

Ernest Orlando Lawrence Berkeley National Laboratory Records Transmittal

Division Information & Computing Sciences	Department Information Systems and Services	Archives and Records Office Use Only
Group Archives and Records Office--Human Radiation Experiments Search and Retrieval Pr		Filing Code ARO-990
Location 69-101		LBL Accession Date 5/4/1995
Transferee HRE Team		FRC Accession No. 434 95
Head of Department 		

Records Title

Human Radiation Experiments Search and Retrieval Project Experiment Summaries

Inclusive Date of Records

1940 1989

No of Containers

4 FRC Box

Brief description of records

boxes overpacked - added 4th box - folder listing will not match what is in boxes.
This series contains the write-ups of Human Radiation Experiments done at Lawrence Berkeley Laboratory, as well as University of California at Berkeley, UC San Francisco, and UC Los Angeles. These descriptions were done as a part of the Human Radiation Experiment Records Retrieval Project, July to April, 1994-1995.

Materials

Textual

Records Retention

- Historically Valuable Documents. Do not destroy. A detailed folder listing is included with the Records Transmittal
- Destroy/Review on a scheduled basis with a minimum retention of _____ years. Disposal/Review Date: Perm.

This is in accordance with:

- The National Archive General Retention Schedule. Citation _____ Proposed Sch. (July 5th, 1991) Sch. 19, Item 1. (1)
- The Department of Energy Retention Schedule. Citation _____

Disposal Authorization:

The legal retention of the records listed on this Records Transmittal has elapsed. Since I forsee no use of these records, I authorize their disposal.

Signature of Department Head

Date

Ernest Orlando Lawrence Berkeley National Laboratory

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Container **Of**

- | | |
|--------|--|
| Folder | 1 Rewrites of Three DOE Roadmap Experiments (Published February 1995): LBL-14 Rewrite. Studies on the Rate of Uptake of Iodine-131 in the Thyroid |
| Folder | 2 LBL-18 Rewrite. Studies on the Metabolism of Glycine Labeled with Carbon-14 |
| Folder | 3 LBL-21 Rewrite. Pituitary Irradiation with High-Energy Proton Beams |
| Folder | 4 Expanded LBL Experiments Summaries: Incidence of Acute Leukemia and Bone Marrow Studies in Polycythemia Vera Patients Treated with Phosphorus-32 and X-rays. |
| Folder | 5 Treatment of Multiple Myeloma with Phosphorus-32, Strontium-89 and Yttrium-90 |
| Folder | 6 Studies on Iodine-131 Uptake in Euthyroid and Hypothyroid Children |
| Folder | 7 Studies on the Distribution of Gases, Water and Electrolytes in the Human Body |
| Folder | 8 Hematological Studies on Patients Treated by Total Body Exposure to X-Rays |
| Folder | 9 Measurement of Inert Gas Exchange and Blood Circulation Using Radioactive Nitrogen, Argon, Krypton, and Xenon |
| Folder | 10 Carbon-14 Tracer Studies, Morphine and Codeine |
| Folder | 11 Blood Oxygen Studies in Patients with Polycythemia and in Normal Subjects Using Zirconium and Yttrium Colloids |
| Folder | 12 Roentgen Ray Therapy |
| Folder | 13 Studies of Sulfur-35-Labeled Methionine in Normal Adults and in Patients Chronic Hepatic Disease, Idiopathic Hypoproteinemia and Cushing's Syndrome |
| Folder | 14 Studies of Gastric Electric Potentials |
| Folder | 15 Uptake Studies and Therapy using Phosphorus-32 at the Laboratory of Experimental Oncology |
| Folder | 16 Treatment of Bladder Tumors Using Radiocobalt |
| Folder | 17 Studies of the Effect of Hypophysectomy Upon Neoplastic Growth |
| Folder | 18 Studies of Total Body Water with Tritium - San Quentin |

