

**REPOSITORY****DOE-OHRE****COLLECTION****PLUTONIUM INJECTION****BOX NO.**1**FOLDER**Center For Human  
Radiobiology (40-003)

8000190

May 31, 1974

TO: R. E. Rowland

FROM: Austin M. Brues, M.D.

SUBJECT: Trip Report - Visit to Milford and Italy, Texas, May 21, 1974

I was instructed by AEC to visit the personal physician of case Cal-3 (our CHR #40-003), to inform him of details of this patient's 1947 injection and to suggest that he convey this information to the patient before the end of the week. Dr. Walter Weyzen, DBER, was to accompany me.

Because of a necessary visit to Los Alamos May 22-24 and an engagement in the evening of May 20 in Chicago, I took the night flight and was to meet Dr. Weyzen and travel with him by car to see Dr. Dewey H. Roberts in Milford on May 21. I picked him up near the Dallas-Fort Worth airport, and we arrived about 11:30 at Roberts' office in Milford.

Dr. Roberts is a 1932 graduate of Kansas City School of Osteopathy. According to the 1972 Directory of Osteopaths, he was born in 1898 (but told us he is in his 80th year). He took over the patient when his original physician, Dr. A. O. Dykes of Italy, became incapacitated three or so years ago.

Dr. Roberts is an enthusiastic man who appears to have a large practice (although no patients were in evidence); says that he studied three years at Baylor Medical School before going to osteopathic school and takes many post-graduate courses. One might guess that he serves a rural population of several thousand.

I told him we found that the patient had received plutonium into the muscle of the sarcomatous leg three days before it was amputated, not enough in our belief to cause any trouble or to have any effect on the tumor, but that he should be carefully followed in any case because of the very small number of such cases that are living. I pointed out why we are extremely anxious to have an autopsy in the event of his death, also that we would like to be able to check him again at intervals. He will cooperate and wants advice as to whom to call in the event of serious illness or death. He said that these old fellows with hypertension, in his experience, are likely to go to sleep some night and not wake up.

Dr. Roberts was quick to form the belief that the injection may have cured the tumor: we tried to cool this but with questionable success. (I had given warning of this possibility before accepting the assignment.)

8000191

R. E. Rowland  
Page 2  
May 31, 1974

We asked Roberts to tell the patient about the nature of the injection as he has a right to know. The record seems to indicate only that he gave voluntary consent to an injection of radioactive material.

Dr. Roberts says he doesn't know how long he will keep in practice and that we should tell our story to Dr. Hatfield, who, since it was Tuesday morning, would be at the convalescent home on Highway 77 at the south end of Italy, 5 miles up the road, and who would undoubtedly acquire this patient when he retires.

Dr. Peter L. Hatfield was young, intelligent, unshaven, on his hebdomadal morning rounds at a 40- or 50-bed convalescent home. He is a 1968 graduate of Baylor Medical School. He and Roberts are apparently the only doctors in an area of more than 100 square miles. He quickly understood our problem and would like a copy of our letter to Roberts so that he would know what to do in the event he was called on account of the patient's terminal illness or death.

It was not on the agenda that we visit the patient; however, I felt that a social visit was essential, so obtained directions to his home at the Post Office. To get there one goes off #77 to the Post Office, takes the next right, then the next right (pass the alley), turns left at the end, and on to the only brick house on the left opposite the school which is on the right. Our visit was welcome; his wife was taking her grade-school class to the zoo in Dallas; he is moving into the new house, finest in the area, apparently somewhat financed by his two children whom he visited when in the North; was advised that we talked with Dr. Roberts and that he should see him about this; he is well and has had no more blackouts (epilepsy) since he has been taking treatment prescribed at Rochester. He would visit us for a recheck if we request it in the future, if he doesn't have to fly.

Curtis Bruce

AMB:jt

cc: CHR-RR ✓

R. P. Hall, M.D.

B. C. Patten

A. F. Stehney

8000192

July 6, 1984

TO: File  
FROM: E. E. Adams  
SUBJECT: (40-003)

7/5/84 EEA

(40-003) I phoned Dr. David Williams (214/937-1210) to inquire as to the current status of . Dr. Williams said he last saw on 10/19/83 at which time he "seemed to be doing pretty well." had been on Dyazide and on Dilantin and Thorazine (for hallucinations and schizophrenic symptoms). His mental state seemed good and he was getting around, as usual, on crutches.

EEA/md

cc: A. F. Stehney

PRIVACY ACT MATERIAL REMOVED

OCT 25 1984

CHR RECORDS

RECEIVED

JUL 13 '84

CHR RECORDS

8000193



PRIVACY ACT MATERIAL REMOVED

CENTER FOR HUMAN RADIOBIOLOGY

Argonne National Laboratory • Massachusetts Institute of Technology • New Jersey Field Station • Southwest Field Station

June 6, 1974

W. W. H. Weyzen, M.D.  
Division of Biomedical and  
Environmental Research  
U.S. Atomic Energy Commission  
Washington, D. C. 20545

Dear Walter:

Re: Follow-up on visit to Texas, May 20, 1974

7 Yesterday afternoon I reached Dr. D. H. Roberts, physician to \_\_\_\_\_, by telephone to ask him if he had had a chance to talk to \_\_\_\_\_ He said yes, that \_\_\_\_\_ had come to see him on June 4 because of a minor injury, and that he had told him what we had said; namely, that he had received an injection of plutonium when he was in the hospital for his amputation. Dr. Roberts said \_\_\_\_\_ knew about the injection, except what it was that was injected, and wasn't much concerned about it.

I told Dr. Roberts that the AEC people were very anxious to have a letter from him so they would be sure what he had been told, what questions he might have asked and the answers, and his attitude. He said he would be glad to do this and would send it to me for transmittal, took down my address, and checked the spelling of plutonium. I shall send it on when I receive it and assume I may keep a copy for my file.

Faithfully,

Austin M. Brues, M.D.  
Medical Director

AMB:jt

bcc: P. Failla  
R. E. Rowland  
A. F. Stehney  
R. P. Hall, M.D.  
B. C. Patten  
CHR-RR

PRIVACY ACT MATERIAL REMOVED

8000194

CENTER FOR HUMAN RADIOBIOLOGY

November 11, 1986

TO: File  
FROM: J. E. Farnham  
SUBJECT: \_\_\_\_\_, 40-003

\_\_\_\_\_ returned the signed form authorizing us to release his name to the Congressional subcommittee (see J. H. Stebbings' letters of October 29, 1986). Three xerox copies were given to James Stebbings for transmittal to Dr. James Robertson of DOE, Washington, D.C. The original has been retained in the patient's file.

  
\_\_\_\_\_

JEF:11f

PRIVACY ACT MATERIAL REMOVED

MICROFILMED

FEB 04 1987

CNR RECORDS

8000195

29 October 1986

TO: Medical Records  
FROM: J. H. Stebbings *JHS*  
SUBJECT: Follow-up of Cage 40-003

Telephone contact with wife \_\_\_\_\_ was made today at the instigation of DOE (J. Robertson).

\_\_\_\_\_ is still alive; takes medicine for nerves (seizures), and blood pressure. Some arthritis.

Medical expenses are paid by a private medical insurance policy, which was said to be "expensive" but has covered expenses.

A letter is to be sent requesting permission to release name and address to Congressman Markey's Committee; delay will be encountered because children must approve and they live at a distance.

Permission was received verbally to inform DOE of nature of medical financial arrangements.

JHS:tah

T86002

PRIVACY ACT MATERIAL REMOVED

MICROFILMED

FEB 04 1987

CNR RECORDS

8000196

PRIVACY ACT MATERIAL REMOVED

Case# 40-003 Contact by Pag Date 2-24-86

Name \_\_\_\_\_ Purpose: YQ/EXAM/Other

Informant: Same \_\_\_\_\_ Other  WIFE Call:  Sent/Received

Address \_\_\_\_\_

Telephone \_\_\_\_\_ Best time to call \_\_\_\_\_

Doctor DR. WILLIAMS

Health Planning on a physical soon. "He's up and doing." Only problem is a little

Comments arthritis. He goes out 5 days a week to Senior Citizen Center to play dominoes. goes to Church every Sunday.

Medications - for High Blood Pressure

Invitation: Attitude Very cooperative DICANTIN

Scheduled \_\_\_\_\_ Nerve pill

Birth date \_\_\_\_\_  
S.S. # \_\_\_\_\_

RECEIVED  
APR 10 1986  
RECORDS ROOM

PRIVACY ACT MATERIAL REMOVED

CHR Telephone Contact

ARGONNE  
NATIONAL  
LABORATORY

RECEIVED

JUL

INTRA-LABORATORY MEMO

J. R.

---

July 3, 1984

TO: G. J. Hamilton

FROM: A. F. Stehney

SUBJECT: Updates on Series 40 Cases

Please try to get an update on the current status and whereabouts of cases 40-003, 40-009, and 40-012. I would appreciate receiving this information by July 10.

*AFS*

---

AFS:pat

cc: J. Rundo ✓

8000198

JUL 04 1984

November 27, 1985

TO: E. Huberman  
FROM: R. A. Schlenker *RAS*  
SUBJECT: Freedom of Information Act Request

We have been unable to locate the memo from Rowland to Schultz dated December 21, 1972 which you requested about 5:15 p.m. yesterday following the receipt of a letter from D. T. Goldman to A. Schriesheim concerning this matter. As today is the last business day before the deadline, December 2, further search is not possible without missing the deadline. Locating this memo is complicated by the fact that Rowland retired about two years ago and Schultz is dead.

Other intra-laboratory memos on the 18 plutonium research subjects referred to in the Goldman letter, mention them by name and give personal information about them. The release of such documents would be a violation of the patients' privacy and the right-to-privacy is protected by law. It would also constitute a violation of normal ethical practice in the handling of patient medical records.

The subjects referred to have been studied by several organizations since the mid 1940s. Non-personal information can be found in the scientific literature. A good review and guide to the literature up to the time of its publication can be found in Patricia W. Durbin, "Plutonium in Man: A New Look at the Old Data," pp.469-530, Radiobiology of Plutonium, Edited by Betsy J. Stover and Webster S.S. Jee, Published by the J. W. Press, Department of Anatomy, University of Utah, Salt Lake City, 1972.

lw

DEC 04 1985

8000199

ARGONNE  
NATIONAL  
LABORATORY

PRIVACY ACT MATERIAL REMOVED

40-00 -  
INTRA-LABORATORY MEMO

May 31, 1974

TO: CHR Records Room  
FROM: A. M. Brues, M.D.  
SUBJECT: 40-003 (Cal-3)

Patient: (wife: )

Children:

No telephone

No telephone

Physician: D. H. Roberts, D.O.  
Drawer 309  
Milford, Texas 76670  
(or Drawer R, Italy, Texas 76651)  
214/493-3811

Alternate  
physician: Peter L. Hatfield, M.D.  
Italy, Texas 76651  
214/433-6322

AMB:jt

cc: R. P. Hall, M.D.  
B. C. Patten ✓  
A. F. Stehney  
W. Weyzen, M.D. AEC-DBER

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RECEIVED CHR  
AUG 7 1984  
RECORDS ROOM  
MICROFILMED

AUG 13 1984

CHR RECORDS

8000200

November 19, 1984

TO: CHR Records Room  
FROM: Gloria Kokaisl  
SUBJECT: (40-003)

11-19-84 GAK

\_\_\_\_\_ len (40-003) At the request of Dr. John Rundo I called the \_\_\_\_\_ residence ( \_\_\_\_\_ ) and spoke to his wife. She stated \_\_\_\_\_ has been well, not needing to see the doctor except for annual check-up, and gets out daily to the Senior Citizen Center. He takes the same medication. He does have arthritis. \_\_\_\_\_ had a serious glaucoma condition so does not get out very much.

PRIVACY ACT MATERIAL REMOVED

RECEIVED

NOV 21 '84

CHR RECORDS

8000201



PRIVACY ACT MATERIAL REMOVED

BCP

CENTER FOR HUMAN RADIOBIOLOGY

Argonne National Laboratory • Massachusetts Institute of Technology • New Jersey Field Station • Southwest Field Station

May 17, 1973

Greyhound - Mail-A-Ticket  
74 West Randolph  
Chicago, Illinois 60601

Gentlemen:

The enclosed check for \$109.90 is pre-payment of two round trip tickets we would like you to issue to the name of

June 12, 1973 depart Chicago 7:30 p.m.  
for Rochester, New York

June 25, 1973 depart Rochester 5:55 a.m.  
for Chicago, Illinois.

Please mail the tickets to me using the following address:

Mrs. Betty Patten - D203 B118  
Center for Human Radiobiology  
9700 South Cass Avenue  
Argonne, Illinois 60439

If there are any questions in this matter, please call me at the number shown below my signature.

Sincerely yours,

PRIVACY ACT MATERIAL REMOVED

(Mrs.) Betty C. Patten  
Medical Assistant

dk

encl: Check #547400

RECEIVED CHR  
MICROFILMED  
AUG 7 1984  
AUG 13 1984  
RECORDS ROOM  
CHR RECORDS

8000202

CENTER FOR HUMAN RADIOBIOLOGY  
9700 S. C Avenue, Argonne, Illinois 60439 Tel. 312-739-7711 4625

PRIVACY ACT MATERIAL REMOVED



ARGONNE NATIONAL LABORATORY

1/31/80

Gail:

Dr. Rowland was in here this morning and was looking at the charts listed below:

\_\_\_\_\_ 40-003  
40-009  
40-012

They are the only Pu cases which do not have a code in SAC to indicate whether they are living or dead, except for CHI/3 Unknown which was lost and which we can forget.

(We lost track of person--we have the file.)

He would like to have you code in the following for these people:

40-003	L78 (Brues memo)
40-009	L75 (Her signature)
40-012	L74 (His signature)

PRIVACY ACT MATERIAL REMOVED

A handwritten signature in black ink, appearing to be 'Jean', with a long horizontal flourish extending to the right.

ANL-352 (11-77)

8000203

S

December 1, 1978

SNOP CODED

MAR 19 1979

TO: CHR Records Room  
FROM: Austin M. Brues, M.D.  
SUBJECT: (40-003)

MICROFILMED

FEB 6 1980

CHR RECORDS

12-1-78 AMB

(40-003)

I called Dr. David Williams, 1410 West Jefferson, Waxahachie, TX 75165 (tel. 214/937-1210), since we have not heard from or about him since my letter about a year ago. Dr. Williams has seen him once since then, a few months ago when he fractured a metacarpal; this healed well but he was hospitalized for a while for observation. The Doctor saw no evidence of psychosis and considers that his trouble, due to a previous spell of ethanol abuse, has been relieved.

Dr. Williams will be glad to send me a note on the fracture for our record.

lw

PRIVACY ACT MATERIAL REMOVED

xc:  
Medical Assistants  
AMB  
EEA  
MJC

8000204

TO: File  
FROM: B. C. Patten  
SUBJECT: 40-003

MICROFILMED

JAN 28 1977

CHR RECORDS

I received a call from \_\_\_\_\_ (\_\_\_\_\_ wife) to tell me he has been hospitalized. He has been drinking and is generally deteriorating mentally and physically. He has some notion that he is going to receive a million dollars (from us?) because he was a "guinea pig". \_\_\_\_\_ wants us to write to his doctor and ask the doctor to tell \_\_\_\_\_ the facts. His doctor is now:

David W. Williams  
1410 W. Jefferson  
Wafahachie, Texas 75165  
Phone: 214/937-1210

I will send \_\_\_\_\_ a get well care. He is in the Tenery Community Hospital in Wafahachie.

BCP:lc

cc: CHR Records  
Medical Assistants  
A. M. Brues, M. D.

PRIVACY ACT MATERIAL REMOVED

RECEIVED

DEC 14 '77

CHR RECORDS

8000205



40-003

PRIVACY ACT MATERIAL REMOVED

CENTER FOR HUMAN RADIOBIOLOGY

Argonne National Laboratory • Massachusetts Institute of Technology • New Jersey Field Station • Southwest Field Station

December 12, 1977

Dr. David W. Williams  
1410 West Jefferson  
Waxahachie, Texas 75165

Dear Doctor Williams,

Following up my telephone call of this date, I enclose copies of the 1973 records on \_\_\_\_\_ concerning his visit to the Center for Human Radiobiology ~~here~~ and to Strong Memorial Hospital in Rochester, New York. I trust they may be of some value to you. We would be very interested, as I told you, to hear of any further developments, in view of a history indicating a slight exposure to radioactive material at the time of his amputation in 1947.

In the event he should show terminal signs at any time, we would appreciate a collect call to us at Argonne, 312/739-7711, extension 4625, to be directed to one of the responsible members of the Center.

Faithfully yours,

Austin M. Brues  
Medical Director

AMB:frc  
encl.

