University of Toronto Archives and Record Management Services



B2009-0017

Stephen Kah-Sun Sim Personal Records

Prepared by Harold Averill April 2010 Revised by M. Gamble March 2024

© University of Toronto Archives and Record Management Services, 2024

Table of Contents

Biographical	sketch
Scope and co	ontent5
Series 1	Personal and family
Series 2:	Professional correspondence
Series 3:	Education
Series 4:	University of British Columbia : teaching files7
Series 5	University of Toronto : administrative files
Series 6	University of Toronto: teaching files
Series 7	Professional and scientific organizations10
Series 8	Research10
Series 9	Manuscripts and publications11
Series 10	Addresses12
Appendix 1	Series 9: Manuscripts and publications13

Stephen Kah-Sun Sim Personal Records

Biographical sketch¹

Professor Stephen Kah-Sun Sim was born in Singapore on 15 June, 1917 where his extended family ran a wholesale fabric store. Four years later his immediate family, excluding his father, returned to China to their ancestral village of Hua-Mee, near Swatow (Shan-tou). His initial education was in the family's school until 1930, with a year-and-a-half interruption -1927-1929 – caused by a return to Singapore until his father's early death. Then he went to a boarding school in Swatow for three years. Having completed "lower middle school" (Grade 9), he spent most of an academic year (1933-1934) at a school in Teo-Aan (Chao-An), from which he was sent home for going on strike and therefore lost his year. In September 1934 he was sent for further schooling to Shanghai where, he expanded on his aptitude for English and Mathematics. A year later he was sent to Hong Kong to attend Wah Yan College, an English-system school run by the Jesuits, to acquire a better proficiency in English and to avoid military training. (In 1940, ironically, he began taking military training with the Hong Kong Volunteer Defence Corps as a member of its Field Ambulance.) In the three years there, he was subjected to the challenges of a traditional Western-style education, including religious knowledge. In the fall to 1938 he entered Hong Kong University as an engineering student but switched to medicine after his second year. He did not complete his degree due to the Japanese invasion in December 1941.

In April 1942 Professor Sim was allowed to leave Hong Kong and eventually ended up at the Hsiang-Ya Medical College at its temporary location in Kweiyang beyond Japanese control, where he resumed his studies from September 1942 to March 1943. He then joined the Friends Ambulance Unit run by the Quakers in Kunming in Yunan province. Interpreters were much in demand and, he signed on to work in the front-line areas along the China-Burma border. Shortly after, he resigned to work for the British Military Mission, a position that included negotiating and purchasing food supplies for irregular "soldiers" and British officers involved in covert jungle operations. In July 1945 he spent a week training for parachute jumping at Jessore in north eastern India and at war's end was in Keng Tong in north eastern Burma. In December he returned to Hong Kong.

Beginning in January 1946, Professor Sim taught English-Chinese translations at a girl's school in Kowloon and was assistant editor of the *Sunday Examiner*, a weekly English-language Catholic paper. He also began enquiring about pharmacy programs at American universities and the University of Toronto. In September he left for a pre-med program at the Jesuit-run Gonzaga University in Spokane, Washington and in March, 1947 was admitted to the College of Pharmacy at the University of Washington in Seattle. He rented a room in a house close to campus and to make ends meet, worked part-time in a restaurant and a pharmacy.

¹ The information for this biographical sketch is drawn primarily from Professor Sim's memoir, *Biographical Notes*, which covers his years before coming to Canada, and from his curriculum vitae, 1976-1981. See box 001, folders (01) and (02).

Stephen Kah-Sun Sim Personal Records

Biographical sketch

In June 1949 Professor Sim received his Bachelor of Pharmacy degree and immediately entered graduate school. He completed his Master's degree in June 1951 and his PhD in August 1955. He received the E. L. Newcombe Award for outstanding research in pharmacognosy. During the academic year 1954-1955, he was an instructor in pharmacognosy at the College, teaching two half-year courses and one laboratory (third-year undergraduate) course.

