Report on the correspondence and papers

of

SIR ERNST BORIS CHAIN

(1906 - 1979)

biochemist

Vol II

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CONTEMPORARY SCIENTIFIC ARCHIVES CENTRE

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Catalogue of the papers and correspondence of

SIR ERNST BORIS CHAIN FRS

(1906 - 1979)

Compiled by:

Jeannine Alton and Julia Latham-Jackson

VOLUME II

Sections F - J

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SECTION F

INDUSTRIAL CONSULTANCIES AND COLLABORATIVE RESEARCH F.1 - F.346

INTRODUCTION AND LIST OF CONTENTS

Section F reflects Chain's continuing contact with a wide range of industrial firms. Although not all of the companies listed here had a formal consultancy agreement with him, most of them sought his advice at one time or another and they have been included as part of the general picture of industrial collaboration.

The largest group of papers (F.44 - F.174) relates to Chain's consultancy with the Beecham Group which culminated in 1959 with the isolation of 6-aminopenicillanic acid (the 'nucleus' of the penicillin molecule). Chain continued to be associated with the Beecham Group until his death in 1979 and the surviving papers document the extent of his involvement with the expansion of their research effort after 1959 as well as his friendly personal contacts, particularly with H.G. Lazell (Chairman 1958 - 68).

Attention is also drawn to the very full record of Chain's collaboration with Astra from 1948 to 1957, a period for which documentation in other parts of the collection is rather patchy.

Many of Chain's contacts with industry resulted in the funding of collaborative research projects conducted in his laboratory, both in Rome and, particularly, at Imperial College. Correspondence re the negotiation and administration of such collaborative projects is to be found both here (see the references to this Section under 'Imperial College' in the General Index) and in Section D, especially D.127 - D.130.

Inevitably, with so many contacts in the industrial world, Chain was often responsible for initiating collaborative projects between the various firms with whom he was associated. Such links are noted, but not generally cross-referenced in the catalogue entries which follow. Instead, each firm is included in the General Index with a list of references to this and other sections of the catalogue where appropriate.

| AC'CENT INTERNATIONAL INC. | F.1-F.3 |
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| ADVISORY SERVICES (CLINICAL & GENERAL) LTD. | F.4-F.6 |
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| ISF S.p.A. | F.228 |
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| ISTITUTO SIEROTERAPICO E VACCINOGENO TOSCANO | |
| "SCLAVO" S.p.A. | F.230 |

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|--|--------------|
| LILLY RESEARCH LABORATORIES, ELI LILLY AND CO. | F.234, F.235 |
| MARKS AND SPENCER LTD. | F.236-F.251 |
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| MONTECATINI EDISON S.p.A. (later MONTEDISON) | F.258-F.267 |
| NATIONAL DRUG COMPANY | F.268 |
| NATIONAL IRANIAN OIL COMPANY (N.I.O.C.) | F.269-F.281 |
| NESTLÉ ALIMENTANA S.A. | F.282-F.292 |
| PFIZER (CHAS. PFIZER & CO. INC.) | F.293-F.297 |
| PFLEGER (DR. R. PFLEGER CHEMISCHE FABRIK GMBH) | F.298-F.310 |
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| RICHARDSON-MERRELL INC. | F.325 |
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| USIFROID (SOCIÉTÉ D'UTILISATION SCIENTIFIQUE ET INDUSTRIELLE DU FROID) | F.335 |
| USV PHARMACEUTICAL CORPORATION | F.336-F.342 |
| WALLACE LABORATORIES | F.343, F.344 |
| WESTFALIA SEPARATOR LTD. | F.345 |
| | |

F.1-F.3 AC'CENT INTERNATIONAL INC.

1971-73, 1979

Chain was introduced to the President of Ac'cent's parent company, Wm. Underwood Co. by S.A. Goldblith in October 1971, and as a result he invited Chain to visit Ac'cent's fermentation plant at San José, California, in January 1972. Chain's report on this visit was used as a basis for several further discussions, but in August 1973 Wm. Underwood Co. negotiated the sale of Ac'cent to the Stauffer Chemical Company.

- F.1 Correspondence (mainly with President, Wm. Underwood Co.) re arrangements for Chain's visit to San José.
 Includes one letter from the President of Ac'cent with miscellaneous background information on personnel, production processes, etc.
- F.2 Chain's 8 pp. typescript 'Report on Visit to the Ac'cent MSG Plant in San José, California' (on 10 and 11 January 1972), with miscellaneous letters to President, Wm. Underwood Co. and others.
- F.3 Correspondence with the Presidents of Wm. Underwood Co. and Ac'cent, January 1972-September 1973 (and one letter, 1979). Includes various arrangements for meetings, 1972, and announcement of Wm. Underwood Co.'s decision to sell Ac'cent in 1973.
- F.4-F.6 ADVISORY SERVICES (CLINICAL & GENERAL)
 LTD.

1971-74, 1977-79

Correspondence from the Managing Director (R. Kohn), including copies of letters to colleagues at Farmitalia, Carlo Erba and Nestlé re various scientific investigations undertaken by his company. Many of the letters also contain arrangements with Chain for musical and social activities.

- F.4 January 1971-April 1973
- F.5 May 1973
- F.6 July 1973-January 1974, 1977, 1979

F.7 ALTHEA S.p.A.

1955

Correspondence, April-July 1955, re problems experienced with a tomato concentrate, marketed under the brand name 'Fiordagosto'.

F.8

AMERICAN CYANAMID COMPANY

1968-69

Chain acted as expert witness for the Company in patent infringement proceedings.

Correspondence with patent agents and legal representatives. Includes Chain's draft 'Proof of Evidence', and other related papers.

F.9

ANIC S.p.A.

1978

Brief correspondence and report on interferon research in Japan.

See also ENI.

F.10

ANTIBIOTICOS, S.A.

1959, 1961, 1969

Brief correspondence only. 1969 letter refers to past and future visits by Chain to the Antibioticos laboratories.

F.11

ASSORENI

(Associazione per la ricerca scientifica fra le società del Gruppo ENI)

Reports in English and Italian of meeting in London, April 1979, to discuss 'ENI Interferon Project', brief correspondence re visit to Rome in May, and letter outlining further progress of the project, June 1979.

F.12-F.41 ASTRA 1948-79

Chain's first contacts with Astra appear to date from the end of 1945, although his formal collaboration began in 1946 (see F.12). The documentation for the very early period is unfortunately rather sparse, but from mid-1948 until the end of 1957 there is a very full range of correspondence relating mainly to the development of penicillin production processes. The material includes exchanges of information, laboratory specimens and results, drawings of equipment, arrangements for meetings and visits and a little personal correspondence.

After 1958 the surviving papers are very sparse (Chain's carbons only, 1958-59 and less than half a dozen letters for the whole of the 1960s), but there is a further sequence from 1976-79 when Chain was asked to advise on Astra's proposed links with Iran.

The brochure 'Astra and Antibiotics', a draft of which is now at F.38, includes photographs of Chain and a summary account of his collaboration with the Astra Group.

See also K.5.

- F.12

 3 letters from B. Sjögren and H. Berlin, April and July
 1946, re detailed planning of penicillin plant and arrangements for meeting in Oxford. The letters are numbered
 1, 2 and 5.
- F.13

 3 letters from E. Sperber, June-July 1948, with details of fermentation runs and arrangements for Chain to visit the Astra laboratories in August.

Also included is a letter from H. Berlin thanking Chain for past collaboration and 1 p. ms. notes.

- F.14 Correspondence with Sperber and Sjögren, October 1948– January 1949. Includes arrangements for visit by Chain in December and letter from Sjögren enclosing summary of discussions during Chain's visit and report on subsequent experiments.
- F.15 Summaries of further discussions at Astra laboratories on research in progress, January-February 1949, sent to Chain for information.

143 Industrial consultancies and collaborative research F.16 Correspondence with Siggren and Sperber, February-April 1949, including comments and reports on fermentation runs. F.17 Correspondence May-July 1949, mainly repenicillin patents. Includes arrangements for visit by Chain in August. F.18 Correspondence September-December 1949, mainly re details of penicillin production process. Includes discussion of possible collaboration with the Czechoslovakian Government. F.19 Correspondence February-June 1950, re progress with penicillin production and methods of air filtration. Includes personal letter from H. Berlin. F.20 Correspondence July-November 1950. Includes arrangements for a visit to Rome by Sperber in September and for Chain's visit to Stockholm with Professor Marotta and his daughter in December. F.21 Correspondence February-November 1951. Includes exchange re difficulty of obtaining Podbielniak extractors and arrangements for visit to Rome by Sjögren in October. F.22 Correspondence April-December 1952. Includes arrangements for visit by Chain in September, negotiations re royalties on sales of benamide penicillin and discussion of possible co-operation with the Danish company Roskilde. F.23 Correspondence January-February 1953, mainly re arrangements for meeting in Copenhagen to discuss co-operation with Roskilde. Includes related ms. and typescript notes and diagrams. F.24 Correspondence March-December 1953, re arrangements for meetings and visits, details of penicillin production, etc. See also F.25.

F.25 Correspondence re penicillin patents, June-December 1953.

F.26 Further correspondence re penicillin patents, January-June 1954. Includes arrangements for Chain to give evidence during a visit to Sweden in March, and extracts from 2 wartime penicillin reports.

Industrial consultancies and collaborative research F.27 Correspondence, April-October 1954, mainly re details of penicillin production process. F.28 Correspondence, November 1954-January 1955, including arrangements for visit to the Astra laboratories by A. Tonolo and R. Falini to advise on penicillin production problems, and related correspondence. F.29 Correspondence, February-December 1955. Includes comments on fermentation results, more repenicillin patents, and arrangements for ordering copies of the 10-litre fermenters used in Chain's laboratory in Rome. F.30 Correspondence, January-June 1956. Includes copies of correspondence with Italian firm supplying the fermenters and arrangements for visit to the Astra laboratories by G. Gualandi to make aeration measurements. F.31 Correspondence, July-December 1956. Includes evaluation of Gualandi's results and further correspondence with firm supplying the fermenters. F.32 Correspondence, January-May 1957. Includes drawings of fermentation equipment and arrangements for a Swiss microbiologist to work for 3 months in Chain's laboratory before taking up employment at Astra. F.33 Correspondence, June-November 1957. Includes brief exchange re award of Nobel Prize to D. Bovet (see also C.53). F.34 Correspondence, January 1958-December 1959. These are second copies of Chain's letters only as the original Astra file for this period does not seem to have survived. Chain's letter of 19 December refers to the discovery of penicin in the Beecham Research Laboratories and subsequent correspondence comments on the progress of negotiations for research collaboration between Astra and the Beecham Group.

F.36

F.35

Brief correspondence with B. Sjöberg, 1973 (request to see Chain during a visit to London) and 1975 (invitation to Chain to come to Astra during visit to Sweden in December). A letter from Sjögren's widow following his death in 1973 is also included here.

Correspondence, 1960-64 and n.d. A few scattered letters only, mainly from Sjögren. Includes several references to

research in collaboration with the Beecham Research

Laboratories.

Industrial consultancies and collaborative research Correspondence with Sjöberg and others, 1976, mainly F.37 re Astra's activities in Iran. F.38 Draft brochure describing Astra's antibiotic activities, sent to Chain for approval, August 1976. The text refers to the company's early collaboration with Chain in developing methods of penicillin production. F.39 Correspondence, January-November 1977, mainly re Astra's negotiations with the Iranian authorities, including draft proposal for collaboration, June 1977. F.40 Correspondence, May-August 1977, re invitation to Chain to be present at the Award of the Astra prize in Brazil. Correspondence, 1978-79, including draft letter from F.41 Chain to the Iranian Army Health Department, January 1978, advocating collaboration with Astra. F.42, F.43 BAYER 1958-71 F.42 Correspondence, 1958-59, re arrangements for construction in Chain's laboratories of an instrument for the measurement of dissolved oxygen in agitated fermentation liquids in the presence of microorganisms. Chain's letter of 29 December 1958 discusses terms on which he would act as a consultant to Bayer. Correspondence 1963 re priority in the discovery of enzymatic penicillin splitting is also included. F.43 Correspondence, 1969-71, re interviews for a biographical

article on Chain for publication in 'Therapeutische

Berichte'.

F.44-F.174 BEECHAM GROUP LIMITED

Chain's association with the Beecham Group began at the instigation of Sir Charles Dodds who introduced him to H.G. Lazell (Managing Director, later Chairman of the Beecham Group) in 1955.

The result was a very fruitful collaboration culminating in 1959 with the isolation of 6-aminopenicillanic acid (the 'nucleus' of the penicillin molecule) which made possible the development of a whole series of new synthetic penicillins.

Chain continued to act as consultant to Beechams until his death in 1979 and the company also sponsored various research projects and studentships at Imperial College. The following papers trace the development of his collaboration with Beechams and the expansion of their research effort after 1959. Unfortunately some files have been lost and there are gaps for whole years (e.g. 1956, 1957) or parts of years (e.g. November 1960-June 1961).

The material is presented more or less chronologically, with the exception of correspondence with Lazell and his successor, Sir Ronald Edwards, which has been kept separate and now appears at F.169-F.174.

For material relating to conferences and symposia organised by the Beecham Group and attended by Chain, see J.77-J.80, J.99-J.111, J.112.

- F.44 Letter from E.C. Dodds, 27 April 1955, suggesting a meeting with Chain, I. Heilbron and members of the Beecham Group (H.G. Lazell Managing Director, W. McGeorge Director in charge of research, and J. Farquharson Director of the research laboratories) to discuss citric and tartaric acid production.
- F.45 Correspondence with Dodds and McGeorge, May 1955.

 Includes arrangements for meeting in London, ms. notes and letters re tartaric acid production, and arrangements for meetings in Rome in June and July.
- F.46 Correspondence with McGeorge and others, June-July 1955.

 Includes arrangements for visits to Rome, letters of thanks from McGeorge and Heilbron and letter from Chain, outlining his proposals for collaboration with the Beecham Group.

| | Industrial consultancies and collaborative research |
|------|--|
| F.47 | Correspondence with McGeorge, August-September 1955. |
| | Mainly <u>re</u> arrangements for visit to London by Chain for further discussions. |
| F.48 | English and Italian versions of technical data prepared in Chain's laboratory as a basis for his discussions with Beechams in September (see F.47). Includes a detailed costing for a 'Fermentation Plant of Six Stainless Steel Fermenters (each of a capacity of 30,000 L culture fluid)'. |
| F.49 | Correspondence with McGeorge and Dodds, September- October 1955. |
| | Mainly re organisational details connected with the establishment of research facilities in the field of chemical microbiology and plans for penicillin production. Correspondence with Dodds includes a discussion of acquired resistance to penicillin. |
| F.50 | Correspondence with McGeorge and others, November 1955. |
| | Includes arrangements for Chain to visit the Beecham Research Laboratories at Brockham Park and correspondence arising from discussions during this visit. |
| F.51 | Correspondence with McGeorge, December 1955. |
| | Mainly re arrangements for recruiting and training of staff for the new Beecham research team. Includes drafts of letter from McGeorge to Professor Marotta re scheme for training Beecham scientists in Chain's laboratory in Rome. |
| F.52 | 'Microbiological Project for Beecham Research Laboratories Ltd.' |
| | Detailed financial estimates, March 1956. |
| | There is no correspondence with Beechams for 1956 or 1957 apart from the mainly personal exchanges at F.53 below. |
| F.53 | Letters from McGeorge, July-October 1957. |
| | Mainly personal correspondence. Includes one letter from Farquharson (congratulations on the birth of Chain's twins). |

F. 54 Correspondence with Farquharson and McGeorge, January 1958.

Includes 8 pp. letter from Farquharson reporting on research in progress in the Microbiological Division of Beecham Research Laboratories and a 5 pp. typescript 'Aims of the research project ... on the production of penicillins with improved properties by suitable modifications of the penicillin molecule'.

F.55 Correspondence with Farquharson and McGeorge, February-March 1958.

<u>re</u> research projects on antibiotics and on production of ascorbic acid from blackcurrant pectin. Includes letter and report from V.L.S. Charley re the latter.

F.56 Correspondence with Farquharson and McGeorge, April-May 1958.

<u>re</u> arrangements for meeting at Brockham Park, progress of the ascorbic acid project and draft memorandum of the Food Standards Committee on Glucose Beverages (see also F.57).

F.57 'Comments on Draft Report on Soft Drinks by the Food Standards Committee of the Ministry of Agriculture, Fisheries and Food'. 2 typescript drafts.

Letter of comment from Dodds is also included in the folder.

F.58 Correspondence with Farquharson and McGeorge, June-July 1958.

re various research projects in progress. Includes some ms. notes by Chain.

F.59 Correspondence with Farquharson and McGeorge, September-October 1958.

Includes agenda for discussion on 12 September, arrangements for meeting in October, and 2 pp. typescript by Chain 'Some comments of [sic] the use of radioactive sugars in the glucose research programme'.

F.60 Correspondence with Farquharson and McGeorge, November 1958.

re research projects on antibiotics and glucose metabolism. Includes draft paper on 'Penicillin derivatives of p-Aminobenzylpenicillin' by Chain and others.

F.61 Correspondence with Farquharson, McGeorge and others, December 1958.

re work on antibiotics and glucose metabolism. Includes 2 pp. memorandum by G.N. Rolinson on future objectives in 'Penicin-Penicillin Work' and 3 pp. note by S. Johnson and F.R. Batchelor on 'Inhibition of Penicillinase by Triphenylacetyl Derivative of Penicin (AB. 1071)'.

See also F. 34.

F.62 Correspondence with McGeorge and others, January 1959.

Mainly re the report of the Food Standards Committee on Soft Drinks. Includes draft letters from Chain, Dodds and A.H. Douthwaite commenting on the report. Ms. letter from McGeorge, 30 January, also refers to negotiations remanufacture of synthetic penicillins with various companies in America.

F.63 Correspondence with Farquharson, McGeorge and others, February 1959.

Mainly re work on glucose metabolism. Includes 5 pp. 'Progress Notes' by F.R. Batchelor on various projects in the Microbiological Department of the Beecham Research Laboratories, and arrangements for visit to Rome by V.L.S. Charley.

F.64 Correspondence with McGeorge and others, March 1959.

Includes draft announcements in English and Italian of the successful production by Beechams of the basic nucleus of penicillin (6-aminopenicillanic acid) and further draft of letter from Chain re the Food Standards Committee Report on Soft Drinks.

F.65 Correspondence with McGeorge and others, April 1959.

Includes copy of press release in U.K. and U.S.A. recollaboration with Bristol Laboratories (q.v.) in production of synthetic penicillins.

F.66 Reports by two members of the Beecham Group as follows:

'Report on a Visit to the United States during the period
1st-16th April 1959', by F.P. Doyle.

'Report of Discussions with Members of Bristol Laboratories at Syracuse, New York', by G.N. Rolinson.

With covering letter to Chain from F.P. Doyle.

| CSAC 92/3/83 | |
|--------------|---|
| | Industrial consultancies and collaborative research |
| F.67 | Correspondence with McGeorge, May 1959. |
| | Mainly re methods of tartaric acid production and progress in collaboration with Bristol Laboratories. Includes an announcement of a change in the structure of the Beecham Group to allow for the expansion of the Research Laboratories |
| F.68 | Correspondence with Farquharson, McGeorge and C.D.W. Stafford, June-July 1959. |
| | Mainly re tartaric acid production and negotiations with Farmitalia and Astra re production of synthetic penicillins. |
| F.69 | Correspondence with Farquharson and McGeorge, July-August 1959. |
| | Mainly re progress in production of new penicillins and negotiations re Cephalosporin C. Includes letter from Farquharson re invitation to Chain to take part in a symposium at Bristol Laboratories. |
| F.70 | Correspondence with Farquharson, McGeorge and R.J.L. Allen, September 1959. |
| | re penicillin research, visit to Bristol laboratories, death of Sir Ian Heilbron, negotiations with Farmitalia, and 'slimming' qualities of PLJ. |
| F.71 | Correspondence with Farquharson, McGeorge and R.J. Allen, November 1959. |
| | re progress in work on penicillins and glucose research. Includes 2 reports by Allen on glucose projects. |
| F.72 | Correspondence with Farquharson and McGeorge, December 1959. |
| | re penicillin, including negotiations with Astra and others, and Cephalosporin C. |
| F.73 | 'Quantitative Radiopaperchromatographic Studies on the |

F.73 'Quantitative Radiopaperchromatographic Studies on the Absorption of Sugars from the Isolated Surviving Rat Small Intestine'.

Draft of paper by Chain, K.R.L. Mansford and F. Pocchiari, December 1959.

Correspondence with McGeorge, January 1960, with suggestions for alterations to the draft, is also included in the folder.

| | Industrial consultancies and collaborative research |
|------|--|
| F.74 | Correspondence with Farquharson and McGeorge, January 1960. |
| | Mainly re work on penicillins and negotiations with Farmitalia. |
| F.75 | Correspondence with Farquharson and McGeorge, February 1960. |
| | Mainly re progress of penicillin work. Includes request from McGeorge for an account by Chain of the early history of penicillin. |
| F.76 | 19 pp. typescript 'Annotations to the history of the penicillin discovery published in "Antibiotics" (Oxford University Press, 1949)', sent with covering letter to McGeorge, 23 February 1960. |
| | For other accounts by Chain of the history of the penicillin work at Oxford, see B.61-B.92. |
| F.77 | 'The Story of the New Penicillins' |
| | 8 pp. typescript draft by McGeorge, sent to the London Press Exchange Ltd., 23 February 1960. |
| | Folder also includes draft of Beecham Research Laboratories brochure on the new penicillins. |
| F.78 | 5 pp. typescript on 'The Problem of the Penicillin Resistant |

F.78

5 pp. typescript on 'The Problem of the Penicillin Resistant Staphylococcus' and 3 pp. describing Chain's initial collaborative work with Beechams, both sent to McGeorge, 4 March 1960.

A further draft of 'The Story of the New Penicillins' incorporating Chain's additions and sent to him by McGeorge, 10 March 1960, is also included in the folder.

F.79 Correspondence with Farquharson and McGeorge, March 1960.

Mainly re progress of penicillin work and negotiations with Farmitalia. Includes copies of correspondence re 'Broxil' and reports on penicillin and other research.

F.80 Correspondence with Farquharson and McGeorge, April 1960.

See also F.81.

F.81 'Man-Made Penicillins. An Achievement of Beecham Research Laboratories Ltd.'

4th draft of typescript describing the story of the new penicillins, sent to Chain by McGeorge, 12 April 1960.

F.82 Correspondence with Farquharson, McGeorge and Stafford, May-October 1960.

Includes arrangements for meetings and visits and discussion of the content of forthcoming lectures by Chain on the new penicillins.

F.83 Correspondence and papers, July and October 1961.

Includes letter from McGeorge, 31 October, enclosing a copy of the Patent Office Decision on H.S., Burton versus 'his colleagues' re assignment of the patent for Cephalospirin N.

See also K. 22-K. 25.

F.84 Correspondence, November-December 1961.

Chain's carbons only, with the exception of brief notes from Farquharson and G.N. Rolinson.

F.85-F.96 Correspondence with members of the Beecham Group, 1962.

From 1962 the record of Chain's collaboration with Beechams is more diverse, both in number of correspondents and spread of subject-matter, and it is therefore presented year by year, with a brief indication of subject-matter.

F.85 Allen, R. J. L. March-April

re amount of caffeine in an average cup of coffee.

F.86 Croydon, E. A. P. March-May

re antibiotics used in treatment of typhoid. Includes a report on a visit to Rome by Croydon to discuss trials of Beecham preparations in Sardinia.

F.87, F.88 Doyle, F. P. March-December

Doyle succeeded Farquharson (q.v.) as Director of Research at Brockham Park in March. Correspondence is mainly rearrangements for meetings, research planned and in progress and publication of penicillin story.

F.87 March-June

F.88 July-December

F.89 Farquharson, J.

January-March

re meetings, publications policy, research, etc. Includes personal correspondence following the announcement of Farquharson's retirement as Director of Research for reasons of ill health. A letter from his wife following his death in 1964 is also included here.

F.90, F.91 McGeorge, W.

January-November

re research, meetings, etc. Includes copies of reports sent to McGeorge on 'Spartase' (January), 'Impairment of Glucose Tolerance by Low Carbohydrate Diet' (April) and 'Fucidin' (May), and programme for research conference, October 1962, at which Chain gave the opening address.

F.90 January-March

F.91 April-November

F.92 Mallett, A. A.

May-December

re research equipment and experimental details.

F.93 Mansford, K. R. L. November-December

Includes drafts of a note on 'Glucose and Brain
Metabolism', intended for publication in The Lancet.

See also F.100.

F.94 Rolinson, G. N.

June-September

Includes reports on research planned and in progress, typescript draft of 'Studies on Penicillinase Produced by a Strain of Staphylococcus Aureus', by F.R. Batchelor, J. Cameron Wood, Chain and Rolinson, and note from Batchelor, 6 November, re submission of the typescript for publication in Proc. Roy. Soc. (Bibliog. 103).

