

Author Index-1998

- Abrahamson, M. 116(ab)
 Ackermann, RJ. 121(ab)
 Adams, EJ. 278
 Adamski, K. 116(ab)
 Afriyie, MO. 126(ab)
 Ågren, BN. 196
 Ahlberg, AW. 116(ab).
 186
 Aita, JF. 113(ab)
 Akamune, A. 125(ab).
 191
 Al-Bunny, A. 269
 Alledina, Y. 116(ab)
 Al-Mohannadi, S. 269
 Alonso, JC. 132(ab)
 Alonso, O. 119(ab)
 Al-Za'abi, K. 269
 Andrews, D.
 Aoki, T. 30
 Ardeel, HC. 134(ab)
 Ariola-Pienschke, E. 245
 Arroyo, A. 124(ab)
 Atkins, HL. 80
 Audenaert, K. 130(ab)
 Babich, JW. 113(ab)
 Bacher, J. 130(ab)
 Backstrom, P. 133(ab)
 Baker, MK. 120(ab)
 Baldwin, P. 130(ab)
 Barrow, SA. 113(ab).
 114(ab), 117(ab)
 Bechtel, G. 235
 Bender, H. 129(ab)
 Bertoldo, A. 130(ab)
 Beyer, T. 128(ab)
 Biersack, H-J. 129(ab)
 Bin, L. 123(ab)
 Blais, M. 206
 Boccagna, F. 128(ab)
 Bogsrud, TV. 124(ab)
 Bohdiewicz, PJ. 155
 Bonab, AA. 113(ab)
 Brown, K. 87
 Bruch, PM. 113(ab)
 Busch, A. 116(ab)
 Buscombe, JR. 127(ab)
 Buse, M. 129(ab)
 Bybel, B. 206
 Cacciabuado, J. 115(ab)
 Caldwell, CB. 100
 Cao, Z. 178
 Carey, J. 121(ab)
 Carlson, C. 43
 Carlson, KA. 133(ab).
 135(ab), 136(ab)
 Carson, R. 130(ab)
 Casati, R. 128(ab)
 Casey, D. 32
 Castromayor, EM.
 133(ab)
 Chandler, LD. 124(ab)
 Chang, CW. 125(ab)
 Chen, HR. 132(ab)
 Chen, JB. 125(ab)
 Chen, KG. 126(ab)
 Chen, M-N. 124(ab).
 125(ab), 130(ab)
 Chin, BB. 117(ab)
 Chou, KL. 132(ab)
 Civelek, AC. 117(ab)
 Clapp, DA. 115(ab)
 Clarke, GH. 257
 Cánepa, J. 119(ab)
 Cobelli, C. 130(ab)
 Code, C. 17
 Coleman, RE. 127(ab)
 Collins, AM. 115(ab)
 Colombo, FR. 128(ab)
 Conway, AA. 114(ab)
 Cook, TE. 134(ab)
 Cowell, SF. 17, 278
 Crawford, ES. 38
 Cronin, VR. 213
 Cross, DM. 115(ab).
 186,
 265
 Cuadra, JL. 132(ab)
 Cuklanz, EJ. 57, 210
 Czerniecki, B. 120(ab)
 D'Asseler, Y. 130(ab)
 Dachille, MA. 128(ab)
 Dado, A. 127(ab)
 Daley, LJ. 118(ab)
 Dalipaj, MM. 133(ab).
 134(ab)
 Danielsson, M. 120(ab)
 Daube-Witherspoon,
 ME. 130(ab)
 Davidhizar, R. 235
 Day, PJ. 121(ab)
 DeMan, P. 122(ab)
 den Hollander, W.
 127(ab)
 Denhartog, P. 23
 Der, M. 130(ab)
 Dey, HM. 118(ab)
 Dierckx, R. 130(ab)
 Diestelhorst, S. 134(ab)
 Dillehay, GH. 115(ab)
 Donat, J. 116(ab)
 Dowd, SB. 235
 Driedger, AA. 206
 Duncan, BG. 120(ab)
 Duncan, K. 228
 Dunlop, D. 121(ab)
 Dunn, RM. 121(ab)
 Dunnwald, LK. 120(ab)
 Durack, L. 128(ab)
 Eary, J. 128(ab)
 Eary, JF. 120(ab)
 Ejindhoven, J. 127(ab)
 Elliott, DG. 123(ab)
 Elliott, G. 130(ab)
 Engelin, L. 127(ab)
 Everaert, H. 4, 72, 164
 Everett, J. 130(ab)
 Fain, R. 134(ab)
 Fannin, BJ. 134(ab)
 Ferency, S. 116(ab)
 Ferg, M. 103
 Ferraro-Borgida, MJ.
 115(ab)
 Fischer, S. 116(ab)
 Fischman, AJ. 113(ab).
 114(ab), 117(ab)
 Franken, PR. 4, 72, 164
 Fry, J. 127(ab)
 Fujioka, H. 125(ab).
 191
 Fujita, T. 123(ab)
 Gabrys, J. 116(ab)
 Gebhard, MW. 122(ab)
 Gering, MM. 115(ab)
 Gibbons, RJ. 133(ab)
 Gilbert, S. 1, 69, 153, 225
 Goldenberg, DM.
 121(ab)
 Golder, K. 119(ab)
 Goldsmith, SJ. 119(ab)
 Golosovker, O. 119(ab)
 Göransson, MB. 196
 Gordon, BM. 129(ab)
 Gordon, L. 129(ab)
 Grant, S. 117(ab)
 Gratzer, SE. 133(ab)
 Green, J. 130(ab)
 Green, S. 130(ab)
 Greenley, W. 130(ab)
 Griffith, S. 63
 Groce, KD. 135(ab)
 Gross, K. 91
 Guerra, P. 132(ab)
