### THE ROYAL COMMISSION ON HISTORICAL MANUSCRIPTS

Report on the correspondence and papers

of

HENRY McILWAIN

(1912-1992)

neurochemist

in the Contemporary Medical Archives Centre, Wellcome Institute for the History of Medicine, London

Reproduced for the National Cataloguing Unit for the Archives of Contemporary Scientists

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# National Cataloguing Unit for the Archives of Contemporary Scientists in association with the Royal Society

Catalogue of the papers and correspondence of

## **HENRY McILWAIN**

(1912-1992)

Compiled by Peter Harper and Timothy E. Powell

Deposited in the Contemporary Medical Archives Centre, Wellcome Institute for the History of Medicine, London

NCUACS 64/2/97

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#### **GENERAL INTRODUCTION**

#### **PROVENANCE**

The papers were received in November 1993 from Mrs Marjorie McIlwain, widow.

#### OUTLINE OF THE CAREER OF H. McILWAIN

Henry McIlwain was born on 20 December 1912 in Newcastle-upon-Tyne. He was educated at King's College, Newcastle-upon-Tyne, Durham University 1930-1936 (B.Sc. in Chemistry 1934, M.Sc., Ph.D. 1936) and spent the year 1936-1937 at Queen's College, Oxford researching in the organic chemistry of natural products. During the period 1937-1945 he was Leverhulme Research Fellow in the Medical Research Council (MRC) Department of Bacterial Chemistry, and subsequently member of the scientific staff of the MRC, at the Middlesex Hospital Medical School and subsequently at Sheffield University. During the period 1945-1947 he was Lecturer in Biochemistry, Sheffield University and member of the scientific staff of the MRC and of the Council's Unit for Cell Metabolism, Department of Biochemistry, Sheffield University. In 1948 he moved to the Maudsley Hospital as Senior Biochemist in the Teaching and Research Laboratories and subsequently Senior Lecturer and then Reader in Biochemistry in the University of London at the Institute of Psychiatry. In 1954 he was appointed Professor of Biochemistry in the University of London at the Institute of Psychiatry (Professor Emeritus 1980). He was then Visiting Professor, Department of Biochemistry, St Thomas's Hospital Medical School, London, continuing research supported by the MRC, 1980-1986. In 1986 he moved house from London to Bridgnorth in Shropshire and was based for his residual academic activities at the University of Birmingham Medical School. He died on 14 September 1992.

McIlwain's early research career in association with P.G. Fildes at the Middlesex Hospital and H.A. Krebs in Sheffield focused on nutritional factors controlling the growth of bacteria and synthetic bacterial antimetabolites as chemotherapeutic agents for treating bacterial infection. His post-war move to the Maudsley Hospital and the Institute of Psychiatry was a marked change of direction. Here he organised a department dealing with biochemical research on the nervous system and the teaching of neurochemistry to postgraduate medical students. His research and teaching programmes, his textbooks and his active role in the establishment of the *Journal of Neurochemistry* (1956) and the International Society for Neurochemistry (1967) distinguish him as one of the founding-fathers of the modern discipline. In retirement he devoted much time to his interests in the history of science and neurochemistry in particular.

#### DESCRIPTION OF THE COLLECTION

The material is presented in the order given in the List of Contents. The collection provides good documentation of many aspects of McIlwain's career and his contribution to the development of neurochemistry in the UK and internationally.

Section A, Biographical, brings together obituaries, curricula vitae and bibliographies, and material relating to the various stages of McIlwain's scientific career, especially in the 1930s and 1940s, his appointment to the Biochemistry Chair at the Institute of Psychiatry in 1954 and the symposium held in his honour on his retirement in 1980. The section also presents a significant body of material relating to McIlwain's undergraduate studies at King's College, University of Durham, including essays and notebooks.

Section B, Institute of Psychiatry, is principally papers relating to the activities of McIlwain's own Department of Biochemistry and especially its teaching programme in neurochemistry. There is also material relating to various government and University of London enquiries into medical education.

Section C, Research, includes copies of McIlwain's M.Sc. and Ph.D. theses, notes, drafts and reports for early work in the 1930s and correspondence 'from the Lab' for the 1930s and 1940s.

Section D, Publications, lectures and broadcast, is the largest in the collection. It presents significant documentation, especially correspondence, relating to his textbook *Biochemistry and the central nervous system* which went through five editions, 1955-1985, and important editorial correspondence for the *Biochemical Journal* (member of the Editorial Board, 1946-1950), *Biochemical Pharmacology* and *Journal of Neurochemistry*. There are also drafts for lectures and seminars for scientific audiences in the UK and abroad, principally from the 1960s onwards.

Section E, Societies and organisations, documents Mitchell's involvement with a number of UK and international bodies including the Biochemical Society, the International Brain Research Organisation and the International Society for Neurochemistry (ISN) of which he was a founder member and from 1984 'Historian' of the Society with responsibility for its archives.

Section F, Visits and conferences, covers the period 1947-1993 and is of particular interest for its documentation of the historical sessions which McIlwain organised at ISN meetings.

Section G, Correspondence, presents an alphabetical sequence of McIlwain's correspondence including significant exchanges with a number of distinguished mentors and contemporaries such as

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G.R. Clemo, F. Dickens, K.A.C. Elliott, P.G. Fildes, S.S. Kety, H.A. Krebs, Derek Richter and F.L. Rose, and a chronological sequence of shorter scientific correspondence covering the period 1938-1992.

There is also an index of correspondents.

#### LOCATION OF OTHER MATERIAL

The journal written by McIlwain's father, John McIlwain, describing his experiences on the Western Front between August and November 1914, was deposited in June 1996 in the Department of Documents, Imperial War Museum, London.

#### **ACKNOWLEDGEMENTS**

We are very grateful to Mrs McIlwain for making the papers available for cataloguing and for her advice and encouragement, and to Professor Gerald Curzon for a little additional material and information.

Peter Harper Timothy E. Powell BATH April 1997

**BIOGRAPHICAL** SECTION A A.1-A.87

#### **OBITUARIES AND TRIBUTE**

A.1 Obituary by H.F. Bradford for the Independent, 4 January 1993.

Obituary by H.F. Bradford for the Biochemist, February/March 1993.

A.2 'The brain slice preparation: a tribute to the pioneer Henry McIlwain'.

> 15pp typescript of lecture given by G.L. Collingridge at the Third International 'CNS and Brain Slice Meeting' at the University of Kentucky in Louisville, 7 June 1994.

> Folder also includes letter from Mrs Marjorie McIlwain about the meeting, 28 July 1994.

### **BIOGRAPHICAL AND BIBLIOGRAPHICAL**

A.3-A.6 Miscellaneous curricula vitae and publications lists.

4 folders.

A.7 Entries for McIlwain in biographical directories, various dates 1955-1990.

**A.8** Summary of McIlwain's research to 1966.

4pp typescript.

Statement of McIlwain's research investigations, nd.

17pp typescript.

A.9 Correspondence and papers re Biochemical Society video interview of

McIlwain, 1991.

A.11

A.20

#### **Biographical**

A.10 Mcllwain's manuscript notes on his medical condition, 16 and 17 May 1992.

'Becoming a Neurochemist: a 1940s Transition from Microbiology to Neuroscience', *The Biochemist*, February/March 1993.

This article was written by McIlwain just a month before he died in September 1992 and appeared in the same issue of *The Biochemist* as the obituary tribute by H.F. Bradford (A.1). See also D.45.

#### CAREER, HONOURS AND AWARDS

A.12 Correspondence and papers of McIlwain's father, J. McIlwain *re* scholarships etc to support his son's university education, 1930, 1933, 1937.

A.13 Correspondence and papers *re* McIlwain's university education at Armstrong College (later King's College), Newcastle upon Tyne, University of Durham, 1930-1932.

McIlwain graduated B.Sc. (Durham) in 1934.

A.14 Applications for posts, 1933, 1936.

A.15-A.18 'Student items '30s'.

Contents of McIlwain's folder so inscribed divided into four for ease of reference: poems, prose, chemistry notes and McIlwain's (unsuccessful) submission in December 1934 for the Sir Edward Frankland medal and prize on 'The chemist of the future'.

A.19 Correspondence re applications for research fellowships, 1934-1937.