F.95 Stafford, C. D. W.

March-October

Mainly re talk given by Chain at Journeés Bretonneaux (see J. 39) and correspondence with M. Barber (see K.8).

F.96 Wilkins, G. J.

February-September

re research, meetings, and development of fermentation technology.

| | Industrial consultancies and collaborati | ve research | |
|-------------|---|--------------------|--|
| F.97-F.103 | Correspondence, 1963. In alphabet | ical order. | |
| F.97 | Doyle, F. P. | January-October | |
| | Arrangements for meetings and visi research. | ts, reports on | |
| F.98 | McGeorge, W. | January-October | |
| | re resistance to penicillin, research on brain metabolism, and negotiations for collaboration with A. Isaacs. | | |
| F.99 | Mallett, A. A. | October | |
| | <u>re</u> BRL 700. | | |
| F.100 | Mansford, K. R. L. | February, October | |
| | Including further draft on 'Glucose Metabolism' (see also F.93). | e and Brain | |
| F.101 | Rolinson, G. N. | February-May | |
| | re methods and results of research | in progress. | |
| F.102 | Stafford, C. D. W. | January-September | |
| | Mainly <u>re</u> resistance to penicillin. some personal correspondence. | Includes | |
| F.103 | Wilkins, G. J. | July-November | |
| | Mainly re tetracycline patents. | | |
| F.104-F.115 | Correspondence and papers, 1964. | | |
| | In alphabetical order. Correspondence this period does not appear to have surv | | |
| | 3 folders containing data and printed m at the end of the sequence. | atter are included | |
| F.104 | Carrington, T. R. | July, October | |
| | re fermentation problems. | | |
| F.105 | Doyle, F. P. | February-November | |
| | Mainly <u>re</u> work on penicillin aller letter <u>re</u> use of ampicillin against also F.113). | | |

| | Industrial consultancies and collaborative research | | |
|-------------|---|--------------------------------|--|
| F.106 | Gilby, J. A. <u>re</u> fermentation costs. | September | |
| F.107 | Knudsen, E. T. Includes copy of memorandum on Acute Typhoid and Carriers'. | January, July 'Penbritin in | |
| F.108 | McGeorge, W. Includes press-cutting re penicill letters from R.J.L. Allen and E. | | |
| F.109 | Mallett, A. A. <u>re</u> fermentation techniques. | January, October | |
| F. 110 | Rolinson, G. N. Enclosing typescript of paper by I | July M.O. Moss. | |
| F.111 | Stafford, C. D. W. Includes press-cutting <u>re</u> the drug | July, August industry. | |
| F.112 | Wilkins, G. J. re licencing arrangements and invented in the meeting of the Canadian Pharmac facturers Association. | | |
| F.113 | Miscellaneous typescript and printed matter <u>re</u> treatment of typhoid and salmonella with ampicillin (see also F. 105). | | |
| F.114 | Reports and data, originally contained in folder labelled 'Worthing Production Reports'. | | |
| F.115 | Miscellaneous printed matter <u>re</u> American legislation on antibiotics. | | |
| F.116-F.118 | Correspondence and papers, 1965. The main correspondent is F.P. Doyle, often with information or enclosures for meetings of the Consultants Committee of which Chain was a member. The material is presented chronologically. There are virtually no letters from Chain in the sequence. | | |
| F.116 | January-April Includes note by R.J.L. Allen of J. Yudkin re sucrose and glucose on Bacterial Tomato Canker. | | |

F.117 May-August

F.118 October-December

Includes note from McGeorge re cholesterol levels and glucose, 3 pp. typescript 'Notes on the Use of Antibiotics in the Veterinary Field', and copy of letter to the Medical Research Council re virus research.

F.119-F.121 Correspondence and papers, 1966

In chronological order. There are no letters <u>from</u> Chain for this year.

F.119 January-April

Arrangements for meetings and visits, miscellaneous correspondence re research.

F.120 May-August

Includes invitation to speak at Beecham Representatives'
Conference in October, report of meeting re Microbial Protein project at Imperial College, review of
the South African ethical medicine market and
miscellaneous correspondence re research.

F.121 September-December

Includes drafts of letter from Doyle to Chain re proposal of Beecham Research Laboratories to sponsor a research project at Imperial College on microbial metabolites, and miscellaneous correspondence re research.

F.122-F.125 Correspondence and papers, 1967

In chronological order.

F.122 January-April

Includes draft affidavit by Chain for use in proceedings by the Beecham Group against Bristol Laboratories for infringement of hetacillin patents, a note on negotiations reliquid glucose with Ranks Hovis McDougall and miscellaneous correspondence re research and meetings.

F.123 May-August

Includes correspondence <u>re</u> alleged cure for baldness discovered by Israeli scientists, copy of typescript on 'Sucrose and Cariogenesis', and 2 memoranda on interferon sent to Chain for information.

See also F.124.

F.124 Correspondence re journey to Israel, July 1967, to discuss arrangements for collaboration between Beechams and Plantex of Natanya.

F.125 September-December

Includes correspondence <u>re</u> arrangements for work at Imperial College financed by Beecham Research Laboratories and letter from R.J.L. Allen <u>re</u> vitamin C and colds.

F.126-F.128 Correspondence and papers, 1968
In chronological order.

F.126 January-April

Includes notes of discussion with M. Sela and others re collaboration with the Weizmann Institute and Yeda, correspondence and press-cuttings re infective drug resistance, and typescript on 'Vitamin C and the common cold'.

F.127 May-August

Includes 'Notes on Meetings at the Weizmann Institute, Israel, 23-26 May 1968', announcement of reorganisation of research departments at Brockham Park, and miscellaneous correspondence re meetings and visits.

F.128 September-December

Includes drafts of letter from Beechams offering to sponsor a three-year research project at Imperial College on the mode of action of penicillins, correspondence regrant for research on microbial metabolites (see D.127, D.128) and miscellaneous correspondence re research, meetings and visits.

F.129 Correspondence and papers, 1968-70, sent to Chain as a member of Beechams' Agricultural Projects Consultants
Committee. Most of these are concerned with the Report of the Joint Committee on Antibiotics in Animal Husbandry.

- F.130-F.139 Correspondence and papers, 1969
 In alphabetical order.
 - F.130 Batchelor, F. R. July

 <u>re proposed Penicillin Symposia in Australia.</u>

Britton, R. H. W. October re Consultants Committee Meetings.

Brown, D. M. December

re double-stranded (ds) RNA research.

- F.131 Cole, M. July

 <u>re</u> screening of microbial metabolites for insecticidal activity.
 - Croydon, E. A. P. April
 Invitation to speak at symposium in New York.
- F.132 Dewdney, J. M. June-December
 Includes reports and notes of meetings re ds-RNA
 research.
- F.133, F.134 Doyle, F. P.
 - F.133

 re organisation and funding of Beecham research
 project on 'Mode of action of penicillins', conducted at Imperial College.

 January-December
 - F.134 Miscellaneous correspondence <u>re</u> meetings, research, etc. March-December
- F.135 Nayler, J. H. C. August

Rolinson, G. N. December
Enclosing research data.

F.136-F.138 Smither, R. September-October 3 letters enclosing copies of evidence re action of Beecham Group Ltd. vs. Zenith Laboratories Inc. (over ampicillin patents), as follows: F.136 Letter of 17 September enclosing copy of transcript of Chain's deposition given on 2 September 1969. F.137 Letter of 14 October enclosing copies of affidavits by others for Chain's perusal. F.138 Letter of 23 October enclosing draft of 'Second Affidavit of Ernst B. Chain' commenting on material in F.137. F.139 Stafford, C. D. W. Personal correspondence. October Wilkins, G. J. January-May re symposia in Moscow and Australia. Letter of 8 May contains some background information to the Beecham vs. Zenith case. F.140-F.145 Correspondence and papers, 1970 In alphabetical order. F.140 Carrington, T. R. February-March Invitation to lecture. Croydon, E. A. P. January re sensitivity of gonococci.

F.141 Dewdney, J. M. March-August
Includes notes of meetings and draft paper on
penicillin allergy.

F. 142 Doyle, F. P. January-September

Includes programme and summaries of papers for Beecham
Research Conference, 27–29 May 1970, and some
correspondence and notes from colleagues re research
on ds-RNA and mode of action of penicillins.

F.143 Mallett, A. A. December

Copy of letter to Farmitalia re Penicillin G.

Planterose, D. N. January-April
Includes drafts of papers for submission to Nature
and other journals.

F.144 Rolinson, G. N. March
Personal correspondence.

Smith, H. March

re Kav values.

Stafford, C. D. W. February

Personal correspondence.

F. 145 Wilkins, G. J. May

Includes memorandum on 'Antibiotics in the treatment of Gonorrhoea'.

An agenda for December meeting of the Scientific Committee on Non-Specific Immunity is also included in the folder.

F.146-F.148 Correspondence and papers, 1971

- F.146 Letters from F.P. Doyle and others re arrangements for meetings and administration of Beecham research grants to Imperial College.
- F.147 Notes of various meetings and visits during 1971 sent to Chain for information. Includes report on discussions during a visit to the Max Planck Institute by Chain and representatives of Beecham Research Laboratories.
- F.148 Drafts and reports on research planned or in progress, sent to Chain for information. Includes undated typescript outlining 'Proposals for experimental work on the effects of various types of "fibre" and other non-nutritive materials on cholesterol and bile acid metabolism in the rat.'

See J.118 for discussion meeting on 'Effect of Fibre in Food' attended by representatives of Beechams and others, November 1971.

F.149, F.150 Correspondence and papers, 1972

Letters from various members of Beechams <u>re</u> arrangements for meetings, research in progress, etc.

F.149 February-August

Includes typescript by D.M. Brown on 'The Approach to the Pharmacological Study of ds-RNA' and note by J.M. Dewdney on 'Meeting with Professor Westphal at Walton Oaks, 14 July 1972'.

F.150 September-December

Includes letter from Chain re extension of scope of his collaboration with Farmitalia and miscellaneous correspondence reresearch, meetings and visits.

- F.151-F.159 Correspondence and papers, 1973
 In alphabetical order.
 - F.151 Beeson, M. F. May

 Includes note by Beeson and A. Macdonald on 'The
 Effect of BRL 5907 on the Ultrastructure of the
 Rabbit Lung'.
 - F. 152 Brown, D. M. April-November

 re organisation and progress of work on ds-RNA.
 - F.153 Dewdney, J. M. March-December

 Includes reports of various meetings, notes on visit to the Weizmann Institute to discuss collaborative research, and copies of press reactions to publication of experimental results on ds-RNA and foot-and-mouth disease.
 - F.154 Doyle, F. P. January-November

 <u>re</u> arrangements for meetings and organisation of research.
 - F.155 Green, J. September-December

 Includes copies of correspondence with P.N. Magee
 re work on bagasse.
 - F.156 Mallett, A. A. August-December

 re research and meetings at the Beecham Laboratories
 at Worthing. Includes reports and correspondence
 from other members of the Worthing laboratory.

F.157 Mansford, K. R. L. February-October

Mainly re proposed 'Colloquium on Fibre'.

Nayler, J. H. C. April

Enclosing notes on symposium at the Sandoz Research
Laboratories, Vienna, 29 March 1973.

Smither, R. August

re Dutch patent application for acylation of
6-aminopenicillanic acid. Includes copy of
affidavit filed by Chain in February 1972.

F.158 Wilkins, G. J. January-December

re planning and organisation of research and arrangements for the continuation of Chain's consultancy after his retirement from Imperial College.

F.159 Miscellaneous data and reports sent to Chain for information.

F.160-F.163 Correspondence and papers, 1974

Mainly in alphabetical order.

F.160 Dewdney, J. M. January-December

Includes reports of meetings with Sandoz and Max
Planck Institute and material re Interferon Inducers
project.

F.161 Doyle, F. P. January-October
Includes brief correspondence with W.G. Petley.

F.162 Green, J. January-October

Mainly re research on dietary fibre. Includes drafts of 2 papers.

F.163 Correspondence with other colleagues at Beechams, February-December 1974, remeetings, visits, research, etc.

F.164 Correspondence and papers, 1975-76

Includes note of meeting <u>re</u> interferon, June 1975, draft of paper by J.M. Dewdney and brief correspondence <u>re</u> consultancy arrangements.

F.165, F.166 Correspondence and papers, 1977

- F.165 Letters from various colleagues at Beechams re research, meetings, etc.
- F.166 Correspondence with R. Smither re Beechams' action against Bristol-Myers for infringement of amoxycillin patents. Includes copies of related French patents.
- F.167 Correspondence with F.P. Doyle and others, 1978

 Mainly rearrangements for dinner-party to discuss the future of antibacterial chemotherapy, and for a visit to America by Chain in October.
- F.168

 Arrangements for visit to Beecham Laboratories at Worthing,
 July 1979 (cancelled due to illness).

 Folder also includes a report by D.N. Planterose on visit
 to the Weizmann Institute, April 1979.
- F.169-F.172 Correspondence with H.G. Lazell, Chairman of the Beecham Group 1958-68.
 - F.169 1960-65

Mainly arrangements for social occasions, including programme for a visit to Israel by Lazell in 1965. 1962 correspondence refers to the contributions of the pharmaceutical industry to the development of medical research.

F.170 1966-69

Mainly social correspondence.

F. 171 1970-71

Includes arrangements to meet in Bermuda, December 1970, comments on national scientific policy and the future development of the Beecham Group, and a long letter from Chain, 13 November 1970, containing an account of his early associations with Lazell and the work leading to the discovery of 6-aminopenicillanic acid.

F.172 1973-75, 1977

Includes accounts of discussions with F.P. Doyle and others (1973), and comments on Lazell's book 'From Pills to Penicillin' (1975).

F.173, F.174 Correspondence with Sir Ronald Edwards, Chairman of the Beecham Group 1968-75.

See also K.70, K.71.

F.173 1969-73

F.174 1974-75

F.175

BIOCHEMIE GMBH

1955-59, 1974

Correspondence re collaborative research, exchanges of visits, etc.

Includes several letters from E. Brandl (Head of the Biological Research Division) who spent some time at the Istituto Superiore di Sanità and published 3 collaborative papers with Chain and others.

F.176-F.178

BRISTOL LABORATORIES INC.

1951-69

F.176

Correspondence with A.R. Menotti (Vice-President and Scientific Director) re arrangements for Chain to visit the Bristol Laboratories in October 1959 (see also F.177). Some fragmentary earlier correspondence is also included here.

F.177

2 typescript drafts for talk on 'Penicillin: Its Past, Present and Potential Future', delivered by Chain during his visit to Bristol Laboratories, 26 October 1959.

2 pp. ms. draft for undated after-dinner speech is also included here.

F.178

Correspondence, 1969, re proposal to film an interview with Chain for an exhibition on the history of penicillin.

F. 179

BRITISH PETROLEUM (BP)

1965

Correspondence with F.E. King re arrangements for meeting with Chain to discuss B.P.'s Protein from Petroleum Project.

F.180, F.181

BRITISH PETROLEUM (BP) PROTEINS LTD. 1973, 1977

Correspondence with H. Watts (General Manager) and others re economic and other aspects of various methods of yeast and single cell protein manufacture.

F.180

October-November 1973

F.181

January-April 1977

Includes ms. and typescript drafts of letter from Chain commenting on the profitability and efficiency of the joint BP/ANIC Italproteine yeast production plant in Sardinia.

F.182

CALMIC LTD.

1969

Arrangements for research to be conducted at Imperial College on gamma-linolenic acid. Most of the correspondence is conducted by K.R.L. Mansford.

F.183

CARLO ERBA

1961-75

Fragmentary correspondence, mainly with staff of the Istituto Carlo Erba per Ricerche Terapeutiche revisits to Chain's laboratory, etc.

Letter from G. Vita, 12 December 1968, refers to possible future arrangements for co-operation with Chain, but these did not materialise until Spring 1972 when he negotiated a 3-year contract as consultant to Carlo Erba and Farmitalia (q.v.) both by that time subsidiaries of Montecatini-Edison (q.v.).

The sequence also includes a letter from the President of Carlo Erba, April 1972, announcing Chain's election as a member of the Administrative Council. For correspondence re Chain's refusal to accept this appointment see F.260.

F.184

CIBA-GEIGY LTD.

1974-75

Correspondence with P. Loustalot and others <u>re</u> evidence for carcinogenic effects of reserpine. Includes a letter from D. Berenblum in response to request for advice from Chain.

F.185

COGER S.p.A.

1961

Letter, June 1961, following visit by the Technical Director to discuss problems involved in setting up a plant for the manufacture of citric acid in Egypt.

F. 186 CYANAMID OF GREAT BRITAIN LTD. 1970

Correspondence <u>re</u> the use of antibiotics in animal feeding stuffs following a discussion at the Royal Society of Medicine on 19 January 1970. Includes drafts of Chain's contribution to the discussion.

F.187 EDWARDS HIGH VACUUM 1972, 1975

Correspondence re specifications of freeze-drying equipment; invitations to visit the plant at Crawley.

F.188-F.190 ENI (ENTE NAZIONALE IDROCARBURI) 1973-79

F.188 Correspondence with G. Mazzanti (Director-General, ENI), 1973-75, mainly arrangements for meetings to discuss ENI's involvement with various projects for yeast and single-cell protein production. Much of the correspondence is conducted by telex.

F.189 Correspondence with R. Fourquet (Director, ENI) and others, 1975-79. Includes press-cuttings re Italproteine plant in Sardinia (owned jointly by BP and ANIC - a subsidiary of ENI), reports and data on interferon and some personal correspondence.

F.190 Correspondence with G. Mazzanti, January-June 1979.
Mazzanti's letter of 1 June welcomes Chain to membership
of the Committee for Research and Innovation of the ENI
Division for Planning and Development.

F.191-F.200

FARMITALIA

1955-76

Chain was first introduced to Farmitalia by D. Marotta in 1949, and several members of the company worked in his laboratory at the Istituto Superiore di Sanità. One of the results of this collaboration was the development of methods for the production of a lysergic acid derivative (the ethoxamide) by submerged culture of Claviceps paspali.

Unfortunately, with the exception of some published papers, very little remains to document the first twenty years or so of the collaboration. But in Spring 1972, Chain signed a 3-year contract to act as a consultant to Farmitalia and Carlo Erba (q.v.), both by that time subsidiaries of Montecatini Edison (q.v.).

The period of his consultancy is quite well documented with correspondence, reports on work in progress, accounts of meetings, etc.

- F.191 Fragmentary correspondence (mainly incoming letters only), 1955-70, from various members of the company. Mainly arrangements for visits, meetings, etc. Includes some personal correspondence.
- F.192 Personal and scientific correspondence, March-June 1972.
 Includes long letters from R. Falini and G.T. Banks re
 Farmitalia's plant at Settimo Torinese.
- F.193 Correspondence, July-August 1972. Includes a further long letter from G.T. Banks reporting on a visit to Milan in July.
- F.194 Correspondence, September-November 1972. Includes 2 letters from Upjohn International <u>re</u> antibiotics and steroids discovered in their laboratories.
- F.195 Correspondence, January-March 1973, including data, reports and comments on research and policy. Some of Chain's letters mention proposals for a European Institute for Functional Biochemistry. See also F.266, K.65, K.185.
- F.196 Correspondence, April-November 1973.
- F.197 Correspondence, October 1973-March 1974, mainly re Settimo Torinese.

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| F.198 Correspondence, | December | 1973-April | 1974. | |
|-----------------------|----------|------------|-------|--|
|-----------------------|----------|------------|-------|--|

- F.199 Correspondence and reports, May-July 1974.
- F.200 Correspondence, 1975, 1976. 2 letters only. Letter from Chain to L. Zeller, 14 February 1975, discusses possible conditions for the renewal of his contract with Farmitalia.

F.201

FISONS LTD.

1975-76

Brief correspondence with H.J. Kahn (Chairman, Agrochemical Division).

F.202

GALENIKA

1959, 1962

Very fragmentary correspondence consisting of:

2 letters from Chain to the General Manager (P. Arambasic), 1959, one of which refers to a memorandum by Chain 'which summarises the most important points of the conversation we had with the Minister of Industry, and sets out my recommendations with regard to the establishment of a central antibiotics plant and a research institute for industrial biochemistry'.

Letter from the Director of the Research Laboratory, 1962, asking Chain to accept one of his staff as a visiting researcher.

F.203-F.211

GRÜNENTHAL (CHEMIE GRÜNENTHAL GMBH) 1953-78

Chain's only professional contact with Grünenthal was in 1970 when he appeared as an expert witness for the defence at the hearing at Alsdorf (re thalidomide). This episode is documented at F.204-F.209.

The remainder of the material consists of correspondence with Dr. Heinrich Mückter which extends from 1953-78 on both personal and scientific topics.

F.203

Correspondence with H. Mückter, 1953, 1961, 1963, mainly re arrangements for meetings and visits.

F.204

Correspondence with H. Mückter and others, October 1969– February 1970, including arrangements for Chain to give evidence in the thalidomide trial on 2 February 1970.

See also F.205-F.209.

F.205

Ms. and corrected typescript drafts for Chain's evidence. In German.

| | Industrial consultancies and collaborative research |
|------------|--|
| F.206 | Ms. and corrected typescript draft of English translation of Chain's evidence. |
| F.207 | Transcript of examination of Chain during the trial on 2 February 1970. |
| F.208 | Background papers sent to Chain for information, on thalidomide and the progress of the trial. |
| F.209 | Correspondence with H. Mückter, September 1970- February 1971, including comments on the verdict of the thalidomide trial. |
| F.210 | Personal and scientific correspondence, 1972-73. |
| F.211 | Correspondence, 1974-78. Includes arrangements for a visit to Munich by Chain in May 1974, and correspondence re virazol, 1976. |
| .212-F.215 | HINDUSTAN ANTIBIOTICS LTD. 1952-78 |
| | Chain's connection with Hindustan Antibiotics arose from his service on the Expert Committee on Antibiotics of the World Health Organization (q.v.) and through the training facilities offered by his laboratory. Some of the Indians who came to work in Rome continued to correspond with Chain for several years after their return with news of progress in the factory and accounts of their own research. |
| F.212 | 'Suggestions with Regard to the Organisation of the Indian Penicillin Plant'. |
| | 1 p. typescript, 4 February 1952. 1 p. ms., n.d., re the patenting of antibiotics in India is also included here. |
| F.213 | Correspondence with M.J. Thirumalachar and others, 1954-78. |
| F.214 | Letter from N.L. Macpherson (Chief, Industrial Development Section, U.N. Technical Assistance Administration), November 1958, enclosing accounts of the establishment of penicillin factories in India, Yugoslavia and Chile. |
| F.215 | Correspondence 1978-79. |
| | With K.S. Gopalkrishnan, mainly re arrangements for Hindustan Antibiotics Silver Jubilee celebrations in 1979. |

1979.

F.216-F.218 HOECHST (FARBWERKE HOECHST AG.) 1954-78

Correspondence with various members of the company, mainly re arrangements for meetings and visits.

F.216 April 1954-January 1955

Arrangement for visit to Chain's laboratory in Rome.

F.217 May 1962-December 1963

Includes arrangements for Chain to visit the Hoechst laboratories in Frankfurt, September 1962, correspondence re Chain's Trueman Wood Lecture, 1963, and invitations to Chain to lecture in Germany.

F.218 1968-78

Includes correspondence with Hoechst Pharmaceuticals Research Ltd. re visit to laboratory in Milton Keynes, June 1974.

F.219-F.227 IMPERIAL CHEMICAL INDUSTRIES LTD.
(I.C.I.) 1952-78

Correspondence, reports, arrangements for meetings, etc.

Mainly <u>re</u> single cell proteins including arrangements for collaboration with the National Iranian Oil Company (q.v.) and work on double stranded (ds) RNA.

Includes some personal correspondence.

F.219

Correspondence with various members of the company, 1952-71, re visits, research, etc. Includes request trom Chain for information re anticorrosive paints for iron fermenters (1959) and invitation to dinner in honour of George Porter and Derek Barton, with signed dinner menu (1970).

F.220 Correspondence, 1972-74

Mainly arrangements for meetings and visits to discuss work on microbial biomass.

See also F.221.

F.221

| Personal a | nd scientific cor | respondence with A. Spinks, |
|------------|-------------------|-----------------------------------|
| | | Includes typescript of lecture by |
| | | nd university research'. |

- F.222 Correspondence and reports, February-July 1975, resingle cell protein production with particular reference to negotiations for co-operation with the Iranian government.
- F. 223 Correspondence and papers, August-December 1975, including arrangements for meetings and visits to discuss single cell protein production.
- F.224 Further correspondence re Iranian single cell protein project, February-December 1976.
- F.225 Correspondence with I.C.1. Pharmaceuticals Division re double stranded (ds) RNA, March-October 1976.
 Includes 2 letters from C.A. Clarke.
- F.226 Further correspondence re work on ds RNA, 1977-78, including arrangements for meetings and visits.
- F.227 Further correspondence re Iranian protein project and the erection of an experimental plant at Billingham, February-April 1978.
- F. 228 ISF S.p.A. 1976

Correspondence <u>re</u> arrangements for Chain to visit ISF's research laboratories, and letter <u>re</u> proposal for collaboration with Astra for production of 6-APA.