 Guioli, P. 119(ab)
 Guy, R. 257
 Hachamovitch, R.
 115(ab)
 Haenchen, MG. 124(ab)
 Hahn, K. 116(ab)
 Halama, JR. 115(ab)
 Halkar, R. 117(ab)
 Hamblen, SM. 127(ab)
 Hambye, A-S. 4, 72, 164
 Hankins, JH. 113(ab)
 Hartnett, SD. 120(ab)
 Hatherly, R. 120(ab)
 Hattori, N. 123(ab)
 Haun, AS. 136(ab)
 Heller, GV. 115(ab).
 116(ab), 121(ab).
 186,
 265
 Helsabeck, C. 120(ab)
 Hendler, A. 116(ab)
 Henkin, RE. 115(ab).
 129(ab)
 Herbst, J. 59, 219
 Herold, TJ. 124(ab)
 Herscovitch, P. 130(ab)
 Herskowt, M. 116(ab)
 Hewitt, T. 133(ab)
 Hilson, AJW. 133(ab)
 Hinkle, G. 127(ab)
 Hinphy, P. 119(ab)
 Hoh, CK. 43
 Holder, LE. 120(ab).
 174,
 178
 Homs, CJ. 124(ab)
- Hope, E. 43
 Horn, D. 100
 Horwitz, E. 224
 Huang, DT. 118(ab).
 121(ab), 130(ab).
 135(ab)
 Huang, WS. 126(ab)
 Hub, SH. 124(ab)
 Hung, JC. 118(ab).
 121(ab), 124(ab).
 125(ab), 130(ab).
 133(ab), 134(ab)
 Hutchins, GD. 134(ab)
 Ichise, M. 23, 114(ab)
 Ikehira, H. 30
 Ikezoe, J. 125(ab).
 191
 Inoue, T. 125(ab).
 191
 Intenzo, C. 119(ab)
 Inubushi, M. 123(ab)
 Irvine, P. 134(ab)
 Ishimaru, Y. 125(ab).
 191
 Ito, H. 30
 Jacob, A. 269
 Jacobs, GI. 130(ab)
 Jacobsson, H. 120(ab)
 Jahan, S. 269
 Jansson, BA. 196
 Jerin, J. 128(ab)
 Jiang, N. 123(ab)
 Johnson, R. 126(ab)
 Johnston, RE. 94
 Jonsson, C. 120(ab)
 Jordan, C. 119(ab)
 Juaneza, RJ. 135(ab)
 Juweid, M. 121(ab)
 Kairemo, KJA. 118(ab)
 Kanal, KM. 122(ab)
 Kang, JT. 126(ab)
 Karesh, SM. 115(ab)
 Karonen, S-L. 118(ab)
 Karp, JS. 118(ab)
 Keim, LW. 113(ab)
 Kelty, NL. 114(ab).
 120(ab), 123(ab).
 174
 Khan, SH. 114(ab).
 120(ab), 174
 Kida, T. 128(ab)
 Kilburn-Watt, E. 278
 Kim, A. 32
 Kim, S. 119(ab)
 Klaus, DH. 117(ab)
 Klein, EC. 128(ab)
 Klit, L. 56
 Knight, LC. 87
 Koches, TS. 115(ab)
 Komori, E. 123(ab)
 Konishi, J. 123(ab)
 Koole, M. 130(ab)
 Kosegi, JE. 200
 Kowalsky, RJ. 94
 Kozar, JJ. 120(ab)
 Krause, SJ. 135(ab)
 Krevsky, B. 87
 Kroger, K. 124(ab)
- Krzos, JR. 129(ab)
 Kudoh, T. 123(ab)
 Kwan, D. 23
 Lacy, JL. 121(ab)
 Lahar, B. 91
 Lahorte, P. 130(ab)
 Larsson, SA. 120(ab)
 Laymon, CM. 127(ab)
 Leahy, D. 51, 52, 101,
 209, 284
 Lee, JM. 117(ab)
 Lee, JS. 132(ab)
 Lees, RS. 117(ab)
 Lemahieu, I. 130(ab)
 Leo, R. 128(ab)
 Leong, LK. 119(ab)
 Leveque, F. 126(ab)
 Levine, MG. 116(ab)
 Lewis, DH. 115(ab)
 Liao, SQ. 126(ab)
 Limouris, GS. 132(ab)
 Lin, HM. 125(ab)
 Lin, YD. 132(ab)
 Linthicum, W. 130(ab).
 130(ab)
 Littlefield, JL. 124(ab)
 Liu, HG. 114(ab)
 Liu, P. 116(ab)
 Liu, RS. 125(ab).
 126(ab), 132(ab)
 Lowinger, T. 124(ab)
 Lu, JM. 126(ab)
 Lu, X. 123(ab)
 Luk, P. 128(ab)
 Macey, DJ. 123(ab)
 Madras, BK. 113(ab)
 Madsen, M. 133(ab)
 Maes, A. 4, 72, 164
 Magoun, S. 91
 Mahone, TJ. 114(ab)
 Mahoney, DW. 118(ab).
 124(ab), 130(ab)
 Mankoff, DA. 120(ab)
 Mann, A. 186, 265
 Marcus, CS. 134(ab)
 Maruno, H. 252
 Mas, JC. 26
 Masuda, K. 128(ab)
 Mathis, CA. 128(ab)
 Matsuo, S. 128(ab)
 Maurer, AH. 87
 Mazzilli, TV. 124(ab)
 McBride, JG. 124(ab)
 McCool, D. 127(ab)
 McEnerney, K. 43
 McGill, CC. 115(ab).
 121(ab)
 McGough, CG. 121(ab)
 McKay, WJ. 257
 McKee, BT. 133(ab)
 Meli, SM. 123(ab)
 Meltzer, CC. 128(ab)
 Meredith, RF. 123(ab)
 Mesotten, L. 4, 72, 164
 Milko, DL. 128(ab)