'Scholarship Data Concerning Self'. Contents of McIlwain's folder so inscribed: applications for research fellowships, 1935-1936.

| A.21-A.23 | Miscellaneous correspondence and papers, 1935-1938 and nd.  |
|-----------|---|
|           | 3 folders.  |
| A.24      | Application for post in P.G. Fildes's Department of Bacterial Chemistry, Middlesex Hospital, London, 1937.  |
| A.25      | Papers re Register of Personnel for Emergency Pathological Services and Central Register (Section for Scientific Research), 1939.   |
| A.26      | Correspondence and papers <i>re</i> Ministry of Labour Central Register for employment in wartime, 1940.  |
|           | Papers re firewatching duties in Sheffield (found with Ministry of Labour papers), 1941.  |
| A.27      | Correspondence and papers re move to Sheffield, 1940-1941.  |
|           | McIlwain's removal from the Middlesex Hospital to the University of Sheffield was approved by the Medical Research Council in November 1940.  |
| A.28      | Miscellaneous correspondence and papers <i>re</i> McIlwain's career at Sheffield, 1941-1947.  |
|           | Includes formal notification of conferment of the title of Lecturer in Biochemistry in 1945 and examples of headed notepaper for H.A. Krebs's MRC Unit with the misprint 'Unfit for Research in Cell Metabolism'. |
| A.29      | Correspondence with Medical Research Council <i>re</i> conditions of employment, salary etc., 1942-1947.  |
| A.30      | D.Sc. (Durham) 1944.  |
|           | Letter from G. R. Clemo advising on possible D.Sc. submission, 15 December 1942.  |
|           | Abstract of investigations in Bacterial Chemistry and Chemotherapy submitted for D.Sc. (Durham), February 1944.   |

| A.31       | Applications/offers of posts, 1946-1947.   |
|------------|--|
| A.32       | Appointment as Senior Biochemist, Teaching and Research Laboratory, Maudsley Hospital, London, 1947. |
| A.33       | Appointment as Senior Lecturer in Biochemistry, Institute of Psychiatry, University of London, 1949. |
|            | Appointment as Reader in Biochemistry, Institute of Psychiatry, University of London, 1950.          |
| A.34       | Appointment as Professor of Biochemistry, Institute of Psychiatry, University of London, 1954.       |
|            | Includes letters of congratulation.  |
| A.35       | Correspondence and papers <i>re</i> conditions of service at the Institute of Psychiatry, 1949-1961. |
| A.36, A.37 | Honorary degree, University of Aix-Marseille, 1974.  |
| A.36       | Correspondence re arrangements, 1971-1974.   |
| A.37       | Presentation address, McIlwain's reply, newspaper cutting.   |
| A.38       | Conferment of Emeritus title on retirement from Chair of Biochemistry, 1980                          |
| A.39-A.41  | Symposium in McIlwain's honour on 'Chemisms of the Brain', London, 11-12 September 1980.             |
| A.39       | Final programme, papers from publisher of conference volume, letters of good wishes from colleagues. |

| A.40       | Typescript draft of McIlwain's symposium paper 'A Department of Biochemistry at an Institute of Psychiatry'.  |
|------------|---|
|            | Manuscript notes of McIlwain's remarks at Institute of Psychiatry presentation, 27 October 1980. Found with symposium paper.  |
| A.41       | 'Dept Bioch, Inst. Psych. '80 Full version (not published)'. Contents of folder so inscribed: typescript draft for symposium paper headed 'June 1980 For comment', etc. See also B.5. |
| A.42, A.43 | Visiting Professor, St Thomas's Hospital Medical School, London, 1980-1986.   |
| A.42       | Letters of appointment and renewal.   |
| A.43       | Lists of Publications etc for St Thomas's Annual Report.  |
|            | Photograph of members of the Department of Biochemistry, St Thomas's Hospital Medical School 1984   |

### UNIVERSITY ESSAYS AND NOTEBOOKS

| A.44- A.56 | Chemistry essays. These were probably all written for Final Honours Chemistry, Armstrong College, Newcastle-upon-Tyne, University of Durham, 1933-1934. |
|------------|---|
| A.44       | 'The Historical Development of Organic Chemistry'.  |
| A.45       | 'Free Radicals'.  |
| A.46       | 'Stereoisomerism'.  |
| A.47       | 'Isomerism'.  |

| A.48      | 'Carbohydrate History'.  |
|-----------|--|
| A.49      | 'New Methods of Structure Determination'.                            |
| A.50      | 'Biosythesis'.   |
| A.51      | 'Internal Secretions and Vitamins'.                                  |
| A.52      | 'Colour and Constitution'.   |
| A.53      | 'Animal metabolism'.   |
| A.54      | The Stereochemistry N, S, Te, Pt.'                                   |
| A.55      | 'Chlorophyll'  |
| A.56      | Notes on 'Rubber' and 'Practical work for thesis' found with essays. |
| A.57-A.72 | Notebooks  |
| A.57      | '2nd Year Physics. 1931-2'.  |
| A.58      | 'Animal Biochemistry'. ?1932.  |
| A.59      | 'Botany (Physiology, Mycology.)' '1st Yr Hons BSc. 1931-2'.          |
| A.60      | 'Summary of Physical Chemistry' '1931-2, 2-3, and 3-4.'              |

| A.61       | 'Practical Physical Chemistry' '2nd Year Hons Chem. 1932-3'.                      |
|------------|---|
| A.62       | 'Inorganic Chemistry' '2nd Year Hons BSc. 1932-3' '3rd Year Hons BSc. 1933-4.'    |
| A.63       | 'Practical Organic Chemistry' '1st Yr Hons BSc. 1931-2' '2nd Yr Hons BSc.1932-3.' |
| A.64       | 'Organic Chemistry' '2nd Year Hons BSc. 1932-3'.                                  |
| A.65       | 'Organic Chemistry' 'Final Hons BSc. '33-4'.                                      |
| A.66       | 'Bacteriology' '2nd Year Hons Chem. 32-3'.  |
| A.67       | 'Physiology' '2nd Year Hons BSc. 32-3.'   |
| A.68       | 'Final Seminar Notes' '2nd Year Hons Chem. 1932-3'.                               |
| A.69       | 'General Chemistry Notes (made in revision '34)'.                                 |
| A.70       | 'Food and Drugs Analysis'. 'C.W.S. Works Pelaw' 'Summer 1932'.                    |
| A.71       | 'Free Atoms & Radicals (Pearson). '33'.   |
| A.72       | 'The Chemistry of Living Tissues Jan '36' 'Dr Dickens'.                           |
| A.73, A.74 | Notebooks without covers  |
| A.73       | 'Volumetric Analysis'. 1st yr pass Bsc '30-1'.                                    |

A.87

### Biographical

A.74 'Physical Chemistry Examples'.

A.75 Small format jotter used for 'Practical Chemistry' notes. Nd.

# MISCELLANEOUS BIOGRAPHICAL ITEMS

| A.76       | Pages torn from jotter used for detailed record of daily activities, 1928.                                      |
|------------|---|
| A.77, A.78 | '30s-early '40s Diary-like; shop jingles'.  |
|            | Contents of McIlwain's folder so inscribed divided into two for ease of reference: poems, notes on reading etc. |
| A.79       | Loose-leaf binder used for ideas and diary from 1938. Last dated entry 'from '85 Who's Who'.                    |
|            | Loose papers enclosed at rear of binder   |
| A.80, A.81 | Miscellaneous examples of McIlwain's poems, prose and sketches, nd [1930s].                                     |
|            | 2 folders.  |
| A.82       | Miscellaneous social and political papers, 1930s, 1950s.  |
| A.83       | Manuscript draft of review by McIlwain of film 'Dr Ehrlich's Magic Bullet', nd.                                 |
| A.84       | Zoology notes inscribed 'Professor Eastham' and 'UNIV SHEFF 1946-7'.  |
| A.85, A.86 | Passports issued 1937 and 1947 respectively.  |
|            |   |

Three small format photographs of McIlwain, one dated August 1941.

| SECTION B | INSTITUTE OF I | PSYCHIATRY                   | B.1-B.69 |
|-----------|----------------|------------------------------|----------|
|           | B.1-B.28       | DEPARTMENT OF BIOCHEMISTRY   |          |
|           | B.29-B.61      | TEACHING, SEMINARS, LECTURES |          |
|           | B.62-B.69      | MISCELLANEOUS                |          |

#### DEPARTMENT OF BIOCHEMISTRY

| B.1 | 'Department of Biochemistry'. 5pp typescript account of the history of the   |
|-----|--|
|     | department and its research and teaching activities with manuscript annotation 'Probably RR[odnight] BRH&MH Gazette'. Latest bibliographical reference 1967. |

B.2-B.4 'PRELIMY Dept'. Contents of McIlwain's folder so inscribed divided into three for ease of reference: manuscript notes and drafts, printed and duplicated background material, etc. for historical account. 1974,1975 and

**B.5** 'A Department of Biochemistry at an Institute of Psychiatry'.

> This was the paper given by McIlwain at his retirement symposium in September 1980. See A.39-A.41.

> 38pp typescript draft with references, table and figure headed 'For comment' and dated June 1980.

Manuscript note 'HSB[achelard]'s comments Sept '80'.

'Supplies for M'. Contents of University of Sheffield envelope so inscribed: manuscript notes on supplies of chemicals, equipment, laboratory furnishings etc., probably prepared in connexion with McIlwain's move from Sheffield to the Maudsley Hospital (Institute of Psychiatry). The envelope was postmarked in 1947.