F. 229 THE ISRAEL PENICILLIN AND BIOLOGICAL PRODUCTS CO. 1949

Correspondence re arrangements for Chain's appointment as a consultant.

F.230

ISTITUTO SIEROTERAPICO E VACCINO GENO TOSCANO "SCLAVO" S.p.A. 1958-63

Correspondence with the Director (D. d'Antona) and others, 1958-63. Includes several invitations to Chain to visit the 'Palio' as guest of the Institute. 1958 correspondence is mainly re analysis of local mineral water.

See also K. 164.

F.231-F.233

LEPETIT S.p.A.

1953-71

F.231

Letters from G. Zerilli-Marimò and others, 1953-55, mainly re arrangements for Chain to visit Lepetit's factory at Torre Annunziata (Naples). None of Chain's replies for this period has survived.

F.232

Further correspondence, 1961-63, including invitations to Chain to attend various functions at Torre Annunziata and Milan.

F.233

Correspondence, 1970-71, re a film about antibiotics produced by Lepetit in which Chain was asked to participate. Includes English and Italian versions of his script and arrangements for filming in Milan.

F.234, F.235

THE LILLY RESEARCH LABORATORIES, ELI LILLY AND CO. 1953-68

Correspondence with members of the Lilly Research Laboratories.

F.234

1953-59

Includes correspondence re supply of insulin and glucagon samples to Chain, arrangements for exchange of visits and information, and possible collaboration in the field of biological production of lysergic acid derivatives (1959).

F.235

1963, 1968

Includes correspondence and printed matter <u>re</u> work on interferon at the Lilly Research Laboratories.

F.236-F.251 MARKS AND SPENCER LTD.

Chain's early contacts with Marks and Spencer were through his personal friendship with Israel M. Sieff (later Lord Sieff of Brimpton) and other members of the Board. In October 1961 he was appointed as a member of a panel of Scientific Consultants 'to study and advise us on problems which affect the production of goods which are manufactured for sale in our stores'.

The material includes notes and reports on matters affecting the Science Panel, agenda and minutes of meetings, research papers and correspondence with members of the company. Personal correspondence with members of the Marks, Sieff and Sacher families which includes many references both to Marks and Spencer and to various Jewish affairs is included at F.236-F.240.

F.236-F.240 Correspondence with members of the Marks, Sieff and Sacher families, 1953-79. In alphabetical order.

F.236 Marks, S. (later Baron Marks of Broughton) 1953-61

Includes a 3 pp. typescript memorandum sent to Marks by Chain in November 1961 entitled 'Notes on the history of the penicillin development and the importance of collaboration between universities and industry'.

F.237 Sacher, M. M. 1957-72

Includes arrangements for Chain to speak at a dinner, 23 April 1958, commemorating the Tenth Anniversary of the Independence of Israel. The text of Chain's speech is at G.17.

F.238 Sieff, I. M. (later Baron Sieff of Brimpton) 1955-68

Personal and social exchanges, arrangements for meetings and visits, correspondence re Jewish affairs and a 4 pp. letter from Chain, 1962, on the application of quantitative analytical chemical methods to problems of food technology.

F.239 Sieff, J. E. 1965-72

F. 240 Sieff, M.J. (later Baron Sieff of Brimpton) 1958-76

Personal and business correspondence.

F.241-F.251 Correspondence relating to Chain's scientific advisory work

for Marks and Spencer. The chief correspondents are N. Goldenberg and I. Levy.

F.241 1961

Includes letter from I.M. Sieff, 31 October, confirming Chain's appointment as a member of the panel of Scientific Consultants, and correspondence and reports on banana rot.

F. 242 1962

Includes letter from Chain to A. J. Donlon, 3 May 1962, in which he writes 'I really feel that I cannot accept money for the work I am doing for my friends at M and S. I shall be quite satisfied with the reimbursement of expenses (if there are any) connected with this work, but would really feel embarrassed if I accepted a regular remuneration for work for friends for whose social and humanitarian contributions both in Britain and in Israel I have an unlimited admiration'.

F.243 1963

Arrangements for meetings of the Science Panel and related correspondence, mainly re storage of cooked and uncooked chickens.

F.244 1964

Includes agenda, minutes and other related papers for Science Panel meetings.

F. 245 March-June 1965

Correspondence and reports, mainly re flame retardant textiles.

F. 246 July-December 1965

Correspondence and reports, mainly re irradiated foods and insecticides.

F.247 January-June 1966

Includes arrangements for meetings with the Research Director, Spillers Ltd.

F.248 January-December 1967

Includes correspondence with S.A. Goldblith rearrangements for him to lecture on 'The Preservation of Foodstuffs by Irradiation'.

F. 249 1969

<u>re</u> nitrites and nitrosamines. Includes correspondence from 1. Berenblum.

F.250 1970-71

F.251 1972, 1974

Includes further correspondence from S.A. Goldblith.

F.252-F.257 MERCK SHARP & DOHME 1954-76 F. 252 Brief correspondence with various members of the company, 1954-58. F.253 Correspondence with M. Tishler, November 1961-February 1963, re statement signed by Chain and others affirming the usefulness and productivity of the research laboratories of the American pharmaceutical industry. F.254 Further correspondence with M. Tishler and others, October 1962-December 1963. Mainly arrangements for meetings and visits, including visit by Chain to the Merck Research Laboratories in March-April 1963 to assemble background material for his forthcoming Trueman Wood Lecture (see also G.35, G.36). F.255 Personal and scientific correspondence, 1968-70. F.256 Correspondence with L.H. Sarrett, May-October 1971, re work on ds RNA. F.257 Miscellaneous correspondence with L.H. Sarrett and others,

1972-76.

F.258-F.267

MONTECATINI EDISON S.p.A. (later MONTEDISON) 1954-75

Chain's contacts with this company were mainly through Farmitalia (q.v.). In Spring 1972 he agreed to act as consultant to Farmitalia and Carlo Erba, both members of the Montecatini Edison group and most of the following papers are related to this consultancy. They include reports and correspondence on the research activities of both companies culminating in a 27 pp. memorandum written in November 1973 and describing the history of Chain's own contacts with the Italian pharmaceutical industry as well as detailed recommendations for action.

1974 correspondence includes several references to proposals for the creation of an independent European Research Institute for Physiological Biochemistry in Italy in which Chain hoped that Montedison would play a leading part. See also F.195, K.185.

F.258

Brief correspondence with L. Morandi (Vice-President) and others, 1954-55.

F.259

'First preliminary appraisal of research activities at Farmitalia, Via Gracchi and Carlo Erba Research Center (sic)'. 3 pp. typescript summarising conclusions reached at a meeting between Chain and B. Camerino, 16 March 1972.

F.260

Correspondence, March-September 1972. Includes:

6 pp. memorandum by B. Camerino, 20 April, on coordination of the research effort of Farmitalia and Carlo Erba.

Correspondence with G. Mazzanti and E. Pizzi arising from Chain's refusal to accept appointment to the Board of Carlo Erba.

Correspondence with D.H.R. Barton re Camerino's proposal to offer a 5-year grant to Imperial College for research on modified antibiotics.

F.261

Correspondence with B. Camerino, March-July 1973, mainly re research policy and progress. Also included is a letter from Chain to A. Grandi, 16 July, re his professional relationship with ENI (q.v.).

- F.262 Correspondence with A. Fornara, September-November 1973, following a meeting in Milan on 18 September to discuss plans for the research, development and production activities of Farmitalia and Carlo Erba.
- F. 263

 27 pp. typescript summary of Chain's discussion with Fornara on 18 September 1973, including a brief history of his personal and professional contacts with Farmitalia from 1949. A copy of this was sent to Fornara with a covering letter on 12 November 1973.
- F. 264 Ms. and typescript drafts of F. 263.
- F. 265

 Correspondence with U. Colombo and others, November 1973-April 1974, mainly reproduction of yeast from carbohydrates. Includes miscellaneous reports and data sent to Chain for information.
- F.266 Correspondence with U. Colombo and A. Grandi, March-September 1974, mainly reproposals for the establishment of an independent Institute for Physiological Biochemistry. Includes a letter from the Secretary-General of the Fondazione Giovanni Agnelli, 31 January 1974.
- F.267 Correspondence with the President of Montecatini Edison,
 November-December 1974, and a letter to A. Grandi, January
 1975, re arrangements to meet.

F. 268 THE NATIONAL DRUG COMPANY, Philadelphia

1958, 1962

Correspondence with successive Research Directors rearrangements for visits to discuss possibilities for collaborative research.

F.269-F.281

NATIONAL IRANIAN OIL COMPANY (N.I.O.C.) 1974-78

Correspondence, memoranda and reports re projects for single cell protein production, 1974-78.

Includes exchanges with other Iranians including members of the government and academic colleagues. Chain was appointed as a Consultant to the Iranian Protein Committee in October 1975 and attended several of its meetings.

In addition to the single cell protein project, Chain acted as a go-between for Astra (q.v.) in negotiations with Iran re penicillin production.

Some personal correspondence is also included in the sequence.

F. 269

April-October 1974

Correspondence with D. Alliance and A. Badakhshan (General Manager, Research and Laboratories Group, N.I.O.C.) arising from Chain's offer to advise the Iranian authorities about methods of single cell protein production.

F.270

January-February 1975

Correspondence prior to and arising from a visit to Tehran, February, 1975. Includes 3 pp. ms. notes on the visit and the journey to Iran from Australia where Chain had been attending a congress.

F.271

March 1975

2 typescript drafts of report by Chain on SCP (single cell protein) production, sent to A. Fazeli (Head of Biochemical and Bioenvironmental Research Centre, Arya-Mehr University, Tehran).

Related ms. notes and printed matter are also included in the folder.

F.272

March-April 1975

Correspondence with Fazeli and others arising from Chain's memorandum on SCP production and re arrangements for a visit to Iran in May. (See also J.157.)

F.273 May-September 1975

Mainly notes and correspondence arising from Chain's visit to Iran in May and arrangements for visit in October.

F. 274 Typescript of address on single cell proteins delivered by Chain to the Iranian Protein Committee, 7 October 1975.
18 pp.

F. 275 October - November 1975

Includes accounts of meetings and visits during Chain's visit to Iran in October which included an audience with the Shah. Correspondence also refers to his appointment as consultant to the Iranian Protein Committee, and proposed collaboration with Ranks Hovis McDougall Ltd. on production of single cell protein.

F.276 December 1975-April 1976

Correspondence with A. Badakshan (Chairman, Iranian Protein Committee) and others. Includes several letters arising from a visit by Chain to Tehran in February 1976 and 6 pp. typescript 'First draft proposal for fermentation pilot plant unit for continuous and batch fermentation'. Correspondence also refers to proposed collaboration with I.C.I. and Nestlé.

F.277 June-December 1976. Includes:

Correspondence with suppliers of scientific instrumentation re equipment ordered by N.I.O.C. for their fermentation pilot plant.

Minutes of Chain's comments at meeting of the Protein Committee, 22 November 1976.

Note of brief address by Chain at meeting organised by the Royal Institute of International Affairs on 'Iran 1980-85, Problems and Challenges of Development', 7 December 1976.

Correspondence re negotiations with I.C.I. and Nestlé.

F.278 December 1976-April 1977. Includes:

Correspondence with K. Cantell and others resupply of interferon to treat Agha-Khan Bakhtiar (Director, N.I.O.C.).

Correspondence re negotiations with Astra for collaboration with Iran on penicillin production.

Some personal correspondence.

F.279 May-October 1977. Includes:

Correspondence arising from Chain's visit to Iran in May, including a report on the N.I.O.C. fermentation pilot plant at Rey.

Continuing correspondence re negotiations with Astra (re penicillin) and Nestlé (re single-cell protein).

Some personal correspondence.

F. 280 November 1977-February 1978. Includes:

Correspondence with D. Alliance and E. Katzir (President of Israel) re contacts between Israel and Iran.

Minutes of Chain's remarks at meeting of the Iranian Protein Committee, 12 November 1977.

Further correspondence re negotiations with Astra, Nestlé, I.C.I and Ranks Hovis McDougall.

Some personal correspondence.

F.281 March-December 1978

Continuation of correspondence in F.280, including a long ms. letter from H. Gaguik, 4 September, with comments on the Iranian political situation.

F.282-F.292

NESTLÉ ALIMENTANA S.A.

1967-78

(includes AFICO, NESTEC and other subsidiaries)

Chain's collaboration with Nestlé and its subsidiary companies began in 1967. A contract for the growing of bacterial biomass in the fermentation plant at Imperial College was followed by further opportunities for collaborative research.

Chain's main contact in the company was Professor Louis Rey, the Research Director, with whom much of the correspondence is conducted. They became firm personal friends and remained in close touch after Rey's resignation from his full-time post with Nestlé in 1974 due to ill health. (See K.194-K.196.) Chain's main correspondent at Nestlé from 1975 was Dr C.L. Angst.

F.282

1967. Includes:

Arrangements for visit by Chain to Nestlé in May and return visit by L. Rey and others from Nestlé to Imperial College in June.

Correspondence with K.A. Blaxter re collaboration with the Rowett Research Institute (see also K.16).

Report and correspondence <u>re</u> visit to U.S.A. by Chain and L. Rey in November.

F.283

1968. Includes:

Arrangements for research grant to Imperial College for growing bacterial biomass in the fermentation pilot plant.

Progress reports on Nestlé Microbial Protein Project, July and October 1968.

Miscellaneous correspondence re meetings and visits.

F. 284

1969. Includes:

Correspondence (administrative and scientific), research reports, notes of meetings, etc. re collaborative research in progress at Imperial College.

Miscellaneous arrangements for visits.

F.285

1970. Includes:

Arrangements for meetings and visits.

Miscellaneous administrative correspondence.

Ms. and typescript of brief address by Chain introducing a lecture by L. Rey at Imperial College, October 1970.

F.286

1971. Includes:

Scientific and administrative correspondence recollaborative research.

Arrangements for meetings and visits.

See also F.287.

F. 287

Ms. and typescript drafts for interview of Chain by L. Rey (in French) recorded for a film produced by Nestlé entitled 'La Biosynthèse Industrielle: Micro-organismes et Fermentation contrôlée'.

Brief correspondence, 1970-71, is also included here.

F.288

1972

Mainly re arrangements for visits by Chain to Switzerland to advise on research in progress. Includes agendas for visits in May, July and November and correspondence with L. Rey re possible collaboration between Nestlé and Ranks Hovis MacDougall.

F. 289

1973

Includes some personal correspondence with L. Rey.

F.290

1974. Includes:

Arrangements for meetings and visits.

Correspondence with C.L. Angst <u>re</u> proposals for cooperation with Montedison in the field of biosynthetic protein production.

Personal correspondence with L. Rey.

F.291 1975-76

Correspondence with C.L. Angst and others re progress of negotiations with Exxon and the Iranian government for single cell protein production. Chain's letter of 16 April 1975 discusses arrangements for his own participation in this project.

F.292 1977-78

Further correspondence <u>re</u> single cell protein production and arrangements for meetings and visits. Correspondence with C.L. Angst, April-June 1978, discusses conditions for the renewal of Chain's consultancy contract with Nestlé.

F.293-F.297 PFIZER (CHAS. PFIZER & CO. INC.) 1950-66

Correspondence with various branches of the company in U.S.A. and Europe.

F. 293 1950, 1952

Mainly <u>re</u> terramycin. Includes press release announcing its discovery in the Pfizer laboratories, February 1950.

F. 294 September 1953-March 1954

Includes draft and final version of 'Research in Rome', an article describing Chain's laboratories at the Istituto Superiore di Sanità published in Spectrum, Pfizer's in-house magazine. The article was written as a result of a visit to Rome to attend the Sixth International Congress of Microbiology.

F.295 April 1954-1957

Correspondence re research and visits. Includes notes on glucatase and copy of Spectrum, August 1955, containing an appreciation of Fleming.

F. 296 1958-60

Includes correspondence <u>re</u> visit by Chain to the Pfizer laboratories in New York and New Jersey, and arrangements for a member of Chain's laboratory (G. Gualandi) to visit Pfizer to advise on apparatus for measuring concentrations of dissolved oxygen.

F.297 1961-66

Includes correspondence <u>re</u> Chain's contribution to the Second International Fermentation Symposium (London, April 1974) and the Committee of Inquiry into the Drug Industry (Sainsbury Committee).

F.307

Industrial consultancies and collaborative research F.298-F.310 PFLEGER (DR. R. PFLEGER CHEMISCHE FABRIK GMBH) 1950-79 Personal and scientific correspondence with R. Pfleger and others, mostly conducted in German. The early part of the sequence consists of incoming letters only, as copies of Chain's replies have not survived. F.298 Letters from R. Pfleger to Chain, 1950-56. Also included is a letter from Ursula Muellerrath, January 1949, enclosing Pfleger's address. F. 299 Letters from R. Pfleger and others, 1957. Includes correspondence with G. Zerilli Marimò re collaboration between Pfleger and Lepetit and copies of letters from R. Pfleger to C.D.W. Stafford re licensing of Paynocil. F.300 Correspondence, 1958, mainly re licensing arrangements for various pharmaceutical preparations. F.301 Correspondence, 1959. Includes arrangements for meetings and visits and 10 pp. ms. on 'Katalytische Hydrierung der 2-Keto- und der 5-Keto-d-gluconsdure in Gegenwart von Ammoniak, Aminen und Ketonreagenzien'. F.302 Correspondence, 1960-62. F.303 Correspondence, 1963-65. Includes exchanges re possible arrangements for collaboration between Pfleger and the Wellcome Foundation. F.304 Correspondence, 1966. Includes arrangements for meetings and visits and miscellaneous printed matter. F.305 Correspondence, 1967-68. Includes arrangements for meetings and visits and several letters re agroclavin. F.306 Correspondence, 1969. Includes further material on agroclavin and arrangements for analysis by U.K.A.E.A.

Radiochemical Centre of a compound produced by Pfleger.

Correspondence, 1970-July 1971.

F.308 Correspondence with H. Hegler and others following the death of R. Pfleger in October 1971.

F.309 'Robert Pfleger zum Geddchnis'.

Ms. and typescript drafts of tribute to R. Pfleger. Miscellaneous background material is also included in the folder.

F.310 Correspondence with H. Hegler and others, 1975-79.

F.311 PULLMAN ASSOCIATES GMBH 1970

Request to Chain to act as a consultant (acknowledgement only).

F.312, F.313 RANK PRECISION INDUSTRIES LTD. 1971-75

Correspondence and reports re collaborative work on automatic analysis of liquids.

F.312 November 1971-October 1972

Correspondence with J.R. Boundy (Director and General Manager) reterms of agreement for collaboration with Imperial College. Includes invitation to Chain to serve on a small steering committee and several references to an automatic amino acid analyser designed by A.J. Thomas (Senior Lecturer in the Biochemistry Department). See also D.138.

F.313 November 1972-October 1975

Includes minutes of meetings of the steering committee and material re public launching of 'Chromaspek', a development of the automatic amino acid analyser designed by A.J. Thomas.

F.314-F.324

RANKS HOVIS McDOUGALL LTD.

1965-79

Chain was introduced to Dr. Arnold Spicer, the Head of the newly-established Research Department (later the Rank Research Centre) by J. Yudkin in 1965.

The following papers document some of Chain's collaborative activities with the company including a consultancy arrangement and participation in a research project on microbial proteins, particularly Penicillium notatum-crysogenum (coded C 1) and Fusiarium graminearum (coded A 3/5). The material includes correspondence with the Financial Secretary, Imperial College, re administration of the research grant as well as research reports, arrangements for meetings and visits, and personal correspondence with Lord Rank and his nephew Joseph.

Chain was also a member of the Advisory Committee on Nutrition for the Rank Prize Funds (see E.149-E.155), and collaborated with Rank Precision Industries Ltd. in the development of an automatic amino acid analyser designed by a member of the Biochemistry Department at Imperial College (see D.138, F.312, F.313).

Correspondence 1967-69 contains several references to a gift of £50,000 made by Lord Rank towards the establishment of a second Chair of Biochemistryin Chain's Department at Imperial College. The College was unable to raise the additional money needed for the financing of a Chair so an agreement was reached with Lord Rank that the money would be made available to Chain through Imperial College to use for Research Fellowships. Chain used only the interest for this purpose, leaving the principal intact, and in 1973 he approached the Rank Trustees for a further donation to make up the amount needed for the endowment of a second Chair. For correspondence concerning this episode and related events, see D.43-D.74.

F.314 1965

Correspondence with A. Spicer and others re arrangements for meetings and visits. Includes some exchanges of scientific information and brief correspondence from Lord Rank.

F.315 1966. Includes:

Arrangements for a conference held in Marlow, 22 and 23 February, at which Chain gave a short address on aflatoxin and continuous culture.

Correspondence re arrangements for further meetings, visits, conferences.

Brief scientific correspondence and reports on results.

F.316 1967. Includes:

Miscellaneous arrangements for meetings and visits.

Correspondence re possible collaboration with NRDC (National Research Development Corporation) in microbial protein research project.

Brief personal correspondence with Lord Rank.

Ms. (in Chain's hand) and typescript drafts for letter from Lord Rank to the Rector, Imperial College, offering a donation of £50,000 towards the establishment of a second Chair of Biochemistry in Chain's department.

F.317 1968

Scientific and administrative correspondence recollaborative research at Imperial College. Some correspondence re the Rank benefaction is also included.

F.318 1969

Includes correspondence and summary of report on automatic amino acid analyser (see also D.138, F.312, F.313) as well as further correspondence re collaborative research, Rank benefaction, meetings and visits, etc.

F.319 1970. Includes:

Scientific and administrative correspondence recollaborative research.

Correspondence with J. Rank re the public image of the food industry and the British Nutrition Foundation (q.v.).

F.320 1971

Mainly re collaborative research: administrative correspondence, reports on results, arrangements for meetings, etc.

Also includes correspondence with J. Rank, December 1971.

F.321 1972

Includes correspondence re the British Nutrition Foundation.

See also F.322.

F.322 International Workshop on 'The Effect of Maternal Nutrition on the Development of the Offspring', 5-9 November 1972, sponsored by Johns Hopkins University and the Lord Rank Research Centre.

Correspondence re arrangements.

F.323 1973. Includes:

Arrangements for meetings and visits.

Paper by I.F. Duthie containing a review of the microbial protein research project since its inception in 1967.

Press-cuttings and correspondence <u>re</u> Japanese synthetic protein production.

F.324 1974-77, 1979

Includes correspondence and data \underline{re} A 3/5 project and personal correspondence with \overline{J} . Rank and others.

F.325

RICHARDSON-MERRELL INC.

1968

Correspondence re visit to Imperial College and request to Chain to act as a Consultant to the company (declined).

F.326

ROCHE PRODUCTS LTD.

1973-75

Correspondence re research and visits to various branches in U.K., U.S.A. and Australia.

F.327

LABORATO IRE ROGER BELLON

1962-63

Correspondence with R.A.L. Bellon and others re arrangements for visits, work in progress, etc. Letter of 19 July 1963 mentions Chain's acceptance 'en principe d'accorder des conseils scientifiques au Laboratoire Roger Bellon' but it is not clear whether a formal consultancy agreement was negotiated. The letter also mentions the possibility of collaboration with the Beecham Research Laboratories.

F.328-F.330

SANDOZ LTD.

1960-75

F.328

Letters from J. Renz, 1960-62, mainly re arrangements for visits to Chain's laboratory in Rome to discuss technical problems arising from the installation of a new fermentation pilot plant. Copies of Chain's replies have not survived.

F.329

Correspondence with J. Renz and others, 1966-67, mainly re ergotamine. Includes comments on research done by Farmitalia and proposals for funding of work on ergotamine at Imperial College.

F.330

Miscellaneous correspondence, 1968-75.

F.331

LABORATORI BIO CHIMICO-FARMACEUTICI
SMIT 1959, 1962

Correspondence with the Director (U. Ciabatti) including 3 letters, 1962, re collaboration with Beechams and others in the antibiotic field.

F.333

Industrial consultancies and collaborative research

F.332 SMITH KLINE & FRENCH LABOROTORIES LTD. 1958-63

Correspondence with R. Kohn and others re meetings and visits in Rome, London and U.S.A. Kohn's letters of January-April 1959 contain comments on progress of negotiations with the Beecham Group re 6-aminopenicillanic acid.

F.333, F.334 UPJOHN INTERNATIONAL INC. 1958-72

Correspondence re research and visits, 1958-67. Includes requests for information re Upjohn's methods of automatic sterilisation and brief correspondence re streptozotocin.

F.334 Correspondence, 1968-72, mainly re streptozotocin.

F.335 USIFROID (SOCIÉTÉ D'UTILISATION SCIENTIFIQUE ET INDUSTRIELLE DU FROID) 1975

Correspondence <u>re</u> introduction of Usifroid's freeze-drying equipment to Beechams and <u>re</u> visit of L. Rey (designer of the equipment) to U.S.A.

