would you like to join the TECHNOLOGIST SECTION? ☐ Yes ☐ No

COUNCIL MEMBERSHIP (OPTIONAL) ☐ Academic Council ☐ Correlative Imaging Council ☐ Radioassay Council ☐ Cardiovascular Council ☐ Instrumentation Council ☐ Radiopharmaceutical Council ☐ Computer Council

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

APPLICANT'S SIGNATURE _____ DATE _____

FOR OFFICE USE ONLY

APPLICATION FEE _____ ☐ Full ☐ TS _____ ☐ AM ☐ R _____

CHAPTER _____ ☐ TM ☐ IT _____

ACCOUNT # _____ ☐ AF

CHAIRMAN, MEMBERSHIP COMMITTEE (sign)

TECHNOLOGIST SECTION DESIGNEE (sign)

THE SOCIETY OF NUCLEAR MEDICINE

Instructions to Application for Membership

1. Please complete and sign the enclosed application form, either printing or typing the information. Make sure you have completed all information requested in order to avoid unnecessary delays in processing.
2. A membership category will be assigned to you in accordance with the Society's Bylaws based on the information supplied on your application form.
3. To be eligible for **"In-Training"** status, at least 90 days must be remaining in your formal training program. No application processing fee is required.
4. Upon acceptance by the Society, you will automatically become a member of the regional chapter that covers your area of residence. If you wish membership in some other chapter, you should submit your request with your application. If no regional chapter exists for the area of your residence, you will be assigned "Membership-at-Large."
5. **A $10.00 non-refundable processing fee must accompany the completed application form. Otherwise applications will not be processed.**
6. Receipt of your application will be acknowledged. Allow 4–6 weeks for processing and for receipt of the appropriate journals. DO NOT prepay your dues. An invoice will be sent to you upon approval of your application.

Guide to Membership Dues—1986 and 1987

Membership Categories	Society	Technologist Section	Total
Full	$100.00	—	$100.00
Full-in-training	50.00	—	50.00
With Tech Section membership			
Doctoral degrees (MD, DO, PhD)	80.00	$33.00	113.00
Doctoral degrees-in-training	40.00	16.50	56.50
All other degrees	75.00	33.00	108.00
All other degrees-in-training	37.50	16.50	54.00
Associate	75.00	—	75.00
Associate-in-training	37.50	—	37.50
With Tech Section membership			
Doctoral degrees	50.00	33.00	83.00
Doctoral degrees-in-training	25.00	16.50	41.50
All other degrees	50.00	33.00	83.00
All other degrees-in-training	25.00	16.50	41.50
Technologist (must be Tech Section member)	35.00	33.00	68.00
Technologist-in-training	17.50	16.50	34.00
Doctoral degrees	80.00	33.00	113.00
Doctoral degrees-in-training	40.00	16.50	56.50
Affiliate	100.00	—	100.00
With Tech Section membership	50.00	33.00	83.00
Doctoral degrees	100.00	33.00	133.00

- Society and Technologist Section chapter dues are additional and vary by chapter. A chapter dues table is available upon request.
- Council dues are an additional $5.00 per Council.
- Dues for those applicants joining during the year are prorated to January 1st.

9/8

PLACE STAMP HERE

The Society of Nuclear Medicine
Membership Department
136 Madison Avenue—Dept. 1186J
New York, NY 10016-6784

SNM COUNCILS

To satisfy the needs of those individual disciplines within nuclear medicine, The Society of Nuclear Medicine has established special interest Councils that function autonomously within the Society and are open to all interested members.

Academic Council

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

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

Cardiovascular Council

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

Instrumentation Council

The **INSTRUMENTATION COUNCIL** promotes the advancement and dissemination of knowledge of instrumentation utilized in nuclear medicine and serves as a resource center in instrumentation for the Society.

Computer Council

The **COMPUTER COUNCIL** is made up of Society members who have an interest in computers and their application in the diagnostic, therapeutic, and investigative areas of nuclear medicine. It provides a source of information relating to computer science to the Society membership through its meetings and publications.

Correlative Imaging Council

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

Radioassay Council

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

Radiopharmaceutical Science Council

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

If you are interested in joining any or all of the Councils, please contact the Membership Department. The cost for 1986 Council membership is only $5.00 per council.