**B.7** Staff lists 1947/48 - 1978/79.

B.6

| B.8        | Large format 'Datada' diary for 1952 used for record of departmental activities, 1948-1962.  |
|------------|--|
|            | Typescript and duplicated typescript sheets are pasted or sellotaped into the diary to record research activities, publications, teaching, meetings etc.                       |
| B.9        | Miscellaneous correspondence and papers <i>re</i> departmental and Institute affairs, 1952-1960.   |
| B.10       | Reports of activities, monthly August 1953-June 1956, three monthly November 1956-January 1958.  |
|            | Not a complete sequence.   |
| B.11       | Correspondence <i>re</i> visits to McIlwain's department/laboratory, various dates 1956-1981.  |
| B.12       | Applications to Research Committee 1958, 1968  |
|            | 'Purines in body fluids in relation to mental illness' 1958.   |
|            | 'An electrophysiological study of the effects of specified centrally-acting drugs' 1968.   |
|            | Folder also includes letter from Medical Research Council re proposed research on cerebral metabolism, 2 January 1958.   |
| B.13       | Miscellaneous correspondence and papers <i>re</i> departmental and Institute affairs 1960- <i>ca</i> 1969.   |
| B.14       | Laboratory rules, 1963, 1975.  |
| B.15       | 'Building 1965'. Contents of McIlwain's folder so inscribed: notes, proposals etc <i>re</i> accommodation, equipment, new building, 1950s-1965.                                |
| B.16, B.17 | Institute of Psychiatry maintenance estimates 1965-1967, Quinquennium 1967-1972, salaries and wages for new appointments, research projects, dated November and December 1965. |
|            | 2 folders.   |

| B.18     | Applications by McIlwain for leave to attend conferences etc., 1965-1968.   |
|----------|---|
| B.19     | Correspondence and papers <i>re</i> proposal for a unit to study the biological aspects of addiction and drug metabolism at the Institute of Psychiatry and in association with the Department of Biochemistry, 1967. |
| B.20-B22 | 'Memos from Dept '67-'75'. Contents of McIlwain's folder so inscribed.  |
| B.20     | 'Quinquennial Development Policy and Estimates, 1967-72. Statement from Department of Biochemistry, October 1964'.  |
|          | Memorandums to Development Committee from Department of Biochemistry, October 1967, July and December 1969.   |
| B.21     | Includes:   |
|          | Papers re proposed development policy for the Quinquennium 1972-1977.   |
|          | Statement for Teaching Sub-Committee Working Party on Neurochemistry applied to the Brain and to Psychiatry, 1 December 1971.   |
|          | Comments from the Department of Biochemistry on the Long Term Future of the Institute of Psychiatry, 1 September 1972.  |
| B.22     | Letter and papers sent to Policy Sub-Committee, 7 May 1973.   |
|          | Statement on Long-term Policy, Department of Biochemistry, 12 March 1975.   |
| B.23     | Miscellaneous correspondence and papers <i>re</i> departmental and Institute affairs <i>ca</i> 1970-1977.   |
| B.24     | 'Policy Sub-Committee'. Contents of McIlwain's folder so inscribed: reprint, manuscript notes and drafts, photocopy of letter from McIlwain to Chairman of Policy Sub-Committee etc., 1972-1973.                      |
| B.25     | 'Monthly Dept Statements'. Contents of McIlwain's folder so inscribed: statements of departmental costs, 1974-1978.   |
|          | Not a complete sequence.  |

B.26 Duplicated weekly programme sheets, 10 December 1979 - 26 May 1980.

A few examples only.

B.27 Miscellaneous correspondence and papers re departmental and Institute

affairs 1980 and nd.

B.28 Manuscript notes re laboratory layout, nd.

### **TEACHING, SEMINARS, LECTURES**

B.29 B.Sc. Special Physiology 1953-1955.

McIlwain proposed a course in biochemistry and the central nervous system

for B.Sc. Special Physiology students at Chelsea Polytechnic.

Correspondence, suggested syllabus, lecture course, practical work.

B.30, B.31 'Nchem course 1961'.

Contents of folder so inscribed divided into two for ease of reference:

duplicated programme of work, schedules of practical work, etc.

B.31 includes timetable for Cambridge Summer School Course in Bacterial

Chemistry, 1-6 July 1946.

B.32 'Practical Nch 1964'.

Duplicated programme of work, schedules of practical work, list of

participants etc.

B.33-B.52 Joint Institute M.Sc. in Neurochemistry.

This was a one-year course designed to provide comprehensive training in the application of biochemistry to the nervous system for suitably qualified scientists and medical doctors. It was proposed that the course should be run jointly between the Institutes of Psychiatry, Neurology and Ophthalmology with most of the course organisation and formal teaching

taking place at the Institute of Psychiatry.

| B.33-B.35 | 'Initiation of course'. Contents of McIlwain's folder so inscribed divided into three for ease of reference: correspondence and papers 1969-1971.  |
|-----------|--|
| B.36      | Contents of McIlwain's untitled folder: papers relating to the initiation of the M.Sc. course 1970-1971.   |
| B.37-B.47 | Agendas, minutes and papers for meetings of teachers representing the Institutes of Neurology, Ophthalmology and Psychiatry 1970-1980.  11 folders.  |
| B.48      | Miscellaneous papers <i>re</i> M.Sc. course 1974-1979.  Include's typescript draft of M.Sc. course second lecture by McIlwain on 'Chemical and metabolic study of the brain' 'revised Dec '74'.  |
| B.49      | Miscellaneous papers re M.Sc. course 1979-1980.  |
| B.50-B.52 | Schedules of practical work for M.Sc. course 1979-1980.  3 folders.  |
| B.53      | Biochemistry lectures and seminars, 1974-1980.  Reference books, synopses, etc.  |
| B.54      | University Lecture on Pharmacology, Guys Hospital, London, 3 December 1975.  The lecture was entitled 'Adenosine: aspects of its cerebral metabolism which may be relevant pharmacologically'.  4pp typescript draft with manuscript revisions + slide list. |
| B.55      | Institute Research talk on 'New moving parts in the working of the brain', 9 June 1977.  9pp manuscript draft + slide list.  |

B.56 'History of Neurochemistry: M.Sc. course lecture, copy'. Contents of McIlwain's folder so inscribed: manuscript notes, etc., 1983. B.57, B.58 Duplicated and typescript papers re departmental colloquia, journal club, discussion seminars, etc 1968-1980 and nd. 2 folders. B.59 Notices of lectures and seminars given at the Institute by visiting scientists. 1952, 1963-1985. Includes a little related correspondence. B.60, B.61 Miscellaneous papers re lectures, courses, seminars etc, various dates 1963-1983 and nd. 2 folders. **MISCELLANEOUS** B.62 Papers re Royal Commission on Medical Education (Todd Report), 1968. Manuscript notes and typescript draft 'from Professor H. McIlwain 19.4.68'. B.63 Booklet issued to commemorate the new Institute of Psychiatry building, 5 July 1968. B.64-B.67 Papers re Working Party appointed by the Vice Chancellor of the University of London to inquire into the Postgraduate Medical Institutes of the University of London, 1976-1977. The Working Party was chaired by Professor N.F. Morris. B.64 Correspondence with Sir Denis Hill, Department of Psychiatry, re Working Party, November 1976; with attached papers: manuscript note not by McIlwain and 'Data to Dean's Office in connection with UL Working Party's Visit', 2 February 1977.

Papers prepared for Working Party visit to Institute of Psychiatry, 2 B.65, B.66 February 1977. 2 folders. McIlwain's manuscript notes re Morris Report, 8 November 1977; B.67 'Conclusions and recommendations' of Morris Report circulated to members of the Academic Board and Committee of Management for comment, 23 November 1977. Papers re Flowers report on medical education in London, 1980. B.68 Note by the Vice-Chancellor (Lord Annan), press-cutting, copy of Institute of Psychiatry's final submission on the Flowers report, 23 April 1980. List of staff with their research interests and the techniques used to B.69 investigate them at the Institutes of Psychiatry, Neurology and Ophthalmology, nd.

| SECTION C | RESEARCH | C.1-C.52 |
|-----------|----------|----------|
|           |          |          |

#### **THESES**

C.1 M.Sc. thesis on 'The petal constituents of Taraxacum officinale', University of Durham, May 1936.

55pp typescript.

C.2, C.2A Ph.D. thesis on 'The phenazine series', University of Durham, September 1936.

131pp typescript.

2 folders.

#### NOTES, DRAFTS, REPORTS

C.4

C.3 Manuscript and typescript notes and drafts *re* work carried out under the direction of G.R. Clemo, Armstrong College, Newcastle upon Tyne, University of Durham, 1934-1936.

Includes:

'Amplification of some MSc. points'. 5pp manuscript.

'Summary of research during tenure of an Armstrong College post-graduate Research Fellowship, 1934-5'. 2pp manuscript.

'Report on investigations during the year ending Sept. 30th 1936'. 8pp typescript.

C.4, C.5 Contents of McIlwain's folder divided into two for ease of reference:

'2. Extraction of the pigment of Chromatium violacens'. Manuscript draft paginated 11-17 signed by McIlwain and dated 10 October 1935.