F.336-F.342 USV PHARMACEUTICAL CORPORATION 1973-78

Chain acted as a consultant to USV from December 1974– October 1977. The correspondence deals mainly with arrangements for meetings with members of the company and its subsidiary, Revlon, and includes outlines of research policy often with detailed comments by Chain.

F.336 October 1973-June 1974. Includes:

Arrangements for meetings in UK and USA.

Draft conditions for contract.

Chain's report of visit to USV Pharmaceuticals at Tuckahoe, New York, 8-10 April 1974.

Letter from Chain to the Executive Vice-President of Revlon, 17 April 1974, outlining his own approach to pharmaceutical research.

F. 337 July-December 1974

research programme. Includes some correspondence re interferon.

F.338

1975. Includes:

Arrangements for meetings and visits.

2 pp. ms. notes taken by Chain during visit to USV in June.

Correspondence with C.G. Smith (Executive Vice-President, Research and Development) re research planned and in progress.

Some personal correspondence.

F.339

1976

Mainly <u>re</u> arrangements for meetings and visits and research plans in USA and Italy.

F.340

January-April 1977

Includes 9 pp. typescript by Chain on 'The cyclic AMP system as a lead to new drugs' and correspondence re the cyclic AMP system with various members of USV.

F.341

June-October 1977

Mainly re arrangements for meetings. Includes a long letter from Chain, July 1977, containing 'a brief appraisal of the research situation as I see it at Tuckahoe' and a letter of thanks from C.G. Smith at the conclusion of Chain's consultancy agreement.

F.342

1978

Arrangements for a farewell luncheon in New York in April and brief personal correspondence.

F.343, F.344

WALLACE LABORATORIES

1965-66

Correspondence and papers re plans for collaborative research.

F.343

May-September 1965

Correspondence with F.M. Berger (President, Wallace Laboratories) re arrangements for meetings with Chain and C.D.W. Stafford to discuss Beechams' attitude to collaborative research on xerosin.

F.344

October 1965-January 1966

Correspondence re research on xerosin and interferon and arrangements for signing agreement re collaborative research. Includes copy of paper on 'The Role of Drugs in Suicide' presented by F.M. Berger at the Symposium on Suicide held in Washington, October 1965.

F.345

WESTFALIA SEPARATOR LTD.

1971-72

Correspondence re design and development of a 6 Chamber Bowl Clarifier for use in the Biochemistry Department, Imperial College.

F.346

Shorter unindexed correspondence from various industrial firms: invitations/thanks for visits, brief requests for information, etc. In alphabetical order.

| SECTION G | LECTURES, PUBLICATIONS, ADDRESSES, BROADCASTS |
|-----------|---|
| | G.1 - G.221 |

| G.1 | PUBLISHED PAPERS AND BIBLIOGRAPHY |
|---------------|---|
| G.2 - G.125 | LECTURES, PAPERS, ADDRESSES |
| G.126 - G.155 | undated notes and drafts |
| G.156 - G.178 | radio and television |
| G.179 - G.221 | CORRESPONDENCE re PUBLICATIONS AND LECTURES |

It should be noted that most of the material in this Section is additional to the list and copies of Chain's publications which appear at G.1. Chain did not regularly keep copies of his drafts and notes for scientific papers after they had appeared in print. There is often correspondence about his publications, and occasionally drafts and background material have survived; these are indicated in the entries and referenced to the bibliography in the form (Bibliog. ...).

The majority of the Section, however, contains drafts, notes and versions for speeches and papers not listed in the bibliography; they are on both technical and general scientific topics and intended for a variety of readers or audiences. The related correspondence often includes some scientific or personal matter, or deals with honours conferred on Chain.

The sequence G.2 - G.125 is not exhaustive. Other similar material can be found in the appropriate Sections, e.g. on penicillin (Section B), given at Rome (Section C), at symposia (Sections E, F, J), on Jewish occasions (Section H).

G.1 PUBLISHED PAPERS AND BIBLIO GRAPHY

1 box of published papers, and accompanying 'List of Sir Ernst Chain's publications' (compiled at Imperial College, London, August 1979).

This list is reproduced with permission on pp. 340-361 of the catalogue.

G.2-G.125 LECTURES, PAPERS, ADDRESSES

G.2 'Von der Entdeckung des Penicillins'

Lecture given at Internationalen Hochschulwochen, Alpbach, 1948; galley proof for volume of proceedings (1949).

Correspondence (only) <u>re</u> 'Une causerie sur la Pénicilline' given in Paris, June 1948.

G.3 'Etudes sur la structure et la synthèse de la pénicilline'

Exposés Annuels de Biochimie Médicale, 10, 1949

(ed. M. Polonovski).

Proof.

Also included here is correspondence re other contributions made by Chain to the Exposés Annuels, 1950, 1952, 1954, 1964. The meeting in December 1954 (Chain spoke on 'Données nouvelles dans le métabolisme des glycides'), and the subsequent publication, were dedicated to M. Polonovski. The 1964 volume was dedicated to J. Polonovski (son) who had continued the work after his father's death.

G.4 'Industrial Microbiology'

26 pp. typescript of introductory article in series published in Research, 5, 567-576 (1952) (Bibliog. 39).

Correspondence with the Editor of Research, 1951-52, re other contributions and contributors to the series.

G.5 'Recent Progress in the Field of Carbohydrate Metabolism'
33 pp. typescript +5 pp. bibliography. n.d., latest reference 1952.

| Lectures. | publications, | addresses | broadcasts |
|-----------|---------------|-------------|------------|
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- G.6 'Industrial applications of Chemical Microbiology'
 26 pp. typescript lecture, n.d., c.1952.
- G.7 Correspondence with The Times, 1952-54, re 2 articles by Chain:

'Microbiology in Industry', Times Review of Industry, March 1953 (Bibliog. 43).

'Development of Antibacterial Chemotherapy', Times Review of Science, February 1954.

- G.8 The Harben Lectures, 1954, on 'The Biochemical Approach to Biological Phenomena' (Bibliog. 44).

 Correspondence (only) re arrangements and publication.
- G.9 'The Development of Bacterial Chemotherapy'

Address given at the Centennial Commemoration Ceremony held in Frankfurt, March 14-16 1954, on the occasion of the presentation to Chain of the Paul Ehrlich and Ludwig Darmstaeder Prize. The address was published in several languages and periodicals (Bibliog. 45).

See A.90-A.94 for personal material relating to the Award and lecture.

See E.137-E.145 for material relating to Chain's later service on the Council of the Paul Ehrlich Foundation.

English (26 pp.) and German (18 pp.) typescripts of lecture, requests for reprints, copies of Chain's letters forwarding reprints (not indexed).

G.10 Appreciation of M. Macheboeuf (d. August 1954).1 p. typescript, 1954.

Correspondence with colleagues, copies of contributions by others, etc.

G.11 'The impact of Biochemistry on Industry'
10 pp. typescript and ms. draft, n.d.
Folder includes some ms. corrections and incomplete typescript drafts.

- 'Ferroverdin, a Green Pigment containing Iron produced by a Streptomycete', by Chain, A. Tonolo and A. Carilli, Nature, 1 October 1955, p.645.

 Offprint only.
- 'The fate of uniformly labelled ¹⁴C fructose in the isolated rat diaphragm and rat brain and liver slices', article published in Annales Academiae Scientiarum Fennicae, Series All (homage to A.I. Virtanen on his sixtieth birthday), 1955.

Correspondence with editorial committee (1954).

- G.14, G.15 Two lectures in German, given at the University of the Saarland at the invitation of R. Ammon, January 1957. See also K.3.
 - G.14 'Fortschritte auf dem Gebiet der Antibiotika'.

 2 typescript drafts of lecture, miscellaneous ms. drafts for introductory remarks of autobiographical reminiscences of own and Ammon's career.
 - G.15 'Der Wirkungsmechanismus des Insulins'
 2 typescript drafts of lecture, 3 pp. summary.
 See also G.21 below.
- G.16 Speech to Society of Apothecaries, London, July 1957.

 Pages numbered 2-12 (p.1 missing), typescript and ms.
- G.17-G.20 Speeches and lectures given in various locations, c.1958, in connection with celebrations of tenth anniversary of the founding of Israel as an independent state.
 - 'Address given at the Independence Dinner held in London on April 22 1958 at the Dorchester Hotel', seconding toast by Lord Cohen.

 3 typescript versions.
 See also F.237.
 - G.18 'Development of science in Israel'
 12 pp. typescript, given in 1958.

- G.19 'Ricerche all' Istituto Weizmann'

 17 pp. ms. draft, printed brochure of version published as 'Conferenza tenuta a Zurigo dal Prof. Ernst B. Chain', n.d., c.1958.
- G.20 After-dinner speech, perhaps at London Jewish Medical Society.

 Ms. notes and two typescript versions, n.d. but refers

Ms. notes and two typescript versions, n.d. but refers to Chain's arrival in England 'almost exactly twenty seven years ago'.

- G.21 'Some observations on the mode of action of insulin'
 Typescript draft and revised versions, perhaps first given as a lecture at the invitation of R. Ammon, see enclosed carbon letter, 1959 (Bibliog. 58).

 See also G.14, G.15.
- G.22 'Recent Studies in Carbohydrate Metabolism'

 The Harveian Lecture, delivered to the Harveian Society, London, 18 March 1959 and subsequently published in B.M.J. (Bibliog. 57).

 Correspondence only, re invitation, arrangements, publication, 1958-59.
- G.23 'Outlook for biochemistry in the decade 1960-70'

 4 pp. typescript draft, perhaps prepared for article in The Sunday Times, see accompanying correspondence with P. Collins.
- G.24 'Technological Education. A Prognosis'
 4 pp. ms. draft, n.d., c.1959.

1960 (Bibliog. 73).

 G.25 'Nouvelles voies microbiologiques pour l'obtention de médicaments'
 Inaugural lecture for Journées Pharmaceutiques Françaises,

32 pp. ms. draft, English and French typescript and ms. versions of lecture, 2 pp. ms. introductory remarks, brief editorial correspondence.

| G.26 | 'Business and Science' |
|------|---|
| | 11 pp. typescript of speech delivered to a Dinner meeting of the Thirty Club of London, February 1960. The speaker was to have been Sir Charles Dodds but he was taken ill and Chain was asked to 'step into the breach'. |
| | Brief correspondence with H.G. Lazell, President of the Thirty Club for 1960, is also included in the folder. |
| G.27 | 'The penicillinase-resistant penicillins and the problem of the penicillin-resistant staphylococci' |
| | Ms. and various revised typescript drafts, n.d., latest reference 1961. |
| G.28 | 'Recent progress in biochemical research' |
| | 4 pp. typescript, n.d., c.1961. |
| G.29 | 'Modified Penicillins' |
| | Typescript and ms. draft, and final version, of article published in Laboratory Practice, 1961 (Bibliog. 81). |
| | Brief correspondence. |
| G.30 | Correspondence re The Jenner Lecture, given June 1961 on 'Recent advances in the field of chemical microbiology'. |
| | 24 pp. typescript lecture, untitled but probably The Jenner Lecture. |
| G.31 | 'Note on the importance and function of a biochemical research centre within the medical faculty of the Catholic University at Rome' |
| | Memorandum by Chain, c. March 1962., ms. and type- script versions in English, Italian translation, brief correspondence. |
| G.32 | 'Memorandum on the Need for Non-Medical Chairs of Biochemistry in Italian Universities and Technical High Schools' |

13 pp. typescript, n.d., early 1960's.

G.33 'The biochemical effects of insulin'

The Banting Lecture, delivered April 1962.

15 pp. typescript +2 pp. references.

Brief correspondence re lecture, and with editor,
Diabetes, to whom Chain submitted the text for publication. It was not accepted, but Chain was invited to prepare a special article on the subject for the journal.

G.34 'Les antibiotiques'

Article for volume seven of Encyclopaedia <u>La Vie et l'Homme</u>, 1962.

Includes English version, French translation heavily amended and corrected by Chain, correspondence with editors and colleagues re inadequacy of original French translation which Chain insisted on having replaced.

G.35, G.36 'Academic and industrial contributions to drug research'

The Trueman Wood Lecture, given at the Royal Society of Arts, June 1963. The lecture was published in full in the Journal of the Royal Society of Arts, and a shortened version was published, exceptionally, in Nature, 200, November 1963 'in view of the considerable contributions which Prof. Chain has made to drug research, and the importance which is today attached to the subject' (Bibliog. 99). The lecture was also published in Swedish, French and German versions, and frequently quoted or referred to.

See also F.254.

G.35 Ms. draft for lecture.

G.36 Correspondence, 1962-64 (and some later), including invitation to give lecture, arrangements for delivery, publication and translation, Chain's letters requesting information from colleagues, letters arising from lecture, etc.

See also E.6, G.215.

G.37 Ms. speech at a dinner given to Chain by Nathan. n.d., c.1963 (shortly before Chain's return to London from Rome).

G.45

G.46

Lectures, publications, addresses, broadcasts

| G.38 | 'Address at the Commemoration Ceremony of the Warsaw Ghetto Rising' |
|-----------|---|
| | 6 pp. typescript, n.d., probably 1963. |
| G.39 | Series of eight lectures or articles in German, typescript, n.d., early 1960s, as follows: |
| | 'Allegemeine Gesichtspunkte', 9 pp. |
| | 'Arzneimittel-Forschung', 4 pp. |
| | 'Antibakterielle-Chemotherapie-die Sulfonamide', 3 pp. |
| | 'Die Antibiotika', 6 pp. (latest reference 1960) |
| | 'Chemotherapie in der Protozoenbekdmpfung', 4 pp. |
| | 'Vitamine', 4 pp. |
| | 'Die Hormone, insbesondere die sogennanten Steroid- Hormone', 9 pp. |
| | 'Neuropharmakologie', 6 pp. |
| G.40 | 'The conquest of the penicillin resistant staphylococcus by new penicillins' |
| | 8 pp. typescript and ms. draft, 1964 (Bibliog. 104). |
| G.41-G.46 | 'Landmarks and Perspectives in Biochemical Research' |
| | Chain's Inaugural Lecture at Imperial College, delivered 12 May 1964, and published as an Imperial College publication (Bibliog. 112) and also in B.M.J., January 1965. |
| G.41 | Multiple ms. drafts for lecture, variously paginated. |
| G.42 | Typescript draft with ms. corrections, 54 pp. |
| G.43 | Arrangements for lecture, lists of guests, publication, etc. |
| G.44 | Correspondence from colleagues re lecture, sending good |

wishes and/or regretting absence. Includes letter from

Letters of thanks from recipients and correspondence arising.

A. Isaacs, telegrams from D. Marotta, etc.

Requests for reprints of lecture (not indexed).

List of those to whom copies of lecture were sent.

G.47 Untitled lecture in German (on future trends in medical research) given at Kongressgesellschaft für drztliche Fortbildung, Berlin, 1964.

> Ms. and typescript drafts of lecture, prepared for publication in commemorative volume for the 20th Anniversary of the Kongressgeselleshaft in 1971.

Includes ms. introductory remarks with autobiographical recollections, and a little editorial correspondence.

G.48 William Withering Lectures, Birmingham, 13 and 14 October 1964.

The subjects were:

'The biochemical effects of insulin'

'Some recent contributions from chemical microbiology to medicine'

Includes correspondence, invitation, arrangements and schedule, 3 pp. draft introduction (only).

G.49 'Antibacterial Chemotherapy', by M. Barber and E.B. Chain.

> 25 pp. typescript for article published in Annual Review of Pharmacology, 4, 1964 (Bibliog. 109).

G.50 'Contributions from chemical microbiology to medicine'

> The Jephcott Lecture, given at Royal Society of Medicine, 6 July 1964, and subsequently published in Proc. R.S.M., 58, 1965 (Bibliog. 111).

Includes heavily-corrected and revised typescript draft, correspondence, 1963-64, re invitation, arrangements, publication of lecture, and later correspondence, 1966, re Jephcott Modal to be presented to Chain.

G.51 'Development and trends of antibiotic research'

> The Oliver-Sharpey Lecture, given at Royal College of Physicians of London at the 'Antibiotics and Infection' Session of the Consultant Conference, 16-20 November 1964 and subsequently published in conference Proceedings ed. N. Compston, 1965 (Bibliog. 107).

Includes heavily-corrected and revised typescript drafts, correspondence, 1963-64, re invitation, arrangements, publication.

| G.52 | 'Entwicklung und gegenwärtiger Stand der antibakteriellen Antibiotikatherapie' |
|-----------|---|
| | Very heavily-corrected, 20 pp. ms. draft for lecture, undated but similar material to G.51, probably given as a lecture at Hoechst. |
| G.53 | Appreciation of Mary Barber sent to The Times, September 1965. |
| G.54 | Draft of introductory remarks (only) for seventh Lister lecture, 3 pp. |
| G.55 | 'Why Biochemistry?' |
| | 19 pp. typescript headed 'First Draft'. For lecture delivered at Imperial College (to Chemical Society?), c.1965. |
| G.56 | 'What is biochemistry?' |
| | 8 pp. typescript +4 pp. ms. for lecture, n.d. |
| G.57 | Untitled talk, on careers in biochemistry, given to sixth form science teachers. |
| | 7 pp. typescript, n.d., but refers to University expansion so c.1965. |
| G.58-G.61 | Papers on structure and funding of scientific research. Some prepared for specific purpose (e.g. G.58 prepared for Council for Scientific Policy, see E.54), others of more general intention. |
| G.58 | 'Comments on the relationship between university and non-university research institutes in Germany' |
| | 4 pp. typescript. Originally prepared for Council for Scientific Policy, 1965. |
| G.59 | 'Relations between Academic Research Laboratories and the Biologically Based Industries' |
| | 6 pp. typescript of talk, n.d. |
| G.60 | 'A proposal for the creation of Research Fellowships for bringing overseas scientists to Great Britain' |
| | 5 pp. typescript with some ms. notes, March 1965. |
| | |

- G.61 'The case for establishing a Fellowship Fund for bringing foreign scientists to Britain'
 7 pp. typescript, n.d.
- G.62 Chairman's introduction and vote of thanks at the Jackson Pope Memorial Lecture, on 'The rôle of sugars as energy reserves in nature', given at Royal Society of Arts by Sir Edmund Hirst, January 1966.
- G.63

 '25 Years of penicillin research'

 Article for special commemorative issue of The Chemist and Druggist, February 1966.

 5 pp. typescript and ms. draft, editorial correspondence.
- 'The Influence of Microbiological Chemistry on Therapeutics'

 The Mackenzie Davidson Memorial Lecture, given at

Twenty-Seventh Annual Congress, British Institute of Radiology, 31 March 1966 and subsequently published in <u>Br. J. Radiol</u>.

Correspondence <u>re</u> invitation and arrangements, programme of Congress, 12 pp. typescript draft.

G.65 'Closing the gap between industry and medicine'

Contribution to the panel discussion at British Council
Course on 'Drug Introduction, Evaluation and Safety',
June 1966.

Correspondence re invitation and arrangements, programme of Course, 5 pp. typescript draft of Chain's remarks.

- G.66 Correspondence (only) re Weizmann Memorial Lecture on 'Science in Israel', given in Leeds, July 1966.
- G.67 Correspondence (only) re collaborative article 'Aeration Studies, IV. Aeration Conditions in 3000-Litre Submerged Fermentations with Various Microorganisms', published in Biotechnology and Bioengineering, 8, 1966 (Bibliog. 119).

| G.68 | 'The New World of Biochemistry in Heart Research' |
|------|---|
| | Address at Public Meeting of the British Heart Foundation, September 1966. |
| | Correspondence <u>re</u> invitation and arrangements, programme of meeting, 6 pp. typescript and ms. draft and 2 pp. summary of lecture. |
| G.69 | 'Address at the occasion of Professor S.J. Pirt's Inaugural Lecture', Queen Elizabeth College, London, January 1967. |
| | Correspondence re invitation and arrangements, 4 pp. typescript of Chain's introductory remarks as Chairman. |
| G.70 | Correspondence (only) <u>re</u> talk 'Antibiotics and the Development of Penicillin', given at Holland Park School, February 1967, and subsequent visit by members of the Senior Science Society to Department of Biochemistry, Imperial College. |
| G.71 | 'Introduction of Sir Hans Krebs' (as John Coffin Memorial Lecturer), University of London, February 1967. |
| | Correspondence re invitation and arrangements, ms. and typescript drafts of Chain's remarks. |
| G.72 | 'The Problem of the Emergence of Bacterial Resistance to Antibiotics' |
| | Address to Marks and Spencer Ltd., April 1967, the first in a series of talks organised by the firm. |
| | Ms. draft and 11 pp. typescript version. |
| G.73 | Correspondence (only) <u>re</u> talk on 'Drug Research', given to H.G. Wells Society of Imperial College, May 1967. |
| G.74 | 'Address given at the Chairman's Dinner', Beecham Group, 24 May 1967. |
| | Ms. and typescript, brief correspondence. |
| | |

| G.75 | 'Biochemical Research and Progress in Medicine' |
|------|--|
| | The first Earl King Memorial Lecture, given at Post- graduate Medical School, London, October 1967. |
| | Correspondence <u>re</u> invitation, arrangements, thanks for lecture. |
| | Miscellaneous ms. notes, 38 pp. typescript draft of lecture, which includes personal and autobiographical recollections. |
| | Also included is miscellaneous background material about King's life and work. |
| G.76 | Correspondence (only), 1966-67, re the Telford Memorial Lecture, given to Manchester Medical Society, 22 November 1967. Chain lectured on 'Biochemical Research and Progress in Medicine'. |
| G.77 | 'The Birth of a Drug' |
| | Talk at Hunterian Society Dinner, December 1969. |
| | Ms. and typescript versions, brief correspondence. |
| G.78 | Two ms. drafts (6 pp. and 5 pp.) for talk on the future development of Israel. n.d., but several references to 1967 Arab-Israeli war. |
| G.79 | 'Introduction of Professor J.Z. Young' as Henry Tizard Memorial Lecturer, Westminster School, 29 February 1968. Typescript drafts. |
| | Typescript didns. |
| G.80 | 'Complex Equipment in the Life Sciences', article published in The Financial Times, 11 March 1968. |
| | Ms. and typescript drafts, press-cutting of article as published, brief correspondence. |
| G.81 | Letter to the Editor, <u>The Observer</u> , on research at Porton, 2 June 1968, and correspondence arising. Includes a little background material. |

'The Biochemist's Approach to Medical Research'. G.82 Inaugural lecture in the 'Scientific Basis of Medicine' series, British Postgraduate Medical Federation, October 1968.

> A synopsis of the lecture was published under the title 'Biochemical Approach to Medicine' in The Scientific Basis of Medicine Annual Reviews, 1970 (Bibliog. 133).

Multiple ms. and typescript drafts, brief correspondence.

- Letter to The Times re German immigration regulations, G.83 October 1968, and correspondence arising.
- G.84 Introduction to lecture by M. Sela, n.d., c.1969. Ms. and typescript versions.
- Ms. and typescript versions, heavily corrected, of a G.85 lecture variously entitled 'Potential future contributions of biochemical research to medicine' and 'The role of biochemistry in future medical research'. n.d., but c.1969.

Uses similar material to G.82 above.

G.86 'Effects of insulin on the pattern of glucose metabolism in the perfused working and Langendorff heart of normal and insulin deficient rats', by Chain, Mansford and Opie.

Biochem. J., 115, 1969 (Bibliog. 127).

Includes extensive drafts and revisions, editorial correspondence and copy of referees' report on paper as a result of which Chain revised the work.

'Metabolismo di esosi in fettine di corteccia cerebrale G.87 di ratto'

> Italian typescript and ms. version of collaborative article published in English in J. Neurochem., 16 (Bibliog. 128).

G.88 'Antibiotics and therapy in perspective'

> The first Centenary Lecture given at Fitzwilliam College, Cambridge, 28 November 1969; includes personal and scientific recollections.

Ms. and typescript drafts, all heavily revised. See also A. 190.