Following graduation, he was hired as an "Instructor II" at the Faculty of Pharmacy at the University of British Columbia, being promoted a year later to assistant professor before being lured away to the University of Toronto in 1959. There he was promoted to associate professor in 1965 and full professor in 1979. At the University of Toronto, in addition to his teaching load, he took on numerous administrative duties. He was co-ordinator of the Faculty of Pharmacy time tables from 1970 until his retirement, and interviewed and processed OSAP appeals from Pharmacy students from 1970 to 1980. He chaired the faculty's Library Committee from 1974 to 1982 and worked with the Presidential Advisory Committee on the U of T Library System during much of that time. He served as faculty liaison for the hospital pharmacy residency program at St. Joseph's Hospital in Hamilton from 1974 until his retirement.

Professor Sim taught pharmacognosy at the University of Toronto until the Faculty abandoned courses in naturopathic studies; then he taught medicinal chemistry and toxicology. He was an appraiser for one MScPhm thesis (1973), a member of the final oral examination committee for two MScPhm candidates in 1977, and was asked to review several other theses over time. He retired in 1985.

Professor Sim was particularly interested in the origin, structure and chemistry of drugs and their impact on humans. His research focussed on the biochemical aspects of medicinal substances from plants and micro-organisms and on the metabolism of ergot fungus. He is best known for his writings on the latter and on medicinal plant alkaloids which he had first studied as an undergraduate at the University of Washington. In 1966 he took a four-week training course in the use of radioisotopes in basic research at the Oak Ridge Institute of Nuclear Studies in Tennessee.

Professor Sim belonged to a number of professional and scientific associations, including the Canadian and American Pharmaceutical Associations, American Society of Pharmacognosy, Canadian Society of Plant Physiology, the American Association for the Advancement of Science, Sigma Xi Scientific Research Society of North America, and the New York Academy of Sciences.

In 1957 Professor Sim married Lillian T. Mar, BSN, and they had two children. He died at his home in Scarborough, Ontario on September 6, 2002.

Stephen Kah-Sun Sim Personal Records

Scope and content

Textual, graphic, publications, sound recordings, 1936 -2002, 2.28 m.

Personal records documenting the life and career of Stephen K. Sim, first Chinese professor in the Faculty of Pharmacy, University of Toronto. Includes his early life, education, and his four years teaching at the University of British Columbia before coming to Toronto. The records contain correspondence, memorabilia, course notes for his studies at the Universities of Hong Kong and Washington, administrative files (University of Toronto) and teaching files (Universities of British Columbia and Toronto), a few files on professional organizations, research files, manuscripts and publications, addresses, three CDs of interviews on his experiences during World War II, and photographs.

Access: Restricted. Letters of reference in box 001, files (25) - (32) are closed until 1 January 2023. All the other files are open.

Stephen Kah-Sun Sim Personal Records

Series 1: Personal and family

[194-]-20020.06 m of Textual,18 Digital video files8 Files of photographs

This series begins with biographical information about Professor Sim, including copies of his curriculum vitae, 'Biographical notes' that he wrote in 1995-1996 that describes his life up to his appointment at the University of British Columbia, and three CDs of interviews with him about his experiences during World War II. There are also files of certificates and memorabilia (some belonging to his wife, Lillian), greeting cards, and a notebook on vocabulary and Chinese words from the 1940s. The series ends with files of correspondence with his wife, Lillian, and nephews, nieces, and cousins in Singapore and Hong Kong, and a few friends.

/001	(01) - (20)		[194-] - 1999
/001P	(01) - (08)	Black-and-white and colour photoprints of Professor Sim and members of his family	n.d., 1967-2002
/001M – 002M		Video interviews of Prof. Sim discussing his experiences in World War II and his education in the US after the war	Ca. 1990

Series 2: Professional correspondence

Textual, graphic, 1961-1993, 0.08 m. Restricted

This series consists of files of Professor Sim's correspondence with professional colleagues, Raul N. De Gasperi (University of Miami), Norman R. Farnsworth (University of Illinois, Chicago), Heroshi Mitsuhaski (Hokkaido University, Japan), Krishna Chandia Varma (University of Saugar, India), followed by letters of reference covering the years 1961-1993. The correspondence with colleagues relates primarily to research interests and invitations to visit the University of Toronto.