'Haemolytic streptococcus'. 6pp manuscript notes, various dates in text, July, August 1937. A note at the end of p.6 is signed '[B.C.J.G.]Knight' and dated '19.8.37'.

| C.5       | 'G/Strep.' 6pp manuscript notes, 1p dated '9/1/39'.   |
|-----------|---|
|           | 2pp manuscript notes on the preparation of 'STR agar', nd.  |
| C.6       | 'PhD Thesis Notes 12/36'.   |
|           | 4pp manuscript notes.   |
| C.7       | 'Report on investigations carried out during the Academic Year. 1936-7'   |
|           | The investigations included work on the reactions of alkylphenazonium salts, the phenazyls and the biological properties of phenazine derivatives, and were carried out at the Dyson Perrins Laboratory, Oxford University. McIlwain acknowledged the advice of R. Robinson in connexion with the investigations. |
|           | 41pp typescript.  |
| C.8       | 'Report to Medical Research Council, 1945/47'.  |
|           | 1p. typescript on 'studies on the metabolism of vitamin-coenzyme-like compounds by microorganisms'; manuscript notes.   |
| C.8A      | Papers re experiments on live animals, 1949-1950.   |
| C.9, C.10 | 'US 1951' Contents of folder so inscribed divided into two for ease of reference: manuscript and typescript notes, 1948, 1949, nd, correspondence 1950, possibly taken by McIlwain to the United States in 1951. See also F.3, F.4.   |
| C.11      | 'Exhibiting electrical phenomena in isolated cerebral tissues', 7 October 1963.   |
|           | 2pp typescript note of studies in progress or suggested.  |
|           | 'Research suggestions July 1974'  |
|           | 1p typescript note.   |

| C.12, C.13     | 'Res. themes'. Contents of folder so inscribed divided reference.  | into two for ease of |
|----------------|--|----------------------|
| C.12           | Contents of plastic folder: manuscript notes, 1979, 1980   | ).                   |
| C.13           | Manuscript notes, 1980-1983.   |                      |
| C.14           | 'Proposed use of double-labelling procedure and inhibite methods, to measure distribution of adenine derivatives   |                      |
|                | 2pp typescript, February 1980.   |                      |
|                | Medical Research Council project grant progress report   | 'sent 25/9/80'.      |
|                | Medical Research Council project grant final report 'sen   | t 20/10/83'.         |
| C.15-C.23      | 'NULL'. Contents of McIlwain's folder so inscribed divid<br>of reference: manuscript notes and drafts, etc, princi<br>includes some significantly earlier material. Presented in | pally 1989-1991 but  |
|                | C.22 includes draft on null methods in biochemist c.1940-2'.   | ry 'probably written |
| CORRESPONDENCE |  |                      |
| C.24           | Correspondence with F. Dickens and J.S. Anderson (1937).   | re phenazine, 1936-  |
| C.25-C.32      | 'Letters of interest from the Lab mostly to 1942; some McIlwain's folder so inscribed.   | later'. Contents of  |
|                | Arranged in alphabetical order by McIlwain.  |                      |
| C.25           | A. [?]. Fuller   | 1938                 |
|                | G.P. Gladstone   | 1940-1943.           |

| C.26 | Glaxo Laboratories Limited                            | 1940-1941       |
|------|---|-----------------|
|      | McIlwain's correspondents are A.L. Bacharach and F.A. | Robinson.       |
|      |   |                 |
| C.27 | F. Hawking  | 1943            |
|      | H. Hibbert  | 1940            |
|      |   |                 |
|      | F.G. Hopkins  | 1942            |
|      | O. Inman  | 1942            |
|      | O. IIIIIaii   | 1942            |
|      | Joint Council of Professional Scientists              | 1942            |
|      |   |                 |
|      |   |                 |
| C.28 | B.C.J.G. Knight                                       | 1939, 1941-1942 |
|      | Kodak Limited.  | 1941            |
|      |   |                 |
|      |   |                 |
| C.29 | The Lancet  | 1941-1942       |
|      | T.F. Macrae   | 1020            |
|      | I.F. Maciae   | 1939            |
|      | J.C. McGowan  | 1942            |
|      |   |                 |
|      | T.R.R. Mann   | 1940            |
|      |   |                 |
|      | May & Baker Limited                                   | 1940            |
|      | Medical Research Council                              | 1040 4044       |
|      | Medical Research Council                              | 1940-1941       |
|      |   |                 |
| C.30 | H.S. Raper (letter addressed to R. Robinson).         | 1937            |
|      | (iotto) dadiessed to 11. Hobilisolly,                 |                 |
|      | H.L. Riley  | 1939            |
|      |   |                 |

| <i>I</i>  | F.C. Schmelkes<br>(Remarks made at Schmelkes' funeral by W.J. Orchan  | 1942<br>d).           |
|-----------|---|-----------------------|
|           | Smith (writing from Burroughs Wellcome & Co.).  | 1939                  |
|           | M. Stephenson<br>(McIlwain's manuscript draft only)   | 1940                  |
|           | E.T. Stiller<br>(writing from Merck & Co.)  | 1940                  |
|           | V. du Vigneaud  | 1940                  |
|           | E. Work   | nd                    |
| C.31      | D.D. Woods  | 1940-1942             |
| C.32      | Unidentified  | 1938, 1941-1942.      |
| C.33-C.37 | 'PT Correspondence'. Contents of McIlwain's correspondence re pantothenic acid, pantoyl taurine, et           |                       |
|           | McIlwain's principal correspondents are F.A. Robinson Ltd) and F. Hawking (National Institute for Medical Res |                       |
| C.33      | 1939, 1941.   |                       |
|           | 1939 papers are duplicated sheets re 'Casein - Yeast Media (C.Y.C.G.)'  | - Cystine - Glutamate |
| C.34      | 1942 January - June.  |                       |
| C.35      | 1942 July - October.  |                       |
| C.36      | 1942 November-December.   |                       |

| C.37      | 1943.   |                             |
|-----------|---|-----------------------------|
| C.38-C.46 | 'Letters etc. of interest from lab. '42 - '46'. Contents of inscribed.        | f McIlwain's folder so      |
|           | Arranged in alphabetical order by McIlwain.                                   |                             |
| C.38      | A. Albert.  | 1945                        |
|           | K.R. Butlin   | 1946                        |
| C.39      | D.G. Catcheside   | 1946                        |
|           | G.R. Clemo  | 1944                        |
|           | L. Colebrook  | 1943-1945                   |
| C.40      | F.Dickens   | 1944, 1946                  |
|           | E.C. Dodds  | 1945                        |
|           | P.G. 'Espinasse   | 1944                        |
|           | P.G. Fildes   | 1944-1945                   |
|           | A. Fleming  | 1944                        |
|           | H.M. Fox  | 1942-1944                   |
| C.41      | J.H. Gaddum   | 1943, 1945                  |
|           | Gainsborough<br>(writing from Staines County Hospital with letter frattached) | 1942<br>rom B.C.J.G. Knight |

| <i>I</i> | L.P. Garrod   | 1945      |
|----------|---|-----------|
|          | Glaxo Laboratories Limited (McIlwain's correspondent is F.A. Robinson). | 1943      |
|          | F. Hawking  | 1943      |
|          | G.P. Gladstone  | 1944-1945 |
|          | C.N. Hinshelwood  | 1944      |
| C.42     | B.C.J.G. Knight   | 1943-1944 |
|          | The Lancet  | 1941-1946 |
| C.43     | C. Long   | 1945      |
|          | C.R. Lucas  | 1944      |
|          | A. Lwoff<br>(McIlwain's manuscript draft only)                          | nd        |
|          | J. C. McGowan   | 1942-1943 |
|          | G.S.W. Marlow   | 1943      |
|          | C.W. Morley   | 1942      |
| C.44     | D.M.M. Needham  | 1945      |
|          | F.F. Nord   | 1944-1945 |
|          | A.E. Orford   | 1942      |
|          | S. Peyton   | nd /      |

| <i>I</i>   | G. Pontecorvo  | 1946                |
|------------|--|---------------------|
|            | P.O. Boblin, In  | 1044                |
|            | R.O. Roblin, Jr  | 1944                |
| C.45       | F.C. Schmelkes   | 1942                |
|            | R. Schoental   | 1941                |
|            | B.N. Singh   | 1942                |
|            | E.E. Snell   | 1942-1943           |
|            | W. Smith   | 1946                |
|            | M. Stephenson  | nd                  |
|            | W.C. Tobie   | 1945                |
| C.46       | V. du Vigneaud   | 1941, 1946          |
|            | S.G. Waksman   | 1944                |
|            | D.D. Woods   | 1946                |
|            | D.W. Woolley   | 1943                |
|            | L.D.Wright   | 1944                |
|            | F.G. Young   | 1944-1945           |
| C.47, C.48 | Correspondence and papers <i>re</i> Accessory Food Factors B Sub-Committee, 1946-1947. | s Committee Vitamin |
|            | 2 folders.   |                     |

| C.49-C.51 | Correspondence and papers <i>re</i> the McIlwain mechanical tissue chopper, 1952-1953, 1968-1976.   |
|-----------|---|
|           | The apparatus was devised to prepare pieces of animal tissue for metabolic experiments and to be especially applicable to small and irregular specimens available at biopsy or from small organs. It was made by a small engineering firm H. Mickle, of Hampton, Middlesex, later Gomshall, Surrey. |
| C.49      | 1952-1953.  |
| C.50      | 1968-1976.  |
| C.51      | 'Description of the chopper', 4pp typescript, with legends to figures and figures, nd.  |
|           | H.Mickle's leaflet re tissue chopper.   |
| C.52      | Correspondence and papers <i>re</i> funding for McIlwain's post-retirement research, 1980-1981, 1984, 1990.   |

| SECTION D | PUBLICATIONS, LEC | TURES AND BROADCAST      | D.1-D.134 |
|-----------|-------------------|--------------------------|-----------|
|           | D.1-D.48          | PUBLICATIONS             |           |
|           | D.49-D.86         | EDITORIAL CORRESPONDENCE |           |
|           | D.87-D.132        | LECTURES                 |           |
|           | D.133             | BROADCAST                |           |
|           | D.134             | REPRINTS                 |           |