Mishkin, F, 126(ab), 134(ab)	Parkinson, DE, 128(ab)	Russell, A, 115(ab), 116(ab)	Stavraka, A, 132(ab)	Vines, D, 23, 114(ab)
Mizuno, S, 30	Patel, J, 119(ab)	Ruszkiewicz, JA, 128(ab)	Steves, AM, 38	Vlahos, L, 132(ab)
Molino, C, 132(ab)	Patel, M, 269	Sa'ad, M, 269	Stipp, V, 91	Vliotopoulos, V, 132(ab)
Morita, R, 128(ab)	Patel, Y, 124(ab)	Sajdak, R, 245	Strömberg, S, 118(ab)	
Morris, RS, 186	Patterson, H, 257	San Pedro, EC, 114(ab)	Sy, WM, 124(ab)	
Mortelmans, L, 4, 72, 164	Pena, O, 134(ab)	Saver, A, 120(ab)	Sze, PC, 124(ab)	
Mosman, EA, 133(ab)	Peterson, LJ, 133(ab)	Schauwecker, DS, 134(ab)	Szulc, M, 115(ab)	
Motee, HP, 133(ab)	Pham, HL, 126(ab), 134(ab)	Scheff, AM, 120(ab)	Tadamura, E, 123(ab)	
Mountz, JM, 114(ab)	Pham, PK, 120(ab)	Schmit, CL, 134(ab)	Takada, M, 128(ab)	
Moyna, NM, 116(ab)	Phillips, JM, 115(ab), 116(ab)	Sdraiati, C, 128(ab)	Takamiya, Y, 117(ab)	
Murase, K, 125(ab), 191	Phillips, V, 127(ab)	Seo, IS, 124(ab)	Takano, H, 30	
Murata, H, 252	Pickett, MW, 200	Sestrich, S, 130(ab)	Takayama, T, 252	
Murphy, P, 116(ab)	Piriz, J, 186	Seyer, MY, 135(ab)	Tamaki, N, 123(ab)	
Mussivand, TV, 133(ab)	Ponath, C, 129(ab)	Shalberg, PA, 113(ab)	Tanaka, F, 114(ab)	
Mut, F, 119(ab)	Ponto, JA, 99, 262, 283	Shapiro, B, 121(ab)	Taylor, A, 117(ab)	
Natale, D, 122(ab)	Pozderac, R, 127(ab)	Sharkey, RM, 121(ab)	Taylor, RE, 123(ab)	
Neagley, FL, 208	Prekeges, J, 50	Sharpe, WD, 115(ab)	Teates, TD, 132(ab)	
Nelson, R, 133(ab)	Pruskin, SG, 32	Shaw, D, 116(ab)	Thakrar, DS, 127(ab)	
Ng, CK, 118(ab)	Puckett, CL, 132(ab)	Shaw, SM, 274	Theofanous, G, 32	
Nguyen, T, 134(ab)	Purnell, SD, 124(ab)	Shih, W-J, 91	Thomas, C, 126(ab)	
Nichols, D, 59, 103, 223	Quinton, T, 274	Shirakawa, S, 123(ab)	Thomas, KS, 3, 70, 200	
Nicodemus, CF, 117(ab)	Ratica, DM, 128(ab)	Shukla, SK, 132(ab)	Thomas, M, 130(ab)	
Nikula, TK, 118(ab)	Reinhardt, M, 117(ab)	Sleika, OA, 134(ab)	Timpe, JT, 125(ab)	
Nitke, SJ, 129(ab)	Revesz, G, 87	Sisson, JC, 121(ab)	Tomas, B, 126(ab)	
Noma, K, 128(ab)	Reynolds, C, 120(ab)	Smallwood, J, 117(ab)	Townsend, DW, 128(ab)	
Núñez, M, 119(ab), 133(ab)	Riggan, SL, 118(ab)	Smith, BM, 115(ab)	Triantafyllou, N, 132(ab)	
Nyak, N, 121(ab)	Rini, J, 119(ab)	Smith, EM, 9	Tuli, M, 269	
O'Connor, MK, 119(ab), 122(ab)	Roßmüller, B, 116(ab)	Smith, KF, 124(ab)	Turkington, TG, 127(ab)	
Ohnishi, H, 128(ab)	Rose Wolf, GE, 248	Smith, LG, 128(ab)	Urbain, JL, 87	
Olsen, J, 127(ab)	Rosenbaum, D, 116(ab)	Smith, RJ, 118(ab)	Valdivia, V, 126(ab)	
Onoguchi, M, 252	Rosner, N, 117(ab)	Snowdon, GM, 204	Van den Maegdenbergh, V, 4	
Osei-Boah, P, 126(ab)	Rossman, PJ, 122(ab)	Solmka, P, 133(ab)	van Lingen, A, 127(ab)	
Owunwanne, A, 269	Rothfusz, B, 117(ab)	Soriano, A, 132(ab)	Vandenbergh, S, 130(ab)	
Packard, AB, 121(ab)	Roy, L, 154, 227	Spaulding, SA, 121(ab)	Vandevivere, J, 72	Zanzonico, P, 119(ab)
Pagani, M, 120(ab)	Rubin, RH, 114(ab)	Spelman, TA, 113(ab)	Vanderendonck, R, 206	Zarca, M, 132(ab)
Palestro, CJ, 126(ab)	Rubio, C, 132(ab)	Spicer, KM, 129(ab)	Verma, AK, 124(ab)	Zhang, J, 119(ab)
Parekh, JS, 132(ab)	Ruddy, TD, 133(ab), 134(ab)	Spies, SM, 125(ab)	Zimmer, AM, 125(ab)	
		Spies, WG, 125(ab)		
		Srivastava, SC, 80		