The Society of Nuclear Medicine
Membership Department 136 Madison Avenue, New York, NY 10016, (212)889-0717.

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

Rates for Classified Listings—$10.00 per line or fraction of line (approx. 50 characters per line, including spaces). Please allow 28 characters for the first line which will appear in capital letters. Special rates for *SNM members* on Positions Wanted: $9.50 per line. *Note: Box numbers are available for the cost of the 2 lines required.*

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

Full page	$920	Quarter page	$345
Half page	530	Eighth page	295

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

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

Send copy to:
Advertising Department
The Society of Nuclear Medicine
136 Madison Avenue
New York, NY 10016-6784
(212)889-0717

Positions Open

Physician

NUCLEAR MEDICINE PHYSICIAN wanted to join expanding cardiology office/hospital practice in the Los Angeles area. Must be ABNM certified or eligible with clinical experience in nuclear cardiology, SPECT, and diagnostic ultrasound. Send CV and references to: Box 1102, The Society of Nuclear Medicine, 136 Madison Ave., New York, NY, 10016-6784. EOE.

NUCLEAR MEDICINE PHYSICIAN. Position open in University Hospital for ABNM certified physician, interested in academic nuclear medicine. Ample opportunity for research and development work. Interest in radiochemsitry/radiopharmacy appreciated. Please send resume to D. Pavel, MD, M/C 931, University of Illinois at Chicago, Box 6998, Chicago, IL 60680. An equal opportunity employer.

NUCLEAR MEDICINE PHYSICIAN. Opportunity at the assistant professor level in major northeast university department. Successful candidate must be certified in radiology or internal medicine and board certified/eligible in nuclear medicine. Excellent clinical and research opportunity. Send CV to: Arnold M. Strashun, MD, Division of Nuclear Medicine, Dept. of Radiology, State University of New York, Health Science Center at Brooklyn, 450 Clarkson Ave., Box 1210, Brooklyn, NY 11203. EO/AA Employer, DMC #C-0026.

ABNM CERTIFIED PHYSICIAN. Private practice position for recently certified physician with 2-3 years post-training, clinical, and research experience at an academic institution. Strong background in diagnostic medicine, biochemistry, physiology, and nuclear technology is essential. Large, private, midwest hospital. Send CV with references to: Box 1001, Society of Nuclear Medicine, 136 Madison Ave., 8th Fl., New York, NY 10016-6784. EOE.

IMMEDIATE PHYSICIAN OPPORTUNITY to join rapidly growing nuclear medicine/diagnostic ultrasound group in South Florida. Special emphasis on cardiovascular nuclear medicine and echocardiography. Send CV to Drs. Gottlieb & Block, 1150 N.W. 14 St., Suite #1, Miami, FL 33136; (305)324-0424. EOE.

NUCLEAR MEDICINE PHYSICIAN. The Veterans Administration Medical Center, Seattle, Washington and the University of Washington School of Medicine are seeking a board certified or board eligible nuclear medicine physician at the assistant professor level. Strong interest and experience in research and teaching are essential, and computer aptitude and experience are desirable. The hospital is in a new facility with state-of-the-art imaging and computer systems and the professional staff includes a medical imaging physicist and computer programmer. Starts July 1, 1987. Contact: John Harley, MD, Chairman, Search Committee, VA Medical Center, 1660 S. Columbian Way, Seattle, WA 98108. EOE.

CLINICAL DIRECTOR OF NUCLEAR MEDICINE. The University of Massachusetts Medical School is actively seeking candidates for the position of Clinical Director, university-based, research dedicated department of nuclear medicine. The applicant must demonstrate expertise in basic and/or clinical research and have the management skills necessary to direct all aspects of diagnostic clinical nuclear medicine. For further information, send CV and bibliography to: Dr. Lewis E. Braverman, Chairman, Department of Nuclear Medicine, University of Massachusetts Medical Center, 55 Lake Avenue North, Worchester, MA 01605. An Affirmative Action/Equal Opportunity Employer.