/001	(21) - (32)	Letters of reference in files (25) – (32) – are restricted until 1 January 2023	[194-] - 1999
/001P	(09)	Professors Sim and Shen Giande (Sichuan), taken by Professor Heroshi Mitsuhashi of Japan	1983-11-03

Series 3: Education

Textual, graphic, 1936-1999, 0.26 m.

This series documents Professor Sim's university education, beginning with examination results at Wah Yan College, the English-system school run by the Jesuits in Hong Kong, where he spent two years improving his English before entering the University of Hong Kong in 1938. His notes at the latter, for Engineering courses in algebra, applied and pure mathematics and physics, survived the vicissitudes of war, but those for Medicine, to which he switched in the fall of 1940, did not. The files for Bachelor of Science in Pharmacy **Series 3: Education**

courses at the University of Washington (1946-1949) include course notes for only two courses (in French), some essays on his experiences during World War II and his coming to the United States, short essays on scientists, his BScPhm thesis, and a file on the 50th anniversary (1999) reunion of his class. Also present are copies of his Masters and Doctoral theses, a notebook on extractions and assays, a spoof on a technical paper, and an essay on his impressions of America. There are also files documenting his state pharmacist licence, which he obtained in 1951 and maintained until 1980, and on the course in pharmacognosy he taught while finishing his thesis and about which he later wrote.

The arrangement is by degree and courses and associated materials within each degree.

Included in this series is a photo album of Professor Sim's years at the University of Washington and a number of files of loose photos for the years 1947-1955 of him in his residences, his lab, with friends and colleagues and on vacation.

/002	(01) (02) - (06) (07)	Wah Yan College, Hong Kong University of Hong Kong, Engineering courses University of Washington. BScPhm. Course notes in	1936-1938 1938-1940
		French	1948-1949
/003	(01) - (12)	University of Washington. BScPhm. Course notes – PhD; teaching course in pharmacognosy	1946-1955
/001P	(10) (11) - (19)	Photo album, University of Washington; includes photos taken in British Columbia in 1951 Loose photos	1946-1952 1947-1955
	() (-)	p	

Series 4: University of British Columbia: teaching files

Textual, graphic, 1955-1960, 0.07 m.

In 1955 Professor Sim was hired by the University of British Columbia at "Instructor II" level, from which he was soon promoted to assistant professor. The series contains a file of course outlines, memos, and correspondence for Pharmacy 211, 312, and 413, and Pharmacology 442; lecture notes for Pharmacognosy courses 331 and 411; files on theses topics, toxicology slides that he ordered, and several photographs.

University of Toronto Archives

B2009-00)17	Stephen Kah-Sun Sim Personal Records	
/003	(13) – (22)	Pharmacy 211 – toxicology slides order	1955-1960
/001P	(20) - (23)	Two informal black-and-white photos of Professor Sim at UBC (1956) and at Pharmacy banquet, 1957; toxicology photos	1956-1958
Series 5:	University of	of Toronto: administrative files	1750 1750

Textual, graphic, 1959-2000, 0.26 m.

This series documents certain administrative activities of the Faculty of Pharmacy during Professor Sim's professorship therein, beginning with files on his employment and faculty and students' course evaluations. These are followed by files on the Decanal Search Committee for the Dean, Faculty Council meetings, and the Admissions and Selections Committee with inquiries for graduate and post-doctoral positions (mostly from the 1960s and the 1970s). There are comprehensive files on the work of the Faculty's Library Committee and the Presidential Advisory Committee on the U of T Library System, and on the hospital pharmacy residency programme at St. Joseph's Hospital in Hamilton, Ontario. The remainder of the series documents a number of policy reports, initiatives in course development, the Graduate Study and Research program, focussed studies, and pharmacy education generally. The series concludes with a file on the Undergraduate Pharmaceutical Society to which Professor Sims was faculty advisor, several reports from the Dean, and a file on the pharmacognosy 233 course at the University of Illinois.