PRIVACY ACT MATERIAL REMOVED

8000206

CENTER FOR HUMAN RADIOBIOLOGY  
9700 S. Cass Avenue, Argonne, Illinois 60439 Tel. 312-739-7711 Ext. 4625

CHR-RR



PRIVACY ACT MATERIAL REMOVED

CENTER FOR HUMAN RADIOBIOLOGY

Argonne National Laboratory • Massachusetts Institute of Technology • New Jersey Field Station • Southwest Field Station

REC'D  
FEB 19 1975  
FEB 23 1977

November 18, 1974

Dr. D. H. Roberts  
Drawer 309  
Milford, Texas 76670

Dear Dr. Roberts:

40-003

Many thanks for your note concerning \_\_\_\_\_ rectal bleeding.

Looking at his record, I see that he gave a similar history when he was at Rochester in June, 1973; he was given a barium enema for x rays and a sigmoidoscopy and his stool was examined with the guaiac test for occult blood, and all were negative. At that time they believed the trouble had been a bleeding hemorrhoid. I trust this is helpful.

When I last heard from you last spring, you told me you had informed \_\_\_\_\_ that he had received a small injection of plutonium at the time of his 1947 operation. I asked you if you could send me a note so that I could be sure that was correct. I would still appreciate that, and you might mention whether this gave him any concern. I know you are one of the busiest men in the county, so I hate to trouble you; I am enclosing an envelope to make it less of a bother.

I hope I may see you again one of these days. It was good to hear from you.

Faithfully,

Austin M. Brues, M.D.  
Medical Director

8000207

AMB:jmt  
Enclosure

- bcc: R. P. Hall, M.D.
- B. C. Patten
- A. F. Stehney
- W. Weyzen, M.D., AEC

PRIVACY ACT MATERIAL REMOVED

BIOLOGY  
312-739-77 ext. 4625

November 15, 1974

TO: CHR Records Room  
FROM: A. M. Brues, M.D.  
SUBJECT: (40-003)

About two weeks following my May 21 visit to [redacted] and his physician, Dewey H. Roberts, D.O., I telephoned Dr. Roberts to acknowledge his courtesy and to remind him that Dr. Weyzen and I had asked that he inform [redacted] of the fact that he had received a plutonium injection at the time of his 1947 operation. Dr. Roberts said that as a matter of fact, [redacted] had dropped in to see him the day before and that he had told him this; that [redacted] seemed interested but unmoved by this information. I then told the doctor that I needed a note from him stating these facts; he said he would do so right away, and checked the spelling of my name and of plutonium. The note has never been delivered to me.

Today I received a note from Dr. Roberts, apparently in conformity with a request routinely made in our letter accompanying a patient's record — the note was addressed to myself and Walter Weyzen, M.D. at this address — reading as follows:

"Dr. -

Our patient [redacted] came in this AM complaining of blood in his morning stool.

D. H. Roberts, D.O.  
Drawer 309  
Milford, Texas  
76670"

The Rochester record indicates that he had a history of bleeding from the rectum; that sigmoidoscopy and barium enema were negative as was a test for occult blood, and that he had hemorrhoids that were considered the source of the blood noted by him previously.

AMB:jmt  
cc: R. P. Hall, M.D.  
B. C. Patten  
A. F. Stehney  
W. Weyzen, M.D., AEC

*A. M. Brues*

PRIVACY ACT MATERIAL REMOVED

8000208



U of C-AUA-USAEC

bc: R. E. Rowland  
A. M. Brues, M.D.  
B. C. Patten  
CHR-RR ✓

PRIVACY ACT MATERIAL REMOVED

40-003

W

CENTER FOR HUMAN RADIOBIOLOGY

March 7, 1973

Dr. A. O. Dykes  
Italy  
Texas 76651

Dear Doctor Dykes:

We are trying to locate a patient of yours by the name of \_\_\_\_\_ in order to do a follow-up study on treatment he received for a sarcoma in July, 1947.

We are especially interested in cases of this sort, and his is of particular interest since he has this unusual malignant tumor and has shown such a long survival time.

If he is able and willing we would like him to participate in a metabolism study at Strong Memorial Hospital in Rochester, New York for about ten days. Please assure him it would only be for observation and collection of excreta.

We will take care of his transportation and hospital costs, and he will receive about \$140.00 participation reimbursement for cooperating in this study. If it is necessary for him to have someone accompany him, we will take care of the transportation and lodging of that individual and allow them \$13.00 a day for meals and other incidental expenses.

If \_\_\_\_\_ is unable to come at this time, please advise us of his condition and convey to him our interest.

Faithfully yours,

PRIVACY ACT MATERIAL REMOVED

Austin M. Brues, M.D.  
Medical Director  
Center for Human Radiobiology

dk

8000209

CORRESPONDENCE/PICTURES

8000210



**Department of Energy**

Washington, DC 20545

November 28, 1986

233 5-355

James H. Stebbings, Sc.D.  
 Epidemiology Group Leader  
 Division of Biological and  
 Medical Research  
 Center for Human Radiobiology  
 Argonne National Laboratory  
 Building 202  
 9700 South Cass Avenue  
 Argonne, Illinois 60439

MICROFILMED

NOV 17 1987

CHR RECORDS

Dear Dr. Stebbings:

Thank you for obtaining and sending me the information on the plutonium survivor. I'm not sure if there are any provisions for awarding medals, but will keep your suggestion in mind.

You will also be interested in hearing that we plan to discuss your current work on domestic radon exposure at a meeting of the Interagency Technical Committee of the NIH on December 16, 1986. The meeting's topic will be "Data Collection, Problems and Issues." It will be held in Conference Room 8, Building 31, NIH, from 1:00 to 4:00 p.m.

Sincerely,

*J. S. Robertson*  
 James S. Robertson, M.D., Ph.D.  
 Director, Human Health and Assessments  
 Division, ER-73  
 Office of Health and Environmental  
 Research, Office of Energy Research

8000211

JJA  
40-003

CENTER FOR HUMAN RADIOBIOLOGY  
OPERATED FOR THE U.S. DEPARTMENT OF ENERGY BY ARGONNE NATIONAL LABORATORY

Telephone 312/972-7678

PRIVACY ACT MATERIAL REMOVED

November 13, 1986

Dr. James Robertson  
Human Health and Assessments Division  
ER-73  
Office of Health and Environmental Research  
U.S. Department of Energy  
Washington, DC 20545

Dear Dr. Robertson:

Enclosed is a copy of the signed consent from the one surviving plutonium injection case.

It occurred to me that perhaps a medal should be ceremoniously awarded to this gentleman, which seems to me appropriate for individuals who took these risks for the protection of the nation's defense employees. Congressman Markey would surely approve, as he refers to them as our "peaceful atomic soldiers"!

If there is anything else we can do, please let us know. The report was most interesting.

Sincerely yours,



James H. Stebbings, Sc.D.  
Epidemiology Group Leader  
Division of Biological  
and Medical Research

PRIVACY ACT MATERIAL REMOVED

JHS:tah

Enclosure

T86022

MICROFILMED

NOV 17 1987

CHR RECORDS

8000212

ARGONNE NATIONAL LABORATORY  
9700 SOUTH CASS AVENUE  
ARGONNE, ILLINOIS 60439 TELEPHONE 312/972-4153

## ARGONNE NATIONAL LABORATORY

9700 SOUTH CASS AVENUE, ARGONNE, ILLINOIS 60439

Telephone 312/972-7678

PRIVACY ACT MATERIAL REMOVED

29 October 1986

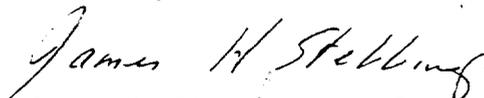
Dear :

As I discussed with your wife, \_\_\_\_\_, earlier today, we have a request from the Department of Energy in Washington that they be allowed to identify you to a Congressional Subcommittee which is discussing medical follow-up and assistance to individuals such as yourself.

We would very much appreciate it if you would indicate your preference on the attached form, and send it back to us.

You have our best personal wishes for yourself and your family.

Sincerely,



James H. Stebbings, Sc.D.  
Epidemiology Group Leader  
Division of Biological  
and Medical Research

JHS:tah

T86004

Enclosures

PRIVACY ACT MATERIAL REMOVED

MICROFILMED

FEB 04 1987

CNR RECORDS

8000213

# ARGONNE NATIONAL LABORATORY

9700 SOUTH CASS AVENUE, ARGONNE, Illinois 60439

Telephone 312/972-7678

29 October 1986

Dr. James Robertson  
Human Health and Assessments Division  
ER-73  
Office of Health and Environmental Research  
U.S. Department of Energy  
Washington, DC 20545

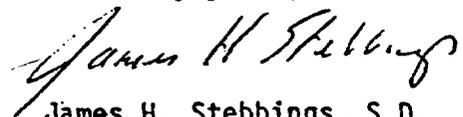
Dear Dr. Robertson:

As a preliminary response to your inquiry of last evening, I have contacted the wife (usual contact) of the only survivor of the 19 Pu/Am injection cases (our case #40-003). He was injected at Berkeley, and had a bone sarcoma. He continues to have complaints common at his age (hypertension, arthritis), but nothing which would be ascribed to plutonium. The subject's medical care is paid for by a private medical policy, said to be "expensive."

I have sent a letter to the case and his wife so they can indicate willingness (or not) to be identified. Prompt response is not anticipated as they said they had to discuss it with children who live some distance away.

There was a case injected at age 5 years, also in California. It was another osteogenic sarcoma (lethal in 1947, in Australia: not a U.S. citizen); one wonders if they weren't hoping for some cures. The americium case (our #30-032), who was also a California osteogenic sarcoma case, died in 1948.

Sincerely yours,



James H. Stebbings, S.D.  
Epidemiology Group Leader  
Division of Biological  
and Medical Research

JHS:tah

T86003

MICROFILMED

FEB 06 1987

CHR RECORDS

8000214

# ARGONNE NATIONAL LABORATORY

9700 SOUTH CASS AVENUE, ARGONNE, ILLINOIS 60439

*file*  
40-003

Telephone: 312-972-7678

February 27, 1986

Dr. Robert G. Thomas  
ER-72  
GTN  
Mail Stop G236  
U.S. Department of Energy  
Washington, D. C. 20545

*Bob*  
Dear Dr. Thomas:

With respect to your telephone inquiry relating to plutonium studies in the Environmental Health Section (previously Center for Human Radiobiology), I refer you back to the factsheet furnished Dr. Thiessen in 1984 (copy enclosed).

I had follow-up completed on cases Cal-III and HP-6. Case Cal-III died in 1984 of causes not reasonably relatable to plutonium. Case HP-6 is living as of several days ago. Both the interviewer who contacted the household, and a review of the case file, suggest that the functioning of this subject is such that direct contact is contraindicated. I hope this is of some assistance to you.

Best personal wishes.

Sincerely yours,

*Jim Stebbings*

James H. Stebbings, Sc. D.  
Epidemiology Group Leader

JHS:11f

Enclosures

cc w/enc.: H. Drucker, BIM  
E. Huberman, BIM  
D. T. Goldman, DOE-CH

**MICROFILMED**

FEB 04 1987

**CHR RECORDS**

**8000215**

# ARGONNE NATIONAL LABORATORY

9700 SOUTH CASS AVENUE, ARGONNE, ILLINOIS 60439

40-003

TELEPHONE 312/972-4146

July 23, 1984

RECEIVED

JUL 25 1984

J. R.

Dr. Jacob Thiessen  
Mailstop E-201, Human Health Studies  
Office of Health and Environmental Research  
Office of the Environment  
U.S. Department of Energy  
Washington, D. C. 20545

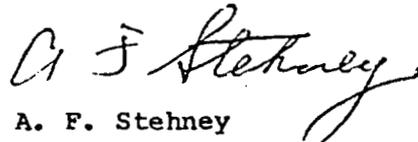
SUBJECT: Congressional Investigation into Health and Safety Policies of the  
Department of Energy (DOE)

Dear Dr. Thiessen:

In response to Dr. C. W. Edington's memorandum of June 27, 1984, on the above subject, I have enclosed a factsheet on "Plutonium Studies at the Center for Human Radiobiology (CHR)." The factsheet is in the format requested by Dr. Edington.

Please let me know if you need more information or documentation.

Sincerely yours,



A. F. Stehney  
Environmental Research Division

AFS:pat  
Enclosures

cc: H. Drucker  
H. J. Rauch  
P. Failla  
P. F. Gustafson  
E. Huberman  
J. Rundo

MAR 05 1986

8000216

Project Name:

Plutonium Studies at the Center for  
Human Radiobiology (CHR)

Date Started: 2 January 1943

Date Terminated: Ongoing

Principal Investigators: R. E. Rowland, A. F. Stehney

Objectives of Test:

1. To determine the excretion rate of plutonium 27 years after injection.
2. To determine the retention and body distribution of plutonium.

Short Description:

In 1945-1947, 18 hospital patients of limited life expectancy were injected with plutonium in order to obtain information about the retention and organ distribution of plutonium. An important objective was to determine the relationship between the body content and the rate of excretion in order to provide data for estimating the body content of plutonium from measurements of plutonium in excreta (bioassay). The results of this study were described in Report LA-1151 (1950).<sup>(1)</sup>

The data in LA-1151 were reviewed in a manuscript prepared by P. W. Durbin for publication in the 1972 volume, Radiobiology of Plutonium.<sup>(2)</sup> Tissue and bone samples had been obtained at autopsy from six of the cases at times ranging from 5 days to 456 days after injection, and the longest collection time for excreta was about 5 years. In addition to preparing the manuscript, Durbin traced the later history of the cases and discovered that four were still living in 1972.

The Center's direct knowledge of the plutonium injection cases dates from December 13, 1972, when Dr. Durbin brought her records to CHR for possible further follow-up. The Center then undertook to determine excretion rates in study subjects who were still alive and to exhume deceased subjects in order to determine the amounts and body distribution of plutonium. During 1973, CHR obtained metabolism samples from three living patients, obtained permission to exhume from next of kin of three deceased patients, and disinterred and transferred to CHR the remains of one of these deceased. The metabolism samples (blood and excreta) were taken at Strong Memorial Hospital (SMH), Rochester, New York.

In 1974, the U.S. Atomic Energy Commission (AEC) reviewed the origins and subsequent follow-up of the plutonium studies. On December 31, 1974, the AEC authorized CHR to proceed with the program of study of the living patients who were injected with plutonium during 1945-1947 and of the bodies of deceased individuals from that group for whom legal consent for examination is obtained.

Follow-up Data:

Table 1 summarizes CHR follow-up activities and last known status (July 5, 1984) for each of the plutonium injection cases.

CHR personnel have published 10 reports on results obtained by study of these cases.<sup>(3-12)</sup> Copies of these reports are attached.

8000217

Table 1. Plutonium injection cases: Summary of CHR activities and last known status (July 5, 1984).

