

A guide to the papers of Viktor Hamburger (1900-2001)
Marine Biological Laboratory
Woods Hole, MA 02543

Processed by
Diana Carey

Archives of the Marine Biological Laboratory
7 MBL Street
Woods Hole, MA 02543
June 23, 2003

Manuscript Collection MC-MBL-Hamburger/Sci, AC 2004-07
(Two 20" x 16 ½" x 3 ½" boxes, six 24" x 12" boxes)

TABLE OF CONTENTS

BIOGRAPHICAL INFORMATION	1
PROVENANCE	2
ARRANGEMENT	2
SCOPE AND CONTENT	2
RELATED COLLECTIONS	2
FOLDER LIST	3-12

BIOGRAPHICAL INFORMATION

Viktor Hamburger was born in the small town of Landeshut, Silesia in Germany on July 9, 1900 to Else and Max Hamburger. Keenly interested in the natural world from a young age, he went on to study zoology and received his Ph.D. in 1925 from the University of Freiburg where he studied under future Nobel Laureate, Hans Spemann.

In 1932, Hamburger came to the United States on a Rockefeller Foundation fellowship to work with F.R. Lillie at the University of Chicago, studying chicken embryos. Hamburger had intended to return to Germany at the end of his fellowship, but in early 1933 was informed that he had been "cleansed" from his teaching position at the University of Freiburg because of his Jewish ancestry. Hans Spemann wrote from Germany, advising him to look for a position in the United States.

The Rockefeller Foundation extended Hamburger's fellowship for another two years after which he found a position on the zoology faculty at Washington University in St. Louis, becoming chair of the department in 1941, and remaining at the university for the rest of his career. From 1937 to

1945, Hamburger spent summers at the Marine Biological Laboratory in Woods Hole as an instructor in the embryology course and later as head of the course.

Viktor Hamburger was a pioneer in the field of experimental embryology. Important areas of study during his long career include the stage classification of normal chick embryo development; the discovery, with Rita Levi-Montalcini, of nerve growth factor (NGF); the study of programmed cell death; and the development of behavior. Levi-Montalcini and Stanley Cohen received the Nobel Prize in 1985 for their work with NGF- work that they had begun with Hamburger- leading many to feel that Hamburger had been unjustly overlooked by the Nobel committee. Hamburger did receive many other honors in recognition of his work throughout his career. Among these, he was elected to the National Academy of Sciences in 1953 and awarded the National Medal of Science in 1989. He remained active in scientific research throughout his life, living past his 100th birthday. His ashes are interred in Woods Hole.

PROVENANCE

The Viktor Hamburger papers were donated to the MBL Archives by his daughter. Garland Allen, science historian and Professor of Biology at Washington University, helped coordinate the transfer of the papers to the MBL Archives. Some correspondence was withheld from the papers so that the family could examine it before transfer to the archives. A preliminary index to the correspondence folders was prepared by Mathew Davies and Garland Allen.

ARRANGEMENT

The papers have been left in their original order; arranged in reverse chronological order within folders. Folders have been grouped by subject (correspondence; course notes; grants and awards; illustrations; lectures and meetings; oversized material; writings and biographical material) and arranged alphabetically. Correspondence is arranged alphabetically by author and then in reverse chronological order by item. Illustration folders containing photographs, slides, and drawings are arranged by size and divided between boxes five, six, seven, and eight. The finding aid for the papers and preliminary correspondence index is located in box one.

SCOPE AND CONTENT

The collection includes, six 24" x 12" boxes, two 20" x 11" x 3½" boxes, and two 16 millimeter films. The papers span in date from 1917 to 2000 and consist of correspondence with colleagues, course lecture notes, lecture and meeting notes, writings, and illustrations (including illustrations for two classics of embryology: "A Series of normal stages in the development of the chick embryo" and *A Manual of Experimental Embryology*.) Notable correspondents include Johannes Holtfreter (however, with one exception, the letters in the Holtfreter files are photocopies of the originals,) Rita Levi-Montalcini, and Jane Oppenheimer.

