

## SCIENTIFIC EXHIBITS

All Scientific Exhibits to be presented at the 24th Annual Meeting of the Society are listed below by the category under which the abstract title was accepted. All exhibits will be on display in the back portion of the Exhibit Hall. For the complete abstract listings, exhibit numbers, locations, and exhibit hours, please consult the Exhibit Program for the meeting.

### **BONE/JOINT**

INTRAOPERATIVE DETERMINATION OF PROXIMAL FEMORAL VIABILITY. David F. Preston, Ralph G. Robinson, James R. Neff, Norman L. Martin, Audrey V. Wegst, and Rae R. Jacobs.

IMAGING OF IRRADIATED BONE--CORRELATION WITH AUTORADIOGRAPHY, RADIOGRAPHY AND HISTOPATHOLOGY. Michael A. King, David A. Weber, George W. Casarett, Robert E. O'Mara, George A. Wilson, and Francis A. Burgener.

SOFT TISSUE LOCALIZATION OF BONE IMAGING AGENTS. James T. Conway, Susan Weiss, Andrew J. Tofe, Arlette K. Merritt, and Marion D. Francis.

A CORRELATIVE STUDY OF THE STABILITY OF Tc-99m DIPHOSPHONATE INJECTION. V.M. Immerso, P.J. Conte and H.B. Hupf.

### **CARDIOVASCULAR**

EARLY DIAGNOSIS OF DEEP VEIN THROMBOPHLEBITIS USING THE I-125 FIBRINOGEN UPTAKE TEST. Robert F. Carretta, Gerald L. DeNardo, Sally J. DeNardo, and Frederick L. Weiland.

MULTI-GATED ACQUISITION AND LEFT VENTRICULAR FUNCTIONAL ANALYSIS. Robert E. Henkin, David Hale, Patrick Scanlon, Rolf Gunnar, William J. Plos, and Wei Chang.

LEFT VENTRICULAR EJECTION FRACTIONS USING A MULTI-CRYSTAL SCINTILLATION CAMERA. Lionel Reese and Kathryn Wilkins.

MYOCARDIAL INFARCTIONS AND THEIR RELATION TO THE SKELETON--AN EXHIBIT. Harold A. Goldstein and B. Leonard Holman.

CLINICOPATHOLOGIC CORRELATES OF TECHNETIUM-99m STANNOUS PYROPHOSPHATE MYOCARDIAL SCINTIGRAPHY IN PATIENTS. Robert W. Parkey, Lawrence R. Poliner, L. Maximilian Buja, Frederick J. Bonte, Ernest M. Stokely, Melvin R. Platt, and James T. Willerson.

COMPUTER ASSISTED IMAGING OF THE MYOCARDIUM. Martin C. Graham, Robert W. Burt, James F. Winther, and Douglas R. Roller.

A COUNT RATE METHOD FOR CALCULATING LEFT VENTRICULAR EJECTION FRACTIONS FROM GATED IMAGES. Charles Mentz, Andrew W. Goodwin, Beverly Cornell, Constance Hissom, and Diana Campbell.

TECHNETIUM-99m-OXINE AND INDIUM-111-OXINE LABELED PLATELETS: LOCALIZATION OF VENOUS THROMBI AND ENDARTERIAL DAMAGE. Zachary D. Grossman, Brian W. Wistow, Gopal Subramanian, John G. McAfee, F. Deaver Thomas, Robert F. Rohner, Robert W. Henderson, and Marcia L. Roskopf.

VASCULAR IMAGING USING IN VIVO LABELED ERYTHROCYTES. Stewart M. Spies, B. Adrian Kesala, Bhurji N. Singh, Sharad P. Mehta, James L. Quinn, and David Green.

### **GASTROENTEROLOGY**

SCINTIGRAPHIC DETECTION OF ACUTE GASTROINTESTINAL BLEEDING. Abass Alavi, Robert Dana, Stanley Baum, Darryl Biery, and Bruce Sherman.

HEPATIC STATUS AFTER JEJUNOILEAL BYPASS SURGERY. Veena Goel, Robert Chodos, Lyn Howard, and Shantilal Lunia.

GALLIUM SCANNING AT ONE HOUR FOR INFLAMMATORY DISEASE. Ralph S. Wolfstein.

IS THE RECTILINEAR SCANNER OBSOLETE FOR PANCREATIC IMAGING? Don O. Moore, Joseph Mastantuno, and John B. Selby.

### **INSTRUMENTATION**

ANALYSIS OF SCINTILLATION CAMERA METHODS FOR I-123 THYROID UPTAKE MEASUREMENTS. Mark L. Born and F. David Rollo.