POSITION AVAILABLE. January 1, 1987 for nuclear radiologist with strong diagnostic radiology background to head nuclear medicine at a 400-bed medical school affiliated hospital. Nine person private practice group provides opportunity for teaching and clinical research. 3,300 Nuclear examinations per year including nuclear cardiology, thyroid therapy, and bone densitometry. ABR certification required, plus ABNM or speical competence. Direct inquiries to: David DiSantis, MD, 1288 Paramore Dr., Virginia Beach, VA 23454; (804)489-5422. EOE.

NUCLEAR MEDICINE PHYSICIAN with board certification in internal medicine or radiology needed for expanding out patient imaging practice. Contact with CV to: I.M.C. Inc., 2040 W. Wisconsin Ave., Suite 378, Milwaukee, WI 53233; (414)933-8739. EOE.

Resident

RESIDENCY IN NUCLEAR MEDICINE. A 2-year ACGME approved program offering broad clinical and basic science experience. Two years prior postgraduate training in ACGME approved program is a requirement. The program is an integrated program involving tertiary care, oncology and pediatric exposure, stong radioimmunoassay and reserach opportunities. Program also provides opportunity for exposure to MRI, CT, and ultrasound. The program is an integrated program of the State University of New York at Buffalo School of Medicine. Positions available July 1, 1987. Contact: J A Prezio, MD, Chairman and Program Director, SUNY/B, VAMC, Building 5, 3495 Bailey Ave., Buffalo, NY 14215. EOE.

The Nuclear Medicine Division of the University of Michigan Medical Center offers a two-year, AMA approved residency program leading to Board eligibility in nucler medicine. The program offers both clinical training & research, and the division is comprehensively equipped for imaging and *in vitro* procedures. For further information & applicatons for July 1987, contact: DE Kuhl, MD, Chief, Nuclear Medicine Division, Box 0028, U-M Hosptial, Ann Arbor, MI 48109. Contact person: Lula Clark, (313)936-5401. A Non-Discriminatory/Affirmative Action Employer.

The Division of Nuclear Medicine of the Department of Medicine at North Shore University Hospital offers a 2-year residency in nuclear medicine. North Shore University Hospital is an affiliated teaching hospital of the Cornell University Medical College. The program is comprehensive with training in all aspects of diagnostic and therapeutic tracer medicine. There is strong emphasis on measurements of physiologic parameters and thyroidology, cardiology, and nephrology. A PET-CYCLOTRON facility is under development and will add to the scope of the residency program. Inquiries may be addressed to: D. Margouleff, MD, Chief, Division of Nuclear Medicine, North Shore University Hospital, 300 Community Dr., Manhasset, NY 11030. An Equal Opportunity Employer.

NUCLEAR MEDICINE AND NUCLEAR CARDIOLOGY RESIDENCY AND FELLOWSHIP POSITIONS available July, 1987, Emory University Affiliated Hospitals. This comprehensive, ABNM certified training program is based at the Emory University Affiliated Hospitals, which include Emory University Hospital, a 650-bed tertiary referral center; Grady Memorial Hospital, a 1,100-bed county teaching hospital; The Henrietta Egleston Hospital for Children, a 175-bed dedicated pediatric center; and the Atlanta VA Medical Center with 500 beds. A nuclear medicine learning center is located at Emory Hospital. The staff includes eight nuclear medicine physicians and six basic scientists. The trainee's experience encompasses a wide range of general nuclear medicine procedures, with emphasis on SPECT, cardiovascular studies, computer processing, and NMR. A didactic program includes lectures and laboratory exercises in clinical and basic science, radiopharmacy, radioassay, and computer processing. Involvement in research is strongly encouraged. Address applications and inquiries to: Dr. Naomi Alazraki, Director of Nuclear Medicine, Emory University Hospital, 1364 Clifton Road, N.E., Atlanta, GA 30322. An Equal Opportunity/Affirmative Action Employer.

Technologist

NUCLEAR MEDICINE TECHNOLOGIST. Come to the gateway to beautiful northern Wisonsin! Wausau Hospital Center, a new 300-bed, full service accredited, acute care, regional trauma center, is accepting applications for nuclear medicine technologists. Requires: ARRT registry or registry eligible in nuclear medicine or medical registry or licensure related field. Prefer clincial experience in nuclear medicine. Excellent salary and benefits! Act now! Call collect or send resume to: Personnel Services, Wausau, Hospital Center, 333 Pine Ridge Blvd., Wausau, WI 54401; (715)847-2800. Equal Opportunity Employer M/F.