/004		Faculty of Pharmacy. Sim's employment – Library Committee	1959-2000
/005		Presidential Advisory Committee on the U of T Library System – University of Illinois. Pharmacognosy course	1964-1993
/001P /002P	(24) - (27)	Photographs Undergraduate Pharmaceutical Society executive photo	1964-1984 1961

Series 6: University of Toronto: teaching files

Textual, 1959-1985, 0.79 m.

While there are slim files on some courses Professor Sim did not teach, the files for those he did teach are mostly extensive and comprehensive, containing any combination of correspondence, memos, course outlines, lecture schedules, lecture notes, laboratory notes, reading lists, and examination questions. Professor Sim taught courses principally in pharmacognosy, medicinal chemistry and toxicology. The courses in pharmacognosy (phytochemistry) dominate the 1960s; thereafter, when the Faculty moved away from naturopathic studies, courses (306 and 404) in medicinal chemistry. The courses represented in this series are:

Pharmacognosy 232, Unit 3: Alkaloids Pharmacognosy 34/334: Phytochemistry Pharmacognosy 44: Selected topics in Pharmacognosy I Pharmacognosy 45: Selected topics in Pharmacognosy II

Series 6: University of Toronto: teaching files

Pharmaceutical chemistry 47: Drug assay Pharmaceutical chemistry 48: Advanced analytical pharmaceutical chemistry Pharmacology 361/460: Pharmacology Pharmacology PCL 1014: Graduate course in toxicology

The pharmacy courses are: Pharmacy 12: Introduction to Pharmacy

PHM 306: Medicinal Chemistry I, Unit C-3: Principles of chemotherapy

PHM 306: Medicinal Chemistry I, Unit E-5: Cardiovascular agents

Pharmacy 344

PHM 401: Lecture on the toxicology of common analgesics

PHM 404: Medicinal Chemistry II, Unit C-9: Narcotic and non-narcotic analgesics

PHM 404: Medicinal Chemistry II, Unit C-10: Antibacterial and antifungal agents

Pharmacy 431: Biopharmacy

Pharmacy 465: Hospital pharmacy administration

The arrangement is by ascending course number and chronologically within each number.

/006	Courses: Pharmacy : Pharmacognosy 232 (1974-1975); Pharmacognosy 34 (1959-1966) : alkaloids - chemotaxony	1959-1975
/007	Courses: Pharmacognosy 34 : labs and lectures : enzymes, glycosides, volatile oils, fixed oils	1962-1968
/008	Courses: Pharmacognosy 34/334 (1968-1970); Pharmacology 361/460 (1970-1971); Pharmacognosy 44 and 45 (1964-1965); Pharmaceutical chemistry 47/48 (1964-1965); Pharmacology PCL 1014: toxicology (1977-1979); Pharmacy 12 (1962-1963); PHM 101 and 201 (1967-1968), PHM 306, Units C-3 (1979-1981) and E-5 (1970-1981)	1962-1981
/009	Courses: PHM 306, Units C-3 and E-5 (1981-1985)	1981-1984
/010	Courses: Pharmacy 344 (1968-1969); PHM 401 (1978-1982); PHM 404, Units C-9 and C-10 (1971-1983)	1968-1983
/011	Courses: Units C-9 and C-10 (1975-1985); PHM 431 (1970-1972); PHM 465 (1984-1985); seminars (1980-1985); theses appraisals (1966-1974); oral exams (1960-1961); University Extension	

B2009-0017		Stephen Kah-Sun Sim Personal Records	
		refresher course in pharmacy (1961-1962)	1960-1985
/012	(01)	University Extension refresher course, February 1967	1967

Series 7: Professional and scientific organizations

Textual, graphic, 1963-1983, 0.03 m.

