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As physicist for Los Angeles Tumor Institute, I attended the Oak Ridge Institute for Nuclear Studies in September, 1948.

At that time Dr. Paul C. Aebersold, his staff, and many others of AEC gave me specific information as to shielding necessary for the safe handling of the largest U. S. source of Cobalt 60. My first sketch for a telecobalt applicator is dated September 11, 1948, made after these talks.

It was February 13, 1950, when the interest in a cobalt applicator was aroused to the point of sending me to a Washington, D. C. meeting of all representatives from universities, hospitals and x-ray manufacturers who were interested in Cobalt 60 applicators. This meeting was sponsored by the AEC and again Dr. Aebersold and staff were the energizing factors.

The following is a resume of the information I have been able to collect:

Los Angeles Tumor Institute Purchase Order #1348.

Isotope shipping memo Oak Ridge National Laboratory #33604.

Scheduled for shipment February 25, 1952.

1080 curies, 108 pieces of Co60.

First treatment at L. A. T. I.: April 23, 1952.

I have several clipping and news releases, among them AEC television release of the Ed Murrow show, "See It Now," January 13, 1952, as well as the following:

Mr. Seymour Henck, Asst. Pub. Dir., AEC, Oak Ridge;

From General Electric News on x-rays, August, 1951, clipping and picture showing Gilbert H. Fletcher, M. D., Marshall Brucer, M. D. and Dale Trout;

Science News Letter clipping October 6, 1951, showing the same G. E. unit;

Picture of Jasper E. Richardson, Ph.d., physicist, O. R. I. N. S., testing Co60 in the G. E. Unit.

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This G. E. unit was located in the Oak Ridge Hospital and the testing, I believe, was done under the direction of the Oak Ridge Institute for Nuclear Studies (O.R.I.N.S.).

CANADA

I received an invitation to attend the installation of the Co60 therapy unit, the installation to be on November 12, 1951, at the Ontario Cancer Foundation Clinic, Victoria Hospital, London, Ontario, under the direction of the Hon. McKinnon Phillips, M.D., C.M., Minister of Health of Ontario. The unit was denominated in this invitation as "The First Commercial Cobalt 60 Beam Therapy Unit in the World."

From an AP dispatch, dated January 19, 1952, Winnipeg, Manitoba: Dr. I. H. Smith of London, Ontario, reports 2-1/2 months' observation period of 51 patients at London Hospital. (Presumably, this was the Victoria Hospital.) This report indicates that the first treatments by a Canadian unit (from the Chalk River pile) were just about on the date of the installation ceremony, November 12, 1951. This was about five months before AEC-produced Cobalt 60 from Oak Ridge was used on April 23, 1952 at the Los Angeles Tumor Institute.

Therefore, Canada was the first in the world to treat with a large source of Cobalt 60, and I think the Los Angeles Tumor Institute was the first in the United States.

The design of the Cobalt 60 unit used at L.A.T.I. was entirely my own, but AEC officials were helpful in the early stages and in the approval of the final design and the loading.

I first met Marshall Brucer prior to shipment. He was in no way associated with the design or the loading of the unit. Dr. Brucer came to Los Angeles shortly afterwards and talked about his designs.

The higher n-flux density of the Canadian pile resulted in a higher specific activity of Co60, so Dr. Johns was able to have a smaller source with the same "r" output. This resulted in less penumbra and possibly was a little better. The cones I used were designed to reduce the penumbra of the larger source and partly compensated. However, it was necessary to cover the cone end to minimize secondaries.

Russell H Neal

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[July 8 1962?]

Waikiki Biltmore

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Nobel Prize + Fermi Award + Nobel Prize Winners and Close Personal Basis

Second

E. O. Lawrence — Karl Compton
Millikan — Niels Bohr
Enrico Fermi

Alive

George de Hevesy — Willard Libby
Sir John Cockcroft
Edwin M. McMillan
Melvin Calvin
Linus Pauling
Otto Hahn
Vincent du Vigneaud
Emilio Segre
Owen Chamberlain
Donald Glaser
J. R. Oppenheimer
Edward Teller
Alvin Weinberg
Eugene Wigner
[illegible]

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[illegible]
[illegible]
[illegible]
[illegible]
Bloch
Cori
[illegible]

Other Well-Known Scientists | Award Winners

Leo Zillard
John Lawrence
Martin Kamen
Louis Alvarez
Philip Abelson
Merle Tuve
Allen Waterman
Vannevar Bush
Clyde Cowan
Isadore Perlman
Henry Smyth
Perrin
Wallace Lunn
[illegible]

Eugene Lockhart
Hans Bethe
George Gamow
Fred [illegible]
Norris [illegible]
Maurice [illegible]
Tsien Chang Wu
Leland [illegible]
Leslie [illegible]
Kenneth [illegible]
Martin [illegible]

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[1961]

Chapter 4 Appendices

"The Men Around Lawrence"
Cyclotron Wall of Fame

Cooksey - constant companion, confidant - follow-up man
R.T. Birge - knew history in making
- had a sense of history
M.S. Livingston
David Sloan
(John H. Lawrence - brother)
E.M. McMillan
Wyn Salisbury
Robert Thornton
Luis Alvarez
Glen Seaborg
Wm H. Crocker
Robert S. Stone - Cancer - Mother
(EOL's early interest in cancer + payoff)
Wm H. Brobeck - Engineering
Wally Reynolds
UC Regents
Emilio Segre
Glen Seaborg
Emilio Segre

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[illegible]

Chapter + Appendices

Cyclotron Hall of Fame

Famous men who were associated with or came under influence of ECL

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COLLECTION Paul Aebersold Papers
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