RELATED COLLECTIONS

Viktor Hamburger's collected reprints are in the MBL Archives. Two 16 millimeter films and books from Hamburger's personal library were donated along with his papers and are housed in the

FOLDER LIST

Box	Folder	Title
1	1	<u>A</u> : Adelman, Howard; Akiyama, Yoshio; Allen, Garland; Altman, Joseph; Anderson, Edgar; Andrews, Henry; Asayama, Sin-iti
1	2	Allee, W. C.
1	3	Arndt, Walther
1	4	Arndt-Gerloff, Annelise
1	5	<u>B</u> : Bagnara, Joseph; Ballard, Bill; Bang, Frederick; Barde, Yves; Barron, Donald; Barth, Lester; Bautzman, H; Beadle; Bekoff, Marc; Benquist, Harry; Bertalanffy, L.; Bijtel, J. H.; Bissier, Lisbeth; [Blasko]; Blattner, Russell; Boving, Renee Laya; Brachet, J.; Brendel, Otto; Bucklin, Donald; Buecker, Elmer
1	6	Baltzer, Fritz
1	7	Barker, W.
1	8	Bauer, Walter
1	9	Bekoff, Anne
1	10	Brunso-Bechtold
1	11	<u>C</u> : Carmichael, Leonard; Castro, Gustavo de Reveira; Chevremont, M.; Chiarodo, Andrew; Coghill, G. E.; Cohese, Steve; Cori, Carl; Cori, Ruth; Corner, M. A.; Coulombre, Alfred J.; Counce, Sheila; Curtis, William F.;
1	12	Cairns, John M.
1	13	Carr, Virginia
1	14	Carson, Hampton
1	15	Child, C. M.
1	16	Churchill, Frederick B.
1	17	Cowan, Max
1	18	<u>D</u> : Dannebacke, Thelma; Dart, Raymond A.; Day, M. F.; Deichman, Ute; DeRobertis, E.; Dohrn, Peter
1	19	Decker, John D.
1	20	Delbruck, Max
1	21	Detwiler, S. R. /Dunn, L. C.
1	22	Dohrmann, Ulrike
1	23	Drachman, Daniel B.
1	24	<u>E</u> : Eakin, Richard; Ebert, James D.; Eibl-Eibesfeldt. I.; Elsasser, Walter; Emerson, Alfred; Enders, Lucy Rava; Erlanger, Joseph; Eyal-Giladi, H.
1	25	Eastlick, H.
1	26	<u>F</u> : [Fill, B]; Filogamo; Fox, Michael W.; Frank, Anthony; Frank, Lothar; Freed, Leselotte; Fremiet, E. Taure; Fujii, Takashi; Fujita, S.
1	27	Fankhauser, Gerhard
1	28	Frish, Max Von
1	29	<u>G</u> : Gadjusek, Carleton; Gaffron, Hans; Gayer, Ken; Gilbert, Scott F.; Gillette, Roy;