# Publications, lectures and broadcast

# **PUBLICATIONS**

| D.1-D.7   | 'CHTH HIST' and 'BIOCH & other mss of about 1940'. Contents of folder so inscribed divided into seven for ease of reference: typescript and manuscript drafts <i>re</i> development of biochemistry, chemotherapy, etc.  |
|-----------|--|
| D.8, D.9  | 'Chemistry of the Brain' and 'Data collected c.1950'. Contents of folder so inscribed divided into two for ease of reference: typescript and manuscript drafts <i>re</i> 'growth of biochemical knowledge of the brain'. |
| D.10-D.15 | Biochemistry and the central nervous system, 1955 (Churchill, London).   |
| D.10-D.14 | Correspondence with publisher, readers, translators etc <i>re</i> various editions, nd, 1954-1983.   |
| D.10      | nd, 1954-1957.   |
| D.11      | 1958-1962.   |
| D.12      | 1963-1966.   |
| D.13      | 1968-1971.   |
| D.14      | 1972-1978, 1983.   |
| D.15      | Manuscript draft of chapter 20 'Essays in neurochemical interpretation of the brain' for 5th edition, 1985.  |
|           | Reviews of 5th edition.  |

# Publications, lectures and broadcast

| D.16      | 'A second major constituent of the blood oxidized at the brain', <i>Nature</i> <b>179</b> (1957), 419.  Manuscript draft.   |
|-----------|---|
|           |   |
| D.17      | Chemotherapy and the central nervous system, 1957 (Churchill, London).  |
|           | Correspondence with publisher, reader 1957, 1958.   |
|           | Correspondence with J.H. Gaddum, manuscript notes, <i>re</i> term 'chemotherapy', 1957. See also G.15.  |
| D.18      | 'Henry Maudsley, molecular biologist. A centenary, 1867-1967', Bethlem-Maudsley Hosp. Gaz. 9 (1967), 4.   |
|           | Typescript draft, letter etc.   |
| D.19      | Stimulation of piriform and neocortical tissues in an <i>in vitro</i> flow system: metabolic properties and release of putative neurotransmitters', <i>J. Neurochem.</i> <b>17</b> (1970), 521-530. |
|           | Abstract, discussion, references, figures etc.  |
| D.20      | 'Types of metabolic adaptation in the brain'. In <i>Essays in Biochemistry</i> (eds P.N. Campbell and F.Dickens), 1971 (Academic Press, London).  |
|           | Manuscript draft, letter from editor (F. Dickens).  |
| D.21      | 'Integrity of cell-functioning in cerebral systems'.  |
|           | Manuscript draft, latest bibliographical reference 1975.  |
| D.22-D.29 | 'Translocation of neural modulators: a second category of nerve signal',  |
|           | Neurochemical Research 1 (1976), 351-368.   |
| D.22      | Typescript and figures with letter from <i>Nature</i> returning the paper to McIlwain, 2 March 1976 and postcard from <i>Neurochemical Research</i> accepting it for publication, 10 June 1976.     |

# Publications, lectures and broadcast

| D 22 D 20   | Manuscript notes and drafts.   |
|-------------|--|
| D.23-D.29   |  |
|             | 7 folders.   |
|             |  |
| D.30        | 'The structuring of cerebral activity by intracellular chemical mediators'.  |
|             | Manuscript draft 'begun 20/1/77', manuscript notes. 'Messengers' is given as an alternative to 'mediators' on the title page.  |
|             |  |
| D.31        | 'MSS '78-80'. Contents of folder so inscribed: correspondence with<br>Neuroscience, 1979-1980, manuscript notes, etc.  |
| D.32, D.33  | 'Linear sequences in neural and genetic expression'.   |
|             | This paper was submitted in February 1978 to <i>FEBS Letters</i> for publication as a 'Hypothesis' but was not recommended for publication by the referees. In April 1978 a related paper was submitted to <i>Nature</i> under the title 'A proposal for linear coding in the dendrites of neural systems'. It was returned to McIlwain in June as was a revised version in July 1978. |
| D.32        | Typescript of paper sent to FEBS Letters, letter of submission, referees' reports.   |
| D.33        | Typescript of paper sent to <i>Nature</i> , revised version, correspondence with <i>Nature</i> .   |
| D.34-D.36   | 'The flow of thought and the flow of substance in the brain', <i>Biological Psychology</i> <b>12</b> (1981), 147-169.  |
|             | Manuscript draft, figures, etc.  |
|             | 3 folders. See also D.123-D.126.   |
|             |  |
| D.37, D.37A | 'The origin and use of the terms competitive and non-competitive in interactions among substances at biological systems'.  |
|             | Manuscript draft of contribution to Essays in Biochemistry; correspondence, 1985-1986.   |
|             | 2 folders.   |

Biochemistry and neurochemistry in the 1800s: their origins in comparative D.38, D.38A animal chemistry', Essays in Biochemistry 25 (1990), 197-224. Manuscript notes on animal chemistry etc, 1988, 1989, found with offprint of McIlwain's article in Essays in Biochemistry. 2 folders. 'Toward an ecology of neurochemical knowledge'. D.39 This was McIlwain's contribution to a volume of memoirs on Professor Yasuzo Tsukada. Manuscript draft, typescript version sent to Japan, correspondence, 1990-1991. 'How neurochemistry regained its specific biological components: D.40-D.42 experimental and cognitive advance, 1935-1955'. This was McIlwain's contribution to issue of Neurochemical Research honouring L. Sokoloff. Letter of invitation, 21 March 1990; typescript title page, abstract and first page of paper; manuscript notes and drafts; biographical information about Sokoloff. 3 folders. 'Contributions to neurochemical knowledge considered ecologically'. D.43, D.44 The manuscript was accepted for publication by Molecular and chemical neuropathology in November 1991. Correspondence, referee's comments etc, 1989, 1991. D.43 Typescript 'top copy', etc. D.44 Becoming a neurochemist: a 1940s transition from microbiology to D.45 neuroscience'. Manuscript and typescript drafts of article 'For: Biochem. Soc. Trans'; letter

submitting article, 20 August 1992.

| D.46             | Manuscript notes on the work of J.C. Eccles, nd.   |                        |
|------------------|--|------------------------|
| D.47             | Reviews by McIlwain, various dates 1948-ca.1985.   |                        |
| D.48             | Miscellaneous shorter correspondence and paper publications, various dates 1935-1991.  | s <i>re</i> McIlwain's |
| EDITORIAL CORRES | SPONDENCE  |                        |
|                  | Arranged aphabetically by publisher or journal.  |                        |
| D.49             | Addiction Research Foundation.   | 980-1983               |
|                  | McIlwain was a member of the Advisory Panel of the R on Alcohol and Drug Problems series.  | esearch Advances       |
|                  | Correspondence re topics for review in Research Advance  | es series.             |
|                  |  |                        |
| D.50             |  | 1948, 1951             |
|                  | Refereeing.  |                        |
| D.51-D.64        | Biochemical Journal  | 1945-1978              |
|                  | McIlwain joined the Editorial Board in November 1946 1950. He submitted papers to the <i>Journal</i> , and continuthroughout his career. |                        |
|                  | The sequence includes referees' reports by McIlwain and  | others.                |
| D.51             | 1945-1946.   |                        |

