



Smithsonian

*National Museum of American History Kenneth E. Behring Center*

## Guide to the Rubin Borasky Electron Microscopy Collection, 1930-1988

NMAH.AC.0452

Don Darroch

3/10/1994

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# Table of Contents

Collection Overview .....	1
Administrative Information .....	1
Arrangement.....	2
Scope and Contents.....	2
Biographical / Historical.....	1
Names and Subjects .....	2
Container Listing .....	4
Series 1: Personal.....	4
Series 2: Surveys of Colleagues and Responses, 1959-1982.....	5
Series 3: Other Correspondence, 1940-1988.....	7
Series 4: Electron Microscopy Societies, 1942-1974.....	8
Series 5: Development and Applications of Electron Microscopy, 1935-1986.....	9
Series 6: Early History of Electron Microscope; Draft Material, Correspondence, 1942-1987.....	11
Series 7: Scientific Publications, 1930-1985.....	12
Series 8: Audio Tapes, 1971-1977.....	13

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## Collection Overview

<b>Repository:</b>	Archives Center, National Museum of American History
<b>Title:</b>	Rubin Borasky Electron Microscopy Collection
<b>Identifier:</b>	NMAH.AC.0452
<b>Date:</b>	1930-1988
<b>Creator:</b>	Borasky, Rubin, 1910-1988 (Creator) Schaeffer, Asa Arthur Borasky, Charlotte S., Mrs.
<b>Extent:</b>	5 Cubic feet (16 boxes )
<b>Language:</b>	English .

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## Administrative Information

### Acquisition Information

The collection was donated by Charlotte S. Borasky, August 1, 1992.

### Processing Information

Collection processed by Don Darroch, October 10, 1994

### Preferred Citation

Rubin Borasky Microscopy Collection, 1930-1988, Archives Center, National Museum of American History.

### Restrictions

Collection is open for research.

### Conditions Governing Use

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## Biographical / Historical

Rubin Borasky (1910- ) was born in Philadelphia, PA and was educated at Temple University (AB in 1932, AM in 1936, Ph. D. in 1950). He was employed as a teaching assistant at Temple 1932-1934 and as a teacher in Philadelphia secondary schools 1934-1939. Later he worked as a biologist and chemist in U. S. Department of Agriculture, as senior scientist (electron microscopy) for the General Electric Company and as electron micrographer at the University of Illinois. He was a member of the Electron Microscopy Society of America and other professional societies in the field of electron microscopy.

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## Scope and Contents

This material was collected by Mr. Borasky over a long period during which he worked in the field of electron microscopy.

Borasky's correspondence with many of the major figures in the field is included. Much of this correspondence was initiated by Borasky as a means of documenting the history of electron microscopy that he attempted to write over many years. The question of priority of invention and the many steps in development of these instruments are prominent elements of the correspondence.

The collection includes documentation of early events in the development and use of the electron microscope. Numerous reprints of articles, some by pioneers in the field, are supplemented by micrographs (photos) of various materials.

As part of the collection, more than 70 audio tapes were made by Mr. Borasky, recording interviews and lectures relating to microscopy and other matters. The quality of these recordings is generally not satisfactory, however.

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## Arrangement

The collection is arranged into seven series.

Series 1: Personal, 1948-1987

Series 2: Surveys of Colleagues and Responses, 1959-1982

Series 3: Other Correspondence, 1940-1988

Series 4: Electron Microscopy Societies, 1942-1974

Series 5: Development and Applications of Electron Microscopy, 1935-1986

Series 6: Early History of Electron Microscope (draft material; correspondence), 1942-1987

Series 7: Scientific Publications, 1930-1985; 8. Audio Tapes, 1971-1977

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## Names and Subject Terms

This collection is indexed in the online catalog of the Smithsonian Institution under the following terms:

Subjects:

Electron microscopes  
Electron microscopy

Types of Materials:

Correspondence -- 1930-1950  
Electron micrographs  
Photographs -- 20th century  
Photomicrographs

Names:

Electron Microscopy Society of America.  
General Electric Company  
Temple University.  
United States. Department of Agriculture

University of Illinois.

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## Container Listing

### Series 1: Personal

Box 1, Folder 1	Notes, memoranda 1948-1987
Box 1, Folder 2	Correspondence 1949-1984
Box 1, Folder 3	Teaching materials, undated
Box 1, Folder 4	Borasky: Electronoscope Analysis Course Outline, C. 1966
Box 1, Folder 5	Rubin Borasky publications 1949-1982
Box 1, Folder 6	Rubin Borasky publications , undated
Box 2, Folder 7	"Pioneers" draft material 1965-1987
Box 2, Folder 8	"Pioneers" draft material, undated
Box 2, Folder 9	Borasky attendance at two meetings on collagen, Europe 1963
Box 2, Folder 10	Borasky notebook 1980-1982
Box 2, Folder 11	Borasky notebook 1984
Box 2, Folder 12	Borasky notebook 1984-1987

*[Return to Table of Contents](#)*

## Series 2: Surveys of Colleagues and Responses, 1959-1982

Box 3, Folder 1	Survey of 1959: correspondence and brief replies
Box 3, Folder 2	Anderson, Thomas F.
Box 3, Folder 3	Astbury, W. T.
Box 3, Folder 4	Calbick, C. J.
Box 3, Folder 5	Chapman, George B.
Box 3, Folder 6	Comer, Joseph J.
Box 3, Folder 7	Hillier, James
Box 3, Folder 8	Marton, L.
Box 3, Folder 9	Mudd, Stuart
Box 3, Folder 10	Philpott, Delbert
Box 3, Folder 11	Rochow, Theodore
Box 3, Folder 12	Williams, Robley C.
Box 3, Folder 13	Bell, S. H., 1963
Box 3, Folder 14	Burton, E. F., 1966
Box 3, Folder 15	Survey of 1981: correspondence and brief replies
Box 3, Folder 16	Replies of EMSA members 1981-1982
Box 3, Folder 17	Replies of Washington Society of EM members 1981-1982
Box 3, Folder 18	Fullam, Ernest F., 1974-1982
Box 3, Folder 19	Helin, Eleanor 1981
Box 3, Folder 20	Ladd, William 1982
Box 3, Folder 21	Tahmisian, Theodore N. 1982
Box 3, Folder 22	Wyckoff, Ralph 1981

