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Guide to the Samuel Schwartz Papers 1940-1997



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Descriptive Summary

Identifier	ICU.SPCL.SSCHWARTZ
Title	Schwartz, Samuel. Papers
Date	1940-1997
Size	4.5 linear feet (7 boxes)
Repository	Special Collections Research Center University of Chicago Library 1100 East 57th Street Chicago, Illinois 60637 U.S.A.

Abstract Dr. Samuel Schwartz (1916-1997) was a renowned expert on porphyrins and heme metabolism, pioneering research into the biological effects of radiation, starting when he joined the Manhattan Project at the University of Chicago. This collection consists of 4.5 linear feet of his research materials, political activist writings, his concerns about nuclear warfare, and his personal writings. The largest part of the collection contains his research papers and drafts of journal articles with his notes and data. This includes his time during the Manhattan Project (University of Chicago), when he researched the effects of radiation on metalloporphyrins. There is a large section on Schwartz's political activism, both for Zionism and for nuclear disarmament. Other material in the collection documents Schwartz's personal life, his interest in birds of prey, and literary aspirations, including poetry and songs.

Information on Use

Access

Open for research. No restrictions

Citation

When quoting material from this collection, the preferred citation is: Schwartz, Samuel. Papers, [Box #, Folder #], Special Collections Research Center, University of Chicago Library

Biographical Note

Samuel Schwartz was born April 13, 1916 in Minneapolis, Minnesota, the son of Russian immigrants. He earned both a B.S. (1938) and a M.D. (1943) from the University of Minnesota, where he spent most of his academic career. Schwartz was a pioneering worker in biomedical studies, especially involving the biological effects of radiation and metals. His contributions to the field of medicine are found in several tests, such as the "Watson-Schwartz Test," the "HemoQuant Test," and pioneering research into radiation diagnoses and treatment for diseases.

Schwartz began working on porphyrins (macrocycle, or macromolecule with rings of atoms) and bile pigments while washing glassware dishes in his freshman year at the University of Minnesota in 1934 under Dr. Cecil J. Watson. His work in porphyrin metabolism, essential molecules that bind metals, such as hemoglobin in the blood, led him to developing a test for acute intermittent porphyria, an inherited defect that causes abdominal pain and neurological disturbances.

In 1943, Schwartz was invited by Dr. Watson to move to Chicago to work on a secret Army Project. Originally believing that his lab would be studying malaria, he became a group leader over twenty-five investigators in the Manhattan Project (University of Chicago) working on the biological effects of radiation and metals from 1943-1946. During his work for the Manhattan Project he devised a new test for uranium contamination in urine and feces which was more sensitive than any other test in the period.

Schwartz then moved on to a two year Fellowship, eventually ending up in Copenhagen as a visiting professor until 1948, when he returned to the University of Minnesota. Schwartz conducted research on photophoresis, where intense light can induce motion in particles suspended in a gas, and on lead poisoning in humans and birds (Schwartz was an avid bird watcher). He also developed the HemoQuant Test, which led to the earlier detection of colorectal carcinoma.

Dr. Samuel Schwartz was recognized as an expert on porphyrin and heme metabolism, publishing numerous scientific papers and receiving US Public Health Service research career award. He was also a member of the American Society of Biology and Chemistry, American Society of Clinical Investigation, American Association of Cancer Research, and the Society for Experimental Biology and Medicine. In addition to his academic work, Schwartz was also a poet, singer, and political and conservation activist, publishing and speaking on behalf of the state of Israel and for bird conservatories. He died on December 5, 1997 in Minneapolis due to complications from lymphoma at the age of eighty-one.

Scope Note

This collection documents Schwartz's research, political activism, and personal life. It is arranged into four series.

Series I: Research, contains Schwartz's work on the biological effects of radiation and porphyrin and heme metabolism. This includes article offprints, Schwartz's own data and research notes, some of his own publications, and correspondence on biomedical topics. This series has been divided into two subseries to distinguish topics: Subseries 1: Manhattan Project, contains the research Schwartz conducted while attached to the Manhattan Project (University of Chicago). This includes mostly data and articles relating to radiation and metal effects on the body. Subseries 2: Biomedical, contains the rest of Schwartz's research endeavors, mostly focusing

on porphyrins. This includes article offprints, lab notes, correspondence, and lab data. Both subseries have been arranged chronologically.

Series II: Nuclear Politics, contains Schwartz's thoughts and collections on the rising tensions of nuclear warfare during the Cold War. Schwartz agreed with Einstein that atomic energy meant the only possibility of survival for humans was an eventual world community and disarmament, and the articles contained in this collection reflect that, as well as the paranoia of the outbreak of a nuclear war. This series contains mostly article offprints from various journals during the Cold War, as well as an essay written by Einstein on his proposals for how to solve or manage the nuclear crisis. This series has been arranged chronologically.

