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Columbia University
in the City of New York

NEW YORK 32, N. Y.

DEPARTMENT OF RADIOLOGY
RADIOLOGICAL RESEARCH LABORATORY
630 WEST 168TH STREET

April 8, 1957

Mr. L.D. Marinelli
Argonne National Laboratory
P.O. Box 299
Lemont, Illinois

Dear Leo:

I heard through Rossi that you are preparing something on strontium-90 along the lines we discussed some time ago. I have to prepare a report for the Advisory Committee before the next meeting early in May, and I would like to have as much material as you can provide before the end of April. (I will be out of town most of the time before the meeting of the Advisory Committee and the meeting of the Radiation Research Society, both of which will be in Rochester, New York. I assume that you will attend the RRS meeting, and I will see you then.)

I understand that you will be going to Italy for the meeting in Turin. Perhaps we will also have a chance to get together before or after this meeting, if you go through New York.

With best wishes, I am

Yours sincerely,

G. Failla

G. Failla

GF:KR

Argonne National Laboratory

P.O. BOX 299
LEMONT, ILLINOIS

April 23, 1957

Dr. R. E. Nusbaum
School of Medicine
University of California
Los Angeles, California

Dear Dr. Nusbaum:

The enclosed manuscript is a preliminary draft of Report ANL-5716 that grew out of discussions that have taken place on several occasions on the subject of bone pathology to be expected from Sr⁹⁰. The manuscript is not in its final form: it is too laconic in spots and the English could be improved in many others. It is hoped to improve upon it in the immediate future.

In view of your interest and of your contributions to the subject, I am taking the liberty of submitting it to you for any comments, suggestions and criticisms that you may care to make. They will be gratefully received.

With kindest regards, I am,

Sincerely yours,

L. D. Marinelli ✓
Associate Director
Radiological Physics Division

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cc: Reading File
encl. (1)

Argonne National Laboratory

P.O. BOX 299
LEMONT, ILLINOIS

April 24, 1957

Dr. K. Z. Morgan
Oak Ridge National Laboratory
Oak Ridge, Tennessee

Dear Dr. Morgan:

The enclosed manuscript is a preliminary draft of Report ANL-5716 that grew out of discussions that have taken place on several occasions on the subject of bone pathology to be expected from Sr⁹⁰. The manuscript is not in its final form: it is too laconic in spots and the English could be improved in many others. It is hoped to improve upon it in the immediate future.

In view of your interest and of your contributions to the subject, I am taking the liberty of submitting it to you for any comments, suggestions and criticisms that you may care to make. They will be gratefully received.

With kindest regards, I am,

Sincerely yours,

L. D. Marinelli
Associate Director
Radiological Physics Division

LDM:lms
cc: Reading File
encl. (1)

Argonne National Laboratory

P.O. BOX 299
LEMONT, ILLINOIS

April 23, 1957

Dr. G. Failla
Columbia University
630 W. 168th Street
New York 32, N. Y.

Dear Dr. Failla:

I am enclosing herewith a preliminary draft of ANL-5716 concerning estimates of bone pathology to be expected from Sr⁹⁰.

The line of argument in the manuscript is somewhat different from the one that I had elaborated at the meeting of the Advisory Committee of last November. If you recall it, I was basing my arguments of retention of Sr on what we had found in humans with Ra²²⁶ contained in potable waters. I found, however, that there were not very extensive data on concurrent experiments with Ca⁴⁵, and that, therefore, the assumption that Sr would behave as Ra rested entirely on Norris and Kisielecki's experiments on rats.

I plan on circulating this monograph through the many people concerned and I was wondering whether it would be appropriate for me to include in the list of recipients the members of the Advisory Committee. I would value your advice in the matter.

I plan on being in Rochester early on Sunday, May 12, and it would be nice if we could get together before the meetings of the Society start. Do you think that it will be possible?

With kindest regards to Pat and my friends in the laboratory, I remain,

Sincerely yours,

L. D. Marinelli
Associate Director
Radiological Physics Division

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encl. (1)

Columbia University
in the City of New York

NEW YORK 32, N. Y.

DEPARTMENT OF RADIOLOGY
RADIOLOGICAL RESEARCH LABORATORY
630 WEST 168TH STREET

April 25, 1957

Mr. L.D. Marinelli
Argonne National Laboratory
P.O. Box 299
Lemont, Illinois

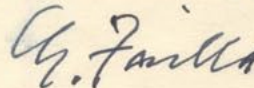
Dear Leo:

Many thanks for the manuscript which I have just received and which I have not had time to read. I think it would be very good if you can send copies to the members of the Advisory Committee. I am preparing a report on the strontium problem for the Committee, but I haven't gotten very far yet. I may call you next week if I need your help.

The meeting of the Advisory Committee will be in Rochester the week before the meeting of the R.R.S. Therefore, I will be there Sunday. However, Hollaender is planning to have a meeting of the Organizing Committee for the 1958 International Congress on Radiobiology for that day, and I don't know at the moment how much time I will have. I assume that you will stay at the Sheraton and I will leave a note for you. If you are not staying at this hotel, you might call me up early Sunday and we can make definite arrangements then. Certainly, it should be possible for us to get together some time during Sunday.

With best wishes, I am

Yours sincerely,



G. Failla

GF:KR

Argonne National Laboratory

P.O. BOX 299
LEMONT, ILLINOIS

May 18, 1959

Dr. G. E. Harrison
Radiobiological Research Unit
Atomic Energy Research Establishment
Harwell, Didcot, Berkshire, England

Dear Dr. Harrison:

I am enclosing herewith a copy of ANL-5716¹ which was prepared in the spring of 1957. This report was circulated among quite a number of people but never saw the light in published form. The second part of the report has been superseded by the 1958 Janeway Lecture² which I also enclose.

From the contents of your letter I think that you are under the impression that I have been measuring the retention of Sr⁹⁰ in man. This is not so; as you may see from the enclosed report, most of the data on strontium came from experiments made by Van Dilla and co-workers at the University of Utah. Personally, we have followed only two cases of Sr⁸⁵ with Dr. R. J. Hasterlik for about a year and the retention curve proved to be a straight line.³ Owing, however, to some uncertainty as to the relative values of the standards used both at ACRH and at ANL, we could never assess the form of the power law. We have, however, followed a radium case (inhalation) for six years and we find his retention to obey a straight line with $b = 0.77$.

I hope that you find these values of some use to you.

Kindest regards.

Sincerely yours,

L. D. Marinelli
Associate Director
Radiological Physics Division

LDM:lms

cc: Reading File

- Encls. (1) ANL-5716, "Estimates of Bone Pathology to be Expected from Sr⁹⁰, by L. D. Marinelli. April 22, 1957. (Preliminary Draft).
(2) "Radioactivity and the Human Skeleton. Janeway Lecture, 1958," by L. D. Marinelli, Am. J. Roentgenology, LXXX, Nov. 1958.
(3) "Low Intensity Spectrometry of the Gamma Radiation Emitted by Human Beings," by C. E. Miller. Geneva Conference 1958, Paper No. 762; originally published in Radiological Physics Division Semiannual Report, July through December, 1956, pp. 23-24, ANL-5679.