Of the professional and scientific associations listed in the biographical sketch on Professor Sim, only the Canadian Pharmaceutical Association and the American Society of Pharmacognosy are included in this series. There are also slim files on the Association of Deans of Pharmacy of Canada, the Association of Faculties of Pharmacy of Canada, and the Pharmacy Examining Board of Canada. Accompanying the textual records are photographs of meetings American Society of Pharmacognosy and the Canadian Pharmaceutical Association.

The arrangement of the files is in alphabetical order by name of organization.

/012	(02) - (06)	American Society of Pharmacognosy – Pharmacy Examining Board of Canada	1963-1983
/001P	(28) - (30)	American Society of Pharmacognosy (1964, 1965); Canadian Pharmaceutical Association (1958)	1958-1965

Series 8: Research

Textual, 1955-1994, 0.26 m.

This series is divided into four sections: correspondence regarding research on medical, drug, and poisonous plants, with files on Laetril and vitamins; files on the basic research course on radio-isotopes that Professor Sim took at Oak Ridge, Tennessee, in 1966; research grant applications; and experimental research databooks. The NRC grants were for Professor Sim's ongoing research on ergot (*Claviceps*) fungus: the first focussing on the enzyme activity in cultured tissues, and the second on its metabolism (see file on experiments in 'pHPP colorimetric work,' /014(05)).

The correspondence files are extensive and there are numerous databooks. The latter do not appear to be complete in all cases as there are gaps in the numbered experiments. The databooks B-I and II and the 'W'' series are inter-related and cover experiments on the calibration of Warburg flasks and monometers that were carried out at the Universities of Washington and British Columbia. The remaining data was compiled during experiments at the University of Toronto. These databooks contain research on histamines and tyrosine, to

mention the most prominent, and there are two books of data for Professor Sim's writings on *Claviceps*.

The databooks are grouped by number, where provided, and generally in chronological order. Nearly all are from the 1950s and the 1960s.

Series 8: Research

/012	(07) - (16) (17) - (19)	Correspondence re medicinal, drug, and poisonous plants; files on Laetril and vitamins Basic research course (105 th session), Oak Ridge, Tennessee, 1966	1955-1994 1966
/013	(01) - (02) (03) - (04) (05) (06) - (12)	Basic research course (105 th session), Oak Ridge, Tennessee, 1966 National Research Council of Canada grant applications Databook, experiments B-II Databooks, experiments W-1 (includes 'B-I') – W-6	1966 1963, 1967-1968 1954-1956 1953-1960
/014	(01)(02) - (03)(04)(05)(06)(07)(08)(09) - (13)(14)	Databooks, experiments CL-1, CL-2 Databooks, experiments HT-1 and HT S-1 (histamine) Databook re enzyme preparation for <i>Claviceps litoris</i> Experiments. pHPP colorimetric work. T-6 – ST-1 Experimental work book (nitrogen and protein) Databook, experiments FR-1 to 10 Procedure databook: procedures and stock solutions Databooks, experiments 'S', 'T' : Tyrosene Notebook, with experimental data and research on 5-Hydroxytryptamine	1958-1959 1958, n.d. n.d. 1967 1962-1963 1964-1965 1966-1967 n.d. – 1967 n.d. – 1972
/015	(01) - (02) (03) - (05)	Databooks, experiments Tyr KG-5 & 6 (Tyrosine) Databooks, experiments 70-S-1 to S-3 (Tyrosine, etc.)	1972-1973 1970-1972

Series 9: Manuscripts and publications

Textual, 1951-1989, 0.26 m.

Professor Sim's writings document his experimental research and his interest in the wider aspects of the evolution of the teaching of pharmacognosy and pharmacology. The files contain any combination of correspondence, notes, drafts, offprints, and reviews of his articles and books. Two at the end of the series contain acetate sheets for addresses given. There are a number of unpublished items; those in mimeograph format were mostly associated with his teaching. Not all of his published writings are documented here, and the experimental research for some can be found, at least in part, in Series 8.