NUCLEAR MEDICINE TECH. Full-time position available for an aggressive self-motivated person to assume staff position. Requirements: Registry or registry eligible and must have Florida licensure. Excellent starting salary and benefit package. Send resume to: Florida Medical Center, 5000 W. Oakland Park Blvd., Ft. Lauderdale, FL 33313. An Equal Opportunity Employer.

NUCLEAR MEDICINE TECHNOLOGIST. A challenging and rewarding career opportunity awaits you in the heart of the beautiful Montana Rocky Mountains. St. James Community Hospital is a 270-bed, JCAH accredited acute care hospital located halfway between Glacier and Yellowstone National Parks. Immediate access to hunting, fishing, skiing, hiking, and other outdoor recreation is available for the sports enthusiast. Qualified candidates for the position must be ARRT (N) registered and also be registered or certified (CNMT) in nuclear medicine. Excellent salary and benefits accompany this posi-

tion. Qualified applicants send resume to: Pat Dudley, Employment Supervisor, St. James Community Hospital, 400 South Clark Street, Butte, MT, 59701. EOE M/F.

SPECIAL PROCEDURES TECH. Position open immediately for experienced professional performing ultrasound (echocardiography 2-B and Doppler) and nuclear medicine procedures. Competitive pay and flexible benefit program. Send resume and salary history to: Pocatello Regional Medical Center, Human Resources, 777 Hospital Way, Pocatello, ID 83201. Equal Opportunity Employer. A member of Intermountain Health Care, Inc.

COMPUTER COORDINATOR. Good Samaritan Medical Center a progressive 770-bed institution has an opening for a coordinator of computer operations in their nuclear medicine dept. Qualified applicants will have a BS degree in nuclear medicine technology or related applied science; background in computer or computer applications (prefer MDS or CD&A). Working knowledge of programming along with effective communication skills are preferred. Please send resume and salary requirements to: Personnel Dept., Samaritan Health Service, 215 E. McDowell Rd., Phoenix, AZ 85004. Or call (602)239-2677 for more information. EOE M/F.

Positions Wanted

Chemist

RADIOPHARMACEUTICAL CHEMIST seeking position. Over 5 yrs. experience working within FDA & NRC regulations in the manufacturing of parental drug products. Working knowledge of GMP's and SOP's. Some supervisory experience. Reply to: Box 1101, The Society of Nuclear Medicine, 136 Madison Ave., New York, NY 10016-6784.

MEDICAL RADIATION PHYSICIST
SASKATOON CANCER CLINIC

Applications are invited to fill a new position for a physicist in the Saskatoon Cancer Clinic. The work involves radiation physics, research and development, quality control and maintenance associated with cancer therapy. A PhD in a relevant subject such as medical physics, nuclear physics, or radiation biology is required.

A new clinic to serve 2,700 new patients per year will open in September, 1987 and will have three linear accelerators, Co-60, a simulator, a VAX 11/750 computer and many accessories for radiation therapy. It will include a physics lab, machine shop, and electronics shop and facilities for biological research. This physicist will report to the head of radiation oncology physics and will work with a group of medical physicists with a wide range of interests. Qualified physicists hold academic appointments in the College of Medicine, University of Saskatchewan, and may supervise graduate students in medical physics or clinical engineering.

For details, please contact:

Dr. W.B. Reid
Chief Medical Physicist
Saskatoon Cancer Clinic
37 University Hospital
Saskatoon, Saskatchewan
S7N 0X0
(306)966-2696

ATTENTION SNM MEMBERS

2 new clubs are seeking active members to join in the petition for Council status.

Brain Imaging Council—the proposed council will offer specialists the opportunity to have a forum for discussion and rapid dissemination of information pertaining to brain imaging. It hopes to establish international educational scientific programs to examine current investigations.

Commercial Services Council—the proposed council will be opened to all *individual* members to provide a forum for those individuals who wish to share information and experience about the commercial aspects of nuclear medicine. It hopes to create an educational arena to assist others entering into business, whether it be industry or private practice.