- Goodrich, Hubert; Green, Lloyd; Grinstein, Louise F.; Grobstein, Paul; Grunz, Horst; Guggenheim, P.; Gurdon, John; Gutman, E.; Guze, Samuel B.
- 1 30 Goldschmidt, Richard
- 1 31 Gottlieb, Gilbert
- 1 32 Grafstein, Bernice
- 1 33 Grave, Caswell
- 1 34 H: Haber, F.; Hadow, Alexander; Hall, Thomas; Hanson, Harriet R.; Hanson, Frank Blair; Harrington, Anne; Hartman, Carl G.; Harwood, Jonathan; Hay, Elizabeth; Hedgpeth, Joel W.; Helmreich, Ernest; Henke, Karl; Hitachi, Masahito; Hober, Rudolph; Hofer, Magdalena; Holtfreter, Hiroko; Hopwood, Nick; Horstadius; Hughes, Arthur; Hukel, David; Huxley, Julian
- 1 35 Hadorn, Ernst
- 1 36 Hall, Tom (see also Misc.)
- 1 37 Hamburger, Else
- 1 38 Hamburger, Otto [Biographical Material]
- 1 39 Hamburger, Viktor: Appointment Letters: 1933-69
- 1 40 Hamburger, Viktor: Bibliography; C. V.; Autobiography of Max Hamburger; Albert Hamburger
- 40a Hamburger, Viktor: Chicago 1932-35; Vaber 1920; Freiburg 1931, MIT (1 of 3)
- 40b Hamburger, Viktor: Chicago 1932-35; Vaber 1920; Freiburg 1931, MIT (2 of 3)
- 40c Hamburger, Viktor: Chicago 1932-35; Vaber 1920; Freiburg 1931, MIT (3 of 3)
- 1 41 Hamburger, Viktor: Correspondence etc. relating to Nobel Prize
- 1 41a Hamburger, Viktor: Letters to Parents. Chicago 1933-35, Freiburg 1931-32 (1 of 4)
- 1 41b Hamburger, Viktor: Letters to Parents. Chicago 1933-35, Freiburg 1931-32 (2 of 4)
- 1 41c Hamburger, Viktor: Letters to Parents. Chicago 1933-35, Freiburg 1931-32 (3 of 4)
- 1 41d Hamburger, Viktor: Letters to Parents. Chicago 1933-35, Freiburg 1931-32 (4 of 4)
- 1 42 Harkmark, Wilhelm
- 1 43 Harrison, Ross G.
- 1 44 Henninger, Fred
- 1 45 Henshel, Diane
- 1 46 Herrick, Judson C./ Henke
- 1 47 Hollyday, Peggy
- 1 48 Holtfreter Correspondence on "Analysis of Development" 1950-1955
- 1 49 Holtfreter Correspondence: 1933-45
- 1 50 Holtfreter Correspondence: 1946-49
- 1 51 Holtfreter Correspondence: 1950-53
- 1 52 Holtfreter Correspondence: 1954-56
- 1 53 Holtfreter Correspondence: 1957-60
- 1 54 Holtfreter Correspondence: 1961-88
- 1 55 Holtfreter, Johannes: Translations & correspondence about/ Developmental Dynamics: 1993-1996
- 1 56 Horder, Tim
- 1 57 I: Ibanez; Impehoven, Maura; [Impekoven, Niddy]
- 1 58 J: Jacobsen, Antone G.; Jacobson, Carl/Olof; Jacobson, Marcus; Jaenicke, L.
- 1 59 Japan: Friends, Takashi Fujii,
- 1 60 Junquiera, C.

- 1 61 K: Kamen, Martin C. ; Karnofsky, D. A.; Kawakami, Itsue; Keller, Evelyn Fox; Kemali, Milena; Kno; Knorre, H. Von; Koehler, Otto; Kollros, Jerry; Kornberg, Arthur; Krebs, Helmut; Kuffler, Stephen; Kuhn, A.
- 1 62 Kallen, B.
- 1 63 Keefe, Eugene
- 1 64 Kluver, Heinrich
- 1 65 Kovach, K.
- 1 66 L: Lenhoff, Howard M.; Le Douarin, Nicole; Lewis, Warren; Littrell, Jae L.; Litwiller, Raymond; Loeb, Leo; Lorente de No, R.; Lothar, Frank; Luskin, Marla B.
- 1 67 Landauer, W.
- 1 68 Landmesser, Lynn
- 1 69 Lauder, Jean
- 1 70 Lehrman, Daniel S.
- 1 71 Miscellaneous Correspondence
- 2 1 Levi, G., Letter to Prof. G. Levi, Turin, 1946
- 2 2 Levi- Montalcini, Rita (1 of 3)
- 2 3 Levi- Montalcini, Rita (2 of 3)
- 2 4 Levi- Montalcini, Rita (3 of 3)
- 2 5 Levi-Montalcini: Correspondence, etc. relating to Omni Interview 1988
- 2 6 Levi-Montalcini: Nobel Prize 1986
- 2 7 Lillie, Frank R.
- 2 8 Lorenz, Konrad
- 2 9 M: Mackey, Harris; Magrassi, Lorenzo; Marler, Peter; Martinovitch, P.; Marx, Melvin; May, Raoul M.; Mayr, Ernst; Mazia, Daniel; Melton, Doug; Metz, Charles B; Muchmore, W. B.; Muller, H. J.; Murray, P. D. F.;
- 2 10 Maienschein, Jane
- 2 11 Mangold, Hilda Proescholdt: Letters and Memorabilia
- 2 12 McBride, William G./ McGrayne, Sharon
- 2 13 Metz, Jane
- 2 13a Meyn, Georg Ludwig: Painter and close friend of V. H. 's parents [photocopies]
- 2 14 Moog, Florence
- 2 15 Murray, Margaret
- 2 16 N: Nace, George; Nakai, Junnosuke; Nawar, George; New, D. A. T.; Newman; Nicholas, J. S.; Nijhout, H. Frederik
- 2 17 Narayanan, C. H.
- 2 18 Needham, Joseph
- 2 19 Noden, Drew
- 2 20 O: Olds-Clarke, Patricia
- 2 21 Okada, Tokindo
- 2 22 Oppenheim, Ron (1 of 2)
- 2 23 Oppenheim, Ron (2 of 2)
- 2 24 Oppenheimer, Jane (1 of 4)
- 2 25 Oppenheimer, Jane (2 of 4)
- 2 26 Oppenheimer, Jane (3 of 4)
- 2 27 Oppenheimer, Jane (4 of 4)
- 2 28 Orrego, Fernando

