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OAK RIDGE ASSOCIATED UNIVERSITIES
OAK RIDGE INSTITUTE FOR SCIENCE AND EDUCATION

MEDICAL SCIENCES DIVISION
BIBLIOGRAPHY
1950-1976

REPOSITORY OAK RIDGE INST FOR SCIENCE +
EDUCATION, MEDICAL SCI. DIV.

COLLECTION ORAU

BOX No. VANCE ROAD FACILITY, RM 202A

FOLDER ORAU-30012

MEDICAL 1950

Bruner, H. D., and Andrews, G. A. "Cancer research program of Oak Ridge Institute of Nuclear Studies." Southern Surgeon 16:577-83 (1950).

King, E. R., and Perkinson, J. D. "Preliminary distribution studies of $^{31}\text{GA}^{72}$ in the wistar rat." Texas Reports on Biology and Medicine 8:491-97 (1950).

REPOSITORY oak ridge institute for Science and Education, medical science Division
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1029349

MEDICAL 1951

Berg, H. F. "Localization of radioactivity of colloidal gold¹⁹⁸" AMA Archives of Surgery 63:545-53 (1951).

Brucer, M. "Distribution of gallium in man: autopsy evidence." Journal of Pharmacology and Experimental Therapeutics 101:4-5 (1951). (Abstract.)

-----. "Radioisotope hazards and protection in a hospital." Journal of the American Medical Association 147:1745-51 (1951).

Brucer, M.; King, E. R.; and Bruner, H. D. A method for standardization of gallium⁷². Washington, D.C.: U.S. Atomic Energy Commission, 1951. (ORO-44.)

Bruner, H. D. An expendable cage to separate the urine and feces of rats in tracer experiments. Washington, D.C.: U.S. Atomic Energy Commission, 1951. (ORO-5.)

-----. "Renal extraction ratio of radioactive diodrast in anesthetized dogs." Journal of Pharmacology and Experimental Therapeutics 101:5 (1951). (Abstract.)

Bruner, H. D.; King, E. R.; and Smyser, M. P. Tables to correct for physical decay of some frequently used isotopes. Washington, D.C.: U.S. Atomic Energy Commission, 1951. (ORO-26.)

Bruner, H. D.; Perkinson, J. D., Jr.; Hayes, R. L.; and Wilson, C. "Distribution of intravenously injected Ga⁶⁷ citrate compared with Ga⁷² citrate." Journal of Pharmacology and Experimental Therapeutics 103:338 (1951). (Abstract.)

Furth, J.; Andrews, G. A.; Storey, R. H.; and Wish, L. "The effect of x-irradiation on erythropoiesis, plasma and cell volumes." Southern Medical Journal 44:85-92 (1951).

King, E. R.; Perkinson, J. D., Jr.; Bruner, H. D.; and Gray, J. "Excretion of gallium by the rat and by man." Science 113:555-57 (1951).

Kittle, C. F.; King, E. R.; Bahner, C. T.; and Brucer, M. "Distribution and excretion of radioactive hafnium¹⁸¹ sodium mandelate in the rat." Proceedings of the Society for Experimental Biology and Medicine 76:278-82 (1951).

Skipper, H. E.; Chapman, J. B.; Boyd, G. A.; Riser, W. H., Jr.; and Bell, M. "Preferential incorporation of formate carbon into leukemic blood cells as indicated by autoradiography." Proceedings of the Society for Experimental Biology and Medicine 77:849-54 (1951).

MEDICAL 1952

Andrews, G. A. "The possibilities and limitations of isotope therapy of cancer." Journal of the Kansas Medical Society 53:561-64 (1952).

-----. "Status of radiogold therapy." Nucleonics 10:48-49 (1952).

Archdeacon, J. W., and Brucer, M. "Application of perfused rat liver preparation to isotope study." Proceedings of the Society for Experimental Biology and Medicine 81:325-27 (1952).

Archdeacon, J. W.; Nash, J. B.; and Wilson, G. C. "The biliary excretion of gallium⁷², gold¹⁹⁸, hafnium¹⁸¹ in the rat." Texas Reports on Biology and Medicine 10:281-85 (1952).

Bahner, C. T.; Zilversmit, D. E.; and McDonald, E. "The preparation of wet ashed tissues for liquid counting." Science 115:597-98 (1952).

Brucer, M. "Evaluation of teletherapy sources." Nucleonics 19:9 (1952).

-----. "Internally administered isotopes for cancer therapy and new developments in teletherapy." Nucleonics 10:40-51 (1952).

-----. "Symposium report: cancer therapy with radio-isotopes." Science 115:183 (1952).

-----. Teletherapy design problems: I. Cs¹³⁷. Washington, D.C.: U.S. Atomic Energy Commission, 1952. (TID-5086.)

-----. "Therapeutic potentialities of radioisotopes." Merck Reports 61:9-15 (1952).

-----. "The use of external radiation sources, beta and gamma." In Proceedings of the Second National Cancer Conference, vol. 2, pp. 1647-51. New York: American Cancer Society, 1952.

Bruner, H. D. "Problems with newer isotopes being investigated." Nucleonics 10:49-59 (1952).

Bruner, H. D., and Perkinson, J. D., Jr. "A comparison of iodine-131 counting methods." Nucleonics 10:57-61 (1952).

Bruner, H. D.; Perkinson, J. D., Jr.; and Hayes, R. L. "Effect of quantity of carrier gallium on distribution of metal in rats." Federation of American Societies for Experimental Biology. Federation Proceedings 11:328 (1952). (Abstract.)

Ferguson, J. H.; Andrews, G. A; and Brucer, M. "Blood-clotting studies in dogs internally irradiated with radiogold." Proceedings of the Society for Experimental Biology and Medicine 80:541-45 (1952).

Grimmett, L. G.; Kerman, H. D.; Brucer, M.; Fletcher, G. H.; and Richardson, J. E. "Design and construction of a multicurie cobalt teletherapy unit." Radiology 59:19-29 (1952).

Kerman, H. D. "Medical uses of cobalt 60." Southern Medical Journal 45:495-503 (1952).

Kniseley, R. M.; Andrews, G. A.; and Brucer, M. "Radiation problems in the pathology laboratory of a hospital using radioisotopes." Laboratory Investigation 1:447-55 (1952).

Lotz, W. E.; Gallimore, J. C.; and Boyd, G. A. "How to get good gross autoradiographs of large un-decalcified bones." Nucleonics 10:28-31 (1952).

Perkinson, J. D., Jr., and Bruner, H. D. "Preparation of tissues for iodine-131 counting." Nucleonics 10:66-67 (1952).

Stevens, K. M. "Content of, and incorporation of P³² into the nucleic acids of the liver, spleen, and lymphosarcomatous tissue of man." Cancer 5:122-25 (1952).

Wood, J. L., and Perkinson, J. D., Jr. "Yeast biosynthesis of radioactive sulfur compounds." Journal of the American Chemical Society 74:2445 (1952).

Yates, W. K. "Experimental location of myocardial infarction using radioisotopes." U.S. Armed Forces Medical Journal 3:1597-602 (1952).

Zilversmit, D. B.; Boyd, G. A.; and Brucer, M. "The effect of particle size on blood clearance and tissue distribution of radioactive gold colloids." Journal of Laboratory and Clinical Medicine 40:255-60 (1952).

----- "The preparation and particle size measurement of monodisperse radioactive gold colloids." Journal of Laboratory and Clinical Medicine 40:261-66 (1952).

1029354

MEDICAL 1953

Andrews, G. A. "Treatment of thyroid carcinoma with radioactive iodine." Journal of the Kansas Medical Society 54:7-10 (1953).

Andrews, G. A.; Root, S. W.; and Kerman, H. D. "A study of gallium⁷²: VI. Clinical studies with gallium⁷²." Radiology 61:570-88 (1953).

Andrews, G. A.; Root, S. W.; Kerman, H. D.; and Bigelow, R. R. "Intracavitary colloidal radiogold in the treatment of effusions caused by malignant neoplasms." Annals of Surgery 137:375-81 (1953).

Andrews, G. A.; Root, S. W.; and Kniseley, R. M. "Metabolism and distribution of colloidal Au¹⁹⁸ injected into serous cavities for treatment of effusions associated with malignant neoplasms." Cancer 6:294-302 (1953).

Andrews, G. A.; Root, S. W.; Kniseley, R. M.; and Kerman, H. D. "Intracavitary use of colloidal radioactive gold." Radiology 61:922-29 (1953).

Andrews, G. A., and Tyor, M. P. "Early results of the treatment of chronic granulocytic leukemia with intravenous colloidal gold¹⁹⁸." Journal of Laboratory and Clinical Medicine 42:777-78 (1953).

Berg, H. F.; Christopherson, A. M.; Isaacs, A. M.; and Bryant, J. R. "Localization of radioactivity in regional lymph nodes." AMA Archives of Surgery 67:228-43 (1953).

Brucer, M. "Encouraging and discouraging research with therapeutic radioisotopes." Journal of the Kentucky State Medical Association 51:243-47 (1953).

-----. "Gli isotopi radioattivi nella terapia clinica." Problemi del Servizio Sociale 8, January-February 1953.

-----. "Teletherapy evaluation board." Radiology 60:738-39 (1953). (Editorial.)

Brucer, M.; Andrews, G. A.; and Bruner, H. D. "A study of gallium⁷²: Summary and conclusions." Radiology 61:534-36 (1953).

Brucer, M.; Andrews, G. A.; Rehbock, D. J.; Root, S. W.; and Gray, J. "A study of gallium⁷²: VIII. Autopsy studies of distribution of gallium⁷²." Radiology 61:590-95 (1953).

Brucer, M., and Bruner, H. D. "A study of gallium⁷²: I. Physics and radiation characteristics of gallium⁷²." Radiology 61:537-43 (1953).

Brucer, M.; Pollard, W. G.; Leiter, H.; and Scarf, H. "Shaped sources for teletherapy units." Nucleonics 11:38-41 (1953).

Bruner, H. D.; Cooper, B. M.; and Rehbock, D. J. "A study of gallium⁷²: IV. Toxicity of gallium citrate in dogs and rats." Radiology 61:550-55 (1953).

Bruner, H. D.; Gray, J.; Root, S. W.; and Brucer, M. "A study of gallium⁷²: VII. Studies of the urinary excretion of gallium⁷² in man." Radiology 61:588-90 (1953).

Bruner, H. D.; Hayes, R. L.; and Perkinson, J. D., Jr. "A study of gallium⁷²: X. Preliminary data on gallium⁶⁷." Radiology 61:602-12 (1953).

Bruner, H. D.; Perkinson, J. D., Jr.; and Hayes, R. L.
"Deposition of Mn in the thyroid using Mn^{52-54".} Federation of American Societies for Experimental Biology. Federation Proceedings 12:305-06 (1953).

Bruner, H. D.; Perkinson, J. D., Jr.; King, E. R.; Andrews, G. A.; Nash, J. B.; and Brucer, M. "A study of gallium^{72":} V. Distribution studies on gallium⁷² in rats." Radiology 61:555-70 (1953).

Bryant, J. R.; Berg, H. F.; and Christophersen, W. M.
"Localization of radioactivity in the lung and the lymph nodes." Journal of Thoracic Surgery 26:221-32 (1953).

Buher, W. R. "Direct exposure enlargement using a fractional focal spot x-ray tube." The X-ray Technician 24:321-23 (1953).

Gallimore, J. C., Jr.; Boyd, G. A.; Andrews, G. A.; and Brucer, M. "A study of gallium^{72":} IX. Autoradiographic studies." Radiology 61:595-602 (1953).

Hutchinson, L. A.; Andrews, G. A.; and Kniseley, R. M.
"Influence of cortisone on the toxicity of nitrogen mustard in rats." Proceedings of the Society for Experimental Biology and Medicine 83:376-77 (1953).

Kniseley, R. M., and Andrews, G. A. "Pathological changes following intracavitary therapy with colloidal Au^{198".} Cancer 6:303-12 (1953).

Little, R. C., and Kelly, H. B. "Removal of radioactive gold colloid by the perfused mammalian liver." American Journal of Physiology 173:265-69 (1953).

MacDonald, E., and Bahner, C. T. "Hafnium complexes for biological investigation." Proceedings of the Society for Experimental Biology and Medicine 83:801-04 (1953).

Mayr, G.; Bruner, H. D.; and Brucer, M. "Boron detection in tissues using the (n, alpha) reaction." Nucleonics 11:21-25 (1953).

Perkinson, J. D., Jr.; Eldridge, J. S.; and Cooper, Betty M. "A study of gallium 72: II. Gallium chemistry of biological interest." Radiology 61:543-45 (1953).

Perkinson, J. D., Jr., and Ingols, R. S. "A study of gallium⁷²: III. Effect of internal irradiation on respiration of rat liver slices." Radiology 61:545-50 (1953).

Root, S. W., and Andrews, G. A. "Effect of ACTH on the eosinophil count in peripheral blood and bone marrow." American Journal of Medical Sciences 226:304-9 (1953).

Stembridge, V. A.; Kniseley, R. M.; and Andrews, G. A. "Cellular changes in effusions following intracavitory administration of colloidal Au¹⁹⁸ in human beings." Journal of Laboratory and Clinical Medicine 41:760-66 (1953).

Stembridge, V. A.; Kniseley, R. M.; and Gibbs, W. "Autoradiographic distribution of intravenous colloidal gold (Au¹⁹⁸) in the rat." Laboratory Investigation 2:349-56 (1953).

1029358

MEDICAL 1954

Andrews, G. A. "The clinical use of bone marrow study." Journal of the Tennessee State Medical Association 47:361-66 (1954).

Andrews, G. A.; Kniseley, R. M.; Bigelow, R. R.; Root, S. W.; and Brucer, M. "Pathological changes in normal human thyroid tissue following large doses of I-131." American Journal of Medicine 16:372-81 (1954).

Bahner, C. T. "Localization of antimony in blood." Proceedings of the Society for Experimental Biology and Medicine 86:371-73 (1954).

Berg, H. F.; Christopherson, W. M.; and Bryant, J. R. "Time and site study for optimum lymph node concentration of radiogold following intrabronchial injection." Cancer Research 14:775-79 (1954).

Berg, H. F.; Isaacs, A. M.; and Christophersen, W. M. "Localization of radioactivity in the urinary bladder and the regional lymph nodes." Journal of Urology 72:382-88 (1954).

Brucer, M. "An available Co⁶⁰ source for teletherapy." Nucleonics 12:45-46 (1954).

-----. Marble Used as a Radiation Shield. Mt. Vernon, New York: Marble Institute of America, 1954.

-----. "A standard cobalt 60 teletherapy source capsule." British Journal of Radiology 27:410-12 (1954).

-----. "Standardized Co60 source capsule for teletherapy." Nucleonics 12:58-59 (1954).

-----. "Statement in hearings before the Subcommittee on Research and Development of the Joint Committee on Atomic Energy, Eighty-third Congress of the United States." Second Session: The Contribution of Atomic Energy to Medicine, pp. 26-76. Washington, D.C.: U.S. Government Printing Office, 1954.

-----. "Teletherapy design problems." Radiology 62:91-98 (1954).

Gallimore, J. C.; Bauer, E. C.; and Boyd, G. A. "A non-leaching technique for autoradiography." Stain Technology 29:95-98 (1954).

Gallimore, J. C.; Boyd, G. A.; and Stannard, J. N. "An autoradiographic study of the distribution of polonium in the rat during 24 hours after intravenous injection." The Anatomical Record 118:253-74 (1954).

Kyker, G. C. "Biochemical consideration of distribution." American Journal of the Medical Sciences 227:572-89 (1954).

-----. "The distribution of interstitial and intracavitory injections of certain radiochemical preparations of medical interest." Bulletin of the Medical Association of Puerto Rico 46:362-74 (1954)

Kyker, G. C.; Cress, E. A.; and Gleason, G. I. "Distribution of yttrium administered by various routes." Federation of American Societies for Experimental Biology. Federation Proceedings 13:245 (1954). (Abstract.)

Richardson, J. E. "Effect of chamber voltage on electron build-up measurements." Radiology 62:584-88 (1954).

Richardson, J. E.; Kerman, H. D.; and Brucer, M. "Skin dose from a cobalt 60 teletherapy unit." Radiology 63:25-36 (1954).

Root, S. W.; Andrews, G. A.; Kniseley, R. M.; and Tyor, M. P. "The distribution and radiation effects of intravenously administered colloidal Au¹⁹⁸ in man." Cancer 7:856-66 (1954).

Root, S. W.; Tyor, M. P.; Andrews, G. A.; and Kniseley, R. M. "Distribution of colloidal radioactive chromic phosphate after intracavitary administration." Radiology 63:251-57 (1954).

Tyor, M. P. "Human serum albumin tagged with I¹³¹ in patients with ascites caused by abdominal carcinomatosis and portal cirrhosis: the rates of interchange between the vascular compartment and peritoneal cavity." Journal of Laboratory and Clinical Medicine 44:110-17 (1954).

MEDICAL 1955

Andrews, G. A. "Intracavitary use of radioisotopes." In Radioisotopes in Medicine, pp. 552-63. Washington, D.C.: U.S. Atomic Energy Commission, 1955. (ORO-125.)

Andrews, G. A.; Brucer, M.; and Anderson, E. B.; eds. Radioisotopes in Medicine. Washington, D.C.: U.S. Atomic Energy Commission, 1955. (ORO-125.)

Andrews, G. A.; Kyker, G. C.; Kniseley, R. M.; and Palmer, E. L. "Preliminary studies of yttrium-90 in man." Proceedings of the American Association for Cancer Research 2:1 (1955). (Abstract.)

Bahner, C. T. "Colorimetric study of absorption and excretion of 4-(p-dimethylaminostyrl) quinoline methiodide and related compounds." Proceedings of the Society for Experimental Biology and Medicine 90:133-35 (1955).

-----. "Effect of compounds related to 4-(p-dimethylaminostyrl) quinoline methiodide on lymphoma 8." Cancer Research 15:588-92 (1955).

Brucer, M. "Gamma ray absorption and radiation dosimetry." In Radioisotopes in Medicine, pp. 103-53. Washington, D.C.: U.S. Atomic Energy Commission, 1955. (ORO-125.)

-----. "Marble as a radiation shield." Nucleonics 13:65-66 (1955). (Abstract.)

-----. Special report of the Medical Division on teletherapy design problems: I. Cs¹³⁷. Washington, D.C.: U.S. Atomic Energy Commission, 1955. (TID-5086, second revision.)

----- Teletherapy design problems: IV. Isodose charts for the Co⁶⁰ hectocurie teletherapy machine. Washington, D.C.: U.S. Atomic Energy Commission, 1955. (ORINS-10.)

Brucer, M., et al. Teletherapy design problems III. Washington, D.C.: U.S. Atomic Energy Commission, 1955. (ORO-127.)

----- Teletherapy design problems III. Supplement. Washington, D.C.: Atomic Energy Commission, 1955. (ORO-127.)

Brucer, M.; Kerman, H. D.; and Richardson, J. E. Teletherapy design problems--cobalt 60 teletherapy unit. Washington, D.C.: U.S. Atomic Energy Commission, 1955. (ORO-109.)

Comar, C. L. "Some aspects of radioassay and interpretation." In Radioisotopes in Medicine, pp. 63-72. Washington, D.C.: U.S. Atomic Energy Commission, 1955. (ORO-125.)

Harris, N. O., and Hayes, R. L. "A tracer study of the effect of acute and chronic exposure to sodium fluoride on the thyroid iodine metabolism of rats." Journal of Dental Research 34:470-77 (1955).

Hayes, R. L.; Brucer, M.; and Arakawa, E. "Some integral dose relationships in Co⁶⁰ teletherapy." Radiation Research 3:64 (1955).

Kniseley, R. M. "Some aspects of the biology of radiation." In Radioisotopes in Medicine, pp. 35-44. Washington, D.C.: U.S. Atomic Energy Commission, 1955. (ORO-125.)

Kniseley, R. M., and Andrews, G. A. "Pathologic changes produced in the thyroid by I-131." In Radioisotopes in Medicine, pp. 400-411. Washington, D.C.: U.S. Atomic Energy Commission, 1955. (ORO-125.)

Kyker, G. C. "Biochemical considerations of distribution." In Radioisotopes in Medicine, pp. 50-62. Washington, D.C.: U.S. Atomic Energy Commission, 1955. (ORO-125.)

Kyker, G. C.; Toriello, J.; and Kniseley, R. M. "Interstitial yttrium in prostate and parametrium." Federation of American Societies for Experimental Biology, Federation Proceedings 14:240-41 (1955). (Abstract.)

Levene, M.; Andrews, G. A.; and Kniseley, R. M. "Large doses of I¹³¹ in dogs: radiation dosage correlated with histologic and autoradiographic changes." American Journal of Roentgenology 73:88-97 (1955).

MacDonald, L. D.; Hayes, R. L.; and Brucer, M. "Integral dose measurements: preliminary report on a Co⁶⁰ teletherapy beam." Radiology 64:115-16 (1955).

Medical Division, Oak Ridge Institute of Nuclear Studies. Semi-annual progress report for the period ending December 31, 1954. Oak Ridge, Tennessee: ORINS, 1955.

Richardson, J. E., and Brucer, M. "Modification of electron filter to improve light localization of a cobalt 60 beam." Radiology 64:398-403 (1955).

10293b4

MEDICAL 1956

Anderson, E. B. Ten years with the peaceful atom. Oak Ridge, Tennessee: ORINS, 1956. (ORINS-15.)

Andrews, G. A. "The effect of dose on the mobilization of rare-earth radioisotopes: II. Preliminary clinical studies." In Rare Earths in Biochemical and Medical Research: A Conference Sponsored by the Medical Division, Oak Ridge Institute of Nuclear Studies, October 1955, pp. 241-58. Washington, D.C.: U.S. Atomic Energy Commission 1956. (ORINS-12.)

----- "The intrapleural use of radioactive colloidal materials." In Therapeutic Use of Artificial Radioisotopes, Paul F. Hahn, ed.; pp. 295-315. New York: John Wiley & Sons, 1956.

Andrews, G. A.; Kniseley, R. M.; Palmer, E. L.; and Ketchmar, A. L. "Therapeutic usefulness of radioactive colloids: comparative value of gold 198, chromic phosphate (P32), yttrium 90, and lutecium 177." In Peaceful Uses of Atomic Energy: Proceedings of the International Conference in Geneva, August 1955, pp. 122-37. New York: United Nations, 1956.

Bruker, M. "An automatic controlled pattern cesium 137 teletherapy machine." American Journal of Roentgenology 75:49-55, (1956).

-----. "Dosimetry calculations and conference summary." In Rare Earths in Biochemical and Medical Research: A Conference Sponsored by the Medical Division, Oak Ridge Institute of Nuclear Studies, October 1955, pp. 336-41. Washington, D.C.: U.S. Atomic Energy Commission, 1956. (ORINS-12.)

-----. The industrial atom: teletherapy devices with radioactive isotopes. Washington, D.C.: U.S. Atomic Energy Commission, 1956. (TID-8007.)

-----. "Statement in hearings before the Subcommittee on Research and Development of the Joint Committee on Atomic Energy, Eighty-fourth Congress of the United States." Atomic Energy Research in Medicine, Biology, Agriculture, and Food Preservation, pp. 210-41. Washington, D.C.: U.S. Government Printing Office, 1956.

-----. "Teletherapy devices with radioactive isotopes." In Peaceful Uses of Atomic Energy: Proceedings of the International Conference in Geneva, August 1955, pp. 68-74. New York: United Nations, 1956.

Brucer, M.; Eldridge, J.; and Trombka, J. "Thyroid radioiodine uptake calibration." In Peaceful Uses of Atomic Energy: Proceedings of the International Conference in Geneva, August 1955, pp. 359-64. New York: United Nations, 1956.

Brucer, M.; Oddie, T. H.; and Eldridge, J. S. Thyroid uptake calibration: I. Mock-iodine, a radioactive iodine gamma-ray standard. Washington, D.C.: U.S. Atomic Energy Commission, 1956. (ORINS-14.)

102936b

Christopherson, W. M.; Berg, H. F.; Kyker, G. C.; and Brucer, M. "Studies of interstitial radiolutetium (Lu177) in the dog." AMA Archives of Pathology 62:441-44 (1956).

-----. "Studies of radiolutetium in the mammary gland." In Rare Earths in Biochemical and Medical Research: A Conference Sponsored by the Medical Division, Oak Ridge Institute of Nuclear Studies, October 1955, pp. 332-39. Washington, D.C.: U.S. Atomic Energy Commission, 1956. (ORINS-12.)

Comar, C. L. "Applications of high energy radiation in agriculture." In Proceedings of the Conference of Collaborators from Southern Regional Research Experiment Stations, March 19-21, 1956, pp. 64-76. New Orleans, Louisiana: Southern Regional Research Laboratory, 1956.

-----. "Radiocalcium studies in pregnancy." Annals of the New York Academy of Sciences 64:281-98 (1956).

-----. "Radioisotopes in agriculture." In Atoms in Business, pp. 33-40. San Antonio, Texas: Southwest Research Institute, 1956.

-----. "Radioisotopes in agriculture." In Prospects for Atomic Energy in the South, pp. 84-95. Washington, D.C.: Atomic Industrial Forum, 1956.

-----. "Radioisotopes in animal physiology and nutrition-mineral metabolism." In Peaceful Uses of Atomic Energy: Proceedings of the International Conference in Geneva, August 1955, pp. 245-51. New York: United Nations, 1956.

Comar, C. L., and Wasserman, R. H. "Radioisotopes in the study of mineral metabolism." In Progress in Nuclear Energy, series VI, vol. 1, pp. 153-96. London: Pergamon, 1956.

Comar, C. L.; Wasserman, R. H.; and Nold, M. M. "Strontium-calcium discrimination factors in the rat." Proceedings of the Society for Experimental Biology and Medicine 92:859-63 (1956).

Gabrielsen, Z., and Kretchmar, A. L. "Studies on salivary secretion of iodide." Journal of Clinical Endocrinology 16:1347-53 (1956).

Harris, C. C.; Bigelow, R. R.; Francis, J. E.; Kelley, G. G.; and Bell, P. R. "CsI (Tl)-crystal surgical scintillation probe." Nucleonics 14(11):102-8 (1956).

Hood, S. L., and Comar, C. L. "Behavior of radioactive yttrium in the blood of ruminants." In Rare Earths in Biochemical and Medical Research: A Conference Sponsored by the Medical Division, Oak Ridge Institute of Nuclear Studies, October 1955, pp. 301-10. Washington, D.C.: U.S. Atomic Energy Commission, 1956. (ORINS-12.)

----- "Tissue distribution and placental transfer of yttrium 91 in rats and cattle." In Rare Earths in Biochemical and Medical Research: A Conference Sponsored by the Medical Division, Oak Ridge Institute of Nuclear Studies, October 1955, pp. 280-300. Washington, D.C.: U.S. Atomic Energy Commission, 1956. (ORINS-12.)

Kniseley, R. M., and Andrews, G. A. "Transformation of thyroidal carcinoma to clear-cell type." American Journal of Clinical Pathology 26:1427-38 (1956).

10293b8

Kyker, G. C. "The effect of dose on the mobilization of rare earth radioisotopes: I. Animal studies." In Rare Earths in Biochemical and Medical Research: A Conference Sponsored by the Medical Division, Oak Ridge Institute of Nuclear Studies, October 1955, pp. 222-40 Washington, D.C.: U.S. Atomic Energy Commission, 1956. (ORINS-12.)

Kyker, G. C.; Christopherson, W. M.; Berg, H. F.; and Brucer, M. "Selective irradiation of lymph nodes by radiolutetium (Lu177)." Cancer 9:489-98 (1956).

Kyker, G. C.; Rafter, J.; Cress, E. A.; and Stevens, N. "Radioyttrium with complex heterogeneous carrier." Federation of American Societies for Experimental Biology. Federation Proceedings 15:295 (1956). (Abstract.)

Kyker, G. C., and Stewart, M. "Rare-earth radioisotopes of biochemical interest." Southern Chemist 16:146-47 (1956). (Abstract.)

Kyker, G. C., and Anderson, E. B., eds. Rare earths in biochemical and medical research. Washington, D.C.: U.S. Atomic Energy Commission, 1956. (ORINS-12.)

Loos, R. "Investigation of the complexing action of amino acids by means of paper electrophoresis." In Rare Earths in Biochemical and Medical Research: A Conference Sponsored by the Medical Division, Oak Ridge Institute of Nuclear Studies, October 1955, pp. 163-68. Washington, D.C.: U.S. Atomic Energy Commission, 1956. (ORINS-12.)