To receive a copy of either petition, please write indicating council of choice to: Membership Department, The Society of Nuclear Medicine, 136 Madison Avenue, Dept. 1186JC, New York, NY 10016-6784, (212)889-0717.

CEDARS-SINAI MEDICAL CENTER

DIRECTOR
NUCLEAR MEDICINE PHYSICS

CEDARS-SINAI, 1120 bed research, teaching and acute care Medical Center is seeking a Director of Nuclear Medicine Physics. Candidates should have a PhD in either physics, computer sciences or a closely related field, with experience in image processing and preferably in the field of nuclear medicine or nuclear cardiology, although this is not required. The position will be working in image processing with an internationally recognized and well-funded nuclear cardiology team, and will also involve research in Cardiac Magnetic Resonance Imaging. Cedars-Sinai is the largest and most comprehensive not-for-profit medical center in the WEST. We offer a superior salary and benefits program and superb opportunity for career advancement. Send resume in confidence to: Mr. John Gilbert, Employment Office, 8723 Alden Drive, Los Angeles, California 90048. (213) 855-5521.

BGH

NUCLEAR MEDICINE PHYSICIAN

A 430-bed community hospital with a large regional laboratory has a position for a physician prepared in nuclear medicine. Other imaging modalities included in this regional referral center include radiology, CT scanning, and ultrasound. Applicants must have (or be eligible for) RCPS(C) Certification in Nuclear Medicine. Certification in a second discipline would be an asset. Remuneration arrangements are negotiable. Applications or inquiries should be directed to:

GLENN E. CHAPMAN
Executive Director
Brandon General Hospital
150 McTavish Avenue East
BRANDON, Manitoba R7A 2B3

NUCLEAR MEDICINE TECHNOLOGIST

...Central Florida Location

As Central Florida's principal referral and teaching center, we can offer excellent career potential to an experienced Nuclear Medicine Technologist who enjoys the challenge of a major teaching hospital and the pleasures of Florida living.

You will have frequent patient contact as you work with nursing and medical staff to assure the accurate administration of therapeutic and diagnostic procedures and attendant quality control. You should have one year of extensive clinical training and be a graduate of an accredited school of nuclear medicine technology. Registry with the ARRT or certification by the Nuclear Medical Technology board is required.

Florida is well known for its sunny disposition, and in the Orlando area, you will also find excellent schools, affordable housing and no state tax on income. We can offer a competitive salary, extensive benefits and excellent potential for advancement. Please call **TOLL FREE 1-800-327-8402 (outside Florida)**, or **(305) 841-5186 (within Florida)**, or send your resume to: **Orlando Regional Medical Center, Dept. of Employment, 1414 S. Kuhl Ave., Orlando, FL 32806.**

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positions available for 1987-88. 2,000+ bed medical center state-of-the-art planar and tomographic equipment. Strong programs with cardiology, oncology. Active monoclonal antibody program. Ample opportunity for research. Send C.V. to Michael E. Siegel, M.D., Director Nuclear Medicine, LAC/USC Medical Center, 1200 N. State Street, Los Angeles, CA 90033.

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(In Florida Call 1-904-373-2200)

NUCLEAR MEDICINE TECHNOLOGIST

IMMEDIATE opening for full-time registered nuclear medicine technologist at a progressive 675-bed acute care teaching hospital located in the beautiful Blue Ridge Mountains of Virginia. Must be experienced with all types of imaging, MDS computer system, and nuclear cardiology. No RIA necessary. Competitive salary and excellent benefits package, including dental insurance. Send resume with work experience to: Mrs. Linda Hubbard, CNMT, Nuclear Medicine, Roanoke Memorial Hospitals, P.O. Box 13367, Roanoke, VA 24033. EOE–M/F.