Old Case Number	CHR Case Number	CHR Activities	Status
Cal-I	40-001	10/16/75: Exhumed cremains Aug 78: Returned	Died 1/9/66
Cal-II	40-002	No contacts; said to have died in Australia	Died 1/6/47
Cal-III	40-003	6/11/73: Examined at CHR 6/23-26/77: Metabolism study at SMH	Living 10/19/83
Chi-1	40-004	6/10/75: Exhumed Apr 78: Returned	Died 10/3/45
Chi-2	40-005	No contacts; cremation ashes scattered	Died 1/13/46
Chi-3	40-006	No contacts; case unidentified	Lost to study, 1946
HP-1	40-007	1973: Next of kin refused permission to exhume	Died 1/12/60
HP-2	40-008	1973: Next of kin refused permission to exhume	Died 4/4/48
HP-3	40-009	1/28-2/18/73: Metabolism study and radioactivity measurement at SMH 1/23-24/79: Metabolism study at SMH	Died after 6/5/81
HP-4	40-010	9/24/73: Exhumed Jul 75: Returned	Died 4/29/47
HP-5	40-011	1973: Next of kin refused permission to exhume	Died 4/29/46
HP-6	40-012	2/14/73: Metabolism study at SMH 6/21-7/1/73: Metabolism study at SMH	Living 12/30/74
HP-7	40-013	1973 and 1977: Next of kin refused permission to exhume	Died 10/27/46
HP-8	40-014	No contacts	Died 11/22/75
HP-9	40-015	5/18/78: Exhumed Jul 81: Returned	Died 7/2/47
HP-10	40-016	No contacts	Died 6/2/57
HP-11	40-017	No contacts	Died 2/26/46
HP-12	40-018	No contacts	Died 4/13/53

8000218

References:

1. W.H. Langham, S.H. Bassett, P.S. Harris and R.E. Carter. Distribution and excretion of plutonium administered to man. Los Alamos Scientific Laboratory, LA-1151 (September 1950).
2. P.W. Durbin. Plutonium in man: a new look at the old data. In The Radiobiology of Plutonium, B.J. Stover and W.S.S. Jee (eds.), The J.W. Press, Salt Lake city, UT, pp. 469-537 (1972).
3. J. Rundo, P.M. Starzyk, J. Sedlet, R.P. Larsen, R.D. Oldham and J.J. Robinson. The excretion rate and retention of plutonium 10,000 days after acquisition. In Diagnosis and Treatment of Incorporated Radionuclides, Proc. Seminar, Vienna, 8-12 December 1975, IAEA, Vienna, pp. 15-22 (1976).
4. R.E. Rowland and P.W. Durbin. Survival, causes of death, and estimated tissue doses in a group of human beings injected with plutonium. In The Health Effects of Plutonium and Radium, Proc. Symp. Sun Valley, Idaho, 6-9 October 1975, W.S.S. Jee (Ed.), The J.W. Press, Salt Lake City, UT, pp. 329-342 (1976).
5. R.A. Schlenker, B.G. Oltman, and H.T. Cummins. Microscopic distribution of  $^{239}\text{Pu}$  deposited in bone from a human injection case. In The Health Effects of Plutonium and Radium, Proc. Symp. Sun Valley, Idaho, 6-9 October 1975, W.S.S. Jee (Ed.), The J.W. Press, Salt Lake City, UT, pp. 437-450 (1976).
6. J. Rundo and F.H. Ilcewicz. Blood content and excretory plasma clearance of plutonium  $10^4$  days after injection. Abstracts of Papers-22nd Ann. Mtg. Health Phys. Soc., Atlanta, 3-8 July 1977, Pergamon Press, NY, p.26 (1977); Health Phys. 33, 668 (1977).
7. R.E. Rowland. The risk of bone sarcoma from plutonium-239. In Biological Implications of Radionuclides Released from Nuclear Industries, Proc. Symp., Vienna, 26-30 March 1979, Vol. II, IAEA, Vienna, pp. 211-224 (1979).
8. R.P. Larsen, R.D. Oldham, and R.E. Toohy. Macrodistribution of plutonium in the human skeleton. In Actinides in Man and Animals, Proc. Snowbird Actinide Workshop, 15-17 October 1979, M.E. Wrenn (Ed.), RD Press, Salt Lake City, UT, pp. 191-197 (1981).
9. J. Rundo. The late excretion of plutonium following acquisition of known amounts. In Actinides in Man and Animals, Proc. Snowbird Actinide Workshop, 15-17 October 1979, M.E. Wrenn (Ed.), RD Press, Salt Lake City, UT, pp. 253-260 (1981).
10. R.A. Schlenker and B.G. Oltman. Plutonium microdistribution in human bone. In Actinides in Man and Animals, Proc. Snowbird Actinide Workshop, 15-17 October 1979, M.E. Wrenn (Ed.), RD Press, Salt Lake City, UT, pp. 199-206 (1981).

8000219

11. R.A. Schlenker and B.G. Oltman. Uranium concentrations in human bone. In Actinides in Man and Animals, Proc. Snowbird Actinide Workshop, 15-17 October 1979, M.E. Wrenn (Ed.), RD Press, Salt Lake City, UT, pp. 473-476 (1981).
12. R.E. Toohy, C.G. Cacic, R.P. Larsen, and R.D. Oldham. The concentration of plutonium in hair following intravenous injection. Health Phys. 40, 881-886 (1981).

Attachments:

Reprints of references 3-12 are attached.

MAR 05 1986

8000220

40-003



Department of Energy  
Argonne Area Office  
9800 South Cass Avenue  
Argonne, Illinois 60439

RECEIVED  
1985 NOV 26 PM 12:51  
BIO-MED RESEARCH

NOV 21 1985

Dr. Alan Schriesheim, Director  
Argonne National Laboratory  
9700 S. Cass Avenue  
Argonne, Illinois 60439

Dear Dr. Schriesheim:

SUBJECT: FREEDOM OF INFORMATION ACT (FOIA) REQUEST DATED OCTOBER 30, 1985,  
DOCKET NO. 11048504D

The enclosed FOIA request is for a copy of a memo from R. E. Rowland to H. A. Schultz dated December 21, 1972, which discusses records of 18 plutonium research subjects. The requestor is also asking for any supporting documentation and any subsequent memos regarding the subject.

Due to statutory time limitations for responding to FOIA requests, we must have your response no later than December 2, 1985.

Sincerely,

*Thomas J. Belmont*  
for David T. Goldman  
Area Manager

Enclosure:  
As Stated

cc: A. Zilberstein, ANL, w/enclosure  
R. E. Rowland, Princeton, KY, w/enclosure 502-365-2979  
~~ENCLOSURE~~

DEC 04 1985

8000221

# THE KNOXVILLE JOURNAL

A GANNETT NEWSPAPER  
P.O. BOX 911  
KNOXVILLE, TENNESSEE 37901

40-003

1985 NOV -4 PM 3:39

Oct. 30, 1985

Mr. Ronald Turner  
MA-232.1  
U.S. Department of Energy  
Freedom of Information and Privacy Act Branch  
1000 Independence Ave. S.W.  
Washington, D.C. 20585

To the FOI Officer:

This request is made under the federal Freedom of Information Act, 5 U.S.C. '552.

Please send me copies of Memorandum, dated 12-21-72, from Dr. R.E. Rowland to H.A. Schultz, senior staff assistant, Records and Data Processing, Center for Human Radiobiology, Argonne National Lab. Memo discusses instructions from Rowland to Schultz on records of 18 plutonium research subjects. Records were transferred to Schultz for his disposition. Please include any supporting documentation and any subsequent memos regarding this subject.

As you know, the FOI Act provides that if portions of a document are exempt from release, the remainder must be segregated and disclosed. Therefore, I will expect you to send me all nonexempt portions of the records which I have requested, and ask that you justify any deletions by reference to specific exemptions of the FOI Act. I reserve the right to appeal your decision to withhold any materials.

I promise to pay reasonable search and duplication fees in connection with this request. However, if you estimate that the total fees will exceed \$50, please notify me so that I may authorize expenditure of a greater amount.

I am prepared to pay reasonable search and duplication fees in connection with this request. However, the FOI Act provides for waiver or reduction of fees if disclosure could be considered as "primarily benefiting the general public." I am a journalist employed by The Knoxville Journal and intend to use the information I am requesting as the basis for a planned article. Therefore, I ask that you waive all search and duplication fees. If you deny this request, however, and the fees will exceed \$50, please notify me of the charges before you fill my request so that I may decide whether to pay the fees or appeal your denial of my request for a waiver.

As I am making this request as a journalist and this information is of timely value, I will appreciate your calling me by telephone, rather than by mail, if you have any questions. Thanks and I will look forward to your reply within 10 business days, as required by law.

Sincerely,

*Randell B. ...*

Randell B. , reporter  
(615) 522-4141, Ext. 423

8000222

REC'D 11/1/85

URGENT

U.S. DEPARTMENT OF ENERGY  
**memorandum**

DATE November 12, 1985

REPLY TO  
ATTN OF MA-232.1 - Joan Ogbazghi

SUBJECT Freedom of Information Request #11048505D

TO Jane Monhart, CH Operations Office  
ATTN Bernie Russ

The attached Freedom of Information (FOI) request is being sent to you for action as the records requested appear to be principally within the purview of your organization. If our determination is incorrect, please inform me immediately to whom you are forwarding this request.

If other divisions, offices or field organizations also have records relevant to this request, you as the appropriate FOI Office are responsible for requesting their participation and for coordinating the response. It is important that an appropriate response be forwarded to the requester within 10 working days as failure to act can be deemed a denial.

On the reverse side of this memorandum, a "Reminder of Procedures for Handling FOI Requests" should assist your staff. If you have any questions, I can be reached on FTS 252-5955.

  
John H. Carter  
Chief of FOI and Privacy Acts  
Activities Branch  
Division of Reference and  
Information Management

Attachment

DEC 04 1985

8000223

PRIVACY ACT MATERIAL REMOVED

4-6-73

A. M. Bues -

I have contacted  
he is willing to come for your  
observations, etc.

Please direct your instructions  
to me

Haly, Texas

P.S. It will be necessary for  
some one to accompany the

PRIVACY ACT MATERIAL REMOVED

MICROFILMED

AUG 13 1984

CHR RECORDS

RECEIVED CHR

AUG 7 1984

RECORDS ROOM

8000224

November 14, 1985

Mr. Randall Seck  
The Knoxville Journal  
P.O. Box 911  
Knoxville, TN 37901

Re: 110481080  
110485070  
110485080  
110485220

Dear Mr. Seck:

Your October 30, 1985, Freedom of Information requests (copies enclosed) addressed to the U.S. Department of Energy were received on November 4, 1985, and have been sent to our Freedom of Information Officers at our Chicago, Oak Ridge, Richland and San Francisco Operations Offices. They will correspond directly with you about your requests.

In compliance with the Freedom of Information Act, the 10 day response period will begin when the offices designated above have received your requests. If you need further assistance, please contact Jane Monhart, Chicago Operations Office, 9800 South Cass Avenue, Argonne, IL 60439, (312) 972-2376; Wayne Lange, Oak Ridge Operations Office, P.O. Box E, Room 1012, Oak Ridge, TN 37831, (615) 576-0885; Gail M. Bokkan, Richland Operations Office, 825 Jadin Avenue, P.O. Box 550, Richland, WA 99352, (509) 378-8274; Elsie Motoko, San Francisco Operations Office, 1333 Broadway, Wells Fargo Building, Oakland, CA 94612, (415) 273-4358.

We have assigned the above referenced numbers to your requests and ask that you refer to these in any future correspondence.

Sincerely,

Original signed by John H. Carter

John H. Carter  
Chief of FOI and Privacy Acts  
Office of Administrative Services

Official File Copy  
Action Officer 4  
Official File (RF)

MA-232.1:J80:sjb:26025:11/13/85.

OFC 04 1985

PRIVACY ACT MATERIAL REMOVED

April 8, 1973

Mr. A. M. Brues, M.D. 203 A13  
Center for Human Radiobiology  
Argonne National Laboratory  
9700 South Cass Ave.  
Argonne, Illinois 60439

RECEIVED CHS

AUG 7 1984

RECORDS ROOM

Dear Sir:

I am willing to participate  
in your metabolism study at  
Strong Memorial Hospital in  
Rochester, N.Y., but I can-  
not leave before the week  
of June 4.

I refuse to fly to any  
point.

PRIVACY ACT MATERIAL REMOVED

Thank you very much.

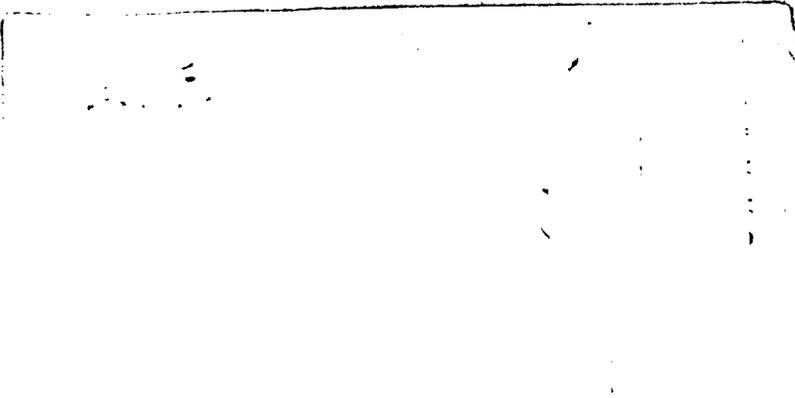
MICROFILMED

AUG 13 1984

Yours truly,

8000226

IR RECORDS



Mr. D. M. Bruce, M.D., 20347133  
Center for Human Radiobiology  
College Station Laboratory  
9700 South Loop West,  
College Station, Texas 77843

MICROFILMED  
AUG 18 1984  
CHR RECORDS



PRIVACY ACT MATERIAL REMOVED

PRIVACY ACT MATERIAL REMOVED

8000227

The taxi fare from station  
to hospital and hospital  
to my room was <sup>THE</sup> **Towne House**  
less than ten dollars so  
we took care of that.

We arrived at  
11:55 A.M.

Enclosed is receipt for June 15, 1973  
limousine fare. Send check to Italy address - Thanks

Dear Betty,

PRIVACY ACT MATERIAL REMOVED

He arrived safely, but  
our trip wasn't very pleasant.  
The limousine driver checked  
with the office and the fare  
hadn't been verified.  
I wasn't going to pay him, but  
I was afraid he would call  
in some authority and detain  
us. I gave him the money  
which made him very furious  
at me. After we boarded the  
bus, he told me that he  
didn't think he could make  
it. Of course I was very, very  
nervous, but we made it ok.  
We were received graciously at  
the hospital. ~~XX~~ took a  
shower and they gave us a  
big lunch. I stayed about two  
hours with him and then went to  
my room. Everything is fine now.  
Thanks for everything. We love

**AA Americana  
Hotels**

1325 Mt. Hope Avenue, Elmhurst, N.Y. 14620  
1-800-473-6301

Sincerely,  
[Signature]

8000228

PRIVACY ACT MATERIAL REMOVED

THE  
Towne House  
MOTOR INN  
1325 Mt. Hope Avenue  
Rochester, N.Y. 14620



MICROFILMED

AUG 13 1984

CHR RECORDS



*Needs to  
be rechecked*

*Mr. Betty C. Patten, Medical Assistant  
Center for Human Radiobiology  
Argonne National Laboratory  
D-203-B-118  
Argonne, Illinois 60439*

8000229



PRIVACY ACT MATERIAL REMOVED

ARGONNE NATIONAL LABORATORY

October 18, 1974

Dr. G. W. Dolphin  
National Radiological Protection Board  
Building 556  
Harwell, Didcot  
Berks OX11 0RQ  
England

Dear Goeff,

My fascination with the urinary excretion (and other) data from 40-009 and 40-012 also continues. In answer to your question, I can only say that at ages 77 and 72 respectively, one would expect there to be osteoporosis to some extent, and that it would be greater in the female (40-009) than in the male. In addition, I believe that there is evidence of clinical osteoporosis in case 40-009, i.e., it is considerably greater than the average for her age, but I have not been able to confirm this. You may remember that I mentioned at Seattle that the excretion rates of the three subjects (these two plus 40-003 or Cal-3) decreased in the same order as their expected degrees of osteoporosis.

Tony James' findings seem to be slightly different from Pat Durbin's with americium, the excretion rate of which seemed to show a slow but steady increase from about 400 days of age (290 days post injection) to 850 days of age. She also observed a decrease in ash weight of some bones (tibiae, lumbar vertebrae) over about the same time range, and in a recent phone conversation she described this as evidence of osteoporosis.

The importance of our results for 40-009 and 40-012 notwithstanding, I do not think they tell us that we cannot use Langham's equations for the case of, say, a 50-year old man who acquired his plutonium at age 25, since osteoporosis has hardly got underway at age 50. The urinary excretion rate of plutonium by case 40-003 was not in violent disagreement (about a factor of two lower) with Langham's prediction. This case was 62 at the time of our study and he is black; negro males have very little osteoporosis.

I hope this helps, rather than confuses, the issue!

Yours sincerely,

*John*  
J. Rundo

Center for Human Radiobiology

PRIVACY ACT MATERIAL REMOVED

hmb

40-003

UNIVERSITY OF CALIFORNIA

PRIVACY ACT MATERIAL REMOVED

LAWRENCE RADIATION LABORATORY  
BERKELEY, CALIFORNIA 94720  
TELEPHONE (415) 843-2740

TELEX 335313 LAWRADLAB BERK  
TWX 910-366-7172 LAW RAD LAB  
CABLE UCLRL BERKELEY

**RECEIVED**  
  
JUN 22 1973  
  
R. E. ROWLAND  
RADIOLOGICAL AND ENVIRONMENTAL  
RESEARCH DIVISION

June 19, 1973

Dr. Robert Rowland  
Argonne National Laboratory  
Argonne, Illinois

Dear Bob,

I am delighted of course to learn that you tracked down Cal-III. Obviously I hoped you would. Now all I hope is that there is something there to measure, because his retained dose looks to be about MPC level.

*3/21/74  
4/22/74  
5/15/74*

In the file you have for him, there are listed the pathology, surgery, and hospital unit numbers. We have no better access to making copies than you do. As a matter of fact our permission to examine the records permitted us to do just that and to make hand-written notes, but not to copy the records of persons still living. Your best method would be to prepare a request for copying of records signed by the man himself. There is undoubtedly some charge, but it should not be much. The copies of course could be sent to Austin. Why else do you have a resident MD anyway. I don't see how management of obtaining copies of the UC hospital records would be any different from your radium experience.