STATEMENT OF OWNERSHIP, MANAGEMENT AND CIRCULATION

(REQUIRED BY 39 U.S.C. 3685)

1. **A. Title of Publication:** The Journal of Nuclear Medicine Technology.
2. **B. Publication Number:** 966500.
3. **C. Date of filing:** September 29, 1998.
4. **D. Frequency of issue:** Quarterly.
5. **E. A. Number of issues published annually:** Four.
6. **F. B. Annual Subscription price:** \$70 in U.S.A.; \$75 in Canada and Pan-American countries; \$80 elsewhere.
7. **G. Complete mailing address of known office of publication:** 1850 Samuel Morse Dr., Reston, VA 20190-5316.
8. **H. Complete mailing address of the headquarters of general business offices of the publisher:** 1850 Samuel Morse Dr., Reston, VA 20190-5316.
9. **I. Full names and complete mailing address of publisher, editor, and managing editor:** Publisher: Society of Nuclear Medicine, Inc., 1850 Samuel Morse Dr., Reston, VA 20190-5316; Editor: Susan Gilbert, 1850 Samuel Morse Dr., Reston, VA 20190-5316; Managing Editor: Dawn Murphy, 1850 Samuel Morse Dr., Reston, VA 20190-5316.
10. **J. Owner:** Society of Nuclear Medicine, Inc., 1850 Samuel Morse Dr. Reston, VA 20190-5316.
11. **K. Known bondholders, mortgages and other security holders owning or holding 1 percent or more of total amount of bonds, mortgages or other securities:** None. Society of Nuclear Medicine, Inc., is a nonprofit corporation; there are no shareholders.
12. **L. The purpose, function and nonprofit status of this organization and the exempt status for federal income tax purposes have not changed during the preceding 12 months.**
13. **M. Extent and nature of circulation:** (A) Total number of copies printed; average during preceding 12 months—7,979; actual copies printed in September 1998—8,574; (B) 1. Paid circulation: Sales through dealers and carriers, street vendors and counter sales—none. Actual copies in September 1998—none. 2. Mail subscriptions: average—7,226; actual copies in September 1998—7,642; (C) Total paid circulation: average—7,226; actual copies in September 1998—7,642; (D) Free distribution by mail, carrier or other means: samples, complimentary, and other free copies; average—21; actual copies in September 1998—19 (E) Free distribution outside the mail, carriers or other means: average—none; actual copies in September 1998—none; (F) Total free distribution: average—21; actual copies in September 1998—19; (G) Total distribution: average—7,247; actual copies in September 1998—7,661; (H) 1. Copies not distributed; office use, left over, unaccounted for, spoiled after printing; average—732; actual copies in September 1998—913. Returns from news agents—none. (I) Total: average—7,979; actual copies in September 1998—8,574.
14. **N. I certify that the statements made by me are correct and complete;** (signed) John S. Childs, Managing Director of Communications.

Subject Index-1998

A

- Absorption.** 99m Tc radiopharmaceuticals, onto disposable plastic syringes, 196
ACNP News. 63, 224
Adsorption. 99m Tc radiopharmaceuticals, onto disposable plastic syringes, 196
AECB, see Atomic Energy Control Board
Anatomy and physiology, heart, nuclear cardiology, 4
Anesthesia, procedures to image nonhuman primates, nuclear medicine technologists, 128(ab)
Animals, procedures to image nonhuman primates, nuclear medicine technologists, 128(ab)
Arterial sampling, indwelling ports, quantitative PET studies, 130(ab)
Artifacts
 motion, head movement in simulated brain imaging, 257
 simulated frame-loss, myocardial perfusion imaging, 248
Atomic Energy Control Board (AECB). recent decisions, 64
Atria, innervation, 11 C HED
 normal and stellectomy canine hearts, 134(ab)
 normal canine hearts, 134(ab)
Attenuation compensation. Chang algorithm on quantitative SPECT results, 178
Attenuation correction
 absolute quantitation, 131 I uptake, 123(ab)
 arm position effects, 99m Tc sestamibi cardiac SPECT, 116(ab)
 artificial heart materials, 133(ab)
 inferior wall myocardial perfusion defects, prone imaging, 115(ab)
 practical considerations, fully corrected whole-body PET studies, 118(ab)
 radiopharmaceuticals in PET imaging, 228
 uniform, 111 In and 67 Ga SPECT, 117(ab)
Author guidelines, 288

B

- Blood activity,** measurement of, scintillation camera feasibility in, 125(ab)
Bloodborne pathogens, blood contamination of lead unit dose containers, commercially prepared doses, 200
Blood-pool imaging, agents for, cardiac function, 72
Blood radioactivity, measurement, for quantification of cerebral blood flow, gamma camera use in, 191
Body outline, serious artifacts due to, attenuation correction rCBF SPECT exams, 120(ab)
Bone, scintigraphy, osteoarthritis, 133(ab)
Bone malignancy, radionuclide therapy of, 80
Bone scan, wrist pathology, image fusion, 124(ab)
Bone scintigraphy, tibial metastases, from bronchogenic adenocarcinoma, 91

Book reviews

Nuclear Medicine Procedure Manual 1997- 98, 50

Radiopharmacy Computer Assisted Instruction for Medical Imaging Sciences, 50

Brain

ictal SPECT, technical protocol, 116(ab) imaging, simulated, head movement in, 257

quantitative 99m Tc BICISATE imaging, head injury patients, 113(ab)

Breast cancer

imaging, prone scintimammography

SPECT, 127(ab)

sentinel node assessment in,

lymphoscintigraphy, 120(ab)

sentinel node localization in, 99m Tc human serum albumin or sulfur colloid, 120(ab)

89 Sr therapy, 117(ab)

Bronchogenic adenocarcinoma, tibial metastases in, 91

C

Cancer, bone malignancy, radiopharmaceuticals for therapy, 80

Capsules, compounded, 131 I, solution volume and storage time effects on dissolution, 274

Carbon-11 HED, atrial innervation

normal and stellectomy canine hearts, 134(ab)

normal canine hearts, 134(ab)