PROPERTIES AND APPLICATION OF COLLIMATORS IN NUCLEAR MEDICINE. F. David Rollo.

A MATHEMATICAL METHOD FOR DETERMINING DETECTOR UNIFORMITY AND AN INDEX OF UNIFORMITY (IOU) FOR SENSITIVITY AND RESOLUTION. Martin L. Nusynowitz and Anthony R. Benedetto.

THE GAMMA CAMERA--HOW IT WORKS. R. Eugene Johnston and F. Chan.

RAPID SINGLE IMAGE QUALITY CONTROL AND ACCEPTANCE TESTING OF SCINTILLATION CAMERAS WITH THE SMITH ORTHOGONAL HOLE (SOH) PHANTOM. Edward M. Smith, James H. Larose, and F. David Rollo.

CLINICAL EVALUATION OF THE CLEON IMAGER. C.D. Teates, B.R.J. Williamson, B.Y. Howard, and R.J. Barczak.

USE OF DATASYSTEM 160 (OHIO NUCLEAR) INSTRUMENT FOR ANALYSIS OF CEREBRAL RADIOANGIOGRAMS IN A COMMUNITY HOSPITAL. Renato H. Rojas and Janice P. Gabrielson.

EVALUATION OF FIELD UNIFORMITY AND RESOLUTION OF TWO LARGE FIELD OF VIEW CAMERAS. Jaroslaw Muz, Steven J. Figiel, Robert J. Heck, and Sandra J. Rankin.

A PROTOCOL FOR THE MEASUREMENT OF SCINTILLATION COUNTER DEAD TIME UNDER SIMULATED CLINICAL CONDITIONS. Ralph Adams, Gerald J. Hine, and C. Duane Zimmerman.

A ROC IN THE PILE. Alan B. Ashare.

EMISSION COMPUTED TOMOGRAPHY EXHIBIT. J.A. Correia, D.A. Chesler, C.A. Burnham, T. Walters, S. Cochavi, N. Alpert, B. Ahluwalia, and G.L. Brownell.

A COMPARISON OF SELECTED COMPUTER PROCESSED DISPLAYS USING A CAP BRAIN PHANTOM. John R. Prince, Walter G. Dukstein, William E. White, and Gene Huddleston.

## PROCEEDINGS OF 24th ANNUAL MEETING

IMAGING WITH POSITRONS: COMPUTED AXIAL TOMOGRAPHY AND QUANTITATIVE RECTILINEAR SCANNING. Edward J. Hoffman, Michael E. Phelps, and David E. Kuhl.

COMPUTERS IN NUCLEAR MEDICINE. A.B. Brill, J.J. Erickson, R.R. Price, and B. Maskewitz.

DISPLAY SYSTEMS FOR GAMMA CAMERAS. Robert T. Anger, John G. Allen, and James E. Carey.

THE TOMOGRAPHIC SCANNER: PRINCIPLES OF OPERATION. Hal O. Anger.

A FIELD PROCEDURE FOR QUANTITATIVE ASSESSMENT OF GAMMA CAMERAS. Thomas K. Lewellen, Robert Murano, and David Williams.

### RADIOASSAY

A NEW DYNAMIC RADIOIMMUNOASSAY METHODOLOGY FOR SERUM TRIIODOTHYRONINE AND HUMAN THYROID STIMULATING HORMONE. Anthony L. Mazzola.

PROGRAM GENERATED QUALITY CONTROL INDICES IN RIA. William J. Pikhosh and Sidney Soloway.

A DOUBLE ANTIBODY SOLID PHASE (DASP) SEPARATING SYSTEM FOR RADIOIMMUNOASSAYS. G.J.M. Tevaarwerk, D.A. Boyle, C. Hurst, I. Anguish, and P. Uksik.

A SUPERIOR PERFORMANCE STANDARD FOR I-125 COUNTERS. Marion M. Satterfield.

QUALITY PERFORMANCE CRITERIA FOR ASSESSING THE TECHNICAL ADEQUACY OF RADIORECEPTOR ASSAYS. John R. Prince, Walter G. Dukstein, William E. White, Charlotte Ament, and Ruth Koelliker.

### RADIOPHARMACEUTICAL SCIENCE

A DEVICE FOR EFFICIENT TRANSFER AND UNIT DOSE PACKAGING OF XENON-127. Richard J. Kowalsky.

A STUDY OF THE PHYSICAL AND CHEMICAL PROPERTIES OF RADIOCOLLOIDS. Ann Warbick, Albert S.K. Chan, and Gunes N. Ege.