Here is the address:  
Medical records library  
University of California Medical Center  
San Francisco, California, 94122  
Attn: Miss Helen Martin

You might also volunteer to share your physical exam results with the UC tumor registry.

See you at IRPA (I hope)  
Patricia W. Durbin

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RECEIVED

MAY 2 '74

CHR RECORDS

8000231

*Dr. Christian... will  
pay for hospital records.*

PRIVACY ACT MATERIAL REMOVED

*Handwritten signature*

THE UNIVERSITY OF ROCHESTER  
SCHOOL OF MEDICINE AND DENTISTRY  
AND  
STRONG MEMORIAL HOSPITAL

260 CRITTENDEN BOULEVARD  
ROCHESTER, NEW YORK 14620

RECEIVED  
JUL 18 1973  
R. E. ROWLAND  
RADIOLOGICAL AND ENVIRONMENTAL  
RESEARCH DIVISION

July 13, 1973

Argonne National Laboratory  
9700 S. Cass Avenue  
Argonne, Illinois 60439

Billing for hospitalization of  
Research Patient

June 21 to July 1, 1973

10 days at \$132.29 \$1,322.90

Billing for hospitalization of  
Research Patient

June 13, to June 26, 1973

13 days at \$132.29 1,719.77

Shipping charges for frozen specimens  
relating to these patients

71.58  
\$3,114.25

Your Purchase Order #762107 dated 1-11-73

Send check to the attention of  
Mr. David J. Fanning

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RECEIVED  
NOV 8 '73  
CHR RECORDS

8000232



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**MICROFILMED**

CENTER FOR HUMAN RADIOBIOLOGY

---

*Argonne National Laboratory • Massachusetts Institute of Technology • New Jersey Field Station • Southwest Field Station*

September 7, 1973

Christine Waterhouse, M.D.  
Director, Metabolic Unit  
Strong Memorial Hospital  
260 Crittenden Boulevard  
Rochester, New York 14620

Dear Dr. Waterhouse:

This is a summary of our findings on

Thank you very much for your cooperation.

Faithfully yours,

Austin M. Brues, M.D.  
Medical Director

AMB/jt  
Enc.

PRIVACY ACT MATERIAL REMOVED

8000233



PRIVACY ACT MATERIAL REMOVED

CENTER FOR HUMAN RADIOBIOLOGY

---

*Argonne National Laboratory • Massachusetts Institute of Technology • New Jersey Field Station • Southwest Field Station*

August 22, 1973

Dear :

I have sent our own summary of the examinations and tests to Doctor Roberts. They do not add anything of importance to the detailed report that Dr. Waterhouse has already sent you.

I must say it was a delightful pleasure to all of us to meet you and your wife. It would be nice to hear from you once in a while.

Faithfully yours,

Austin M. Brues, M. D.  
Medical Director

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8000234

CENTER FOR HUMAN RADIOBIOLOGY

9700 S. Cass Avenue, Argonne, Illinois 60439 Tel. 312-739-7711 Ext. 4625



PRIVACY ACT MATERIAL REMOVED

CENTER FOR HUMAN RADIOBIOLOGY

---

*Argonne National Laboratory • Massachusetts Institute of Technology • New Jersey Field Station • Southwest Field Station*

August 22, 1973

D. H. Roberts, M. D.  
Drawer 309  
Milford, Texas 76670

Dear Doctor Roberts:

I am sending you herewith a copy of our own record on  
This adds little to the report you have already received from Dr. Waterhouse  
at Rochester.

We greatly appreciate your cooperation with our studies, and it was a  
pleasure to meet the

Faithfully yours,

Austin M. Brues, M. D.  
Medical Director

AMB/lc  
Encl.

PRIVACY ACT MATERIAL REMOVED

8000235

① AFS  
 ② HAS from BCP  
 ③ AFR RECEIVED  
 CHR RECORDS

To market, to market,  
 To buy a fat pig,  
 Home again, home again,  
 Jiggety - jig.

JUL 19 1973

To market, to market,  
 To buy a fat hog,  
 Home again, home again,  
 Jiggety - jog.

To market, to market,  
 To buy a plum bun,  
 Home again, home again,  
 Market is done.

July 14, 1973

Hi Betty,

Well, the trip is done, and  
 did we have a grand time!  
 We left Rochester Wednesday,  
 June 27 at 6:30 A.M. and arrived  
 in Washington, D.C. at 5:55 P.M. the

the same day. We left D.C. Monday, July 2 at 9:00 A.M. and arrived in Detroit, Michigan at 9:30 P.M. the same day. Our son met us and we motored by car to Flint. We left Flint at 6:00 A.M. July 9 and arrived in Chicago at 10:30 A.M. the same morning. We got a taxi to the Union Station and we were on our way to Texas on the five o'clock Texas Chief.

We were very comfortable and our accommodations were wonderful. Dr. Waterhouse and her staff at Strong Memorial were the best.

I had to stay two ~~day~~ days longer in Rochester than were allotted for me. The cab fare was within our means so we're not sending any more receipts.

We met so many wonderful people that we shall never forget.

We can assure you that this trip has been a rewarding experience which will be a lasting memory.

Thank you very kindly for making this trip the most wonderful we've ever taken.

We hope that this study will be rewarding to you. We were happy to cooperate.

Thanks again for everything.

Sincerely,

21  
1

40-003  
W



PRIVACY ACT MATERIAL REMOVED

CENTER FOR HUMAN RADIOBIOLOGY

*Argonne National Laboratory • Massachusetts Institute of Technology • New Jersey Field Station • Southwest Field Station*

May 18, 1973

Dear \_\_\_\_\_ :

The enclosed check for \$100.00 should cover the cost of your trip to the Ft. Worth Train Station, meals on the train, and any other expenses you may incur until we meet you here.

We have arranged to have train tickets mailed directly to you. If they do not arrive in a week or so, please call me collect.

After you arrive at Argonne we will give you tickets for the Greyhound Bus trip to Rochester.

Please keep all receipts for your expenses while on this trip. If you do not get a receipt, say for a taxi fare, kindly keep a record so that we may reimburse you while you are at Argonne. As we had explained, there will be other monies due you which we will handle while you are here.

The attached itinerary is enclosed in duplicate so you may leave a copy with someone in your family.

If you should have any questions, please do not hesitate to call.

Sincerely yours,

(Mrs.) Betty C. Patten  
Medical Assistant  
Center for Human Radiobiology

dk

encl:

8000239

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CENTER FOR HUMAN RADIOBIOLOGY

PRIVACY ACT MATERIAL REMOVED

DC: Dr. Christine Waterhouse<sup>40-10-2</sup> for your information, from A. F. Stehney Argonne National Laboratory. 5-17-7

itinerary:

Saturday  
June 9

6:10 p.m. leave Ft. Worth on Texas Chief, reservations on Car 1635 Drawing Room D.

Sunday  
June 10

Arrive at Union Station, Chicago, at 3:15 p.m., go to the Amtrak Counter where you will be met by a uniformed driver of the Travelers Limousine Service who will take you to the Hinsdale Ramada Inn on I-55 (Phone 312/325-2900). In the event the driver does not contact you within 10 minutes of your arrival at the Amtrak Counter, please call the Limousine Service at 323-0090. We have arranged to have the Limousine fare charged to the Center; if the driver should charge you, please get a receipt.

Monday  
June 11

I will pick up \_\_\_\_\_ at 9:00 a.m. at your room and bring him to Argonne. After the tests are completed, around 4 p.m., I will take \_\_\_\_\_ back to the Ramada Inn.

Tuesday  
June 12

A day of rest until 6:00 p.m. at which time a Travelers Limousine Service Car will arrive to take you to the Greyhound Bus Station in Chicago. We will give you the bus tickets. Check with Customer Service for early boarding privilege.

Tuesday  
June 12

Board the 7:30 p.m. bus for Rochester, New York.

Wednesday  
June 13

10:25 a.m. Arrive Rochester, New York. Take a cab to Strong Memorial Hospital. Check \_\_\_\_\_ into the Metabolic Ward in charge of Dr. Christine Waterhouse. When \_\_\_\_\_ is settled, \_\_\_\_\_ may take a cab to Townhouse Motor Inn, 1325 Mt. Hope Ave., Phone: 716/473-6301. These accommodations reserved through the morning of June 25th.

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(continued)

Monday  
June 25

At 5:55 a.m. the Greyhound Bus leaves for Chicago. Get there early and request early boarding.

"

Arrive at 6:50 p.m. Chicago Greyhound Bus Station. A room has been reserved for you at the Bismark Hotel, 171 West Randolph, Phone: 312/236-0123. The hotel is approximately 1 1/2 blocks away from the bus station, take a taxi from the bus station. When you check in at the hotel, please remind them that you will not be checking out until 3:30 p.m. on Tuesday, June 26th. (We have arranged for this room to be billed to Dr. Stehney at Argonne National Laboratory).

Tuesday  
June 26

At 3:30 p.m. take a taxi to the Union Station to board the Texas Chief which departs for Ft. Worth at 5:00 p.m.  
Reservations: Car 1535 Drawing Room D.

Wednesday  
June 27

At 1:55 p.m. arrive at Ft. Worth Train Station.

All times quoted are local times.

Please mail us all receipts that you may have obtained and a listing of all expenses not covered by the \$13.00 per diem. We hope that you will find this a rewarding experience and we thank you again for your cooperation.

8000241

4U-000  
W  
HAC



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**CENTER FOR HUMAN RADIOBIOLOGY**

Argonne National Laboratory • Massachusetts Institute of Technology • New Jersey Field Station • Southwest Field Station

**May 8, 1973**

**c/o Dr. D. H. Roberts  
Drawer R  
Italy, Texas 76651**

**Dear**

**I talked to Dr. Roberts and learned from him that you are planning to drive. We would very much like to have you spend one day here at Argonne on your way to Rochester. Therefore, we have set up the following itinerary:**

- Sunday, June 10**      **Arrive at Hinsdale - Ramada Inn located on I-55 at County Line Road.**
- Monday, June 11**      **Examination at Argonne. I will pick up at 8:30 Monday morning.**
- Tuesday, June 12**      **Leave for Rochester, New York.**
- Wednesday, June 13**      **Arrive Rochester, New York. to check in Strong Memorial Hospital preferably between 10 a.m. and 2 p.m. has reservations at Townhouse Motor Inn, 1325 Mt. Hope Ave., 716/473-6301 and should check in before 6 p.m.**

**We will pay you:**

- (1) The equivalent of round trip coach air fare for two to cover traveling costs. This will be approximately \$456.00.**
- (2) Motel bill at Ramada and Townhouse.**
- (3) Payment of \$13 per day each to cover meals and incidentals while at Argonne.**

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May 8, 1973

- (4) will be allowed \$13 per day for meals and incidentals during her stay at Rochester.
- (5) hospital bill plus \$140.00 for participating in the study.

I would suggest that you consult with a Motor Club as to the best route to follow because of the flooded areas along the Mississippi. I am enclosing a map of Illinois and a map showing Argonne's location.

If I can be of any help or you have any questions please call me collect. My card is enclosed.

Sincerely yours,

(Mrs.) Betty C. Patten  
Medical Assistant  
Center for Human Radiobiology

dk

encl:

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Sunday, Feb. 22, 1976

# Radiation test *Star Ledger* duped humans

WASHINGTON (UPI) — Scientists in a secret government project injected 18 men, women and children with overdoses of bomb-grade radioactive plutonium three decades ago without telling their human guinea pigs what they were being given, federal researchers said yesterday.

Dr. James Liverman of the Energy Research and Development Administration (ERDA) said the World War II-era experiment was forgotten for about 20 years and records are sketchy today. But, he said, there is no evidence any of the 18 suffered ill effects from their injections.

A science newsletter, Science Trends, said present-day researchers who recently learned of the experiment find it ethically "reprehensible" but valuable from the lessons it taught about effects of plutonium exposure.

Liverman said three of the 18 subjects — two men and a

woman — still are alive.

He said one, a black man in Texas, is "healthy for a man in his late 70s" and was told the nature of the injection about two years ago. The other three, Liverman said, are in their 80s and have not been told because of their mental or medical condition.

\* \* \*

Plutonium is considered one of the most toxic substances known to man. Even small amounts are believed capable of causing cancer.

But Dr. Patricia Durbin of the Lawrence Radiation Laboratory at Berkeley, Calif., who discovered the existence of the survivors about four years ago, said in Science Trends: "These cases serve to demonstrate the plutonium does not appear to be more carcinogenic than expected and, as far as bone (cancer) is concerned, may actually be less carcinogenic than expected."

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RECEIVED CHR  
AUG 7 1984  
MICROFILMED  
RECORDS ROOM  
AUG 13 1984  
CHR RECORDS

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7/22/47

Surgery Log

M. Sec. 118. Ru

Ask for Miss. Nelson

Surgery - 2950

#22407 -

vs. Jones, Bellamy & Mullen

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RECEIVED CHR

AUG 7 1984

RECORDS ROOM

MICROFILMED

AUG 13 1984

CHR RECORDS

PRIVACY ACT MATERIAL REMOVED

36 yrs Male  
L 142240 record #  
Chondrosarcoma of femur  
7/14 biopsy 7/21 amp.  
from  
still living <sup>0'</sup> 7/17/68  
att phy. A O Dykes  
Tumor registry

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MICROFILMED

AUG 13 1984

CHR RECORDS

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40-512 Cal-111

*Needs to be reproduced*

Name

Hospital No. UCSF C-142240

Path 47.863 } 1801

Date of birth

Date of injection July 18, 1947 ~ 0.1  $\mu$ Ci <sup>235</sup>Pu IM

Age at injection ~ 36

Date of death

Age at death Time after injection 21 yr  
Died July 17, 1968

Death certificate No

PRIVACY ACT MATERIAL REMOVED

MICROFILMED

Aug 13 1984

CHR RECORDS

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SP 1863

C-142240

July 21, 1947

Dr. E. J. Jones, Jr.

Male Aet 36. Injury to lat asp left knee 10 mos earlier

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non mid-thigh amputation. Soft reddish granular area resembling cancellous bone lateral femoral condyle. A soft mucoid material can be expressed. Tumor process involves a 5 x 3 cm area in section and extends up prox shaft 8 cm. Micro

Shots of irregular shaped cells in a base, fibrillary mucoid matrix. Cytoplasm vacuolated nuclei of irregular size. Many mitoses some multinuc. cells. Hem. & necrosis extending into adjacent muscle.

Bone replaced by tumor cells. Marrow infil. = tumor cells.

Chondrosarcoma

J. W. Hamlin.

SP 1801

30g of fragments of soft tissue + cancellous bone. - same micro as 1863

Ruth Seale

PRIVACY ACT MATERIAL REMOVED

MICROFILMED

AUG 13 1984

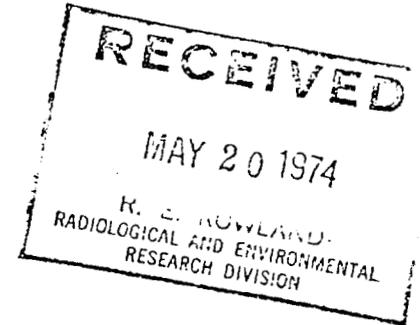
CHR RECORDS

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UNITED STATES  
ATOMIC ENERGY COMMISSION  
WASHINGTON, D.C. 20545



James L. Liverman, Director  
Division of Biomedical and  
Environmental Research

DISCLOSURE TO CAL-3

The following is a verbatim account of the statement of disclosure to CAL-3 as copied from the hospital chart:

The experimental nature of the intramuscular injection of the radioactive tracer sample was explained to the patient, who agreed on the procedure. The patient was in fully oriented and in sane mind. Injection was given into the gastrocnemius muscle of the left leg and the area marked with circle. Injection made at center of circle. Needle depth equals 2 centimeters. No blood appeared on aspiration and no bleeding after removal of needle. At explanation of the procedure to the patient and assisting in procedure were Mrs. Mary Wootton, R.N., Dr. Donald F. Bellamy and Dr. Ray Mullen.

Signed:  
Mrs. Mary Wootton

Signed:  
Dr. Donald F. Bellamy

Signed:  
Dr. Ray Mullen

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Signed:  
Dr. B. V. Low-Beer

*S. Marks*  
Sidney Marks, M.D.  
Biomedical Programs, DBER

RECEIVED  
MAY 21 '74

CHR RECORDS

8000250

JUN 29 1977

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SNOP CODED

it semi coded

- 20 - AUG 25 1977

JUN 29 1977

from ERDA files  
RECORDS ROOM

RECORDS ROOM

Dictation on \_\_\_\_\_ who was Cal-3 in Pat Durbin's article.

was unemployed. He was originally treated as a private patient by Dr. Lloyd Fisher. Dr. Fisher's address was 1904 Franklin Street, Oakland, California.

had an injury in September 1946. He was referred to a Dr. Carter as an industrial case. ~~The name of Dr. Carter~~ Dr. Carter's initials are W. E.