1947 January-June.

1947 July-December.

D.52

D.53

| D.54      | 1948 January-June. Includes memorandum submitted by the Editorial Board to the Royal Society Scientific Information Conference.              |
|-----------|--|
| D.55      | 1948 July-December.  |
| D.56      | 1949 January-June.   |
| D.57      | 1949 July-December.  |
| D.58      | 1950.  |
| D.59      | 1951-1953. Includes signed menu from dinner given on the occasion of E.J. King's resignation as Chairman of the Editorial Board, March 1952. |
| D.60      | 1954-1955.   |
| D.61      | 1958, 1960-1963.   |
| D.62      | 1965-1966.   |
| D.63      | 1969-1973, 1975,1977-1978.   |
| D.64      | Nd.  |
| D.65-D.69 | Biochemical Pharmacology various dates 1958-1990   |
|           | McIlwain was a member of the Editorial Advisory Board for a period to 1990.  |
|           | Principally refereeing.  |

| D.65      | 1958-1959. Includes papers <i>re</i> founding of the journ appeared in 1958; also review by McIlwain for the journal |                       |
|-----------|--|-----------------------|
| D.66      | 1967, 1969-1970.   |                       |
| D.67      | 1980.  |                       |
| D.68      | 1981-1982.   |                       |
| D.69      | 1983-1986, 1990.   |                       |
| D.70      | The Biochemical Society Bulletin/The Biochemist  | 1983-1992             |
|           | re Thudichun Lectures. See also D.71.  |                       |
|           | re accuracy of historical account in the <i>Bulletin</i> , in confort J.H. Quastel. See also E.61, E.66, E.67.       | nexion with the work  |
| D.71      | Biochemical Society Transactions   | 1976-1977             |
| D.72      | Faraday Society  | 1944-1946             |
|           | Refereeing.  |                       |
| D.73      | Journal of Neurobiology  | 1967-1980, 1985       |
|           | McIlwain became a member of the Editorial Board of foundation in 1968.   | of the Journal on its |
| D.74-D.81 | Journal of Neurochemistry  | 1955-1986             |
|           | McIlwain was invited to join the Advisory Board of the and was closely associated with it for the next thirty year   |                       |
|           | Refereeing etc.  |                       |

| D.74       | 1955-1958.  |  |
|------------|---|--|
| D.75       | 1960-1962.  |  |
| D.76       | 1963-1967.  |  |
| D.77       | 1968-1970.  |  |
| D.78       | 1971-1975.  |  |
| D.79       | 1976-1977   |  |
| D.80       | 1978-1980.  |  |
| D.81       | 1981, 1983, 1985-1986.  |  |
| D.82       | Nature  | 1974-1979                                  |
|            | Refereeing.   |  |
| D.83, D.84 | Neurochemistry International  | 1980-1988                                  |
|            | In 1980 McIlwain accepted a personal invitation from Maxwell to serve as a consulting editor on the Editor journal. | the publisher Robert ial Board of this new |
|            | Refereeing etc.   |  |
| D.83       | 1980-1983.  |  |
| D.84       | 1984-1985, 1987-1988.   |  |

| D.85, D.86 | Miscellaneous shorter editorial correspondence and papers, 1943-1986.  Includes refereeing and invitations to write declined by McIlwain.  |
|------------|--|
| D.85       | 1943, 1945, 1969, 1973-1975, 1979.   |
| D.86       | 1981-1986.   |
| LECTURES   |  |
| D.87       | 6pp manuscript draft of lecture relating to McIlwain's work on phenazines, ca 1936-1937.   |
| D.88       | McIlwain's Inaugural Lecture as Professor of Biochemistry in the University of London, 1955.   |
|            | 'Additional list' of names and addresses probably compiled for distribution of copies of Inaugural Lecture; letters of thanks from those to whom McIlwain sent copies of his lecture, etc. |
| D.89       | 'Chemical factors in the excitation of isolated mammalian cerebral cortex', International Meeting of Neurobiologists, Amsterdam, September 1959.   |
|            | 6pp typescript + abstract.   |
| D.90       | 'The chemical nature of the brain made manifest', Oxford University Scientific Society, February 1960.   |
|            | 16pp typescript + figures.   |
| D.91       | 'Chemical and electrical events in tissues from the brain'.  |
|            | 4pp typescript for lecture at Strasbourg, 25 April 1966.   |
|            | 5pp typescript for lecture to Oxford Biochemical Society, 1 December 1966; letter of thanks.   |

'The usefulness of isolated cortical preparations', Neurobiology Discussion D.92 Group, 23 June 1967. 2pp typescript. 'Lectures, February 1968 How to take the brain apart and make the pieces D.93 work'. 6pp typescript + list of slides. 'Seminars Sept-Nov 1968'. Contents of McIlwain's folder so inscribed D.94, D.95 divided into two for ease of reference. Includes outlines, slide lists, drafts etc for papers given during visit to the USA in November 1968, in Naples in October 1969, and to the 'Clin.-Teaching Sectn., Psychology', 11 December [no year given]. The topics of McIlwain's papers are 'Basic mechanisms in the epilepsies', 'Isolated cerebral tissues as an electrophysiological test system', 'Opposing actions and structural features in glutamic acid and tetrodotoxin', 'Chemical and electrical events in isolated tissues from the brain' and 'Biochemical approaches to CNS adaptation and learning'. 'Seminars, "subsystems" '. Contents of folder so inscribed: drafts, slide D.96 lists, figures for two different papers on 'Electrical excitation of specified subsystems of the mammalian brain as isolated tissue preparations' and 'Electrical stimulation of specified subsystems of the mammalian brain, as isolated tissue preparations', November 1971. The 'Electrical stimulation' paper is described as a 'spoken paper for: EXPERIMENTAL MODELS OF EPILEPSY (Basic Research Task Force, NINDS, Nov.1971)'. D.97 'Adenosine as neurohumoral agent in the brain', C.I.N.P. meeting, Copenhagen, 1972. 4pp typescript + slide list D.98 'N chemism; internalizing envirt'. Contents of folder so inscribed: manuscript notes and drafts, 1972-1975.

| D.99         | 'The neurohumoral status of ATP and adenosine examined in preparations from the mammalian brain', colloquium, January 1973.  6pp typescript + slide list.   |
|--------------|---|
| D.100        | 'Cabanis recalled, and current knowledge of the brain's chemical output', Helsinki, April 1973.  10pp typescript + figure.  |
| D.101        | 'The neurohumoral status of adenine derivatives examined in preparations from the mammalian brain', seminars, April-May 1973.  7pp typescript.  |
| D.102        | 'The status of adenosine as neurohumoral agent in the brain', lecture and seminars, September 1973.  7pp. typescript + slide list.  |
| D.103        | 'Adenosine 3': 5' -cyclic monophosphate and its precursors in the brain: a cyclase-containing adenine-uptake region', Biochemical Society colloquium, Swansea, 18 December 1973.  5pp typescript + slide list.  |
| D.104        | 'Ntransm. "vector" cpds'. Contents of folder so inscribed: manuscript notes, 1973-1974.   |
| D.105        | 'Precursors and products of the adenine mononucleotides of cerebral tissues: neurohumoral implications', Mont St. Odile, March 1974.  3pp typescript 'spoken paper' + slide list; 1p. typescript round-table contribution 'Cerebral subsystems maintained as tissue slices'. See also F.28. |
| D.106, D.107 | 'Chemistry figurative usage'. Contents of folder so inscribed divided into two for ease of reference: manuscript notes and drafts, background material etc probably assembled for lecture. Most material dated in 1974-1975.  |

| D.108-D.113  | 'Cerebral isolates and neurochemical discovery', Biochemical Society Thudichun Lecture, 24 March 1975.                        |
|--------------|---|
| D.108        | Invitation, correspondence <i>re</i> arrangements, correspondence arising, 1974-1983.   |
| D.109        | 14pp typescript + list of slides for 'spoken version' of lecture; reprint.  |
| D.110, D.111 | Figures, copies of letters from F.Hoppe-Seyler and J. Liebig to Thudichun, etc.   |
|              | 2 folders.  |
| D.112, D.113 | Manuscript notes re preparation of Thudichun Lecture.   |
|              | 2 folders.  |
| D.114        | 'Mediation of some neurochemical and drug actions on cyclic AMP, by release of adenosine', ISN 5th meeting, 5 September 1975. |
|              | 1p slide list with manuscript notes.  |
|              | 'Neurotransmitters and the isolated optic tract - superior colliculus of the guinea pig', ISN 1975, Symposium 3.              |
|              | 1p slide list with manuscript notes.  |
|              | 'Transport phenomena in the nervous system', satellite symposium, 9 September 1975.   |
|              | 2pp slide list with manuscript notes.   |
| D.115        | 'Resistance, translocation and metabolism of cycAMP', Biochemical Society, 8 July 1976.                                       |
|              | 4pp manuscript draft.   |
| D.116        | 'The structuring of cerebral activity by intracellular chemical mediators', BRA meeting, March 1977.                          |
|              | 2pp typescript + slide list, summary and abstract.  |

| D.117       | 'Categories of neurotransmission involving mononucleotides, ISN meeting symposium 2, 22 August 1977.  |
|-------------|---|
|             | Slide list; slide list with manuscript notes.   |
| D.118-D.120 | ADENOSINE/cycAMP Seminars, Papers'. Contents of folder so inscribed divided into three for ease of reference.   |
| D.118       | Slide lists for three papers delivered in June 1978.  |
|             | The topics are 'Adenosine and its mononucleotides as regulatory and adaptive signals in the brain', 'Purine derivatives as regulatory and adaptive signals in the brain' and 'Synaptic mediators and the structuring of cerebral activity'. |
| D.119       | Drafts for two papers delivered at ISN Symposium, September 1979.   |
|             | 'In vitro contributions to the study of brain metabolism'. 3pp typescript and manuscript draft + abstract.  |
|             | 'Protein-bound cyclic AMP and protein kinase, cerebral cortex'. 2pp typescript and manuscript draft.  |
| D.120       | Drafts for two contributions to Biochemical Society Colloquium, Guildford, December 1979.   |
|             | Manuscript and typescript drafts of McIlwain's Colloquium introduction + figures.   |
|             | Draft for paper on adenosine binding. 6pp typescript.   |
| D.121       | 'For how long after its formation is cyclic AMP active in the brain, and at what sites?', Institute of Neurology, University of London, 9 May 1980.   |
|             | 8pp typescript + slide list, letter re arrangements.  |
| D.122       | 'Neurotransmitter mediators & the endogenous activities of the brain', National Institute for Medical Research, London, March 1981.   |