The series begins with a few letters to the editor and book reviews, followed by drafts of articles and books. The two books Professor Sims wrote were introductory texts for pharmacy students, on medicinal plant alkaloids and glycerides. Both attracted international interest and went through several printings and/or editions. Some of his articles also attracted wide interest.

Series 9: Manuscripts and publications

For a listing of the manuscripts and publications in this series, see Appendix 1.

/016	[1965?] - 1971
------	----------------

/017 (01) - (08) 1972-1989

Series 10: Addresses

Textual, 1962-1992, 0.06 m.

Only seven of Professor Sim's addresses are represented in this series. The most thoroughly documented, on toxic and hallucinogenic plants, was given to the Alcoholism and Drug Addiction Research Foundation in Toronto in October 1978. Other topics include enzyme therapy, narcotic analgesics, the treatment of infections in cancer patients, amikasin, endorphins, and the use of Didanosine for AIDS patients.

The arrangement of the files is chronological by date of address.

/017 (09) - (17) 1962-1992

Photographs

136 photographs ; 4 slides

Appendix 1: Series 9: Manuscripts and publications

/Box	(file)	Description	Date(s)
	(06) (07) (08)	Letters to the editor Book reviews With H. W. Youngken, Jr. 'A study of growth effects	[195-] -1970 1971-1978
	(00)	induced in cultures of <i>Claviceps litoralis</i> Kawatani,' <i>Journal of the</i> <i>American Pharmaceutical Association, Scientific Edition</i> , XLIII, 7 (July 1951) 429-432	1951
	(09)	"The significance of noradrenaline in pharmacology and physiology (a review of recent works)", January 1952	1952
	(10)	'Relationship between pharmaceutical chemistry and pharmacology', n.d. Mimeo.	[1955-59]
	(11)	'Towards a sound pharmacognosy course in the pharma- ceutical curriculum,' <i>Bulletin of the Canadian Conference of</i> <i>Pharmaceutical Faculties</i> , IX, 4 (October 1956) 82-85	1956
	(12)	With H. W. Youngken, Jr. 'Catecholase activity in tissue cultures of <i>Claviceps litoralis</i> , <i>Journal of the American</i> <i>Pharmaceutical Association, Scientific Edition</i> , XLV, 12 (December	1750
	(13)	1956) 779-784 'Graduate school programs – No. 5 – Pharmacognosy at the	1956
	(14)	University of Washington,' Bulletin of the Canadian Conference of Pharmaceutical Faculties, IX, 4 (January 1957) 5-7 McDonald, Kenneth G. and Stephen K. Sim, 'A note on the activation of histamine release from rabbit blood by	1957
	(15)	 crystalline papain,' <i>Canadian Pharmaceutical Journal, Scientific Section</i>, 90 (April 1957) 231-234 'Correlation of pharmaceutical chemistry with other courses (b) Pharmacognosy,' <i>Bulletin of the Canadian Conference of</i> 	1957
	(16)	<i>Pharmaceutical Faculties</i> , IX, 4 (August 1958) 179-181 'The effect of mescaline and yohimbine on the respiration of rat brain homogenate,' <i>Journal of the American Pharmaceutical</i>	1958
	(17) (18)	Association, Scientific Edition, XLVIII, 6 (June 1959) 332-334 'Recent developments in corticosteroids,' June 1960 Mimeo. 'Glimpses behind the story of production of steroid hormones, Bulletin of the Ontario College of Pharmacy, IX, 5	1959 1960
	(19)	(November 1960) 87-90 Partial draft of article on <i>Claviceps litoralis</i> Kawatani, with	1960
	(20)	experimental data Medicinal plant alkaloids: an introduction for pharmacy students.	[1960-61]
	. ,	Toronto: University of Toronto Press, 1964. 1st edition.	1964-1965
	(21)	'One man's solution for the evening before examination', 5 March 1965	1965
	(22)	'Oncolytic alkaloids of periwinkle plants,' Bulletin of the Ontario College of Pharmacy, XIV, 4 (September 1965) 61-63	1963

