## The Journal of Nuclear **Medicine**

Official Publication of The Society of Nuclear Medicine

Volume 26, Number 3 **March 1985** 

THE JOURNAL OF NUCLEAR MEDICINE (ISSN 0161-5505) is published monthly by The Society of Nuclear Medicine, Inc., 475 Park Avenue South, New York, NY 10016. Second Class Postage paid at New York, NY and additional mailing offices. Postmaster, send address changes to The Journal of Nuclear Medicine, 475 Park Avenue South, New York, NY

**EDITORIAL COMMUNICATIONS should be** sent to the Editor: Thomas P. Haynie, MD, The Journal of Nuclear Medicine, Office of Special Publications, The University of Texas M. D. Anderson Hospital, 6723 Bertner Avenue, Houston, TX 77030 (713)792-6015. Books and monographs covering the use of nuclear medicine and its allied disciplines will be reviewed as space is available. Send review copies to

**BUSINESS COMMUNICATIONS concerning** advertising, subscriptions, change of address, and permission requests should be sent to the publisher, The Society of Nuclear Medicine, 475 Park Avenue South, New York, NY 10016 (212)889-0717. Advertisements are subject to editorial approval and are restricted to products or services pertinent to nuclear medicine. Advertising rates are available from the publisher. Closing date is the first of the month preceding the date of issue.

SUBSCRIPTION RATES for 1985 calendar year are \$100 within the United States; \$110 for Canada and Pan American countries; \$130 elsewhere. Student subscriptions are \$50 (with proof of student status). Single copies \$9.00; foreign \$10.00; convention issue (May) \$11.00; foreign \$12.00. Make checks payable, in U.S. dollars drawn on U.S. banks, to The Society of Nuclear Medicine. Notify the Society of change of address and telephone number at least 30 days before date of issue by sending both the old and new addresses.

COPYRIGHT © 1985 by The Society of Nuclear Medicine, Inc. All rights reserved. No part of this work may be reproduced or translated without permission from the copyright owner. Because the copyright on articles published in The Journal of Nuclear Medicine is held by the Society, each author of accepted manuscripts must sign a statement transferring copyright. See Information for Authors for further explanation, which appears on the second page preceding the Calendar.

SNM NEWSLINE
Three Mile Island—Six Years Later
JAMA Solicits Papers for Nuclear War Issue
FDA: Approval for New Indications
EPA: Standards for Radioactive Airborne Emissions219
Commentary: Lines from the President
Board of Trustees Meeting
Technologist Section Takes Stand Against OJT 221
Low-Level Waste Compact Update
CLINICAL SCIENCES
Indium-111 Chloride Imaging in Chronic Osteomyelitis  Bettye A. Sayle, H. Daniel Fawcett, Donna J. Wilkey,  George Cierny, III, and Jon T. Mader
Comparison of Quantitative and Visual Detection of New Focal Bone Lesions  W. Robert Pitt and Peter F. Sharp
24-Hour/4-Hour Ratio of Technetium-99m Methylene Diphosphonate Uptake in Patients with Bone Metastases and Degenerative Bone Changes  Ora Israel, Dov Front, Alex Frenkel, and Uriel Kleinhaus
Technetium-99m HIDA Hepatic Lobar Distribution and Retention Ratios in Detection of Intrahepatic Lithiasis  Shin-Hwa Yeh, Ren-Shyan Liu, Por-Fen Chiu, Liang-Chih Wu, On-Kee Liu, and Miau-Ju Huang
Case Reports
What Causes Uptake of Technetium-99m Methylene Diphosphonate by Tumors? A Case Where the Tumor Appeared to Secrete a Hypercalcemia-Causing Substance Charles K. Stone and James C. Sisson
Dynamic Positron Emission Tomography with Nitrogen-13 Ammonia
Nobushige Hayashi, Nagara Tamaki, Yoshiharu Yonekura, Michio Senda, Hideo Saji, Kazutaka Yamamoto, Junji Konishi, and Kanji Torizuka
Radionuclide Turnover Studies on Ectopic Thyroid Glands—Case Report and Survey of the Literature  Angelita Ramos-Gabatin and Harold T. Pretorius
BASIC SCIENCES
Scintigraphic Studies to Evaluate Stability of Ceramics (Hydroxyapatite) in Bone Replacement
Petr Patka, Wim Den Hollander, Gerrit Den Otter, Guido A.K. Heindendal, and Klaas De Groot

Uptake of Gallium-67 Citrate and [2- 3H]Deoxyglucose in the Tumor Model, Following Chemotherapy and Radiotherapy  Galina Iosilevsky, Dov Front, Lise Bettman, Ruth Hardoff, and Yehudith Ben-Arieh
Tumor Location Using F(ab') <sub>2µ</sub> from a Monoclonal IgM Antibody: Pharmacokinetics  Byron Ballou, Jean Reiland, Geoffrey Levine, Barbara Knowles, and Thomas R. Hakala
Optimum Conditions for Labeling of DTPA-Coupled Antibodies with Technetium-99m  R.L. Childs and D.J. Hnatowich
Technical Notes
Practical Gamma Camera Quality Control with a Four-Point Phantom
Jack L. Lancaster, David T. Kopp, John S. Lasher, and Ralph Blumhardt
Stimulated Salivary Clearance of Technetium-99m
Pertechnetate
Pertechnetate
Pertechnetate Peter W. Blue and John H. Jackson
Pertechnetate Peter W. Blue and John H. Jackson
Pertechnetate Peter W. Blue and John H. Jackson
Pertechnetate Peter W. Blue and John H. Jackson
Peter W. Blue and John H. Jackson
Pertechnetate Peter W. Blue and John H. Jackson
Pertechnetate Peter W. Blue and John H. Jackson
Pertechnetate Peter W. Blue and John H. Jackson
Pertechnetate Peter W. Blue and John H. Jackson
Peter W. Blue and John H. Jackson
Peter W. Blue and John H. Jackson
Peter W. Blue and John H. Jackson

## The Journal of Nuclear Medicine

Volume 26, Number 3 March 1985

Principles of Real-Time Sonography in Modern Obstetrics: A Handbook for the Practicing Physician	. 321
Environmental Radioactivity NCRP Proceedings No. 5	
Fundamentals of Nuclear Medicine	
Abstracts	.323
Information for Authors	. 332
Calendar32A, 34A,	36A
Classified Advertising40A,	41A
Index to Advertisers	42A