He was to be transferred to the county hospital for treatment. Dr. Bellamy in the <sup>Orthopedic</sup> Clinic recommended admission of \_\_\_\_\_ for treatment.

The admission was to be to the University Hospital. A biopsy was diagnosed as a bone cyst pathologically. The x-ray studies showed a destructive lesion in the left femoral condyle. The x-ray was read out by Dr. R.I. Sherman.

was admitted to the hospital on 7/13/47. A progress note on 7/16/47 was recorded as 5/16/47. The note stated that the patient was very comfortable and cheerful, a very cooperative patient. Toes move well. Signed R. Mullen.

The next note of interest on 5/17/47 stated as follows: X-ray scout films negative for any evidence of metastases. Amputation postponed until Monday in order to have radioactive tracer substances prepared (plutonium) and standardized. Patient will have tumor uptake studies done. Signed Mullen. On 5/18/47 cast split down medial side. Some throbbing pain but no other discomfort.

To surgery Monday. Hemoglobin 92%, W.B.C. 7,300. Signed R. Mullen. This was followed by a brief sentence, Cast removed for tracer injection. On 7/18/47 there was a lengthy progress note dated 7/18/47, 3:30 pm. It read as follows:

The experimental nature of the intramuscularly injection of the radioactive tracer sample was explained to the patient, who agreed on the procedure. The patient was in fully oriented and in sane mind. Injection was given into the gastrocnemius muscle of the left leg and the area marked with circle. Injection made at center of circle. Needle depth equals 2 centimeters. No blood appeared on aspiration and no bleeding after removal of needle. At explanation of the

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PRIVACY ACT MATERIAL REMOVED

procedure to the patient and assisting in procedure were ~~and there are~~ signatures, Mrs. Mary Wootton, R.N.; Dr. Donald F. Bellamy, <sup>and</sup> Dr. Ray Mullen, Dr. B.V. Low-<sup>Beer</sup>~~Beer~~. The next progress note was on 7/18/47 at 10:00 pm. No pain or discomfort whatsoever following injection. Signed, R. Mullen. On 7/21/47, the amputation was done. The discharge note on 8/7/47 did not allude to the radioactive procedure. It did give a diagnosis of <sup>one,</sup> ~~1~~ osteomyxochondro — sarcoma of left <sup>inner</sup> ~~thimer~~-distal condyle. Second, treatment of lues. Signed Ray Mullen.

40-002  
we have  
the copy  
reference

Excerpts from <sup>the</sup> hospital chart of . These were copied at the University of California Record Center in Richmond on 4/18/74 at noon. ~~THE XXXXX OF THE~~ The chart number is U127513. There was a lengthy discharge note written by Lore J. Larsen, M.D., Assistant in Orthopedic Surgery. It was dated June 11, 1946, and addressed to whom it may concern: The fifth paragraph of the discharge note read as follows: "On May 3, the patient was taken to surgery and a tumor was exposed from the lateral aspect by reflecting the vastus lateralis muscle anteriorly to expose the bone. Generous sections of the bone were taken for biopsy as well as studies to determine the rate of uptake of radioactive material which had been injected prior to the surgery, in comparison with normal tissues. At the time of writing, these data are not available on the chart and can \_\_\_\_\_

RECEIVED CHR

JUN 29 1977

RECORDS ROOM

APPENDIX 2, CONT'D

Case Cal-3<sup>a</sup>

This case, a 73.3-kg, 36-yr old Negro male, was diagnosed from biopsy as having an osteo-fibro myxochondrosarcoma involving the distal femur, patella and proximal tibia. He was injected 7/18/47 with 0.095  $\mu\text{Ci}$  <sup>238</sup>Pu(VI) nitrate intramuscularly at an ink-marked location on the gastrocnemius muscle. A mid-thigh amputation was performed four days p.i. Alive and well 7/17/68, 21 yr. p.i.

<u>Samples</u>	<u>Wet wt. (g)</u>	<u>Ash wt. (g)</u>	% of absorbed	
			<u>dose</u>	<u>dose/g</u>
Tumor	29.5	0.37	0.60	0.0203
Bone and tumor <sup>b</sup>	31.5	12.6	0.144	0.0046
Marrow	4.0	0.05	0.063	0.0158
Normal cortex	50.5	20.0	0.063	0.00124
Muscle from normal bone	27.5	0.345	0.025	0.0009
Injection site	69.5	0.87	46.6 <sup>c</sup>	

Whole femur reconstruction:

$$\frac{(\text{Bone} + \text{tumor}) + (\text{marrow}) + (\text{normal cortex})\%}{(\text{Bone} + \text{tumor}) + (\text{marrow}) + (\text{normal cortex})\text{g}} = 0.00313\%/g$$

<sup>a</sup>Data of J. G. Hamilton and J. C. Crowley, unpublished.

<sup>b</sup>Part of distal femur, patella, and proximal tibia.

<sup>c</sup>% of administered dose.

THE UNIVERSITY OF ROCHESTER  
SCHOOL OF MEDICINE AND DENTISTRY  
AND  
STRONG MEMORIAL HOSPITAL

260 CRITTENDEN BOULEVARD  
ROCHESTER, NEW YORK 14620

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RECEIVED  
CHR RECORDS  
JUL 5 1973

June 28, 1973

*The  
side  
back to  
be independent*

SEARCHED  
INDEXED

D. H. Roberts, M.D.  
Drawer 309  
Milford, Texas 76670

RE:

Dear Dr. Roberts:

Enclosed are the admission and discharge summaries from your patient admission to the Clinical Research Center at the University of Rochester. I think the notes are self-explanatory.

It was our feeling that the patient did have idiopathic grand mal epilepsy and should be carried on Dilantin. We did not put him back on his antihypertensive medication because at the time of his discharge, his blood pressures were well within normal range. However, I am certain as in most other cases, his blood pressure will rise again as he resumes his normal activities and probably in the future will require medication of this type. Other than the hypertension and related cardiac changes, the epilepsy and the hemorrhoidal bleeding, we found no evidence of disease in

I hope this summary will be of some benefit to you.

Sincerely yours,

*Christine Waterhouse*

Christine Waterhouse, M.D.  
Professor of Medicine

CW/dp  
Enclosures

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CENTER FOR HUMAN RADIOBIOLOGY  
Argonne National Laboratory

Radiological and Environmental Research Division  
and Health Division

**EMICROFILMED**

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Radium Study Project -- Clinical Summary

Name of Patient:

Phone:

CHR # : 40-003

Social Security # :

Personal Physician:

D. H. Roberts, M. D.  
Drawer 309  
Milford, Texas 76670

Phone: 214/493-3811

Date of Medical Evaluation: June 11, 1973

Date of Birth:

Present Health Status: This patient, en route to Strong Memorial Hospital, Rochester, N.Y., for specific metabolic studies, was seen at the Center for preliminary interview, studies of hematology and blood chemistries, skeletal X-ray survey and examination for body radioactivity. His regular medical workup was deferred to the Clinical Research Center at the University of Rochester. A few additional data are supplied here.

Past Medical History: Early in 1946, while employed as a porter, he was thrown along a railway car corridor in Union Station, Chicago, due to deceleration of the Train, and injured the lateral aspect of the left knee. About a year later, when examined by a company physician in Oakland, a tumor was found in this area and a mid-Thigh amputation was performed at the University of California Hospital in July 1947. A 5 x 3 cm. tumor mass, extending up the femur from the distal end, was identified as a chondromyxosarcoma. The physician told him the prognosis was bad. He worked with an artificial limb until 2 years ago, when this was discarded because of severe skin irritation. He sometimes has cramps in the phantom leg. He has been taking medication for hypertension for one or two years (hydropres?) and has occasionally "blacked out" recently.

Marital History: He was married to \_\_\_\_\_ in September 1944; previously had a brief, unsuccessful marriage. His wife is a school teacher, healthy except for hypertension for which she takes Aldomet, and has a mild allergic history (hayfever). One daughter, born in 1945, had 2 miscarriages and then adopted a girl; a son, born in 1947, has one daughter.

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Family History: Mother died in the 1930's of undetermined cause; father was separated and is believed not to be living. A brother and a sister are living and well in Chicago.

Occupational History: He was a Porter from 1942-47; started in El Paso and "wound up" in San Francisco. Since operation he has done mostly farm and other outdoor work until he abandoned the artificial leg; and now uses crutches and has a small shop where he repairs furniture.

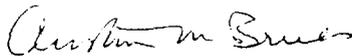
Physical Examination: Not done.

Laboratory Examination: Reports are attached. All findings are negative and consistent with those reported at Rochester. (The slightly low inorganic phosphate and borderline elevated alkaline phosphatase are consistent with results being reported on normal patients from our laboratory. No abnormal body radioactivity was detected.

Radiologic Examination: Report is attached. Findings are consistent with degenerative arthritis in a number of areas, and scattered radiolucencies suggestive of gouty deposits (however, the uric acid level is quite normal).

Clinical Summary: No abnormalities other than those noted in the report from Strong Memorial Hospital, plus a moderate degree of degenerative arthritis.

Recommendations: Returned to the care of his personal physician.

  
Austin M. Brues, M. D.

lc

CENTER FOR HUMAN RADIOBIOLOGY  
Argonne National Laboratory

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Personal History Form

Name: \_\_\_\_\_ Telephone: \_\_\_\_\_  
Address: \_\_\_\_\_ Social Security #: \_\_\_\_\_  
\_\_\_\_\_ Date of Marriage \_\_\_\_\_  
\_\_\_\_\_ Zip \_\_\_\_\_  
Date of birth: \_\_\_\_\_ Place of birth: \_\_\_\_\_

*Spouse's* Maiden name: \_\_\_\_\_  
Spouse's name: \_\_\_\_\_ Date of birth: \_\_\_\_\_ If not living, date of death: \_\_\_\_\_

Previous marriages: \_\_\_\_\_

Miscarriages: Not applicable

Children:	Name	Date of birth	Address
	<i>Id. Marie Louise (daughter lost 20 weeks in miscarriage)</i>		
	<i>Id. Anita</i>	<i>Feb 1947</i>	

Parents:	Name	If not living, age and cause of death
		<i>Dec. in his 30's Cause unknown</i>
		<i>Dec. in 15 years was separated.</i>

Brothers and Sisters:	Name	Address
		<i>Chicago</i>
		<i>Chicago</i>

Occupational History:	Years of employment	Place of employment	Nature of work
	<i>1942-1946</i>	<i>Army</i>	

*Stacker and Co. Rose Wood of NSF* PRIVACY ACT MATERIAL REMOVED

*worked at Great Southern (with G. J. ...)*

*Since mostly from work worked 20 years ...*

Medical History: Illnesses Surgery Performed Hospital

was taking medicine for hypertension - stopped medication 3-4 days ago.  
green pill the size of a marble head -  
mother since March - faint every evening in house.  
intense night sweats - wife's teacher school.

Accident: Fell along corridor of train, in Union  
Station, Chicago, crushing <sup>left</sup> knee about 9:45, 1946. Church  
was down later. U. Cal. Hosp. July-Aug. 1947. Has worn artificial  
knee for 2 years ago. Saw, was uncomfortable without.  
Sometimes has cramps in phantom leg.  
Painful <sup>above</sup> knee. Said he would  
never get well.

Sometimes constipated

Wife takes <sup>200mg</sup> MSD 401 1 or 2 daily  
for hypertension - one half "trial of oseltamivir"  
also a better has been

May 31, 1974

TO: CHR Records Room  
FROM: A. M. Brues, M.D.  
SUBJECT: 40-003 (Cal-3)

Patient: (wife: )

Children:

No telephone

No telephone

Physician: D. H. Roberts, D.O.  
Drawer 309  
Milford, Texas 76670  
(or Drawer R, Italy, Texas 76651)  
214/493-3811

Alternate  
physician: Peter L. Hatfield, M.D.  
Italy, Texas 76651  
214/483-6322

AMB:jt  
cc: R. P. Hall, M.D.  
B. C. Patten  
A. F. Stehney  
W. Weyzen, M.D. AEC-DBER

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CLINICAL LABORATORY REPORT

ARGONNE

231 06-11 600358			
*09.4	mg%	CA++	08.5-10.5
0489	mg%	LIPID	250-450
088	mg%	GLU	065-110
014	mg%	B.U.N	10.0-20.0
05.2	mg%	U-AC	02.5-08.0
136	mg%	CHOL	150-300
06.6	gm%	T.P	6.00-8.00
03.6	gm%	ALB	3.50-5.00
00.7	mg%	T-BIL	0.18-1.00
092.H	mU/ml	A-RH	030-085
146	mu/ml	L.D.H	090-200
023	mu/ml	SGOT	010-050
	UNITS	TEST	NORMALS

other tests

Laboratory Notes

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OMEGA MEDICAL LABORATORIES  
DOWNERS GROVE, ILLINOIS

(312) 964-8362

COMMUNITY MEMORIAL GENERAL HOSPITAL LA GRANGE, ILLINOIS 60525			CHEMISTRY II		
TEST	NORMAL	RESULT	TEST	NORMAL	RESULT
<input type="checkbox"/> ROUTINE <input type="checkbox"/> STAT			<input type="checkbox"/> SALICYLATES	0-50 mg %	
<input type="checkbox"/> CEPH FLOCC & THY-TURB.			<input type="checkbox"/> BSP (45 min.)	0-5%	
<input type="checkbox"/> CEPH FLOCC	24 hrs. 0		<input type="checkbox"/> OUTPATIENT		
<input type="checkbox"/> THYMOL TURBIDITY	48 hrs. 0-1 +		<input type="checkbox"/> INPATIENT		
<input type="checkbox"/> SERUM ELECTROPHORESIS			<input type="checkbox"/> TOTAL ACID PHOSPHATASE	0.13-0.63 SU/ml	
TOTAL PROTEIN	PATIENT 6.6 Gm/100 ml	NORMALS ADULT 6.0-8.0 Gm/100 ml	<input type="checkbox"/> TOTAL PROSTATIC ACID PHOSPHATASE	0-0.15 SU/ml	
ALBUMIN	3.2 Gm/100 ml	ADULT 3.5-5.0 Gm/100 ml			
ALPHA <sub>1</sub> GLOBULIN	0.3 Gm/100 ml	ADULT 0.1-0.9 Gm/100 ml			
ALPHA <sub>2</sub> GLOBULIN	0.8 Gm/100 ml	ADULT 0.2-1.2 Gm/100 ml			
BETA GLOBULIN	0.9 Gm/100 ml	ADULT 0.7-1.2 Gm/100 ml			
GAMMA GLOBULIN	1.4 Gm/100 ml	ADULT 0.6-1.7 Gm/100 ml			
TG 3.4					

TEST	NORMAL	RESULT
<input type="checkbox"/> IRON	65-175 mcg/100 ml	
<input type="checkbox"/> IRON AND IRON BINDING CAPACITY	250-400 mcg/100 ml	
<input type="checkbox"/> AMMONIA	18-48 mcg/100 ml	

# 600358  
Downers Grove  
DATE REPORTED 6/14/73  
TECH. BH  
CHART COPY

COMMUNITY MEMORIAL GENERAL HOSPITAL LA GRANGE, ILLINOIS 60525			CHEMISTRY I		
TEST	NORMAL	RESULT	TEST	NORMAL	RESULT
<input type="checkbox"/> *SMA 12/60 <input type="checkbox"/> FASTING			<input type="checkbox"/> *ALK. PHOSPHATASE	30-85 ADULT mU/ml	
<input type="checkbox"/> *CALCIUM	8.5-10.5 mg/100 ml		<input type="checkbox"/> *LDH	90-200 mU/ml	
<input checked="" type="checkbox"/> *PHOSPHORUS	2.5-4.5 mg/100 ml	2.4	<input type="checkbox"/> *SGOT	10-50 mU/ml	
<input checked="" type="checkbox"/> *GLUCOSE	65-110 mg/100 ml		<input type="checkbox"/> LDH ELECTROPHORESIS		
<input type="checkbox"/> *BUN	10-20 mg/100 ml		<input type="checkbox"/> *SMA 6/60		
<input type="checkbox"/> *URIC ACID	2.5-8.0 mg/100 ml		<input type="checkbox"/> *ELECTROLYTES		
<input type="checkbox"/> *CHOLESTEROL	150-300 mg/100 ml		<input type="checkbox"/> *SODIUM	135-145 meq/l	
<input type="checkbox"/> *TOTAL PROTEIN	6.0-8.0 Gm/100 ml		<input type="checkbox"/> *POTASSIUM	3.5-5.0 meq/l	
<input type="checkbox"/> *ALBUMIN	3.5-5.0 Gm/100 ml		<input type="checkbox"/> *CHLORIDE	75-105 meq/l	
<input type="checkbox"/> *BILIRUBIN TOTAL	0.2-1.5 mg/100 ml		<input type="checkbox"/> *CO <sub>2</sub>	24-32 meq/l	
<input type="checkbox"/> BILIRUBIN DIRECT	0-0.25 mg/100 ml		<input type="checkbox"/> *CPK	35-225 mU/ml	
			<input type="checkbox"/> *CREATININE	0.7-1.4 mg/100 ml	

TEST	NORMAL	RESULT
<input type="checkbox"/> SGPT	5-35 U	
<input type="checkbox"/> LIPASE	< 1 CCU	
<input type="checkbox"/> AMYLASE	60-160 U/100 ml	
<input type="checkbox"/> THYMOL TURBIDITY	0-4 UNITS	

# 600358  
PRIVACY ACT MATERIAL REMOVED  
DATE REPORTED 6/14/73  
TECH. BH  
CHART COPY

8000262





ARGONNE NATIONAL LABORATORY  
HEALTH DIVISION

PRIVACY ACT MATERIAL REMOVED

Special Routine

URINE

Special Routine	73																			
Date	4/11																			
Reaction	5.0																			
Sp. Gr.	1.020																			
Albumin	0																			
Bil. (uclt.)	0																			
Cult. Blood	0																			
Micro. WBC/HPF																				
RBC/HPF																				
Casts/LPF																				
Epith. cells																				
Mucus																				
Bacteria																				
Amorph. Sed.																				
Initialed by																				

Name

BLOOD

Date	4/11																			
Hb (gms)	15.6																			
Hematocrit	47																			
MCV																				
MCH	72.00																			
MCHC	57																			
RDW	1																			
Lymphs %	30																			
Mon. %	8																			
Eosin. %	2																			
Baso. %																				
Platelet Cells																				
WBC normal																				
Anisocytosis																				
Poikilocytosis																				
Hypochromasia																				
Baso. stippling																				
Plasma cells																				
Reticulocytes																				
Platelets																				
Sed. Rate 60 min.																				
Corrected																				
Blood Type																				
Initialed by	RH																			

Clinical Laboratory Data

P.R. NO.