Series III: Judaism, contains Schwartz's writings on Zionism and the Jewish life. This includes sermons, poems, and other writings about the way the Jewish community should live in the world, and his hopes for the state of Israel. This series has been arranged chronologically.

Series IV: Personal, contains Schwartz's personal writings, biographical material, and funeral record. This includes his poetry, a play that he acted in, articles on avian conservation and his personal life philosophy as written to his children. This series has been arranged chronologically.

Related Resources

The following related resources are located in the Department of Special Collections:

<http://www.lib.uchicago.edu/e/spcl/select.html>

Fermi, Enrico. Collection

Subject Headings

- Schwartz, Samuel
- Porphyrins
- Radiation
- Manhattan Project (U.S.)
- Zionism
- Israel -- Politics and government

INVENTORY

Series I: Research

Series I contains Schwartz's work on the biological effects of radiation and porphyrin and heme metabolism including article offprints, research notes, and correspondence. This series has been divided into two subseries: Subseries 1: Manhattan Project, which ranges from 1943-1946 (and

some later research based on his Manhattan Project work); and Subseries 2: Biomedical, from 1934-1990. Both subseries have been arranged chronologically.

Subseries 1: Manhattan Project, contains Schwartz's work on the biological effects of radiation and metals while at the Manhattan Project (University of Chicago). This contains article offprints, handwritten and typed notes, as well as declassified experimental materials.

Subseries 2: Biomedical, contains Schwartz's work on porphyrins and heme metabolism while at the University of Minnesota and Copenhagen. This includes lab data, handwritten and typed notes, article offprints, and correspondence.

Subseries 1: Manhattan Project

Box 1

Folder 1

Metallurgical Laboratory contract, 1943

Box 1

Folder 2

Notes on isomers, handwritten notes, 1943-1945

Box 1

Folder 3

Group employee listings, 1943-1945

Box 1

Folder 4

Manhattan Project article and data reprints, 1943-1946

Box 1

Folder 5

Personnel requests, correspondence, 1944-1945

Box 1

Folder 6

Uranium-urine analysis, article reprint, 1945

Box 1

Folder 7

"Idiopathic Coproporphyrinuria," draft, charts, notes, 1945

Box 1

Folder 8

Dog blood biochemistry studies, correspondence, data, 1945

Box 2

Folder 1

"The Atom Speaks," poem about involvement in Manhattan Project, 1946

Box 2

Folder 2

"Radiation-Induced Changes in Ultraviolet Absorption Spectra of Urine," article reprint, 1946

Box 2

Folder 3

"Preparation of Morphologically Intact Leucocytes from Peripheral Blood," article reprints, 1946

Box 2

Folder 4

Effects of radiation and metal exposure on liver function, article drafts, handwritten notes, 1946

Box 2

Folder 5

"A Note on the Use of Ion Exchange Resins for the Purification of Urinary Purines, Kynurenic Acid, and Coproporphyrin," article draft, 1946

Box 2

Folder 6

Uranium toxicity literature, article reprint, 1946

Box 2

Folder 7

"Biochemical Studies Related to the Effects of Radiation and Metals," photo-duplicate, 1947

Box 2

Folder 8

Minneapolis Morning Tribune article on Schwartz's radiation research, 1950

Box 2

Folder 9

"Uranium Excretion Studies," article reprints, 1951

Box 2

Folder 10

Studies of porphyrin metabolism, article reprint, 1956

Box 2

Folder 11

"The War Years," article draft, ca. late 1950's

Box 2

Folder 12

Argonne National Laboratory Reviews, research on nuclear fission, 1964

Subseries 2: Biomedical

Box 3

Folder 1

"A Method of Separating Small Quantities of the Coproporphyrin Isomers 1 and 3," article reprints, 1940

Box 3

Folder 2

Conversion of protoporphyrin to coproporphyrin by the liver, article reprints, 1941

Box 3

Folder 3

"Isolation of Uroporphyrin from the Feces in Idiopathic Porphyria," article reprints, 1941

Box 3

Folder 4

"A Simple Test for Urinary Porphobilinogen," article reprints, 1941

Box 3

Folder 5

"Isolation of a Dextrorotatory Urobilin from Human Fistula Bile," article reprints, 1942

Box 3

Folder 6

Hospitals of the University of Minnesota bulletin, written presentation on porphyria by Samuel Schwartz, 1942

