713995

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~~SPECIAL REREVIEW~~
~~FINAL DETERMINATION~~
~~UNCLASSIFIED~~

~~By:~~

644475 ~~Date:~~

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SPECIAL REREVIEW
FINAL DETERMINATION
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By: Pe Dreyer
Date: 2-13-85

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Scope of Medical Program

REPOSITORY Atlanta NARA

COLLECTION RG #326 (326-87-6 OR R+D Div.)

BOX No. 37

FOLDER Scope of Medical Program

2002016

STANDARD FORM NO. 64

~~SECRET~~

Office Memorandum • UNITED STATES GOVERNMENT

~~OFFICIAL USE ONLY~~

TO : Dr. Stoeckle DATE: April 1, 1950

FROM : Dr. Holland

SUBJECT:

Harry, you are familiar with the general subject of this correspondence as we have discussed it previously. I suggest you obtain from the file room a copy of a recent letter I wrote to Wright Langham.

I see no reason why this concerns Jean Felton and, if you agree, suggest we obtain whatever correspondence was directed to him, and that you carry the ball from here on out. I would like to be kept advised of your progress.

Albert H. Holland, Jr, M.D.

Enclosure:
Correspondence

Holland:aw

MEDICINE, HEALTH & SAFETY 10-9

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2002017

CLASSIFIED ROUTING SLIP

LOS ALAMOS SCIENTIFIC LABORATORY

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FROM CLASSIFIED MAIL & RECORDS GROUP MR DATE March 22, 1950

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NAME	DIV. AND GROUP	SIGNATURE	DATE
DR. ALBERT HOLLAND			

NOTE: The Medical History referred to in attached letter is being sent under separate cover.

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2002018

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SECRET

UNIVERSITY OF CALIFORNIA
LOS ALAMOS SCIENTIFIC LABORATORY
(CONTRACT W-7405-ENG-36)
P. O. Box 1663
Los Alamos, New Mexico

IN REPLY
REFER TO: LAB H-4-3

March 20, 1950

CAUTION
This document contains information affecting the National Defense of the United States. Its contents in any manner to an unauthorized person is prohibited and may result in severe criminal penalties under applicable Federal laws.

Albert H. Holland, Jr., M.D.
Director of Research and Medicine
U. S. Atomic Energy Commission
P. O. Box E
Oak Ridge, Tennessee

Dear Jerry:

It seems that I really fouled up regarding my promise to you at the Washington meeting. It seems that I discussed with Bob Hasterlik of Chicago the possibility of getting samples from Ebb Cade and having Jack Schubert run plutonium assays simultaneously with our group here. I therefore sent Ebb Cade's medical history to Bob, thinking I was sending it to the right person. I saw Bob in Chicago a few days later, at which time he asked me why I had sent the information to him. I knew at that time I had made a mistake. The matter was then turned over to my Division Leader, Dr. Shipman, to take care of. He thought I might have possibly confused Hasterlik with Jean Felton, and has contacted Felton regarding the matter. Now, at least, we are straightened out. Will you and Felton please get together on the matter and see what you can do? I am sorry I seemed to have confused the issue by getting so many people involved.

As I see it, Dr. Shipman and I will give you and Jean all of the information we can, and the two of you work together to try to obtain another look at Mr. Cade as well as collect as many urine and fecal specimens as conveniently possible. If you are able to locate him, let me know and I will send you specific instructions for collecting, preserving and shipping specimens. By all means keep your eyes open for a possible autopsy.

I have spent the last three months working over all of the human excretion data available. It looks as if the half-time of excretion of plutonium is of the order of hundreds of years and the excretion curve seems to be composed of a number of exponentials. The excretion constants of three of the exponentials can be determined from the data available. Undoubtedly a fourth exponential exists and represents the excretion rate from the major body storage of plutonium. It is highly important that we get a few results at the end of a very long time in order that we may determine the excretion constant for this fourth storage depot. I think this is sufficiently important that we should spare no effort to obtain additional samples. A brief summary of Ebb Cade's medical history is included. I have also included a letter from Dr. F. K. Harder, Public Health

2002019

m-1928

SECRET

Officer of Greensboro, North Carolina, that gives the address of the Ebb Cade family. You will notice from the medical history that Ebb Cade had definite signs of cataract at the time the plutonium was injected. This was what I was trying to tell you in Washington.