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|--------|----|---|
| Folder | 19 | Study on the Effects of Injection Volume on Intramuscular Radiosodium Clearance Rates |
| Folder | 20 | Body Composition Studies using Tritium |
| Folder | 21 | Measurement of Residual Fluid in the Fasting Stomach, Using Zr-95-Nb-95 |
| Folder | 22 | Treatment of Cancer with Heavy Charged Particles |
| Folder | 23 | Radiogold and Yttrium Treatments of Women with Cancer and Ascites |
| Folder | 24 | Measurement of Total Sodium Space and Total Body Sodium in Normal Subjects and in Patients with Cardiac Edema |
| Folder | 25 | Blood Volume Studies on Normal Human Subjects and in Pregnancy, Portal Cirrhosis, and Cancer Using Phosphorus-3 |
| Folder | 26 | Total Red Cell Volume, Plasma Volume and Sodium Space in Congestive Heart Failure Using Phosphorus-32 and Sodium |
| Folder | 27 | Phosphorus-32 Treatments for Breast Cancer |
| Folder | 28 | Studies on Blood Volume Measurement Using Chromium |
| Folder | 29 | Studies on the Metabolism of Tritium-Labeled Cholesterol |
| Folder | 30 | Local Blood Flow in Human Bone Marrow in Leukemia and Neoplastic Diseases Using Iodine-131 |
| Folder | 31 | Sodium Space and Body Sodium Content, Exchangeable with Sodium-24, in Normal Individuals and Patients with Ascites |
| Folder | 32 | Potassium-42 in the Localization of Deep-Seated Tumors |
| Folder | 33 | Longitudinal Studies |
| Folder | 34 | The Clearance of Silver-111 from Plasma and Liver of Cirrhotic and Non-Cirrhotic Patients |
| Folder | 35 | Measurement of Sodium-24 Movement in Normal Humans |
| Folder | 36 | Blood Studies in Bolivia |
| Folder | 37 | Development of Imaging Techniques to Visualize Certain Organs Using Radioactive Isotopes of Gold, Gallium, Technetium, Mercury and Iodine |

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- Folder 38 Uptake of I-131 into the Thyroids of Cancer Patients
- Folder 39 Chelated Yttrium-90 as Internal Radiation Therapy for Leukemia
- Folder 40 Metabolism Studies Using Palmitic Acid Labeled With Carbon-14
- Folder 41 The Effect of Erythropoietic Stimulation on Marrow Distribution in Man, Rabbit and Rat Using Iron-59 and Iron-52
- Folder 42 Physiological Studies on Mount Everest Climbers
- Folder 43 Sodium Selenite-Se75 for Tumor Localization Studies
- Folder 44 Iron Kinetics - Classification and Evaluation of Patterns of Erythropoiesis in Polycythemia Vera
- Folder 45 Bone Blood Flow Shown with Fluorine-18 and the Positron Camera
- Folder 46 Diminished Oxidation of 14C-UL-L-Asparagine to 14CO2 in Mice and Humans with Tumors
- Folder 47 Carbon-14 Bicarbonate Kinetics in Adult Males
- Folder 48 Radioisotope Kinetics Studies in Erythropoiesis Using Iron-59
- Folder 49 Effect of L-Methionine Ingestion on 14CO2 Excretion from L-Histidine (Imidazole-2-14C) in Folic Acid and Vitamin B12 Deficient Humans
- Folder 50 Effects of Heavy Ions on the Neuron System with Special Reference to Vision
- Folder 51 Serum Glyceride Turnover Studies in Obese Women Using Carbon-14-Labeled Glycerol
- Folder 52 C-14 Labeled Glycine
- Folder 53 Radioactive Aspirin
- Folder 54 Fe-59 - 12 Healthy Men, 1964 Sargent, Saito, Parker, Lawrence
- Folder 55 Additional Backup Information for DOE "Roadmap" Experiments Published February 1995: LBL-1 Treatment of Leukemia with Phosphorous-32
- Folder 56 LBL-2. Metabolic Studies of Bone Tumors Using Strontium-89
- Folder 57 LBL-3. Inhalation Studies Using Carbon