CHR - 40-003

SEROLOGY

PRIVACY ACT MATERIAL REMOVED

Date																				
VDRL																				
Kahn																				
Wass.																				

8000266



The enclosed version of the Radiologist's Report was constructed by Dr. A.M. Bruce specifically for mailing to Dr. D. A. Roberts along with his copy of the final clinical summary.

- |                                       |   |                                   |
|---------------------------------------|---|-----------------------------------|
| <input type="checkbox"/> Complete     | <input type="checkbox"/> More details       | <input type="checkbox"/> 20000000 |
| <input type="checkbox"/> Information  | <input type="checkbox"/> Complete & details | <input type="checkbox"/> 20000000 |
| <input type="checkbox"/> Registration | <input type="checkbox"/> Complete           | <input type="checkbox"/> 20000000 |

9/7/73  
 2000


INTELLIGENCE DIVISION  
 AND  
 MESSAGE ROOM

**MESSAGE FORM AND INTEROFFICE MAILING SLIP**

To \_\_\_\_\_ Date \_\_\_\_\_

Location \_\_\_\_\_

From \_\_\_\_\_

----- FOLD HERE FOR RETURN -----

Time Called \_\_\_\_\_ Will Call Again  Returned Your Call

Telephone No. \_\_\_\_\_ Please Call After \_\_\_\_\_

Action Requested:

<input type="checkbox"/> Attention	<input type="checkbox"/> Handle	<input type="checkbox"/> Please Call Me
<input type="checkbox"/> Information	<input type="checkbox"/> Prepare Reply	<input type="checkbox"/> Please See Me
<input type="checkbox"/> Per Conversation	<input type="checkbox"/> Complete & Return	<input type="checkbox"/> Approval
<input type="checkbox"/> Per Request	<input type="checkbox"/> Note & Return	<input type="checkbox"/> Signature
<input type="checkbox"/> Comment	<input type="checkbox"/> Note & Retain	<input type="checkbox"/> File

MESSAGE

8920008

Radiological and Environmental Research Division  
Argonne National Laboratory

CENTER FOR HUMAN RADIOBIOLOGY

Radiologist's Report

PRIVACY ACT MATERIAL REMOVED

CHR # 40-003

Date Read: June 13, 1973

Patient's Name \_\_\_\_\_

The chest shows no evidence of abnormality in the heart or lungs. There is atheromatous tortuosity of the descending aorta. The hands show small areas of absorption or lysis in the head of the right thumb-metacarpal and the base of the proximal phalanx of the right thumb, also the middle phalanx of the right middle finger and the heads of the left second and third metacarpals. There are some degenerative changes in the distal interphalangeal joints of the right second, third and fourth fingers and the left third and fourth. Small lucencies are also present in the navicular and capitate bone on each side. Both fore-arms are normal. The right humerus shows that there are definitely abnormal trabeculae in the region of the greater tuberosity of the humerus and the acromion. Dense spurs are present in the right acromioclavicular joint. The left humerus also shows abnormal trabeculae in the greater tuberosity of the humerus and the acromion, with degenerative changes in the acromioclavicular joint. The cervical spine shows marked spurring in the anterior aspects and lateral spinal ligaments. The lumbar spine shows large and dense spurs along the vertebral margins. The pelvis is normal. The right femur shows no evidence of any gross lesions but there are some very fine stippled densities in the intertrochanteric region. The left femur shows that there has been an amputation about 4" below the lesser trochanter. There are reactive changes of the usual kind at the amputation end. Few fine stippled densities are seen in the intertrochanteric region. The right knee shows evidence of degenerative arthritis. The right ankle shows a large spur on the dorsum of the astragalus. There is an os trigonum, and also an accessory scaphoid. The right foot shows some small osteolytic areas in the head of the first metatarsal. The skull and sinuses show no evidence of abnormality. The right and left mastoids show that the cells are normal except for the presence of some larger cells than usual on each side. The mandible shows that there are abnormal trabeculae, with very small lucencies resulting, throughout this bone. Several teeth are missing, but the remaining teeth appear grossly normal.

Impression: There is evidence of degenerative arthritis in a number of areas. There are a number of radiolucencies in the hands and carpal bones bilaterally which are suggestive of gouty deposits. In the proximal portions of both humeri as well as the adjacent acromions, there are some non-specific changes in the trabeculae; the mandible shows similar changes.

PRIVACY ACT MATERIAL REMOVED

  
\_\_\_\_\_  
I. E. Kirsh, M. D.

8000269

Radiological and Environmental Research Division

Argonne National Laboratory

PRIVACY ACT MATERIAL REMOVED

CENTER FOR HUMAN RADIOBIOLOGY

Radiologist's Report

CHR # 40-003

Date read: June 13, 1973

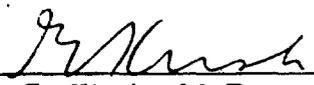
Patient's Name \_\_\_\_\_

The chest shows no evidence of abnormality in the heart or lungs. There is atheromatous tortuosity of the descending aorta. The hands show small areas of absorption or lysis in the head of the right thumb-metacarpal and the base of the proximal phalanx of the right thumb, also the middle phalanx of the right middle finger and the heads of the left second and third metacarpals. There are some degenerative changes in the distal interphalangeal joints of the right second, third and fourth fingers and the left third and fourth. Small lucencies are also present in the navicular and capitate bone on each side. Both forearms are normal. The right humerus shows that there are definitely abnormal trabeculae in the region of the greater tuberosity of the humerus and the acromion. Dense spurs are present in the right acromioclavicular joint. The left humerus also shows abnormal trabeculae in the greater tuberosity of the humerus and the acromion, with degenerative changes in the acromioclavicular joint. The cervical spine shows marked spurring in the anterior aspects of the cervical vertebral bodies. The dorsal spine shows calcification in the anterior and lateral spinal ligaments. The lumbar spine shows large and dense spurs along the vertebral margins. The pelvis is normal. The right femur shows no evidence of any gross lesions but there are some very fine stippled densities in the intertrochanteric region. The left femur shows that there has been an amputation about 4" below the lesser trochanter. There are reactive changes of the usual kind at the amputation end. Few fine stippled densities are seen in the intertrochanteric region. The right knee shows evidence of degenerative arthritis. The right ankle shows a large spur on the dorsum of the astragalus. There is an os trigon and also an accessory scaphoid. The right foot shows some small osteolytic areas in the head of the first metatarsal. The skull and sinuses show no evidence of abnormality. The right and left mastoids show that the cells are normal except for the presence of some larger cells than usual on each side. The mandible shows that there are abnormal trabeculae, with very small lucencies resulting, throughout this bone. Several teeth are missing, but the remaining teeth appear grossly normal.

Impression: There is evidence of degenerative arthritis in a number of areas. There are also a number of radiolucencies in the hands and carpal bones bilaterally which are suggestive of gouty deposits. In the proximal portions of both humeri as well as the adjacent acromions, there are some changes in the trabeculae which are consistent with findings in early radium deposition, but not yet completely specific. The mandible shows abnormal trabeculae, suggestive of damage due to radiation.

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PRIVACY ACT MATERIAL REMOVED

  
I. E. Kirsh, M.D.

Radiological and Environmental Research Division Health Division

Argonne National Laboratory

PRIVACY ACT MATERIAL REMOVED

Name \_\_\_\_\_ Sex M CHR # 40-003 Radium Study Project

Date of Birth \_\_\_\_\_ Date of Films 6/11/73 Bone Survey Summary Sheet

Area	Position	Score	Criteria for Coding Radiographic Changes with Radium Deposition. Note: The most advanced lesion determines the score for each area.
1 Chest & Ribs	PA	0	(±) Questionable, barely detectable changes such as slight coarsening of trabeculation. (1) Minimal areas of bone resorption (equal to or less than 10 mm. in longest diameter) in the cortex of long or flat bone, <u>or</u> Isolated areas of patchy bone sclerosis, <u>or</u> Definite coarsening of trabeculation. (2) Large punched-out areas of bone resorption (greater than 10 mm. in longest diameter) in long or flat bone, <u>or</u> Lesions of 2 severity, <u>plus</u> (a) some areas of bone sclerosis <u>or</u> (b) definite coarsening of trabeculation. (3) Extensive changes of 3 severity <u>plus</u> (a) changes in trabecular pattern <u>or</u> (b) areas of bone sclerosis. (4) Large areas of aseptic necrosis and/ pathologic fracture. (5) Malignant changes. GENERAL IMPRESSION: Negative for changes typical of radium deposition, <u>or</u> Minimal (1-11) Mild (12-22) Moderate (23-34) Advanced (34+)
2 Cervical Spine	AP & LAT.	0	
3 Thoracic Spine	AP & LAT.	0	
4 Lumbar Spine	AP & LAT.	0	
5 Pelvis	AP	0	
6 R Shoulder & Humerus	AP	1	
7 L Shoulder & Humerus	AP	1	
8 R Elbow & Forearm	AP	0	
9 L Elbow & Forearm	AP	0	
10 R Wrist & Hand	AP	0	
11 L Wrist & Hand	AP	0	
12 R Femur	AP	0	
13 L Femur	AP	0	
14 R Knee & Leg	AP	0	
15 L Knee & Leg	AP	N.F.	
16 R Ankle	AP	0	
17 L Ankle	AP	N.F.	
18 R Foot & Ankle	AP & LAT.	0	
19 L Foot & Ankle	AP & LAT.	N.F.	
20 Skull	AP & LAT.	0	
21 Paranasal Sinuses	Mod. Waters	0	
22 R Mastoid	Lat. & Post.	0	
23 L Mastoid	Lat. & Post.	0	
<i>Mandible R+L OK</i> TOTAL		3	Malignant changes associated with radium deposition. Note: A score of 5 or 6 in one area makes the case advanced irrespective of total score. N = Normal; F = Pathological fracture; T = Tumor; M = Miscellaneous

IMPRESSION:

PRIVACY ACT MATERIAL REMOVED

Other Clinical Findings: Right mid-thigh amputation

Date Films Read 6-13-73 Interpretation by Radiologist: J. K. ...  
 8000271 M.D.

8000272

Special  
Medical

Center for Human Radiobiology  
Peripheral Leucocyte Chromosome Analysis

Case # 40-003

Sample date June 11, 1973

A sample of peripheral blood was drawn from the patient into a sterile heparinized tube by the A.N.L. Health Division on the above date. Leucocytes were cultured, using standard culture techniques including PHA stimulation. The cultures were terminated after 50-53 hours. Slides were examined following standard Giemsa staining. Slides were scored on 7/5/73 and a sample of 84 cells was obtained. The sample consisted of sufficiently well spread cells with 46 or more centromeres. A copy of the cytogenetic unit's score sheet is attached.

Results were as follows:

PRIVACY ACT MATERIAL REMOVED

	<u>Number</u>
Cells with 46 centromeres	<u>78</u>
Cells with >46 centromeres	<u>6</u>
% hyperdiploid cells	<u>7.1</u>
Rings + dicentrics (and associated fragments)	<u>0</u>
Chromosome minutes	<u>0</u>
Acentric fragments	<u>2</u>
<u>Total chromosome aberrations per cell</u>	<u>.02</u>
Chromatid deletions	<u>0</u>
Gaps	<u>7</u>
<u>Total chromatid aberrations per cell</u>	<u>.10</u>
<u>Total aberrations per cell</u>	<u>.12</u>

PRIVACY ACT MATERIAL REMOVED

Date of report 7/5/73

Submitted by S. F. Hoegeman

8000273



8000275

40-003

# RADIOCHEMISTRY

REPORTS FILED 1/27/79

SAMPLE ANALYSIS FOR THIS  
CASE IS IN PROGRESS

**MICROFILMED**

FEB 25 1981

CHR RECORDS

8000276

PRIVACY ACT MATERIAL REMOVED

CENTER FOR HUMAN RADIOBIOLOGY  
BODY RADIOACTIVITY MEASUREMENT

Name \_\_\_\_\_ Case No. 40-003  
Date Measured 11 JUNE 1973 (73.162) Height 180.3 cm Weight 81.1 kg  
Type of Exposure  $^{238}\text{Pu}$  injection  
Exposure Period \_\_\_\_\_  
References \_\_\_\_\_

Counting Geometry DETECTOR 1 CM ABOVE LIVER REGION OF SUPINE  
Detector 18-cm DIAMETER PROPORTIONAL COUNTER SUBJE  
Analyzer NUCLEAR DATA Run No.(s) 73.16202 + 05  
Calibration BROAD BEAM ATTENUATION of  $^{238}\text{Pu}$  SOURCE

Energy Band (keV)	<u>15.6-23.2</u>	_____	_____
<u>CHANNEL NUMBERS</u>	<u>70-105</u>	_____	_____
Subject Gross CPM	<u>7.81 ± 0.89</u>	_____	_____
Background CPM	<u>4.15 ± 0.19</u>	_____	_____
Control Subj. Net CPM	<u>3.81 ± 0.89</u>	_____	_____
Net Subject CPM	<u>- 0.15 ± 1.25</u>	_____	_____
Net Subj. CPM From <u><math>^{238}\text{Pu}</math></u>	<u>- 0.15 ± 1.25</u>	_____	_____
Net Subj. CPM From _____	_____	_____	_____

Remarks: CALIBRATION FACTOR for  $^{238}\text{Pu}$  is 5403  
cpm /  $\mu\text{Ci}$  BARE at 10 cm. SUBJECT CONTAMINATION  
ASSUMED TO BE POINT SOURCE IN LIVER, 7 CM  
from SURFACE of BODY, YIELDING 10.07 cpm/ $\mu\text{Ci}$

$^{238}\text{Pu}$  Body Burden: 0.00 ± 0.11  $\mu\text{Ci}$   
\_\_\_\_\_ Body Burden: \_\_\_\_\_  
\_\_\_\_\_ Body Burden: \_\_\_\_\_

PRIVACY ACT MATERIAL REMOVED

8000277

Signed Richard E Toohes Date 15 Aug 73



SUMMARY REPORT - CHEMICAL ANALYSES  
Center for Human Radiobiology

PRIVACY ACT MATERIAL REMOVED

Name \_\_\_\_\_ Case No. 40,003 Sample No. 04

Event EXCRETION Time, Date 0800 6/5 - 0800 6/6/73 Mean Time, Date 2000, 6-15/73

Sample Description FRESH URINE

Collected at UNIV OF ROCHESTER Other Information \_\_\_\_\_

Sample Size (Unit) 1.00 (DAY) Chem Lab. No. 1130

Analyses Requested for: <sup>238</sup>Pu, <sup>228</sup>Th by: Initials/Date RPL / 8-15-73