- 2 29 P: Pake, George E.; Pannese, Ennio; Park, Tom; Parker, G. H.; Parpart, A. K.; Pasteels, Jean; Patten, Bradley M.; Pauling, Linus; Piatt, Jean; Pilar, Guillermo R.; Prestige, Martin; Price, Dorothy; Prosser, C. Ladd; Purves, Dale; Pyke, W.
- 2 30 Provine, Robert
- 2 31 R: Rager, G.; Raven, Chr. P.; Raven, Peter H.; Rawles, Mary; Reed, Sheldon; Reichardt, Werner; [Rolmann]; Rosenblatt, Jay; Rubel, Ed; Rugh, Roberts; Rush, Robert A.
- 2 32 Rudnick, Dorothea
- 2 33 S: S., Berta ; Sander, K.; Schleidt, Wolfgang M.; Schmitt, Rudiger; Schneiderman, Howard A.; Schoenway, Gary; Scott, J. P.; Schuman, Arnold J.; Segal, Lore; Seidel, Friedrich; Shepley, Ethan A. H; Shooter, Eric M.; Silber, Robert; Sinauer, Andrew D.; Small, Jean; Smit, H. E.; Sonneborn, T. M.; Speck, Josef; Spitzer, Nicholas C.; Stadler, Lewis J.; Steeves, John; Steinmuller, David; Stent, Gunther S.; Straznicky, Charles; Stroeva, O. G.; Stultz, Walter
- 2 34 Schmidt, G. A.
- 2 35 Schmitt, Francis Otto
- 2 36 Schotte, Oscar E.
- 2 37 Sharma, Sansar
- 2 38 Shieh, P.
- 2 39 Skoff, Robert P.
- 2 40 Spemann, Hans (1 of 2)
- 2 41 Spemann, Hans (2 of 2)
- 2 42 Spemann, Hans: on Paul Weiss
- 2 43 Spemann, Hans: Political Views
- 2 44 Spemann, Hans: Volkshochule, Freiburg
- 2 45 Sperry, Roger W.
- 2 46 Steinbach, H. B.
- 2 47 Stelzner, Dennis
- 2 48 Stern, Curt
- 2 49 T: T., Florence; T., Kazuyuki; Tatum, Edward L.; Terry, Robert J.; Tiedemann, H; Tondury, G.; Toulmin, G. June; Trinkaus, J. P.; Tyler, Albert
- 2 50 Tardent, Pierre
- 2 51 Taylor, George Wellford
- 2 52 Thoenen, Hans
- 2 53 Toni, Franka, Nandl, & Elisabeth (1 of 2)
- 2 54 Toni, Franka, Nandl, & Elisabeth (2 of 2)
- 2 55 Twitty, Victor C.
- 2 56 V: Van der Loos, Hendrik; Varon, Silvio; Vince, Margaret
- 2 57 W: Waddington, C. H.; Wald, George; Wasserman, Fredrich; Wechsler, W.; Weichert, Carol E.; Welch, Arnold D.; Wessells, Norman K.; Whitaker, Douglas; White, Richard H.; Wiesel, Torsten N.; Wilens, Sally; Williams, Carol M; Wolff, Etienne; Woodcock, A. E. R.
- 2 58 Watterson, Ray L.
- 2 59 Weidenreich, Franz
- 2 60 Weiss, Paul
- 2 61 Weiss: Sabine Braukman re. Paul Weiss