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- Folder 58 LBL-4. Inhalation of Zirconium-89 on Smoke Particles
- Folder 59 LBL-5. Radioactive Phosphorous as a Possible Diagnostic Procedure for Breast Tumors
- Folder 60 LBL-8. Durbin's Followup of Pu and Americium Injections
- Folder 61 LBL-9. Uptake of Iodine-131 in Thyroids of Psychiatric Patients
- Folder 62 LBL-11. Radiation-Related Studies Involving Inmates at San Quentin Prison
- Folder 63 LBL-12. Blood and Tissue Studies with Iron-59
- Folder 64 LBL-15. Measures of Body Fat and Related Factors in Normal Adults Using Potassium-40 and Cesium-137
- Folder 65 LBL-17. A Physiological Study in the Peruvian Andes Using Iron-59
- Folder 66 LBL-18. Studies on the Metabolism of Glycine Labeled with Carbon-14
- Folder 67 LBL-19. Astatine-211 and the Thyroid
- Folder 68 LBL-23. Radionuclide Studies to Determine Bone Marrow Distribution in Man

Container **Of**

- Folder 1 Leads to Experiments - Not Enough Info.to Write-Up: ARSENIC: Arsenic
- Folder 2 CADMIUM: Cadmium
- Folder 3 CARBON: C-14 Carboxyl Labeled Tyrosine - DI-dihydroxy phynylalanine (DODA)
- Folder 4 NASA - Carbon Monoxide Analyzer Studies Kinetics of Heme Catabolism and Red Blood Cell Survival
- Folder 5 Administration of C-14 Labeled Bicarbonate and Acetate to Diabetics
- Folder 6 C-14, H-3 Metabolic Studies, Pollycove
- Folder 7 C-14 and N-15 Labeled Amino Acids
- Folder 8 C-14 Labeled Analgetics, Elliott 65/66

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- Folder 9 C-14 Diabetic Young Patients, Havel, 1962
- Folder 10 C-14 on Skin, Maibach
- Folder 11 C-14 in Pregnant Women Getting Abortion
- Folder 12 C-14, H-3 Skin Studies, William Epstein
- Folder 13 UCSF MSS 83-5 Dr. Harvey M. Patt Papers, Alpen, Edward cv
- Folder 14 C-14 Labeled Stilbamidine
- Folder 15 CESIUM: Cesium-137 Mid 1960's Intercomparison Program
- Folder 16 CHROMIUM-51: Chromium-51 Tagged Cells from Patient with Hemolytic Episodes Injected Into Normals
- Folder 17 Cr-51 Hematological Studies in Cancer, Petrakis
- Folder 18 Cr-51 Blood Volume Determinations
- Folder 19 Cr-51 Blood Volume Determinations in Infants with Pulmonary Hyperfusion
- Folder 20 COBALT: Co-60 Labeled Vitamin B-12
- Folder 21 Co-60 in Anemia
- Folder 22 COLLOIDS: Colloids - Chromic Phosphate, Yttrium Citrate, Zirconium Lactate, Zirconium Phosphate
- Folder 23 COPPER: Cu-64 Uptake
- Folder 24 FALLOUT: Fallout - Marshall Islanders, 1955
- Folder 25 FLUORINE: F-18 Dr. Herman Bechs
- Folder 26 GALLIUM: Ga-72 Uptake, Laboratory of Experimental Oncology
- Folder 27 PHOSPHOROUS: P-32 Treatment for Skin Cancer and Disorders, Low-Beer
- Folder 28 P-32, Na-24, and I-131 Di-iodofluorescein Experiments on Cancer Patients at the Laboratory of Experimental Oncology