Typescript and manuscript draft + slide list, letter re arrangements.

| D.123-D.126  | 'Flow of thought and flow of substance in the brain', Rush University, 21 May 1981 and University of Iowa, 29 May [1981].                      |
|--------------|--|
| D.123        | Lecture notices, 9 pp manuscript 'spoken version 5/81'.  |
| D.124        | Figures etc.   |
| D.125, D.126 | Manuscript notes and drafts <i>re</i> 'flow of thought', William James, Virginia Wolf, etc, August - November 1981.                            |
|              | 2 folders.   |
| D.127        | 'History of neurochemistry', December 1982.  |
|              | 12pp manuscript, etc.  |
| D.128, D.129 | 'Neurochemistry and problem-solving: an historical account', University of California, San Francisco, June 1983.                               |
|              | Correspondence <i>re</i> arrangements, three manuscript and photocopied manuscript drafts, one as amended in October 1983.                     |
|              | 2 folders.   |
| D.130        | Msc. Lecture 'Cyclic nucleotides and adenosine', 'UM&DSchls, Divisn of Biochemistry', 14 October 1985.   |
|              | Manuscript and photocopied manuscript drafts, slide list, figures.   |
| D.131        | 'History of neurochemistry', May 1988.   |
|              | 9pp photocopied manuscript, figures.   |
| D.132        | 'Discovering electrical events in tissues: an historical perspective', Department of Pharmacology, University of Birmingham, 25 February 1991. |
|              | Poster only.   |

## **BROADCAST**

D.133

'Biochemistry of brain abnormalities'. Talk by McIlwain for the 'Frontiers of Knowledge' programme, first broadcast in the European English Service, 17 March 1967.

Letter of engagement, transcript.

### **REPRINTS**

D.134 McIlwain's reprints **SECTION E** 

#### SOCIETIES AND ORGANISATIONS

E.1-E.73

#### **BIOCHEMICAL SOCIETY**

McIlwain served as a member of the Biochemical Society Committee, 1958-1961. He was the Biochemistry Society's representative on the Biological Council: Co-ordinating Committee for Symposia on Drug Action, 1958-1968.

For the *Biochemical Journal* and other Biochemical Society publications see Section D. McIlwain served on the Editorial Board of the *Biochemical Journal*, 1946-1950.

- E.1-E.3 General correspondence and papers 1948-1969.
- E.1 1948-1956. Includes papers *re* proposed International Union of Biochemistry and publishing facilities offered by the Society.
- E.2 1957-1962. Includes reports of the Co-ordinating Committee for Symposia on Drug Action, 1959 and 1962.
- E.3 1963-1969. Includes papers *re* joint meeting with The Netherlands Biochemical Society at Leiden in 1963, report of the Co-ordinating Committee for Symposia on Drug Action, 1964, and papers *re* joint meeting with the Physiological Society at Oxford in 1965.
- E.4-E.11 Minutes of Biochemical Society Committee, 1958-1961.

E.12-E.14 Correspondence and papers re Neurochemical Group, 1966-1969, 1984.

McIlwain was a principal mover in the establishment of this Group within the Society in 1967. He was a member of the first Committee of the Group.

E.12 1966-1968. Includes committee papers.

8 folders.

E.13 1969. Committee papers.

E.14 1984. 'A brief history of the Neurochemical Group' by H.S. Bachelard, October 1984 (3pp typescript); 3pp manuscript notes by McIlwain headed 'For HSB's Brief History... Nchem Gp, Bsoc' and dated 11 October 1984.

E.15 'Bioch. Soc. Historical'. Contents of McIlwain's folder so inscribed: correspondence *re* history of the Society, history of biochemistry, etc., 1960, 1983-1985, 1988, 1991, nd.

In 1960 McIlwain felt unable to take on the post of Honorary Archivist of the Society because of other commitments.

#### **BRAIN RESEARCH ASSOCIATION**

E.16- E.18 Papers re meetings etc., 1977-1988.

3 folders.

### CENTRE FOR NEUROSCIENCE, UNIVERSITY COLLEGE LONDON

E.19-E.21 Information (News Sheets etc), 1980, 1984-1986.

3 folders.

## CHEMICAL SOCIETY, HISTORICAL CHEMISTRY GROUP

E.22 Papers re meetings, 1976-1978.

### **EUROPEAN NEUROSCIENCE ASSOCIATION**

E.23 Information from Secretariat, Newletters, 1976-1978.

### **EUROPEAN SOCIETY FOR NEUROCHEMISTRY**

E.24 Information from Secretary, Newsletters, 1977-1984.

# INSTITUTE OF DEVELOPMENTAL NEUROSCIENCE AND AGING

E.25 Correspondence and papers, 1983-1984.

In 1983 McIlwain accepted an invitation to join the Advisory Board of the Institute.

### INTERNATIONAL BRAIN RESEARCH ORGANISATION

1972.

|           | In 1966 McIlwain filled a vacancy on the Central Council as a representative of the neurochemistry panel. In 1968 he was elected as alternate representative to the Central Council. |
|-----------|--|
| E.26-E.31 | Correspondence and papers, 1966-1985.  |
| E.26      | 1966.  |
| E.27      | 1967-1968. Includes list of UK members of IBRO.  |
| E.28      | 1969. Includes 'copy of the tentative Statutes and By-Laws of IBRO, as reviewed by the IBRO Committee for Re-Structure'.   |
| E.29      | 1970. Includes copy of the Statutes and By-Laws approved and ratified by the Central Council.  |

E.30 1973. Includes lists of applicants for IBRO membership.

E.31 1974-1977, 1979, 1985.

E.32 'IBRO'. Contents of McIlwain's folder so inscribed: 'Statement to Dr D.B. Tower, December, 1958. Present status of neurochemistry'; carbon copy of letter from McIlwain to G.B. Ansell *re* possible Neurochemical Club, 8 April 1959; 'Biochemistry at the Institute of Psychiatry, Maudsley Hospital, London', draft by McIlwain 'for IBRO Bull. 6/63'; 'Report for IBRO Survey' on Biochemistry Department at the Institute of Psychiatry, inscribed 'HMcIl's copy 11/66'.

E.33, E.34 Printed material.

2 folders.

#### INTERNATIONAL SOCIETY FOR NEUROCHEMISTRY

McIlwain was a founder member of the Society. In 1984 he became the 'Historian' of the society with responsibility for assembling and looking after the society's archives. For papers *re* the historical sessions organised by McIlwain at the Society's international meetings see Section F.

E.35-E.40 General correspondence and papers: ISN Newsletters, minutes of business meetings etc., 1973-1990.

6 folders.

E.41-E.56 'ISN Historian'. Contents of McIlwain's box folder so inscribed

E.41 'HISTORIAN job:appt. 1984'. Contents of McIlwain's envelope so inscribed: correspondence *re* McIlwain's appointment, ISN archives, April-June 1984

E.42-E.52 Correspondence and papers *re* ISN Historian, ISN archives, history of neurochemistry, 1983-1992, nd.

| E.42 | 1983-1984.   |
|------|--|
| E.43 | 1985 January-February. Includes note by McIlwain on the history of neurochemistry for ISN News and author's proof of article by McIlwain for Journal of Neurochemistry 'In the Beginning: To Celebrate 20 Years of the International Society of Neurochemistry (ISN)'. |
| E.44 | 1985 February-June. Includes note by McIlwain 'The ISN Collection: an Appeal for Contributions' for <i>ISN News</i> .  |
| E.45 | 1985 July-December.  |
| E.46 | 1986.  |
| E.47 | 1987-1988.   |
| E.48 | 1989.  |
| E.49 | 1990.  |
| E.50 | 1991-1992, nd. Includes 'Historian's Third Report on the ISN Collection, 1991' for ISN News.   |
| E.51 | 'Copies of ISN minutes et al relating to historian appts and round-t[ables]'. Copied by McIlwain from items in ISN archive collection, September 1991.   |
| E.52 | Extract from American Society of Neurochemistry standing rules and procedures <i>re</i> archives; manuscript notes of ISN archive collection classification, holdings etc.   |