2	62	Wenger, Byron S.	
2	63	Wenger, Eleanor	
2	64	Wiehen, Joseph	
2	65	Wigston, Donald J.	
2	66	Willier, Benjie H.	
2	67	<u>X, Y, Z</u> : Young, John Z.; Young, Michael; Young, William C; Yutema, C.; Zwilling, E.	
2	68	Yamada, Tuneo	
2	69	Yip, Joe	
3	1	Classical Exp. Embr. (Personal Philosophy)	May 1972
3	2	Freiburg Symposium	1990-1991
3	3	Hamburger Lecture	1977-1999
3	4	Historical Landmarks	1978-1981
3	5	The Influence of the Nervous System...	1934
3	6	Japan 1965 Conference	1960-1965
3	7	Kuffler Lecture	1989
3	8	Lecture Abstracts	1933-1965
3	9	Lectures: Programs from	1982
3	10	Lectures: Tumor and Embryo Cells, NGF	1950-1954
3	11	List of Lectures	1933-1989
3	12	Meetings: 1946-1962	1945-1962
3	13	Meetings: 1963-1966	1963-1966
3	14	Meetings: 1967-1969	1967-1986
3	15	Meetings: 1971-1973	1971-1973
3	16	Meetings: 1976-1978	1976-1978
3	17	Meetings: 1979-1980	1979-1980
3	18	Perspectives in Biology & Medicine (Bishop Lecture)	1974
3	19	Radio Talks	1940-1955
3	20	Scientific Lectures	1935-1945
3	21	Scientific Lectures	1946-1951
3	22	Scientific Lectures	1952-1955
3	23	Scientific Lectures	1956-1963
3	24	Scientific Lectures	1964
3	25	Scientific Lectures	1965-1966
3	26	Scientific Lectures	1967-1970
3	27	Scientific Lectures	1971-1972
3	28	Scientific Lectures	1973-1975
3	29	Scientific Lectures	1976-1986
3	30	Scientific Lectures: Mitotic Patterns	
3	31	Scientific Lectures: Neuronal Death, Trophic Interactions	1978-1987
3	32	Society of Neurosciences	1987
3	33	Talks: Germany	1920-1930
3	34	Tallahassee	1983-1984
3	35	Talks: Miscellaneous Topics	1940-1955
3	36	Talks: Miscellaneous Topics (1 of 2)	1935-1959
3	37	Talks: Miscellaneous Topics (2 of 2)	1935-1959

3	38	Talks: Miscellaneous Topics	1967-1962
3	39	Thomas Hall Lectures	1978-1990
4	1	Amphibian Material	1943-1970
4	1a	Anat. Emb. Schedules	1948-69
4	1b	Anat. Embr. Exams (1 of 3)	1946-69
4	1c	Anat. Embr. Exams (2 of 3)	1946-69
4	1d	Anat. Embr. Exams (2 of 3)	1946-69
4	2	Circulatory System, Heart	1955
4	3	Classification	
4	4	Comp. Anat. Drawings (1 of 2)	
4	5	Comp. Anat. Drawings (2 of 2)	
4	6	Cytology Drawings, Notes	1921
4	7	Develop. Genetics	1971
4	8	Developmental Genetics (1 of 3)	1950-1969
4	9	Developmental Genetics (2 of 3)	1950-1969
4	10	Developmental Genetics (3 of 3)	1950-1969
4	11	Developmental Genetics: Bibliography	1958-1969
4	12	Developmental Genetics: Schedules	1946-1969
4	13	Developmental Genetics: Tables, Etc.	1961-1963
4	14	Drawings: Newborn Chick	
4	15	Elementary Experimental Embryology	1948-1971
4	16	Elementary Experimental Embryology	1960-1970
4	17	Embryology	
4	18	Embryology: Berkley, MIT	1949-1950
4	19	Entod. Deriv. Resp. Coelom	
4	20	Entwo. Physiol; Lecture Notes, Freiburg	1931
4	20a	Exam. Physiol. Dev. Genet.	1948-69
4	21	Exp. Analysis of the Factors Determining Nerve-Paths in Amphibia	1933
4	22	Exp. Analysis of the Role of the N. S. in Development	1934
4	23	Exp. Embryology	1967-1968
4	24	Exp. Embryology (1 of 3)	1968
4	25	Exp. Embryology (2 of 3)	1968
4	26	Exp. Embryology (3 of 3)	1968
4	27	Exp. Embryology Bibliographies	1939-1968
4	27a	Exp. Embryol. Exams	1936-64
4	28	Gametogenesis Fertilization	1942-1953
4	29	Homology; General Intro.	1956-1966
4	30	Harvard Medical Symposium	1981-1983
4	31	Human Embr. Placenta	
4	32	Integument Teeth	
4	33	Motility	1964-1974
4	34	Musenlature	
4	34a	N. S. Sense Organs	
4	35	Neuroembryology (1 of 3)	1971
4	36	Neuroembryology (2 of 3)	1971
4	37	Neuroembryology (3 of 3)	1971