- 'Some comments on infective drug resistance' G.89 Contribution to a Symposium on 'Transmissible Drug Resistance' organised by the Veterinary Research Club, 13 February 1970. Programme of meeting, ms. and typescript versions of talk, correspondence. G.90-G.92 'Social Responsibility and the Scientist in Modern Western The Sixteenth Robert Waley Cohen Memorial Lecture, delivered to The Council of Christians and Jews, 25 February 1970. The lecture was published by the Council of Christians and Jews (Bibliog. 135) and in a condensed form in New Scientist, 22 October 1970 (Bibliog. 136). G.90 Ms. and typescript drafts of lecture (all with variants), comments on draft by M. Carlile. G.91 Correspondence with Council re invitation to lecture, arrangements and publication, 1968-71. G.92 Correspondence arising from lecture and publication, including requests and thanks for reprints, arrangements to publish in Perspectives in Biology and Medicine, letter to The Times, 1970-71, and one letter 1976. G.93, G.94 'Biochemical Research in Perspective. Concepts and Practical Applications' The Henry Tizard Memorial Lecture, given at Westminster School, 10 March 1970.
 - G.93 Ms. and typescript drafts and notes for lecture.
 - G.94 Correspondence re invitation and arrangements and also re the purchase of equipment for the Biology Department of the School from Chain's fee of 100 guineas.
- G.95 'A Computerised Scanner for Bidimensional Radiochromatograms', by Chain, A.E. Lowe and K.R.L. Mansford, J. Chromatog., 53, 1970 (Bibliog. 137). Mainly correspondence with collaborators and publishers.

| | Lectures, publications, addresses, broadcasts | | |
|---|--|--|--|
| G.96 | 'Suggestions for the creation of an autonomous authority for the administration of scientific research in the United Kingdom' | | |
| | 7 pp. typescript paper (photocopy) dated 24 November 1970. | | |
| G.97 | 'Virus like particles from lower fungi' | | |
| | Ms. and typescript drafts for paper or lecture, n.d., c.1970. | | |
| G.98 | Ms. draft for Chairman's Introductory remarks at H.G. Wells Memorial Lecture, by J. Wren-Lewis on 'The Anti- scientific Revolution', 11 March 1971. | | |
| G.99 | Tribute to H. Raistrick, sent to The Times, 12 March 1971. | | |
| G.100 | 5 pp. typescript draft for talk on fusicoccin, probably at discussion meeting or symposium, n.d., c.1971. | | |
| G.101 Speech proposing Toast to Hunterian Society, 10 February. | | | |
| | Ms. and typescript drafts, brief correspondence. | | |
| G.102, G.103 | 'Fungal viruses and their anti-viral properties' | | |
| | Evening Discourse given at Royal Institution, 3 March 1972, and published in <u>Proc. Roy. Inst.</u> , <u>45</u> , 1972 (<u>Bibliog</u> . 148). | | |
| G.102 | Ms. and typescript drafts and notes. | | |
| G.103 | Correspondence <u>re</u> invitation, arrangements, publication, 1970-72. | | |
| G.104-G.106 | 'The role of the biochemist in the development of drug therapy and prophylaxis' | | |
| | The Hanbury Memorial Lecture, given to the Pharmaceutical Society of Great Britain, 24 May 1972, and subsequently published in The Pharmaceutical Journal. | | |
| G.104 | Ms. and typescript drafts. | | |
| G.105 | Correspondence re lecture, award of Hanbury Memorial Medal which Chain received on same occasion, publication, etc. Includes correspondence with Lord Cohen who chaired the meeting. | | |
| G.106 | Ms. introductions for other occasions on which Hanbury Lecture material was used, at Inaugural Lecture of Beecham Auditorium, 5 July 1972, and in Ireland, n.d. | | |

| | Lectures, publications, addresses, broadcasts |
|-------|--|
| G.107 | 'Note of thanks to Sir Rudolph Peters, FRS' |
| | Given at British Nutrition Foundation Prize Lecture by Peters, 1972. 4 pp. typescript. |
| G.108 | Letter to The Times (on 'synthetic food'), September 1972. Submitted for publication but no indication whether accepted or not. |
| G.109 | Transcript of discussion following a talk by Chain to Oxford University Biochemical Society, 1973, with brief correspondence. |
| G.110 | Ms. draft on 'Semisynthetic penicillins' and other drugs, n.d., latest reference 1973. |
| G.111 | Ms. draft for talk in German on relations between academic and industrial research laboratories. n.d., but Chain lectured frequently on this subject c.1973. |
| G.112 | 'Whither Biochemistry?' |
| | 2 typescript drafts, one with extensive corrections, + 1 p. preface apologising for 'improvised and somewhat disjointed presentation'. |
| | n.d., c.1973, probably given at Imperial College. |
| G.113 | 'Ner Israel Rabbinical College. Message for the 40th Annual Banquet, 9th December 1973' (at Baltimore, U.S.A.). |
| | Ms. and typescript drafts of message with covering letter to the Vice-President of the college (Rabbi H.N. Neuberger). |
| | Folder also includes background correspondence. Chain had originally hoped to attend the dinner but was prevented from doing so by illness. |
| G.114 | Address to British Nutrition Foundation, paying tribute to Sir Charles Dodds. n.d., December 1973 or January 1974 (Dodds died 16 December 1973). |
| G.115 | 'Introduction of Professor Magee, R.S. of Arts, Sir William Jackson Pope Memorial Lecture', 23 January 1974. |
| | The meeting was to have been chaired by Dodds; Chain took his place at short notice and paid tribute to his work in the introductory remarks. |
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| CSAC 92/3/83 | |
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| | Lectures, publications, addresses, broadcasts |
| G.116 | Letter to The Sciences (publication of the New York Academy of Sciences), 14, 5 June 1974. |
| | Correspondence, copy of published text. |
| G.117 | 'Social responsibility and the Scientist in Modern Western Society' |
| | Talk given to Natural History Society, Bryanston School, May 1975 (includes some material from Waley Cohen Lecture see G.90), with correspondence re invitation and arrangements. |
| G.118 | Tribute to Sir Hans Krebs on his 75th birthday. Published in Assoc. of Jewish Refugees monthly magazine, AJR Information, August 1975. |
| | 2 pp. typescript draft, brief correspondence. |
| G.119 | Contribution to written symposium on the present and future position of the State of Israel, published in <u>Maariv</u> Evening Newspaper (in Hebrew), September 1976. |
| | Correspondence from the Editor, press-cutting. |
| G.120 | Correspondence (only), 1976-77, re book Viruses and Plasmids in Fungi, scheduled for publication 1978, to which Chain and K.W. Buck were to contribute Chapter I 'Mycoviruses and Interferon Induction'. |
| G.121 | Ms. and typescript draft of obituary tribute to Jacques Tréfouël (d. July 1977), published in <u>Nature</u> . Includes correspondence <u>re</u> publication, and letters of thanks from family and colleagues. |
| G.122 | Speech at dinner in France, late 1977 or early 1978 (refers to obituary tribute to Tréfouël). |
| | Ms. and typescript drafts, in English and French. |
| G.123 | Obituary tribute to A.D. Gardner, The Times, February |

Typescript version, correspondence from Mrs. Gardner and from colleagues.

1978.

- G.124 Ms. draft for speech on scientific research in Israel, n.d., c.1978.
- G.125 'In Memory of Doug. Hems', 7 March 1979.

Ms. and typescript versions of memorial tribute to colleague at Imperial College.

Enclosed here is a letter of good wishes from Hems on Chain's retirement, 1973.

G.126-G.155 UNDATED NOTES AND DRAFTS

This is entirely autograph manuscript material, written on jotter pads or on loose pages of various format, and sometimes paginated. It is presented under tentative headings according to subject-matter.

Attention is drawn to G.145-G.154 which have been retained as samples of Chain's methods of work, with a miscellany of research ideas, drafts for papers, scientific and personal correspondence all on the same jotter or notepad for later use or typing-up.

G.155 is a folder of bibliographical notes, of interest since Chain left virtually no laboratory notebooks or experimental observations.

| G.126-G.130 | Miscellaneous speeches, etc. overseas | | |
|-------------|--|--|--|
| G.126 | 1 p. speech at Milan 1940s. | | |
| G.127 | 4 pp. speech at Milan (in Italian) 1940s. | | |
| G.128 | 1 p. speech at Naples (in English and Italian) 1940s. | | |
| G.129 | 2 pp. speech (in Italian) on science and human affairs. | | |
| G.130 | Speech (in French) to Spanish Academy of Sciences. | | |
| G.131-G.134 | Miscellaneous speeches on Jewish occasions | | |
| G.131 | Notes for speech on development of Israel. | | |
| G.132 | 2 pp. draft speech on science in Israel. | | |
| G.133 | 1 p. notes, probably on Weizmann Institute. | | |
| G.134 | Miscellaneous sequences of drafts on importance of active Judaism. | | |

| G.135-G.144 | 5-G.144 Lectures and talks on biochemistry | | |
|---|--|--|--|
| G.135 'Scope of biochemistry', 4 pp. | | | |
| G.136 | 'The role of the chemist in biochemical research', 3 pp. | | |
| G.137 | 'The scope and aims of biochemistry', 6 pp. | | |
| G.138 | 'The science of biochemistry', 5 pp. | | |
| G.139 | 'Opportunities for the biochemist in industry', 2 pp. | | |
| G.140 | Speech or paper on contribution of biochemistry to medicine and agriculture, pp.1-12 only. | | |
| G.141 | 'The case of successful research in clinical biochemistry', pp. 20-25 only. | | |
| G.142 pp. 5-9 only of speech or paper on conditions favor for fundamental research. | | | |
| G.143 | Notes and drafts for speech or lecture on history and development of drug research. | | |
| G.144 | Substantial folder of miscellaneous notes, narratives and drafts for lectures on history and importance of biochemistry; some intended for M.Sc. course at Imperial College. | | |
| G.145-G.155 | Miscellaneous notes and drafts | | |
| G.145 | Pages from a jotter pad or diary: research ideas, notes of letters to be written, jobs to be done, names and addresses, guest-lists, etc. | | |
| G.146 Miscellaneous notes and drafts (part of a notepad). | | | |
| G.147 | Miscellaneous notes and drafts (part of a notepad). | | |
| G.148 | Miscellaneous notes for paper on 'Synthetic Foods'. | | |
| G.149 | Pages from a jotter pad, one dated 1973. | | |
| G.150 | Drafts for personal correspondence (part of a notepad). | | |
| G.151 | Drafts for miscellaneous correspondence, with firms, Imperial College, personal friends (part of a notepad). | | |

Lectures, publications, addresses, broadcasts G.152 Drafts for miscellaneous correspondence, with firms, personal friends, etc. (part of a notepad) and including 9 pp. typed-up report on visit to Ribena factory 1957. G.153 Shorter drafts for correspondence. G.154 Folder of miscellaneous shorter notes, research ideas, notes taken at meetings, on firms or laboratories, etc. G.155 Folder of bibliographical notes, notes on the literature.

G.156-G.178 RADIO AND TELEVISION

Correspondence and drafts for proposed programmes and interviews, in alphabetical order of company or organisation.

See F.233, F.287 for additional material on projects for films. See also J.184.

G.156 ASSOCIATED-REDIFFUSION LTD.

Correspondence, 1958, re participation in 'New Horizon' series.

G.157-G.167 BRITISH BROADCASTING CORPORATION

Correspondence and papers for programmes and interviews for radio and television, 1949-79.

G.157 1949, 1961-62

G.158 1969-70

Includes correspondence with R. Jackson re a documentary for the Third Programme on the project for an Independent University (broadcast 2 July 1969).

G.159-G.163 1971

Correspondence and papers re Chain's participation in first of televised 'Controversy' programmes, on defence and the social responsibility of the scientist, filmed at the Royal Institution, 14 July 1971. The text of Chain's remarks, which were based on his Waley Cohen Memorial Lecture, 1970 (see G.90-G.92) were published in The Listener, 26 August 1971.

- G.159 Correspondence re arrangements, Italian translation, etc.
 Chain waived his fee for this, as for several other programmes, and asked for it to be sent to the Central Synagogue.
- G.160 Ms. and typescript drafts of Chain's opening address on 'Defence and the Social Responsibility of the Scientist'.
- G.161 Letters from friends and colleagues who saw the programme.
 (Most with Chain's replies.)
- G.162 Letters from members of the public.
- G.163 Press-cuttings, copy of The Listener with published version.

G.164 1972

Correspondence and papers re Chain's contribution to television programme on 'The Nobel Prize' (with reference to the discovery of penicillin), transmitted 19 December 1972. Chain waived his fee and asked for it to be sent to the British Organisation for Rehabilitation Through Training.

- G.165 Ms. drafts for Chain's contribution.
- G.166 1973-74

Miscellaneous correspondence <u>re</u> appearances or advice for TV programmes 'Horizon', 'Controversy', 'Science without Frontiers', 'Science Now', etc.

G.167 1977-79

Correspondence with BBC Open University Productions repossible participation in various programmes.

G.168 CANADIAN BROADCASTING COMPANY

Brief correspondence only, 1971.

G. 169 CENTRAL OFFICE OF INFORMATION

Brief correspondence only, 1969.

G.170 EUROPE No.1 - TÉLÉCOMPAGNIE

Script for programme on the discovery of penicillin in the series 'Cinq minutes qui ont changé le monde', 1964.
Brief correspondence.

G.171 GRANADA TV

Brief correspondence only, 1959.

G.172 LONDON WEEKEND TELEVISION

Brief correspondence only, forwarding script for programme on Pasteur, 1972.

| Lectures, | publications, | addresses, | broadcasts |
|-----------|---------------|------------|------------|
| | | | |

G.173 MEDIKASSET

Brief correspondence only, 1977.

G.174 NATIONAL BROADCASTING COMPANY OF THE UNITED STATES OF AMERICA (NBC)

Interview for 'Today', 14 November 1966.

Correspondence, drafts of Chain's answers to questions, edited transcript of interview.

G.175 OFFICE DE RADIODIFFUSION-TÉLÉVISION FRANÇAISE (ORTF)

Contribution to programme 'L'Enfant, l'Homme et la Vie: Les Antibiotiques', broadcast 17 July 1969.

Correspondence only.

G.176 RADIO ITALIANA (RAI)

Contribution to programmes 'Gli antibiotici' and 'Nuovi antibiotici'.

Correspondence only, 1950.

G.177 R.G. PRODUCTION CO.

Correspondence only, 1973.

G. 178 WEST-GERMAN TELEVISION NETWORK

Correspondence only, 1972.

G. 179-G. 221 CORRESPONDENCE re PUBLICATIONS AND LECTURES

G.179-G.215 Publications

G.216-G.221 Lectures

G.179-G.215 presents, in alphabetical order, correspondence with editors, publishing houses, journalists and scientific colleagues. The material includes requests to write articles or books, to comment on works submitted for publication by others, to serve on editorial or advisory boards, to provide introductions to works by others, etc. There is a little scientific correspondence, and references to Chain's own scientific papers submitted for publication. The material is dated and an indication given of any information of special biographical or scientific interest. Some of the exchanges may relate to undated manuscripts and drafts elsewhere in Section G, but it has not been possible to identify them with certainty.

G.216-G.221 presents, in chronological order, requests to give lectures or talks.

| G.179-G.215 | PUBLICATIONS | |
|-------------|---|------|
| G.179 | Abacus-Kent Ltd. | 1971 |
| | Academic Press Inc. | 1954 |
| | re English edition of 'Rendiconti del Istituto Superiore di Sanità'. | |
| | Acta Vitaminologica | 1962 |
| | Adam Hilger Ltd. | 1952 |
| G.180 | Advances in Chemotherapy | 1962 |
| | Advances in Pharmacology | 1963 |
| | Allan Wingate (Publishers) Ltd. | 1959 |
| | Anglo-American Book Co. | 1953 |

| | Lectures, publications, addresses, broadcasts | |
|-------|---|---------------------------------|
| G.181 | Annual Reviews Inc. Includes material re Annual Review of Biochemistry (Bibliog. 38, 56) and Annual Review of Pharmacology (Bibliog. 109). | 1949, 1958, 1962-63 |
| G.182 | Antibiotics and Chemotherapy Chain served on the Editorial and on the International Editorial Board from the founding of journal in 1950. | |
| | Archives Internationales de Pharmacodynamie et a Thérapie Chain served on the new Advisory Editorial Board from its inception in 1975. | de 1975-77 |
| | Archives of Biochemistry | 1948, 1959 |
| G.183 | Aries Corporation | 1973 |
| | re 'Interferon Scientific Memoranda'. | |
| | Arzneimittel-Forschung | 1963 |
| | Invitation to serve on Editorial Committee. | |
| | Aurora Zanichelli | 1957 |
| G.184 | N. Barou | 1949 |
| | Biochemical Journal | 1949, 1952, 1963, 1972, 1975 |
| | Biochemical Pharmacology | 1959, 1970 |
| G.185 | Biochimica et Biophysica Acta | 1954, 1961 |
| G.186 | Biotechnology and Bioengineering | 1965, 1969 |
| G.187 | Blackwell Scientific Publications | 1958, 1961, 1978 |
| | Britain-China Friendship Association | 1961 |
| | re proposed Quarterly Journal of Chinese Art & Sciences | <u>ts</u> |
| | British Doctor | 1961 |

| | Lectures, publications, addresses, broadcasts | |
|-------|--|------------|
| G.188 | Cambridge University Press | 1952 |
| | (Chain's carbons only) | |
| | Chemical & Engineering News | 1957 |
| | Chemische Industrie | 1954 |
| | Chemistry and Industry | 1959, 1962 |
| | (Chain's carbons only) | |
| G.189 | Chemistry in Britain | 1969 |
| | Chemotherapia | 1959 |
| | (Chain's carbon only, accepting invitation to serve as adviser to Editorial Committee). | |
| | Clinical Pharmacology and Therapeutics | 1961 |
| | Clinical Science | 1972-73 |
| G.190 | Daco-Verlag | 1970 |
| | The Daily Telegraph | 1961 |
| | De Medicina Tuenda | 1963 |
| | Invitation to serve on the 'Basic Sciences' cor of the new journal, and correspondence re pu tion of Inaugural Meeting of European Society Biochemical Pharmacology (see E.58). | blica- |
| | Deutsche Apotheker-Zeitung | 1969 |
| G.191 | Die Naturwissenschaften | 1979 |
| | Die Weltwoche | 1950 |
| | Discovery | 1953, 1961 |
| | Drug Action and Drug Resistance in Bacteria | 1979 |

| | Lectures, publications, addresses, broadcasts | |
|-------|---|---------------------------|
| G.192 | Edizioni Scientifiche di Medicina e Chirurgia (Rome) | 1955 |
| | Edizioni Scientifiche e Techniche Monadori (Milan) | 1970 |
| | Edizioni Scientifiche Einaudi (Turin) | 1957 |
| | re Chain's preface to Italian translation of b by R. Dubos. | ook |
| | Eine Welt der Vereinten Nationen | 1975 |
| G.193 | Paul Elek Limited | 1973-74 |
| | Ellis Horwood Limited | 1973 |
| | Elsevier Publishing Company | 1959, 1962, 1972, 1979 |
| G.194 | Enciclopedia della Chimica | 1970 |
| | Enciclopedia Medica Italiana | 1953-54, 1959 |
| | Encyclopaedia Hebraica | 1950 |
| | The EP Group of Companies | 1976 |
| G.195 | EPOCA | 1963 |
| | European Journal of Biochemistry | 1972 |
| | Excerpta Medica | 1952 |
| | (Chain's carbon only). | |
| G.196 | The Financial Times | 1955, 1969, 1971 |
| G.197 | Feinermann, E. | 1970 |
| | Food Manufacture | 1970 |
| | Frazier, C.A. | 1973 |

| | Lectures, publications, addresses, broadcasts | |
|-------|---|------------|
| G.198 | Gauthier-Villars éditeur | 1962 |
| | General and Comparative Endocrinology | 1961-62 |
| | Chain served on the Advisory Council. | |
| | Granada Publishing Limited | 1969 |
| | Hutchinson & Co. Limited | 1955 |
| G.199 | Ignossos Encyclopedia | 1974 |
| | II Farmaco | 1949 |
| | The Industrial Chemist | 1961, 1963 |
| G.200 | International Abstracts of Biological Sciences | 1958 |
| | International Archives of Allergy and Applied Immunology | 1953 |
| | International Journal of Environmental Studies | 1969-72 |
| | Chain accepted an invitation to serve as Adv Editor in 1972. | isory |
| | International Journal of Radiation Biology | 1958 |
| | Chain was invited to serve on Editorial Board but declined. | , |
| | Interscience Publishers, Inc. | 1949, 1958 |
| G.201 | Jerusalem Post | 1969 |
| | Jewish Chronicle | 1976-77 |
| | Journal of Biochemical and Microbiological Technology and Engineering | 1959 |
| | Chain served on Editorial Advisory Board. | |
| | Journal of Neurochemistry | 1955 |
| | J.P.A. Yearbook | 1961 |

| | Lectures, publications, addresses, broadcasts | |
|-------|--|---------------|
| G.202 | Langer, E. | 1954 |
| | Las Españas | 1950 |
| | Les Amis de l'Université de Liège | 1954 |
| | McGraw Hill Book Company Inc. | 1963, 1969 |
| | Manufacturing Chemist | 1957 |
| | Marcel Dekker, Inc. | 1969 |
| G.203 | MD Publications, Inc. | 1958-59 |
| G.204 | Médecine et Hygiène | 1970, 1972 |
| | Correspondence 1970 is <u>re</u> thalidomide. | |
| | Medicine | 1975 |
| G.205 | Nature | 1954-77 |
| | General correspondence re articles submitted publication by Chain and or his collaborator referred to him for comment. | |
| G.206 | New Scientist | 1957-74 |
| | General correspondence, mainly requesting of from Chain. | articles |
| G.207 | News Chronicle | 1958 |
| | Nuova Antologia | 1952 |
| | Omni | 1978 |
| | Oxford University Press | 1970 |
| G.208 | Pergamon Press | 1955-57, 1963 |
| | Correspondence 1955 is re Editorial Advisory of International Journal of Applied Radiation Isotopes; correspondence 1957 is re Modern Methods in Biochemistry. | |
| | The Pharmaceutical Journal | 1959 |

| | Lectures, publications, addresses, broadcasts | |
|----------------|---|------------|
| G.208 (Cont'd) | Pointer | 1969-70 |
| | Probe | 1966 |
| | Progress in Experimental Medicine and Biochemistry | 1979 |
| G.209 | H.M. Rauen | 1961-62 |
| | Research | 1948, 1952 |
| | 'Retrospectives in Biochemistry: 1975' | 1975 |
| | D.L. Rohlfing | 1971 |
| G.210 | The Royal Society | 1959-63 |
| | (Chain's carbons only, re papers submitted for publication in the Society's Proceedings.) | or |
| G.211 | Scientia | 1953-58 |
| | Society of Biological Chemists, India | 1955 |
| | The Sunday Times | 1958 |
| | Tom Stacey Limited | 1973 |
| | Chain was a member of the consulting panel the proposed 'History of the Jewish People'. | or |
| G.212 | Trends in Biochemical Sciences (TIBS) | 1975-78 |
| | Mainly requests for articles or contributions. | |
| G.213 | Who's Who in World Jewry | 1976 |
| | Invitation to join International Publication Committee. | |
| | World Medicine | 1970 |
| | Chain was an advisor. | |
| | World Science Review | 1955 |
| | Wykeham Publications (London) Limited | 1970 |

| | Lectures, publications, addresses, broadcasts |
|-------|--|
| G.214 | Shorter requests for books, articles, contributions (no reply by Chain). |
| G.215 | Shorter correspondence <u>re</u> permission to quote from publications by Chain, reproduce photographs, etc., 1951-79. |

| G.216-G.221 | LECTURES |
|-------------|---|
| G.216 | Thanks for lecture on early penicillin research, given in Oxford c.1940. |
| | Requests to give talks or lectures in Italy, 1950-58. |
| G.217 | Requests to give talks or lectures, 1950-59. |
| | Includes request from J. Tréfouël to lecture to Société Chimique de France, 1952; correspondence, 1955-59, requesting lectures at Munich. |
| G.218 | Requests to give talks or lectures, 1960-69. |
| | Includes correspondence re Almroth Wright Lecture at the Wright-Fleming Institute (1963). |
| G.219 | Requests to give talks or lectures, 1970-71. |
| G.220 | Requests to give talks or lectures, 1972. |
| | Includes visit to University College of Swansea. |
| G.221 | Requests to give talks or lectures, 1973-78. |
| | Includes correspondence re Boulter Lecture at Guildford Medical Centre, 1975. |

SECTION H ISRAEL AND JEWISH ORGANISATIONS H.1 - H.141

INTRODUCTION AND LIST OF CONTENTS

Section H contains correspondence and papers relating to a large number of Jewish societies, organisations and academic institutions with which Chain was associated during his life. The material, which is presented alphabetically, varies from a single folder to a substantial sequence covering several years of which by far the largest is at H.66 - H.135 (The Weizmann Institute of Science).

For drafts and lectures on Jewish topics in Section G, see G.17 - G.20, G.66, G.78, G.113, G.118, G.119, G.124, G.131 - G.134.

For conferences, etc. on Jewish topics in Section J, see J.58, J.79, J.88, J.91, J.127, J.174.

| ANGLO-ISRAEL CHAMBER OF COMMERCE | H.1 |
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| LONDON JEWISH HOSPITAL MEDICAL SOCIETY | H.55 |
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| MUSEUM OF THE DIASPORA (BETH HATEFUTSOTH) | H.58 |
| NATIONAL COUNCIL FOR SOVIET JEWRY OF THE UNITED KINGDOM AND IRELAND | H.59 |
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| WEIZMANN INSTITUTE OF SCIENCE | H.66-H.135 |
| WHITTINGEHAME COLLEGE (Sussex) | H.136 |
| WORLD JEWISH CONGRESS | H.137 |
| YESHIVA UNIVERSITY | H.138 |
| | |
| Shorter unindexed correspondence | H.139-H.141 |

H.1

ANGLO-ISRAEL CHAMBER OF COMMERCE

1974-78

Correspondence re Chain's membership of the Executive Committee. Includes letter from the Chairman (L.R. Goodman), April 1976, confirming Chain's agreement to become an Honorary Vice-President of the Chamber.