Medical Division, Oak Ridge Institute of Nuclear Studies.
Midyear report for the period ending December 31, 1955. Oak
Ridge, Tennessee: ORINS, 1956. (ORINS-13.)

Meschan, I.; Oddie, T. H.; and Brucer, M. "The utilization
of europium 152-154 in a cervical carcinoma applicator."
Radiology 67:422-23 (1956).

Okawa, C., and Trombka, J. I. "The technic of making
microangiograms of rabbit bone marrow." American Journal of
Clinical Pathology 26:758-64 (1956).

Schachinger, L. "Aus dem krebskrankhaus in Oak Ridge."
Atomkernenergie 1:321-23 (1956).

Stewart, M., and Kyker, G. C. "Standardization of beta
emitting radioisotopes." Southern Chemist 16:126 (1956).

Totter, J. R., and Comar, C. L. "Function of molybdenum in
xanthine oxidase." In A Symposium on Inorganic Nitrogen
Metabolism, pp. 513-20. Baltimore, Maryland: The Johns
Hopkins Press, 1956.

Tyor, M. P., and Eldridge, J. S. "A comparison of the
metabolism of rubidium 86 and potassium 42 following
simultaneous injection into man." American Journal of the
Medical Sciences 232:186-93 (1956).

Wasserman, R. H.; Comar, C. L.; and Nold, N. M. "The
influence of amino acids and other organic compounds on the
gastrointestinal absorption of calcium⁴⁵ and strontium⁸⁹ in
the rat." Journal of Nutrition 59:371-83 (1956).

1029370

-----.
"Influence of amino acids and other organic compounds
on gastrointestinal absorption of radiocalcium and
radiostrontium." Federation of American Societies for
Experimental Biology. Federation Proceedings 15:576 (1956).
(Abstract.)

1029371

MEDICAL 1957

Anderson, E. B. "Ten years with the peaceful atom." Translated into Japanese by Junichi Fujita. Journal of Nursing (Tokyo) 21(11):41-46 (1957).

Andrews, G. A. "A few notions involved in the clinical use of radioisotopes." Annals of Internal Medicine 47:922-38 (1957).

-----. "Clinical uses of radioactive colloids." In U.S. Atomic Energy Commission Report TID-7554, pp. 433-47, Washington, D.C.: U.S. Atomic Energy Commission, 1957.

Belanger, L. F.; Visek, W. J.; Lotz, W. E.; and Comar, C. L. "The effects of fluoride feeding on the organic matrix of bones and teeth of pigs as observed by autoradiography after *in vitro* uptake of Ca⁴⁵ and S³⁵." Journal of Biophysical Cytology 3:559-66 (1957).

Brucer, M. Isotopes in medicine--are they worth the trouble? Washington, D.C.: U.S. Atomic Energy Commission, 1957. (ORINS-17.)

-----. "Progress and potentialities in teletherapy." Mississippi Valley Medical Journal 79:260-70 (1957).

-----. "Radioiodine uptake measurement." Acta Radiologica Interamer 7:129-43 (1957).

-----. "Teletherapy." In U.S. Atomic Energy Commission Report TID-7554, pp. 418-29. Washington, D.C.: U.S. Atomic Energy Commission, 1957.

1029372

Christopherson, W. M.; Kyker, G. C.; Berg, H. F.; and Brucer, M. "Effect of specific activity on distribution of radiolutecium (Lu177)." Proceedings of the Society for Experimental Biology and Medicine 95:750-54 (1957).

Comar, C. L. "Experience in animal experimentation from the standpoint of salvage and waste disposal." In U.S. Atomic Energy Commission Report TID-7512, pp. 105-9. Washington, D.C.: U.S. Atomic Energy Commission, 1957.

Comar, C. L.; Russell, R. S.; and Wasserman, R. H. "Strontium-calcium movement from soil to man." Science 126:485-92 (1957).

Comar, C. L.; Trum, B. F.; Kuhn, U. S. G., III; Wasserman, R. H.; Nold, N. M.; and Schooley, J. C. "Thyroid radioactivity after nuclear weapons tests." Science 126:16-18 (1957).

Comar, C. L., and Wasserman, R. H. "Macronutrient metabolism." In Atomic Energy and Agriculture. AAAS Symposium, vol. 49, pp. 249-304. Washington, D.C.: American Association for the Advancement of Science, 1957.

Comar, C. L.; Wasserman, R. H.; Ullberg, S.; and Andrews, G. A. "Strontium metabolism and strontium-calcium discrimination in man." Proceedings of the Society for Experimental Biology and Medicine 95:386-91 (1957).

Comas, F., and Brucer, M. "First impressions of therapy with cesium 137." Radiology 69:231-35 (1957).

Cooper, B. M. "Contribution of radioactive isotopes to the study of electrolyte balance in surgery." Annals of the New York Academy of Sciences 66:976-82 (1957).

St. Aubin, P. M.; Kniseley, R. M.; and Andrews, G. A.
"External irradiation of the thyroid gland in dogs: effects
of large doses of roentgen rays upon histologic structure and
 I^{131} metabolism." American Journal of Roentgenology
78: 864-75 (1957).

Schweitzer, G. K., and Eldridge, J. S. "Reproducibility of
radioactive sample preparation techniques." Analytica
Chimica Acta 16:189-93 (1957).

Singer, L.; Maqsood, M.; Medlen, A. B.; and Comar, C. L.
"Endogenous and biliary excretion of calcium-45 and
strontium-89." Archives of Biochemistry and Biophysics
66:404-10 (1957).

Talmage, R. V.; Schooley, J. C.; and Comar, C. L.
"Differential removal of strontium 85 and calcium 45 from rat
skeleton by peritoneal lavage." Proceedings of the Society
for Experimental Biology and Medicine 95:413-17 (1957).

Trombka, J. I., and O'Foghludha, F. "The effects of degraded
radiation in thyroid uptake measurements." Physics in
Medicine and Biology 1:340-51 (1957).

Wasserman, R. H. "Radiation processing of foods." Journal
of the American Dietetic Association 33:33-36 (1957).

Wasserman, R. H.; Comar, C. L.; Nold, M. M.; and Lengemann,
F. W. "Placental transfer of calcium and strontium in the
rat and rabbit." American Journal of Physiology 189:91-97
(1957). Also in Federation of American Societies for
Experimental Biology: Federation Proceedings 16:267 (1957).
(Abstract.)

1029374

Wasserman, R. H.; Comar, C. L.; and Papadopoulou, D.
"Dietary calcium levels and retention of radiostrontium in
the growing rat." Science 126:1180-82 (1957).

Wasserman, R. H.; Comar, C. L.; Schooley, J. C.; and
Lengemann, F. W. "Interrelated effects of L-lysine and other
dietary factors on the gastrointestinal absorption of calcium
45 in the rat and chick." Journal of Nutrition 62:367-76
(1957).

MEDICAL 1958

Andrews, G. A. "Acute effects of irradiation in man." In Proceedings of the Sixth International Congress of the International Society of Hematology, pp. 371-82. 1958.

-----. "Operations revealing incurable cancer." Surgery, Gynecology, and Obstetrics 107:787-88 (1958). (Editorial.)

Bahner, C. T. "Response of Walker 256 tumors to 4M2M and 4M20." Cancer Research 18:537-42 (1958).

Belanger, L. F.; Visek, W. J.; Lotz, W. E.; and Comar, C. L. "The effects of fluoride ingestion on the organic matrix of the teeth of growing pigs." Journal of Dental Research 37:264-75 (1958)

-----. "Rachitomimetic effect of fluoride feeding on the skeletal tissues of growing pigs." American Journal of Pathology 34:25-35 (1958).

Bellenghi, G. "Sul metodo standard per la determinazione della captazione tiroidea di radioiodio." Minerva Medica 49:2920-23 (1958).

Brucer, M. "Brachytherapy." American Journal of Roentgenology 79:1080-90 (1958).

-----. "Die grundlagen der therapie mit radioaktiven isotopen." Atomkernenergie 3:217-21 (1958).

-----. "Medical instrumentation." In Radiation Biology and Medicine, pp. 864-81. Reading, Massachusetts: Addison-Wesley, 1958.

102937b

-----. "Progress in teletherapy." In Radiation Biology and Medicine, pp. 589-603. Reading, Massachusetts: Addison-Wesley, 1958.

-----. "Radiation-its hopes and hazards." In Courtroom Medicine. Springfield, Illinois: Charles C. Thomas, 1958.

-----. "Radioactive drugs." Mississippi Valley Medical Journal 80:221-24 (1958).

-----. "Radioisotope laboratory facilities and health safety practices." In Proceedings of the Conference on Peaceful Uses of Atomic Energy, May 1957, pp. 204-9. Washington, D.C.: U.S. Atomic Industrial Forum, 1958.

-----. Radioisotope scanning. Washington, D.C.: U.S. Atomic Energy Commission, 1958. (ORINS-20.)

-----. "Radioisotopes and the clinical pathologist." American Journal of Clinical Pathology 29:266-68 (1958). (Editorial.)

-----. "The therapeutic limitations of radioisotopes in urology." Lederle Bulletin Symposium Report 1(2):1-14 (1958).

Brucer, M.; Harmon, J. H.; and Gude, W. D. Radioisotopes in the United States hospitals. Washington, D.C.: U.S. Atomic Energy Commission, 1958. (ORINS-21.)

Brucer, M., and Simon, N. "Teletherapy: progress since 1955: technological and clinical evaluation." In Peaceful Uses of Atomic Energy, Proceedings of Second International Congress, September 1958, pp. 291-92. New York: United Nations, 1958.

Ganz, A., and Brucer, M. "Blood clearance and tissue distribution studies in the dog following intravenous administration of radioactive colloidal gold (Aurocolloid)." Journal of Laboratory and Clinical Medicine 52:20-26 (1958).

Johnson, G. T. "Oxidation of fatty acids by cell suspensions of Spicaria violacea." Mycologia 50:677-80 (1958).

Kretchmar, A. L. "On the mode of action of the adrenal cortical hormones in protein metabolism." Dissertation Abstracts 19:1195 (1958). (Abstract.)

Medical Division, Oak Ridge Institute of Nuclear Studies. Midyear report for the period ending December 31, 1957. Oak Ridge, Tennessee: ORINS, 1958. (ORINS-23.)

Nold, M. M.; Hayes, R. L.; and Comar, C. L. "Tissue dose from internally administered Y-90." Radiation Research 9:160 (1958). (Abstract.)

Rust, J. H., and Ullberg, S. G. F. Urea formation from one carbon fragment. New York: UNESCO, 1958.

Tsuya, A., and Brucer, M. The TsuyaTscan. Washington, D.C.: U.S. Atomic Energy Commission, 1958. (ORINS-24.)

Wasserman, R. H.; Lengemann, F. W.; and Comar, C. L.
"Comparative metabolism of calcium and strontium in
lactation." Journal of Dairy Science 41:812-21 (1958).

MEDICAL 1959

Andrews, G. A. "Medical problems encountered in the handling of radioisotopes." In Symposium on Health Physics in Biology and Medicine, pp. 72-91. Washington, D.C.: U.S. Atomic Energy Commission, 1959. (TID-7572.)

Andrews, G. A.; Sitterson, B. W.; Ketchmar, A. L.; and Brucer, M. "Accidental radiation excursion in the Oak Ridge Y-12 plant: Part IV. Preliminary report on clinical and laboratory effects in the irradiated employees." Health Physics 2:134-38 (1959).

Bigelow, R. R. "The treatment of thyroid carcinoma." Journal of the Tennessee State Medical Association 52:78-79 (1959).

Black, R. Neck scanning with iodine-131. Oak Ridge, Tennessee: ORINS, 1959. (ORINS-28.)

Brucer, M. "The acute radiation syndrome." In The Acute Radiation Syndrome: A Medical Report on the Y-12 Accident, June 16, 1958, pp. 13.1-13.13. Washington, D.C.: U.S. Atomic Energy Commission, 1959. (ORINS-25.)

----- "An exhibition of the installation of Co⁶⁰ teletherapy machines." In Roentgens, Rads, and Riddles, pp. 132-39. Washington, D.C.: U.S. Atomic Energy Commission, 1959.

----- The medical schools in nuclear medicine. Paper presented to the Association of American Medical Schools and Colleges, Chicago, Illinois, November 3, 1959.

1029380

-----. "Radioisotope hazards and protection in a hospital." In Protection in Diagnostic Radiology; E. P. Sonnenblick, ed.; pp. 204-12. New Jersey: Rutgers University Press, 1959.

-----. "A survey of brachytherapy." In Roentgens, Rads, and Riddles, pp. 449-56. Washington, D.C.: U.S. Atomic Energy Commission, 1959.

-----. Thyroid radioiodine uptake measurement: A standard system for universal intercalibration. Washington, D.C.: U.S. Atomic Energy Commission, 1959. (ORINS-19.)

-----. "World production estimates." In Roentgens, Rads, and Riddles, pp. 155-61. Washington, D.C.: U.S. Atomic Energy Commission, 1959.

Brucer, M., and Simon, N. "Teletherapy: progress since 1955." In Progress in Nuclear Energy; J. C. Bugher, J. Coursaget, and J. F. Loutit, eds.; Medical Science Series VII, vol. 2, pp. 290-315. London: Pergamon Press, 1959.

Brucer, M., and Umegaki, Y. Radiation measurements and the spectrum. Washington, D.C.: U.S. Atomic Energy Commission, 1959. (ORINS-32.)

Brucer, M., comp. The acute radiation syndrome: A medical report on the Y-12 accident, June 16, 1958. Washington, D.C.: U.S. Atomic Energy Commission, 1959. (ORINS-25.)

Comas, F., and Brucer, M. "First impressions of therapy with cesium-137." Yearbook of Radiology, pp. 420-21. Chicago: Year Book Publishers, 1959. (Abstract.)

Cress, E. A., and Kyker, G. C. Effect of rare earths on oxygen consumption of rat liver slices. Oak Ridge, Tennessee: ORINS, 1959. (ORINS-29.)

Cronkite, E. P.; Fliedner, R. M.; Bond, V. P.; Andrews, G. A.; and Johnson, A. M.. "Special hematologic studies on radiation casualties in the Y-12 accident." In The Acute Radiation Syndrome: A Medical Report on the Y-12 Accident, June 16, 1958, pp. 3.1-3.9. Washington, D.C.: U.S. Atomic Energy Commission, 1959. (ORINS-25.)

Darling, D. "The practicality of cesium as a teletherapy source." In Roentgens, Rads, and Riddles, pp. 485-89. Washington, D.C.: U.S. Atomic Energy Commission, 1959.

Fliedner, T. M; Cronkite, E. P.; Bond, V. P.; Rubini, J. R.; and Andrews, G. "The mitotic index of human bone marrow in healthy individuals and irradiated human beings." Acta Haematologica 22:65-78 (1959).

Friedman, M.; Brucer, M.; and Anderson, E.; eds. Roentgens, rads, and riddles. Washington, D.C.: U.S. Atomic Energy Commission, 1959.

Glaser, W.; Gibbs, W. D.; and Andrews, G. A. "The mechanism of removal of rose bengal from the plasma of the rat determined by autoradiography and radioassay." Journal of Laboratory and Clinical Medicine 54:556-61 (1959).

Harris, C. C.; Hamblen, D. P.; and Francis, J. E. Basic principles of scintillation counting for medical investigators. Washington, D.C.: U.S. Atomic Energy Commission, 1959. (ORNL-2802/ORINS-30.)

1029382

Hayes, R. L. "Chemical measurements of integral dose." In Roentgens, Rads, and Riddles, pp. 61-68. Washington, D.C.: U.S. Atomic Energy Commission, 1959.

Kniseley, R. M. "Important non-biological contributions to radioisotopic diagnosis." Journal of the Iowa State Medical Society 49:619-24 (1959).

----- "Panel on radioisotopes." Journal of the Iowa State Medical Society 49:741 (1959).

Kretchmar, A. L. "An alteration in the excretion of free serine in urine from irradiated humans." Nature (London) 183:1809-10 (1959).

Kyker, G. C. "Serum protein studies." In The Acute Radiation Syndrome: A Medical Report on the Y-12 Accident, June 16, 1958, pp. 7.1-7.2. Washington, D.C.: U.S. Atomic Energy Commission, 1959. (ORINS-25.)

Medical Division, Oak Ridge Institute of Nuclear Studies. Midyear report for the period ending December 31, 1958. Oak Ridge, Tennessee: ORINS, 1959. (ORINS-27.)

Morris, A. C., Jr. A physician's introduction to electronics. Oak Ridge, Tennessee: ORINS, 1959. (ORINS-31.)

Papavasiliou, C. G. "Calcification in secondary tumors of the spleen." Acta Radiologica 51:278-82 (1959).

Papavasiliou, C. G., and Speas, C. J. "Fracture of the hyoid bone." Radiology 72:272-74 (1959).

Ross, D. A. "Linear scans." In The Acute Radiation Syndrome: A Medical Report on the Y-12 Accident, June 16, 1958, pp. 9.1-9.3. Washington, D.C.: U.S. Atomic Energy Commission, 1959. (ORINS-25.)

-----. The medical spectrometer. Oak Ridge, Tennessee: ORINS, 1959. (ORINS-30.)

Sitterson, B. W. "Clinical report." In The Acute Radiation Syndrome: A Medical Report on the Y-12 Accident, June 16, 1958, pp. 1.1-1.32. Washington, D.C.: U.S. Atomic Energy Commission, 1959. (ORINS-25.)

Snyder, F.; Cress, E. A.; and Kyker, G. C. "Liver lipid response to intravenous injection of rare earths in rats." Journal of Lipid Research 1:125-31 (1959).

Snyder, F.; Cress, E. A.; Stephens, N.; and Kyker, G. C. "Characterization of liver lipid response to intravenous rare earths in rats." Federation of American Societies for Experimental Biology, Federation Proceedings 18:327 (1959). (Abstract.)

Snyder, F., and Stephens, N. "A simplified spectrophotometric determination of ester groups in lipids." Biochimica et Biophysica Acta 34:244-45 (1959).

Steffee, C. H. "Histopathologic effects of rare earths administered intraperitoneally to rats--a preliminary report." Archives of Industrial Health 10:414-19 (1959.)

MEDICAL 1960

Andrews, G. A. "Medical students and radioisotopes." New Physician 9(12):23-27 (1960).

----- "Radiation accidents." In Fallout; J. M. Fowler, ed.; pp. 106-14. New York: Basic Books, 1960.

----- "Some general concepts of the clinical use of radioisotopes." In Medical Physics; Otto Glasser, ed.; vol. 3, pp. 302-6. Chicago: Year Book Publishers, 1960.

Brucer, M. "External gamma-ray measurements with sodium-iodide crystals." In Medical Physics; Otto Glasser, ed.; vol. 3, pp. 484-88. Chicago: Year Book Publishers, 1960.

----- "High-energy sources for teletherapy." In Medical Physics; Otto Glasser, ed.; vol. 3, pp. 320-22. Chicago: Year Book Publishers, 1960.

----- "Intercalibration technics for thyroid uptake." In Medical Physics; Otto Glasser, ed.; vol. 3, pp. 322-28. Chicago: Year Book Publishers, 1960.

----- The ORINS human radiation counters: A preliminary report. Washington, D.C.: U.S. Atomic Energy Commission, 1960. (ORINS-38.)

----- "The search for the hole." In A Symposium on Scintillation Counting, pp. 1-24. Bethesda, Maryland: National Naval Medical Center, 1960.

-----. Thyroid Radioiodine Uptake Measurement: A Standard System for Universal Intercalibration. Translated into Japanese by Hirotake Kakehi and Teruo Nagai. Tokyo: Bunkodo Company, 1960.

Brucer, M., and Cloutier, R. J. "Radiation warning signs for medical installations." International Journal of Applied Radiation 8:143-45 (1960).

Brucer, M., and Anderson, E. B., eds. Radiation protection at the medical division. Oak Ridge, Tennessee: ORINS, 1960.

Comas, F., and Brucer, M. "Irradiation of the ovaries from the urinary excretion of iodine 131." American Journal of Roentgenology 83:501-6 (1960).

Fliedner, T. M.; Cronkite, E. P.; Bond, V. P.; and Andrews, G. A. "Mitotic activity and cytology of human bone marrow after accidental exposure to ionizing radiation." In Proceedings of the 7th Congress of the European Society of Haematologists, part II, pp. 458-67. 1960.

Hayes, R. L. Standard-man phantoms. Washington, D.C.: U.S. Atomic Energy Commission, 1960. (ORINS-35.)

Hayes, R. L., and Brucer, M. "Compartmentalized phantoms for the standard man, adolescent, and child." International Journal of Applied Radiation 9:113-18 (1960).

Hayes, R. L., and Butler, W. R., Jr. "Growth and decay of radionuclides: a demonstration." Journal of Chemical Education 37-590-92 (1960).

Hayes, R. L; Nold, M. M; Comar, C. L.; and Kakehi, H.
"Internal radiation dose measurements in live experimental
animals. Part I." Health Physics 4:79-85 (1960).

Kniseley, R. M. "Training for clinical use of radioisotopes:
qualification courses." Journal of Nuclear Medicine 1:239-50

Ross, D. A. "Medical spectrometer." In Medical Physics: Otto Glasser, ed.; vol. 3, pp. 341-45. Chicago: Year Book Publishers, 1960.

Simon, N.; Brucer, M.; and Hayes, R. L. "Radiation and leukemia in carcinoma of the cervix." Radiology 74:905-11 (1960).

Snyder, F.; Baker, F.; Rafter, J.; and Kyker, G. C. "Octanoate oxidation in the cerium-induced fatty liver." Biochimica et Biophysica Acta 43:554-55 (1960).

Snyder, F.; Cress, E. A.; and Kyker, G. C. "Rare-earth fatty liver." Nature (London) 185:480-81 (1960).

Snyder, F.; Stephens, N.; Gerst, L.; and Kyker, G. C. "The rare-earth fatty liver: plasma-free fatty acids." Federation of American Societies for Experimental Biology. Federation Proceedings 19:299 (1960). (Abstract.)

Tsuya, A., and Hayakawa, I. "Linear scanner (ORINS): possibility of its clinical applications." Acta Radiologica Japonica 20:2001-11 (1960).

1029388

MEDICAL 1961

Andrews, G. A.; Sitterson, B. W.; Kretchmar, A. L.; and Brucer, M. "Criticality accident at the Y-12 plant." In Diagnosis and Treatment of Acute Radiation Injury, pp. 27-48. Geneva: World Health Organization, 1961.

Andrews, G. A.; Sitterson, B. W.; Kretchmar, A. L.; and Tanida, R. "Studies of total-body irradiation and attempted marrow transplantation in acute leukemia." Acta Haemat (Basel) 26:129-53 (1961).

Bond, V. P.; Fliedner, T. M.; Cronkite, R. P.; and Andrews, G. A. "Deoxyribonucleic acid synthesizing cells in the blood of man and dog exposed to total body radiation." Journal of Laboratory and Clinical Medicine 57:711-17 (1961).

Brucer, M. "The development of radioisotope scanning." In Applications of Radioisotopes and Radiation in the Life Sciences, pp. 402-26. Washington, D.C.: U.S. Government Printing Office, 1961.

----- "The film badge and the cricket: an exercise in political medicine." Journal Mississippi State Medical Association, September 1961, pp. 453-56.

----- "Human radiation exposure." In Radioactivity in Man; G. R. Meneely, ed.; pp. 373-91. Springfield, Illinois: Charles C. Thomas, 1961.

----- "Levels of radiation." Journal of the American Medical Association 175:36-39 (1961).

-----. "Radiation hysteria." Journal of the American Medical Association 176:680 (1961). (Editorial.)

-----. "Radioisotopes in medicine." In Science and the New Nations; Ruth Gruber, ed.; pp. 113-17. New York: Basic Books, 1961.

-----. "A total-body irradiator." International Journal of Applied Radiation 10:99-105 (1961).

Cloutier, R. J., and Brucer, M. "Leaks in standard sealed teletherapy sources." Health Physics 6:32-35 (1961).

Comas, F. "Exploratory laparotomies to minimize 'geographical misses' in radiotherapy." American Surgeon 27:513-17 (1961).

Henry, H. F. "Is all nuclear radiation harmful?" Journal of the American Medical Association 176:671-75 (1961).

Johnson, G. T., and Kyker, G. C. "Fission-product and cerium uptake by bacteria, yeasts, and molds." Journal of Bacteriology 81:733-40 (1961).

Kretchmar, A. L., and Congdon, C. C. "Amino acid changes in mice with grafted homologous bone marrow." Federation of American Societies for Experimental Biology. Federation Proceedings 20:402b (1961). (Abstract.)

-----. "Biochemical changes and increased liver weight in bone barrow chimeras." American Journal of Physiology 200:102-6 (1961).

1029390

Medical Division, Oak Ridge Institute of Nuclear Studies. A high magnetic field bubble chamber report. Oak Ridge, Tennessee: ORINS, 1961.

----- Report for 1960. Oak Ridge, Tennessee: ORINS, 1961. (ORINS-39.)

Morris, A. C., Jr. "Measurements in a total-body irradiation facility." International Journal of Applied Radiation 11:108-13 (1961).

Snyder, F., and Cress, E. "Choline oxidase in fatty livers induced by cerium." Experientia 17:303-5 (1961).

Snyder, F., and Godfrey, P. "Collecting Cl^{14}O_2 in a Warburg Flask for subsequent scintillation counting." Journal of Lipid Research 2:195 (1961).

Snyder, F., and Stephens, N. "Plasma free fatty acids and the rare-earth fatty liver." Proceedings of the Society for Experimental Biology and Medicine 106:202-4 (1961).

Snyder, F.; Stephens, N.; and Kyker, G. C. "Fatty acids of liver and adipose lipids during cerium-induced fatty liver infiltration." Federation of American Societies for Experimental Biology. Federation Proceedings 20:275f (1961). (Abstract.)

MEDICAL 1962

Andrews, G. A. "The acute radiation syndrome." Nuclear Safety 3:69-76 (1962).

-----. "Criticality accidents in Vinca, Yugoslavia, and Oak Ridge, Tennessee: Comparison of radiation injuries and results of therapy." Journal of the American Medical Association 179:191-97 (1962).

-----. "High dose irradiation injury." Journal of the American Medical Association 179:220 (1962). (Editorial).

Brucer, M. "The great fallout controversy." Journal of the American Medical Association 179:164-65 (1962). (Editorial.)

-----. "Medical high-energy radiation." Radiazioni di Alta Energia 1:5-13 (1962).

-----. "When do you leave a fallout shelter?" Journal of the American Medical Association 180:144-46 (1962).

Gengozian, N. "Radiation immunology: effects of hematopoietic tissue transplantation." In Ionizing Radiations and Immune Processes; Charles A. Leone, ed., pp. 403-54. New York: Gordon and Breach, 1962.

Gengozian, N.; Batson, J. S.; and Smith, T. A. "Tamarinus nigricollis as a laboratory primate." In Bone Marrow Therapy and Protection in Irradiated Primates, pp. 245-69. The Netherlands: Krips, Rijswijk, 1962.

1029392

Glaser, W., and Gibbs, W. D. "Localization of radiomagnesium in puppies: radioautographic study of heart and bone." American Journal of Physiology 202:585-88 (1962).

Godfrey, P., and Snyder, F. "A procedure for in vivo Cl^{14}O_2 collection and subsequent scintillation counting." Analytical Biochemistry 4:310-15 (1962).

Kniseley, R. M.; White, D. A.; Sitterson, B. W.; and Andrews, G. A. "Effects of total-body irradiation on platelet values in human beings." In Symposium on Recent Developments in Studies of Blood Platelets, June 22-23. Oak Ridge, Tennessee: Oak Ridge National Laboratories, Biology Division, 1962. (Abstract.)

Kretchmar, A. L., and Congdon, C. C. "Increased free aspartic acid in liver of mice with grafted homologous bone marrow." Federation of American Societies for Experimental Biology. Federation Proceedings 21:424a (1962). (Abstract.)

Kyker, G. C. "Rare earths." In Mineral Metabolism, vol. 2B, pp. 499-541. New York: Academic Press, 1962.

Medical Division, Oak Ridge Institute of Nuclear Studies. Research report, 1961, for the year ending December 31, 1961. Oak Ridge, Tennessee: ORINS, 1962. (ORINS-41.)