4	38	Neuroembryology: 1973	1973
4	39	Neuroembryology: 1983	1983
4	39a	Neuroembryology Exams	1956-77
4	40	Physiology, General Notes (1 of 2)	[1926-1936]
4	41	Physiology, General Notes (2 of 2)	[1926-1936]
4	42	Placodes, Notes On	
4	43	Purves Seminar	1979-1981
4	44	Seminar	1967-1968
4	45	Sexual Cycles	
4	46	Sinauer	1984-1986
4	47	Skeleton	
4	48	Stages: 17, 18, 21	
4	49	Stages: 25, 26	
4	50	Stages: 28, 29, 35	
4	51	Stage Series	
4	52	Ts Notes	
4	53	Urogenital System	
4	54	Vertebrate Zoology	
4	55	Woods Hole Embryology Course Lectures	1958
4	56	Woods Hole Embryology Course Schedules	1937-1945
5	1	Academic Press: Advances in Ontogeny	1970-1973
5	2	Articles, Appreciations of	
5	2a	Autobiographical Materials: Annie and Clara Hamburger correspondence with notes from Frank London [photocopies]	1941-1998
5	3	Autobiographical Chapter: History of Neuroscience	1994-1997
5	4	Autobiographical Materials (1 of 4)	1917-1993
5	5	Autobiographical Materials (2 of 4)	1917-1993
5	6	Autobiographical Materials (3 of 4)	1917-1993
5	7	Autobiographical Materials (4 of 4)	1917-1993
5	8	Autobiographical Materials, Reviews	1984-1992
5	9	Autobiographical Materials: Fire-Fighter 1911	
5	10	Biographical Writing, C. V.	1918-1997
5	11	Book Reviews	1947-1967
5	12	Book Reviews	1947-1975
5	13	Book Reviews by V. H.	
5	14	Deanship, Tom Hall	1959-1960
5	15	Decker, John D.	
5	16	Developmental Physiological Relationships: Translation	1927
5	17	Editorial Work (1 of 3)	1945-1955
5	18	Editorial Work (2 of 3)	1945-1955
5	19	Editorial Work (3 of 3)	1945-1955
5	20	Experienta: Spemann Paper	1969-1970
5	21	German Restitution	1933-1957
5	22	German Restitution Consulate	1956-1995
5	23	Graduate Students: MA/PHD Publications	1951-1963
5	24	H. Mangold Article: Commentaries	1982-1985

5	25	Harrison Paper	1981
5	26	Harvard University Press	1974-1980
5	27	Heritage of Experimental Embryology: Oxford Press	1986-1991
5	28	Heritage of Experimental Embryology: Reviews, Correspondence	1986-1988
5	28a	Historic Moment: The Discovery of the Chemical Transmission of Embryonic Induction [Developmental Neuroscience]	1996-1997
5	29	Illustrations: Hatching (1 of 2)	
5	30	Illustrations: Hatching (2 of 2)	
5	31	Journal of Neurobiology	1992
5	32	Journal of Neuroembryologist: Annual Reviews of Neuroscience	1987-1989
5	33	Journals Office, Columbia University	1992
5	34	Koln: Job Offer	1950
5	35	Levi-Montalcini, Rita [Articles, Writings] (1 of 2)	1973-1995
5	36	Levi-Montalcini, Rita [Articles, Writings] (1 of 2)	1973-1995
5	37	Manual of Experimental Embryology (1943, 1961): Correspondence, Sales	1988-1994
5	38	Manual of Experimental Embryology: Reviews	1942-1943
5	39	McGraw-Hill: Modern Men of Science	1966-1967
5	40	MIT Press: Developmental History of the Motor Neuron	1972-1977
5	41	National Academy of Sciences	1963-1992
5	42	Neuroscience (Journal)	1991
5	43	Neuroscience Abstracts	1976-1980
5	44	Neuroscience Commentaries	1980-1982
5	45	Notes of Cajal, His, & Held	1934-1994
5	46	Obituaries Received	1920-1998
5	47	Oxford University Press	1980-1992
5	48	Perspectives in Biology & Medicine: Goethe Paper	1949-1981
5	49	PNAS: Articles by Lauder and Oppenheimer	1992-1995
5	50	Quarterly Review of Biology: Marcel Malpighi Review	1966-1968
5	51	Reprint Lists	1981
5	52	Roux Article, JHB	1995
5	53	Selected Papers: Birkhauser	1988-1991
5	54	Sidman, Dr. Richard L.	1969
5	55	Spemann (Trends in Neuroscience)	1985-1986
5	56	Spemann Chapter for <u>International Journal of Developmental Biology</u>	1995-1997
5	57	Stage Series in the Development of the Chick Embryo	1973-1977
5	58	Trigeminal Nerve Paper: Notes	[1940-1960]
5	59	Von Baer, Karl Ernst: Biography	1969-1970
5	60	W. H. Freeman & Co. Publishers	1992
6	1	American Society of Zoologists (Honorary Membership)	1990
6	2	Cancer Grants: 1954-'55-'56	1953-1955
6	3	Cranial Ganglia: 1959	1958-1959
6	4	F. O. Schmitt Award	1976
6	5	Fidia Award	1987-1988
6	6	Gerard Award	1985
6	7	Grants Application: 1971-73	1971-1973