Box 3

Folder 7

"Studies of Urobilinogen," article reprints, 1944

Box 3

Folder 8

Conversion of hematin to bilirubin, article reprints, 1945

Box 3

Folder 9

"Studies of the Uroporphyrins," parts 1 and 2, article reprints, 1945

Box 3

Folder 10

Lab data logbook, 1945-1946

Box 3

Folder 11

"Studies of Urobilinogen," part 6, article reprints, 1947

Box 3

Folder 12

Isolation of leukocytes, article reprint, 1947

Box 3

Folder 13-15

Copenhagen studies, data books 1-3, 1948

Box 4

Folder 1

Data book, C.R. Evertz, 1948

Box 4

Folder 2

Newspaper clippings on cancer research, photocopies, 1950-1955

Box 4

Folder 3

Porphyrin poem, written as part of a presentation, 1961

Box 4

Folder 4

Session chairman's remarks at New York Academy of Sciences conference, 1973

Box 4

Folder 5

Poems for Gordon Conference presentation, 1974

Box 4

Folder 6

Songs about the Diehl Hall Laboratory and medicine, 1978

Box 4

Folder 7

Job fair notes, 1989

Box 4

Folder 8

"Porphyrins, Radiation, and Tumor Therapy," talk given at meeting of the International Photodynamic Association, 1990

Box 4

Folder 9

"Tricks and Treats, Intriguing Goals for Pyrroles," talk at the Gordon Conference, 1990

Box 4

Folder 10

"Chasing after the Crucial Experiment," talk given at Samuel Schwartz Day, 1990

Box 5

Folder 1

Data logs, 1948-1949

Series II: Nuclear Politics

Series II contains Schwartz's thoughts and collections on nuclear policy during the Cold War. Most of these detail the effects of nuclear explosions on human bodies or on large population centers. This series contains mostly article offprints from various journals during the Cold War, as well as an essay written by Einstein on his proposals for how to solve or manage the nuclear crisis. This series has been arranged chronologically.

Box 6

Folder 1

Bulletin of the Atomic Scientists of Chicago, reprints, December, 1945-September, 1946

Box 6

Folder 2

Bulletin of the Atomic Scientists of Chicago, reprints, October, 1946-May, 1947

Box 6

Folder 3

Spy hysteria, Atomic Information article reprint, 1946

Box 6

Folder 4

"Only Then Shall We Find Courage," essay by Albert Einstein, 1946

Box 6

Folder 5

Russell-Einstein Manifesto, photocopy, 1955

Box 6

Folder 6

"Friends, Please Forgive Us," photocopied story by Japanese survivor of Hiroshima, undated

Box 6

Folder 7

Literature on nuclear weapons and nuclear policy, article photocopies, 1961-1980

Box 6

Folder 8

Literature on nuclear weapons and nuclear policy, article photocopies, 1981

Box 6

Folder 9

Literature on nuclear weapons and nuclear policy, article photocopies, 1982

Box 6

Folder 10

Literature on nuclear weapons and nuclear policy, article photocopies, article offprint, 1983-1985

Series III: Judaism

Series III contains Schwartz's writings on Zionism and Judaism, including sermons and poems about Judaism's place in the world and his hopes for the state of Israel. This series has been arranged chronologically.

Box 7

Folder 1

Transcript of talk given at Midwest Conference of Reformed Synagogue Youth on the state of Israel, ca. 1950

Box 7

Folder 2

"My Philosophy of Life," presented at Carleton College, transcript, 1956

Box 7

Folder 3

Correspondence, American Professors for Peace in the Middle East, 1970

Box 7

Folder 4

Sermon, "Understanding our Blessings," 1970

Box 7

Folder 5

Notes, sermons, brochures, 1970-1971

Box 7

Folder 6

Sermon, "The 'Morality' of Atoms and Man," transcript, 1971

Box 7

Folder 7

"Origins and Philosophies of Zionism," article draft, 1976

Box 7

Folder 8

Sermon, "The Cell Plays Hide and Seek," 1976

Box 7

Folder 9-11

"Thoughts on a National Council," drafts, 1977-1979

Box 7

Folder 12

Sermon, "Renewal, Research, and Religion," 1991

Box 7

Folder 13

Sermon on revolutions and freedom, 1992

Box 7

Folder 14

Sermon on the meaning of life, 1994

Series IV: Personal

Series IV contains Schwartz's personal writings such as poems and plays, biographical material, and funeral record. It also includes information on avian conservation and his personal life philosophy, as written to his children. This series has been arranged chronologically.

Box 7

Folder 15

Correspondence, 1942-1997

Box 7

Folder 16

Program for play, "Porphyria Jones," script, photograph, 1943

Box 7

Folder 17

Biographic material, photographs, curriculum vitae, awards, funeral proceedings, 1943-1997

Box 7

Folder 18

The Journal of Irreproducible Results, journal copy, 1969

Box 7

Folder 19

Church bulletin, 1971

Box 7

Folder 20

New Poets Anthology, article offprint, 1973

Box 7

Folder 21

Alumni Quarterly, article offprint, 1985

Box 7

Folder 22

"Samuel Schwartz Day" proceedings, talks, invitations, slides, 1990

Box 7

Folder 23

Raptor conservatory literature, 1991-1992

Box 7

Folder 24

Favorite quotations, 1992

Box 7

Folder 25

Newspaper clippings, 1997

Box 7

Folder 26

Short story, draft, undated

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