Carotid artery, thrombi, imaging with 99m Tc labeled synthetic peptide, 117(ab)

Cerebral blood flow

quantification of, blood radioactivity measurement with gamma camera, 191

quantitative, 133 Xe and dynamic SPECT, 126(ab)

regional, attenuation correction examinations, serious artifacts in, 120(ab)

Chemotherapy. 99m Tc red blood cell labeling, adults and children, 265

Chest pain

assessment, 99m Tc-tetrofosmin liver clearance, 186

during stress tests, reproducibility of ejection fraction measurements, 115(ab)

Cholecystokinin. response, spontaneous gallbladder contraction during cholescintigraphy, 124(ab)

Cholescintigraphy

radionuclide hepatobiliary imaging, post-traumatic liver injuries, 123(ab)

spontaneous gallbladder contraction during CCK response and, 124(ab)

Chromatography, miniaturized, quality control procedures for radiopharmaceuticals, 125(ab)

Cognition, diagnosis, PET activation, 17

Coincidence detection, radiopharmaceuticals in PET imaging, 228

Coincidence imaging

dual-head gamma camera, quality control of positron emitters on, 127(ab)

FDG molecular and 99m Tc tetrofosmin SPECT detection, viable myocardium, 115(ab)

FDG SPECT, epilepsy, tumor, progressive aphasia and stroke, 114(ab)

high-quality FDG studies, dual-headed gamma camera, 245

Contamination

blood, lead unit dose containers, 200

99m Tc-DTPA, in lung ventilation studies, 43

Copper filtration, in dose calibration, measurement of 131 I and 111 In with, 94

Coronary artery disease

ischemic, 99m Tc-tetrofosmin liver clearance, 186

nuclear cardiology in, 155

Cost-effectiveness, whole-body FDG and off-site FDG PET, patient throughput for, 129(ab)

Critical thinking, ACNP proficiency test, 38

Cross-calibration factor, blood radioactivity measurement, with gamma camera, 191

D

Dead-time measurements, modern digital gamma camera systems, 119(ab)

Dopamine transporters

imaging with 11 C β -CFT, lesioned rat, 135(ab)

PET and SPECT imaging, altropine for, 113(ab)

Dopascan, 123 I β -CIT clinical evaluation, Parkinson's disease, 114(ab)

Dose calibrator

copper filter, measurement of 131 I and 111 In with, 94

geometry parameter for quality control, 127(ab)

Dosimetry, measurements, technical considerations of, 121(ab)

E

ECAT ART scanner, improved whole-body imaging, 128(ab)

Editor's Page

future of *JNMT*, 1(ed)

peer review process, 69(ed)

SNM-TS membership, 153(ed)

recognition of contributors, 225(ed)

Ejection fraction

left ventricular, first-pass radionuclide angiography or gated blood-pool imaging, 134(ab)

measurements, 99m Tc-tetrofosmin, chest pain during stress tests, 115(ab)

External radioactive reference markers, SPECT, dopamine system, 114(ab)

Extremity exposure,

99m Tc radiopharmaceutical preparation,

Filtered backprojection

dose from syringe procedures during, 32

F

- Filtered backprojection.** iterative reconstruction comparison, coincidence detection data, 118(ab)
- Filtration problems.** ^{111}In capromab pentetide, 283(le)
- Fluorine-18-FDG** biodistribution patterns, plasma time-activity curve and external TLD measurement, 131(ab) high-quality studies, dual-headed gamma camera, 245 molecular coincidence detection, $^{99\text{m}}\text{Tc}$ FDG tetrofosmin and, viable myocardium, 115(ab) PET, lung cancer, Medicare coverage, 63 PET, spectral analysis approach for quantification, 130(ab)
- 6-Fluorine-18 FDOPA.** robotic synthesis of, 125(ab)
- Fluorodeoxyglucose,** in PET imaging, 228
- Fractionated kit.** radiochemical purity, $^{99\text{m}}\text{Tc}$ -tetrofosmin, 128(ab)
- Frame loss.** simulated artifacts, myocardial perfusion imaging, 248

G

- Gamma camera** dual-headed, high-quality FDG studies, 245 measurement of blood radioactivity, quantification of cerebral blood flow, 191 modern digital systems, dead-time measurements on, 119(ab) static versus variable speed whole-body acquisition, organ uptake ratios, 126(ab) system for wipe testing, 100(le)
- Gastrointestinal bleeding** occult, imaged by $^{99\text{m}}\text{Tc}$ -HSA-D radionuclide angiography, 30 red cell labeling, in vitro versus in vivo, 87
- Generator, $^{99\text{m}}\text{Tc}$** elution time and eluate volume in, 118(ab) fractionation elution performance, 130(ab)
- Government Relations Office** annual report, 1997, 59 update, 103, 223

H

- Head movement,** simulated brain imaging, 257
- Heart** anatomy and function, nuclear cardiology, 4, 72, 164 artificial, attenuation by materials, 133(ab)
- Heat-damaged red blood cells,** 204
- Hepatobiliary imaging,** radionuclide, post-traumatic liver injuries, 123(ab)

I

- Image fusion technique,** bimodality, CT, MR, SPECT and PET, 133(ab)

Image reconstruction

- attenuation map effects, Chang algorithm, quantitative SPECT results, 178 iterative, filtered backprojection comparison, coincidence detection data, 118(ab)
- PET, filtered backprojection versus expectation-maximization methods, 134(ab)

Image registration, anatomic localization of wrist pathology, 124(ab)

Imaging protocols, nuclear cardiology, evaluation of cardiac perfusion, 164

Immunoscintigraphy, melanectomized patients, 131(ab)

Index Medicus, 56(le)

Indium-111, measurement, dose calibrator assay with a copper filter, 94

Indium-111 capromab pentetide monoclonal antibody imaging, prostate cancer, 174 preparation of, filtering, 283(le)