6	8	Horwitz Award	1983-1984
6	9	Illustrations: Deafferentation, Tantalum, Motility Chick	
6	10	Illustrations: Heritage of Experimental Embryology (1 of 5)	
6	11	Illustrations: Heritage of Experimental Embryology (2 of 5)	
6	12	Illustrations: Heritage of Experimental Embryology (3 of 5)	
6	13	Illustrations: Heritage of Experimental Embryology (4 of 5)	
6	14	Illustrations: Heritage of Experimental Embryology (5 of 5)	
6	15	Illustrations: Manual of Experimental Embryology (1 of 5)	
6	16	Illustrations: Manual of Experimental Embryology (2 of 5)	
6	17	Illustrations: Manual of Experimental Embryology (3 of 5)	
6	18	Illustrations: Manual of Experimental Embryology (4 of 5)	
6	19	Illustrations: Manual of Experimental Embryology (5 of 5)	
6	20	Illustrations: Skeleton, Nerve-Less Limb, Molly Waugh	
6	21	Illustrations: Stage Series, Chick	
6	22	Illustrations: Stage Series: Rana, [Bufo], Triturus, Salome	
6	23	Illustrations: Vertebrate Physiology Book	1955
6	24	International Brain Research Organization, Honorary Membership	1985
6	25	Lashley Award, American Philosophical Society	1990
6	26	Lifetime Achievement Award, Society of Developmental Biology	2000
6	27	Muscle Dystrophy Application	1974-1982
6	28	Muscle Dystrophy: 1979-1980	1978-1980
6	29	Muscle Dystrophy: 1980-1981	1980-1981
6	30	National Academy of Sciences	1953
6	31	National Institutes of Health (NIH) 1968	1967-1968
6	32	National Institutes of Health (NIH) 1/1/70-12/31/70	1970
6	33	National Institutes of Health (NIH) 1968-1970	1968-1970
6	34	National Institutes of Health (NIH) 1969	1968-1970
6	35	National Institutes of Health (NIH) 1972	1971-1972
6	36	National Institutes of Health (NIH) 1973	1972-1973
6	37	National Institutes of Health (NIH) 1974-1976	1973-1976
6	38	National Institutes of Health (NIH) 1975	1975-1976
6	39	National Institutes of Health (NIH) 1976	1975-1976
6	40	National Institutes of Health (NIH) 1977-1978	1977-1978
6	41	National Institutes of Health (NIH) 1978	1977-1978
6	42	National Institutes of Health (NIH) 1979-1980	1979-1980
6	43	National Institutes of Health (NIH) 1981-1982	1980-1984
6	44	National Institutes of Health (NIH) Grants: '52-'56-'57-'58	1952-1958
6	45	National Institutes of Health (NIH) Suppl. 1966-'67	1965-1967
6	46	National Institutes of Health (NIH): Behavior 1963	1962-1965
6	47	National Institutes of Health (NIH): Behavior 1964	1963-1965
6	48	National Institutes of Health (NIH): Behavior 1965	1964-1965
6	49	National Institutes of Health (NIH): Behavior 1966	1966-1967
6	50	National Medal of Science	1989
6	51	National Science Foundation (NSF)	1963
6	52	National Science Foundation (NSF) Grant: 1970	1970-1973
6	53	Neurol-Physiology: RLM, NIH: 1960-1961	1957-1961