Nagai, T., and Kniseley, R. M. "The fate of H^3 thymidine labelled cells injected as a potential human-marrow graft: a preliminary report." In Proceedings of the VIIIth International Congress of Hematology, Tokyo, September 4-10, 1960, vol. 1, pp. 275-80. Tokyo: Pan Pacific Press, 1962.

Odell, T. T., Jr., and Kniseley, R. M. "The origin, life span, regulation and fate of blood platelets." In Progress in Hematology, vol. 3, pp. 203-17. New York: Grune and Stratton, 1962.

Pircher, F.; Brucer, M.; Morris, A. C., Jr.; and Black, R. "The ORINS linear scanner in clinical diagnosis." Journal of Nuclear Medicine 3:26-40 (1962).

Snyder, F.; Cress, E. A.; and Stephens, N. "Bone marrow lipids after total-body irradiation." Federation of American Societies for Experimental Biology. Federation Proceedings 21:424f (1962). (Abstract.)

Snyder, F., and Stephens, N. "Quantitative carbon-14 and tritium assay of thin-layer chromatography plates." Analytical Biochemistry 4:128-31 (1962).

1029394

MEDICAL 1963

Andrews, G. A.; Sitterson, B. W.; and Ross, D. A. "The use of scanning in thyroid cancer." In Progress in Medical Radioisotope Scanning, pp. 312-325. Atomic Energy Commission Symposium Series no. 1. Washington, D.C.: Atomic Energy Commission, 1963.

Arnold, Patricia "Total-body irradiation and marrow transplantation." American Journal of Nursing 63:83-88 (1963).

Brown, D. W., and Ketchmar, A. L. "Analog computer simulation of radioiodine tracer studies in thyroid disease." Journal of Nuclear Medicine 4:197 (1963). (Abstract.)

Cloutier, R. J. "Fast neutron generators: radiation levels and shielding requirements." American Industrial Hygiene Association Journal 24:497-501 (1963).

----- "Radiation safety." Science Teacher 30:35-39 (1963).

Congdon, C. C., and Ketchmar, A. L. "Increased liver weight in bone-marrow chimeras." Journal of Molecular Pathology 2:277-90 (1963).

Cosgrove, G. E.; Nelson, W. M.; and Jones, A. W. "Spirura tamarini sp. n. (Nematoda: Spiruridae) from an Amazonian primate, Tamarinus nigricollis (Spix, 1823)." Journal of Parasitology 49:1010-13 (1963).

Edwards, C. L.; Andrews, G. A.; Sitterson, B. W.; and Kniseley, R. M. "Clinical radioisotope bone marrow scanning." Clinical Research 11(2): 193 (1963).
(Abstract.)

Gengozian, N., and Batson, J. "Effects of radiation on a small South American primate, Tamarinus nigricollis." Radiation Research 19:223-24 (1963). (Abstract.)

Goswitz, F. A.; Andrews, G. A.; and Kniseley, R. M. "Effects of local irradiation (Co^{60} teletherapy) on the peripheral blood and marrow." Blood 21:605-19 (1963).

Hayes, R. L. "A method for collection and radioassay of specimens of human stools." American Journal of Clinical Pathology 39:203-5 (1963).

Hayes, R. L.; Carlton, J. E.; and Butler, W. R., Jr. "Radiation dose to the human intestinal tract from internal emitters." Health Physics 9:915-20 (1963).

Hayes, R. L.; Nelson, W. M.; and Carlton, J. E. "Lanthanum-140 as a measure of the completeness of stool collections for the oral iron-59 absorption test." Journal of Nuclear Medicine 4:208 (1963). (Abstract.)

Honda, T.; Rafter, J. J.; and Kyker, G. C. "Intralymphatic administration of radioisotope to lymph nodes." Journal of Nuclear Medicine 4:188 (1963). (Abstract.)

Kniseley, R. M.; Andrews, G. A.; and Harris, C. C.; eds. Progress in Medical Radioisotope Scanning. Atomic Energy Commission Symposium Series no. 1. Washington, D.C.: Atomic Energy Commission, 1963.

Kretchmar, A. L.; Andrews, G. A.; and Sitterson, B. W.
"Attempted bone marrow autografts after large doses of
nitrogen mustard." New England Journal of Medicine
268:427-28 (1963).

Kretchmar, A. L., and Congdon, C. C. "The levels of free
aspartic acid, glycine, and serine in tissues of bone marrow
chimeras." Transplantation 1:298-305 (1963).

-----. "RNA and DNA in liver of irradiation chimeras."
Blood 22:503 (1963). (Abstract.)

-----. "Serine metabolism in mice carrying homologous
bone-marrow grafts." Federation of American Societies for
Experimental Biology. Federation Proceedings 22:392 (1963).
(Abstract.)

McArthur, W. H.; Kretchmar, A. L.; and Congdon, C. C. "Study
of nitrogen balance in irradiated mice given foreign bone
marrow." Blood 22:502-3 (1963). (Abstract.)

Medical Division, Oak Ridge Institute of Nuclear Studies.
Research report, 1962, for the year ending December 31, 1962.
Oak Ridge, Tennessee: ORINS, 1963. (ORINS-42.)

Oda, F. T.; Andrews, G. A.; Bigelow, R. R.; Sitterson, B. W.;
and Buxton, R. W. "Surgery in patients with leukemia and
lymphoma." American Surgeon 29:33-47 (1963).

Oda, F. T.; Gibbs, W. D.; and Andrews, G. A. "Distribution
of radioisotopes in tumors of the rat liver." Journal of
Nuclear Medicine 4:18-28 (1963).

Ross, D. A. "Linear scanning." In Progress in Medical Radioisotope Scanning, pp. 190-204. Atomic Energy Commission Symposium Series no. 1. Washington, D.C.: Atomic Energy Commission, 1963.

Sitterson, B. W., and Andrews, G. A. "Introduction to thyroid scanning." In Progress in Medical Radioisotope Scanning, pp. 279-95. Atomic Energy Commission Symposium Series no. 1. Washington, D.C.: Atomic Energy Commission, 1963.

Snyder, F. "Aluminum plates for thin-layer chromatography." Analytical Chemistry 35:599 (1963).

Snyder, F., and Cress, E. A. "Bone marrow lipids in rats exposed to total-body irradiation." Radiation Research 19:129-41 (1963).

Suu, Vu-Thi; Congdon, C. C.; and Kretchmar, A. L. "Increases in lysozyme activity in the kidney of irradiated chimeras." Proceedings of the Society for Experimental Biology and Medicine 113:481-85 (1963).

Vodopick, H. A., and Kniseley, R. M. "Sulfur-35 studies in man: platelet survival and urinary radioactivity assayed by beta liquid scintillation spectrometry." Journal of Laboratory and Clinical Medicine 62:109-20 (1963).

White, D. A. "Useful chemotherapeutic agents." Journal of the Tennessee State Medical Association 56:42-45 (1963).

MEDICAL 1964

Andrews, G. A. "Book review: Silver, Solomon. Radioactive Isotopes in Medicine and Biology: Medicine." Archives of Internal Medicine 113:310-11 (1964).

-----. "Discussion of E. P. Cronkite's The Diagnosis, Treatment, and Prognosis of Human Radiation Injury from Whole-body Exposure." Annals of the New York Academy of Sciences 144:349-54 (1964).

-----. "Mexican Co⁶⁰ radiation accident." Isotopes and Radiation Technology 1:200-201 (1964).

Burger, C. L.; Harris, W. W.; Anderson, N. G.; Bartlett, T. W.; and Kniseley, R. M. "Virus-like particles in human leukemic plasma." Proceedings of the Society for Experimental Biology and Medicine 115:151-56 (1964).

Comas, F. V. "Comparative changes in radiosensitivity between bone marrow and a rat tumor irradiated under anoxia." Radiology 83:528-33 (1964).

Edwards, C. L.; Andrews, G. A.; Sitterson, B. W.; and Kniseley, R. M. "Clinical bone marrow scanning with radioisotopes." Blood 23:741-56 (1964).

Fliedner, T. M.; Andrews, G. A.; Cronkite, E. P.; and Bond, V. P. "Early and late cytologic effects of whole body irradiation on human marrow." Blood 23:471-87 (1964).

Gengozian, N. "Heterotransplantation of human antibody-forming cells in diffusion chambers." Annals of the New York Academy of Sciences 120:91-118 (1964).

-----. "Human A- and B-like antigens on red cells of marmosets." Proceedings of the Society for Experimental Biology and Medicine 117:858-61 (1964).

-----. "Transplantation of rat bone marrow in irradiated mice: effect of exposure rate." Science 146:663-64 (1964).

Gengozian, N.; Batson, J. S.; and Eide, P. "Hematologic and cytogenetic evidence for hematopoietic chimerism in the marmoset, Tamarinus nigricollis." Cytogenetics 3:384-93 (1964).

Gengozian, N., and Doria, G. "Allotypic specificities in four strains of inbred mice as revealed by reciprocal immunizations." Journal of Immunology 93:426-32 (1964).

Gibbs, W. D., and Lushbaugh, C. C. "A new counter for radioactive samples." Journal of Nuclear Medicine 5:726 (1964). (Abstract.)

Gibbs, W.; Wilson, E.; Hodges, H.; and Lushbaugh C. C. "Comparative study of thyroid and whole-body retention of iodine in box turtles." In U.S. Atomic Energy Commission Report TID-7689, pp. 20-21. Washington, D.C.: U.S. Atomic Energy Commission, 1964. (Abstract.)

Hayes, R. L., and Carlton, J. E. "In vivo mobilization of barium-137m." Journal of Nuclear Medicine 5:378 (1964). (Abstract.)

Hayes, R. L.; Carlton, J. E.; and Nelson, W. M.
"Lanthanum-140 as a measure of the completeness of stool collections: demonstration of delayed excretion of iron-59." Journal of Nuclear Medicine 5:200-208 (1964).

Hayes, R. L.; Oddie, T. H.; and Brucer, M. "Dose comparison of two total-body irradiation facilities." International Journal of Applied Radiation 15:313-18 (1964).

Kakehi, H., and Hayes, R. L. "Counting characteristics of a medium-level whole-body counter." Journal of Nuclear Medicine 5:372 (1964).

Kniseley, R. M. "Radioisotope scanning." Science 145:416-18 (1964).

Kniseley, R. M.; Andrews, G. A.; Edwards, C. L.; and Tanida, R. "Scanning of bone marrow in hematopoietic disorders." In Medical Radioisotope Scanning, vol. 2, pp. 207-25. Vienna: International Atomic Energy Agency, 1964.

Kniseley, R. M., and Tauxe, W. N., eds. Dynamic Clinical Studies with Radioisotopes. Atomic Energy Commission Symposium Series no. 3. Washington, D.C.: Atomic Energy Commission, 1964.

Kretchmar, A. L., and Comas, F. V. "Correlation between kidney muramidase activity and plasma iron removal in rats with Walker-256 carcinosarcoma." Proceedings of the Society for Experimental Biology and Medicine 116:275-77 (1964).

Kyker, G. C., and Rafter, J. "Rare earth fatty liver induced by lanthanum chelates." Federation of American Societies for Experimental Biology. Federation Proceedings 23:375 (1964).
(Abstract.)

-----. "Scanning of bone marrow in animals." Journal of Nuclear Medicine 5:726-27 (1964). (Abstract.)

Lushbaugh, C. C. "Letter to the editor: Distribution of erythrocyte volumes." Blood 23:404-5 (1964).

Lushbaugh, C. C., and Gibbs, W. "A rapid screening method for detecting abnormal plasma vitamin B₁₂ binding sites in chronic myelogenous leukemia using arm counting." In U.S. Atomic Energy Commission Report TID-7689, pp. 11-14. Washington, D.C.: U.S. Atomic Energy Commission, 1964.
(Abstract.)

Lushbaugh, C. C.; Ketchmar, A.; and Gibbs, W. "Liver function measured by the blood clearance of rose bengal-I¹³¹: A review and a model based on compartmental analysis of changes in arm, blood, and liver radioactivity." In Dynamic Clinical Studies with Radioisotopes, pp. 319-57. Atomic Energy Commission Symposium Series no. 3. Washington, D.C.: Atomic Energy Commission, 1964.

McArthur, W. H.; Congdon, C. C.; and Ketchmar, A. L. "Nitrogen balance in radiation chimeras." Proceedings of the Society for Experimental Biology and Medicine 117:171-75 (1964).

1029402

MacLeod, J.; Hotchkiss, R. S.; and Sitterson, B. W.
"Recovery of male fertility after sterilization by nuclear
radiation." Journal of the American Medical Association
187:637-41 (1964).

Medical Division, Oak Ridge Institute of Nuclear Studies.
Research Report, 1963, for the year ending December 31, 1963.
Oak Ridge, Tennessee: ORINS, 1964. (ORINS-43.)

Morris, A. C., Jr. "A diagnostic-level whole-body counter."
Journal of Nuclear Medicine 5:364 (1964). (Abstract.)

Morris, A. C., Jr.; Ross, D. A.; and Travis, J. C. "A
high-level whole-body counter." International Journal of
Applied Radiation 15:391-96 (1964).

Nelson, W. M., and Andrews, G. A. "Breast cancer and
cytologic dysplasia in many organs after busulfan (myleran)." American Journal of Clinical Pathology 42:37-44 (1964).

Nelson, W. M.; Vichai Poshyachinda; and Makumkrong
Wasanasomsithi. "A method for comparing collimator systems
applied to external counting of Cr⁵¹ in the spleen." Journal
of Nuclear Medicine 5:725-26 (1964). (Abstract.)

Pfannenstiel, P., and Sitterson, B. W. "Clinical usefulness
of iodine-130 in serial tracer-studies in patients with
functioning thyroid cancer." Journal of Nuclear Medicine
5:727 (1964). (Abstract.)

Saito, H., and Nagai, T. Labeling of myeloma cells and
leukemic leukocytes in short-term cultures with tagged
precursors of nucleic acid and protein. Washington, D.C.:
U.S. Atomic Energy Commission, 1964. (ORINS-45.)

Snyder, F. "Radioassay of thin-layer chromatograms: a high-resolution zonal scraper for quantitative Cl⁴ and H³ scanning of thin-layer chromatograms." Analytical Biochemistry 9:183-96 (1964).

-----. "Zonal scanning of thin-layer chromatograms." Atomlight 38:7-12 (1964).

Snyder, F.; Alford, T. S.; and Kimble, H. Radioassay of thin-layer chromatograms: blueprints for zonal scraper. Washington, D.C.: U.S. Atomic Energy Commission, 1964. (ORINS-44.)

Snyder, F., and Kimble, H. Blueprints of an automatic zonal scraper and sample collector for radioassay of thin-layer chromatograms. Washington, D.C.: U.S. Atomic Energy Commission, 1964. (ORINS-47.)

Snyder, F., and Kyker, G. C. "Triglyceride accumulation and release in the rare-earth fatty liver." Proceedings of the Society for Experimental Biology and Medicine 116:890-93 (1964).

Snyder, F., and Lewis, W. "Phospholipid patterns in livers accumulating fat." Proceedings of the Society for Experimental Biology and Medicine 116:459-62 (1964).

Suu, Vu-Thi; Congdon, C. C.; and Kretchmar, A. L. "Lysozyme activity in radiation chimeras." Proceedings of the Society for Experimental Biology and Medicine 115:825-29 (1964).

Urso, P., and Gengozian, N. "Immunofluorescent detection of proliferating human antibody-forming cells." Nature 203:1391-92 (1964).

Wilson, E. D.; Gibbs, W. D.; and Lushbaugh, C. C. "Thyroid uptake and whole-body retention of I¹³¹ in box turtles." Texas Reports of Biology and Medicine 22:211-12 (1964).
(Abstract.)

MEDICAL 1965

Andrews, G. A. "Radiation accidents." Journal of the American Medical Association 291:151-52 (1965). (Editorial).

Andrews, G. A.; Auxier, J. A.; and Lushbaugh, C. C. "The importance of dosimetry to the medical management of persons accidentally exposed to high levels of ionizing radiation." In Personnel Dosimetry for Radiation Accidents, pp. 3-16. Vienna: International Atomic Energy Agency, 1965.

Andrews, G. A., and Cloutier, R. J. "Accidental acute radiation injury: the need for recognition." Archives of Environmental Health 10:498-507 (1965).

Bergner, P.-E. E. "Exchangeable mass: determination without assumption of isotopic equilibrium." Science 150:1048-50 (1965).

----- "On stationary and non-stationary red cell survival curves." Journal of Theoretical Biology 9:366-88 (1965).

----- "Stochastic concepts in clinical red cell survival studies." Nature (London) 205:975-77 (1965).

Bergner, P.-E. E., and Lawson, J. D. "Red cell survival: on the analysis of DF³² p-data." Clinical Research 13:66 (1965). (Abstract.)

Edwards, C. L., and Gengozian, N. "Autoimmune hemolytic anemia treated with d-penicillamine." Annals of Internal Medicine 62:576-79 (1965).

1029406

Gengozian, N.; Edwards, L.; and Hübner, K. "Clinical and experimental studies on the effect of penicillamine on antibody formation." Clinical Research 13:68 (1965).
(Abstract.)

Gengozian, N.; Rabette, B.; and Congdon, C. C. "Abnormal immune mechanism in allogeneic radiation chimeras." Science 149:645-47 (1965).

Gibbs, W. D.; Lushbaugh, C. C.; and Morris, A. C., Jr. "Preliminary efficiency and calibration studies with a new whole-body counter with an ultralow background shield." Journal of Nuclear Medicine 6:337 (1965). (Abstract.)

Goh, K. O. "Book review: Human Chromosome Methodology." Annals of Internal Medicine 63:925-26 (1965).

----- "Cytogenetic interrelation of the myeloproliferative disorders." Clinical Research 13:273 (1965). (Abstract.)

Harris, C. C.; Satterfield, M. M.; Kimble, H. E.; and Uchiyama, G. "A 'rescanner' with photographic readout." Journal of Nuclear Medicine 6:332 (1965). (Abstract.)

Hayes, R. L.; Carlton, J. E.; and Byrd, B. L. "Bone scanning with gallium-68: a carrier effect." Journal of Nuclear Medicine 6:605-10 (1965).

----- "⁶⁸Gallium as a bone scanning agent." Journal of Nuclear Medicine 6:358 (1965). (Abstract.)

Hübner, K., and Brown, D. W. "Scanning of the spinal subarachnoid space after intrathecal injection of ^{131}I labeled human serum albumin." Journal of Nuclear Medicine 6:465-72 (1965).

Hubner, K., and Gengozian, N. "Depression of the primary immune response by dl-penicillamine." Proceedings of the Society for Experimental Biology and Medicine 118:561-65 (1965).

Kniseley, R. M.; Andrews, G. A.; Tanida, R.; Edwards, C. L.; and Kyker, G. C. "Whole-body scanning of the bone marrow organ." Journal of Nuclear Medicine 6:361 (1965).
(Abstract.)

Kretchmar, A. L. "Stability and response characteristics of the red blood cell system: a computer study." Clinical Research 13:67 (1965). (Abstract.)

Kretchmar, A. L., and Congdon, C. C. "The metabolic problem in secondary disease." In La Greffe des Cellules Hematopoietiques, pp. 347-52. Paris: Centre National de la Recherche Scientifique, 1965.

Kretchmar, A. L.; McArthur, W. H.; and Congdon, C. C. "Shift in the relative distribution of body nitrogen between skin and carcass in mouse radiation chimeras." Journal of Nutrition 87:261-66 (1965).

Kyker, G. C., and Rafter, J. J. "Scanning of bone marrow in animals." Journal of Nuclear Medicine 6:361 (1965).
(Abstract.)

Lushbaugh, C. C.; Hofstra, R.; Roth, R. E.; and Andrews, G. A. "ED₅₀ for gastrointestinal responses in man." Radiation Research 25:213-14 (1965). (Abstract.)

Lushbaugh, C. C., and Lushbaugh, D. B. "Rapid electronic cell sizing as an aid in clinical diagnosis." Southern Medical Journal 58:1208-12 (1965).

Medical Division, Oak Ridge Institute of Nuclear Studies. Research report, 1964, for the year ending December 31, 1964. Oak Ridge, Tennessee: ORINS, 1965. (ORINS-49.)

Meyer, L. M.; Schiffer, L. M.; White, D. A.; and Cronkite, E. P. "The plasma disappearance of radioactive cobalamin: effect of prior administration of vitamin B₁₂ analogues." British Journal of Haematology 11:370-79 (1965).

Miller, B.; Anderson, C. E.; Kyker, G. C.; Yarbro, C. L.; and Cress, E. A. "Plasmalogen in rare earth-induced fatty infiltration in rat liver." Journal of the Elisha Mitchell Scientific Society 81(1):12-18 (1965).

Miller, I. H., Jr., and Kyker, G. C. "Nutritional protection against fatty liver due to cerium." Federation of American Societies for Experimental Biology. Federation Proceedings 24:564 (1965). (Abstract.)

Miller, L., and Goh, K. O. "Prevention of in vitro cultured leukocyte clumping." The Human Chromosome Newsletter, December 1965, pp. 17-18. (Abstract.)

Morris, A. C., Jr. "A diagnostic-level whole-body counter." Journal of Nuclear Medicine 6:481-88 (1965).

Nelson, B.; Rush, E. A.; Takasugi, M.; and Wittenberg, J. "Lipid embolism to the brain after lymphography." New England Journal of Medicine 273:1132-34 (1965).

Pfannenstiel, P.; Andrews, G. A.; and Brown, D. W. "Congenital hypothyroidism from intrauterine ^{131}I damage." In Current Topic in Thyroid Research, pp. 749-58. New York: Academic Press, 1965.

Snyder, F. "Fatty acid oxidation in irradiated bone marrow cells." Nature (London) 206:733 (1965).

----- "Quantitative radioassay of methods for thin-layer chromatography: zonal and autoradiographic scans." In Radioisotope Sample Measurement Techniques in Medicine and Biology, pp. 521-33. Vienna: International Atomic Energy Agency, 1965.

----- "Zonal scanning of thin-layer chromatograms." In Advances in Tracer Methodology, vol. 2, pp. 107-13. New York: Plenum Press, 1965.

Snyder, F., and Kimble, H. "An automatic zonal scraper and sample collector for radioassay of thin-layer chromatograms." Analytical Biochemistry 11:510-18 (1965).

Snyder, F.; Piantadosi, C.; and Oswald, E. "The deposition and metabolism of α -butyl alcohol- $1-^{14}\text{C}$ in the rat." Journal of the American Oil Chemists' Society 42:461A (1965). (Abstract.)

Snyder, F., and Wright, R. "Effect of localized irradiation on the metabolism of bone marrow lipids." Radiation Research 25:417-22 (1965).

Steckel, R. J.; Hendrix, E. L.; and Bigelow, R. R.
"Malignant solid teratoma of the ovary in an 8-year-old
child." Obstetrics and Gynecology 25:249-52 (1965).

Uchiyama, G.; Harris, C. C.; Kimble, H.; and Morris, A. C.,
Jr. "Color recording for a rescanning device." Clinical
Research 13:82 (1965). (Abstract.)

Urso, P., and Gengozian, N. "Host-graft agglutinin activity
by spleen cells of heterologous radiation chimeras cultivated
in diffusion chambers." Transplantation 3:762-64 (1965).

MEDICAL 1966

Andrews, G. A. "Book review: Progress in Medical Radioisotope Scanning." Health Physics 12:1511 (1966).

-----. "Treatment of radiation injury." Journal of the Mississippi State Medical Association 7:534-38 (1966).

Andrews, G. A.; Kniseley, R. M.; and Wagner, H. N., Jr. Radioactive Pharmaceuticals. Washington, D.C.: U.S. Atomic Energy Commission, 1966.

Bergner, P.-E. E. "Tracer theory: a review." Isotope and Radiation Technology 3:245-62 (1966).

Bollinger, J. N. "Incorporation of dietary linoleic acid into triglycerides of irradiated bone marrow." Radiation Research 28:121-31 (1966).

Cloutier, R. J., and Dalton, C. P. "Radiation safety problems connected with the medical use of radioisotopes." Health Physics 12:1835 (1966). (Abstract.)

Cloutier, R. J., and Watson, E. E. "Measurement of plutonium in wounds: self-absorption by plutonium." Health Physics 12:1203 (1966). (Abstract.)

Edwards, C. L.; Congdon, C. C.; Gengozian, N.; Vodopick, H.; and Andrews, G. A. "Treatment of acute leukemia: an experimental immunologic approach." Experimental Hematology 9:23-24 (1966). (Abstract.)

1029412

Edwards, C. L.; Hayes, R.; Ahumada, J.; and Kniseley, R. M.
"Gallium-68 citrate: a clinically useful skeletal scanning
agent." Journal of Nuclear Medicine 7:363-64 (1966).
(Abstract.)

Gengozian, N. "Formation of isohaemagglutinins in the
marmoset, Tamarinus nigricollis." Nature (London)
209:722-23 (1966).

----- "Isohemagglutinin formation in the marmoset, T.
nigricollis." Federation of American Societies for
Experimental Biology. Federation Proceedings 25:435 (1966).
(Abstract.)

Gengozian, N., and Batson, J. S. "Effects of whole-body
irradiation on a small South American primate, Saguinus
fuscofasciatus." International Journal of Radiation Biology and
Related Studies in Physics, Chemistry, and Medicine
11(6):539-51 (1966).

Gengozian, N.; Batson, J. S.; and Nelson, B. M. "Bone marrow
grafting attempts in marmosets after whole-body irradiation."
International Journal of Radiation Biology and Related
Studies in Physics, Chemistry, and Medicine 11(6):553-61
(1966).

Gengozian, N., and Carlson, D. "Consideration of radiation
exposure rates in transplantation of xenogeneic and
allogeneic bone marrow in irradiated mice." Third
International Congress of Radiation Research, p. 90. (1966).
(Abstract.)

Gengozian, N.; Lushbaugh, C. C.; Humason, G. L.; and Kniseley, R. M. "'Erythroblastosis foetalis' in the primate, Tamarinus nigricollis." Nature (London) 209:731-32 (1966).

Goh, K. O. "Inner chromosomal structure of the somatic metaphase of mammals: a light microscopic observation." Clinical Research 14:310 (1966). (Abstract.)

-----. "Smaller G chromosome in irradiated man." Lancet 1:659-60 (1966).

Harris, W. W.; Anderson, N. G.; Bartlett, T. W.; Rutenberg, E. L.; McCauley, L. L.; and Kniseley, R. M. "Unusual particles in human plasma from leukemia and lymphosarcoma." National Cancer Institute Monographs 21:389-94 (1966).

Hayes, R. L. "Radioisotopes of gallium." In Radioactive Pharmaceuticals, pp. 603-18. Washington, D.C.: U.S. Atomic Energy Commission, 1966.

Hayes, R. L.; Carlton, J. E.; and Rafter, J. J. "Scanning with hydrous ferric oxide colloid labeled with gallium-68." Journal of Nuclear Medicine 7:335-36 (1966). (Abstract.)

Hayes, R. L., and Rafter, J. J. "Rhenium-188 as a possible diagnostic agent." Journal of Nuclear Medicine 7:797 (1966). (Abstract.)

Holten, V. Z.; Kyker, G. C.; and Pulliam, M. "Effects of lanthanide chlorides on selected enzymes." Proceedings of the Society for Experimental Biology and Medicine 123:913-19 (1966).

Johnson, G. T., and Kyker, G. C. "The mechanism of cerium uptake by Saccharomyces cerevisiae." Mycologia 58:91-99 (1966).

Kniseley, R. M. "Book review: Progress in Atomic Medicine." American Journal of Clinical Pathology 45:487 (1966).

Kniseley, R. M.; Andrews, G. A.; Tanida, R.; Edwards, C. L.; and Kyker, G. C. "Delineation of active marrow by whole-body scanning with radioactive colloids." Journal of Nuclear Medicine 7:575-82 (1966).

Kretchmar, A. L. "Erythropoietin: hypothesis of action tested by analog computer." Science 152:367-70 (1966).

----- "A model of hemopoiesis for mammalian recovery experiments." Experimental Hematology 9:42-44 (1966). (Abstract.)

Kretchmar, A. L., and Conover, W. R. "Secondary mortality and body-weight loss in lethally irradiated mice given small doses of isologous bone marrow cells." Experimental Hematology 10:11-12 (1966). (Abstract.)