It may be desirable for you or Felton to visit Greensboro and see what you can find out regarding the old gentleman, It is quite possible that he is deceased.

Any help that you can give us will surely be appreciated.

Sincerely yours,

WHL/ed

Wright H. Langham

SECRET

2002020

COPY

COPY

GUILFORD COUNTY HEALTH DEPARTMENT
210 North Greene Street
Greensboro, North Carolina

September 21, 1949

Dr. Wright H. Langham
Los Alamos Scientific Laboratory
P. O. Box 1663
Los Alamos, New Mexico

Dear Sir:

In reply to your letter of September 8, 1949, we have been able to ascertain that a Cade family lives at 740 Law Street. This is the family of Ebb Cade, but I do not know anything concerning the state of his health. They seem to be out most of the time, and it is my suggestion that you might be able to secure some information by writing directly to the patient himself.

Sincerely yours,

/s/ F. K. Harder

F. K. Harder, M.D., M. P. H.

C O P Y

REPOSITORY Atlanta NARA
COLLECTION RG # 326 (326-87-6 OR R&D Div.)
BOX No. 37
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MEDICINE, HEALTH & SAFETY / 0-9

2002021

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DR. ALBERT H. HOLLAND, JR.			

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2002022

1950

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[redacted]

ARMY SERVICE FORCES
UNITED STATES ENGINEER OFFICE
Manhattan District
Oak Ridge, Tennessee
P. O. Box E

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NO 2 OF 2 COPIES, SERIES B

EIDMT-1
MD706

[redacted]

19 September 1945

REPOSITORY Atlanta NARA
COLLECTION RG #326 (326-87-6 OR R&D Div.)
BOX No. 37
FOLDER Scope of Medical Program

Mr. Wright Langham
P. O. Box 1663
Santa Fe, New Mexico

Dear Mr. Langham:

Inclosed is a brief resume of E.C.'s medical history, and a graphic record of the patient's hospital course is forwarded under separate cover.

The jaundice which this patient developed was apparently an infectious jaundice from which he recovered before his discharge from the hospital. At the time of discharge the patient was ambulatory and in good condition.

Approximately 15 teeth have been extracted by Captain Peter Dale, and the rate of healing of the extraction sites was within the limits of normal.

More bone specimens and extracted teeth will be shipped to you very soon for analysis.

We would appreciate receiving your records of the complete analyses on the urines, feces, bone samples, and teeth at your earliest convenience.

For the District Engineer:

Very truly yours

/s/ David Goldring

DAVID GOLDRING,
Captain, Medical Corps,
Assistant.

COPY

2 Incls.
Med.History
Graph (Sep.Cover)

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2002023

MEDICINE, HEALTH & SAFETY

[redacted]

11-1947 1950

EXPERIMENT I ON P. 49 ≠ 4

PURPOSE

1. The purpose of this experiment was to determine:

a. The amount of P. 49 ≠ 4 excreted daily through the gastro-intestinal and genito-urinary tracts of a human subject for a period of 40-60 days after an intravenous injection of approximately 5.0 ug. of P. 49 ≠ 4.

b. The quantity of P. 49 present in the circulating blood four hours after the injection.

c. The amount of this substance which is deposited in the patella and the epiphysis of the tibia approximately 96 hours after the injection.

SUBJECT

1. Fifty-three year old colored male was selected who was in an automobile accident and sustained the following injuries:

a. Through and through laceration of the tip of the nose and the lower lip and a superficial laceration of the left wrist.

b. Comminuted fracture of the left femur which was in good position.

c. Comminuted fracture of the right patella which was in poor position.

d. Transverse fracture of the right radius and ulna which was in poor position.