NUCLEAR MEDICINE TECHNOLOGIST

Pitt County Memorial Hospital, a 550+ bed acute care teaching hospital, is currently accepting applications for a Nuclear Medicine Technologist. Qualified candidates must possess an Associate degree in Radiologic Technology and have ARRT or SNMT certification or be registry eligible and obtain either certification within one year. Pitt County Memorial Hospital offers competitive salaries and excellent benefits package. For immediate consideration, send resume to:

PCMH
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Employment Office
PITT COUNTY MEMORIAL HOSPITAL
P.O. Box 6028
Greenville, NC 27834
(919) 757-4556

EOE/AA

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Robertson et al.: MIRD Primer for Absorbed Dose Calculations, 1986	$25.00	$28.00	_____
Alazraki & Mishkin: Fundamentals of Nuclear Medicine* 1984	$12.00		_____
**Accredited instructors may purchase copies @ $2.00 (postage included) bulk quantities (10 or more) of Fundamentals of Nuclear Medicine for distribution to medical students.*		@ $2.00	_____
Brill: Low-Level Radiation Effects: A Fact Book 1982			
a) Complete text: Fact book plus updates (includes postage)	$32.00		_____
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Hibbard & Lance: Laboratory Manual for Nuclear Medicine Technology 1984	$14.00	$16.00	_____
Partain: Nuclear Magnetic Resonance and Correlative Imaging Modalities 1984	$35.00	$47.00	_____
Robbins: Chromatography of Technetium-99m Radiopharmaceuticals—A Practical Guide 1984	$14.00	$18.00	_____
Steves et al.: Clinical Evaluation Methods Guide 1982	$15.00	$18.00	_____

Patient Pamphlets

A Patient's Guide to Nuclear Medicine (minimum order: 100 copies; includes postage)	$ .20/copy	_____
Guidelines for Patients Receiving Radiodine Treatment (minimum order: 25 copies; includes postage)	$ .30/copy	_____
Examination copies available for $1.50 each (includes postage)	$1.50/copy	_____

Add $2.50 per copy for postage and handling: (Contact the Society for bulk order rates)

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Periodicals

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Journal of Nuclear Medicine (Monthly) U.S. $110.00 _____; Canada & Pan American countries $120.00 _____; Elsewhere $140.00 (airmail) _____; Student $60.00 _____.

Journal of Nuclear Medicine Technology (Quarterly) U.S. $50.00 _____; Canada & Pan American countries $55.00 _____; Elsewhere $60.00 _____.

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☐ Please send me a complete listing of audiovisuals that are available from SNM.

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Educate your patients with SNM Patient Information Pamphlets

A Patient's Guide to Nuclear Medicine

Well illustrated, this 16-page pamphlet explains what nuclear medicine is, how the procedures are performed, and how they can help in the early detection of disease.

Divided into 3 sections, the guide opens with a general overview of nuclear medicine. A question-and-answer section follows, addressing such topics as safety, the benefits of nuclear medicine procedures, pre- and post-instructions, and testing of pregnant women and children. The third section explains some of the more commonly performed procedures such as bone, liver, lung, heart, and thyroid uptake scans.

16 pp; 5½ × 8½; in 2 colors;
20¢ per pamphlet; minimum order: 100 copies

Guidelines for Patients Receiving Radioiodine Treatment

Prepared in collaboration with the U.S. Nuclear Regulatory Commission, this 8-page pamphlet answers patients' questions about home care after receiving radioiodine treatment for thyroid conditions.

Easy-to-read language outlines important precautions patients can follow to help reduce radiation exposure to others. It also contains a checklist that physicians can review with their patients to determine which guidelines are appropriate for them and how they should be followed.

8 pp; 5½ × 8½; in 2 colors;
30¢ per pamphlet; minimum order: 25 copies

Healthcare professionals in private practice, hospitals, and clinics will find that these pamphlets provide a brief, attractive, and inexpensive way to educate patients and their families about the importance of proper health care.