Kyker, G. C., and Rafter, J. J. "Colloidal properties of the lanthanides." In Radioactive Pharmaceuticals, pp. 503-24. U.S. Atomic Energy Commission Symposium Series no. 6. Washington, D.C.: U.S. Atomic Energy Commission, 1966.

Lushbaugh, C. C.; Comas, F.; Saenger, E. L.; Jacobs, M.; Hofstra, R.; and Andrews, G. A. "Radiosensitivity of man by extrapolation from studies of total-body irradiation of patients." Radiation Research 27:487-88 (1966). (Abstract.)

Medical Division, Oak Ridge Institute of Nuclear Studies.
Research report, 1965, for the year ending December 31, 1965.
Oak Ridge, Tennessee: ORINS, 1966. (ORINS-53.)

Merrit, C.; Gengozian, N.; and Hampton, J. "Human A- and B-like antigens and antibodies in marmoset serum." Federation of American Societies for Experimental Biology. Federation Proceedings 25:435 (1966). (Abstract.)

Morris, A. C., Jr., and Ross, D. A. The design of a low-background whole-body counting facility. Washington, D.C.: U.S. Atomic Energy Commission, 1966. (ORINS-51.)

Nelson, B.; Cosgrove, G. E.; and Gengozian, N. "Diseases of an imported primate Tamarinus nigricollis." Laboratory Animal Care 16:255-75 (1966).

Nelson, B., and Takasugi, M. "Caution in lymphography." New England Journal of Medicine 274:110 (1966.) (Editorial.)

Oswald, E. O; Piantadosi, C.; Anderson, C. E.; and Snyder, F. "The synthesis of ^{14}C - and ^3H -labeled glycerol ethers." Lipids 1:241-46 (1966).

Pfleger, R. C.; Piantadosi, C.; and Snyder, F. "The metabolism of α -alkoxy glyceryl monoethers in rat liver." Journal of the American Oil Chemists' Society 43:140A (1966). (Abstract.)

Rogers, W. A., Jr., and Nelson, B. "Strongyloidiasis and malignant lymphoma: 'opportunistic infection' by a nematode." Journal of the American Medical Association 195:685-87 (1966).

Snyder, F. "A comparison of zonal scans and strip scans of thin-layer chromatograms." Separation Science 1:655-57 (1966).

----- "Triglyceride and phospholipid biosynthesis in irradiated bone marrow." Radiation Research 27:523 (1966). (Abstract.)

----- "Triglyceride biosynthesis in irradiated bone marrow." Radiation Research 27:375-83 (1966).

Snyder, F.; Cheng, S.-S.; and Piantadosi, C. "An unusual lipid present in Ehrlich ascites cells and other tumors." Journal of the American Oil Chemists' Society 43:140A (1966). (Abstract.)

Snyder, F.; Cress, E. A.; and Stephens, N. "An unidentified lipid prevalent in tumors." Lipids 1:381-86 (1966).

Snyder, F., and Pfleger, R. C. "Metabolism of alpha-alkoxy glyceryl monoethers in rat liver, in vivo and in vitro." Lipids 1:328-34 (1966).

Snyder, F., and Piantadosi, C. "Labeling and radiopurity of lipids." Advances in Lipid Research 4:257-83 (1966).

----- "The synthesis and purity of labeled lipids." In Radioactive Pharmaceuticals, pp. 553-65. Washington, D.C.: U.S. Atomic Energy Commission, 1966.

Snyder, F., and Smith, D. "An automated system for sample collection and computer analysis of thin-layer radiochromatograms." Separation Science 1:709-22 (1966).

Snyder, F., and Wood, R. "The incorporation of labeled lipids into a glyceryl ether component of Ehrlich ascites cells." ACS Abstracts, p. C-258. New York: American Chemical Society, 1966. (Abstract.)

Webb, A. M., and Lushbaugh, C. C. "Automated measurement of erythrocyte fragility using a linearly decreasing salt gradient." Clinical Chemistry 12:538 (1966). (Abstract.)

Wood, R.; Bever, E. L.; and Snyder, F. "The GLC and TLC resolution of diastereoisomeric polyhydroxystearates and assignment of configurations." Lipids 1:399-408 (1966).

-----. "The resolution of long-chain isomeric polyhydroxy acids by gas-liquid chromatography." Journal of the American Oil Chemists' Society 43:139A (1966). (Abstract.)

Wood, R., and Snyder, F. "Characterization and tentative identification of lipid ether present in Ehrlich ascites cells and other tumors." ACS Abstracts, p. C-257. New York: American Chemical Society, 1966. (Abstract.)

-----. "Gas-liquid chromatographic analysis of long chain isomeric glyceryl monoethers." Lipids 1:62-72 (1966).

-----. "A modified applicator for the uniform coating of thin-layer plates." Journal of Chromatography 21:318-19 (1966).

-----. "Modified silver ion thin-layer chromatography." Journal of the American Oil Chemists' Society 43:53-54 (1966).

MEDICAL 1967

Andrews, G. A. "Ethical considerations in human experimentation." In U.S. Atomic Energy Commission Report CONF-661018. Washington, D.C.: U.S. Atomic Energy Commission, 1967.

-----. "Radiation accidents and their management." Radiation Research Supplement 7:390-97 (1967).

-----. "Total-body irradiation in the human being." In Proceedings of the XIth International Congress of Rome, September 1965, pp. 1583-89. Excerpta Medica Foundation, 1967.

Andrews, G. A.; Congdon, C. C.; Edwards, C. L.; Gengozian, N.; Nelson, B.; and Vodopick, H. "Preliminary trials of clinical immunotherapy." Cancer Research 27:2535-41 (1967).

Andrews, G. A., and Lushbaugh, C. C. Radiobiological Factors in Manned Space Flight. Washington, D.C.: National Academy of Sciences--National Research Council, 1967.

Andrews, G. A.; Lushbaugh, C. C.; Kniseley, R. M.; White, D. A.; and Friedman, B. I. "Haematological effects of whole-body radiation in the human being." In IAEA Panel: Effects of Ionizing Radiations on the Haematopoietic Tissue, pp. 75-83. Vienna: International Atomic Energy Agency, 1967.

Arimizu, N., and Morris, A. C., Jr. "Area scanning for quantitative measurement of radioactivity in internal organs." Journal of Nuclear Medicine 8:312 (1967). (Abstract.)

Bergner, P.-E. E. "The concepts of mass, volume, and concentration." In Atomic Energy Commission Symposium Series no. 11, CONF-661010, pp. 21-37. Washington, D.C.: U.S. Atomic Energy Commission, 1967.

-----. Ergodic properties of the tracer system. Washington, D.C.: U.S. Atomic Energy Commission, 1967. (ORAU-103.)

-----. Turnover compartmentalization: a statistical tracer theory for analysis of whole-system retention data. Washington, D.C.: U.S. Atomic Energy Commission, 1967. (ORAU-104.)

-----. "Turnover compartmentalization theory." Journal of Nuclear Medicine 8:327 (1967). (Abstract.)

Bergner, P.-E. E., and Lushbaugh, C. C., eds. Compartments, pools, and spaces in medical physiology. U.S. Atomic Energy Commission Symposium Series no. 11, CONF-661010. Washington, D.C.: U.S. Atomic Energy Commission, 1967.

Bergner, P.-E. E.; Lushbaugh, C. C.; Gibbs, W. D.; and Franz, W. "Analogue computer analysis of human chromium-51 RBC survival and whole-body retention data." Journal of Nuclear Medicine 8:292-93 (1967). (Abstract.)

Cheng, S.-S.; Piantadosi, C.; and Snyder, F. "Lipid droplets and glyceryl ether diesters in Ehrlich ascites cells grown in tissue culture." Lipids 2:193-94 (1967).

Cloutier, R. J.; O'Foghludha, F.; and Comas, F. V.
Conference on dosimetry of total-body irradiation by external
photon beams. U.S. Atomic Energy Commission Report
CONF-670219. Washington, D.C.: U.S. Atomic Energy
Commission, 1967.

Cloutier, R. J., and Watson, E. E. "Measuring plutonium in
wounds: advantages of using the americium gamma ray."
Health Physics 13:811-13 (1967).

Comas, F. V., and Byrd, B. L. "Hemopoietic spleen colonies
in the rat." Radiation Research 32:355-65 (1967).

Dalton, C. P., and Cloutier, R. J. "An arrangement of
radioactive sources for a low exposure rate total-body
irradiation facility." Physics in Medicine and Biology
12:116 (1967). (Abstract.)

----- Source arrangement for a low-exposure rate total-body
irradiation facility for man. Washington, D.C.: U.S. Atomic
Energy Commission, 1967. (ORINS-52.)

Fanger, H., and Lushbaugh, C. C. "Radiation death from
cardiovascular shock following a criticality accident."
Archives of Pathology 83:446-60 (1967).

Gengozian, N.; Gottlieb, C. F.; and Allen, E. M.
"Demonstration of an early host-graft incompatibility
reaction in radiation chimeras with the Jerne plaque
technique." Proceedings of the Society for Experimental
Biology and Medicine 126:135-40 (1967).

Gengozian, N., and Hübner, K. F. "Effect of phytohemagglutinin (PHA) on an antibody-forming system." Journal of Immunology 99:184-90 (1967).

Gibbs, W. D.; Hodges, H. D.; and Lushbaugh, C. C. "Another method for correcting the initial whole-body count in iron-59 absorption studies in anemia." Blood 29:934-36 (1967). (Editorial).

Goh, K. O. "Cytogenetic studies in blastic crisis of chronic myelocytic leukemia." Archives of Internal Medicine 120:315-20 (1967).

-----. "The in vitro autoradiographic studies of the Ph¹ chromosome cells." Clinical Research 15:278 (1967). (Abstract.)

-----. "Inner chromosomal structures in the somatic metaphase of rat kangaroo (Potorous tridactylis): A light microscopic observation." Cytologia 32:416-19 (1967).

-----. "Pseudodiploid chromosomal pattern in chronic lymphocytic leukemia." Journal of Laboratory and Clinical Medicine 69:938-49 (1967).

Goh, K. O.; Swisher, S. N.; and Herman, E. C. "Chronic myelocytic leukemia and identical twins: additional evidence of the Philadelphia chromosome as postzygotic abnormality." Archives of Internal Medicine 120:214-19 (1967).

Hartman, R. E., and Hayes, R. L. "Gallium binding by blood serum." Federation of American Societies for Experimental Biology. Federation Proceedings 26:780 (1967). (Abstract.)

Hayes, R. L.; Carlton, J. E.; Byrd, B. L.; and Rafter, J. J.
"Factors influencing the distribution of labeled hydrous
ferric oxide colloid." Journal of Nuclear Medicine 8:302
(1967). (Abstract.)

Kimble, H. Interface scanner. Oak Ridge, Tennessee: ORAU,
1967. (ORAU-105.)

Kniseley, R. M. "The bone marrow." In Principles of Nuclear
Medicine; Henry N. Wagner, Jr., ed.; pp. 404-12.
Philadelphia: W. B. Saunders, 1967.

-----. "Book review: Clinical Capillary Microscopy."
American Journal of Clinical Pathology 48:199 (1967).

Likuski, H. J.; Debons, A. F.; and Cloutier, R. J.
"Inhibition of gold thioglucose-induced hypothalamic obesity
by glucose analogues." American Journal of Physiology
212:669-76 (1967).

Lim, J.; Piantadosi, C.; and Snyder, F. "A comparison of
phospholipid biosynthesis in irradiated bone marrow and
liver." Proceedings of the Society for Experimental Biology
and Medicine 124:1158-61 (1967).

Lushbaugh, C. C. "Radiation and shock." Journal of the
American Medical Association 200:181 (1967). (Editorial.)

-----. "Some biological end points of dosimetric value
derived from clinical data." In U.S. Atomic Energy
Commission Report CONF-670305, pp. 94-113. Washington, D.C.:
U.S. Atomic Energy Commission, 1967.

Lushbaugh, C. C.; Cloutier, R. J.; Humason, G.; Langham, J.; and Guzak, S. "Histopathologic study of intradermal plutonium metal deposits: their conjectured fate." Annals of the New York Academy of Sciences 145:791-97 (1967).

Lushbaugh, C. C.; Comas, F.; and Hofstra, R. "Clinical studies of radiation effects in man. A preliminary report of a retrospective search for dose-relationships in the prodromal syndrome." Radiation Research Supplement 7:398-412 (1967).

Lushbaugh, C. C., and Gibbs, W. D. "Decreased ^{24}Na excretion in rat GI syndrome after 1200-rad fission neutron exposures." Radiation Research 31:593-94 (1967). (Abstract.)

Medical Division, Oak Ridge Associated Universities.
Research report, 1966, for the year ending December 31, 1966.
Oak Ridge, Tennessee: ORAU, 1967. (ORAU-101.)

Oswald, E. O.; Piantadosi, C.; Anderson, C. E.; and Snyder, F. "Infrared spectra and polymorphism of glycerol ether derivatives." Chemistry and Physics of Lipids 1:270-81 (1967).

Pfleger, R. C.; Piantadosi, C.; and Snyder, F. "The biocleavage of isomeric glyceryl ethers by soluble liver enzymes in a variety of species." Biochimica et Biophysica Acta 144:633-48 (1967).

Pfleger, R. C., and Snyder, F. "Lipid turnover in an isolated population of irradiated bone marrow cells." Radiation Research 30:325-28 (1967).

Snyder, F. "Book review: Advances in Chromatography, Vol. 2." Journal of the American Oil Chemists' Society 44:464 (1967).

-----. "Book review: Advances in Chromatography, Vol. 3." Journal of the American Oil Chemists' Society 44:464-65 (1967).

-----. "Thin-layer chromatography radioassay: a review." Atomlight 58:1-16 (1967).

Snyder, F.; Pfleger, R. C.; and Piantadosi, C. "Cleavage of the 1- and 2-isomers of ¹⁴C-labeled glyceryl ethers by a soluble multienzyme system of rat liver." In Abstracts IV, p. 734. Tokyo: Seventh International Congress of Biochemistry, 1967.

Snyder, F., and Smith, D. "An automated system for sample collection and computer analysis of thin-layer radiochromatograms." In Separation Techniques in Chemistry and Biochemistry; Roy A. Keller, ed.; pp. 331-44. New York: Marcel Dekker, 1967.

Snyder, F., and Wood, R. "The subcellular distribution and metabolism of glyceryl ether diesters in Ehrlich ascites cells." Journal of the American Oil Chemists' Society 44:381 (1967). (Abstract.)

Uchiyama, G.; Hitchcock, A. A. C.; and Morris, A. C., Jr. "Clinical results with a color-recording rescanner." Journal of Nuclear Medicine 8:437-43 (1967).

Van Woert, M. H. "Oxidation of reduced nicotinamide adenine dinucleotide by melanin." Life Sciences 6:2605-12 (1967).

Wood, R. "GLC and TLC analysis of isopropylidene derivatives of isomeric polyhydroxy acids derived from positional and geometrical isomers of unsaturated fatty acids." Lipids 2:199-203 (1967).

Wood, R., and Snyder, F. "Characterization and identification of glyceryl ether diesters present in tumor cells." Journal of Lipid Research 8:494-500 (1967).

----- "Chemical and physical properties of isomeric glyceryl monoethers." Lipids 2:161-71 (1967).

----- "Quantitative determination of glyceryl alk-1-enyl and alkyl-alkenyl ethers in neutral and phospholipids." Journal of the American Oil Chemists' Society 44:380-81 (1967). (Abstract.)

MEDICAL 1968

Anderson, R. E.; Cumming, R. B.; and Snyder, F. "The lipid composition of L-M cells grown in suspension culture." Journal of the American Oil Chemists' Society 45:129 (1968). (Abstract.)

Andrews, G. A. "The therapeutic use of bone-marrow transplantation." In Proceedings of the International Conference on Leukemia - Lymphoma; Chris J. D. Zarafonetis, ed.; pp. 423-432. Philadelphia: Lea and Febiger, 1968.

Beck, W. L.; Callis, E. L.; and Cloutier, R. J. "Phantom depth-dose measurement with extruded LiF in a low-exposure-rate total-body irradiator." In U.S. Atomic Energy Commission Report CONF-680920, pp. 976-89. Washington, D.C.: U.S. Atomic Energy Commission, 1968.

Berger, J. D.; Watson, E. E.; and Cloutier, R. J. "Health physics aspects of low-energy accelerators." In U.S. Atomic Energy Commission Report CONF-680411, pp. 112-37. Washington, D.C.: U.S. Atomic Energy Commission, 1968.

Blank, M., and Snyder, F. "Determination of the position of double bonds in naturally occurring alkyl glyceryl ethers." Journal of the American Oil Chemists' Society 45:121 (1968). (Abstract.)

Carlson, D., and Gengozian, N. "The radiation exposure-rate effect: action upon the primary immune response in mice." Radiation Research 35:572 (1968). (Abstract.)

Cloutier, R. J., and Dalton, C. P. "Radiation safety problems connected with the medical use of radioisotopes." In Proceedings of the First International Congress of Radiation Protection, Rome, September 5-10, 1966, pp. 1603-13. London: Pergamon Press, 1968.

Comas, F. V. "The time factor in fractionated irradiation of mouse skin." In U.S. Atomic Energy Commission Report CONF-680410, pp. 18.1-18.12. Washington, D.C.: U.S. Atomic Energy Commission, 1968.

Comas, F. V.; Andrews, G. A.; and Nelson, B. "Spleen irradiation in secondary hypersplenism." American Journal of Roentgenology 104:668-73 (1968).

Cosgrove, G. E.; Lushbaugh, D. B.; Humason, G.; and Anderson, M. G. "Synhimantus (Nematoda) associated with gastric squamous tumors in muskrats." Bulletin of the Wildlife Diseases Association 4:54-57 (1968).

Cosgrove, G. E.; Nelson, B.; and Gengozian, N. "Helminth parasites of the tamarin, Saguinus fuscicollis." Laboratory Animal Care 18:654-56 (1968).

Debons, A. F.; Krimsky, I.; Likuski, H. J.; From, A.; and Cloutier, R. J. "Gold thioglucose damage to the satiety center: inhibition in diabetes." American Journal of Physiology 214:652-58 (1968).

Edwards, C. L.; Tanida, R.; and Gibbs, W. D. "Tracer and treatment discrepancy as a complication of radioiodine therapy." Journal of Nuclear Medicine 9:367-68 (1968). (Abstract.)

Edwards, C. L.; Tanida, R.; and Mora, R. "Laminar scintiscans for determining depth of small metastases of thyroid carcinoma." Journal of Nuclear Medicine 9:313-14 (1968).
(Abstract.)

Frome, E. L., and Beauchamp, J. J. "Maximum likelihood estimation of survival curve parameters." Biometrics 24:595-605 (1968).

Gengozian, N.; Carlson, D. E.; and Gottlieb, C. F. "Radiation exposure rates: effects on the immune system." In U.S. Atomic Energy Commission Report CONF-680410, pp. 16.1-16.23. Washington, D.C.: U.S. Atomic Energy Commission, 1968.

Gibbs, W. D.; Hodges, H. D.; and Lushbaugh, C. C. "Precise geometry-independent radioassay of large biological samples." Journal of Nuclear Medicine 9:264-66 (1968).

Goh, K. O. "Autoradiographic studies in chronic myelocytic leukemia." In Atomic Energy Commission Symposium Series no. 13, CONF-671111, pp. 695-715. Washington, D.C.: U.S. Atomic Energy Commission, 1968.

-----. "Chromosomes in chronic lymphocytic leukemia." The Lancet 2:104 (1968.) (Editorial.)

-----. "Cytogenetic studies of bone-marrow lymphocytes after total-body irradiation." Clinical Research 16:42 (1968). (Abstract.)

-----. "The effect of deoxyribonucleotide triphosphates on pulverized human chromosomes at G₂." Clinical Research 16:452. (1968).

-----. "Large abnormal acrocentric chromosome associated with human malignancies. Possible mechanism of establishing clone of cells." Archives of Internal Medicine 122:241-48 (1968).

-----. "Smaller G (Gp-) and t (Gp-; Dpt) chromosomes. a familial study with one member having acute leukemia." American Journal of Diseases in Children 115:732-38 (1968).

-----. "Total-body irradiation and human chromosomes: cytogenetic studies of the peripheral blood and bone marrow leukocytes seven years after total-body irradiation." Radiation Research 35:155-70 (1968).

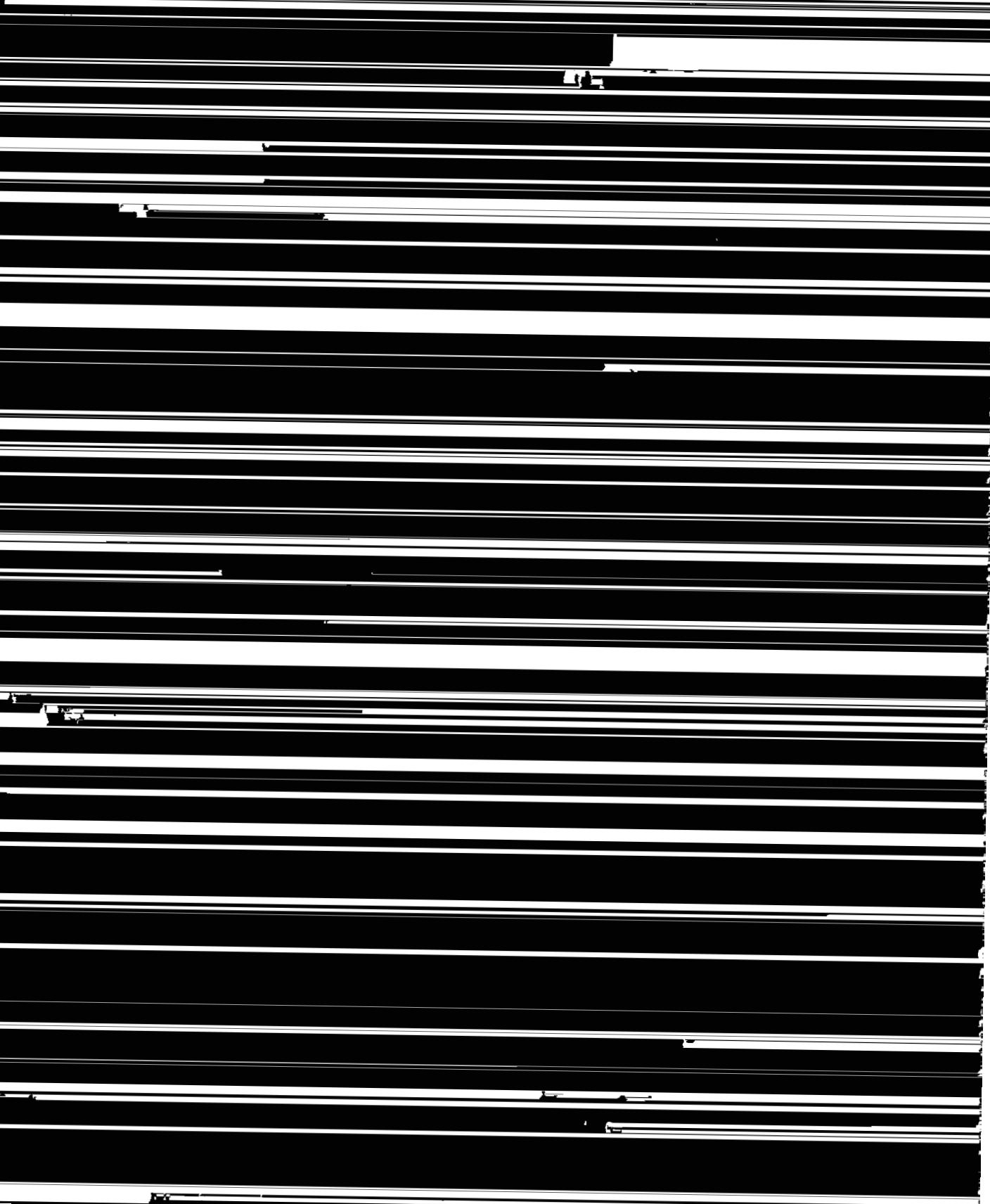
Goh, K. O., and Sumner, H. "Breaks in normal human chromosomes: are they induced by a transferable substance in the plasma of persons exposed to total-body irradiation?" Radiation Research 35:171-81 (1968).

Goswitz, F. A.; Edwards, C. L.; and Vodopick, H. "Assessment of erythropoiesis by ferrokinetics and radiocolloid bone-marrow scanning." Journal of Nuclear Medicine 9:319 (1968). (Abstract.)

Hartman, R. E., and Hayes, R. L. "Indium and gallium binding by blood serum." Federation of American Societies for Experimental Biology. Federation Proceedings 27:838 (1968). (Abstract.)

Hayes, R. L.; Byrd, B. L.; and Carlton, J. E. "¹³¹mIn as a possible bone scanning agent." Journal of Nuclear Medicine 9:323 (1968). (Abstract.)

Hayes, R. L.; Goswitz, F. A.; and Murphy, B. E. P.; eds.
Radioisotopes in medicine: in vitro studies. U.S. Atomic
Energy Commission Symposium Series no. 13, CONF-671111.
Washington, D.C.: U.S. Atomic Energy Commission, 1968.



Lushbaugh, C. C.; Comas, F. V.; and Andrews, G. A. "Radiation dose-response relations derived from clinical data." Health Physics 15:165-66 (1968). (Abstract.)

Lushbaugh, C. C., and Lushbaugh, D. B. "Evaluation of therapeutic response using change in electronically determined red blood cell size distribution." American Journal of Clinical Pathology 50:627 (1968). (Abstract.)

Medical Division, Oak Ridge Associated Universities. Research report, 1967, for the year ending December 31, 1967. Oak Ridge, Tennessee: ORAU, 1968. (ORAU-106.)

Pfannenstiel, P.; Sitterson, B. W.; and Anderson, G. A. "¹³⁰I for studying the effects of thyroid-stimulating hormone in patients with thyroid cancer." Journal of Nuclear Medicine 9:90-95 (1968).

Pfleger, R. C.; Anderson, N. G.; and Snyder, F. "Lipid class and fatty acid composition of rat liver plasma membranes isolated by zonal centrifugation." Biochemistry 7:2826-33 (1968).

Porter, R. P. "Chimerism and immunologic tolerance: a consequence of fraternal twinning in the marmoset." Dissertation Abstracts 29:479-B (1968). (Abstract.)

Porter, R. P., and Gengozian, N. "Immunologic tolerance of grafted skin exchanged between marmoset dizygotic cotwins." Federation of American Societies for Experimental Biology. Federation Proceedings 27:505 (1968). (Abstract.)

----- "Transplantation in the marmoset (Callithricidae): a technique for orthotopic, fitted skin grafts." Proceedings of the Society for Experimental Biology and Medicine 127:860-67 (1968).

Ross, D. A., and Morris, A. C., Jr. "A stable, low-background whole-body counter designed for uniform detector geometry." International Journal of Applied Radiation and Isotopes 19:731-39 (1968).

Snyder, F. "Automated thin-layer chromatography." Journal of the American Oil Chemists' Society 45:143 (1968).
(Abstract.)

----- "Thin-layer chromatography radioassay: a review." Advance Tracer Method 4:81-104 (1968).

Snyder, F., and Cress, E. A. "Application of thin-layer chromatographic zonal ^{14}C -profile scans to the analysis of urinary constituents derived from lipids." Clinical Chemistry 14:529-34 (1968).

Snyder, F., and Piantadosi, C. "Acylation and degradation of alkoxyglycerols in vitro." Federation of American Societies for Experimental Biology 27:458 (1968).
(Abstract.)

----- "Deacylation of isomeric diacyl ($1-^{14}\text{C}$) alkoxy-glycerols by pancreatic lipase." Biochimica et Biophysica Acta 152:794-97 (1968).

Snyder, F.; Piantadosi, C.; and Wood, R. "The metabolism of glyceryl thioethers." Journal of the American Oil Chemists' Society 45:84 (1968). (Abstract.)

Snyder, F., and Wood, R. "Deposition of triglycerides of increased carbon number in irradiated rat marrow." Radiation Research 33:142-49 (1968).

-----. "The occurrence and metabolism of alkyl and alk-1-enyl ethers of glycerol in transplantable rat and mouse tumors." Cancer Research 28:972-78 (1968).

Ur, A., and Lushbaugh, C. C. "Some effects of electrical fields on red blood cells with remarks on electronic red cell sizing." British Journal of Haematology 15:527-38 (1968).