Box 3, Folder 23

Biographical data on EM colleagues 1970-1982

*[Return to Table of Contents](#)*



## Series 3: Other Correspondence, 1940-1988

Box 4, Folder 1	Craig, Richard E. 1984
Box 4, Folder 2	de Broglie, Louis 1965-1986
Box 4, Folder 3	Dupuoy, 1985
Box 4, Folder 4	Fernandez-Moran, Humberto 1956-1985
Box 4, Folder 5	McCrone, 1981-1982
Box 4, Folder 6	Porter, Keith R. 1959-1982
Box 4, Folder 7	Ruska, Ernest 1981
Box 4, Folder 8	Zworykin, V. K. 1940-1981
Box 4, Folder 9	Hawkes, Peter W. 1985-1988
Box 4, Folder 10	Miscellaneous correspondence 1981-1986

*[Return to Table of Contents](#)*

## Series 4: Electron Microscopy Societies, 1942-1974

Box 5, Folder 1	Electron Microscopy Society of America 1942-1943
Box 5, Folder 2	EMSA annual programs 1946-1974
Box 5, Folder 3	EMSA annual reports, membership 1965-1974
Box 5, Folder 4	EMSA Bulletin 1971-1974
Box 5, Folder 5	EMSA Borasky correspondence 1947-1981
Box 5, Folder 6	EMSA Bibliography correspondence 1946-1970
Box 5, Folder 7	EM Bibliography 1946-1970
Box 5, Folder 8	Washington Society of Electron Microscopy 1962
Box 5, Folder 9	Philadelphia Electron Microscopy Society 1949-1965
Box 5, Folder 10	Foreign societies and meetings 1951-1968

*[Return to Table of Contents](#)*

## Series 5: Development and Applications of Electron Microscopy, 1935-1986

Box 6, Folder 2	Embedding 1956
Box 6, Folder 3	Dosimetry lectures 1952
Box 6, Folder 4	Electron microscopy reviews 1948-1953
Box 6, Folder 5	Electron stains 1942-1958
Box 6, Folder 6	Bacteria 1949-1958
Box 6, Folder 7	Electron diffraction 1946-1958
Box 6, Folder 8	Fixation 1953-1958
Box 6, Folder 9	Blood components 1946-1955
Box 6, Folder 10	Bone and cartilage 1950-1955
Box 6, Folder 11	Algae, yeast etc. 1953-1958
Box 6, Folder 12	Autoradiography 1947-1958
Box 6, Folder 13	Cell components; mitochondria etc. 1949-1958
Box 6, Folder 14	Electron microscope gadgetry 1946-1958
Box 6, Folder 15	Ultramicrotomy 1941-1957
Box 6, Folder 16	Microtomy 1950-1963
Box 7, Folder 17	Siemens electron microscope (captured in WWII) 1944-1974
Box 7, Folder 18	Siemens EM; German documents 1940-1947
Box 7, Folder 19	Wave mechanics and the electron microscope 1985-1986
Box 7, Folder 20	Recipes for fixing and embedding tissues c.1962
Box 7, Folder 21	Electron microscopy dental tissue; reprints 1946-1959
Box 7, Folder 22	Electron microscopy; Fischer, Simonsen 1948
Box 7, Folder 23	Polystyrene particles in space (NASA) 1984
Box 7, Folder 24	Applications of the electron microscope 1940-1948

Box 7, Folder 25	Resinography 1948-1964
Box 7, Folder 26	Thin films and fibers 1940-1957
Box 7, Folder 27	Electron microscope equipment photos 1935-1953
Box 7, Folder 28	Electron micrographs c.1943-1953

*[Return to Table of Contents](#)*

## Series 6: Early History of Electron Microscope; Draft Material, Correspondence, 1942-1987

Box 8, Folder 1	Electron Microscope Histories 1942-1969
Box 8, Folder 2	Electron Microscope Histories 1970-1987
Box 8, Folder 3	Origin and Background of Invention of Electron Microscope; Reinhold Rudenberg 1959-1963
Box 8, Folder 4	Origin of Magnetic Electron Microscope; Martin M. Freundlich (Correspondence) 1963
Box 8, Folder 5	Correspondence; H. Gunther Rudenberg 1963-1987
Box 8, Folder 6	Correspondence; Ernst Ruska 1981-1987
Box 8, Folder 7	Other Correspondence 1960-1983
Box 8, Folder 8	The Electron Microscope: Priority of Invention. Borasky 1978-1988

*[Return to Table of Contents](#)*

## Series 7: Scientific Publications, 1930-1985

Box 9                      1930-1959

Box 10                     1960-1985

*[Return to Table of Contents](#)*

## Series 8: Audio Tapes, 1971-1977

Box 11	Interviews with Asa Arthur Schaeffer C.1971-1974 (15 cassettes)
Box 12	Interviews with Asa Arthur Schaeffer C.1971-1974 (15 cassettes)
Box 13	Interviews C.1971-1977 (13 cassettes)
Box 14	Interviews, Lectures n. d. (13 cassettes)
Box 15	Interviews n. d. (12 cassettes; blank cassettes [11])
Box 16	Audio tapes (3 reels)

*[Return to Table of Contents](#)*