ORDERING INFORMATION

Single copies are available for review at $1.50 each. All prices include postage and handling. Prepayment required in U.S. funds drawn on U.S. banks only. Make checks payable to: The Society of Nuclear Medicine. *Prices are in U.S. dollars and subject to change without notice.*

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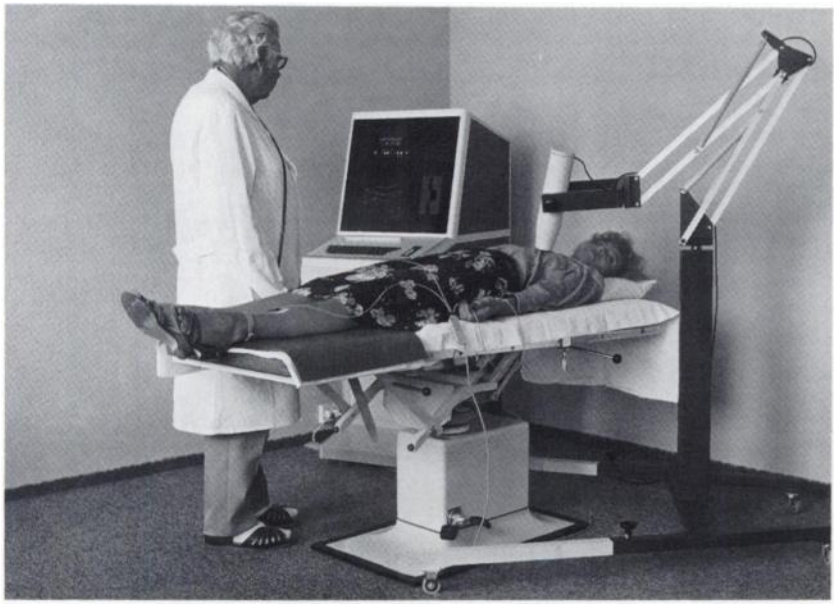
Each description of the products below was condensed from information supplied by the manufacturer. The reviews are published as a service to the professionals working in the field of nuclear medicine and their inclusion herein does not in any way imply an endorsement by the Editorial Board of The Journal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



Parametric Gammascope

A&P Gruppe-Altmann KG has introduced the parametric gammascope, a mobile diagnostic apparatus for measuring heart, kidney, and thyroid function. To measure absolute cardio-pulmonary circulation times, the patient may be seated or prone, or the test may be done during exercise. The apparatus also measures by beat-to-beat methods and the gated blood-pool method. For renal studies the gammascope can be used to measure glomerular filtration rates and perfusion of kidney transplants. The parametric gammascope may be used for hematology studies, evaluation of radioimmunoassays, thyroid diagnostics, and for the storage and handling of patient data. Developed at the Institute of Medicine of the Nuclear Research Center, Julich, West Germany, the gammascope may be used directly at the patient's bedside or for different analytic procedures in the laboratory. **A&P Gruppe-Altmann KG, Albert-Schweitzer-Str. 18, D-3320 Salzgitter 1, West Germany.**

Circle Reader Service No. 101

NMR Microscope Accessory

Bruker Instruments has introduced an NMR accessory for high-resolution microscopic imaging. The accessory, also called the "NMR microscope," is designed for Bruker wide-bore AM and MSL systems, and requires virtually no modification of the standard spectrometer.

The NMR capability makes a variety of microscopic imaging techniques available to researchers in the medical, biologic, and material sciences. These techniques include T_1/T_2 imaging, multiecho, multislice, volume selective spectroscopy, chemical shift imaging, diffusion imaging, and multinuclear imaging. **Bruker Instruments, Inc., Manning Park, Billerica, MA 01821.**

Circle Reader Service No. 102

Updating and Indexing Service

The Nuclear Medicine Literature Updating and Indexing Service, edited by Douglas Van Nostrand, MD, and Henry N. Wagner, Jr., MD, brings together information of interest to the nuclear medicine community from hundreds of medical publications, including all U.S. nuclear medicine journals and most of the major nuclear medicine journals from countries outside the United States. The Updating and Indexing Service covers original scientific articles, reviews, editorials, books, and special reports. The 1987 monthly issues will list entries by organ systems and other selected categories. In addition, the service will provide quarterly and annual indexes. **The Nuclear Medicine Literature Updating and Indexing Service, 2905 Hardy Ave., Wheaton, MD 20902.**

Circle Reader Service No. 103

Bone Mineral Analysis for CT Scanners

Elscint has announced its clinical evaluation of a Bone Mineral Analysis System now available for its EXEL 1800 and 2400 CT scanners. The system measures the trabecular bone in the lumbar spine and can assist in the detection of metabolic bone disease and osteoporosis.