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- Folder 29 Chromic Phosphate Hepatoma Patient (Jones & Wrobel, 1941)
- Folder 30 Phosphorus, Strontium, Chromate in Children, Yeazell, UCSF
- Folder 31 PLUTONIUM: Plutonium Tracer Studies
- Folder 32 POTASSIUM: K-42 Total Body Potassium in Man, UCSF
- Folder 33 K-42 in Normals (Nello Pace) 1950
- Folder 34 K-42 in Pregnant Women
- Folder 35 RADIOACTIVE SUBSTANCES: Uptake and Concentration of Radioactive Substances
- Folder 36 Experimental Radiation Techniques
- Folder 37 RUBIDIUM: Brain Tumor Localization and Blood Barrier Studies Using Rb-82, 1980 Chi-Kwan Yen, Yukio Yano, R. Friedland, T.F. Budinger
- Folder 38 SODIUM: Sodium, Zirconium, Yttrium Fitness Studies
- Folder 39 Na-24 Patients with Hypertension, Edelman, 1962
- Folder 40 STRONTIUM: Sr-90, Sr-85, Carr et al 1954
- Folder 41 SULFUR: Sulfur-35 Labeled Albumin, Sulfur/Protein Turnover Studies
- Folder 42 Sulfur-35 on Skin, Maibach
- Folder 43 Sulfur-35 Labeled Methionine and Cystine/I-131 Labeled Albumin - Twenty Adult Males, Margen Tarver, 1956
- Folder 44 THORIUM: Thorium for Retrograde Ateriography
- Folder 45 TRITIUM: Tritium Labeled Vitamin-D, Smyth
- Folder 46 Labeled Albumen (Tritium?) Nutritional Studies
- Folder 47 Tritium-Doc Secretion, 1962 Biglieri
- Folder 48 URANIUM: Uranium-26 Short Term Dose Tolerance

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- Folder 49 VITAMIN D: Vitamin D Metabolism in Uremic Children
- Folder 50 X-RAYS: X-ray Treatment of Brain Tumors, UCSF, Boldrey
- Folder 51 XENON, ARGON, KRYPTON: Studies on Children Using Xenon, Argon, Krypton
- Folder 52 YTTRIUM: Yt-95 Tagged Cross Transfusion Experiments at the Laboratory of Experimental Oncology
- Folder 53 Y-91 John Lawrence, 1948-49
- Folder 54 ZIRCONIUM, ZINC: Zr-95, Zn-65, and Cb-95, 1949-50, Low-Beer and Scott
- Folder 55 Zirconium Studies of Intestinal Absorption, 1965
- Folder 56 Zinc-65 Possible Use on Diabetics, Patients with Xanthoma Tuberosum, Leukemia, etc., 1962, Sargent
- Folder 57 Documentation Not used for Expanded Experiment List: Gas Exchange Studies with Argon, Xenon, Krypton, Nitrogen
- Folder 58 Xenon at White Mountain (Included in #6 experiment list)
- Folder 59 Materials on Captive / Vulnerable Populations
- Folder 60 Early Hamilton (Various Isotopes on Normals and Patients): Hamilton - Sodium, Potassium, Chlorine, Bromine, Iodine
- Folder 61 Outside Scope: Contact Therapy for Skin Cancer with Beta-Ray Emitting Isotopes using Radioactive Phosphorus, Low-Beer (Doesn't say humans used.)
- Folder 62 Irradiation of Skin - Grant Proposal, Not AEC Funded
- Folder 63 Fetal Thyroidal Uptake of I-127, Fallout
- Folder 64 Rubidium-86 Uptake by Red Blood Cells from Control and Cancer Subjects (done on cells, not subjects)
- Folder 65 Iron Metabolism Studies in Infants using Fe-59 at UCLA
- Folder 66 Testicular Irradiation Study 1963-1973, Swedish Hospital, Seattle, WA
- Folder 67 Reference Materials: Research Projects Using Radioactivity at UC campuses