Van Woert, M. H. "Reduced nicotinamide-adenine dinucleotide oxidation by melanin: inhibition by phenothiazines." Proceedings of the Society for Experimental Biology and Medicine 129:165-71 (1968).

Webb, A. M.; Edwards, C. L.; and Wright, M. F. "Automated determination of muramidase activity." Clinical Chemistry 14:820 (1968). (Abstract.)

Wood, R. "Gas-liquid chromatographic analysis of long-chain fatty alcohols." Journal of Gas Chromatography 6:94-96 (1968).

Wood, R., and Bauman, W. J. "Gas-liquid chromatographic analyses of 1,2-ethanediol monoethers and monoesters." Journal of Lipid Research 9:733-38 (1968).

Wood, R., and Snyder, F. "Analysis of glyceryl-alkyl and alk-1-enyl ethers by gas-liquid chromatography and thin-layer chromatography." Journal of the American Oil Chemists' Society 45:175 (1968). (Abstract.)

-----. "Quantitative determination of alk-1-enyl- and alkyl-glyceryl ethers in neutral lipids and phospholipids." Lipids 3:129-35 (1968).

MEDICAL 1969

Anderson, R. E.; Cumming, R. B.; Walton, M.; and Snyder, F. "Lipid metabolism in cells grown in tissue culture: O-alkyl, O-alk-1-enyl, and acyl moieties of L-M cells." Biochimica et Biophysica Acta 176:491-501 (1969).

Anderson, R. E.; Garrett, R. D.; Blank, M. L.; and Snyder, F. "The quantitative production of aldehydes from O-alk-1-enyl glycerols." Lipids 4:327-30 (1969).

Anderson, R. E., and Snyder, F. "Quantitative collection of $^{14}\text{CO}_2$ in the presence of labeled short-chain acids." Analytical Biochemistry 27:311-14 (1969).

Andrews, G. A.; Balish, E.; Edwards, C. L.; Kniseley, R. M.; and Lushbaugh, C. C. "Possibilities for improved treatment of persons exposed in radiation accidents." In Handling of Radiation Accidents, pp. 119-35. Vienna: International Atomic Energy Agency, 1969.

Andrews, G. A.; Congdon, C. C.; Edwards, C. L.; Gengozian, N.; Nelson, B.; and Vodopick, H. "Preliminary trials of clinical immunotherapy." In Year Book of Cancer, pp. 232-84. Chicago: Year Book Medical Publishers, 1969. (Abstract.)

Arimizu, N.; Kakehi, H.; and Morris, A. C., Jr. "Area scanning for quantitative measurement of radioactivity in internal organs." In Medical Radioisotope Scintigraphy, vol. 1, pp. 653-63. Vienna: International Atomic Energy Agency, 1969.

Arimizu, N., and Morris, A. C., Jr. "Quantitative measurement of radioactivity in internal organs by area scanning." Journal of Nuclear Medicine 10:265-69 (1969).

Balish, E., and Pearson, T. A. "Studies on the bacterial flora of three men accidentally exposed to total-body irradiation." Radiation Research 39:525-26 (1969).

(Abstract.)

Balish, E., and Shapiro, S. K. "S-adenoxylmethionine: homocysteine methyl-transferase activity in Candida albicans." Bacteriological Proceedings 69:145 (1969).

(Abstract.)

Barclay, T. R., and Morris, A. C., Jr. "On-line computer interfacing of an analytrol film reader for measuring size of radioactive colloid particles." Journal of Nuclear Medicine 10:387 (1969). (Abstract.)

Berger, J. D. "Book review: Code of Practice for the Protection of Persons Exposed to Ionizing Radiations in Research and Teaching." Nuclear Safety 10:521 (1969).

Bergner, P.-E. E. Theory of quantitative radiation--response time-data. Washington, D.C.: U.S. Atomic Energy Commission, 1969. (ORAU-109.)

Blank, M. L., and Snyder, F. "The occurrence of fatty alcohols in normal tissues and neoplasms." Journal of the American Oil Chemists' Society 46:139 (1969). (Abstract.)

----- "The preparation of alkyl-1, 2 diols and their chromatographic behavior in relation to O-alkyl-glycerols." Biochimica et Biophysica Acta 187:154-56 (1969).

1029436

Carlson, D. E. "The radiation exposure-rate effect: actions upon the immune response in mice." Dissertation Abstracts 29:4040B (1969). (Abstract.)

Cloutier, R. J. "Book review: Atlas of Radiation Dose Distribution, Vol. III." Health Physics 16:815 (1969).

Cloutier, R. J.; Smith, S. A.; Snyder, W. S.; and Warner, G. G. "Dose to the fetus from gamma emitters present in the bladder." Health Physics 17:362 (1969). (Abstract.)

Comas, F. V.; Andrews, G. A.; and Edwards, C. L. "Changes in leukocyte values in patients with chronic granulocytic leukemia receiving spleen irradiation." Radiation Research 39:491 (1969). (Abstract.)

Cotman, C.; Blank, M. L.; Moehl, A.; and Snyder, F. "Lipid composition of synaptic plasma membranes isolated from rat brain by zonal centrifugation." Biochemistry 8:4606-12 (1969).

Debons, A. F.; Krimsky, I.; From, A.; and Cloutier, R. J. "Rapid effects of insulin on the hypothalamic satiety center." American Journal of Physiology 217:1114-18 (1969).

Edwards, C. L., and Hayes, R. L. "Gallium-67 for tumor scanning." In Book of Abstracts, pp. 92-93. Tokyo: International Congress of Radiology, 1969.

----- "Scanning tumors of soft tissue and bone with ⁶⁷Ga-citrate." Journal of Nuclear Medicine 10:332 (1969). (Abstract.)

----- "Tumor scanning with ⁶⁷Ga-citrate." Journal of Nuclear Medicine 10:103-5 (1969).

Gengozian, N. "Marmosets: their potential in experimental medicine." Annals of the New York Academy of Sciences 162:336-62 (1969).

Gengozian, N.; Batson, J. S.; Greene, C. T.; and Goslee, D. G. "Hemopoietic chimerism in imported and laboratory-bred marmosets." Transplantation 8:633-52 (1969).

Gengozian, N.; Carlson, D. E.; and Allen, E. M. "Transplantation of allogeneic and xenogeneic (rat) marrow in irradiated mice as affected by radiation exposure rates." Transplantation 7:259-73 (1969).

Gengozian, N., and Congdon, C. C. "Effect of syngeneic antilymphocyte serum on rat-mouse radiation chimeras." Transplantation Proceedings 1:34-38 (1969).

Gibbs, W. D.; Hodges, H. D.; Queener, R. F.; and Lushbaugh, C. C. "Improvement in accuracy of whole-body radioisotope quantitation by the scatter-window method." Journal of Nuclear Medicine 10:335 (1969). (Abstract.)

Gibbs, W. D., and Lushbaugh, C. C. "Whole-body counter systems." In Handbook of Radioactive Nuclides; Yen Wang, ed.; pp. 134-40. Cleveland, Ohio: Chemical Rubber Company, 1969.

Goh, K. "Chromosomal vacuolization, dissociation, and breakage associated with chloramphenicol." Clinical Research 17:326 (1969). (Abstract.)

----- "Exogenous deoxyribonucleoside triphosphates: their effect on pulverized human chromosomes at the G₂ phase." Proceedings of the Society for Experimental Biology and Medicine 131:942-46 (1969).

Goswitz, F. A.; Edwards, C. L.; Wright, M. F.; and Clevenger, M. "Value of radioisotopic tests in primary myelofibrosis." Southern Medical Journal 62:1431 (1969). (Abstract.)

Goswitz, F. A.; Vodopick, H.; and Clevenger, M. "Blood lymphocyte kinetics in patients with chronic lymphocytic leukemia (CLL)." Journal of Nuclear Medicine 10:404 (1969). (Abstract.)

----- "The need to measure red-cell mass and plasma volume independently in patients with hematologic disorders." Southern Medical Journal 62:1431-32 (1969). (Abstract.)

Harlow, R. D.; Lumb, R. H.; and Wood, R. "Insect lipids: carbon number distribution of triglycerides in five species." Comparative Biochemistry and Physiology 30:761-69 (1969).

Hartman, R. E., and Hayes, R. L. "The binding of gallium by blood serum." Journal of Pharmacology and Experimental Therapeutics 168:193-98 (1969).

Hayes, R. L.; Byrd, B. L.; Carlton, J. E.; Nelson, B.; and Swartzendruber, D. C. "Studies of the concentration of gallium in soft-tissue tumors." Southern Medical Journal 62:1432 (1969). (Abstract.)

Hayes, R. L.; Carlton, J. E.; and Byrd, B. L. "Localization of ^{67}Ga in soft-tissue tumors in experimental animals." Journal of Nuclear Medicine 10:406 (1969). (Abstract.)

Hodges, H. D.; Edwards, C. L.; Lushbaugh, C. C.; and Gibbs, W. D. "Whole-body ^{131}I retention as a quantitative measure of thyroid function." Journal of Nuclear Medicine 10:459 (1969). (Abstract.)

Hübner, K. F., and Gengozian, N. "Critical variables of the Jerne plaque technique as applied to rodent antibody-forming systems responding to heterologous red cell antigens." Immunology 102:155-67 (1969).

Humason, G. L., and Lushbaugh, C. C. "Sirius supra blue FGL-CF; superior to analine blue in the combined elastin, reticulum, and collagen stain." Stain Technology 44:105-6 (1969).

Hurst, S. K.; Mardon, D. N.; and Balish, E. "Germ-tube formation by Candida albicans in a defined liquid culture medium." Bacteriological Proceedings 69:33-34 (1969).
(Abstract.)

Kakehi, H.; Gibbs, W. D.; and Hayes, R. L. Counting characteristics of a medium-level whole-body counter. Washington, D.C.: U.S. Atomic Energy Commission, 1969.
(ORAU-108.)

Kniseley, R. M. "Book review: Progress in Atomic Medicine." American Journal of Clinical Pathology 52:484 (1969).

Kniseley, R. M.; Andrews, G. A.; Edwards, C. L.; and Hayes, R. L. "Bone-marrow and skeletal scanning." Radiological Clinics of North America 7:265-80 (1969).

Lee, T.-C.; Swartzendruber, D. C.; and Snyder, F. "Zonal centrifugation of microsomes from rat liver: resolution of rough- and smooth-surfaced membranes." Biochemical and Biophysical Research Communications 36:748-55 (1969).

Lozzio, B. B., and Comas, F. V. "Biological effects of pokeweed mitogen." International Archives of Allergy and Applied Immunology 36:266-81 (1969).

Lushbaugh, C. C. "Reflections on some recent progress in radiation biology." In Advances in Radiation Biology, vol. 3, pp. 277-313. New York: Academic Press, 1969.

----- "Theoretical and practical aspects of models explaining 'gastrointestinal death' and other lethal radiation syndromes." In Comparative Cellular and Species Radiosensitivity; V. P. Bond and T. Sugahara, eds.; pp. 288-97. Tokyo: Igaku Shoin, 1969.

Lushbaugh, C. C., and Auxier, J. "Reestimation of human LD₅₀ radiation levels at Hiroshima and Nagasaki." Radiation Research 39:526 (1969). (Abstract.)

Lushbaugh, C. C.; Frome, E. L.; Davis, H. T.; and Bibler, D. S. "Power spectrum of the impedance pneumograph: a data reduction system producing an analytical parameter of potential clinical usefulness." Aerospace Medicine 40:425-29 (1969).

Lushbaugh, C. C.; Humason, G.; and Gengozian, N. "Intrauterine death from congenital Chagas disease in laboratory-bred marmosets (Saguinus fuscicollis lagonotus)."American Journal of Tropical Medicine and Hygiene 18:662-65 (1969).

Mardon, D. N., and Balish, E. "Modifications in a French pressure cell-laboratory press system." Applied Microbiology 17:777 (1969).

Medical Division, Oak Ridge Associated Universities. Research report, 1968, for the year ending December 31, 1968. Oak Ridge, Tennessee: Oak Ridge Associated Universities, 1969. (ORAU-107.)

Pearson, T. A., and Balish, E. "Isolation and characterization of a Sphaerophorus-type microorganism from the large intestines of man." Bacteriological Proceedings 69:103-4 (1969). (Abstract.)

Piantadosi, C.; Snyder, F.; and Wood, R. "Synthesis of ^{35S}- and ^{14C}-labeled glyceryl thioethers." Journal of Pharmaceutical Sciences 58:1028-29 (1969).

Porter, R. P., and Gengozian, N. "Immunological tolerance and rejection of skin allografts in the marmoset." Transplantation 8:653-65 (1969).

Regan, J. D.; Vodopick, H.; Takeda, S.; Lee, W. H.; and Faulcon, F. M. "Serine requirement in leukemic and normal blood cells." Science 163:1452-53 (1969).

Savage, N., and Balish, E. "Induction of auxotrophs of Candida albicans." Bacteriological Proceedings 69:33 (1969).

Snyder, F. "The biochemistry of lipids containing ether bonds." In Progress in the Chemistry of Fats and Other Lipids, vol. 10, part 3, pp. 287-335. New York: Pergamon Press, 1969.

----- "Enzymic pathways for the biosynthesis and bio-cleavage of alkyl glyceryl ethers." Journal of the American Oil Chemists' Society 46:115 (1969). (Abstract.)

-----. "Ether-linked lipids in neoplasms of man and animals: methods of measurement and the occurrence and nature of alkyl and alk-1-enyl moieties." In Advances in Experimental Medicine and Biology, vol. 4, pp. 609-21. New York: Plenum Press, 1969.

-----. "A review of instrumentation and procedures for ^{14}C and ^3H radioassay by thin-layer and gas-liquid chromatography." Isotope and Radiation Technology 6:381-400 (1969).

Snyder, F., and Blank, M. L. "Relationships of chain lengths and double bond locations in O-alkyl, O-alk-1-enyl, acyl, and fatty alcohol moieties in preputial glands of mice." Archives of Biochemistry and Biophysics 130:101-10 (1969).

Snyder, F.; Blank, M. L.; and Morris, H. P. "Occurrence and nature of O-alkyl and O-alk-1-enyl moieties of glycerol in lipids of Morris transplanted hepatomas and normal rat liver." Biochimica et Biophysica Acta 176:502-10 (1969).

Snyder, F.; Blank, M. L.; Sodsma, J.; and Morris, H. P. "Occurrence and enzymatic cleavage of glyceryl ethers in Morris transplanted hepatomas and normal rat liver." Proceedings of the American Association for Cancer Research 10:84 (1969). (Abstract.)

Snyder, F.; Malone, B.; and Blank, M. L. "The biosynthesis of alkyl glyceryl ethers by microsomal enzymes of digestive glands and gonads of the starfish, Asterias forbesi." Biochimica et Biophysica Acta 187:302-6 (1969).

Snyder, F.; Malone, B.; and Soodsma, J. "Metabolism of long-chain fatty alcohols: formation of waxes and glyceryl ethers." Journal of the American Oil Chemists' Society 46:9 (1969). (Abstract.)

Snyder, F.; Malone, B.; and Wykle, R. L. "The biosynthesis of alkyl ether bonds in lipids by a cell-free system." Biochemical and Biophysical Research Communications 34:40-47 (1969).

Snyder, F., and Moehl, A. "Use of liquid scintillation quenching to quantitate lipid mass." Analytical Biochemistry 28:503-9 (1969).

Snyder, F.; Piantadosi, C.; and Wood, R. "The metabolism of glyceryl thioethers." Proceedings of the Society for Experimental Biology and Medicine 130:1170-74 (1969).

Snyder, F., and Wood, R. "Alkyl and alk-1-enyl ethers of glycerol in lipids from normal and neoplastic tumor tissues." Cancer Research 29:251-57 (1969).

Snyder, F.; Wykle, R. L.; and Malone, B. "The biosynthesis of alkyl ether bonds in lipids from glyceraldehyde-3-phosphate and fatty alcohols by microsomal enzymes." Federation of American Societies for Experimental Biology. Federation Proceedings 28:595 (1969). (Abstract.)

----- "A new metabolic pathway: biosynthesis of alkyl ethers bonds from glyceraldehyde-3-phosphate and fatty alcohols by microsomal enzymes." Biochemical and Biophysical Research Communications 34:315-21 (1969).

Swartzendruber, D. C. "Localization of C-type viruses in preleukemic AKR mouse spleen." In Proceedings, 27th Annual Meeting, Electron Microscopy Society of America; Claude J. Arceneaux, ed.; pp. 386-87. Baton Rouge, Louisiana: Claitor's Publishing Division, 1969.

Upton, A. C.; Cosgrove, G. E.; and Lushbaugh, C. C. "Induction of carcinoma of the glandular stomach in mice by whole-body irradiation." In Experimental Carcinoma of the Glandular Stomach, pp. 63-74. Tokyo: Maruzen Company, 1969.

Upton, A. C., and Lushbaugh, C. C. "The Pathological anatomy of total-body irradiation." In Atomic Medicine, 5th edition, pp. 154-88. Baltimore: Williams and Wilkins, 1969.

Vodopick, H.; Rupp, E. M.; Comas, F. V.; Goswitz, F. A.; and Edwards, C. L. "³²P-DFF leukokinetic study of the mechanisms of splenic irradiation in CGL." Journal of Nuclear Medicine 10:449 (1969). (Abstract.)

Vodopick, H. A.; Rupp, E. M.; and Gengozian, N. "The bi-directional in vitro mixed leukocyte reaction: a mutual inhibitory phenomenon?" Transplantation 7:155-64 (1969).

Watson, E. E.; Cloutier, R. J.; and Berger, J. D. "Tritium concentrations in neutron generator pump oil." Health Physics 17:739-40 (1969).

Webb, A. M. "A new semiautomated thyroxine determination by iodine displacement." Clinical Chemistry 15:764 (1969). (Abstract.)

Wood, R.; Baumann, W. J.; Snyder, F.; and Mangold, H. K.
"Gas-liquid chromatography of dialkyl, alkyl acyl, and
diacyl derivatives of glycerol." Journal of Lipid Research
10:128-31 (1969).

Wood, R., and Harlow, R. D. "Gas-liquid chromatographic
analysis of free long-chain aldehydes." Journal of Lipid
Research 10:463-65 (1969).

-----. "Metabolic relations derived from structural anal-
yses of neutral glycerides and phosphoglycerides." Journal
of the American Oil Chemists' Society 46:116 (1969).
(Abstract.)

-----. "Rat liver lipids: metabolic relationships derived
from structural analyses of neutral glycerides and phospho-
glycerides." Journal of the American Oil Chemists' Society
46:7 (1969). (Abstract.)

-----. "Structural analyses of rat liver phosphoglycer-
ides." Archives of Biochemistry and Biophysics 135:272-81
(1969).

-----. "Structural Studies of neutral glycerides and phos-
phoglycerides of rat liver." Archives of Biochemistry and
Biophysics 131:495-501 (1969).

Wood, R.; Harlow, R. D.; and Lambremont, E. N. "GLC
analysis of Heliothis virescens triglycerides at various
metamorphic stages." Lipids 4:159-62 (1969).

Wood, R.; Harlow, R. D.; and Snyder, F. "Alkyl and
alk-1-enyl glyceryl ethers derived from various rat tissue
phospholipids." Biochimica et Biophysica Acta 176:641-43
(1969).

Wood, R.; Piantadosi, C.; and Snyder, F. "Quantitative analysis and comparison of the physical properties of O-alkyl and S-alkyl ethers of glycerol." Journal of Lipid Research 10:370-73 (1969).

Wood, R., and Snyder, F. "Tumor lipids: metabolic relationships derived from structural analyses of acyl, alkyl, and alk-1-enyl moieties of neutral glycerides and phosphoglycerides." Archives of Biochemistry and Biophysics 131:478-94 (1969).

Wykle, R. L., and Snyder, F. "The glycerol source for the biosynthesis of alkyl glyceryl ethers." Biochemical and Biophysical Research Communications 37:658-62 (1969).

MEDICAL 1970

Andrews, G. A.; Comas, F. V.; Edwards, C. L.; Kniseley, R. M.; Lushbaugh, C. C.; and Vodopick, H. Hematologic and therapeutic effects of total-body irradiation (50 R-100 R) in patients with malignant lymphoma, chronic lymphocytic and granulocytic leukemias, and polycythemia vera. Washington, D.C.: U.S. Atomic Energy Commission, 1970. (ORAU-112.)

Andrews, G. A.; Kniseley, R. M.; Vodopick, H.; Bergner, P.-E.; and Lushbaugh, C. C. "Hematologic responses to total-body irradiation." In Radioisotope in Pharamakokinetic und Klinischer Biochemie; G. Hoffmann and H. A. Ladner, eds.; pp. 517-27. Stuttgart: Nuklear Medizin, 1970.

Arimizu, N.; Kakehi, H.; and Saegusa, K. "New accessories of the scintillation camera for producing the simultaneous section scintigrams of multiple layers." Journal of Nuclear Medicine 11:618 (1970). (Abstract.)

Arimizu, N., and Morris, A. C., Jr. "Quantitative measurements of radioactivity deposited in internal organs using computer analysis of scintigraphy." In Proceedings of the 9th Japan Conference on Radioisotopes, pp. 378-81. 1970.

Balish, E.; Pearson, T. A.; and Chaskes, S. "Irradiated humans: microbial flora, immunoglobulins, complement (C'3), transferrin, agglutins, and bacteriocidins." Radiation Research 43:729-56 (1970).

1029448

Barclay, T. R.; Morris, A. C., Jr.; Hayes, R. L.; Carlton, J. E.; and McDow, A. E., Jr. "On-line computer interfacing of a densitometer film reader for measuring the size of radioactive colloid particles." Analytical Chemistry 42:685-86 (1970).

Beck, W. L.; Cloutier, R. J.; Comas, F. V.; and Lushbaugh, C. C. "Human depth-dose estimates in multidirectional gamma-ray fields." Physics in Medicine and Biology 15:144 (1970). (Abstract.)

Beck, W. L.; Stokes, T. R.; Cloutier, R. J.; and Lushbaugh, C. C. "Dosimetry for clinical total-body irradiation." AAPM Quarterly Bulletin 4:66 (1970). (Abstract.)

Bernard, S. R., and Hayes, R. L. "Dose to various segments of the gastrointestinal tract." In U.S. Atomic Energy Commission Symposium Series no. 20, CONF-691212, pp. 295-314. Washington, D.C.: U.S. Atomic Energy Commission, 1970.

Blank, M. L., and Snyder, F. "Long chain fatty alcohols in normal and neoplastic tissues." Lipids 5:337-41 (1970).

----- "Specificities of alkaline and acid phosphatases in the dephosphorylation of phospholipids." Biochemistry 9:5034-36 (1970).

Blank, M. L.; Wykle, R. L.; Piantadosi, C.; and Snyder, F. "Biosynthesis of O-alkyl and O-alk-1 enyl ether-linked lipids in neoplastic cells." Proceedings of the American Society for Cancer Research 11:9 (1970). (Abstract.)

----- "The biosynthesis of plasmalogens from labeled O-alkylglycerols in Ehrlich ascites cells." Biochimica et Biophysica Acta 210:442-47 (1970.).

Carlson, D. E., and Gengozian, N. "Radiation exposure-rate dependence of the immune response in mice." Radiology 97:433-38 (1970).

Chaskes, S., and Balish, E. "Immunoglobulins (IgG, IgA, and IgM), complement (C'3), and transferrin in irradiated humans." Bacteriological Proceedings 70:77 (1970).
(Abstract.)

Cloutier, R. J. "Symposium on medical radionuclides: radiation dose and effect." Nuclear Safety 11:475-81 (1970).

Cloutier, R. J.; Edwards, C. L.; and Snyder, W. S.; eds. Medical radionuclides: radiation dose and effects. U.S. Atomic Energy Commission Symposium Series no. 20, CONF-691212. Washington, D.C.: U.S. Atomic Energy Commission, 1970.

Cloutier, R. J., and Watson, E. E. "Radiation dose from radioisotopes in the blood." In U.S. Atomic Energy Commission Symposium Series no. 20, CONF-691212, pp. 325-46. Washington, D.C.: U.S. Atomic Energy Commission, 1970.

Comas, F. V. "The radiosensitivity of rat bone-marrow cells." International Journal of Radiation Biology 17:549-57 (1970).

Comas, F. V.; Edwards, C. L.; and Vodopick, H. "Splenic irradiation in chronic granulocytic leukemia: changes in leukocyte values." Radiation Research 42:413-23 (1970).

Corrill, L. S.; Stokes, T. R.; and Lushbaugh, C. C. "Accumulation rates of GI and marrow damage in pair-irradiated mice during continuous and fractionated daily exposures." Radiation Research 43:271 (1970). (Abstract.)

Cosgrove, G. E.; Humason, G.; and Lushbaugh, C. C. "Trichospirura leptostoma, a nematode of the pancreatic ducts of marmosets (Saguinus spp.)."Journal of the American Veterinary Medicine Association 157:696-98 (1970).

Cosgrove, G. E.; Nelson, B. M.; and Self, J. T. "The pathology of pentastomid infection in primates." Journal of Laboratory Animal Care 20:354-60 (1970).

Debons, A. F.; Krimsky, I.; From, A.; and Cloutier, R. J. "Gold thioglucose induction of obesity: significance of focal gold deposits in hypothalamus." American Journal of Physiology 219:1403-8 (1970).

----- "The histopathology of the gold thioglucose-induced destruction of the hypothalamic satiety center: evidence for direct participation of insulin in the functioning of the center." In Nutrition: Proceedings of the 8th International Congress of Nutrition, pp. 220-22. Amsterdam: Excerpta Medica, 1970.

----- "Site of action of gold thioglucose in the hypothalamic satiety center." American Journal of Physiology 219:1397-1402 (1970).

Dickson, H.; Roberts, E., Jr.; Butler, H. M.; Cloutier, R. J.; Smithwick, G.; Watson, E. E.; Haywood, F. F.; and Berger, J. D. "Radiation Safety in the operation of a low-energy accelerator." In U.S. Atomic Energy Commission Report CONF-700322, pp. 441-58. Washington, D.C.: U.S. Atomic Energy Commission, 1970.

Edwards, C. L., and Hayes, R. L. "Scanning malignant neoplasms with gallium-67." Journal of the American Medical Association 212:11 82-90 (1970).

-----. "Tumor scanning with ^{67}Ga citrate." In Year Book of Cancer, pp. 350-52. Chicago: Year Book Medical Publishers, 1970.

Edwards, C. L.; Hayes, R. L.; Nelson, B.; and Tehranian, N. "Clinical investigation of ^{67}Ga for tumor scanning." Journal of Nuclear Medicine 11:316-17 (1970). (Abstract.)

Edwards, C. L.; Nelson, B.; and Hayes, R. L. "Localization of gallium in human tumors." Clinical Research 18: 89 (1970). (Abstract.)

Gengozian, N., and Merritt, C. B. "Effect of unilateral ovariectomy on twinning frequency in the marmoset." Journal of Reproduction and Fertility 23:509-12 (1970).

Gibbs, W. D.; Hodges, H. D.; Bailey, M.; and Lushbaugh, C. C. "Accurate whole-body quantitation of ^{131}I retention by counting a scatter window." Journal of Nuclear Medicine 11:487-90 (1970).

Goh, K. O. "Inner chromosomal structure of human leukemic metaphase: a light microscopic observation." Cytologia 35:465-70 (1970).

Goswitz, F. A., and Vodopick, H. "Pitfalls to avoid in the interpretation of CoB₁₂ tests." Southern Medical Journal 63:1369 (1970). (Abstract.)

----- "Radiocolloid scans in chronic granulocytic leukemia." Journal of Nuclear Medicine 11:630-31 (1970). (Abstract.)

Goswitz, F. A.; Vodopick, H.; and Clevenger, M. "The day one index and organ erythropoiesis." Southern Medical Journal 63:1368-69 (1970). (Abstract.)

Gottlieb, C. F., and Gengozian, N. "X-ray and neutron depression of the mouse immune system." Radiation Research 43:217 (1970). (Abstract.)

Hagen, P. O., and Blank, M. L. "Minor lipid components of Clostridium butyricum." Journal of the American Oil Chemists' Society 47:83A (1970). (Abstract.)

Hayes, R. L.; Byrd, B. L.; Carlton, J. E.; and Rafter, J. J. "Factors affecting the localization of ⁶⁷Ga in animal tumors." Journal of Nuclear Medicine 11:324 (1970).