SUMMARY OF RESULTS (at time of event)

Nuclide, Element or Ratio	Method of Analysis	Unit	Amount in Whole Sample ± SE	Concentration or Rate ± SE Unit/Day	Comments and Assumptions	Laboratory Documents	Initials and Date		
							Entered	Checked	To CHR File
<sup>238</sup> Pu	Pu1	pci	0.051 ± 0.04	0.051 ± 0.04		RC-28-PS	RPL 11-30-73	RPL 12-3-73	gp 12/2/73
<sup>238</sup> Pu	Pu1	pci	0.0620 ± 0.0051	0.0620 ± 0.0051	REANALYZED USING 10X AS MUCH SAMPLE	RC-29-20 P55	RPL 2-19-74	RPL 2-19-74	gp 2/18/74

Additional Comments:



SUMMARY REPORT - CHEMICAL ANALYSES  
Center for Human Radiobiology

PRIVACY ACT MATERIAL REMOVED

Name: \_\_\_\_\_ Case No. 40,003 Sample No. .11  
 Event: EXCRETION Time, Date 0600 6/2 - 0600 6/23/73 Mean Time, Date \_\_\_\_\_  
 Sample Description: FRESH URINE  
 Collected at: UNIV. OF ROCHESTER Other Information \_\_\_\_\_  
 Sample Size (Unit): 1.00 (DAY) Chem Lab. No. 1137  
 Analyses Requested for: 238 Pu by: Initials/Date RPL / E-15-73

SUMMARY OF RESULTS (at time of event)

Nuclide, Element or Ratio	Method of Analysis	Unit	Amount in Whole Sample ± SE	Concentration or Rate ± SE Unit/ DAY	Comments and Assumptions	Laboratory Documents	Initials and Date		
							Entered	Checked	To CHR File
<sup>238</sup> Pu	Pu1	PCI	0.000 ± 0.02	0.000 ± 0.02		RC-28-PS	RPL 11-30-73	RPL 12-3-73	RP 12/21/73
<sup>238</sup> Pu	Pu1	PCI	0.0596 ± 0.0052	0.0596 ± 0.0052	REANALYZED USING IDX ASMUCH SAMPLE	RC-29-RD P-57	RPL 2/19/74	RPL 2/19/74	RP 2/23/74

Additional Comments:









SUMMARY REPORT - CHEMICAL ANALYSES  
Center for Human Radiobiology

PRIVACY ACT MATERIAL REMOVED

Name: \_\_\_\_\_ Case No. 40,003 Sample No. .07  
 Event: EXCRETION Time, Date 0800 1/6 - 0800 1/19/73 Mean Time, Date \_\_\_\_\_  
 Sample Description: FRESH URINE Other Information \_\_\_\_\_  
 Collected at: UNIV. OF ROCHESTER  
 Sample Size (Unit): 1.00 ( DAYS ) Chem Lab. No. 1133  
 Analyses Requested for: 238Pu by: Initials/Date RPL / 8-15-73

SUMMARY OF RESULTS (at time of event)

Nuclide, Element or Ratio	Method of Analysis	Unit	Amount in Whole Sample $\pm$ SE	Concentration or Rate $\pm$ SE Unit/	Comments and Assumptions	Laboratory Documents	Initials and Date		
							Entered	Checked	To CHR File
<u>238Pu</u>	<u>Pu 1</u>	<u>Pci</u>	<u>0.014 <math>\pm</math> 0.02</u>	<u>0.014 <math>\pm</math> 0.02</u>		<u>RC-28-PS</u>	<u>RPL</u> 11-30-73	<u>RPL</u> 11-2-73	<u>gp</u> 12/21/73

Additional Comments: \_\_\_\_\_

DEC 21 1973  
CHR RECORDS



SUMMARY REPORT - CHEMICAL ANALYSES  
Center for Human Radiobiology

PRIVACY ACT MATERIAL REMOVED

Name: \_\_\_\_\_ Case No. 40,003 Sample No. 109

Event: EXCRETION Time, Date 0800 1/20 - 0800 1/21/73 Mean Time, Date \_\_\_\_\_

Sample Description: FRESH URINE Other Information \_\_\_\_\_

Collected at: UNIV. OF ROCHESTER Chem Lab. No. 1/35

Sample Size (Unit): 1.00 (DAYS) Analyses Requested for: 238Pu by: Initials/Date RPL / 8-15-73

SUMMARY OF RESULTS (at time of event)

Nuclide, Element or Ratio	Method of Analysis	Unit	Amount in Whole Sample ± SE	Concentration or Rate ± SE Unit / DAY	Comments and Assumptions	Laboratory Documents	Initials and Date		
							Entered	Checked	To CHR File
<sup>238</sup> Pu	Pu 1	Pci	0.000 ± 0.01	0.000 ± 0.01		RC-28-P5	RPL 11-30-73	RPL 12-3-73	RP 12/21/73

Additional Comments:

RECEIVED  
DEC 21 '73

SUMMARY REPORT - CHEMICAL ANALYSES  
Center for Human Radiobiology

PRIVACY ACT MATERIAL REMOVED

Name \_\_\_\_\_ Case No. 40,003 Sample No. •10  
 Event EXCRETION Time, Date 0800 6/21 - 0800 6/22/73 Mean Time, Date \_\_\_\_\_  
 Sample Description FRESH URINE  
 Collected at UNIV. OF ROCHESTER Other Information \_\_\_\_\_  
 Sample Size (Unit) 1.00 (DAYS) Chem Lab. No. 1136  
 Analyses Requested for: 238 Pu by: Initials/Date RPL/8-15-73

SUMMARY OF RESULTS (at time of event)

Nuclide, Element or Ratio	Method of Analysis	Unit	Amount in Whole Sample ± SE	Concentration or Rate ± SE Unit/ DAY	Comments and Assumptions	Laboratory Documents	Initials and Date		
							Entered	Checked	To CHR File
<sup>238</sup> Pu	Pu1	pci	0.000 ± 0.03	0.000 ± 0.03		RC-28-PS	RPL 11-30-73	RPL 12-3-73	RP 12/21/73

Additional Comments:

RECEIVED

DEC 21 '73

CHR RECORDS







October 4, 1978

MICROFILMED

TO: Records

607.061384

FROM: Robert Oldham *R. Oldham*

CHR RECORDS

SUBJECT: Sample Analyses Without Detailed Result Forms

The following analyses on the samples indicated do not have Detailed Result Forms. Results were entered directly into CHEM FILE from notebooks containing the calculations using the CHEM coding Form, CHR-ANL-12/19/73.

<u>NUCLIDE ANALYZED</u>	<u>SAMPLE ID</u>	<u>LAB NO</u>
AM241	40-004.010	2980
"	40-004.E1C2	2986
"	40-009.19	946
"	40-009.20	947
"	40-009.22 to 40-009.27	949 to 954
"	40-010.B51	1824
"	40-010.E14	1877
"	40-012.08	1147
"	40-012.10	1149
"	40-012.11	1150
"	40-012.13	1152
PU239	40-009.01 to 40-009.28	930 to 955
"	40-012.07 to 40-012.23	1146 to 1162
PU238	40-001.BY1	3006
"	40-003.04	1130
"	40-003.11	1137
"	40-003.12	1138

cc: J. Plondke  
R. Oldham

RO/ns

8000293







SUMMARY REPORT - CHEMICAL ANALYSES  
Center for Human Radiobiology

PRIVACY ACT MATERIAL REMOVED

Name: \_\_\_\_\_ Case No. 140.003 Sample No. 106  
 Event: EXCRETION Time, Date 0800 6/17 - 0800 6/18/73 Mean Time, Date \_\_\_\_\_  
 Sample Description: FRESH URINE  
 Collected at: UNIV. OF ROCHESTER Other Information: \_\_\_\_\_  
 Sample Size (Unit): 1.00 (DAYS) Chem Lab. No. 1132  
 Analyses Requested for: 238 Pu by: Initials/Date RPL / 8-15-73

SUMMARY OF RESULTS (at time of event)

Nuclide, Element or Ratio	Method of Analysis	Unit	Amount in Whole Sample ± SE	Concentration or Rate ± SE Unit/	Comments and Assumptions	Laboratory Documents	Initials and Date		
							Entered	Checked	To CHR File
<u>238 Pu</u>	<u>Pu1</u>	<u>pci</u>	<u>0.003 ± 0.02</u>	<u>0.003 ± 0.02</u>		<u>RC-28-P5</u>	<u>RPL</u> 11-30-73	<u>RPL</u> 12-3-73	<u>RP</u> 12/21/73

Additional Comments:

RECEIVED  
DEC 21 1973  
CHR RECORDS

PRIVACY ACT MATERIAL REMOVED



DETAILED RESULTS:

40-080 CASTB (NEW) 750529

CALCIUM  
\*\*\*\*\*

PRIVACY ACT MATERIAL REMOVED

NAME: \*CASE NO.: 40-003 \*SAMPLE NO.: 080  
EVENT: COLLECTN \*DATE OF EVENT: 730619 \*LAB NO.: 1134  
TYPE: U \*SAMPLE DESCRIPTION: URINE

ITEM	UNIT	ANALYSIS NUMBER	
		1	2
1. SAMPLE SUB-NUMBER		080C	080C
2. METHOD		CHA	CHA
3. DATE REQUESTED		730815	730815
4. DATE ANALYZED		741022	741210
5. SAMPLE SIZE	DAY	1.000	1.000
6. ALIQUOT FRACTION		0.807	0.807
7. VOL. OF ALIQUOT	ML	100.000	100.000
8. VOL. MEASURED	ML	0.025	0.050
9. ALIQUOT FACTOR		2.019E-04	4.037E-04
10. SAMPLE SIZE MEASURED	DAY	2.019E-04	4.037E-04
11. CA IN ALIQUOT	UG	20.700	40.900
12. STD. ERROR (SYS) - 2%	UG	0.414	0.818
13. CA CONC N OR RATE	MG/DAY	102.551	101.313
14. REFERENCES-CHR DOCS.		RC30	RC30

RECEIVED

\*\*\*\*\*  
\* RESULTS \*  
\*\*\*\*\*

JAN 2 1975

1. CA CONCENTRATION OR RATE (WTD. MEAN)	101.924	MG/DAY
2. STD. ERROR (EXTERNAL)	0.619	MG/DAY
3. STD. ERROR (INTERNAL)	1.441	MG/DAY
4. VARIANCE RATIO, F	0.185	
5. FRACTIONAL STD. ERROR	0.014	

CHR RECORDS

\*\*\*\*\*

CA (MEAN) IN ALIQ #1 : 20.573 ± 0.291 UG  
CA CONCENTRATION OR RATE: 101.924 ± 1.441 MG/DAY

ANALYZED BY: JS CHECKED: JS 6/1/75 REVIEWED BY/DATE: JBH DEC 16 1975  
COMMENTS AND REFERENCES:

TO (BY/DATE): CHR FILE: 9P15176 SR FORM: SA CARD: CHEM FILE:  
CHR FORM 3/7/75

PRIVACY ACT MATERIAL REMOVED

8000299

SUMMARY REPORT - C MICAL ANALYSES  
Center for Human Radiobiology

PRIVACY ACT MATERIAL REMOVED

Name \_\_\_\_\_ Case No. 40,003 Sample No. 108

Event EXCRETION Time, Date 0800 6/19 - 0800 6/20/73 Mean Time, Date \_\_\_\_\_

Sample Description FRESH URINE Other Information \_\_\_\_\_

Collected at UNIV. OF ROCHESTER Chem Lab. No. 1134

Sample Size (Unit) 1.00 ( DAYS )

Analyses Requested for: <sup>238</sup>Pu by: Initials/Date RPL / 8-15-73

SUMMARY OF RESULTS (at time of event)

Nuclide, Element or Ratio	Method of Analysis	Unit	Amount in Whole Sample ± SE	Concentration or Rate ± SE Unit/ DAY	Comments and Assumptions	Laboratory Documents	Initials and Date		
							Entered	Checked	To CHR File
<sup>238</sup> Pu	Pu1	PCI	0.003 ± 0.04	0.003 ± 0.04		RC-28-PS	RPL 11-30-73	RPL 12-3-73	gp 12/21/73

Additional Comments:

RECEIVED  
DEC 21 '73  
CHR RECORDS



SUMMARY REPORT - CHEMICAL ANALYSES  
Center for Human Radiobiology

PRIVACY ACT MATERIAL REMOVED

Name \_\_\_\_\_ Case No. 40,003 Sample No. .10

Event EXCRETION Time, Date 0800 6/21 - 0800 6/22/73 Mean Time, Date \_\_\_\_\_

Sample Description FRESH URINE Other Information \_\_\_\_\_

Collected at UNIV. OF ROCHESTER \_\_\_\_\_

Sample Size (Unit) 1.00 (DAYS) Chem Lab. No. 1136

Analyses Requested for: <sup>238</sup>Pu by: Initials/Date RPL / 8-15-73

SUMMARY OF RESULTS (at time of event)

Nuclide, Element or Ratio	Method of Analysis	Unit	Amount in Whole Sample ± SE	Concentration or Rate ± SE Unit/ DAY	Comments and Assumptions	Laboratory Documents	Initials and Date		
							Entered	Checked	To CHR File
<sup>238</sup> Pu	Pu1	PCI	0.000 ± 0.03	0.000 ± 0.03		RC-28-PS	RPL 11-30-73	RPL 12-3-73	gp 12/21/73

Additional Comments:

RECEIVED  
DEC 21 1973  
CHR RECORDS

PRIVACY ACT MATERIAL REMOVED



SUMMARY REPORT - CHEMICAL ANALYSES  
Center for Human Radiobiology

PRIVACY ACT MATERIAL REMOVED

Name \_\_\_\_\_ Case No. 40.003 Sample No. 012  
 Event EXCRETION Time, Date 6/23 0800-10800 6/24/73 Mean Time, Date \_\_\_\_\_  
 Sample Description FRESH URINE  
 Collected at UNIV. OF ROCHESTER Other Information \_\_\_\_\_  
 Sample Size (Unit) 1.00 (DAYS) Chem Lab. No. 1138  
 Analyses Requested for: 238Pu by: Initials/Date RPL/8-15-73

SUMMARY OF RESULTS (at time of event)

Nuclide, Element or Ratio	Method of Analysis	Unit	Amount in Whole Sample ± SE	Concentration or Rate ± SE Unit/ DAY	Comments and Assumptions	Laboratory Documents	Initials and Date		
							Entered	Checked	To CHR File
<u>238Pu</u>	<u>Pu 1</u>	<u>PCI</u>	<u>0.069 ± 0.04</u>	<u>0.069 ± 0.04</u>	<u>REANALYZED USING 10X AS MUCH SAMPLE</u>	<u>RC-28-P5</u>	<u>RPL</u> <u>11-30-73</u>	<u>RPL</u> <u>12-3-73</u>	<u>gp</u> <u>12/21/73</u>
<u>238Pu</u>	<u>Pu 1</u>	<u>PCI</u>	<u>0.055 ± 0.01</u>	<u>0.055 ± 0.01</u>		<u>RC-28-P5</u>	<u>RPL</u> <u>11-30-73</u>	<u>RPL</u> <u>12-3-73</u>	<u>gp</u> <u>12/21/73</u>

RECEIVED  
DEC-21-73  
CHR RECORDS

PRIVACY ACT MATERIAL REMOVED

8000304

DETAILED RESULTS:

40-003 130 CASTB (NEW) 750529

PRIVACY ACT MATERIAL REMOVED

CALCIUM  
\*\*\*\*\*

NAME: \*CASE NO.: 40-003 \*SAMPLE NO.: 130

EVENT: COLLECTN \*DATE OF EVENT: 730624 \*LAB NO.: 1139

TYPE: U \*SAMPLE DESCRIPTION: URINE -

ITEM	UNIT	ANALYSIS NUMBER	
		1	2
1. SAMPLE SUB-NUMBER		130C	130C
2. METHOD		CHA	CHA
3. DATE REQUESTED		730815	730815
4. DATE ANALYZED		741022	741210
5. SAMPLE SIZE	DAY	1.000	1.000
6. ALIQUOT FRACTION		0.732	0.732
7. VOL. OF ALIQUOT	ML	100.000	100.000
8. VOL. MEASURED	ML	0.050	0.050
9. ALIQUOT FACTOR		3.660E-04	3.660E-04
10. SAMPLE SIZE MEASURED	DAY	3.661E-04	3.661E-04
11. CA IN ALIQUOT	UG	23.900	23.800
12. STD. ERROR (SYS) - 2%	UG	0.478	0.476
13. CA CONC N OR RATE	MG/DAY	65.292	65.018
4. REFERENCES-CHP DOCS.		RC30	RC30

RECEIVED

JAN 7 '76

\*\*\*\*\*  
\* RESULTS \*  
\*\*\*\*\*

CHR RECORDS

1. CA CONCENTRATION OR RATE (WTD. MEAN)	65.154	MG/DAY
2. STD. ERROR (EXTERNAL)	0.137	MG/DAY
3. STD. ERROR (INTERNAL)	0.921	MG/DAY
4. VARIANCE RATIO, F	0.022	
5. FRACTIONAL STD. ERROR	0.014	

\*\*\*\*\*

CA (MEAN) IN ALIQ #1 : 23.850 ± 0.337 UG

CA CONCENTRATION OR RATE: 65.154 ± 0.921 MG/DAY

ANALYZED BY: JS CHECKED: \_\_\_\_\_  
COMMENTS AND REFERENCES:

REVIEWED BY/DATE: RBH DEC 1

TO (BY/DATE): CHR FILE: *M/S/76* SP FORM: \_\_\_\_\_ SA CARD: \_\_\_\_\_ CHEM FILE: \_\_\_\_\_  
CHR FORM 3/7/75

8000305

PRIVACY ACT MATERIAL REMOVED



8000307

Outside  
Medical

Dr Robert S. A.  
Dawson 309,  
Midford, Tx  
78670



Austin M. Bues, MD  
Walter Meyzer, MD  
Chief of Human Radiology  
Arbonne National Lab.  
Argonne, Illinois 60439

Re: -

Dear patient Elmer  
Alder came in this Am  
complaining of blood in  
his morning stool

Dr Robert S. A.  
Dawson 309,  
Midford Tx  
78670

ADMISSION NOTE:

Admitted 6/13/73

The patient is a 62 year old, married, colored male who is admitted to SMH for first time for balance study of heavy metals.