H.2

ANGLO-ISRAEL CULTURAL FOUNDATION

1969-70

Correspondence with Lord Goodman, one of the inaugurators of the Foundation. Chain was asked to become one of its initial Patrons.

H.3

ANGLO-JEWISH ASSOCIATION

1961, 1975-76

Chain was elected as a member of the Council at a meeting on 6 October 1969.

Brief correspondence with the Secretary and Treasurer.

H.4

ASSOCIATION OF JEWISH EX-SERVICEMEN AND WOMEN 1970-71

Correspondence with the Chairman (H. Samek).
Includes draft of message from Chain in support of formation of an Oxford Branch of A.J.E.X.

H.5-H.12

BAR-ILAN UNIVERSITY

1961-79

Chain was a member of the Board of Trustees of the University from 1976. He was awarded an honorary doctorate in 1974.

H.5

1961-74

1961 correspondence is <u>re</u> invitation to Chain from the General Secretary of the British Friends of Bar-Ilan University to become a member of the Academic Advisory Committee.

- H.6-H.8 Award of Honorary Doctorate by Bar-Ilan University,27 June 1974.
 - H.6 Announcement of the award, arrangements for the ceremony.
 - H.7 Ms. drafts and abstract of Chain's address on the occasion of the award.
 - H.8 Letters of thanks from Chain, letters of congratulation from colleagues.
- H.9 1974-76

Includes letter from the Chancellor of Bar-Ilan University, 26 July 1976, announcing Chain's election to membership of the Board of Trustees.

H.10 1977

Includes correspondence <u>re</u> election of Rabbi E. Rackman as President of Bar-Ilan <u>University</u> and arrangements for meetings of the Board of Trustees.

H.11 1978

Mainly <u>re</u> meetings and visits. Includes correspondence and memorandum by W. Feder <u>re</u> proposed medical school of Bar-Ilan University.

H.12 1979

Mainly re arrangements for dinner marking the endowment of the President Ephraim Katzir Chair in Bio-physics at Bar-Ilan University, 16 May 1979.

H.13-H.21 B'NAI B'RITH 1961-79

(includes Hillel Foundation)

Correspondence and papers.

H.13 1961, 1965-66

1961 letter is an invitation to address the B'nai B'rith Leo Baeck (London) Lodge.

1965-66 correspondence is with the Director of the Hillel Foundation (H. Shaw) and includes invitation to Chain to become a Patron (accepted).

H.14 1967 Includes invitation to chair the Hillel Foundation annual lecture and drafts of Chain's introduction of D. Brogan as lecturer. H.15 1968 Mainly re Hillel Foundation Building Appeal. H.16 1969 Includes ms. of speech delivered at lunch given by H. Lever in Chain's honour in aid of the Hillel Foundation Building Appeal, and miscellaneous correspondence with the Chairman and the Director of the Hillel Foundation. H.17 1970-71 Mainly invitations to meetings and functions at Hillel House. H.18 1972 Invitations to meetings and functions, requests to lecture. H.19 1973-75 Invitations to meetings and functions, requests to patronise fund-raising and other activities. H.20 1976-79 Includes draft of address delivered at a soirée in honour of Chain's 70th birthday, 11 January 1977. H.21 Undated ms. draft of speech re the value of the Hillel houses to Jewish university students. H.22 THE BOARD OF DEPUTIES OF BRITISH JEWS 1969, 1971-79 Request to serve on British Committee for Jews in Arab Countries (1969); invitations to attend functions, sign petitions.

H.23 CENTRAL SYNAGO GUE (Great Portland Street, London) 1966-77

Correspondence re membership of the congregation, attendance at services, etc.

| H.24, H.25 | FRIENDS OF THE FUND FOR THE ADVANCEMENT OF MEDICINE IN ISRAEL | T 1971-77 |
|------------|---|--------------|
| | Chain was a Trustee. | |
| H.24 | Correspondence with V. Mishcon and others, 1971- re arrangements for Chain to become a Trustee. | 72, |
| H.25 | Correspondence with A. Shapiro and other Trustees, 1973-77, re administration of the Fund. | |
| H.26-H.38 | HEBREW UNIVERSITY OF JERUSALEM | 1952-79 |
| | Chain was a member of the Board of Governors. | |
| | Correspondence is mainly with the President and Ch of the Board of Governors of the University and offi of the English Friends of the Hebrew University of Jerusalem. | |
| | There is very little correspondence before 1967 and virtually none for 1970-72. | |
| H.26 | Correspondence with the Executive Vice-President the Hebrew University (D.W. Senator), 1952-53, re planning and academic organisation of the University | |
| H.27 | Letter from the Chairman (N. Bentwich), March 195 enclosing copies of speeches made at the laying of corner-stone of the University (1918) and at the ope ceremony (1925). | the |
| | Undated typescript 'Notes for the Talk at the Dinne of the Friends of the Hebrew University of Jerusaler The material assembled by Bentwich may have been intended to help Chain in the preparation of this ta | n'. |
| | Brief correspondence with the Secretary, 1962, 196 | 3. |
| H.28 | Typescript of 'Address to the Friends of the Hebrew University of Jerusalem on November 18th, 1965'. | |
| H.29 | Communications from the President, Chairman of the Board of Governors and Executive Vice-President of | f |
| | the Hebrew University, 1966-70. Mainly <u>re</u> arrangements for meetings and functions. | ge- |

H.30 Correspondence with the Chairman and Secretary of the Friends of the Hebrew University of Jerusalem, 1967. Includes arrangements for travel to Meeting of Board of Governors in June, copy of report on a visit to the Hebrew University by A. Neuberger, May 1967, and correspondence re nominations for the offices of President and Chairman of the Board of Governors of the University. H.31 Ms. and typescript drafts of speech by Chain introducing a film about agricultural experiments in the Negev desert shown at a meeting of the Friends, 30 January 1968. Folder also includes correspondence re arrangements and photograph of Chain delivering the speech. H.32 Correspondence with officers of the Friends of the Hebrew University, 1968. Includes arrangements for travel to meeting of Board of Governors in March. H.33 Correspondence with officers of the Friends of the Hebrew University, 1969. Includes correspondence re fundraising and invitations to Chain to speak at various functions. H.34 Communications from the President and the Chairman of the Board of Governors of the Hebrew University, 1973-75. Includes announcement of Chain's appointment as an honorary member of the Board, April 1974. H.35 Correspondence with officers of the Friends of the Hebrew University, 1973-75. Mainly re meetings and functions. Includes correspondence with A. Neuberger re the role of the Academic Committee of the Board of Governors of the University. H.36 Communications from the Chairman of the Board of Governors, 1976-79. Mainly re meetings and various university affairs. H.37 Correspondence with officers of the Friends of the Hebrew University, 1976-78. Re meetings and conferences. H.38 Brief correspondence from members of the Hebrew University and the Hadassah Medical School, 1955-77. Not indexed.

H.39

IMPERIAL COLLEGE JEWISH SOCIETY

1969-71

Correspondence re meetings and introduction of Kosher meals service at Imperial College.

H.40

INSTITUTE OF JEWISH AFFAIRS

1969-79

Correspondence with the Director (S.J. Roth) re arrangements for Chain to take the Chair at lecture by S. Ettinger, 3 March 1970.

Invitations to other IJA lectures and meetings are also included here.

H.41

INTER-UNIVERSITY JEWISH FEDERATION OF GREAT
BRITAIN AND IRELAND 1969-72

Includes invitation to Chain to accept an Honorary Vice-Presidency of the Federation for 1969-70 and correspondence re various meetings and social events.

H.42

ISRAEL MEDICAL ASSOCIATION

1969, 1971

Letter re Chain's nomination as continuing Honorary President of the British Fellowship of the Association, August 1971.

Brief correspondence re meetings.

H.43

ISRAEL NATIONAL COUNCIL FOR RESEARCH AND DEVELOPMENT

1970, 1977

1970 correspondence is re desalination research and development in Israel. Chain's reply has not survived.

1977 correspondence refers to symposium on 'Biotechnological applications of Proteins and Enzymes' (see also J.172, J.173) and developments in the pharmaceutical and food industries.

H.44

ISRAEL UNIVERSITIES' STUDY GROUP FOR MIDDLE
EASTERN AFFAIRS
1974-75

Includes correspondence <u>re</u> the attitude to Israel of UNESCO and other international organisations and specialised agencies.

H.45

ISRAELI EMBASSY (London)

1968-79

Correspondence with various members of the embassy staff. 1968 correspondence is re the granting of 'compulsory licences' to Israeli firms, and includes exchanges with M.W. Weisgal and W.L. Abramowitz on the same subject.

H.46-H.48

JERUSALEM ACADEMY OF JEWISH STUDIES

1973-78

Correspondence with the Principal (Rabbi B . Horovitz)

re the affairs of the Academy, arrangements for
meetings and functions in England and Israel, fundraising activities, etc.

H.46

1973-75

H.47

1976-78

H.48

Ms. and typescript drafts for speech by Chain describing the work of the Jerusalem Academy, delivered at a reception given by W.I. Hubert in January 1976. Brief correspondence with Mr. Hubert is also included in the folder.

H.49

JEWISH COLLEGE OF TECHNOLOGY

1972-78

Correspondence is mainly with the English Friends of the Jerusalem College of Technology, of which Chain was an Honorary Vice-President, re meetings, fundraising, etc.

H.50

JEWISH NATIONAL FUND

1969-75

Correspondence with the Director <u>re</u> various activities of the Fund. Includes requests for Chain to serve on a prize-awarding committee (1969), and become a patron of the J.N.F. Education Department (1971).

H.51, H.52

JEWS' COLLEGE, LONDON

1972-79

H.51

Typescript and incomplete ms. draft of speech delivered at the College Speech Day, 2 July 1972.

Correspondence re arrangements, letters of thanks and invitations to a previous Speech Day are also included in the folder.

H.52

Correspondence 1975-79

with C. Domb re text of letter supporting Jews' College for publication in the Jewish Chronicle;

from Jews' College Union Society (request to speak)

re arrangements for the establishment of 'Emeritus Chief Rabbi Sir Israel Brodie Chair in Biblical Studies at Jews' College'.

H.53

JOINT ISRAEL APPEAL (including JOINT PALESTINE APPEAL) 1969-77

Correspondence re functions, meetings and fund-raising.

H.54

KOL YISROEL GROUP (Philadelphia)

1969

Correspondence with the Chairman re persecution of Jews in Arab countries.

H.55

LONDON JEWISH HOSPITAL MEDICAL SOCIETY

1970-78

Correspondence is mainly requests to Chain to give the Annual Oration of the Society (he did so in March 1977).

1978 correspondence is <u>re</u> nomination of Chain as an honorary member of the Society.

THE MACCABEANS H.56, H.57 1955, 1971-75 H.56 Correspondence with successive Honorary Secretaries of the Society consisting mainly of invitations to Chain to attend one of the society's dinners as a guest of honour (he accepted in December 1974, see below). H.57 Typescript drafts of 'Speech for the Maccabeans on December 15th 1974', including autobiographical reminiscences of Chain's early life up to his departure from Germany in 1933. H.58 MUSEUM OF THE DIASPORA (BETH HATEFUTSOTH) 1977-78 Request to Chain to become a member of the Executive Council of the British Friends of the Museum (accepted); invitations to the opening ceremony in Tel Aviv, May 1978. H.59 NATIONAL COUNCIL FOR SOVIET JEWRY OF THE UNITED KINGDOM AND IRELAND 1976 Correspondence re implications of Chain's election as a Foreign Member of the Academy of Sciences of the USSR. See also A.170, E.218. Brief correspondence from the Women's Campaign for Soviet Jewry is also included here. H.60 SCHEU FOUNDATION FOR ASTHMA AND RESPIRATORY DISEASES 1977-78 Correspondence and information about the Foundation. Includes invitation to Chain to become a Trustee. See also K. 204. H.61 SHAARE ZEDEK HOSPITAL, JERUSALEM 1973, 1975

Correspondence with the Chairman (V. Mishcon) and Executive Director of the British Council of the Shaare Zedek Hospital, mainly arising from requests to Chain to give lectures/attend functions in aid of the hospital.

- H.62, H.63

 TECHNION ISRAEL INSTITUTE OF
 TECHNOLOGY

 1953-77

 H.62

 Correspondence with colleagues at the Technion,
 1958-77, re research, visits, functions, etc.

 H.63

 Correspondence with the British Technion Society
 and other related bodies, 1953-77. Mainly re
- H.64 UNION MONDIALE DES ÉTUDIANTS JUIFS 1949

 Correspondence from the Secretary-General re
 Chain's appointment as a member of the Honorary

Committee.

Vice-President of all these bodies.

H.65
UNION O.S.E. (Union des Oeuvres de Secours aux Enfants et de Protection Sanitaire des Populations Juives)

1954, 1960-75

Includes 'Association "OSE" in Israel'and 'British OSE Society (Organisatio Sanitaria Ebraica)'.

meetings and functions. Chain was an Honorary

1954 correspondence includes request to Chain to serve on the Scientific Council of Union O.S.E.

Later correspondence is mainly with British OSE Society re meetings of the Executive Committee. Chain was an Honorary Vice-President until the organisation was absorbed by the Central British Fund for Jewish Relief and Rehabilitation in 1975.

1949-79

Israel and Jewish organisations

H.66-H.135

THE WEIZMANN INSTITUTE OF SCIENCE

(formerly the Daniel Sieff Research Institute)

Very little remains to document Chain's early associations with the Weizmann Institute, although it is clear that he seriously considered going to work there in the late 1940s (see A.79, A.80, H.66, K.12). He was a long-standing member of the Board of Governors, Chairman of the Committee on Membership and Honours for Public Service (from 1970 - see H.90) and Vice-President of the Weizmann Foundation from 1972 (see H.94).

Much of the following correspondence is with fellow Governors reforthcoming meetings and elections, and it includes discussions of many different aspects of the Institute's financial and administrative affairs as well as some more personal exchanges.

H.66

Correspondence 1949-56

Includes letter from E.D. Bergmann, January 1949 urging Chain to come and work at the Institute; letter from C. Weizmann, December 1949; correspondence with A. Katchalsky re development of antibiotics industry in Israel, 1950-51; correspondence re Chaim Weizmann Memorial Lectures and arrangements for visit of D. Marotta, 1956.

H.67

Correspondence and papers 1958-59

Includes letter from M.J. Sieff re candidates for Presidency of the Institute and 7 pp. typescript in Italian headed 'Memorandum per l'organizzazione in Italia di una Società di Amici dell' Istituto Scientifico Weizmann'.

The remaining correspondence consists of Chain's carbons only.

H.68

Correspondence 1961-63

Mainly re arrangements for meetings of the Board of Governors and other events. Includes some personal exchanges and a long letter from Chain to 1. Sieff re the relationship between the Executive Council of the Institute and the Board of Governors.

H.69

Correspondence with members of the American Committee for the Weizmann Institute, 1954-63.

Mainly with A. Feinberg (President) and J. Brainin (Executive Vice-Chairman), re various fund-raising

and commemorative projects.

H.70 Correspondence 1964-January 1965

re arrangements for celebrations to mark the 20th Anniversary of the founding of the Weizmann Institute and the 70th birthday of Meyer W. Weisgal, Chairman of the Executive Council of the Institute. Includes 2 pp. typescript tribute to Weisgal written for inclusion in a Jubilee presentation volume (see below).

- H.71 Copy of booklet prepared for Weisgal's 70th birthday.
- H.72 Correspondence with A. de-Shalit, April 1965, reproposals for collaboration between the Weizmann Institute and the British Ministry of Technology.
- H.73 Correspondence with Weisgal and others, May-October 1965.

Mainly re arrangements for meetings, visits, etc.
Includes copy of a letter from N.M.V. Rothschild to M. J. Sieff
re financial and administrative problems of the Weizmann
Institute.

- H.74 Correspondence with W. Taub and others, July-September 1965, re negotiations with Beecham Research Laboratories for collaboration with the Weizmann Institute through the Yeda Research and Development Co. Ltd.
- H.75

 Booklet recording speeches and tributes during Presentation of the Weizmann Award in the Sciences and Humanities to Lord Sieff of Brimpton and (post-humously) Mrs. Rebecca Sieff, 3 January 1967.
- H.76

 Arrangements for Extraordinary Meeting of the Board of Governors of the Weizmann Institute, April 1967.

 Folder also includes Agenda of the meeting and a copy of the 'Operating Budget 1967-68'.
- H.77 Correspondence with Margalit Sela and others re visit to the Weizmann Institute for informal discussions, June-July 1967.

H.78 Correspondence re Annual General Meeting of the Board of Governors, October 1967. Includes a letter from D.D. Stone (Chairman of the Board), August 1967, re the impact of the recent war on the future of Israel. H.79 Ms. drafts of speech, apparently delivered on the occasion of the opening of the new Wolfson Institute of Experimental Biology at the Weizmann in October 1967. H.80 Arrangements for meeting of Board of Governors, December 1968. Includes copy of proposal by P. Hillman for establishment of a research group in Neurophysiology at the Weizmann (for consideration at the meeting), and some related correspondence. H.81 Correspondence with P. Sporn, January-April 1969, re nominations for the Presidency of the Weizmann Institute. Includes accounts of meetings of members of the Selection Committee and discussions with prospective candidates. H.82 Correspondence with other members of the Selection Committee and prospective candidates, September 1968-April 1969. Includes letter from M.J. Sieff re size and structure of the Board of Governors of the Weizmann Institute. H.83 3 pp. typescript draft by P. Sporn, 4 March 1969, headed 'Advisory Council, The Weizmann Institute of Science', advocating the formation of a small Scientific Advisory Council to make recommendations to the Board of Governors. H.84 Summary of resolutions at Extraordinary General Meeting of the Board of Governors, April 1969, including the election of A.B. Sabin as the next President, and correspondence with Sabin following his election. H.85 Correspondence with various members of the Weizmann Institute and Board of Governors, May-December 1969, mainly re arrangements for meetings and visits.

H.86 Correspondence, January-April 1970

Mainly re administrative and scientific policy of the Weizmann Institute. Includes several references to proposed Scientific Advisory Council. Letter from H.W. Thompson, 3 April, is re arrangements for Chain to represent the Royal Society at the installation of the new President of the Institute.

H.87-H.90 Correspondence with D.D. Stone (Chairman, Board of Governors) and others, September-November 1970.
In alphabetical order.

H.87 C.B. Anfinsen

Includes copies of letters from A.B. Sabin and S.L. Stulman to Anfinsen re terms of reference of the new Scientific and Academic Advisory Committee.

H.88 M.M. Boukstein

Mainly re Boukstein's appointment as Chairman of the Executive Council. Includes letter from C.B Anfinsen.

H.89 H. Levine

Includes general correspondence re scientific policy, the political situation in the Middle East, etc.

H.90 D.D. Stone

Includes request to Chain to serve as Chairman of the newly-formed Committee on Membership and Honours for Public Service, invitation to Birthday Dinner Party in New York in honour of Stone and H. Levine, and arrangements for informal meeting of the Scientific and Academic Advisory Committee.

H.91 Correspondence re membership of the Committee on Membership and Honours of the Board of Governors of the Weizmann Institute, February-September 1971. Includes correspondence with M.M. Boukstein re general affairs of the Institute.

H.92, H.93 Correspondence re nominations for honours, February-December 1971.

H.92 February-October

H.93 November-December

H.94-H.99 Correspondence and papers, 1972

Nominations for Honours Committee, arrangements for meetings, general correspondence <u>re</u> the affairs of the Institute.

H.94 January

Mainly re nominations and electoral procedure. Includes copy of telex from A.B. Sabin congratulating Chain on election to Vice-Presidency of the Weizmann Foundation.

H.95 February-May

Mainly re nominations and electoral procedure. Includes some correspondence re fund-raising.

H.96 June-July

Mainly re nominations and electoral procedure. Includes draft recommendations of the Honours Committee on the criteria for election of candidates to the Board of Governors, and related correspondence.

H.97 August-September

Mainly <u>re</u> nominations and elections, but includes letter from M.M. Boukstein <u>re</u> scientific work at the Institute.

H.98 September-October

Mainly re nominations and elections. Includes some arrangements for meetings in November.

H.99 November-December

Mainly re meeting of Board of Governors. Includes letter from A. Patchornik reporting on progress of collaborative research project with Beecham Research Laboratories.

H.100-H.104 Correspondence and papers, 1973

H.100 January-March

Nominations and elections, arrangements for meetings and discussions. Includes Chain's draft letter of congratulation to E. Katzir on his election as President of Israel.

H.101 April-May

Nominations and elections, arrangements for meetings. Includes correspondence re corrections to the minutes of the Board of Governors meeting in November 1973.

H.102 June-July

Nominations, arrangements for meetings and visits, correspondence re administrative problems. Includes some correspondence with the Executive Secretary of the Weizmann Institute Foundation.

H.103 August-September

Nominations, arrangements for meetings. Includes correspondence re the minutes of the Executive Council meeting in June 1973.

H.104 October-December

Mainly re nominations. Includes some personal correspondence from D. Kleeman.

H.105-H.110 Correspondence and papers, 1974

H.105 January-March

Re nominations and elections. Includes letter from A. Feinberg (Chairman, Board of Governors) re fund for families of members of the Weizmann Institute killed in the Yom Kippur War.

H.106 April

Includes correspondence with D. Kleeman, S.L. Stulman and others re financial position of the Weizmann Institute, copy of typescript by M.W. Weisgal entitled 'Some Observations on the State of the Institute' and miscellaneous re nominations, awards, etc.

H.107 May

Includes correspondence re nominations, elections and meetings and re various financial and administrative problems of the Institute.

H.108 June-July

Re nominations, elections, meetings. Includes invitation to Chain to serve on the International Sponsoring Committee for the Chaim Weizmann Centenary Celebration and 2 pp. typescript 'Report on Membership of Board of Governors of the Weizmann Institute and Criteria for Election to the Board', 10 July 1972.

H.109 August-September

Mainly re arrangements for meetings and functions. Includes some correspondence re nominations and elections and re financial position of the Institute.

H.110 October-December

Re nominations, elections, arrangements for meetings and financial affairs of the Institute.

H.111 Correspondence with the Director of the Weizmann Institute Foundation, February-November 1974.

Also included here is material re the Comitato Italiano per L'Istituto Scientifico Weizmann.

H.112-H.117 Correspondence and papers, 1975

H.112 January-April

Includes copies of press releases re research at the Weizmann Institute, draft telegram of condolence from Chain on death of Margalit Sela and letter announcing the Search Committee's recommendation that Professor Michael Sela be appointed as President of the Institute.

H.113 May-June

Mainly re nominations and elections. Includes presscuttings re the activities of the Italian Committee for the Weizmann Institute.

H.114 July-September

Mainly re nominations, elections, arrangements for Meetings. Includes correspondence from D. Kleeman re administrative affairs of the Institute.

H.115 October

Includes agenda for Executive Council meeting on 18 November and copy of Operating Budget for 1975-76.

H.116 November

Mainly re nominations and elections.

H.117 December

Correspondence re nominations and re matters arising from the Board of Governors meeting in November 1975.

H.118-H.121 Correspondence, 1976

H.118 January-February

Re meetings and functions, nominations and awards. Includes further correspondence arising from the Board of Governors meeting in November 1975 and personal correspondence with M.M. Boukstein.

H.119 March-July

Re nominations, arrangements for Board of Governors meeting, etc.

H.120 August-October

Mainly re nominations and awards with some personal correspondence including copy of Chain's letter of congratulation to Sir Marcus Sieff on his election as Chairman of the Board of Governors.

H.121 November-December

Mainly re nominations and awards. Includes some personal correspondence.

H.122-H.126 Correspondence 1977

H.122 January-February

Includes correspondence re membership of the Board of Governors and scientific research in progress at the Institute.

H.123 March-May

Includes request to Chain to serve on an ad hoc committee to study the relations between 'pure' and 'applied' research, and arrangements for visit to Israel in June.

H.124 June

Includes extensive correspondence with the President (M. Sela) <u>re</u> scientific policy of the Institute including the function of the ad hoc committee and proposed agreement between Yeda and Miles Laboratories.

H.125 August-September

Mainly <u>re</u> honours and awards. Includes letter from Chain to D. Vofsi expressing views on the scientific policy of the Institute.

H.126 October-December

Includes copies of Chain's letters of condolence on the deaths of M.W. Weisgal and D.D. Stone.

H.127-H.131 Correspondence 1978

H.127 January

Mainly <u>re</u> nominations and awards. Includes copy of letter from Chain to E. Japhet <u>re</u> meetings of the ad hoc committee on applied research.

H.128 February-March

Mainly re nominations and awards.