Hayes, R. L.; Nelson, B.; Swartzendruber, D. C.; Carlton, J. E.; and Byrd, B. L. "Gallium-67 localization in rat and mouse tumors." Science 167:289-90 (1970).

Johnson, D. R.; Poston, J. W.; Auxier, J. A.; Brown, D. G.; Gramly, W. A.; Gibbs, W. D.; Hodges, H. D.; and Davy, D. R. "'Total' and 'exchangeable' sodium studies in swine and sheep using activation analysis and isotopic dilution." Health Physics 18:729-31 (1970). (Abstract.)

Kniseley, R. M.; Andrews, G. A.; Edwards, C. L.; and Hayes, R. L. "Bone marrow and skeletal scanning." In Year Book of Nuclear Medicine, p. 365. 1970.

Lee, T.-C. "The metabolism of lipids on smooth- and rough-surfaced membranes of rat liver microsomes." Federation of American Societies for Experimental Biology. Federation Proceedings 29:674 (1970). (Abstract.)

Lee, T.-C.; Swartzendruber, D. C.; Morris, H. P.; and Snyder, F. "Zonal centrifugation profiles of smooth- and rough-surfaced microsomes from normal and neoplastic tissues." In Tenth International Cancer Congress, pp. 278-79. 1970. (Abstract.)

Lushbaugh, C. C.; Corrill, L. S.; Stokes, T. R.; Humason, G.; and Lushbaugh, D. "Mouse splenic stem-cell response to protracted radiation exposure." Radiation Research 43:212-13 (1970). (Abstract.)

Medical Division, Oak Ridge Associated Universities. Research report, 1969, for the year ending December 31, 1969. Washington, D.C.: U.S. Atomic Energy Commission, 1970. (ORAU-110.)

Morris, A. C., Jr.; Barclay, T. R.; and Lushbaugh, C. C. "Monitoring physiological responses during total-body irradiation therapy." Physics of Medicine and Biology 15:192 (1970). (Abstract.)

Nelson, B. "Postmortem studies of radionuclides in man." In U.S. Atomic Energy Commission Symposium Series no. 20, CONF-691212, pp. 103-13. Washington, D.C.: U.S. Atomic Energy Commission, 1970.

Nelson, B., and Kniseley, R. M. "Marrow fibrosis in myeloproliferative disorders." In U.S. Atomic Energy Commission Symposium Series no. 19, CONF-680529, pp. 533-55. Washington, D.C.: U.S. Atomic Energy Commission, 1970.

Pearson, T. A., and Balish, E. "Serum agglutinins and bacteriocidins from irradiated patients." Bacteriological Proceedings 70:111 (1970). (Abstract.)

----- "Unusual Sphaerophorous species from the large intestine of man." Applied Microbiology 19:458-62 (1970).

Piantadosi, C.; Ishaq, K. S.; and Snyder, F. "Synthesis of O-alkyldihydroxyacetone and derivatives." Journal of Pharmaceutical Sciences 59:1201-2 (1970).

Piantadosi, C., and Snyder, F. "Plasmalogens and related derivatives: their chemistry and metabolism." Journal of Pharmaceutical Sciences 59:283-97 (1970).

Ricks, R. C., and Edwards, C. L. "The effect of dose rate and exposure fractionation on plasma iron kinetics in rats and man." Radiation Research 43:240-41 (1970). (Abstract.)

Ricks, R. C.; Lushbaugh, C. C.; and Frome, E. "Changes in the power spectrum of the impedance pneumograph trace during radiation-induced gastro-intestinal distress in man." Federation of American Societies for Experimental Biology. Federation Proceedings 29:45 (1970). (Abstract.)

Sansone, G.; Swartzendruber, D. C.; and Snyder, F. "Inclusions in mitochondria of preputial glands from mice: A combined biochemical and morphologic study." Biochimica et Biophysica Acta 201:401-9 (1970).

Snyder, F. Lipids and cancer, a bibliography: 1947-1970. Washington, D.C.: U.S. Atomic Energy Commission, 1970. (ORAU-111.)

----- "Liquid scintillation radioassay of thin-layer chromatograms." In Proceedings of the International Symposium on the Current Status of Liquid Scintillation Counting; E. D. Bransome, ed.; pp. 533-55. New York: Grune and Stratton, 1970.

----- "Thin-layer radiochromatography and related procedures." In Progress in Thin-layer Chromatography and Related Methods, A. Niederwieser and G. Pataki, eds.; vol. 1, pp. 52-73. Ann Arbor, Michigan: Humphrey Science Publishers, 1970.

Snyder, F.; Blank, M. L.; and Malone, B. "Requirement of cytidine derivatives in the biosynthesis of O-alkyl phospholipids." Journal of Biological Chemistry 245:4016-18 (1970).

Snyder, F.; Blank, M. L.; Malone, B.; and Wykle, R. L. "Identification of O-alkyldihydroxyacetone phosphate, O-alkylhydroxyacetone, and diacyl glyceryl ethers after enzymic synthesis." Journal of Biological Chemistry 245:1800-1805 (1970).

Snyder, F., and Malone, B. "Enzymic interconversion of fatty alcohols and fatty acids." Biochemical and Biophysical Research Communications 41:1382-87 (1970).

Snyder, F.; Malone, B.; and Blank, M. L. "Enzymic synthesis of O-alkyl bonds in glycerolipids." Journal of Biological Chemistry 245:1790-99 (1970).

Snyder, F.; Malone, B.; and Cumming, R. B. "Synthesis of glycerol ethers by microsomal enzymes derived from fibroblasts (L-M cells) grown in suspension cultures." Canadian Journal of Biochemistry 48:212-15 (1970).

Snyder, F.; Piantadosi, C.; and Malone, B. "The participation of 1- and 2-isomers of O-alkylglycerols as acyl acceptors in a cell-free system." Biochimica et Biophysica Acta 202:244-49 (1970).

Snyder, F.; Rainey, W. T., Jr.; Blank, M. L.; and Christie, W. H. "The source of oxygen in the ether bond of glycerolipids: 180 studies." Journal of Biological Chemistry 245:5853-56 (1970).

Soodsma, J. F. "In vitro studies on the oxidative cleavage of alkyl glyceryl esters by rat liver." Federation of American Societies for Experimental Biology 29:931 (1970).
(Abstract.)

Soodsma, J. F.; Piantadosi, C.; and Snyder, F. "The bio-cleavage of alkyl glyceryl ethers in Morris hepatomas and other transplantable neoplasms." Cancer Research 30:309-11 (1970).

Swartzendruber, D. C. "Electron microscopic studies of lymphoid germinal centers." In XIII International Congress of Hematology, p. 398. Munich: J. F. Lehmanns Verlag, 1970. (Abstract.)

Swartzendruber, D. C.; Byrd, B. L.; Hayes, R. L.; Nelson, B.; and Tyndall, R. L. "Preferential localization of gallium-67 citrate in tissues of leukemic mice." Journal of the National Cancer Institute 44:695-700 (1970).

Swartzendruber, D. C.; Hayes, R. L.; and Nelson, B. "Sub-cellular localization of gallium-67 by high resolution radioautography." Journal of Cell Biology 47:207a-8a (1970). (Abstract.)

Vodopick, H.; Rupp, E. M.; and Gengozian, N. "An in vitro histocompatibility test in a search for tumour antigen." In In Vitro Procedures with Radioisotopes in Medicine, pp. 199-208. Vienna: International Atomic Energy Agency, 1970.

Winchell, H. S.; Sanchez, P. D.; Watanabe, C. K.; Hollander, L.; Anger, H. O.; McRae, J.; Hayes, R. L.; and Edwards, C. L. "Visualization of tumors in humans using ^{67}Ga -citrate and the Anger whole-body scanner, scintillation camera and tomographic scanner." Clinical Research 18:145 (1970). (Abstract.) Also in Journal of Nuclear Medicine 11:378 (1970). (Abstract.) And Journal of Nuclear Medicine 11:459-66 (1970).

Wood, R. "Plasma membranes: structural analyses of neutral lipids and phospholipids of rat liver." Archives of Biochemistry and Biophysics 141:174-82 (1970).

----- "Tumor lipids: identification of sterol ester species in Ehrlich ascites cells." Cancer Research 30:151-54 (1970).

Wood, R.; Anderson, N. G.; and Swartzendruber, D. C. "Tumor lipids: characterization of the lipids isolated from membranous material." Archives of Biochemistry and Biophysics 141:190-97 (1970).

Wood, R., and Harlow, R. D. "Tumor lipids: carbon number distribution of triglycerides and glyceryl ether diesters." Lipids 5:776-81 (1970).

-----. "Tumor lipids: structural analyses of the phospholipids." Archives of Biochemistry and Biophysics 141:183-89 (1970).

Wood, R., and Healy, K. "Liberation of aldehydes from alk-1-enyl-glyceryl ethers by acid hydrolysis." Lipids 5:661-63 (1970).

-----. "Tumor lipids: biosynthesis of plasmalogens." Biochemical and Biophysical Research Communications 38:205-11 (1970). Also in Journal of the American Oil Chemists' Society 47:79A (1970). (Abstract.) And in Journal of Biological Chemistry 245:2640-48 (1970).

Wood, R.; Walton, M.; Healy, K.; and Cumming, R. B. "Plasmalogen biosynthesis in Ehrlich ascites cells grown in tissue culture." Journal of the American Oil Chemists' Society 47:79A (1970). (Abstract.) Also in Journal of Biological Chemistry 245:4276-85 (1970).

Wykle, R. L.; Blank, M. L.; Piantadosi, C.; and Snyder, F. "Identification of intermediaries in the biosynthesis of O-alkyl-linked lipids." Federation of American Societies for Experimental Biology. Federation Proceedings 29:674 (1970). (Abstract.)

Wykle, R. L.; Blank, M. L.; and Snyder, F. "The biosynthesis of plasmalogens in a cell-free system." Federation of European Biochemical Societies. FEBS Letters 12:57-60 (1970).

Wykle, R. L., and Snyder, F. "Biosynthesis of an O-alkyl analogue of phosphatidic acid and O-alkyl glycerols via O-alkyl ketone intermediates by microsomal enzymes of Ehrlich ascites tumor." Journal of Biological Chemistry 245:3047-58 (1970).

MEDICAL 1971

Andrews, G. A. "Book review: Myeloproliferative Disorders of Animals and Man." Health Physics 21:342 (1971).

-----. "Total-body irradiation." In Primer of Radiology, R. J. Schulz, ed.; pp. 61-72. New York: GAF Corporation, 1971.

Andrews, G. A., and Haywood, F. F. "Clinical and Biological consequences of nuclear explosions." Practitioner 207:331-42 (1971).

Beck, W. L., Jr. K-shell ionization cross section for Ag and L-shell ionization cross sections for Au, Bi, and U for protons from 1.0 to 5.0 MeV. Master's Thesis, University of Tennessee, 1971.

Beck, W. L., Jr.; Cloutier, R. J.; and Watson, E. E. "High-dose monitoring of personnel with film and thermoluminescent dosimetry." Health Physics 21(6):58 (1971). (Abstract.)

Beck, W. L., Jr.; Stokes, T. R.; Cloutier, R. J.; and Lushbaugh, C. C. "Dosimetry for clinical total-body irradiation." Physics of Medicine and Biology 16:165 (1971). (Abstract.)

Bell, O. E., Jr.; Blank, M. L.; and Snyder, F. "The incorporation of ¹⁸⁰O and ¹⁴C from long-chain alcohols into the alkyl and alk-1-enyl ethers of phospholipids of developing rat brain." Biochimica et Biophysica Acta 231:579-83 (1971).

1029460

Blank, M. L.; Cress, E. A.; and Snyder, F. "The metabolism of fatty acids and fatty alcohols in fibroblasts (L-M cells) grown as monolayers." Journal of the American Oil Chemists' Society 48:100A (1971). (Abstract.)

Blank, M. L.; Cress, E. A.; Stephens, N.; and Snyder, F. "On the analysis of long-chain alkane diols and glycerol ethers in biochemical studies." Journal of Lipid Research 12:638-40 (1971).

Blank, M. L.; Wykle, R. L.; and Snyder, F. "Enzymic synthesis of ethanolamine plasmalogens from an O-alkyl glycerolipid." Federation of European Biochemical Societies. FEBS Letters 18:92-94 (1971).

Brewen, J. G., and Gengozian, N. "Radiation-induced human chromosome aberrations: II. Human in vitro irradiation compared to in vivo irradiation of marmoset leukocytes." Mutation Research 13:383-91 (1971).

Carlson, D. E., and Gengozian, N. "The effect of acute radiation exposure rates on formation of hemagglutinating antibody in mice." Journal of Immunology 106:1353-62 (1971).

Carlton, J. E., and Hayes, R. L. "Rapid separation of generator-produced gallium-68 from EDTA eluate." International Journal of Applied Radiation and Isotopes 22:44-45 (1971).

Chaskes, S., and Kingdon, C. "Immunoglobulins (IgG, IgA and IgM) in irradiated humans." Bacteriological Proceedings 71:73 (1971). (Abstract.)

Cloutier, R. J. "Book review: Protection in the management of patients who have received therapeutic amounts of radio-nuclides." Health Physics 21:343-44 (1971).

Cloutier, R. J., and Berger, J. D. "Health physics practices in laboratories using ^3H - and ^{14}C -labeled tracers." Journal of the American Oil Chemists' Society 48:330A (1971). (Abstract.)

Cloutier, R. J.; Watson, E. E.; Hayes, R. L.; and Nelson, B. "Radiation doses from isotopes of gallium." Journal of Nuclear Medicine 12:348 (1971). (Abstract.)

Edwards, C. L., and Hayes, R. L. " ^{67}Ga for scanning and staging tumors." Journal of Nuclear Medicine 12:355 (1971). (Abstract.)

Edwards, C. L.; Hayes, R. L.; Ominsky, S.; Byrd, B. L.; and Rafter, J. J. "Intralymphatic injection of ^{67}Ga for visualizing abdominal lymph nodes." Journal of Nuclear Medicine 12:431 (1971). (Abstract.)

Gengozian, N. "Male and female cell populations in the chimeric marmoset." In Medical Primatology, 1970; E. I. Goldsmith and J. Moor-Janowski, eds.; pp. 926-38. Basel: S. Karger, 1971.

Gengozian, N.; Congdon, C. C.; Allen, E. A.; and Toya, R. E. "Immune status of allogeneic radiation chimeras." Transplantation Proceedings 3:434-36 (1971)..

Gengozian, N., and Hübner, K. "'In situ' visualization of a graft-vs-host reaction." Journal of Immunology 106:1159-65 (1971).

10294b2

Gengozian, N., and Porter, R. P. "Transplantation immunology in the marmoset." In Medical Primatology, 1970; E. I. Goldsmith and J. Moor-Jankowski, eds.; pp. 165-75. Basel: S. Karger, 1971.

Goh, K. O. "Choramphenicol, acute leukemia and chromosomal vacuolization." Southern Medical Journal 64:815-19 (1971).

----- "Total body irradiation and human chromosomes: II. Cytogenetic studies of the cultured bone marrow cells seven years after total body irradiation." American Journal of Medical Science 262:43-49 (1971).

Goh, K. O., and Heusinkveld, R. S. "Contributions of cytogenetics to hematology." In Hematology for Internists; R. I. Weed, ed.; pp. 275-85. Boston: Little, Brown, 1971.

Goswitz, F.; Nelson, B.; Vodopick, H.; and Lushbaugh, C. "Human marrow changes after treatment with low-dose-rate total-body irradiation." Journal of Nuclear Medicine 12:359, (1971). (Abstract.)

Grigor, M. R.; Blank, M. L.; and Snyder, F. "Structural relationships between glycerides of pig serum and adipose tissue." Lipids 6:965-68 (1971).

Hagen, P. O. "The effect of low temperatures on microorganisms: conditions under which cold becomes lethal." In Inhibition and Destruction of Microbial Cells; W. B. Hugo, ed.; pp. 39-74. New York: Academic Press, 1971.

Hayes, R. L.; Byrd, B. L.; Carlton, J. E.; and Rafter, J. J. "Effect of scandium on the distribution of ^{67}Ga in tumor-bearing animals." Journal of Nuclear Medicine 12:437-38 (1971). (Abstract.)

Hayes, R. L.; Nelson, B.; Swartzendruber, D. C.; Brown, D. H.; Carlton, J. E.; and Byrd, B. L. "Studies of the intracellular deposition of ^{67}Ga ." Journal of Nuclear Medicine 12:364 (1971). (Abstract.)

Kraus, L. M.; Rasad, A.; and Lushbaugh, C. C. "Fast moving hemoglobin (Hb) in C57BL/Cum mice: induced by continuous low level irradiation." In Abstracts of Papers, number 309. Washington, D.C.: American Chemical Society, 1971.

Lee, T.-C., and Snyder, F. "The measurement of lipid turnover in membranes by a double isotope technique." Journal of the American Oil Chemists' Society 48:330A (1971). (Abstract.)

Littlefield, L. G.; Goh, K. O.; Klepper, M. B.; and Joiner, E. E. "Chromosome breakages in women taking oral contraceptives: a two year study." In Fourth International Congress of Human Genetics, Paris 1971, Abstracts of Papers Presented, p. 113. Amsterdam: Excerpta Medica, 1971. (Abstract.)

Lumb, R. H., and Snyder, F. "A rapid isotopic method for assessing the biosynthesis of ether linkages in glycerolipids of complex systems." Biochimica et Biophysica Acta 244:217-21 (1971).

Lushbaugh, C. C.; Stokes, T. R.; and Corrill, L. S. "Dose-rate dependence of mouse endogenous splenic colony formation and proliferation during continuous and fractionated daily irradiation at low exposure rates." Radiation Research 47:344 (1971). (Abstract.)

1029464

McDow, A. E., Jr., and Ricks, R. C. "Uses of a time-shared computer in quantitative nuclear medicine." In U.S. Atomic Energy Commission Report CONF-710425, pp. 155-67. Washington, D.C.: U.S. Atomic Energy Commission, 1971.

Mardon, D. N.; Hurst, S. K.; and Balish, E. "Germ-tube production by Candida albicans in minimal liquid culture media." Canadian Journal of Microbiology 17:851-56 (1971).

Medical Division, Oak Ridge Associated Universities. Research report, 1970, for the year ending December 31, 1970. Oak Ridge, Tennessee: ORAU, 1971. (ORAU 113.)

Morris, A. C., Jr.; Barclay, T. R.; Tanida, R.; and Nemcek, J. V. "A miniaturized probe for detecting radioactivity at thyroid surgery." Physics of Medicine and Biology 16:397-404 (1971).

Nelson, B.; Hayes, R. L.; Edwards, C. L.; Kniseley, R. M.; and Andrews, G. A. "Distribution of ⁶⁷Ga in human tissues at autopsy." Journal of Nuclear Medicine 12:452 (1971). (Abstract.)

Otten, J. A.; Tyndall, R. L.; Estes, P. C.; and Swartzendruber, D. C. "Localization of gallium-67 citrate during embryogenesis." Proceedings of the American Association for Cancer Research 12:41 (1971). (Abstract.)

Piantadosi, C.; Ishaq, K. S.; Wykle, R. L.; and Snyder, F. "Synthesis and characterization of 1-O-alkyldihydroxyacetone phosphates and derivatives." Biochemistry 10:1417-21 (1971).

Savage, N., and Balish, E. "Morphology, physiology, and virulence of some mutants of Candida albicans." Infection and Immunity 3:141-48 (1971).

Snyder, F. "The chemistry, physical properties, and chromatography of lipids containing ether bonds." In Progress in Thin-layer Chromatography and Related Methods, vol. 2, pp. 105-41. Ann Arbor, Michigan: Ann Arbor Science Publishers, 1971.

----- "Glycerolipids in the neoplastic cell: methodology, metabolism, and composition." In Methods in Cancer Research vol. 4, pp. 399-436. New York: Academic Press, 1971.

Snyder, F.; Blank, M. L.; and Wykle, R. L. "The enzymic synthesis of ethanolamine plasmalogens." Journal of Biological Chemistry 246:3639-45 (1971).

Snyder, F.; Hibbs, M.; and Malone, B. "Enzymic synthesis of O-alkyl glycero-lipids in brain and liver of rats during fetal and postnatal development." Biochimica et Biophysica Acta 231:409-11 (1971).

Snyder, F., and Malone, B. "The biosynthesis of wax esters: enzymic interconversions of fatty acids and fatty alcohols." Journal of the American Oil Chemists' Society 48:85A (1971). (Abstract.)

Snyder, F., and Moehl, A. "Mass measurement in a liquid scintillation spectrometer: quantitation of sulfhydryl moieties in color quenching." In Organic Scintillators and Liquid Scintillation Counting; D. L. Harrocks and C.-T. Peng, eds.; pp. 419-24. New York: Academic Press, 1971.

Snyder, W. S.; Cloutier, R. J.; and Smith, S. "Dose to a developing fetus from a gamma emitter in the bladder." In U.S. Atomic Energy Commission Report ORNL 4720, pp. 119-20. Washington, D.C.: U.S. Atomic Energy Commission, 1971.

Swartzendruber, D. C., and Hübner, K. F. "Effect of irradiation on ^{67}Ga distribution in mouse tissues." In American Society for Cell Biology, Eleventh Annual Meeting, Abstracts of Papers, p. 296. 1971. (Abstract.)

Swartzendruber, D. C.; Nelson, B.; and Hayes, R. L. "Gallium-67 localization in lysosomal-like granules of leukemic and nonleukemic murine tissues." Journal of the National Cancer Institute 46:941-52 (1971).

Wykle, R. L.; Blank, M. L.; and Snyder, F. "The enzymic synthesis of ethanolamine plasmalogens." Federation of American Societies for Experimental Biology. Federation Proceedings 30:1243 (1971). (Abstract.)

MEDICAL 1972

Barclay, T. R.; Morris, A. C., Jr.; and McDow, A. E., Jr. "Gamma-camera-to-computer interfacing--the easy way." In U.S. Atomic Energy Commission Report CONF-720430; pp. 369-75. Washington, D.C.: U.S. Atomic Energy Commission, 1972.

Beck, W. L.; Stokes, T. R.; and Lushbaugh, C. C. "Dosimetry for radiobiological studies of the human hematopoietic system." In NASA Report NASA TM X-2440, pp. 974-80. Washington, D.C.: U.S. National Aeronautics and Space Administration, 1972.

Beck, W. L.; Stokes, T. R.; and Wade, L., Jr. "Dosimetry for total-body irradiation accident." Health Physics 23:419 (1972). (Abstract.)

Berger, J. D. "Book review: Radiological Physics Examination Review Book." Health Physics 23:259 (1972).

Berger, J. D., and Cloutier, R. J. "Health physics practices in laboratories using ^3H - and ^{14}C -labeled tracers." Lipids 7:604-10 (1972).

Blank, M. L.; Kasama, K.; and Snyder, F. "Isolation and identification of an alkyldiacylglycerol containing isovaleric acid." Journal of Lipid Research 13:390-95 (1972).

Blank, M. L.; Wykle, R. L.; and Snyder, F. "The biosynthesis of ethanolamine plasmalogens by a postmitochondrial fraction from rat brain." Biochemical and Biophysical Research Communications 47:1203-8 (1972).

1029468

Brewen, J. G.; Preston, R. J.; and Littlefield, L. G.
"Radiation-induced human chromosome aberration yields
following an accidental whole-body exposure to ^{60}Co γ -rays." *Radiation Research* 49:647-56 (1972). *Y*

Brown, D. H.; Swartzendruber, D. C.; Carlton, J. E.; Byrd,
B. L.; and Hayes, R. L. "Mechanism of gallium-binding in
tumors: isolation and characterization of gallium-binding
granules (GBG) in soft tissue tumors." *Proceedings of the
American Association for Cancer Research* 13:37 (1972).
(Abstract.)

Cloutier, R. J. "Health physics education and training:
past, present, and future." In *Health Physics Operational
Monitoring*, vol. 3, pp. 1305-44. New York: Gordon and
Breach, 1972.

Duggan, J. L.; Beck, W. L.; Albrecht, L.; Munz, L.; and
Spaulding, J. D. "Studies of x-rays induced by charged
particles." *Advances in X-Ray Analysis* 15:407-23 (1972).

Edwards, C. L., and Hayes, R. L. "Localization of tumors
with radioisotopes." In U.S. Atomic Energy Commission
Symposium Series no. 27, CONF-711101, pp. 618-39.
Washington, D.C.: U.S. Atomic Energy Commission, 1972.

Edwards, C. L.; Hayes, R. L.; and Nelson, B. "The 'normal'
 ^{67}Ga scan." *Journal of Nuclear Medicine* 13:428-29 (1972).
(Abstract.)

Gengozian, N. "A blood factor in the marmoset, *Saguinus
fuscicollis*: its detection, mode of inheritance, and
species specificity." *Journal of Medical Primatology*
1:272-86 (1972).

----. "Inter- and intrasubspecies red cell immunizations in the marmoset, Saguinus fuscicollis ssp." Journal of Medical Primatology 1:172-92 (1972).

~~S~~oswitz, F. A. "Bone marrow imaging." In Continuing Education Lectures, 1972, pp. 10/1-10/15. Atlanta: ~~S~~outheastern Chapter, Society of Nuclear Medicine, 1972.

----. "Book review: Manual of Nuclear Medicine Procedures." Annals of Internal Medicine 76:1057-58 (1972).

~~S~~oswitz, F. A.; Andrews, G. A.; and Viamonte, M.; eds. ~~C~~linical uses of radionuclides: critical comparison with other techniques. U.S. Atomic Energy Commission Symposium Series no. 27, CONF-711101. Washington, D.C.: U.S. Atomic Energy Commission, 1972.

~~S~~oswitz, F.; Morris, A.; McDow, A.; Kim, K.; and Hedges, H. "A computer-interfaced four-probe counter and its application to a dynamic radiocolloid study." Journal of Nuclear Medicine 13:433 (1972). (Abstract.)

~~S~~oswitz, F. A., and Vodopick, H. A. "Dynamic radioisotopic studies in clinical hematology." In U.S. Atomic Energy Commission Symposium Series no. 27, CONF-711101, pp. 293-312. Washington, D.C.: U.S. Atomic Energy Commission, 1972.

Gottlieb, C. F., and Gengozian, N. "The humoral immune response in mice after neutron or x-irradiation at different dose rates." Journal of Immunology 109:711-18 (1972).

Gottlieb, C. F., and Gengozian, N. "Radiation dose, dose rate, and quality in suppression of the humoral immune response." Journal of Immunology 109:719-27 (1972).

Grigor, M. R.; Moehl, A.; and Snyder, F. "Occurrence of ethanolamine- and choline-containing plasmalogens in adipose tissue." Lipids 7:766-68 (1972).

Grigor, M. R.; Pratt, R. D.; and Snyder, F. "Acylation of cholesterol by microsomal enzymes from mouse preputial gland tumors." Archives of Biochemistry and Biophysics 150:371-75 (1972).

Hershman, J. M., and Edwards, C. L. "Serum thyrotropin (TSH) levels after thyroid ablation compared with TSH levels after exogenous bovine TSH: implications for ^{131}I treatment of thyroid carcinoma." Journal of Clinical Endocrinology and Metabolism 34:814-18 (1972).

Humason, G. L. Animal Tissue Techniques, 3rd edition. San Francisco: W. H. Freeman, 1972.

Kniseley, R. M. "Marrow studies with radiocolloids." Seminars in Nuclear Medicine 2:71-85 (1972).

Kniseley, R. M., and Goswitz, F. A. "Radiocolloid scanning." In U.S. Atomic Energy Commission Symposium Series no. 27, CONF-711101, pp. 293-312. Washington, D.C.: U.S. Atomic Energy Commission, 1972.

Lee, T.-C.; Piantadosi, C.; and Snyder, F. "The subcellular distribution of ether lipids in tumors." Proceedings of the American Association for Cancer Research 13:58 (1972).
(Abstract.)

Littlefield, L. G. "An abnormal cell-line in a patient with acute granulocytic leukemia." Cancer 29:1281-86, (1972).

Lushbaugh, C. C. "Predicted levels of human radiation tolerance extrapolated from clinical studies of radiation effects." In Report NASA TM X-2440, pp. 398-415. Washington, D.C.: U.S. National Aeronautics and Space Administration, 1972.

Lushbaugh, C. C., and Ricks, R. C. "Some cytokinetic and histopathologic considerations of irradiated male and female gonadal tissues." In Frontiers of Radiation Therapy and Oncology, vol. 6, pp. 228-48. Basel: Karger, 1972.