B2009-0017		Stephen Kah-Sun Sim Personal Records				
Appendix 1: Series 9: Manuscripts and publications						
/Box	(file)	Description	Date(s)			
/015	(23) - (24) (25) - (26)	Medicinal plant alkaloids: an introduction for pharmacy students. Toronto: University of Toronto Press, 1965. 2 nd edition. Medicinal plant alkaloids: an introduction for pharmacy students.	1965			
	(20) (20)	Toronto: University of Toronto Press, 1965. 2 nd edition. 1966 reprint	1965-1966			
/016	(01) (02)	'The use of enzymes as therapeutic agents.' Mimeo 'Undergraduate pharmacognosy laboratory: a new system at Toronto', <i>American Journal of Pharmaceutical Education</i> , 30, 1	[1966?]			
	(03) – (04)	 (February 1966) <i>Medicinal plant alkaloids: an introduction for pharmacy students.</i> Toronto: University of Toronto Press, 1965. 2nd edition. 1968 	1966			
	(05) – (06)	reprint Medicinal plant alkaloids: an introduction for pharmacy students. Correspondence, notes and corrections 2 nd reprint or 3 rd	1968-1969			
	(07) - (10)	edition Medicinal plant glycosides: an introduction for pharmacy students.	1970			
	(11) – (12)	Toronto: University of Toronto Press, 1967 <i>Medicinal plant glycosides: an introduction for pharmacy students.</i> 1968 (2 nd) and 1971 (3 rd) reprints	1966-1970 1968-1981			
	(13)	Medicinal plant glycosides: an introduction for pharmacy students. Requests for copies; distribution records	1967-1981			
	(14)	With Y.K.R. Choi. 'Tyrosine aminotransferase activity in a soluble extract of ergot fungus,' <i>Journal of Pharmacy and Pharmacology</i> , 23, 1 (1971) 78-80	1971			
	(15)	'The cephalosporins,' <i>Bulletin of the Ontario College of Pharmacy</i> , XX, 2 (April 1971) 52-54. With experimental data	1970-1971			
	(16) – (20)	'Trimethoprim-sulfonamide therapy: a brief literature review,' <i>American Journal of Pharmacy</i> , 143, 5 (September-October 1971) 165-170	1971-1971			
	(21)	'Chemotherapy of gonorrhoea: a review of current status,' <i>Canadian Medical Association Journal</i> , 107, 10 (1972-11-18) 986-1992	1972			
	(22)	'Methadone – a review,' <i>Canadian Medical Association Journal</i> , 109, 7 (1973-10-06) 986-1992	1972			
	(23)	'Chemotherapy of infections in cancer patients: a review,' American Journal of Hospital Pharmacy, 32, 1 (Jan. 1975) 35-44	1974-1975			
/017	(01)	'Digoxin tablets – a review of the bioavailability problem,' American Journal of Hospital Pharmacy, 33, 1 (Jan. 1976) 44-48	1975-1975			
	(02)	'Selected references on amikacin,' Compiled for Ontario Hospital Association Institute, April 1977	1977			
	(03)	'Infective endocarditis' and 'bacterial endocarditis'. Drafts	[1978]			

Appendix 1: Series 9: Manuscripts and publications

/Box	(file)	Description	Date(s)
/017	(04)	'Endorphins: internal opioid system,' <i>Canadian Pharmaceutical</i>	1070 1001
		Journal, Scientific Section, 113, 6 (June 1980) 208-209	1979-1981
	(05)	'Calcium entry blockers as cardiovascular drugs.'	1982
	(06)	'Third-generation cephalosporins: brief review for	
		ceftazidime and cefoperazone.'	1986
	(07)	'Quinolone antimicrobials: literature survey', December 1988,	
		with acetate sheets for address, 13 December 1988	1987-1988
	(08)	'Literature case reports: empirical antibiotic therapy',' 31	
		October 1989; with acetate sheets for talk on 'beta-lactim	
		antibiotics with anti-pseudomonas activity'	1988-1989