PAST HISTORY

1. The patient stated that he had always been in good health except for a chronic urethral discharge which he has had for 10-15 years. He gave no history of any kidney or liver disorders.

2. The patient had always been employed as a cement mixer.

3. There was nothing of note in his family history.

PHYSICAL EXAMINATION

1. He was a well developed, well nourished colored male with the above evidences of trauma.

2002024

2. The other findings upon examination were:

a. He was blind in left eye, and the left cornea showed old healed scars and the lens was completely obliterated by cataract formation. The edge of the right pupil was irregular but reacted to light and accomodation. The lens showed incipient cataract formation.

b. The patient had marked caries and pyorrhea.

c. Examination of the chest revealed no abnormal findings. His heart showed no enlargement to percussion. The heart shounds were of good quality and regular in rate and rythm. The BP was 115/68.

3. X-ray examination of his chest was within normal limits, but x-ray of his knees revealed marked atrophic and hypertrophic arthritis with osteochondromatosis of his left knee.

4. The laboratory findings are as noted on the accompanying chart.

5. The only comments necessary are that the specific gravity of the urine is uniformly lower than normal. The urines show an occasional trace of albumin. There is a recurrent pyuria of variable degree which may be on the basis of chronic gonorrhea. The blood N.P.N. is slightly elevated, and the area nitrogen is twice the normal value. All of this points to somewhat diminished kidney function.

6. The patient's hemoglobin and RBC were lower than normal, and he showed a mild reduction of the total WBC which might have been produced by the sulfonamide therapy which was administered. There was, however, no reduction in the percentage of granulocytes.

PROCEDURE

1. 100 cc of solution containing 0.3% sodium citrate and 0.5% sodium chloride in distilled water was prepared and autoclaved for fifteen minutes at 15 pounds pressure.

2. 50 microliters of P. 49 ≠ 4 were accurately removed from an ampule and delivered into a glass stoppered 25 cc sterile volumetric flask.

3. 0.25 cc of the above dilution were removed with 0.5 cc tuberculim syringe through a 22 gauge needle.

4. The left median cubital vein of the subject was entered with a sterile 20 gauge needle, and 0.25 cc of P. 49 ≠ 4 were injected. Care was taken to avoid leakage. The syringe was not rinsed with blood.

5. The glass ampule was sealed and returned. The solution in the 25 cc volumetric flask, the syringe and the two needles were returned for assay, and assay and determination of the actual amount of P. 49 ≠ 4 injected. The amount introduced was 4.7 micrograms instead of 5.0 micrograms.

2002025

SECRET

EXPERIMENT I ON P. 49 ≠ 4

COLLECTION OF SPECIMENS

1. The urine samples were collected at irregular intervals for the first four days and thereafter the total 24 hour urine output was collected. (There is no control period because unfortunately the urines were pooled before and after the injection of P. 49 ≠ 4.)

a. The urines were stored in the refrigerator in glass-top quart jars with rubber seals. Five cc of 40% formaldehyde was used as a preservative.

b. The urine was collected in new clean urinals and the urinals were rinsed daily with two washings of 0.1 N HCl.

2. The stool specimens were collected for each 24 hour period.

a. The stool specimens were transferred from the bed pan into glass-top jars by spatula, and then the bed pan was rinsed thoroughly three times with 200-250 cc of water and followed by a 200 cc rinse of .1 HHCl. These rinsings were added to the specimen jars.

b. The jars were stored in the refrigerator and enough of the 40% formaldehyde solution was added to the jars containing the feces to cover the samples.

c. A fresh bed pan was used each week.

3. A single 4 hour blood sample (10 cc) was taken. Sodium citrate was used as an anti-coagulant.

4. Biopsies of the patella and the epiphysis of the tibia were obtained for analysis when the patient was operated upon for reduction of the fracture.

2002026