McDow, A. E., Jr. "Code conversion by computer." In U.S. Atomic Energy Commission Report CONF-720430, pp. 335-41. Washington, D.C.: U.S. Atomic Energy Commission, 1972.

Medical Division, Oak Ridge Associated Universities. Research report, 1971, for the year ending December 31, 1971. Oak Ridge, Tennessee: ORAU, 1972. (ORAU-116.)

Morris, A. C., Jr.; Barclay, T. R.; Tanida, R.; and Nemcek, J. V. Design specifications for a miniaturized surgical probe. Washington, D.C.: U.S. Atomic Energy Commission, 1972. (ORAU-115.)

Morris, A. C., Jr.; Goswitz, F. A.; Kim, K. A.; McDow, A. E., Jr.; Aaron, P. A.; and Barclay, T. R. "Rapid analysis of dynamic radionuclide functions using the on-line computer." Journal of the Association for the Advancement of Medical Instrumentation 6:180 (1972).

Nelson, B.; Hayes, R. L.; Edwards, C. L.; Kniseley, R. M.; and Andrews, G. A. "Distribution of gallium in human tissues after intravenous administration." Journal of Nuclear Medicine 13:92-100 (1972).

Piantadosi, C.; Chae, K.; Ishaq, K. S.; and Snyder, F.
"Synthesis of acyl dihydroxyacetone phosphates and related derivatives." Journal of Pharmaceutical Sciences 61:971-74 (1972).

Piantadosi, C.; Ishaq, K. S.; Blank, M. L.; and Snyder, F.
"Synthesis of 1-O-alkyl-3-O-phosphorylethanamine-2-propanone and related derivatives." Journal of Pharmaceutical Sciences 61:607-10 (1972).

Porter, R. P., and Gengozian, N. "In vitro proliferation and differentiation of hemic precursor cells from marrow and blood of naturally chimeric marmosets." Journal of Cellular Physiology 79:27-41 (1972).

----- "Megakaryocytes cultured from blood lymphocytes of naturally chimeric marmosets." Blood 40:588-89 (1972).
(Abstract.)

Ricks, R. C.; Lushbaugh; C. C.; and McDow, A. E., Jr.
"Correlation of heart rate and CO₂ production with pulmonary impedance during exercise stress in man." Federation of American Societies for Experimental Biology. Federation Proceedings 31:311 (1972). (Abstract.)

----- "Pulmonary impedance power spectral analysis: its correlation with heart rate and expired CO₂ during exercise stress in man." Journal of the Association for the Advancement of Medical Instrumentation 6:186 (1972). (Abstract.)

Ricks, R. C.; Lushbaugh, C. C.; McDow, A. E., Jr.; and Frome, E. "Pulmonary-impedance power spectral analysis: a facile means of detecting radiation-induced gastrointestinal distress and performance decrement in man." In Report NASA TM X-2440, pp. 238-48. Washington, D.C.: U.S. National Aeronautics and Space Administration, 1972.

Shively, J. M.; Brown, D. H.; Ball, F. L.; Caton, J. E.; Phares, E. F.; Brantley, J. N.; and Breillat, J. P. "Partial characterization of the polyhedral inclusion bodies of Thiobacillus neopolitanus." In U.S. Atomic Energy Commission Report ORNL-4771, pp. 182-84. Washington, D.C.: U.S. Atomic Energy Commission, 1972.

Snyder, F. "Enzymatic systems that synthesize and degrade glycerolipids possessing ether bonds." Advances in Lipid Research 10:233-59 (1972).

-----. "The enzymic pathways of ether-linked lipids and their precursors." In Ether Lipids: Chemistry and Biology; F. Snyder, ed.; pp. 121-56. New York: Academic Press, 1972.

-----. "Ether-linked lipids and fatty alcohol precursors in neoplasms." In Ether Lipids: Chemistry and Biology; F. Snyder, ed.; pp. 273-95. New York: Academic Press, 1972.

Snyder, F.; Wykle, R. L.; Blank, M. L.; Lumb, R. H.; Malone, B.; and Piantadosi, C. "Enzymic pathways for ether lipids." Federation of American Societies for Experimental Biology 31:454 (1972). (Abstract.)

Snyder, F., ed. Ether Lipids: Chemistry and Biology. New York: Academic Press, 1972.

1029474

Soodsmo, J. F.; Piantadosi, C.; and Snyder, F. "Partial characterization of the alkylglycerol cleavage enzyme system of rat liver." Journal of Biological Chemistry 247:3923-29 (1972).

Stokes, T. R.; Lushbaugh, D.; Humason, G.; and Lushbaugh, C. C. "⁵⁹Fe studies on the erythroblastic response of normal and splenectomized mice to low level continuous radiation." Radiation Research 51:472-73 (1972). (Abstract.)

Swartzendruber, D. C., and Mateer, H. "Ultrastructural identification of intracellular lead by x-ray analysis on a scanning electron microscope." Journal of Cell Biology 55:255a (1972). (Abstract.)

Urso, P., and Gengozian, N. "Functional capacity of T, B, and A cells in allogeneic radiation chimeras." In Fourth International Congress of the Transplantation Society, Collected Abstracts, p. 300. New York: Grune & Stratton, 1972. (Abstract.)

Vodopick, H.; Rupp, E. M.; Edwards, C. L.; Goswitz, F. A.; and Beauchamp, J. J. "Spontaneous cyclic leukocytosis and thrombocytosis in chronic granulocytic leukemia." New England Journal of Medicine 286:204-90 (1972).

Watson, E. E.; Cloutier, R. J.; and Gibbs, W. "Whole body retention of gallium-67 citrate." Southern Medical Journal 65:1417 (1972). (Abstract.)

Webb, A. M. "Semiautomated determination of thyroxine (T₄) iodine." In Standard Methods of Clinical Chemistry, vol. 7, pp. 261-66. New York: Academic Press, 1972.

Wykle, R. L.; Blank, M. L.; Maline, B.; and Snyder, F. "Evidence for a mixed function oxidase in the biosynthesis of ethanolamine plasmalogens from 1-alkyl-2-acyl-Sn-glycero-3-phosphorylethanolamine." Journal of Biological Chemistry 247:5442-47 (1972).

Wykle, R. L.; Piantadosi, C.; and Snyder, F. "The role of acyldihydroxyacetone phosphate, reduced nicotinamide adenine dinucleotide, and reduced nicotinamide adenine dinucleotide phosphate in the biosynthesis of O-alkyl glycerolipids by microsomal enzymes of Ehrlich ascites tumor." Journal of Biological Chemistry 247:2944-48 (1972).

Yuhas, J. M.; Stokes, T. R.; and Lushbaugh, C. C. "Multi-factorial analysis of human blood cell responses to clinical total body irradiation." In NASA Report NASA TM X-2440, pp. 233-37. Washington, D.C.: U.S. National Aeronautics and Space Administration, 1972.

Yuhas, J. M.; Stokes, T. R.; and Lushbaugh, C. C. "Radiosensitivity and recovery potential of human blood-forming tissues." Radiology 105:641-44 (1972).

Zucker, S., and Webb, A. M. "Assay of muramidase activity in serum, plasma, or urine." In Standard Methods of Clinical Chemistry, vol. 7, pp. 9-17. New York: Academic Press, 1972.

1029476

MEDICAL 1973

Akers, K. K.; Beck, W. L., Jr.; Cloutier, R. J.; and Dickson, H. W. "Health physics training at Oak Ridge Associated Universities." In DHEW Publication FDA 3-8029, pp. 281-87. Washington, D.C.: Department of Health, Education, and Welfare, 1973.

Andrews, G. A. "Book review: Biochemical Indicators of Radiation Injury in Man." Health Physics 24:455-56 (1973).

Andrews, G. A.; Gibbs, W. D.; Morris, A. C., Jr.; and Ross, D. A. "Whole-body counting." Seminars in Nuclear Medicine 3:367-88 (1973).

Bailey, O. T.; Benton, E. V.; Cruty, M. R.; Harrison, G. A.; Haymaker, W.; Humason, G.; Leon, H. A.; Lindberg, R. L.; Look, B. C.; Lushbaugh, C. C.; Philpott, D. E.; Samorajski, T.; Simmonds, R. C.; Suri, K. P.; Tremor, J. W.; Turnbill, C. E.; Vogel, F. S.; Winter, D. L.; and Zeman, W. "Biocore experiment." In Apollo 17 Preliminary Science Report, NASA Report SP-330. Washington, D.C.: U.S. National Aeronautics and Space Administration, 1973.

Barber, L. R.; Cloutier, R. J.; and Watson, E. E. Effective absorbed energies. Washington, D.C.: U.S. Atomic Energy Commission, 1973. (ORAU-120.)

Barclay, T. R.; Morris, A. C., Jr.; and Lucas, J. P. "A universal, solid-state attachment for the computer recording of rectilinear scanning data." In U.S. Atomic Energy Commission Report CONF-730627, pp. 183-89. Washington, D.C.: U.S. Atomic Energy Commission, 1973.

Beck, W. L.; Cloutier, R. J.; and Watson, E. E. "Personnel monitoring with film and thermoluminescent dosimeters for high exposures." Health Physics 25:421-25 (1973).

Beck, W. L.; Stokes, T. R.; and Lushbaugh, C. C. "Dosimetry for total-body irradiation therapy." In DHEW Publication FDA 73-8029, p. 423. Washington, D.C.: U.S. Department of Health, Education, and Welfare, 1973.

Bell, P. R.; McClain, W. J.; Ross, D. A.; McKeighen, R. E.; East, J. K.; Moore, E. C.; Edwards, C. L.; and Goswitz, F. A. A computer-based scanning system. Washington, D.C.: U.S. Atomic Energy Commission, 1973. (ORNL-TM-4038.)

Blank, M. L., and Snyder, F. "Ether-linked glycerol lipids: detection and identification of labeled intermediates and products formed in enzymic systems." Journal of the American Oil Chemists' Society 50:91A (1973). (Abstract.)

Blank, M. L.; Wykle, R. L.; and Snyder, F. "The retention of arachidonic acid in ethanolamine plasmalogens of rat tests during essential fatty acid deficiency." Biochimica et Biophysica Acta 316:28-34 (1973).

Brown, D. H.; Byrd, B.; Rafter, J.; and Hayes, R. L. "Sub-cellular localization of ^{67}Ga in rat hepatoma and normal host liver." Southern Medical Journal 66:1331-32 (1973). (Abstract.)

Brown, D. H.; Carlton, E.; Byrd, B.; Harrell, B.; and Hayes, R. L. "A rate-zonal centrifugation procedure for screening particle populations by sequential product recovery utilizing edge-unloading zonal rotors." Archives of Biochemistry and Biophysics 155:9-18 (1973).

Brown, D. H.; Swartzendruber, D. C.; Carlton, J. E.; Byrd, B. L.; and Hayes, R. L. "The isolation and characterization of gallium-binding granules from soft tissue tumors." Cancer Research 33:2063-67 (1973).

Chae, K.; Piantadosi, C.; and Snyder, F. "An alternate enzymic route for the synthesis of alkyl analog of phosphatidic acid involving alkylglycerol." Biochemical and Biophysical Research Communications 51:119-24 (1973).

----- "Reductase, phosphatase, and kinase activities in the metabolism of alkyldihydroxyacetone phosphate and alkyldihydroxyacetone." Journal of Biological Chemistry 248:6718-23 (1973).

Clapp, N. K.; Tyndall, R. L.; and Cumming, R. B. "Hyperplasia of hepatic bile ducts in mice following long-term administration of butylated hydroxytoluene." Food and Cosmetics Toxicology 11:847-49 (1973).

Cloutier, R. J.; Smith, S. A.; Watson, E. E.; Snyder, W. S.; and Warner, G. G. "Dose to the fetus from radionuclides in the bladder." Health Physics 25:147-61 (1973).

Cloutier, R. J., and Watson, E. E. "Radiation doses from nuclear medicine procedures." In DHEW Publication FDA 73-8029, pp. 71-78. Washington, D.C.: U.S. Department of Health, Education, and Welfare, 1973.

Cloutier, R. J.; Watson, E. E.; Hayes, R. L.; Nelson, B.; and Smith, E. M. "Summary of current radiation dose estimates to humans from $^{66}\text{Ga-}$, $^{67}\text{Ga-}$, $^{68}\text{Ga-}$, and $^{72}\text{Ga-citrate}$." Journal of Nuclear Medicine 14:755-56 (1973).

Cloutier, R. J.; Watson, E. E.; Rohrer, R. H.; and Smith, E. M. "Calculating the radiation dose to an organ." Journal of Nuclear Medicine 14:53-55 (1973).

Congdon, C. C.; Payne, H. S.; Gengozian, N.; and Urso, P. "Spleen white pulp blurring in thymectomized radiation chimeras." Federation of American Societies for Experimental Biology. Federation Proceedings 32:870 (1973). (Abstract.)

Fliedner, T. M.; Bruch, C.; Calvo, W.; Flad, H. D.; Herbst, E.; Hügl, E.; Huget, R.; Nelson, B.; and Schnappauf, H. P. "Pattern of early hemopoietic regeneration in lethally irradiated dogs after transfusion of fresh and frozen blood leukocytes." Experimental Hematology 1:282 (1973). (Abstract.)

Fuhr, J. E., and Gengozian, N. "Coordination of heme and globin synthesis in primate reticulocytes." Biochimica et Biophysica Acta 320:48-53 (1973).

Garcia, Ana Maria. Cytogenetic changes in marrow cells from Syrian hamsters exposed to ^{60}Co total-body radiation. Master's thesis, São Paulo University, 1973.

Gengozian, N. "Book review: Primates in Medicine." Journal of Medical Primatology 2:254-55 (1973).

----- "Book review: Transplantation Genetics of Primates." Journal of Medical Primatology 2:256 (1973).

Gengozian, N., and Congdon, C. C. "Immunological memory in radiation chimeras." Transplantation 16:32-40 (1973).

Gengozian, N.; Edwards, C. L.; Vodopick, H. A.; and Hübner, K. F. "Bone marrow transplantation in a leukemic patient following immunosuppression with antithymocyte globin and total body irradiation." Transplantation 15:446-54 (1973).

Gengozian, N., and Patton, M. L. "Identification of three blood factors in the marmoset, Saguinus fuscicollis ssp." In Medical Primatology 1972, pp. 349-60. Basel: S. Karger, 1973.

Gibbs, W. D.; Edwards, C. L.; and Hodges, H. D. "Linear scanner instrumentation and data handling." Southern Medical Journal 66:1330 (1973). (Abstract.)

Goh, K. O. "Total-body irradiation and human chromosomes: III. Cytogenetic studies in patients with malignant hematologic diseases treated with total-body irradiation." American Journal of the Medical Sciences 266:179-86 (1973).

Goswitz, F.; Lushbaugh, C.; and Vodopick, H. "Marrow changes in chronic granulocytic leukemia after treatment with total-body irradiation." Blood 42:984 (1973). (Abstract.)

Grigor, M. R., and Bell, I. C., Jr. "Synthesis of fatty acid esters of short-chain alcohols by an acyltransferase in rat liver microsomes." Biochimica et Biophysica Acta 306:26-30 (1973).

Grigor, M. R.; Blank, M. L.; and Snyder, F. "Cholesterol metabolism in rats bearing Morris hepatoma 7777." Cancer Research 33:1870-74 (1973).

Hansard, M. Investigation of the applicability of a digital filtering technique for electrocardiogram analysis. Master's thesis, University of Tennessee, 1973.

Hayes, R. L., and Byrd, B. L. "Factors influencing the distribution of rare earth radionuclides in normal and neoplastic tissue." Southern Medical Journal 66:1327-28 (1973). (Abstract.)

Hayes, R. L., and Carlton, J. E. "A study of the macromolecular binding of ^{67}Ga in normal and malignant animal tissues." Cancer Research 33:3265-72 (1973).

Hayes, R. L., and Edwards, C. L. "The effect of stable scandium on red blood cells and on the retention and excretion of ^{67}Ga in humans." Southern Medical Journal 66:1339-40 (1973). (Abstract.)

-----. "New applications of tumour-localizing radiopharmaceuticals." In Medical Radioisotope Scintigraphy, 1972, pp. 531-52. Vienna: International Atomic Energy Commission, 1973.

Hayes, R. L.; Rafter, J. J.; Washburn, L. C.; and Byrd, B. L. "Affinity of $^{253}\text{einsteinium}$ for tumor tissue." National News in Biology 246:23-25 (1973).

Hofer, K. G., and Swartzendruber, D. C. " ^{67}Ga -citrate and ^{125}I -iododeoxyuridine as markers for in vivo evaluation of tumor cell metastasis and death." Journal of the National Cancer Institute 50:1039-45 (1973).

Huisman, T. H. J.; Schroeder, W. A.; Keeling, M. E.; Gengozian, N.; Miller, A.; Brodie, A. R.; Shelton, J. R.; Shelton, J. B.; and Apell, G. "Search for nonallelic structural genes for γ -chains of fetal hemoglobin in some primates." Biochemical Genetics 10:309-18 (1973).

Humason, G. "Hemopoietic tissues." In The Encyclopedia of Microscopy and Microtechnique; P. Grey, ed.; pp. 248-49. New York: Van Nostrand Reinhold Co., 1973.

----- "Leukocytes." In The Encyclopedia of Microscopy and Microtechnique; P. Grey, ed.; pp. 289-92. New York: Van Nostrand Reinhold Co., 1973.

Kasama, K.; Rainey, W. T., Jr.; and Snyder, F. "Chemical identification and enzymatic synthesis of a newly discovered lipid class--hydroxyalkylglycerols." Archives of Biochemistry and Biophysics 154:648-58 (1973).

Kniseley, R. M. Coding index for tumor scanning. Washington, D.C.: U.S. Atomic Energy Commission, 1973.
(ORAU-119.)

----- Cooperative group to study localization of radio-pharmaceuticals. Washington, D.C.: U.S. Atomic Energy Commission, 1973. (ORAU-118.)

Lee, T.-C., and Snyder, F. "Phospholipid metabolism in rat liver endoplasmic reticulum: structural analyses, turnover studies, and enzymic activities." Biochimica et Biophysica Acta 291:71-82 (1973).

Lee, T.-C.; Stephens, N.; Moehl, A.; and Snyder, F. "Turnover of rat liver plasma membrane phospholipids: comparison with microsomal membranes." Biochimica et Biophysica Acta 291:86-92 (1973).

Lee, T.-C.; Wykle, R. L.; Blank, M. L.; and Snyder, F. "Dietary control of stearyl CoA and alkylacylglycerophosphoryl-ethanolamine desaturases in tumor." Biochemical and Biophysical Research Communications 55:574-79 (1973).

Littlefield, L. G., and Goh, K. O. "Cytogenetic studies in control men and women: I. Variations in aberration frequencies in 29,709 metaphases from 305 cultures obtained over a three-year period." Cytogenetics and Cell Genetics 12:17-34 (1973).

Lombardi, M. H.; Beck, W. L., Jr.; and Cloutier, R. J. "Survey of radiopharmaceutical use and safety in sixty-nine hospitals." In DHEW Publication FDA 73-8029, pp. 227-35. Washington, D.C.: U.S. Department of Health, Education, and Welfare, 1973.

Lushbaugh, C. C. "Book review: Manual on Radiation Haematology." Health Physics 24:456 (1973).

----- "Contribution to H2E particle effects in manned space flight." D. Grahn, ed. Radiobiological Advisory Panel, Committee on Space Biology, Space Science Board, National Research Council. Washington National Academy of Sciences, 1973.

Medical Division, Oak Ridge Associated Universities. Research report, 1972, for the year ending December 31, 1972. Oak Ridge, Tennessee: ORAU, 1973. (ORAU-122).

Nelson, B.; Calvo, W.; Herbst, E.; Bruch, C.; Schnappauf, H. P.; and Fliedner, T. "Repopulation of dog lymphnodes after 1200 rads total-body irradiation and I.V. administration of autologous mononuclear blood cells." Experimental Hematology 1:282-83 (1973). (Abstract.)

Nelson, B., and Fliedner, T. M. "Lymphocytopoiesis after irradiation." Fortschritte auf dem Gebiete der Roentgenstrahlen und der Nuclear Medizin, supplement: pp. 290-92. (1973).

Nelson, B., and Pritchard, B. "Autoradiography with Polaroid film." Beitraege zur Pathologie 149:206-10 (1973).

Otten, J. A.; Tyndall, R. L.; Estes, P. C.; Gude, W. D.; and Swartzendruber, D. C. "Localization of gallium-67 during embryogenesis." Proceedings of the Society for Experimental Biology and Medicine 142:92-95 (1973).

Piantadosi, C.; Chae, K.; Ishaq, K. S.; and Snyder, F. "Chemical synthesis of l- ¹⁴C-octadecyldihydroxyacetone phosphate and l- ¹⁴C-octadecyldihydroxyacetone." Journal of Pharmaceutical Sciences 62:320-22 (1973).

Porter, R. P., and Gengozian, N. "Immunological responsiveness and tolerance of marmoset lymphoid tissue in vitro." Transplantation 15:221-30 (1973).

-----. "Marmoset bone marrow." In Methods and Application of Tissue Culture; P. Krause and M. Patterson, eds.; pp. 93-97. New York: Academic Press, 1973.

Shively, J. M.; Ball, F.; Brown, D. H.; and Saunders, R. E. "Functional organelles in prokaryotes: polyhedral inclusions (carboxysomes) of Thiobacillus neapolitanus." Science 182:584-86 (1973).

Snyder, C.; Malone, B.; Nettesheim, P.; and Snyder, F. "Urethan-induced pulmonary adenoma as a tool for the study of surfactant biosynthesis." Cancer Research 33:2437-43 (1973).

Snyder, F. "Radioisotopes--introduction: Detection and chromatographic resolution of labeled lipid intermediaries formed in enzyme systems." Journal of Chromatography 78:141-47 (1973).

-----. "Thin-layer chromatographic behavior of glycerolipid analogs containing ether, ester, hydroxyl, and ketone groupings." Journal of Chromatography 82:7-14 (1973).

Snyder, F.; Clark, M.; and Piantadosi, C. "Biosynthesis of alkyl lipids: displacement of the acyl moiety of acyldihydroxyacetone phosphate with fatty alcohol analogs." Biochemical and Biophysical Research Communications 53:350-56 (1973).

Snyder, F.; Malone, B.; Nettesheim, P.; and Snyder, C. "Urethan pulmonary adenomas as a model for studying the biosynthesis of dipalmitoylglycerophosphorylcholine." Federation of American Societies for Experimental Biology. Federation Proceedings 32:561 (1973). (Abstract.)

Snyder, F.; Malone, B.; and Piantadosi, C. "Tetrahydropteridine-dependent cleavage enzyme of O-alkyl lipids: substrate specificity." Biochimica et Biophysica Acta 316:259-65 (1973).

Stemple, R. Bibliography of medical uses of technetium-99m 1965-1971. Washington, D.C.: U.S. Atomic Energy Commission, 1973. (ORAU-121.)

Swartzendruber, D. C., and Hübner, K. F. "Effect of external whole-body x-irradiation on gallium-67 retention in mouse tissues." Radiation Research 55:457-68 (1973).

Swartzendruber, D. C.; Wolfe, G.; and Hübner, K. F. "Gallium-67 localization in mouse peritoneal cells." Journal of the Reticuloendothelial Society 13:379-80 (1973). (Abstract.)

Tankersley, W. G., and Woodward, J. M. "Induction and isolation of non-replicative minicells of Salmonella typhimurium and their use as immunogens in mice." In Abstracts of the Annual Meeting of the American Society for Microbiology, p. 97. 1973. (Abstract.)

Urso, P., and Gengozian, N. "A, B, and T cell function in mouse allogeneic radiation chimeras." Federation of American Societies for Experimental Biology. Federation Proceedings 32:226 (1973). (Abstract.)

-----. "T cell deficiency in mouse allogeneic radiation chimeras." Journal of Immunology III:712-19 (1973).

Watson, E. E.; Cloutier, R. J.; and Gibbs, W. D. "Whole-body retention of ^{67}Ga -citrate." Journal of Nuclear Medicine 14:840-42 (1973).

Watson, E. E.; Cloutier, R. J.; Smith, S. A.; Snyder, W. S.; and Warner, G. G. "Dose to the fetus from radiopharmaceuticals in mother's bladder." Southern Medical Journal 66:1341 (1973). (Abstract.)

Wykle, R. L.; Blank, M. L.; and Snyder, F. "The enzymic incorporation of arachidonic acid into ether-containing choline and ethanolamine phosphoglycerides by deacylation-acylation reactions." Biochimica et Biophysica Acta 326:26-33 (1973).

MEDICAL AND HEALTH SCIENCES DIVISION 1974

Alpen, E. L.; Bateman, J. L.; Blair, H. A.; Brennan, J. T.; Hasterlik, R. J.; Lushbaugh, C. C.; Rust, J. H.; Leroy, G. V.; and Casarett, G. W. (Scientific Committee 14). Radio-logical factors affecting decision-making in a nuclear attack. Washington, D.C.: National Council on Radiation Protection and Measurements, 1974. (NCRP Report 42.)

Andrews, G. A. "Book review: Anticancer Agents Recently Developed in the People's Republic of China." Annals of Internal Medicine 81:863-64 (1974).

----- "Radiation injury." In Encyclopaedia Britannica, 15th edition, pp. 417-21. Chicago: Encyclopaedia Britannica, 1974.

Blank, M. L., and Snyder, F. "A tissue culture system for studies of the regulation of ether-linked and ester-linked aliphatic moieties in glycerolipids." Archives of Biochemistry and Biophysics 160:100-105 (1974).

Blank, M. L.; Wykle, R. L.; Alper, S.; and Snyder, F. "Microsomal synthesis of the ether analogs of triacylglycerols acyl CoA: Alkylacylglycerol and Acyl CoA: Alk-1-enylacylglycerol acyltransferases in tumors and liver." Biochimica et Biophysica Acta 348:397-403 (1974).

Chaskes, S., and Phillips, A. W. "Pigmentation and auto-flourescence of Candida species after growth on tryptophan media." Canadian Journal of Microbiology 20:595-603 (1974).

1029488

Ciapp, N. K.; Tyndall, R. L.; Cumming, R. B.; and Otten, J. A. "Effects of butylated hydroxytoluene alone or with diethylnitrosamine in mice." Food and Cosmetics Toxicology 12:367-71 (1974).

Cloutier, R. J. "Book review: Nuclear Energy: Its Physics and Its Social Challenge." Health Physics 26:204 (1974).

Cloutier, R. J., and Watson, E. E. "Recent advances in dosimetry for nuclear medicine." American Nuclear Society Transactions 19:43-44 (1974). (Abstract.)

Deland, F. H.; Sauerbrunn, B. J. L.; Boyd, C.; Wilkinson, R. H., Jr.; Friedman, B. I.; Moinuddin, M.; Preston, D. F.; and Kniseley, R. M. "⁶⁷Ga-citrate imaging in untreated primary lung cancer: preliminary report of a cooperative group." Journal of Nuclear Medicine 15:408-11 (1974).

Edwards, C. L., and Hayes, R. L. "Tumor detection with ⁶⁷Ga citrate." In Proceedings of the First World Congress of Nuclear Medicine, Japan, 1974, pp. 120-23. Tokyo, Japan: World Federation of Nuclear Medicine and Biology, 1974.

Gengozian, N.; Smith, T. A.; and Gosslee, D. G. "External uterine palpation to identify stages of pregnancy in the marmoset, Saguinus fuscicollis SSP." Journal of Medical Primatology 3:236-43 (1974).

Gibbs, W. D.; Edwards, C. L.; Hodges, H. D.; and Cloutier, R. J. "Measurement of temporal changes in whole-body radionuclide distribution with a profile scanner." In Dynamic Studies with Radioisotopes in Medicine 1974, pp. 75-84. Vienna: International Atomic Energy Agency, 1974.

Goh, K. O. "Exogenous deoxyribonucleoside triphosphates: II. Their effect on pulverized human chromosomes at the S phase." Proceedings of the Society for Experimental Biology and Medicine 145:938-43 (1974).

Goswitz, F. "Radiocolloid spleen scanning in lymphoma and chronic lymphocytic leukemia." Journal of Nuclear Medicine 15:496 (1974). (Abstract.)

