

**EDITORIAL**

WHITHER NUCLEAR PHARMACY?  
Ralph G. Robinson and Buck A. Rhodes ..... 577

**HISTORY**

BECQUEREL'S DISCOVERY OF RADIOACTIVITY IN 1896  
William G. Myers ..... 579

**DIAGNOSTIC NUCLEAR MEDICINE**

THALLIUM-201 FOR MYOCARDIAL IMAGING: APPEARANCE OF THE NORMAL HEART  
David J. Cook, Ian Bailey, H. William Strauss, Jacques Rouleau, Henry N. Wagner, Jr.,  
and Bertram Pitt ..... 583

RADIONUCLIDE VENOGRAPHY: SIGNIFICANCE OF DELAYED WASHOUT;  
VISUALIZATION OF THE SAPHENOUS SYSTEM  
U. Yun Ryo, Lelio G. Colombetti, Stanton G. Polin, and Steven M. Pinsky ..... 590

COMPARTMENTAL MODELS OF CEREBRAL BLOOD FLOW. ANALYSIS USING THE  
81-keV AND 31-keV PHOTONS OF <sup>133</sup>Xe  
W. A. van Duyl, D. Sparreboom, and A. C. W. Volkers ..... 596

TOMOGRAPHIC IMAGES OF BLOOD POOL AND PERFUSION IN BRAIN AND HEART  
Michael E. Phelps, Edward J. Hoffman, R. Edward Coleman, Michael J. Welch,  
Marcus E. Raichle, Edward S. Weiss, Burton E. Sobel, and Michel M. Ter-Pogossian ..... 603

A DIAGNOSTIC STRATEGY USING VENTILATION-PERFUSION STUDIES IN PATIENTS  
SUSPECT FOR PULMONARY EMBOLISM  
Barbara J. McNeil ..... 613

UNUSUAL BONE-SCAN FINDINGS IN ACUTE OSTEOMYELITIS: CASE REPORT  
Lincoln D. Russin and Edward V. Staab ..... 617

CHILDHOOD PELVIC OSTEOMYELITIS PRESENTING AS A "COLD" LESION ON BONE  
SCAN: CASE REPORT  
Richard T. Trackler, Kenneth E. Miller, David H. Sutherland, and David L. Chadwick ..... 620

RADIONUCLIDE ANGIOCARDIOGRAPHIC CALCULATION OF THE RATIO OF LEFT-TO-  
RIGHT HEART OUTPUTS IN A PATIENT WITH UNUSUAL CARDIOVASCULAR  
ANATOMY: CASE REPORT  
J. Anthony Parker, Michael Freed, Donald S. Ahnberg, and S. Treves ..... 623

FOCALLY INCREASED ACTIVITY ON SCINTICISTERNOGRAPHY: REPORT OF TWO  
CASES  
Robert R. McClelland ..... 626

GALLIUM-67 UPTAKE BY A MALIGNANT FIBROUS HISTIOCYTOMA: CASE REPORT  
David J. Harrowe, Stephen Kessler, Alan A. Jansen, and Steven M. Larson ..... 630

**RADIOCHEMISTRY AND RADIOPHARMACEUTICALS**

DEVELOPMENT OF NEW RADIOPHARMACEUTICALS BASED ON N-SUBSTITUTION OF  
IMINODIACETIC ACID  
Michael D. Loberg, Malcolm Cooper, Elizabeth Harvey, Patrick Callery, and William Faith ... 633

MECHANISM OF LOCALIZATION OF <sup>99m</sup>Tc-LABELED PYROPHOSPHATE AND  
TETRACYCLINE IN INFARCTED MYOCARDIUM  
Mrinal K. Dewanjee and Paul C. Kahn ..... 639

**INSTRUMENTATION AND PHYSICS**

MINICOMPUTER ENHANCEMENT OF SCINTILLATION CAMERA IMAGES USING FAST  
FOURIER TRANSFORM TECHNIQUES  
Mark J. Sebern, James D. Horgan, Robert C. Meade, Charles M. Kronenwetter,  
Philip P. Ruetz, and En-Lin Yeh ..... 647

FIELD FLOOD UNIFORMITY CORRECTION: BENEFITS OR PITFALLS?  
Thomas N. Padikal, Alan B. Ashare, and James G. Kereiakes ..... 653

**IN VITRO NUCLEAR MEDICINE**

STABILITY OF RADIOTHYROXINE PLASMA DISAPPEARANCE CURVE DESPITE  
CATHARSIS AND UNBLOCKED THYROIDAL UPTAKE OF RADIOIODIDE  
Marguerite T. Hays ..... 657

SIMULTANEOUS MEASUREMENT OF PERCENTAGE FREE THYROXINE AND  
TRIODOTHYRONINE: COMPARISON OF EQUILIBRIUM DIALYSIS AND SEPHADEX  
CHROMATOGRAPHY  
Steven M. Snyder, Ralph R. Cavalieri, and Sidney H. Ingbar ..... 660

**LETTERS TO THE EDITOR**

PERFORMANCE OF SCINTILLATION CAMERAS  
Raymond P. Grenier ..... 665

MEASUREMENT OF SERUM TRIIODOTHYRONINE CONCENTRATIONS  
C. M. Heise ..... 665

REPLY  
Kenneth D. Burman, Frances D. Wright, Jerry M. Earll, and Leonard Wartofsky ..... 666

**IN MEMORIAM**

FRANZ KARL BAUER, M.D. ● 1917-1976  
William H. Bland ..... 668

**BOOK REVIEWS**

NON-INVASIVE BRAIN IMAGING: COMPUTED TOMOGRAPHY AND RADIONUCLIDES  
Reviewed by C. Douglas Maynard ..... 669

RADIONUCLIDE ANGIOGRAPHY  
Reviewed by Frank H. DeLand ..... 669

MEDICAL MALPRACTICE LAW  
Reviewed by Richard A. Holmes ..... 669

SYNOPSIS OF GYNECOLOGIC ONCOLOGY  
Reviewed by Conrad G. Julian ..... 669

**ABSTRACTS OF CURRENT LITERATURE** 671

**CALENDAR** 674, 676

**PLACEMENT** 55A, 56A