H.129 April-June

Includes correspondence with M. Sela and Sir Marcus Sieff re structure and function of the Committee on Applied Research and letter from D. Kleeman re the future of the Weizmann Institute Foundation.

H.130 June-July

Re nominations and awards.

H.131 September-December

Includes correspondence <u>re</u> meeting of Board of Governors which Chain was prevented by illness from attending.

H.132 Correspondence, January-July 1979

Includes correspondence re negotiations with the Italian pharmaceutical industry, arrangements for meetings and visits and some personal correspondence.

- H.133 Ms. of undated speech about the Weizmann Institute.
- H.134 Undated typescript outlining proposals for re-organisation of the internal administration of the Institute.
- H.135 Shorter unindexed correspondence <u>re</u> the Weizmann Institute, 1967-71.

H.136

WHITTINGEHAME COLLEGE (Sussex)

1967

Chain was on the Board of Governors.

Correspondence with the Secretary, agendas and minutes of meetings of the Board of Governors.

H.137

WORLD JEWISH CONGRESS

1967, 1975

Letter from M. Goldman, December 1967, congratulating Chain on joining the World Jewish Congress Executive.

Invitation to Farewell Dinner of the British Section of the World Jewish Congress, 1975.

H.138

YESHIVA UNIVERSITY

1968-77

Chain was awarded an Honorary Degree by the Albert Einstein College of Medicine, Yeshiva University, in 1961 (see J.37).

This folder contains invitations to Chain to attend various functions at the University including dinner honouring the 30th Anniversary of Samuel Belkin as President of Yeshiva University to which Chain sent a message of congratulation to Belkin since he was unable to attend.

| H.139-H.141 | Shorter unindexed correspondence | 1948-79 |
|-------------|--|---------|
| | Within each folder the organisations are presen alphabetical order. | ted in |
| H.139 | Requests to give talks and lectures on various as of Jewish life and thought, 1948-79. | spects |
| H.140 | Requests/thanks for financial help, patronage o support, 1963-79. | r other |
| H.141 | Invitations to dinners and functions; miscellane 1963-77. | eous, |

SECTION J VISITS AND CONFERENCES J.1 - J.193

This Section deals with visits, lecture-tours, scientific congresses and symposia 1948-79. Chain was in great demand and received many invitations to attend, present papers, chair sessions, provide introductory or concluding remarks, or to participate in the organisation of conferences as a committee or panel member, or as editor of the published proceedings. He was a cosmopolitan, enjoying travel despite the discomforts of asthma and respiratory difficulties, and accepted many of these invitations which he usually combined with visits to research institutions or laboratories, or to friends.

The material is consequently heterogeneous, and may vary from a single letter of invitation to a full account including preliminary arrangements, invitations sent out to speakers, drafts for speeches or major papers delivered by Chain, letters of thanks or congratulation and the like, extending over several years. Many of the undated lectures and papers in G.126 - G.155 were almost certainly given at conferences, but cannot be identified precisely (but see G.64, G.89).

The presentation is chronological as far as possible. At the end of each year is placed a folder or folders of miscellaneous invitations or correspondence for which no further identifiable material can be traced. Some of these represent declined invitations, but some refer to conferences which Chain may have attended and for which no other evidence survives in this collection.

For conferences on penicillin, see B.73 - B.84, B.86 - B.88, B.90.

For conferences organised by Chain at the Istituto Superiore di Sanità, see C.79 - C.101.

For conferences organised by societies and organisations, see E.11 - E.17, E.44, E.45 - E.52, E.64, E.65, E.73 - E.75, E.83, E.132, E.149 - E.155, E.165, E.167 - E.169, E.198, E.202, E.205, E.206, E.207 - E.210, E.224, E.233, E.234.

Invitation for 1948

J.1 Symposium on the ground substance of mesenchyme and hyaluronidase, New York Academy of Sciences, 3-4 December 1948.

1949

J.2 Réunion Internationale de Tuberculose, Lausanne, April.

Chain's lecture, on 'Chemistry of the Tubercle Bacillus',
was published in the conference volume 'Bacilles tuberculeux et paratuberculeux'.

Folder includes travel and editorial correspondence, photograph of Chain, p.1 of summary and pp.4-5 of text of lecture on 'Biologically active substances from the tubercle bacillus', n.d.

- J.3 Symposium on 'Mutagenic substances', Naples, 27-31 May.
 Brief correspondence re meeting and publication.
- J.4 Congress of Società per il Progresso delle Scienze, Rome,28 November.

Chain lectured on 'Modern Developments in Bacterial Chemotherapy'.

14 pp. typescript of lecture, brief editorial correspondence.

Invitations for 1949

J.5 Symposium on Venereal Diseases, Washington D.C., 7-8 April.

Symposium at St. Andrews, 23-30 July.

Invitations for 1950, 1951, 1952

J.6 First International Congress of American College of Chest Physicians, Rome, 17 September 1950.

XIIth International Congress of Pure and Applied Chemistry, New York, 3-7 September 1951.

Conference in Jerusalem, n.d. (1951).

Symposium in Pallanza, n.d. (1952).

1953

J.7 Second International Congress of Biochemistry, Paris.

Introductory speech, 10 pp. typescript. n.d. but refers to M. Macheboeuf, organiser of Symposium, who died suddenly in August 1953.

1954

J.8 Indian Science Congress, Hyderabad, January.

Brief correspondence re travel arrangements.

Invitation to address Indian Academy of Sciences, Ahmedabad, programme of visit, ms. and typescript versions of two lectures given by Chain on 'Technique of submerged fermentations' and 'Some aspects of intermediate carbohydrate metabolism'.

J.9 Riunioni Medico-Chirurgiche Internazionali, Turin, 29 May-6 June.

Chain was awarded an honorary degree during the proceedings and also gave a lecture on 'Aspects of intermediate carbohydrate metabolism'.

Correspondence \underline{re} arrangements, summary of Chain's lecture, requests for copies, etc.

J.10 'Some mechanisms of Biological Synthesis'.

29 pp. typescript of lecture at Congress of Agricultural Industries, n.d., c.1954.

Invitations for 1954

J.11 Giornate Biochimiche Italo-Franco-Elvetiche, 21-24 April.

International Poliomyelitis Congress, Third International Congress, Rome, 6-10 September.

Third International Congress of Internal Medicine, Stockholm, 15–18 September.

Swiss Chemical Society, Altdorf, 25-27 September.

Second Radioisotope Conference, Harwell, n.d.

Asociacion Internacional de Antibioticos y Quimioterapicos, 2nd International Congress, Buenos Aires, n.d. (Chain was an Honorary President).

Médecine et Hygiène, Symposium on antibiotics, October.

1955

J.12 Third International Congress of Biochemistry, Brussels, August.

Chain gave a paper on carbon metabolism of moulds.

Brief correspondence only, repaper and arrangements.

Invitation for 1955

J.13 Istituto Lombardo, meeting on macromolecules, Milan, 25–28 July.

1956

J.14 . Rassegna Internazionale Elettronica e Nucleare, Rome, 28 June-15 July.

Chain was a member of the Scientific Committee.

Brief correspondence only, re Proceedings.

1957

- J.15

 Fifth National Congress of Chemotherapy, Turin, 5-6 June.

 Chain gave a paper, 'Introduction to the new antibiotics'.

 Correspondence re arrangements, publication, etc.
- J.16 International Symposium on Chemistry of Enzymes, Tokyo, 15–23 October.

 One letter only.

1958

- J.17-J.19 Visit to U.S.A., September-October.
 - J.17 Symposium on Molecular Biology, organised by Colombia University and the Rockefeller Institute for Medical Research, 25–30 September.

Programme of meeting, correspondence with organisers.

J.18 Second Conference on Physicochemical Mechanism of Nerve Activity, 2–3 October, and

Second Conference on Muscular Contraction, 3-4 October, both organised by New York Academy of Sciences.

Chain gave a paper on 'Recent progress in intermediary carbohydrate metabolism of brain and muscle' at the first of these conferences.

Programme of meetings, correspondence with organisers.

- J.19 Correspondence with colleagues and friends re lectures and visits by Chain during his stay in U.S.A., at Rutgers, Bethesda, New York University College of Medicine, Harvard, Wisconsin, Purdue, Colombia, etc.
- J.20 Seventh International Congress for Microbiology, Stockholm.

Chain was Chairman of a section.

Brief correspondence, Chain's carbons only.

J.21 Fourth International Congress of Biochemistry, Vienna, 1-6 September.

Chain gave a summarising talk.

Brief correspondence re arrangements and publication.

J.22 Symposium at Wellcome Research Institution, London, September.

Brief correspondence only.

Invitations for 1958

J.23 Seminario di Chimica Terapeutica, Pavia, April.

Convegno sul valore antibiotico della colimicina, Rome, April.

Congresso della Società Internazionale di Ematologia, Rome, September.

Société Suisse d'Endocrinologie, Berne, September.

1959

J.24 Symposium on antibiotics, Prague, 18-23 May.

Chain gave a paper, and contributed to panel discussion.

Correspondence with organisers and colleagues re arrangements; includes a little scientific correspondence arising, press-cutting.

First International Symposium on Anti-infectious and Antimitotic Chemotherapy, Geneva, 12–13 September.

Chain was an Honorary President.

Correspondence with organisers.

Invitations for 1959

J.25 Conference on Controlled Clinical Trials, Vienna, March.

Meeting on 'Biochemistry and Physiology of Insulin and the Sulfonylureas', New York, April.

Symposium on 'Prevenzione della resistenza batterica agli antibiotici', Perugia, May.

Invitations for 1960

J.26

Continuous culture symposium, March.

Twelfth International Congress of the International College of Surgeons, Rome, May.

Chain served on Committee of Honour.

Meeting of German Society for Endocrinology, April.

Chain gave a paper.

Symposium on transport and metabolism, Prague.

Chain served on International Committee.

1960

J.27, J.28

Visit to U.S.A., December.

J.27

Correspondence re City of Hope Award to Chain, 4th December; ms. and typescript versions of his address on occasion of award.

Also included is 12 pp. typescript 'Synopsis of the main subjects of the scientific work of E.B. Chain and his coworkers'.

J.28

Meeting of the Association for Research in Nervous and Mental Disease, New York, December.

Typescript of Chain's paper, 'Studies on brain metabolism', later published in a slightly different form in <u>Ultrastructure</u> and Metabolism of the Nervous System, 1962 (Bibliog. 92).

Folder also includes brief correspondence <u>re</u> publication arrangements.

1961

J.29

'Giornate Mediche Internazionali' of Società Italiana di Chemioterapia, Turin, 10-11 June.

Chain gave a paper on the new penicillins.

Correspondence with organisers.

| | Visits and conferences |
|-----------|---|
| J.30-J.34 | Visit to China, April-June. |
| | The visit was at the invitation of the Chinese Medical Association and the Academia Sinica; it was first bruited in 1958 but arrangements were not complete until 1961. |
| J.30 | Correspondence, 1958-61, re visit, arrangements, schedule of activities, guest-lists, etc. and a little later correspondence re research, exchange of students and information. |
| J.31 | Red exercise-book of miscellaneous travel notes, names of personnel, draft for speech, etc. (few pages used); another ms. draft for a speech is included as a loose sheet. |
| J.32 | Ms. and typescript drafts for Chain's report on his visit. |
| J.33 | Copy of final version of report, 17 pp. duplicate typescript and brief correspondence sending copies to Foreign Office and Ministry of Science. |
| J.34 | Article on visit, based on interview and originally intended for publication in The Observer but not published. |
| J.35 | Fifth International Congress of Biochemistry, Moscow, 10-16 August. |
| | Chain chaired the section on Biochemistry of Antibiotics. |
| | Correspondence with organisers, programme of events, letters of thanks and later correspondence re Chain's invitations to Russian colleagues to work at Istituto in Rome. |
| J.36 | Visit to Czechoslovakia, September, at invitation of Slovak Academy of Sciences. |
| | Correspondence only. |
| J. 37 | Visit to New York, November, for award of Honorary Doctorate of Humane Letters by Albert Einstein College of Medicine, Yeshiva University. |
| | Correspondence, 1961-62, letters of thanks, 9 pp. ms. draft of Chain's address. |
| | Invitations for 1961 |
| J.38 | Second International Symposium of chemotherapy, Naples, 14-17 September (Chain chaired a session on 'new antibiotics'). |
| | Visit to U.S.A. |

Visit to Paris, December.

1962

J.39 Journées Bretonneau, Tours, 16-18 February, Centenary celebration for death of Bretonneau.

Chain lectured on the new penicillins and the production of lysergic acid.

Correspondence with organisers and colleagues, programme of events, 4 pp. ms. draft of Chain's introductory remarks on Bretonneau.

J.40 Fifth International Congress, Società Farmaceutica del Mediterraneo Latino, Palma de Mallorca, 9-11 May.

> Chain spoke on 'Recenti Progressi nel Campo della Neurochimica'.

Correspondence with organisers and colleagues, summary of lecture.

J.41 Journées Médicales de Bruxelles, 14-16 June.

Chain spoke on 'The New Penicillins'.

Correspondence with organisers.

J.42-J.45 Visit to South America, July.

This was an extended tour, taking in Brazil, Argentina, Uraguay and Chile, and including an Honorary Degree from the University of Brazil and contacts with Jewish organisations as well as with academic and industrial institutions.

- J.42 Correspondence re arrangements, invitations, letters of introduction, guest-lists, letters of thanks and a little continuing correspondence 1961-63.
- J.43 Ms. drafts for speeches given on visit, invitation cards.
- J.44 Miscellaneous printed matter re Jewish and academic institutions in South America.
- J.45 Photographs and press-cuttings of visit.

 See also A.223.

J.50

Chain's paper.

Visits and conferences

J.46 International Symposium on Pharmaceutical Chemistry, organised by Società Italiana di Scienze Farmaceutiche, Florence, 17-19 September. Chain chaired a session, and his concluding remarks were published in the conference Proceedings. Correspondence with organisers re arrangements and publication. J.47 Journées de Biochimie, Bordeaux, 18-20 October. Chain spoke on the mode of action of insulin, and on the new penicillins. Correspondence with organisers and colleagues. Invitations for 1962 J.48 Laboratoires Bristol, symposium on child medication. Chain was asked to preside and speak. Meeting and lecture at Milan and Pavia. Simposio Internazionale sui Glucidi Fosforilati, Milan, October. 1963 Symposium on 'Global Impacts of Applied Microbiology', J.49, J.50 Stockholm, 29 July-2 August. Chain spoke on 'Antibiotics today and in the future' and his paper was published in the conference Proceedings. Correspondence with organisers and colleagues, programme of J.49 events. Folder also includes letter of thanks for lecture given to Microbiology Division, Swedish Medical Society, March 1963.

Miscellaneous typescript and ms. drafts, corrected proof of

J.51

Visit to Moscow, October.

The visit was originally planned for May, but had to be postponed.

Correspondence re invitation and arrangements 1962-63, mainly Chain's carbons only.

Invitations for 1963

J.52

(March-June)

Invitation to America, n.d.

Beecham Symposium on Drug Absorption, April.

Invitation to America, May.

8º Congresso Nazionale, Società Italiana di Patologia, Perugia, May.

Laboratoires Bristol, Symposium in Paris, May.

Invitation to Padua, June.

J.53

(July-November)

Third International Symposium of Chemotherapy, Stuttgart, July. Chain was asked to give introductory talk.

International Symposium on Diabetes, Modena, September.

Squibb Institute, 25 Anniversary Symposium, October.

Symposium on new penicillins, Milan, November.

Invitation to São Paulo.

1964

J.54

Centenary Celebrations, Politecnico di Milano, April.

Chain attended as representative of Imperial College as R.P. Linstead (Rector) was unable to attend.

Invitation, programme of events, brief correspondence.

J.55 Conference at Apothecaries Hall, London, 2-4 June.

> Chain served on Conference Committee and chaired session on 'Laboratory Aspects of Therapy'.

Conference programme, copy of Chain's talk 'The New Penicillins' (offprint). (Bibliog. 106).

J.56 Sixth International Congress of Biochemistry, New York, 26 July-1 August.

> Chain accepted an invitation to chair a session, but no other documentation survives.

Invitations for 1964

J.57 3º Symposium Internazionale sul Lisozima di Fleming, Milan, Chain was asked to serve on Committee of Honour.

> First International Symposium on Radiosensitizers and Radioprotective Drugs, Milan, May. Chain was asked to serve on Committee of Honour.

Antibiotic Congress, Prague, June.

Invitation to Danish Society of Pathology, November.

1965

J.58 World Jewish Congress Second 'Conference of Intellectuals',

> The theme of the Conference was 'Why should Jews remain Jews in this changing world?'. Chain spoke on 'Why I am a Jew' at the invitation of 1. Sieff.

Invitation, ms. and typescript drafts of speech.

Also included here is 8 pp. ms. draft for speech on the value of Jewish primary education, introducing 1. Sieff, n.d., but probably also c. 1965.

Visit to New York for Tenth Anniversary Dinner of Albert Einstein College of Medicine, Yeshiva University, given in honour of Samuel Belkin (President), May.

> Chain spoke at the dinner, but only a preliminary 'message' survives; he was made a Founder Member of the College.

Correspondence, arrangements, letters of thanks.

J.59

J.60, J.61 Visit to Chicago, June.

Chain received an honorary D.Sc., gave a lecture 'Antibacterial Chemotherapy in Perspective', and visited various friends and colleagues.

- J.60 Correspondence re degree and lecture, travel arrangements, speech of presentation, letters of thanks.
- J.61 Correspondence with colleagues and friends.
- J.62 International Symposium on 'Impact of Basic Sciences on Medicine', organised by Hebrew University of Jerusalem, 20–28 June.

Chain spoke on 'Present state of antibiotics chemotherapy' and a condensed version was published under the title 'Phases of penicillin research' in the conference proceedings in the Israel Journal of Medical Sciences, 1, 1966.

Correspondence re arrangements, programme, list of participants, correspondence with colleagues and friends, transcript of Chain's talk, proof of published version.

J.63, J.64

Fifth International Conference on Antimicrobial Agents and Chemotherapy, and Fourth International Congress of Chemotherapy, Washington D.C., 17-21 October.

Chain spoke on 'Twenty-five years of penicillin therapy in perspective', published in Antimicrobial Agents and Chemotherapy, 1965 (Bibliog. 115).

- J.63 Correspondence with organisers, programmes, list of participants, invitation to various 'round table' and discussion groups, letters of thanks, editorial correspondence.
- J. 64 Ms., revised typescript, etc. of Chain's paper.
- J.65-J.67 'Teach-in' on 'Pharmaceutical Profits and the Nation's Health', Edinburgh, 7 December.

Chain was the first speaker; the Chairman was R.H. Girdwood. The 'Teach-in' was organised by the Association of the British Pharmaceutical Industry.

J.65 Programme of meeting, correspondence with organisers and colleagues, press report, ms. and revised typescript of Chain's contribution.

| J.66 | Transcript of 'Teach-in', 121 pp. duplicated typescript. |
|-----------|---|
| J.67 | Documents relating to prosecution brought by American Cyanamid Company against a former employee for 'drug piracy', papers numbered 1-11. |
| | Invitation for 1965 |
| J. 68 | Official Opening, School of Microbiology, University of Melbourne. |
| | <u>1966</u> |
| J.69 | Visit to Copenhagen, 26-28 April, to address Danish Society of Pathology and Microbiology, on 'The New Penicillins'. |
| | Correspondence only, re arrangements, 1965-66. |
| J.70-J.73 | Visit to U.S.A., for symposium 'Reflections on Research and the Future of Medicine', organised by Merck, Sharp and Dohme in New York and New Jersey to celebrate the opening of their new research laboratories at Rahway, N.J., 26-27 May. |
| | Chain gave the principal address, 'The Quest for New Biodynamic Substances', which was published in Perspectives in Biology and Medicine, 10, 1967 (Bibliog. 120). |
| J.70 | Correspondence re symposium, travel arrangements, etc. and including some scientific correspondence on research projects and collaboration. |
| J.71 | Correspondence re publication of Chain's address. |
| J.72 | Ms. and typescript notes and drafts for address, press release and press-cuttings. |
| J.73 | Conference programme, background material sent to Chain. |
| | For an album of photographs compiled on the occasion see A.225. |
| J.74 | Visit to Paris, for Tercentenary Celebrations of Académie des Sciences de l'Institut de France, June. |
| | Chain was invited to give one of the speeches at the inaugural ceremony 'sous la Coupole', and also represented Imperial College. |
| | Correspondence with Secretary of Academy, programme of events, ms. notes and drafts for Chain's address (in French) |

events, ms. notes and drafts for Chain's address (in French).

J.75, J.76 Ninth International Congress for Microbiology, Moscow, 24-30 July.

Chain was guest of honour of Organising Committee, and 'Moderator' (= organiser) of Symposium B1, on 'Biologically Active Substances of Microbial Origin', held on 26 July.

- J.75 Correspondence with organisers and colleagues.
- J.76 Conference programme and newsletters, miscellaneous papers and material sent to Chain.
- J.77-J.80 Symposium on the Semi-Synthetic Penicillins, arranged by Beecham Research Laboratories, Johannesburg, 2-3 September.

Chain gave the opening address, on 'The Semi-Synthetic Penicillins', and the conference proceedings were published.

During his visit he also visited Kenya, Uganda, other medical research centres in South Africa, and spoke on 'Science in Israel' to the Israeli United Appeal Group in Johannesburg.

- J.77 Correspondence with organisers and colleagues, invitations, travel arrangements, letters of thanks; includes a little material on scientific research.
- J.78 Chain's journal and travel notes, 8 pp. ms.
- J.79 Correspondence re Chain's talk on behalf of Israeli United Appeal.
- J.80 Conference programme, Abstracts of speeches, texts of Chain's address and of his contributions to discussions, editorial correspondence.

1967

J.81-J.83 Visit to U.S.A., March-April.

Chain was invited by the Carl Neuberg Society for International Relations to receive the Carl Neuberg Medal and to address the Society at a banquet in Philadelphia. He also received an Honorary Doctorate from the Philadelphia College of Pharmacy and Science.

Chain spoke on 'Fermentation Research in Perspective'.

| J.81 | Correspondence re award of Carl Neuberg Medal, travel arrangements. Includes earlier correspondence from Pharmaceutical Manufacturers Association re invitation to Chain to be 'honored guest' at the Annual Meeting, which did not materialise. |
|------------|--|
| J.82 | Programme of Award, banquet, symposium on 'Drugs and Dreams', 29–30 March, texts of Chain's address to Carl Neuberg Society, and his reply on award of Hon. D.Sc. |
| J.83 | Correspondence re visits by Chain to research laboratories including Upjohn International, Inc., Zimpro Inc. (on behalf of Ministry of Agriculture, Fisheries and Food). |
| J. 84 | Symposium on the Biological and Clinical Aspects of the Central Nervous System, organised to celebrate 50th Anniversary of the Pharmaceutical Department of Sandoz Ltd., 16 October. |
| | Invitation, programme of arrangements. |
| J.85 | Second Conference on Global Impacts of Applied Micro- biology, Addis Ababa, 6-11 November. |
| | Correspondence re arrangements, provisional programme of events. |
| J.86 | Visit to Esso Research Laboratories, New Jersey, 27 November. |
| | Brief correspondence only. |
| | 1968 |
| J.87, J.88 | Visit to Brussels, 25-26 January. |
| | Chain was invited by the wife of the Israeli Ambassador to Belgium to attend and speak at a dinner for various charitable medical organisations; he spoke on the Weizmann Institute. |
| J.87 | Correspondence, invitations, arrangements. |
| J.88 | Ms. draft of a talk on 'Science in Israel', 6 pp. |
| | Two typescript drafts of talk on 'The Weizmann Institute of Science, a Jewish contribution to Knowledge and Progress'. |
| | |

| J.89 | UNESCO Symposium on Brain Research and Human Behaviour , Paris, 11–15 March. |
|------------|--|
| | Chain acted as 'General Discusser'. |
| | Correspondence with organisers and colleagues, invitation, draft and final version of programme, list of participants, ms. drafts of Chain's contributions to discussion. |
| J.90 | The Economic Conference, Jerusalem, 31 March-4 April. |
| | Correspondence, programme, reports, resolutions, etc. |
| | Invitations for 1968 |
| J.91 | Invitation from Jewish Institute for Medical Research, Houston to address Houston Society of Internal Medicine. |
| | Invitation to E. Merck Tercentenary Celebrations, Darmstadt, May. |
| | Comité d'Honneur for M-M Janot, May. |
| | Congrès Juif Mondial, colloquium on 'Où va le Judaisme?' |
| J.92 | Conference on 'Preparing Nutritional Protein from Spirulina', Stockholm, June. |
| | Symposium International sur le Développement, Monaco, September-December. |
| | Symposium on New Antiviral Vaccines, Moscow, October. |
| | 1969 |
| J.93, J.94 | Visit to University of Miami, Florida, January. |
| J.93 | Correspondence re visit, printed matter, arrangements for television interview with W.J. Whelan, schedule of appointments, photographs of Chain and colleagues, invitations to visit other universities during trip. |
| J.94 | 'Some comments on the mode of action of insulin'. |
| | Ms. and typescript draft of paper (kept with above). |
| | See also K.272. |
| | |

J.95, J.96

Sixth meeting of the Federation of European Biochemical Societies (FEBS), Madrid, 7-11 April.