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- Folder 68 AEC Contracts
- Folder 69 Veterans Hospital Research (references in correspondence, no experiments stated)
- Folder 70 Privately Funded Experiments / Military Experiments
- Folder 71 State Funded Cancer Research (Radiation Experiments on Humans)
- Folder 72 Publications Made Possible by Use of the 60" Cyclotron
- Folder 73 Background Information on Why/How P-32, Cr-51 Used to Determine Blood Volume - Fe-59 to Determine Rate of Fomration of Red Cells
- Folder 74 Histories of Laboratories, etc. for Reference Purposes
- Folder 75 Hardin B. Jones Biographical - Contains Bibliography
- Folder 76 Bibliographies for Various Topics(Possible Leads - Lit Search)
- Folder 77 Reprints Not Applicable to Expanded Experiment List: Already Cited in Roadmap
- Folder 78 Not Applicaple - Non-AEC Funding, No Radioactivity of Humans Used, etc.
- Folder 79 Cs-137, K-40, H-3 Determinations of Body Fat

Container **Of**

- Folder 1 University of California Los Angles Experiment List Summaries: UCLA 1 - Scans of the Thyroid Gland Using Iodine 131
- Folder 2 UCLA 2 - Strontium Studies in Patients with Osteoporosis, Paget's Disease, Tumor Metastases to Bone, and in Normal Human Subjects
- Folder 3 UCLA 3 - Studies of Hepatic Function and Hepatic Blood Flow Using Rose Bengal Iodine 131 and Colloidal Gold 198
- Folder 4 UCLA 4 - Investigations Using Iodine 131 for Reticuloendothelial System Studies
- Folder 5 UCLA 5 - Studies of the Behavior of Vitamin B-12 Labeled with Radioactive Cobalt 60
- Folder 6 UCLA 6 - Comparison Of Fifteen Minute Urinary Excretion Values Of Hippuran I-131 With Other Indices Of Renal Function

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| Folder | 7 UCLA 7 - Iodine 131 and 125 as a Diagnostic Tool in Renal Disease |
| Folder | 8 UCLA 8 - Retention of I-131 Labeled Human Serum Albumin |
| Folder | 9 UCLA 9 - Photoscans with Colloidal Aggregates of Radioalbumin |
| Folder | 10 UCLA 10 - Calcium 47 Absorption Studies in Man |
| Folder | 11 UCLA 11 - Lung Scans Using Technetium-labeled Radioalbumin Macroaggregates |
| Folder | 12 UCLA 12 - Brain Tumor Scanning Using Technetium |
| Folder | 13 UCLA 13 - Measurement of Loss of Labeled Albumin in Children By Means of Total Body Counting |
| Folder | 14 UCLA 14 - Copper Absorption in Patients with Disorders of Iron Metabolism |
| Folder | 15 UCLA 15 - Total Body Counting-Labeled Gamma Globulins |
| Folder | 16 UCLA 16 - Manganese Absorption and Retention in Humans |
| Folder | 17 UCLA 17 - Brain Studies in Seizure Disorders Using Technetium |
| Folder | 18 UCLA 18 - Kidney Function Studies in Renal Transplant Recipients Using Tc-99m and Iodine-131m Chelates |
| Folder | 19 UCLA 19 - Liver Studies Using Radiopharmaceutical Technetium Sulfur Colloid (Tc-99m) Macroaggregates of Albumin |
| Folder | 20 UCLA 20 - Demonstration of Vascularity of the Femoral Head Using Technetium Sulfur Colloid |
| Folder | 21 UCLA 21 - Thrombophlebitis Scanning Using Technetium-99m Macroaggregates of Albumin |
| Folder | 22 UCLA 22 - Hepatic Portal System Study Involving Injection with Au198 Colloid and Tc99m Microaggregated Albumin |
| Folder | 23 UCLA 23 - A Comparison of Heart Chamber Dilution Curves and Pulmonary Dilution Curves for the Diagnosis of Congenital Heart Disease |
| Folder | 24 UCLA 24 - Fluorine-18 in Children with Skull Abnormalities |
| Folder | 25 Reference Materials: UCLA Atomic Energy Commission Reports, Publications Lists |

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