Goswitz, F.; Morris, C.; Kim, K.; and Hansard, M. "Altered reticuloendothelial (RE) function in hematologic diseases." Journal of Nuclear Medicine 15:495-96 (1974). (Abstract.)

Greenlaw, R. H.; Weinstein, M. B.; Brill, A. B.; McBain, J. K.; Murphy, L.; and Kniseley, R. M. "⁶⁷Ga-citrate imaging in untreated malignant lymphoma: preliminary report of a cooperative group." Journal of Nuclear Medicine 15:404-7 (1974). (Abstract.)

Hayes, R. L.; Brown, D. H.; Byrd, B. L.; and Carlton, J. E. "A comparison of the tissues distribution of ⁶⁷Ga and the rare earth radionuclides." Journal of Nuclear Medicine 15:501 (1974). (Abstract.)

Hayes, R. L.; Brown, D. H.; and Carlton, J. E. "Comparison of the subcellular distribution of the tumor-localizing agents, ⁶⁷Ga, ¹¹¹In, ²⁰⁶Bi, and ¹⁶⁷Tm." Journal of Nuclear Medicine 15:501 (1974). (Abstract.)

Hodges, H. D. "Applications and availability of whole-body counters to the nuclear medicine technologist." Journal of Nuclear Medicine Technology 2:102-4 (1974).

Hodges, H. D.; Gibbs, W. D.; Morris, A. C., Jr.; and Coffey, W. C., II "An improved high-level whole-body counter." Journal of Nuclear Medicine Technology 15:610-12 (1974).

Hodges, H. D.; Goswitz, F. A.; and Berger, J. D. "Letter to the editor: Defective ^{198}Au -colloid." Journal of Nuclear Medicine Technology 2:18 (1974).

Johnston, G.; Benua, R. S.; Teates, C. D.; Edwards, C. L.; and Kniseley, R. M. " ^{67}Ga -citrate imaging in untreated Hodgkin's disease: preliminary report of cooperative group." Journal of Nuclear Medicine 15:399-403 (1974).

Lee, T.-C., and Stephens, N. "Dietary effect of stearyl CoA desaturation in Morris hepatomas." Federation of American Societies for Experimental Biology. Federation Proceedings 33:1264 (1974). (Abstract 224).

Lee, T.-C.; Stephens, N.; and Snyder, F. "Dietary effects on stearyl coenzyme: a desaturase in Morris hepatomas." Cancer Research 34:3270-73 (1974).

Lushbaugh, C. C. "Human radiation tolerance." In Space Radiation Biology and Related Topics; C. A. Tobias and P. Todd, eds.; Ch. 10, pp. 475-522. New York: Academic Press, 1974.

Lushbaugh, C. C., and Yuhas, J. M. "Pathological features of radiation-induced murine pulmonary carcinomas and their metastases." Radiation Research 59:222 (1974). (Abstract D-28-2.)

Morris, A. C., Jr.; Goswitz, F. A.; Kim, K. H.; McDow, A. E., Jr.; Aaron, P. A.; and Barclay, T. R. "Interface for direct on-line computer recording of dynamic radionuclide data." Medical and Biological Engineering 12:367-69 (1974).

Poggenburg, J. K., and Hayes, R. L. "Radiopharmaceuticals for function studies: Present and future." In Dynamic Studies with Radioisotopes in Medicine 1974, pp. 85-96. Vienna: International Atomic Energy Agency, 1974.

Ricks, R. C., and Lushbaugh, C. C. "The influence of exercise conditioning on the performance decrement effects of total-body irradiation." Health Physics 27(6):614 (1974). (Abstract P/12.)

-----. "Quantitation of radiation-induced changes in man." Radiation Research 59:39 (1974). (Abstract A-19-3.)

Rock, C. O., and Snyder, F. "Biosynthesis of 1-alkyl-Sn-glycero-3-phosphate via ATP: 2-alkyl-Sn-glycerol phosphotransferase." Federation of American Societies for Experimental Biology 33:1552 (1974). (Abstract 1858.)

-----. "Biosynthesis of 2-alkyl-Sn-glycero-3-phosphate via adenosine triphosphate: 2-alkyl-Sn-glycerol phosphotransferase." Journal of Biological Chemistry 249:5382-87 (1974).

Snyder, F.; Malone, B.; and Piantadosi, C. "Enzymic studies of glycol and glycerol lipids containing 0-alkyl bonds in liver and tumor tissues." Archives of Biochemistry and Biophysics 161:402-7 (1974).

Tankersley, W. G., and Woodward, J. M. "Induction and isolation of a minicell-producing strain of Salmonella typhimurium." Proceedings of the Society for Experimental Biology and Medicine 145:802-5 (1974).

Orso, P., and Gengozian, N. "Variation in T and B cell deficiency in different mouse allogeneic radiation chimeras." Journal of Immunology 113:1770-79 (1974).

Vodopick, H., and Andrews, G. A. "Accidental radiation exposure." Archives of Environmental Health 28:53-56 (1974).

Vodopick, H.; Chaskes, S. J.; Solomon, A.; and Stewart, J. A. "Transient monoclonal gammopathy associated with cytomegalovirus infection." Blood 44:189-95 (1974).

Washburn, L. C.; Carlton, J. E.; Hayes, R. L.; and Yuhas, J. M. "Distribution of WR-2721 in normal and malignant tissues of mice and rats bearing solid tumors: Dependence on tumor type, drug dose and species." Radiation Research 59:475-83 (1974).

Washburn, L. C., and Hayes, R. L. "Thin layer chromatographic and colorimetric methods for monitoring the purity of S-2-(3-aminopropylamine)-ethylphosphorothioic acid (WR-2721)." Analytical Chemistry 46:2231 (1974).

Wykle, R. L., and Schremmer, J. M. "A lysophospholipase D pathway in the metabolism of ether-linked lipids in brain microsomes." Journal of Biological Chemistry 249:1742-46 (1974).

MEDICAL AND HEALTH SCIENCES DIVISION 1975

Allen, E. M., and Gengozian, N. "Effect of antithymocyte globulin pretreatment: immunological reconstitution of lethally irradiated animals." Transplantation 19:456-63 (1975).

Andrews, G. A., and Edwards, C. L. "Tumor scanning with gallium-67." Journal of the American Medical Association 233:1100-1103 (1975).

Barclay, T. R.; Cloutier, R. J.; Watson, E. E.; and Gilliam, P. L. "Interfacing a multichannel analyzer to a minicomputer." Nuclear Instruments and Methods 124:281-83 (1975).

Barnhart, D. D., and Gengozian, N. "An evaluation of the mixed lymphocyte culture reaction in marmosets." Transplantation 20:1107-15 (1975).

Blank, M. L.; Cress, E. A.; Piantadosi, C.; and Snyder, F. "A method for the quantitative determination of glycerolipids containing Ω -akyl and Ω -alkyl-1-enyl moieties." Biochimica et Biophysica Acta 380:208-18 (1975).

Blank, M. L.; Piantadosi, C.; Isaq, K. S.; and Snyder, F. "Modification of glycerolipid metabolism in L-M fibroblasts by an unnatural amino-alcohol, N-isopropylethanalamine." Biochemical and Biophysical Research Communications 62:983-88 (1975).

Blank, M. L., and Snyder, F. "Qualitative and quantitative aspects of thin layer chromatography in the analysis of phosphorus-free lipids." In Analysis of Lipids and Lipoproteins; E. G. Parkins, ed.; pp. 63-69. Champaign, Illinois: American Oil Chemists' Society, 1975.

Brown, R. C.; Blank, M. L.; Kostyu, J. A.; Osburn, P.; Kilgore, A.; and Snyder, F. "Analysis of tumor-associated alkyldiacylglycerols and other lipids during radiation-induced thymic leukemogenesis." Proceedings of the Society for Experimental Biology and Medicine 149: 808-13 (1975).

Byrd, B. L.; Watson, E. E.; Cloutier, R. J.; and Hayes, R. L. "Effect of stable scandium on the long-term whole body retention of intravenously administered ^{46}Sc citrate in the rat." Health Physics 29: 375-79 (1975).

Chaskes, S.; Kingdon, G. C.; and Balish, E. "Serum immuno-globulin levels in humans exposed to therapeutic total-body gamma irradiation." Radiation Research 62: 145-58 (1975).

Chaskes, S., and Tyndall, R. L. "Pigment production by Cryptococcus neoformans from para- and ortho-diphenols: effect of the nitrogen source." Journal of Clinical Microbiology 1: 509-14 (1975).

Edwards, C. L., and Hayes, R. L. "Gallium-67 citrate for tumor scanning." In Radiologic and Other Biophysical Methods in Tumor Diagnosis. Proceedings of the 18th Annual Clinical Conference on Cancer, 1973, pp. 39-56. Chicago: Year Book Medical Publishers, 1975.

El-Bassiouni, E. A.; Piantadosi, C.; and Snyder, F. "Metabolism of alkyldihydroxyacetone phosphate in rat brain." Biochimica et Biophysica Acta 388: 5-11 (1975).

Ellis, J. T.; Kraft, L. M.; Lushbaugh, C. C.; Humason, G. L.; Harraft, W. S.; Porta, E. A.; Bailey, O. T.; Greep, R. O.; Leach, C. S.; Lair, T.; Simmonds, R. C.; Vogel, F. S.; Dennis, R. L.; Brashear, H. R.; Talmage, R. V.; Harrison, G. A.; Corbett, R. L.; Klein, G.; Tilbury, T.; Suri, K.; and Haymaker, W. "The effects of cosmic particle radiation on pocket mice aboard Apollo XVII: appendix III: evaluation of viscera and other tissues." Aviation, Space, and Environmental Medicine 46:639-54 (1975).

Frenkel, J. K.; Nelson, B. M.; and Arias-Stella, J. "Immunosuppression and toxoplasmic encephalitis: Clinical and experimental aspects." Human Pathology 6:109-11 (1975).

Gengozian, N., and Batson, J. S. "Single-born marmosets without hemopoietic chimerism: naturally occurring and induced." Journal of Medical Primatology 4:252-61 (1975).

Goh, K. O. "Total-body irradiation and human chromosomes: V. Additional evidence of a transferable substance in the plasma of irradiated persons to induce chromosomal breakages." Journal of Medicine 6:51-60 (1975).

----- "Total-body irradiation and human chromosomes: IV. Cytogenetic follow-up studies 8 and 10-1/2 years after total-body irradiation." Radiation Research 62:364-73 (1975).

Hayes, R. L., and Brown, D. H. "Biokinetics of radio-gallium." In Nuklearmedizin: Fortschritte der Nuklearmedizin in Klinischer und technologischer Sicht, 12th Annual Meeting, Gesellschaft für Nuklearmedizin, München, September 11-14, 1974; H. W. Pabst, ed. Stuttgart: Schattauer Verlag, 1975.

Hodges, H. D.; Morris, A. C., Jr.; and Gibbs, W. D. "Correlation of thyroid uptake with whole-body retention measurements." Journal of Nuclear Medicine Technology 3(2):72-75 (1975).

Hübner, K. F.; Gengozian, N.; and Gilman, T. A. "Suppression and recovery of the immune response and CFV potential of mice during and after chronic low-dose-rate gamma-irradiation." International Journal of Radiation Biology and Related Studies in Physics, Chemistry, and Medicine 28:301-12 (1975).

Hübner, K. F., and Littlefield, L. G. "Burkitt lymphoma in three American children." American Journal of Diseases in Children 129:1219-23 (1975).

Jones, J. B.; Lange, R. D.; Yang, T. J.; Vodopick, H.; and Jones, E. S. "Canine cyclic neutropenia: erythropoietin and platelet cycles after bone marrow transplantation." Blood 45:213 (1975).

Kateley, J. R., and Gengozian, N. "Rat-mouse radiation chimeras: characterization of an antibody-mediated graft-vs-host reaction." Journal of Immunology 114:125-32 (1975).

Lee, T.-C.; Blank, M. L.; Piantadosi, C.; Ishaq, K. S.; and Snyder, F. "Incorporation and subcellular distribution of an unnatural phospholipid base-analog, N-isopropylethanolamine, in rat liver." Biochimica et Biophysica Acta 409:218-24 (1975).

Littlefield, L. G.; Lever, W. E.; Miller, F. L.; and Goh, K.- O. "Chromosome breakage studies in lymphocytes from normal women, pregnant women, and women taking oral contraceptives." American Journal of Obstetrics and Gynecology 121:976-80 (1975).

Littlefield, L. G., and Mailhes, J. B. "Comparison of chromosome breakages in lymphocytes and fibroblasts from control women and women taking oral contraceptives." In Cytogenetics, Environment, and Malformation Syndromes; D. Bergsma and R. Neil Schimke, eds. The National Foundation March of Dimes Birth Defects original articles series, vol. 12. New York: Alan R. Liss, 1975. Also in Fertility and Sterility 26:828-32 (1975).

Medical and Health Sciences Division, Oak Ridge Associated Universities. Research report 1974-75. Oak Ridge, Tennessee: ORAU, 1975. (ORAU-127.)

Newsome, Y. L., and Littlefield, G. L. "Adriamycin-induced chromosome aberrations in human fibroblasts." Journal of the National Cancer Institute 55:1061-64 (1975).

Rock, C. O., and Snyder, F. "Metabolic interrelations of hydroxy-substituted ether-linked glycerolipids in the pink portion of the rabbit harderian gland." Archives of Biochemistry and Biophysics 171:631-36 (1975).

----- "Purification of phospholipase A₂ from venoms by affinity chromatography." Federation of American Societies for Experimental Biology. Federation Proceeding, 34:525 (1975). (Abstract 1720.)

----- "Rapid purification of phospholipase A₂ from Crotalus adamanteus venom by affinity chromatography." Journal of Biological Chemistry 250:6564-66 (1975).

-----. "A short-chain acyl-CoA: 1-alkyl-2-acyl-Sn-glycerol acyltransferase from a microsomal fraction of the rabbit harderian gland." Biochimica et Biophysica Acta 388:226-30 (1975).

Snyder, F., and Malone, B. "Acyltransferases and the biosynthesis of pulmonary surfactant lipid in adenoma alveolar type II cells." Biochemical and Biophysical Research Communications 66:914-19 (1975).

Snyder, F., and Snyder, C. "Glycerolipids and cancer." Progress in Biochemical Pharmacology 10:1-41 (1975).

Swartzendruber, D. C.; Buckland, C. H.; Lushbaugh, C. C.; Humason, G. L.; and Gengozian, N. "Ultrastructural abnormalities of marmoset colon cancer cells." Federation of American Societies for Experimental Biology. Federation Proceedings 34:825 (1975). (Abstract 3423.)

Swartzendruber, D. C., and Lushbaugh, C. C. "Intracellular microvilli in cystic colonic cancer cells." Journal of Cell Biology 67:423a (1975). (Abstract 846.)

Tyndall, R. L.; Colyer, S.; and Clapp, N. "Early alterations in plasma esterases with associated pathology following oral administration of diethylnitrosamine and butylated hydroxytoluene singly or in combination." International Journal of Cancer 16:184-92 (1975).

Tyndall, R. L., and Daniel, J. C., Jr. "Alterations in uterine and serum esterases in pregnant mammals." Fertility and Sterility 26:1098-1104 (1975).

Vodopick, H. "Erythropoietic hypoplasia after exposure to γ -benzene hexachloride." Journal of the American Medical Association 234:850-51 (1975).

Wykle, R. L., and Schremmer-Lockmiller, J. M. "The biosynthesis of plasmalogens by rat brain: involvement of the microsomal electron transport system." Biochimica et Biophysica Acta 380:291-98 (1975).

MEDICAL AND HEALTH SCIENCES DIVISION 1976

Andrews, G. A. "History of radiopharmacy." In Radiopharmacy; Manuel Tubis and Walter Wolf, eds.; pp. 3-23. New York: John Wiley & Sons, 1976.

Andrews, G. A.; Hubner, K. F.; Washburn, L. C.; Wieland, B. W.; Gibbs, W. D.; Hayes, R. L.; and Butler, T. A. "Clinical tumour scanning with (¹¹C) carboxyl-labeled l-aminocyclopentanecarboxylic acid (¹¹C ACPC)." In Proceedings of the 17th Annual Meeting. Louisville, Kentucky: Southeastern Chapter, Society of Nuclear Medicine, 1976. (Abstract.)

Armstrong, R. D., and Frome, E. L. "A branch and bound solution of a restricted least-squares problem." Technometrics 18:447-50 (1976).

----- "The calculation of least absolute value estimators for two-way tables." In Proceedings of the Statistical Computing Section, American Statistical Association, pp. 101-6. Boston, Massachusetts: American Statistical Association, 1976.

----- "A comparison of two algorithms for absolute deviation curve fitting." Journal of the American Statistical Association 71:328-30 (1976).

Baker, R. C.; Wykle, R. L.; and Lockmiller, J. S. "Identification of a soluble protein stimulator of microsomal cytochrome b₅-dependent desaturation reactions." Federation of American Societies for Experimental Biology, Federation Proceedings 35:1625 (1976). (Abstract 1357.)

Baker, R. C.; Wykle, R. L.; Lockmiller, J. S.; and Snyder, F. "Identification of a soluble protein stimulator of plasmalogen biosynthesis and stearoyl-coenzyme a desaturase." Archives of Biochemistry and Biophysics 177:299-306 (1976).

Blank, M. L.; Lee, T.-C.; Piantadosi, C.; Ishaq, K. S.; and Snyder, F. "Membrane lipid modification and stearoyl-coenzyme a desaturase activity in L-M cells." Archives of Biochemistry and Biophysics 177:317-22 (1976).

Blank, M. L.; Rainey, W. T., Jr.; Christie, W. H.; Piantadosi, C.; and Snyder, F. "Mass spectral analysis of a homologous series of S- and O-alkylglycerols." Chemistry and Physics of Lipids 17:201-6 (1976).

Brown, D. H.; Byrd, B. L.; Carlton, J. E.; Swartzendruber, D. C.; and Hayes, R. L. "A quantitative study of the sub-cellular localization of ^{67}Ga ." Cancer Research 36:956-63 (1976).

Charnes, A.; Frome, E. L.; and Yu, P. L. "The equivalence of generalized least squares and maximum likelihood estimation in the exponential family." Journal of the American Statistical Association 71:169-72 (1976).

Dosado, E. A.; Hsie, A. W.; and Snyder, F. "Rapid screening of lipid metabolism in monolayer cell cultures." Journal of Lipid Research 17:285-87 (1976).

DuFrain, R. J.; Littlefield, L. G.; and Wilmer, J. L. Variations in the frequency of induced aberrations in rabbit somatic cells treated with a chemical clastogen. Paper presented at the Fifth International Congress of Human Genetics, Mexico City, October 10-15, 1976. Excerpta Medica, International Congress Series 397:120 (1976).

- Frome, E. L.; Frederickson, E. L.; and Lushbaugh, C. C.
"Power spectrum of the respiratory system." Biometrics
32:423-28 (1976).
- Frome, E. L., and Yakatan, G. J. "Fitting the one compartment open model to bio-availability data." In Ninth International Biometric Conference, p. 19. Boston, Massachusetts: 1976. (Abstract.)
- Gengozian, N.; Bazzell, S. J.; and Nickerson, D. "Histocompatibility antigens and antibody forming cells in the marmoset, a natural blood chimera." Federation of American Societies for Experimental Biology. Federation Proceedings 35:353 (1976). (Abstract 831.)
- Gengozian, N.; Salter, B. L.; Basford, N. L.; and Kateley, J. R. "Characterization of the antibody response of the marmoset to sheep red blood cells." Clinical and Experimental Immunology 23:525-35 (1976).
- Gengozian, N., and Orso, P. "Status of T- and B-cell co-operation in radiation chimeras: evidence for a suppressor effect." Transplantation Proceedings 8:631-35 (1976).
- Goswitz, F. "Vitamin B₁₂ absorption test and other studies." In Diagnostic Nuclear Medicine; A. Gottschalk and E. J. Potchen, eds.; pp. 186-90. Golden's Diagnostic Radiology; L. L. Robbins, ed.; section 20. Baltimore: The Williams and Wilkins Co., 1976.
- Hayes, R. L. "Factors affecting uptake of radioactive agents by tumour and other tissues." In Proceedings of the IAEA Advisory Group Meeting on Tumour Localization with Radioactive Agents, Vienna, 1974, pp. 29-45. Vienna: International Atomic Energy Agency, 1976.

Hayes, R. L., and Byrd, B. L. "A comparison of the deposition of various tumor-localizing agents in inflammatory tissue." In Proceedings of the 17th Annual Meeting. Louisville, Kentucky: Southeastern Chapter, Society of Nuclear Medicine, 1976. (Abstract.)

Hayes, R. L.; Washburn, L. C.; Sun, T. T.; Rafter, J. J.; and Byrd, B. L. "Factors affecting the tissue distribution of (¹¹C) ACPC, a new tumor-localizing agent." In Proceedings of the 17th Annual Meeting. Louisville, Kentucky: Southeastern Chapter, Society of Nuclear Medicine, 1976. (Abstract.)

Hayes, R. L.; Washburn, L. C.; Wieland, B. W.; and Sun, T. T. "Carboxyl-labeled (¹¹C) ACBC, a possible new radio-pharmaceutical for detection of cancer using positron tomography." Journal of Nuclear Medicine 18:639 (1976). (Abstract.)

Hayes, R. L.; Washburn, L. C.; Wieland, B. W.; Sun, T. T.; Turtlè, R. R.; and Butler, T. A. "Carboxyl-labeled ¹¹C-1-aminocyclopentanecarboxylic acid, a potential agent for cancer detection." Journal of Nuclear Medicine 17:748-51 (1976).

Hilenski, L. L.; Walne, P. L.; and Snyder, F. "Aliphatic chains of esterified lipids in isolated eyespots of Euglena gracilis var. bacillaris." Plant Physiology 57:645-46 (1976).

Hodges, H. D., and Gibbs, W. D. "The participation of nuclear medicine technologists in radiation accident management." Journal of Nuclear Medicine Technology 4:95 (1976). (Abstract.)

Hodges, H. D., and Yaden, S. L. "Restraining rats with radiation-induced tail damage." Laboratory Animal Science 26:244 (1976).

Littlefield, L. G., and Joiner, E. E. Cytogenetic follow-up studies in 6 radiation accident victims. Paper presented at the Fifth International Congress of Human Genetics, Mexico City, October 10-15, 1976. Excerpta Medica, International Congress Series 397:137 (1976).

Lushbaugh, C. C.; Andrews, G. A.; Hubner, K. F.; Cloutier, R. J.; Beck, W. L.; and Berger, J. D. "REAC/TS: A pragmatic approach for providing medical care and physician education for radiation emergencies." In Diagnosis and Treatment of Incorporated Radionuclides, pp. 565-77. Vienna: International Atomic Energy Agency, 1976.

Lushbaugh, C. C., and Casarett, G. W. "The effects of gonadal irradiation in clinical radiation therapy: a review." Cancer 37:1111-20 (1976).

Lushbaugh, C. C., and Swartzendruber, D. C. "Histopathologic aspects of radiation effects on lymphatic tissues and malignancies." In Radiation and the Lymphatic System, proceedings of the 14th Annual Hanford Biology Symposium, 1974, pp. 203-208. Washington, D.C.: U.S. Energy Research and Development Administration, 1976. (CONF-740930.)

Machlin, L. J.; Garcia, F.; Kuenzig, W.; Richter, C. B.; Spiegel, H. E.; and Brin, M. "Lack of antiscorbutic activity of ascorbate 2-sulfate in the rhesus monkey." American Journal of Clinical Nutrition 29:825-31 (1976).

Mainwaring, H. R.; Swartzendruber, D. C.; Lushbaugh, C. C.; Idoyaga-Vargas, N. L.; and Watson, E. E. "Radiation effect on ^{67}Ga retention and distribution in mouse tissues." In Radiation and the Lymphatic System, proceedings of the 14th Annual Hanford Biology Symposium, 1974, pp. 28-35. Washington, D.C.: U.S. Energy Research and Development Administration, 1976. (CONF-740930.)

Medical and Health Sciences Division, Oak Ridge Associated Universities. Research report 1975-76. Oak Ridge, Tennessee: ORAU, 1976. (ORAU-128.)

Morris, A. C., Jr.; Barclay, T. R.; Akin, T. E.; Hansard, M. C.; Gibbs, W. D.; and Modzelewski, C. U. "14" x 17" film recorder for computer-enhanced scans." In Proceedings of the Sixth Symposium on Sharing of Computer Programs and Technology in Nuclear Medicine, Atlanta, 1976, pp. 401-11. 1976. Also published in ERDA Report CONF-760119.1, pp. 1-20. Washington, D.C.: U.S. Energy Research and Development Administration, 1976.

Morris, H. B.; Baker, R. C.; Wykle, R. L.; and Snyder, F. Effect of an unnatural phospholipid analog in microsomal membranes in cytochrome P-450. Paper presented at the 11th Annual Regional Lipid Conference, Winston-Salem, North Carolina, 1976.

Nelson, B. M., and Andrews, G. A. "Autologous stem-cell banks for restoring hemopoiesis." Advances in Radiation Biology 6:325-38 (1976).

Nelson, B.; Calvo, W.; Fliedner, T. M.; Herbst, E.; Bruch, C.; Schnappauf, H.-P.; and Flad, H.-D. "The repopulation of lymph nodes of dogs after 1200 whole-body x-irradiation and intravenous administration of mononuclear blood leukocytes." American Journal of Pathology 84:259-82 (1976).

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Niblack, G. D., and Gengozian, N. "Identification of T and B lymphocytes in marmosets." Clinical and Experimental Immunology 23:536-43 (1976).

Nickerson, D. A., and Gengozian, N. "Primary in vitro antibody formation by blood leucocytes of a subhuman primate." Cell Immunology 27:171-76 (1976).

Palisano, J. R.; Walne, P. L.; and Brown, D. H. "Physico-chemical and ultrastructural characterization of isolated developing plastids of Euglena gracilis." Journal of Cell Biology 70(no. 2, part 2):166A (1976). (Abstract 498.)

Richter, C. B.; Humason, G. L.; and Lushbaugh, C. C. Edemic pneumocystis carinii infection in marmosets. Paper presented at the 27th Annual Session, American Association for Laboratory Animal Science, Houston, Texas, 1976.

Richter, C. B.; Humason, G. L.; and Tankersley, B. Acanthocephaliasis in caged marmosets. Paper presented at the 27th Annual Session, American Association for Laboratory Animal Science, Houston, Texas, 1976.

Ricks, R. C.; Cloutier, R. J.; Berger, J. D.; Beck, W. L., Jr.; and Lushbaugh, C. C. "REAC/TS: a radiation emergency assistance center/training site." In Program of the Twenty-first Annual Meeting of the Health Physics Society, San Francisco, 1976, p. 44. 1976. (Abstract Ja-9.)

Rock, C. O. Harderian glands: a model organ for the study of ether lipid metabolism in cancer cells. Ph.D. dissertation, University of Tennessee, 1976.

Rock, C. O.; Baker, R. C.; Fitzgerald, V.; and Snyder, F. "Stimulation of the microsomal alkylglycerol monooxygenase by catalase." Biochimica et Biophysica Acta 450:469-73 (1976).

Rock, C. O.; Fitzgerald, V.; Rainey, W. T., Jr.; and Snyder, F. "Mass spectral identification of 2-(0-acyl)hydroxy fatty acid esters in the white portion of the rabbit harderian gland." Chemistry and Physics of Lipids 17:207-12 (1976).

Rock, C. O. and Snyder, F. Localization of dihydroxyacetone phosphate acyltransferase. Paper presented at the 11th Annual Regional Lipid Conference, Winston-Salem, North Carolina, 1976.

----- "Stimulation of alkyldihydroxyacetone phosphate synthesis detergents." Federation of American Societies for Experimental Biology. Federation Proceedings 35:1724 (1976). (Abstract 1861.)

Snyder, F. "Chromatographic analysis of alkyl and alk-1-enyl ether lipids and their derivatives." In Lipid Chromatographic Analysis; G. V. Marinetti, ed.; vol. 1, pp. 111-48. New York: Marcel Dekker, 1976.

Snyder, F., and Malone, B. "Transfer of methyl groups from N-dimethylnitrosamine to glycerolipids in rat liver." Chemico-Biological Interactions 13:237-41 (1976).

Tyndall, R. L.; Chaskes, S. J.; Carlton, J. E.; Nelson, B.; and Daniel, J. C. "Gallium-67 distribution in pregnant mammals." Journal of Experimental Zoology 195:417-24 (1976).