Chain was Chairman of Colloquium D, Molecular Bases of Antibiotic Action, and contributed a paper to Colloquium E, Molecular Neurobiology. His paper 'Recent studies in aminoacid glucose interrelations in brain' was published in FEBS Symposium, 21, 1970 (Bibliog. 134).

J.95

Correspondence with colleagues and organisers re arrangements, draft and final programmes, personal and social engagements, editorial correspondence re publication, letters of thanks.

J.96

Various ms. and typescript drafts of Chain's paper.

J.97

Hauptversammlung der Deutschen Pharmazeutischen Gesellschaft, Karlsruhe, 2-5 October.

Chain spoke on '30 Jahre Penicillintherapie. Ein Rückblick und Ausblick'.

Correspondence, conference programme, ms. drafts of Chain's lecture.

N.B. The conference programme incorrectly lists the title as '40 Jahre Penicillin-Forschung'.

Invitations for 1969

J.98

Biochemie Kundl, Symposium on high dosage penicillin therapy, Vienna, June.

Sixth International Congress of Chemotherapy, Tokyo, August.

1970

J.99-J.111

'Aspects of Infection 1970'.

Beecham Research Symposia held in Auckland, Sydney and Melbourne, April 1970.

Chain gave the opening and closing addresses at each symposium, on 'The Semi-Synthetic Penicillins - an Introduction' and 'Prospects in Anti-Infective Therapy' respectively. His own conference paper 'Advances in the Understanding of the Mechanism of Penicillin Allergy' was published in the Proceedings, a copy of which appears at J.111.

Continued

| J.99-J.111 (Cont'd.) | During the visit Chain addressed Biochemical/Medical Society meetings on the history of penicillin therapy and on insulin; various dinners and celebrations were also held in his honour. |
|-------------------------|---|
| | He returned via Hong Kong and Bangkok where he visited research institutes. |
| | Because of his poor health and the protracted nature of the trip, Chain arranged for his family to accompany him and to take the journey in easy stages. |
| J.99 | Programmes, timetables, Chain's itinerary, biographical notes prepared for trip, etc. |
| J.100 | Correspondence with organisers at Beechams, colleagues and friends re conference, Chain's participation, contributions, travel arrangements, September 1969-January 1970. |
| J. 101 | Similar material, February-June 1970. |
| J.102 | Material re Dinner in Chain's honour, Auckland, N.Z.; menu, guest-list, ms. draft for speech, correspondence re arrangements. |
| J. 103 | Ms. draft for speech in Australia. |
| J.104 | Correspondence, itineraries, arrangements for visits to Hong Kong and Bangkok. |
| | Press-cutting re visit to Fiji. |
| J.105 | Scientific correspondence with colleagues arising from visits and lectures. |
| J.106 | Chain's letters of thanks, written on his return. Some with replies from colleagues and friends. |
| J.107 | Photocopies of letters of thanks written on behalf of Chain and his family by A.J. Melrose (Beechams). |
| J.108 | Transcript of recording of Chain's lecture 'Thirty Years of Penicillin Therapy in Perspective', given at St. Vincent's Hospital, Melbourne, 17 pp. typescript. |
| | This was an early informal version of his later paper 'Thirty Years of Penicillin Therapy' and although it had aroused great interest, Chain refused to allow publication and expressed annoyance that a tape-recording had been made (see letter in folder). |
| | |

- J.109 Ms. and typescript drafts of Chain's paper on penicillin allergy, and editorial correspondence.
- J.110 Miscellaneous papers and references, mainly on penicillin allergy, sent to Chain in connection with the Australian/ New Zealand symposia.
- J.111 'Aspects of Infection 1970'. Bound copy of symposium proceedings.

The Foreword and Introduction both refer to the importance of Chain's contribution to the events.

J.112 Beecham Research Symposium on Semi-Synthetic Penicillins, Moscow, 28 September-1 October.

> Chain was invited to lead the delegation of non-Soviet participants, and to present a paper on 'Active Areas of Research in the Penicillin Field'. He cancelled his visit for reasons of health.

Correspondence re Symposium, travel arrangements, etc. Includes programmes of papers, list of participants.

J.113 'Lines of Development in Medicine', Symposium at Twente, Holland, 20-21 November.

> The Symposium was organised by the Dr. G. J. van Hoytema Foundation and Merck Sharp and Dohme Nederland. Chain went at the invitation of Merck Sharp and Dohme and delivered a paper on 'The Role of Biochemistry in Future Medical Research'. His paper was published in the symposium proceedings, which did not appear until 1972 (see letter of 6 November 1972).

Correspondence with organisers re conference, travel and publication arrangements, programme and abstracts of papers, ms. and typescript draft of Chain's talk.

Invitations for 1970

J.114 Symposium on Genetics of Industrial Microorganisms, Prague.

> Conference on 'Environment and Society in Transition', New York City, April.

> Congress 'Cefalosporine, Penicilline semisintetiche', Sassari, May.

Pre-symposium on The Chemistry and Mode of Action of Antibiotics, Riga, June.

J.115

Tenth International Congress for Microbiology, Mexico City, August.

International Symposium on Antibiotics, Saragossa, October. Chain was invited to be Honorary President.

Centenary celebrations of birth of Jules Bordet, Institut Pasteur, November.

Second International Symposium on Antibiotics, Valencia, November. Chain was invited to give the closing speech.

1971

J.116, J.117

Food Manufacturers' Federation, Second National Convention, on 'Tomorrow's Food', Brighton, 26-27 September.

Chain spoke on 'Support of Fundamental and Applied Research in Food Science and Technology'.

J.116

Correspondence with organisers and colleagues.

J.117

Ms. and miscellaneous typescript drafts of Chain's speech (all different).

J.118

Discussion meeting on 'Effect of Fibre in Food', held at the Department of Biochemistry, Imperial College, 24 November.

Correspondence re arrangements, list of participants, drafts of Chain's opening remarks, letters of thanks.

Participants included representatives of industrial, academic, medical and government institutions.

J.119

'The Conversion and Manufacture of Foodstuffs by Microorganisms'. International Symposium sponsored by The Japan Section of the Institute of Food Technologists, Kyoto, Japan, 6-8 December.

Chain was to give a special lecture on 'Utilizing Microbes for Man's Benefit in the Future', but was unable personally to attend.

Correspondence, programmes.

J.120-J.126 Visit to South America and U.S.A., 25 December 1971-12 January 1972.

Chain was invited to spend a working week in Santiago, Chile, advising the Government of Chile on behalf of the World Health Organisation/Pan American Sanitary Bureau 'on the possible improvement in their antibiotic production especially with regard to penicillin production' (see J.120 for correspondence reterms of arrangements). He was accompanied by his elder son Benjamin.

Chain also visited other colleagues and firms in North and South America.

- J.120 Correspondence preceding visit, including invitations and terms.
- J.121 Itinerary, letters of introduction, addresses, social engagements.
- J.122 Correspondence with Beechams before and after visit, recosts of penicillin plant. Includes brief ms. research notes made by Chain during visit.
- J.123 Correspondence re visits in U.S.A. in course of travel.
- J.124 Correspondence arising from visit.

 Chain's report to WHO.
- J.125 Letters of thanks sent by Chain on his return, some with replies.
- J. 126 Miscellaneous bills, receipts, memorabilia, photographs.

Invitations for 1971

J. 127 'Les Voies du Judaisme', Brussels, January.

'Chemical Engineering at the Service of Mankind', Spring.

UNESCO meeting on university science education improvement, March.

Symposium on 'Molecular Mechanisms of antibiotic action on protein biosynthesis and membranes', Granada, June. Chain was asked to chair one of the sessions.

J.128

Symposium 'Moving Frontiers of Medical Virology', Budapest, June-July.

Symposium on toxins, Prague, Summer.

Israel Chemistry Week, Tel-Aviv, October.

Gruppa Incentivazione Ricerca Farmaceutica, research meeting, Rome, October.

Académie Nationale de Médecine, 150th Anniversary Celebrations, November.

1972

J.129

Visit to Norway, July.

This was a private visit, which Chain combined with a visit to the Findus factory at Hammerfest. He was accompanied by his son Daniel.

Correspondence re travel arrangements and with colleagues, itinerary, letters of thanks.

J.130

Proposed visit to Argentina, 1972, 1973.

Chain was invited to make a visit and lecture tour, sponsored by the Odol Foundation. The visit, scheduled for September 1972, was deferred until May, then October 1973 and then postponed because of political uncertainties in Argentina.

General correspondence re visit, 1971-73.

J.131, J.132

Industrial Biochemistry Group of the Biochemical Society, Colloquium on 'Biochemists in Industry', Nottingham, 19 December.

Chain spoke on 'Relationships between industrial and academic laboratories' and his talk was published in <u>Biochem. Soc.</u>
Spec. Publ., 2, 1973 (Bibliog. 155).

J.131

Correspondence with organisers, programme, editorial correspondence.

J.132

Ms. and typescript drafts of Chain's talk.

Invitations for 1972

J.133 Symposium on 'Antibiotics after Thirty Years', Birmingham, February.

International Sugar Research Foundation Symposium on 'Sugar and Human Health', Zurich, March.

Congress in Wiesbaden, April.

International Congress on endotoxins, Virginia, May.

1973

J.134-J.140 Visit to Vienna, 30-31 March.

The visit was mainly for the Symposium '20 Jahre Penicillin V', organised by Biochemie; Chain gave the introductory lecture which was published in a slightly shortened version under the title 'Beitrdge des Biochemikers zur Arzneimittelforschung' in Wiener Klinische Wochenschrift, 1974 (Bibliog. 163).

During his visit Chain also addressed the Gesellschaft der Ärzte in Wien and took part in a Round Table discussion at Sandoz.

In March, Chain was awarded the Grand Decoration of Honour in Gold for services rendered to the Republic of Austria, and was nominated Hon. Member of the Gesellschaft der Wiener Ärzte (see J.136).

- J.134 Correspondence with organisers, mainly re arrangements but includes an account sent to Chain of the history of discovery of Penicillin V, 1971-73.
- J.135 Correspondence re other lectures and meetings at Sandoz, etc., 1972-73.
- J.136 Correspondence, press releases, etc. re honours bestowed on Chain during visit.
- J.137 Editorial correspondence.
- J.138 Ms. and typescript drafts of Chain's lecture on 'Beiträge des Biochemikers zur Arzneimittelforschung'.

J.139 Miscellaneous versions of lectures on academic and industrial contributions to drug research, some given in Vienna.

All in German.

J. 140 Miscellaneous notes, diagrams, draft introductions for lectures.

Includes 47 pp. typescript lecture 'Dreissig Jahre Penicillintherapie. Ein Rückblick und Ausblick', n.d., and 11 pp. typescript of earlier lecture 'Gedanken zur Arzneimittelforschung', given at Medical Congress in Berlin, May 1964.

J.141 Sixth International Course on Freeze-Drying and Advanced Food Technology, Bürgenstock-Lucerne, 17–23 June.

Chain gave the opening address, on 'The impact of advances in methodology on biochemical research', and his talk was published in the Proceedings (Academic Press, 1974).

Programme of Course, editorial correspondence, 17 pp. typescript draft, and galley proof of Chain's address.

J.142 Visit to Rutgers University, New Jersey, for memorial service for S.A. Waksman, at which Chain spoke.

Includes travel arrangements, background material on Waksman's work at Technion, Haifa, ms., typescript and shortened version of Chain's address, copy of published memorial volume, photograph, and a little correspondence.

Also included is a little later correspondence <u>re</u> Waksman Memorial Lectures, 1978

Invitations for 1973

J.143 New York Academy of Sciences Conference on 'The Mode of Action of Antibiotics on Microbial Walls and Membranes', June.

Carlo Erba Foundation International Symposium on 'Fattori Naturali di Difesa Antifettiva e Antineoplastica', Milan, June.

1974

J. 144 Visit to Ghent, 29 March.

Chain delivered the second Corneel Heymans Memorial Lecture, on 'The Role of the biochemist in medical research in the past and future', which was published in the Ghent University chronicle, 'De Brug'.

Correspondence re lecture, publication, and also with the family of Mrs. Heymans who died January 1974.

Transcript of tape-recording of lecture, 20 pp.

Also included is a little earlier correspondence, 1970, re recollections of Heymans.

J. 145 Visit to Bordeaux, to celebrate election of F. Tayeau to Académie de Médecine.

Correspondence, two ms. drafts (in French) for speeches. (Bibliog. 164).

J.146-J.148 'Penicillamine - International Symposium', sponsored by Bayer and held at Royal Society of Medicine, 25 and 26 October.

Chain served on the Scientific Advisory Committee, and spoke on 'The Discovery of D(-) Penicillamine' (the full title was 'D-penicillamine: its discovery and chemical properties possibly relevant to its therapeutic use'). It was intended to edit and publish the proceedings, and a German version appeared, but delays occurred in the English publication.

- J.146 Correspondence with organisers and colleagues, draft programmes, arrangements, abstract of Chain's talk, editorial correspondence re English and German publication of proceedings, 1973-76.
- J.147 Miscellaneous ms. and typescript drafts for Chain's talk, including extensive bibliography.
- J.148 Typescript version, 11 pp.

J. 149, J. 150 Visit to Marburg, 18-20 November.

Chain was invited to visit and lecture at Behring-Werke; he suggested instead a discussion meeting for a small number of senior scientists, and a 'Forum Philippinum' on 'Immunologie und Gesellschaft' was organised.

During his visit, Chain was also the guest of Chemiewerk Homburg, and accompanied a cello recital, which was recorded.

- J.149 Correspondence, programme of events, editorial correspondence, press-cuttings, letters of thanks, etc., and a little correspondence re other visits and consultancies.
- J.150 Ms. and typescript drafts of Chain's talk at the 'Forum Philippinum', on 'Entwicklung und Gegenwärtiker Stand der Antibakteriellen Antibiotikatherapie'.

Invitation for 1974

J.151

Discussion on food and drug industries, and Symposium on 'Applied Biology Research Oriented to Pharmaceuticals and Foods', M.I.T., 11 and 12 December.

1975

J.152-J.155 46th Congress of Australian and New Zealand Association for the Advancement of Science (ANZAAS), held at Canberra, 20-24 January.

Chain was President, Pharmaceutical Sciences Section, and gave a Presidential Address, 'The pharmaceutical sciences, Government and the people' (Bibliog. 171).

- J.152 Correspondence re Congress, Chain's Presidency, travel arrangements, publication of address, letters of thanks, etc. Includes arrangements for visits to laboratories and institutions after the Congress. July 1974-March 1975.
- J.153 Programme and abstracts of Congress, press statement by Chain, press notices, photograph, itinerary for visits after Congress.
- J.154 'The pharmaceutical sciences, Government and the people', Chain's Presidential Address.

Ms. and heavily-corrected typescript draft, 36 pp.

Miscellaneous references.

J.155 Two typescript versions (not identical).

| J.156 | Visit to Hoechst A.G., Frankfurt, 12 March. |
|--------------|--|
| | Correspondence re arrangements and research. |
| J.157 | 'Fifth Biennial Symposium of Biochemistry and Nutrition', Shiraz, Iran, 5-7 May. |
| | Invitation, travel arrangements, programme, letters of thanks, photographs. |
| | Includes typescript of paper given by Chain under the title 'Studies on heart metabolism'. |
| J.158, J.159 | Ninth International Congress of Chemotherapy, 13-19 July. |
| | The Scientific Sessions were held at Imperial College. |
| | Chain was a Vice-President and gave the opening address, subsequently published under the title 'Reflections on research in chemotherapy' in Chemotherapy, 1, 1976 (Bibliog. 175). |
| J.158 | Correspondence with organisers re arrangements, entertainment of visitors by Beechams, publication. |
| J.159 | Ms. and typescript versions of Chain's opening address. |
| J.160, J.161 | International Symposium on Enzymatic Mechanisms in Biosynthesis, Barcelona - Madrid, 23-27 September. |
| | The Symposium was in honour of the 70th birthday of Severo Ochoa, and the Proceedings were published as 'Reflections on Biochemistry' by Pergamon Press, 1976. |
| | Chain chaired and introduced Session III, on metabolic regulation, and contributed an essay, 'Reminiscences of Severo Ochoa from our Oxford days' to the published volume. |
| J.160 | Correspondence with organisers, programme, travel arrangements, publication of papers, copy of Chain's essay. |
| J.161 | Typescript of Chain's introductory remarks to Session III, photocopy of published version of his essay on Ochoa, |

J.162

International Symposium 'La Ricerca Scientifica nell' Industria Farmaceutica in Italia: Risultati e Ruolo Internazionale', Rome, 2-4 October.

The Symposium was organised by Gruppo Incentivazione Ricerca Farmaceutica and Società Italiana di Scienze Farmaceutiche.

Chain gave the opening address 'Scienze farmaceutiche, Governo e Popolo', an Italian version, with some modifications, of his address to ANZAAZ (Bibliog. 171), see J.152-J.155. The Italian version was also published.

Correspondence with organisers.

English and Italian texts of address.

J.163

Visit to Madrid, October.

The visit was one of the annual awards of the Miguel Servet prizes of the Fundación General Mediterránea (see E.65). On this occasion Chain was asked to act as president, and to give a lecture on 'Science, Government and the people'.

Correspondence with colleagues, guest-list for lecture, Spanish text of lecture, press comment, etc.

Invitations for 1975

J.164

Third Congress, World Organisation of General Systems and Cybernetics, Bucharest, August.

Invitation to visit Gesellschaft für Molekularbiologische Forschung, October.

1976

J.165-J.171 Visit to Japan, April-May.

Chain was invited to visit Japan by H. Umezawa, Director, Microbial Chemistry Research Foundation Institute of Microbial Chemistry, preliminary arrangements being made during the Ninth International Congress of Chemotherapy (J.158). The visit was financed by the Japan Society for the Promotion of Science.

Chain visited several universities and research institutes, and gave lectures on fungal viruses (Bibliog. 148), the action of insulin on metabolism, and the history of penicillin. He was accompanied by Lady Chain, who lectured on insulin and obesity.

During his visit, Chain met the Emperor, and was decorated with the Order of the Rising Sun.

- J.165 Correspondence re invitations, arrangements, draft itineraries, biographical notes, etc., June-December 1975.
- J.166 Similar material, January-April 1976.

 Correspondence with J.M. Sime in March refers to Chain's wish to have a piano made available for him to practice for a recital.
- J. 167 Copy of itinerary as finally determined.
- J. 168

 'Action of insulin on carbohydrate and protein metabolism in the perfused working heart, and its recovery from anoxia', 18 pp. typescript for talk given in Japan.

'The penicillin discovery past and present', 1 p. only for talk given to Japanese Antibodies Association.

J.169

Letters of thanks exchanged after visit; includes Chain's report on his visit, prepared for the Japan Society for the Promotion of Science.

Photographs.

- J.170 Continuing correspondence arising from visit, mainly on research and exchanges. Includes photograph of Chain, and invitation to him to join the Advisory Council of the International Committee on Economic and Applied Microbiology.
- J.171 Later correspondence, 1978, 1979, re honours for H. Umezawa.

J.172, J.173

Conference on 'The Biotechnological Applications of Proteins and Enzymes', on the occasion of the 60th birthday of President Ephraim Katzir, Kibbutz Kiryat Anavim, Israel, 23-28 May.

Chain gave the Inaugural Lecture, on 'The position of applied research in non-industrial laboratories', which was published in the conference proceedings (Academic Press, 1977) (Bibliog. 177).

- J.172 Correspondence with organisers, programme of conference, abstracts of papers, travel arrangements. Chain went to Israel straight from Japan (see J.165-J.171) and arrived only a few hours before the opening dinner after which he gave his address.
- J.173 Typescript version of Chain's lecture (slightly different from published version), 31 pp.

Invitations for 1976

J.174 World Zionist Organization seminar on 'The Problems of the Jewish People and the State of Israel in our day', Tel Aviv, June-July.

Fondazione Internazionale Menarini, Conference on 'La Responsabilità della Scienza nella Società Moderna', Florence, October. Includes programme and list of speakers.

1977

J.175, J.176 Semaine de Rhumatologie d'Aix-les-Bains, April.

Chain lectured, in French, on 'The penicillin discovery and its implications for rheumatology', and his talk was published in Rhumatologie.

- J.175 Correspondence with colleagues and organisers revisit, lecture and publication. Includes two versions of draft biographical note by F. Françon, ms. draft of Chain's speech of thanks, etc.
- J. 176

 Ms. and typescript drafts of Chain's lecture, and French translation prepared by F. Forestier with many ms. revisions.

| | VISITS and conferences |
|--------------|---|
| J.177 | Fifth Aaron Katzir-Katchalsky Conference, on Interferons and the Control of Cell-Virus Interactions, Rehovot, 2-6 May. |
| | Chain chaired the session on 'Induction of Interferon Synthesis: mRNA and Inducers'. |
| | Correspondence with organisers, programme of events. |
| J. 178 | Sixth National Congress of Microbiology, Santiago de Compostela, Spain, 6-9 July. |
| | Chain gave the opening address, 'Antibiotics in Perspective' and also received an Honorary Doctorate from the Faculty of Medicine. |
| | Correspondence with organisers, programme of events, abstract of Chain's lecture, text of Chain's short discourse after conferral of degree on himself and on H. Umezawa. |
| J.179, J.180 | Seventh International Freeze-Drying Course, Lyons, 19-24 September. |
| | The Director was L. Rey, who invited Chain to give one of the Inaugural Lectures; his title was 'Observations on present state of basic and applied research and their interactions'. |
| J. 179 | Correspondence with organisers, programme of events, list of participants: includes a little background material and L. Rey's opening speech of welcome. |
| J.180 | Ms. and typescript versions of Chain's lecture. |
| J.181 | Visit to Instituto de Investigaciones Citológicas, Valencia, October. |
| | The visit was inspired by Chain's appointment to the Scientific Advisory Board of the Institute. |
| | Correspondence with colleagues re appointment and visit, newspaper interview with Chain, etc. |
| | See also J.190. |
| | Invitations for 1977 |
| J.182 | Invitation to lecture, Lima University, Peru, August. |
| | |

International Symposium for Sexually-Transmitted Diseases, Montreal, November.

1978

J.183

Visit to Marine Research Laboratories, Toulon (with L. Rey, D. Bovet and M. Herry), 29-31 May.

Schedule of arrangements, brief correspondence, ms. draft of speech in French, perhaps given by Chain at a dinner during the visit.

J.184

Visit to Madrid, November, to make television programme re penicillin.

Correspondence arising from programme, mainly with members of the family of J. Trueta. Includes recollections of the first injection of penicillin into a mouse by John Barnes!

Invitations for 1978

J.185

Course on Fermentation Technology, London (organised by M.I.T.), January.

Invitation to visit Hoechst, June.

Fourth International Congress of Cybernetics and Systems,
'Open Forum' on 'Science and Society', Amsterdam, August.

Sixth Aaron Katzir-Katchalsky Conference, on 'Molecular Mechanism of Biological Recognition', Göttingen, September. Chain intended to go, but had to cancel for reasons of health. Includes programme, list of participants.

1979

J.186-J.189

Symposium on the History of Antibiotics, April.

The Symposium was held during the joint meeting of the American Chemical Society (Division of History of Chemistry and the Division of Medicinal Chemistry) and the Chemical Society of Japan, Honolulu, 1-6 April. The organiser was J. Parascandola.

Chain gave the Keynote Lecture, 'A Short History of the Penicillin Discovery from Fleming's Original Observation to the Present State', and the Proceedings were published.

Chain's travel expenses were paid by Beecham.

J.186

Correspondence with organisers and colleagues, travel arrangements and schedules preceding symposium.

- J.187 Correspondence following symposium re publication, requests for published version, letters of thanks, etc.
- J.188 Programme of symposium, circulars re arrangements, list of speakers, etc.
- J.189 Miscellaneous typescript drafts of Chain's lecture.
- J.190 Visit to Instituto de Investigaciones Citológicas, Valencia.

 The visit, to attend a lecture and receive a silver medal as Scientific Adviser, was planned for May, but postponed until September for reasons of health. Chain died in August.

The correspondence includes discussion of future research programmes and indicates how actively Chain remained involved in scientific problems right to the end of his life.

A little correspondence <u>re</u> S. Grisolia is included here. See also J.181.

Invitations for 1979

- J.191 Symposium on 'Developments in Antiviral Therapy', organised by British Society for Antimicrobial Chemotherapy, London, 30 November. Chain had agreed to chair the session on 'Cellular Biology'. Includes correspondence with organiser, programme, etc.
- J. 192 World Congress Alternatives and Environment, Vienna.

Visit to Bell Laboratories, New Jersey.

Eleventh International Congress of Chemotherapy, Boston.

J. 193 Formal or unanswered invitations to conferences and meetings, 1953–79.