The clinical procedure consists of a localizing planar scan and a set of axial lumbar spine scans using a low dose scan protocol optimized for bone mineral analysis. The clinical images are compared quantitatively to calibration images acquired using a reference phantom containing different, stable known densities of calcium hydroxyapatite. **Elscint Inc., 930 Commonwealth Ave., Boston MA 02215.**

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The Journal of Nuclear Medicine

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Look for the 34th Annual Meeting Housing and Registration Forms in this packet. DATE: June 2–5, 1987. PLACE: Metro Toronto Convention Centre, Toronto, Ontario, Canada.

For additional forms write to: Registrar, The Society of Nuclear Medicine, 136 Madison Avenue, Dept. 1186S, New York, NY 10016-6784 (212)889-0717.

INSIDE THIS ISSUE:

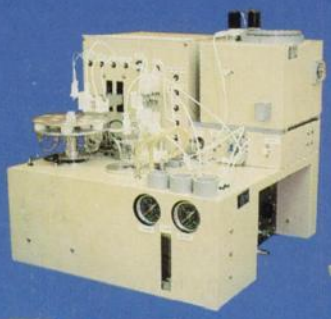
Positron Delivery System for PET

CYPRIS®
(CYclotron for Production of Radio-ISotopes)

Model 370
(18 MeV Proton, 10 MeV Deuteron)

Computerized Control Console Model 370

CUPID
(Clinical-Used Positron-emitting Isotope Delivery)



^{11}C-Methyl iodide **^{13}N-ammonia**

^{18}F-fluorodeoxyglucose

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INSIDE THIS ISSUE:

THE NEW THYROID UPTAKE SYSTEM II: DEDICATED PERFORMANCE

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It sets new performance standards because it is "truly dedicated" to thyroid uptake activity studies.

Operation is simple, and straight forward, thanks to the user friendly menu selection and logical control panel design. All operations and calculations are handled by a high-speed microprocessor with data displayed on the built-in video monitor. An optional printer is available for hard copy.

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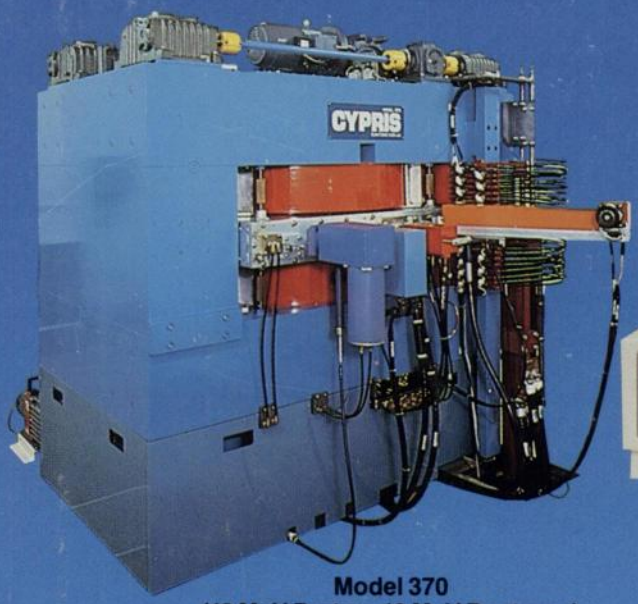
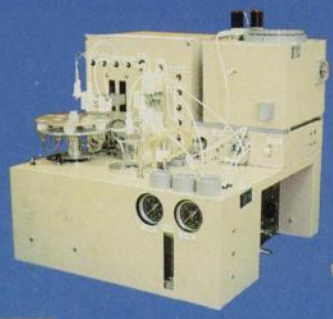


Model 370
(18 MeV Proton, 10 MeV Deuteron)

Computerized Control Console Model 370

CUPID
(Clinical-Used Positron-emitting Isotope Delivery)



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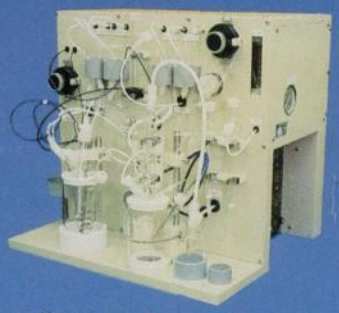

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