Indium-111 octreotide, imaging, meningioma and carcinoid tumor, 135(ab)

Indium-111 OncoScint*, FDA approved, tumor imaging, 155

Indium-111 ProstaScint*

- dual-isotope decreased cost of, 129(ab) prostate cancer, 174 protocol for, 120(ab)

Indium-111 satumomab pentetide

- FDA approved, tumor imaging, 155 radiochemical purity of, quality control procedures, 125(ab)

Instrumentation, design and quality control, scintillation cameras, 9

Iodine-123

- measurement, dose calibrator assay with a copper filter, 94 total-body scan, thyroid cancer and metastasis, 129(ab)

Iodine-123 IPPA, metabolic images, quantitative method for analysis, 133(ab)

Iodine-125, brachytherapy seeds, SPECT imaging of, 124(ab)

Iodine-131

- high-dose therapy, radiation safety, 128(ab) radiation safety, patient dies after therapy, 206 solution volume and storage time, effects on in vitro dissolution, 274 therapy absolute quantitation of uptake, 123(ab) thyroid stunning, 134(ab)

J

Joint Review Committee on Educational Programs in Nuclear Medicine Technology (JRCNMT), 57, 210

K

Kidney

- determination of ERPF, $^{99\text{m}}\text{Tc}$ -MAG and single blood sampling, 23 shock wave lithotripsy trauma, ^{111}In platelets and $^{99\text{m}}\text{Tc}$ RBCs in imaging of, 136(ab)

L

Lead-glass syringe shields. $^{99\text{m}}\text{Tc}$

radiopharmaceutical preparation, dose from syringe procedures during, 32

Lead unit dose containers. single-use protective inserts, blood contamination and, 200

Lead-vial shields. $^{99\text{m}}\text{Tc}$

radiopharmaceutical preparation, dose from syringe procedures during, 32

Learning outcomes, assessment of, 278

Left ventricular ejection fraction, nuclear cardiology, 72

Left ventricular function. $^{191\text{m}}\text{Ir}$ and ^{178}Ta comparison, first-pass radionuclide angiogram, 121(ab)

Lesion detection, assessment of, brain SPECT, 130(ab)

Lithotripsy, shock wave, trauma from, ^{111}In platelets and $^{99\text{m}}\text{Tc}$ RBCs in imaging of, 136(ab)

Liver, $^{99\text{m}}\text{Tc}$ -tetrofosmin clearance, acute chest pain patients, 186

Lung

quantitative imaging, for lung volume reduction surgery, 26 ^{133}Xe ventilation, after perfusion imaging with $^{99\text{m}}\text{Tc}$, 131(ab)

Lung cancer, bronchogenic adenocarcinoma, tibial metastases in, 91

Lung volume reduction surgery, lung scans in patient selection for, 26

Lymphoscintigraphy

breast cancer, sentinel node assessment in, 120(ab) melanectomized patients, 131(ab)

M

Manpower data survey, Workforce Analysis Committee, 208

Medicare, coverage for ^{18}F -FDG PET in lung cancer, 63

Melanoma, immunoscintigraphy and lymphoscintigraphy indications in, 131(ab)

Meningioma

carcinoid tumor and, ^{111}In octreotide for imaging of, 135(ab) surgery or radiation therapy, octreotide brain SPECT in, 119(ab)

Message from the President, 3, 70, 154, 227

Migrational anomalies, congenital thyroid, scintigraphy, 129(ab)

Monoclonal antibody

for tumor imaging, ^{111}In satumomab pentetide, 155

I10, radiochemical purity and immunoreactivity, temperature effects, 126(ab)

Motion correction, cardiac SPECT, four different techniques, 122(ab)

Myocardial infarction, tracer uptake in, SPECT images, 252

Myocardial perfusion imaging

defects, ultra-high energy collimation effects, 122(ab)

first-pass studies

versus gated blood-pool studies, 134(ab) $^{99\text{m}}\text{Tc}$ sestamibi, syringes used for, 121(ab)

gated SPECT, cardiac function, 72 nuclear cardiology, 164

phantom, tracer uptake in myocardial infarction, 252
simulated frame-loss artifacts in, single- and dual-headed systems, 248
^{99m}Tc sestamibi, arm positioning effects, 115(ab)
^{99m}Tc-tetrofosmin liver clearance, acute chest pain patients, 186
Myocardium. ^{99m}Tc-tetrofosmin count statistics, stress effects, 116(ab)

N

National Council on Radiation Protection and Measurements (NCRP). W. Roger Ney retires, 104
Needle stick injury. sensible approaches, nuclear medicine and pharmacy, 135(ab)
Neuropathy. peripheral, osseous metastases after ¹⁸⁶Re HEDP/⁸⁹Sr treatment, 131(ab)
Neuropsychology. cognition, PET activation, 17
NMTCB, *see* Nuclear Medicine Technology Certification Board
Nuclear cardiology. anatomy and function of the heart, 4, 72, 164
radioactive contamination incidents, reduction of, 133(ab)
Nuclear medicine. new image procedures for technologists, 127(ab)
patient education in the 21st century, 235
Nuclear Medicine Technology Certification Board (NMTCB) report from chair, 51, 101, 209, 284
task analysis report 1997, 52
Nuclear medicine technology education. curriculum design, 278
Nuclear pharmacy. centralized, ¹³¹I, solution volume and storage time effects on dissolution, 274
Nuclear Regulatory Commission (NRC) radiation dosage, decisions and instructions, 124(ab)
regulatory release criteria, ¹³¹I-labeled antibodies, 121(ab)

O

Ocular tumors. imaging, planar pinhole technique or SPECT, 119(ab)
Organ uptake ratios. static versus variable speed whole-body acquisition, 126(ab)
Osseous metastases, after ¹⁸⁶Re HEDP/⁸⁹Sr treatment, peripheral neuropathy in, 131(ab)
Osteoarthritis. bone scintigraphy in, 133(ab)
Oxygen-15. gas delivery system, PET imaging, 135(ab)