**PRESENT ILLNESS:** The patient sustained an injury to his left knee while working for Co. outside of Chicago, in 1946. He states that the left knee was crushed at that time and that a year later he was told that he had a tumor of the leg and should have a mid-thigh amputation done. The tumor reportedly was an osteofibromyochondrosarcoma and he was told at that time that he had less than 5 years to live. He was fitted with an artificial leg following surgery and although he never worked again for Co., he has worked at various jobs, perhaps the primary one being shoe repair. During the interval between the amputation and now, he has really had only two problems of any magnitude. He was told that he had high BP 1½ years ago and he has been taking pills of some type for this. He does not know the name of the pills and he has not taken them for a week's time. The other symptom that is present is difficult to evaluate. According to his wife, he has black-out spells where he does not hear what other people are saying and is out of contact for a few moments. He has never fallen in these, but she feels that he is not aware of what is going on. These have been evident for the past 2-3 years and perhaps last about 5 minutes. The patient states that they occur when he is angry at someone, particularly his wife and that he really does know what is going on at these times. He has been given some pills by his doctor for these which he says calms down his nerves and lessen the number of "black-out spells".

**PAST HISTORY AND ILLNESSES:** The patient has had arthritis of particularly his elbows and shoulders for the past several years but this has been without any major deformity or major disability. There have been no other major illnesses - he did have a tonsillectomy several years ago and has had no further trouble with sore throats since then.

**PERSONAL HISTORY:** The patient has worked first as a Co. employee and later at many odd jobs following the amputation of his left leg. Two years ago, he had a good deal of skin irritation from the artificial leg and stopped wearing the artificial limb at that time. He now goes around on crutches but has been unable to work in the past 2 years. The patient is married. His wife works and he receives Social Security. There are two children.

**PHYSICAL EXAMINATION:** BP - 160/80. The patient is well nourished and developed and appears to be in good health. He has a mid-thigh amputation of the left leg. There is no jaundice and the skin is clear. The eyes show a very pronounced arcus senilis and the eye grounds show moderate arteriolar narrowing. There is however no AV nicking nor are there any hemorrhages and exudates. The disks are flat. The examination of the ears is negative. There is no sinus tenderness. The pharynx is clear. There are no lymph nodes in the neck, axillary or inguinal area. The thyroid is not enlarged. The lungs are clear to P&A. The heart may be somewhat enlarged. I get the left border of cardiac dullness about 11 cm. from the mid-sternal line in the 5th interspace. There is considerable irregularity of the heart beat. Although I do not think he is fibrillating, there must be many extra systoles present. The heart sounds are of good quality however and there are no murmurs. The examination of the abdomen is negative. I cannot feel the liver or spleen or kidneys. The peripheral pulses are good and there is no edema. On rectal, the prostate is of normal size and the stool obtained was guaiac negative.

PRESSION: #1 - Twenty-five years post chondrosarcoma without evidence of recurrence or metastasis.

#2 - By history, hypertensive cardiovascular disease. By current exam, the only manifestation noted is some irritability of the conduction system.

An EKG will be taken to document the arrhythmia and a chest x-ray will be done to determine precisely heart size.

Christine Waterhouse, M.D.

THE UNIVERSITY OF ROCHESTER  
STRONG MEMORIAL HOSPITAL

PRIVACY ACT MATERIAL REMOVED

MICROFILMED

JAN 26 1973

P-2

84-33-2

LOCATION NAME ADDRESS AGE CHR RECORDS

DISCHARGE SUMMARY:

Admitted 6/13/73

Discharged 6/26/73

The admission history and physical examination are enclosed. The white count was 6 and 7.4, the hct. was 44 and 42%, the differential was normal with 6 monocytes, 42 lymphocytes, 1 basophil, 1 eosinophil, and 48 segmented cells. The platelet estimate was 4.9/oil immersion field. The urinalysis was negative and the stool guaiac was negative. The chemical screen was normal with a total protein of 6.6, serum albumin - 3.3, calcium - 9, phosphorus - 2.9, cholesterol - 174, urea nitrogen - 10, uric acid - 4.7, creatinine - 1.1, total bilirubin - .6, alkaline phosphatase - 77, and transaminase - less than 10. The sodium was 140, potassium - 4.2, CO<sub>2</sub> - 26, chloride - 102. The glucose was 88 mg%.

At the time of admission, an EKG was taken which showed frequent atrial premature contractions with runs of 2 or 3 consecutively. The voltage was diagnostic for a left ventricular hypertrophy with ST abnormalities in 2,3, AVF, V6, which were suggestive of strain or ischemia. The cardiac size by chest x-ray was WNL. It was, however, noted that considerable tortuosity of the thoracic aorta was present. There were no pulmonary lesions. An incidental finding was calcification of the anterior ligament of the thoracic spine.

The patient was placed on a standardized diet and urine and stool collections were carried out. He was asymptomatic until 8 days after his admission at which time he was found on the floor unconscious about 11 a.m. Some seizure activity was noted by a doctor on the floor. The patient remained comatose for about 15 min. following this but recovered without sequelae gradually thereafter. The BP during the episode was 160/100 and the P was 72. It was our feeling in retrospect that this was one of the "blackout spells" which were described in the initial history. An EEG was taken the following morning and I enclose a copy of this report. A brain scan was also done which was negative. He was started on dilantin following what was probably a grand mal seizure and was given 100 mg. t.i.d. He was told to increase this to 4 times daily if there was further evidence of epileptic seizures.

The only other complication of the patient's hospital admission was the passage of a grossly bloody stool on 6/23. Rectal examination showed no abnormality at that time. He was sigmoidoscoped with negative findings except for hemorrhoids and a barium enema was negative.

DISCHARGE DIAGNOSES: 1. Post chondrosarcoma without evidence of recurrence or metastases.  
2. Hypertensive cardiovascular disease  
3. Idiopathic epilepsy with grand mal seizure  
4. Hemorrhoids with rectal bleeding.

ADDENDUM: The patient's BP throughout his hospital stay showed a diastolic pressure of no greater than 100 and a systolic pressure which was between 120 and 170. There seems to be no doubt of the diagnosis of hypertension but in protected surroundings the BP readings are reasonably good.

Christine Waterhouse, M.D.

8000311

PRIVACY ACT MATERIAL REMOVED

Laboratory of Electroencephalography  
Strong Memorial Hospital

PRIVACY ACT MATERIAL REMOVED

Rochester, New York

E. E. G. No. 1949-A UNIT NO. 84-33-25

Name \_\_\_\_\_ AGE 62 DIV. In, P-2 DATE 6-22-73

Requested by \_\_\_\_\_

Leads \_\_\_\_\_

ment. emot. state  
Gen. Cond. coma, aphasia, etc. \_\_\_\_\_

Drugs \_\_\_\_\_

Description The patient was asleep at the start of the tracing, and at this time the background is somewhat slower from the left than the right hemisphere, especially from the more anterior leads, where medium voltage 2-3 cycles /sec. activity is seen initially. With increased inter-electrode distances, some high voltage sharp forms appear from the left fronto-temporal region.

Some EKG and other artifact is seen in the background, although an independent spike focus cannot be ruled out from the right.

The patient was transiently alert, and at this time the alpha representation is better from the right than from the left hemisphere.

Hyperventilation was not attempted in this case.

IMPRESSION: Abnormal EEG, chiefly on account of some increased slowing, with discharging features, from the left fronto-temporal region.

This EEG would tend to confirm a clinical suspicion of epilepsy.

PRIVACY ACT MATERIAL REMOVED

Comment:

8000312

Signed 

PRIVACY ACT MATERIAL REMOVED

Name

Hospital No. UCSF C-142240

Path 47.1801  
47.1863

Date of birth

Date of injection

July 18, 1947

0.1  $\mu$ Ci <sup>238</sup>Pu IM

Age at injection

Date of death

Age at death

Time after injection 27

Death certificate No.

PRIVACY ACT MATERIAL REMOVED

..... 50,1863  
 C-142240 July 21, 1947  
 Dr. E. Jones, Jr.  
 Male cat 36. Injury to lat asp left knee 10 mos  
 earlier

Gr. mid-thigh amputation. Soft reddish granula  
 area resembling cancellous bone <sup>over</sup> lateral femoral  
 condyle. A soft mucoid material can be  
 expressed. Tumor gross involves a 5 x 3 cm  
 area in center and extends up prox shaft 8 cm.  
 Micro.

Shots of irregular shaped cells in a  
 base, fibrillary mucoid matrix. Cytoplasm  
 vacuolated, nuclei of irregular size. Many mitoses  
 some multi-nuc. cells. Dem. & necrosis extending  
 into adjacent muscle.

Bone replaced by tumor cells. Marrow infil.  
 = tumor cells.

Chondrosarcoma  
 J. W. Hamlin.

SP 1801

30g of fragments of soft tissue + cancellous  
 bone. - same micro as 1863

Ruth Seale

RECEIVED CHR

JUN 29 1977

RECORDS ROOM

Informant from chart of <sup>obtained</sup>  
on 4-18-74 at UC record center in Richmond

PRIVACY ACT MATERIAL REMOVED

IC3

- Unemployed

Dr. Lloyd Fisher 1904 Franklin St., Oakland

Injury Sept 46

Referred to Dr. Carter as industrial. H. E. Carter, M.D.

no transfer to County Hosp.

RECEIVED CHR

JUN 29 1977

RECORDS ROOM

Dr. Ballou in Ortho. clinic recommends admission

Biopsy called bone cyst

Destructive lesion in lt. femoral condyle on x-ray

R. D. Sherman was radiologist

Admitted 7-13.

Incorrect month

Note on 5/16/47

Pt very comfortable and cheerful. A very cooperative pt. does more well.

R. Muller

Previous note 7/15/47

Incorrect month

5/17/47 X-ray scout films negative for any evidence of metastases. Amputation postponed until Monday

in order to have radioactive tracer substances prepared (Plutonium) and standardized. Pt. will have tumor uptake studies done.

Muller

Incorrect month

5/8/47 Cast split down medial side. some throbbing pain but no other discomfort. No surgery Monday

Hb 92%, WBC 7,300

R. Muller

Cast removed for hepar injection.

8000315

PRIVACY ACT MATERIAL REMOVED

7-18-47 3<sup>30</sup> PM

The experimental nature of the intramuscular injection of the radioactive tracer sample was explained to the patient, who agreed on the procedure. The pt. was in fully oriented and in sane mind. Injection was given into the gastrocnemius muscle of left leg and the area marked with circle. Injection made at center of circle. Needle depth = 2 cm. No blood appeared on aspiration and no bleeding after removal of needle.

At explanation of the procedure to the patient and assisting in procedure were  
 Miss Mary Wootton R.N.  
 Dr. Donald J. Bellamy  
 Dr. Ray Muller  
 Dr. B. V. Low-Beer

Signatures here.

7-18-47 10<sup>00</sup> PM. No pain or discomfort whatsoever following injection  
 R. Muller

7-21-47 amputation



3

*Shert*

*Discharge note*

*8-7-47*

*Dx*

*1. Osteomyeloid sarcoma of left femur -  
distal condyle*

*2. Rx lines*

*Ray Muller*

8000318



PRIVACY ACT MATERIAL REMOVED

36 yrs Male

U 142240 record #

Chondrosarcoma of femur

7/14 biopsy 7/21 amp.

from Italy, Texas

still living 7/17/68

att phy. A O Dykes

Tumor registry

PRIVACY ACT MATERIAL REMOVED

8000319

PRIVACY ACT MATERIAL REMOVED

7/22/47

Surgery Log.

M. Co. 118 Room

note for Miss. Hester

Surgery - 2950

H2240T -

Drs. Jones, Bellamy & Mullen

PRIVACY ACT MATERIAL REMOVED

40-003

PRIVACY ACT MATERIAL REMOVED

TO WHOM IT MAY CONCERN:

WE ARE WILLING TO BE IDENTIFIED, BY NAME AND ADDRESS, TO THE  
SUBCOMMITTEE ON ENERGY CONSERVATION AND POWER OF THE U.S. HOUSE  
OF REPRESENTATIVES.

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PRIVACY ACT MATERIAL REMOVED

RECEIVED CHR

NOV 11 1986

RECORDS ROOM

MICROFILMED

FEB 04 1987

8000321

CHR RECORDS

8000322







Description

Case #

Injury - knee hist of	QM,	110-008	QA,T	Y920L	M,	1000	E,	0000	F,	0000	D,	4678P	;
fracture hist of <sup>2nd</sup> chondromyxoidoma	QM,		QA,T	Y920L	M,	9223	E,		F,		D,	4778P	;
hand thigh amputation	QM,		QA,T	1171L	M,	1521	E,		F,		D,	4773P	;
hyperostosis, hist of	QM,		QA,T	0011	M,	0000	E,		F,	9042	D,	1-73P	;
adhesions: thickening - der. in site	QM,		QA,T	4240	M,	4229	E,		F,	0000	D,	730X	;
	QM,		QA,T	4940	M,	5212	E,		F,		D,		;
pedalulceries - hands	QM,		QA,T	1150B	M,	3972	E,		F,		D,		;
-scapular bones	QM,		QA,T	1144B	M,	3972	E,		F,		D,		;
leg changes - Diarr's	QM,		QA,T	1239B	M,	5003	E,		F,		D,		;
abnormal tooth: R humerus <sup>step to anterior</sup> disjunct	QM,		QA,T	1111B	M,	3963	E,		F,		D,		;
spurs - R acromioclavicular joint	QM,		QA,T	1242R	M,	1207	E,		F,		D,		;
eg. changes - L	QM,		QA,T	1242L	M,	5203	E,		F,		D,		;
pussey - cervical spine	QM,		QA,T	1231	M,	1207	E,		F,		D,		;
calcification - distal spinal ligaments	QM,		QA,T	1816	M,	5541	E,		F,		D,		;
spurs - lumbar spine	QM,		QA,T	1233	M,	1207	E,		F,		D,		;
vertebrae: below L lesser thoracic	QM,		QA,T	1935L	M,	1521	E,		F,		D,		;
stippled densities - L/R intervertebral regions	QM,		QA,T	1933B	M,	3957#	E,		F,		D,		;
deg. arch - R knee	QM,		QA,T	1232R	M,	5023	E,		F,		D,		;
spur - R acetabulum	QM,		QA,T	1177R	M,	1207	E,		F,		D,		;

Abstracted by

JA

Date

2/11/77

Coded by

JA

Date

2/11/77

8000325



PRIVACY ACT MATERIAL REMOVED

Description	Case #	Q M	Q A	T	M	E	F	D
<i>fortuosity-thoracic vertebrae</i>	40-002							
<i>caliciflorae - cataglyphid - thoracic spine</i>	1814							
"blackbirds" bird of	0000							
<i>arthritic albus</i>	1249B							
<i>foosillectomy</i>	1241B							
<i>symphyseal</i>	1520							
<i>plutenum injection</i>	1790							
	0001							
	1202							
	0000							
	0000							
	1591							
	1241B							
	1520							
	1790							
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	1241B							
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