PRODUCTION AND USE OF Br-77 NUCLEAR MEDICINE. Allan H. Gobuty, Linda R. Norton, Jay A. Spicer, Hal A. O'Brien, and Buck A. Rhodes.

AN EVALUATION OF THE SINGLE PATIENT DOSE CONCEPT IN NUCLEAR MEDICINE. F. David Rollo and Royce Fishman.

A COMPARATIVE EVALUATION OF Tc-99m GLUCOHEP-TONATE. Tc-99m DTPA AND Tc-99m PERTECHNETATE AS BRAIN IMAGING AGENTS. F. David Rollo and Mark L. Born.

CLINICAL IMPORTANCE OF TIN IN COMMERCIALY AVAILABLE BONE IMAGING KITS. Peggy Joe, G.T. Krishnamurthy, John S. Endow, M. Tubis, and W.H. Bland.

### MISCELLANEOUS

SCINTIANGIOGRAPHIC APPEARANCE OF THE VERTEBRAL ARTERY. John F. Rockett and Mohammed Moinuddin.

TESTICULAR RADIONUCLIDE ANGIOGRAPHY AND STATIC IMAGING: ANATOMY, SCINTIGRAPHIC INTERPRETATION, AND CLINICAL INDICATIONS. Lawrence E. Holder, Edwin R. Holmes, III, Joseph R. Martire, and Henry N. Wagner, Jr.

DOES THYROID SCANNING WITH I-123 DELINEATE ANTERIOR NONFUNCTIONING THYROID NODULES? Peter F. Winter, Peter D. Esser, and Philip M. Johnson.

FLOW STUDIES IN EVALUATION OF CHEST DISEASE. Ralph S. Wolfstein.

NUCLEAR MEDICINE, DIAGNOSTIC RADIOLOGY AND THE TNM STAGING OF MALIGNANCY. Seth A. Borg, Philip Rubin, and Robert E. O'Mara.

IMAGING SITES OF AIRWAY OBSTRUCTION AND MEASURING FUNCTIONAL RESPONSE TO THERAPY IN ASTHMA. George V. Taplin, Sawtantra K. Chopra, Donald P. Tashkin, Dennis Elam, and Mary Lee Griswold.

XENON-127 LUNG VENTILATION PROCEDURE. William H. McCartney and J. Randolph Perry.

CASE OF THE DAY. Edward V. Staab and C. Leon Partain.

TRH STIMULATION TEST: CLINICAL USES AND SPECIAL APPLICATIONS. Fuad S. Ashkar.

DYNAMIC LUNG SCANS--THE "INFUSION COMPONENT". George W. Evans, James H. Kieran, and Sheila M. Williamson.

## TECHNOLOGISTS' SCIENTIFIC PROGRAM

The following papers have been accepted for the Technologists' Scientific Program. Complete abstracts may be found in the June issue of the *Journal of Nuclear Medicine Technology*.

MONDAY, 4:00 p.m.-5:30 p.m.

JOHN EVERS THEATRE

### SUBMITTED PAPERS I

GALLIUM-67 CAMERA IMAGING SPECTROMETRY. Elbert L. Lands, University of Chicago Hospitals and Clinics, Chicago, Ill.

A COMPUTERIZED ENHANCED SUBTRACTION TECHNIQUE FOR Ga-67 SCANNING. Dayton A. Rich, Vijay M. Dhawan, John J. Sziklas, and Richard P. Spencer, Hartford Hospital, Hartford, Conn.

"COLD-SPOT" TECHNIQUE AND ENHANCEMENT OF IMAGE QUALITY IN PANCREATIC SCANNING. George Lis, Said M. Zu'bi, John P. Sullivan, and Suresh M. Brahmavar, Baystate Medical Center, SH-WW Unit, Springfield, Mass.

FLUORESCENCE THYROID SCANNING: PROPER SELECTION OF ENERGY WINDOW. Michael V. McCormick, Heinz W. Wahner, and Alan L. Orvis, Mayo Clinic and Mayo Foundation, Rochester, Minn.

A DYNAMIC HEART MODEL FOR THE ASSESSMENT OF VENTRICULAR TIME ACTIVITY CURVES. Edward Raab, Edward Nickoloff, Henry Manspeaker, Bertram Pitt, and Henry Wagner, Jr., Johns Hopkins Hospital, Baltimore, Md.

LONGITUDINAL MULTIPLANE EMISSION TOMOGRAPHY (PHO/CON, SEARLE RADIOGRAPHICS, INC.)--PROBLEMS FACING THE TECHNOLOGIST. Terry Brown, Charles Armstrong, Barry S. Brunnsden, and Elbert L. Lands, University of Chicago Hospitals and Clinics, Chicago, Ill.