6	54	Neurotization: 1962	1961-1962
6	55	Rockefeller Grant 1938-1949	1936-1953
6	56	Rockefeller University Honorary Degree	1996
6	57	US PHS Grant: Behavior 1967	1966-1967
6	58	Wakeman Award	1978
6	59	Washington University: Botany, Biology Departments	1969
6	60	Washington University: Honorary Degree	1975-1976
6	61	Washington University: Malinckrodt Professorship	1969
6	62	William Greenleaf Eliot Society Award	1989
7	1	Illustrations: Limb Transplant, Chick	1939
7	2	Illustrations: "Mitotic Patterns" Drawings, Graphs (1 of 3)	1948
7	3	Illustrations: Photographs, Trigeminal	
7	4	Illustrations: Manual of Experimental Embryology (2 of 4)	
7	5	Illustrations: Manual of Experimental Embryology (3 of 4)	
7	6	Illustrations: Migration, Terni (1 of 2)	
7	7	Illustrations: Migration, Terni (2 of 2)	
7	8	Illustrations: General Neuro-Embryology, Monsters, Growth Sympos., Life History of N. Cell, Rita Drawings, etc.	
7	9	Illustrations: Flammaria, Silber	
7	10	Illustrations: Transplantations, Reconstructions, Nervous System	
7	11	Illustrations: Transplantation, Eye, Creeper, Gayer (1 of 2)	
7	12	Illustrations: Transplantation, Eye, Creeper, Gayer (2 of 2)	
7	13	Quarterly Review: Marcello Malpighi (from Box 5, Folder 41)	1966
7	14	Illustrations: Encyclopedia Britannica: Exp. Embr. Regeneration	
7	15	Illustrations: "Mitotic Patterns" Drawings, Graphs (2 of 3)	1948
7	16	Illustrations: "Mitotic Patterns" Drawings, Graphs (3 of 3)	1948
7	17	Illustrations: Manual of Experimental Embryology (4 of 4)	
8	1	Illustrations: "Selected Papers" (Negatives)	
8	1a	Illustrations: Photographs	
8	2	Illustrations: "Selected Papers" (Duplicates)	
8	3	Illustrations: Neurotropism, Cajal, Rita	
8	4	Illustrations: Heritage of Experimental Embryology (1 of 4)	
8	5	Illustrations: Heritage of Experimental Embryology (2 of 4)	
8	6	Illustrations: Heritage of Experimental Embryology (3 of 4)	
8	7	Illustrations: Heritage of Experimental Embryology (4 of 4)	
8	8	Illustrations: Tissue Culture, NGF (1 of 2)	
8	9	Illustrations: Tissue Culture, NGF (2 of 2)	
8	10	Illustrations: Manual of Experimental Embryology (1 of 4)	
8	11	Illustrations: Limb Transplant, Creeper	1987
8	12	Illustrations: Limb Extirpation	1935-1944
8	13	Illustrations: Sensory Ganglia, Vestib-Acoustic System, DRG Hypoplasia	1949
8	14	Heimatbuch des Kreises Landeshut (1 of 2)	1927-1929
8	15	Heimatbuch des Kreises Landeshut (2 of 2)	1927-1929
8	16	Mangold, Hilde (Lantern Slide)	
8	17	Universities, Course Records: Heidelberg, Breslau, Freiberg	1918-1925

9	1	notebook	24-28 Sept 1919
9	2	notebook (philosophische grundlagen der biologie , Werner Brock)	
9	3	notebook (vererbungslehre (genetics) Prof Baltzer)	1920
9	4	notebook (psychology)	
9	5	notebook (Truro)	1939
9	6	notebook	1930
9	7	notebook (Physiological Genetics Chicago)	1933
9	8	notebook	
9	9	notebook (Entwicklung physiologie)	1922
9	10	notebook	1972
9	10	office diary and visitor record book	1948-1989