P

Parkinson's disease. ¹²³I β -CIT clinical evaluation, 114(ab)
Patient education. health care in the 21st century, 235
Pediatric patients. ictal brain SPECT, technical protocol, 116(ab)
renal scintigraphy, ^{99m}Tc MAG3, calculation of split function in, 116(ab)

Peer review process, 69(ed)
Peptides. ^{99m}Tc labeled, imaging carotid thrombi with, 117(ab)
Performance criteria. scintillation cameras, 9
Phosphorus-32. radionuclide therapy, bone malignancy, 80
Positron emission tomography (PET) activation, in neurological disorders, 17 altropine as ligand, imaging of dopamine transporters, 113(ab)
FDG fully corrected whole-body studies, 118(ab)
plasma time-activity curve and external TLD measurement, 131(ab)
filtered backprojection, versus expectation-maximization methods, 134(ab)
high-quality FDG studies, dual-headed gamma camera, 245 quantitative, arterial sampling via indwelling ports for, 130(ab)
radiopharmaceuticals in, 228 whole-body FDG and off-site FDG, patient throughput for, 129(ab)
World Wide Web, continuing education and internal communication, 130(ab)
¹¹C β -CFT, imaging of dopamine transporters, 135(ab)
¹⁸F-FDG, lung cancer, Medicare coverage, 63
¹⁵O gas delivery system testing, 135(ab)
Power spectrum. 2D, SPECT images assessed by textual analysis, 128(ab)
Preparation problems. ^{99m}Tc radiopharmaceuticals, 262
Professional practice. ACNP test to develop critical thinking, 38
Proficiency testing. ACNP test to develop critical thinking, 38
Prostate cancer ¹¹¹In capromab pentetate monoclonal antibody imaging, protocol for, 174 ¹¹¹In ProstaScint[®] dual-isotope protocol for, 120(ab)
screening, total prostate-specific antigen, 126(ab)
⁸⁹Sr therapy, 117(ab)
Prostate-specific antigen, free. screening of prostate cancer, 126(ab)

Q

Quality control dose calibrators, geometry parameter for, 127(ab)
positron emitters, dual-head positron coincidence detection gamma camera, 127(ab)
procedures radiochemical purity, miniaturized chromatography, 125(ab)
radiochemical purity of ¹¹¹In SP, 125(ab)
scintillation cameras, 9 test, modified preparation of ^{99m}Tc-tetrofosmin, 269
¹⁸⁸Rh-labeled compounds, nuclear medicine laboratory, 118(ab)
^{99m}Tc preparation problems, 262
Quantitation. ¹²³I IPPA metabolic images, quantitative method for analysis, 133(ab)
lung imaging, 26

R

Radiation. dosage, decisions and instructions, 124(ab)
Radiation safety labeling efficiency and stability, ^{99m}Tc MDP and sestamibi, 124(ab)
needle-stick injuries, nuclear medicine and pharmacy, 135(ab)
patient dies after therapy, 206 radiopharmaceuticals in PET imaging, 228 reduction of radioactive contamination incidents, 133(ab)
^{99m}Tc-DTPA contamination, in lung ventilation studies, 43
Radioactive cadaver. radiation safety, patient dies after therapy, 206
Radiochemical purity testing. ^{99m}Tc preparation problems, 262
Radioimmunoimaging. ^{99m}Tc-labeled anti-CEA monoclonal antibodies, clinical study, 123(ab)
Radioimmunotherapy high-dose, radiation safety, 128(ab)
¹³¹I-labeled antibodies, NRC regulatory release criteria, 121(ab)
Radioiodine. therapy, thyroid stunning, 134(ab)
Radionuclide angiography first-pass, ^{191m}Ir and ¹⁷⁸Ta comparison, 121(ab)
^{99m}Tc-HSA-D, occult intestinal bleeding imaged by, 30
Radionuclides. dual, SPECT, locus of infection or tumor, 119(ab)
Radionuclide therapy. bone malignancy, 80
Radionuclide tumor imaging ¹¹¹In capromab pentetate, prostate cancer, 174
¹¹¹In satumomab pentetate, FDA approved, 155
Radiopharmaceuticals for bone malignancy therapy, 80 in PET imaging, 228 radiochemical purity, quality control procedures, 125(ab)
unit dose lead containers, single-use protective inserts, blood contamination and, 200
^{99m}Tc adsorption onto disposable plastic syringes, 196 preparation problems, 262 ^{99m}Tc MDP and sestamibi, labeling efficiency and stability, 124(ab)
Radiopharmacy. ^{99m}Tc preparation, dose from syringe procedures, 32
Red blood cell labeling evaluation of efficiency, chemotherapy in adults and children, 265 substandard, cause of, 99(e)
in vitro versus in vivo, gastrointestinal bleeding studies, 87
Red blood cells. heat-damaged, preparing for imaging in splenic infarct or trauma, 204
Renal ERPF. determination, ^{99m}Tc-MAG and single blood sampling, 23
Renography. diuretic, exclusion of renal obstruction, 117(ab)
Rhenium-186. radionuclide therapy, bone malignancy, 80
Rhenium-188. compounds labeled with, use and quality control, 118(ab)
Robotic synthesis. 6-F-18 FDOPA, 125(ab)

- S**
- Samarium-153**, radionuclide therapy, bone malignancy, 80
- Scintigraphy**
cardiac function, 72
labeled leukocyte, seronegative spondylarthropathies, 132(ab)
renal, 99m Tc MAG3, calculation of split function in, children, 116(ab)
- Scintillation camera**
measurement of blood activity, feasibility of, 125(ab)
quality control program, 9
- Scintillation counter**, well-type, measurement of blood radioactivity, quantification of cerebral blood flow, 191
- Scintimammography**, prone, imaging breast cancer, 127(ab)
- Sentinel nodes**, localization lymphoscintigraphy, breast cancer, 120(ab)
 99m Tc human serum albumin or sulfur colloid, breast cancer patients, 120(ab)
- Single-photon emission computed tomography (SPECT)**
brain
assessment of lesion detectability, 130(ab)
collimators and nuclides with a texture analysis, 128(ab)
octreotide, meningioma patients, 119(ab)
dopamine system, radioactive reference markers and, 114(ab)
FDG, epilepsy, tumor, progressive aphasia and stroke, 114(ab)
heart
four motion correction techniques, 122(ab)
inferior wall perfusion defects, 115(ab)
 99m Tc sestamibi, arm position effects, 116(ab)
ultra-high energy collimation effects, 122(ab)
 125 I, brachytherapy seeds, 124(ab)
 111 In and 67 Ga, uniform attenuation correction, 117(ab)
quantitative results, Chang algorithm, attenuation map effects, 178
reflection of tracer uptake, myocardial infarction, 252
simulated frame-loss artifacts in, 248
simultaneous dual radiotracer, locus of infection or tumor, 119(ab)
 201 Tl, volume measurements by, 123(ab)
- SNM/ACNP Government Relations Office**
annual report, 1997, 59
update, 103, 223, 286
- Society of Nuclear Medicine**
annual meeting
Technologist Section program, 107
Toronto meeting highlights, 212
Commission on Health Care Policy, roadshow, 64
convention booths, 65
Education and Research Foundation, award winners, 65
Technologist Section, performance and responsibility guidelines, 45
- Solution volume**, storage time and, effects on in vitro dissolution, 131 I, 274
- Spectral analysis**, quantification of dynamic PET studies, 130(ab)
- Spleen**, imaging, preparing heat-damaged red cells for, in infarct or trauma, 204
- Spondylarthropathies**, seronegative, labeled leukocyte scintigraphy in, 132(ab)
- Storage time**, solution volume and, effects on in vitro dissolution, 131 I, 274
- Stroke**, acute, white blood cell kinetics after, 114(ab)
- Strontium-89**
radionuclide therapy, bone malignancy, 80
therapy, breast and prostate cancer, 117(ab)
- Syringes**
disposable plastic, adsorption of some 99m Tc radiopharmaceuticals on, 196
procedures using, extremity exposure to 99m Tc, 32
- T**
- Technetium-99m**
adsorption, onto disposable plastic syringes, 196
generator
elution time and eluate volume in, 118(ab)
fractionation elution performance, 130(ab)
preparation problems, 262
radiopharmaceutical preparation, dose from syringe procedures during, 32
red blood cell labeling, chemotherapy in adults and children, 265
 201 Tl comparison, myocardial phantom in infarction, 252
- Technetium-99m BICISATE**, quantitative brain imaging, head injury patients, 113(ab)
- Technetium-99m-DTPA**, aerosol, contamination, lung ventilation studies, 43
- Technetium-99m-HSA-D**, radionuclide angiography, occult intestinal bleeding imaged by, 30
- Technetium-99m-MAA**, lung scan, for lung volume reduction surgery, 26
- Technetium-99m-MAG3**
renal scintigraphy, calculation of split function, children, 116(ab)
single blood sampling and, ERPF determination, 23
- Technetium-99m MIBI**, planar pinhole technique or SPECT, ocular tumors, 119(ab)
- Technetium-99m-RBC**, heat-damaged red cells, diagnosing splenic infarct or trauma, 204
radionuclide ventriculography, 265
- Technetium-99m-sestamibi**
first-pass doses, comparison of syringes used for, 121(ab)
SPECT, myocardial perfusion defects, 115(ab)
use in cardiac perfusion, 164
- Technetium-99m-tetrofosmin**
liver clearance of, acute chest pain patients, 186
- modified preparation, rapid quality control test, 269
- myocardial count statistics, stress effects, 116(ab)
- radiochemical purity, fractionated kit, 128(ab)
use in cardiac perfusion, 164
- Technologist**, performance and responsibility guidelines for, 45
- Technologist News**, 59, 103, 212, 285
- Temperature**, effects on radiochemical purity and immunoreactivity, monoclonal antibody 1H10, 126(ab)
- Thallium-201**
gated SPECT, volume measurements by, collimator and total myocardial count effects, 123(ab)
use in cardiac perfusion, 164
 99m Tc comparison, myocardial phantom in infarction, 252
- Thyroid cancer**
dosimetry measurements in, 121(ab)
metastasis and, value of 123 I total-body scan in, 129(ab)
radiation safety, patient dies after therapy, 206
- Thyroid disease**, congenital, migrational anomalies, scintigraphy, 129(ab)
- Thyroid gland**, stunning, radioiodine therapy, 134(ab)
- Tin-117m**, radionuclide therapy, bone malignancy, 80
- U**
- UltraTag® kit**
heat-damaged red cells, splenic infarct or trauma, 204
substandard radiolabeling of red blood cells, 99(ie)
- Unit dose lead containers**, single-use protective inserts, blood contamination and, 200
- V**
- Ventilation**, 133 Xe lung, after perfusion imaging with 99m Tc, 131(ab)
- Ventriculography**, radionuclide cardiac function, 72
chemotherapy in adults and children, 265
- Verification of Involvement in Continuing Education (VOICE)**, 59, 103, 219, 285
- W**
- White blood cells**, cerebral, kinetics, after acute stroke, 114(ab)
- Wipe testing**, gamma camera system for, 100(ie)
- Women's Health Information Kit**, 65
- Workforce Analysis Committee**, manpower data survey, 208
- World Wide Web**. PET, continuing education and internal communication, 130(ab)
- X**
- Xenon-133**, dynamic SPECT, quantitative cerebral blood flow, 126(ab)
- Xenon-133 gas**, lung scan, for lung volume reduction surgery, 26