| E.53      | 'ISN Historical '92'. Contents of McIlwain's folder so inscribed: correspondence <i>re</i> ISN News, 25th Anniversary Issue, January, February 1992.   |
|-----------|--|
| E.54      | 'Account of historian job, for ISN 5/92'. Contents of McIlwain's folder so inscribed: manuscript notes and drafts for McIlwain's article 'History among the neurochemists: the ISN historical sessions, 1981-1991'. Title page of manuscript draft inscribed 'For: <i>The Biochemist</i> ' and 'Later rearranged for <i>J Nchem</i> Commemoration vol 1993'. |
| E.55      | 'POST of HISTORIAN, ISN. For JNCh; 6/92'. Contents of McIlwain's folder so inscribed: typescript of McIlwain's article 'The post of historian, ISN: and the Society's historical colloquia and Collection'.  |
| E.56      | 'Resgn ISN Histn 6/92'. Contents of McIlwain's folder so inscribed: copy of McIlwain's letter of resignation to ISN Secretary, 12 June 1992, with related manuscript drafts.   |
| E.57-E.67 | Miscellaneous items related to McIlwain's work as ISN Historian, interest in the history of neurochemistry.  |
| E.57-E.60 | Typescript draft review by C.J. van der Berg on 'Brain function and energy metabolism in historical perspective' (118pp.), 21 March 1983. It is described as unfinished by its author who invites comments, criticism and useful material.  4 folders.   |
| E.61      | Typescript draft by J.H. Quastel on 'Some details of the early (pre-1941)  |
|           | history of neurochemistry'(8pp.), April 1985.  Undated manuscript draft letter from McIlwain to Brian [G.B. Ansell] re Quastel, the 'concept of the active centre of an enzyme', 'competitive inhibition'.   |
| E.62-E.67 | Contents of McIlwain's folder: correspondence and papers, 1985-1988.   |
| E.62      | Correspondence <i>re</i> ISN archive collection, 1986-1988. Includes 'Historian's Report on the ISN Collection'.   |

Correspondence re general ISN matters, 1986-1987. E.63 Correspondence with Neurochemistry International, 1987-1988. Principally E.64 re issue of journal dedicated to McIlwain. Manuscript notes and drafts for paper by McIlwain on 'The Biochemical E.65 Journal and the Journal of Neurochemistry as exemplying and fostering biochemistry during their initial years of publication'. The paper was given at a meeting of the Biochemical Society in London, December 1987. Copy of paper by T.W. Goodwin on 'The origins and development of biochemistry in the UK'; brief correspondence with Goodwin, 1985,1987. Correspondence and papers arising from tribute to J.H. Quastel in the E.66, E.67 Biochemical Society Bulletin (9 (1987), 10-11), 1988. 2 folders. See also D.70.

### SCIENCE MUSEUM, LONDON

E.68 Correspondence and papers *re* deposit of apparatus in the museum's biochemistry collection, etc. 1980.

### SOCIETY FOR EXPERIMENTAL BIOLOGY

E.69 Correspondence and papers *re* meetings, 1949-1951.

1951 papers re joint meeting with Dutch biologists at the University of Leiden.

### SOCIETY FOR GENERAL MICROBIOLOGY

E.70 Correspondence and papers *re* founding of the Society, 1944-1946.

The Society was founded on 16 February 1945.

#### **MISCELLANEOUS**

E.71- E.73 Miscellaneous shorter correspondence and papers re societies and

organisations.

E.71 American Society for Neurochemistry.

Association of University Teachers of Psychiatry.

British Pharmacology Society.

E.E.G. Society.

Genetical Society.

Medical Council on Alcoholism.

E.72 North East Chemical Societies.

Oxford University Alembic Club.

The Physiological Society.

E.73 Royal Eye Hospital Clinical Society.

Royal Society.

Royal Society of Chemistry.

Semi Lunar Society.

Society for the History of Alchemy and Chemistry.

Society of Chemical Industry.

| SECTION F | VISITS AND CONFERENCES  | F.1-F.79        |
|-----------|---|-----------------|
| F.1       | 258th Meeting of the Biochemical Society, Rowett Researcherdeen, 11 and 12 April 1947.  Programme; information.   | arch Institute, |
| F.2       | First International Congress of Biochemistry, Cambridge, 1949.  Papers <i>re</i> administrative arrangements, social functions incomenu.  |                 |
| F.3-F.4A  | Visit to the USA, July - October 1951.  The principal reason for McIlwain's visit was to work in the R.W. Gerard, Department of Physiology, University of Chicago   |                 |
| F.3, F.4  | Correspondence <i>re</i> arrangements.  2 folders.  |                 |
| F.4A      | McIlwain's correspondence with his secretary at the Institute University of London during his visit to the USA.   | of Psychiatry,  |
| F.5       | XIX International Physiological Congress, Montreal, Quebec September 1953.  McIlwain presented a paper on 'Electrical Requirements for the Respiration of Separated Mammalian Cerebral Cortex'.  Annotated programme book.            |                 |
| F.6       | Visit to the USA, 1953.  McIlwain visited the USA in the autumn to fulfil a number engagements. He was unable to accept an invitation to de Lecture at the New York Academy of Medicine in November.  Correspondence re arrangements. |                 |

F.7 Visit to the USA, February 1954. McIlwain was travelling to New Zealand via the USA. He delivered the Christian A. Herter Lecture on 'The speed of chemical change in the central nervous system', New York University School of Medicine, 15 February 1954. Correspondence re arrangements for Herter Lecture. Visit to New Zealand and Australia, February - July 1954. F.8, F.9 McIlwain was a Visiting Lecturer in the Medical School of the University of Otago, Dunedin, March - June 1954. On the return journey he gave lectures at Canterbury College, Christchurch, the University of Melbourne, and the Australian National University, Canberra. Correspondence re arrangements, itinerary, financial statement. F.8 McIlwain's correspondence with his secretary and others at the Institute of F.9 Psychiatry, University of London, during his visit to New Zealand. 356th meeting of the Biochemical Society, Institute of Psychiatry, University F.10 of London, 17 November 1956. Annotated printed material; letter of thanks. Visit to the National Institute of Neurological Diseases and Blindness, F.11 Bethesda, Maryland, April-May 1957. Papers re financial arrangements for McIlwain's visit as special consultant. Anglo-American Symposium on 'The history and philosophy of knowledge of F.12 the brain and its functions', London, 15-17 July 1957. The meeting was held in connexion with the First International Congress of Neurological Sciences, Brussels, July 1957. Annotated programme booklet.

Conference on Brain Mechanisms Regulating Cortical Excitability, Brain F.13 Research Institute, University of California at Los Angeles, 19-22 November 1961. McIlwain also arranged to visit the City of Hope Medical Center, Duarte, California. Correspondence re arrangements, conference programme; McIlwain's manuscript notes, etc. F.14 Foundation Conference Comparative Addiction Research on Neuropharmacology of Alcohols, Barbiturates and Tranquilizers, Toronto, Ontario, March 1965. McIlwain presented a paper 'Biochemical Comment on Barbiturates, Tranquilizers and Ethanol'. Letter from organiser; timetable of arrangements and sessions, list of participants, typescript draft of McIlwain's contribution, McIlwain's manuscript conference notes. F.15 International Neurochemical Conference, Oxford, 25-30 July 1965. List of participants only. International Brain Research Organisation workshop seminar 'Advances in F.16 Brain Research Technics', Budapest, Hungary, 15-27 August 1965. McIlwain presented a paper on 'Metabolic events and electrical events in tissues from the mammalian brain'. Annotated programme booklet, with loose manuscript notes enclosed. F.17 Brain Barriers Systems Conference, Castle 'De Hooge Vuursche' - Baarn, The Netherlands, 26-30 September 1966. McIlwain presented a paper on 'lon movements in isolated preparations from the mammalian brain' and chaired a session on 'Alterations'. Programme and list of participants, with McIlwain's manuscript conference notes on verso. F.18 Seventh International Congress of Biochemistry, Tokyo, August 1967. Press cuttings only,

| F.19, F.20 | International Convention of Biochemists (sponsored by The Biochemical Society, UK and the Society of Biological Chemists, India), Indian Institute of Science, Bangalore, 4-8 September 1967.   |
|------------|---|
| F.19       | Programme, list of participants, information etc.   |
| F.20       | Annotated abstracts booklet.  |
| F.21       | Workshop on Basic Mechanisms of the Epilepsies (sponsored by the Public Health Services Advisory Committee on the Epilepsies and the National Institute of Neurological Diseases and Blindness), Colorado Springs, Colorado, 13 -15 February 1968.  |
|            | Annotated programme booklet.  |
| F.22       | Faculty of Anaesthetists of the Royal College of Surgeons of England and the Scottish Society of Anaesthetists scientific meeting on 'The action of anaesthetic drugs in the central nervous system', Glasgow, 11 May 1968.  McIlwain spoke on 'Cerebral isolates and the study of central depressant |
|            | drugs'.   |
|            | Correspondence <i>re</i> arrangements, programme, summaries of papers; 2pp typescript draft of McIlwain's paper.  |
| F.23       | Second International Meeting of the International Society for Neurochemistry, Milan, 1-5 September 1969.  |
|            | McIlwain contributed a paper on 'Tests of excitability applied to isolated tissues from the brain' to a symposium on 'Selected topics in human chemical neuropathology'.  |
|            | Annotated programme booklet.  |
| F.24       | Cerebrovascular Clinical Research Center Workshop, Palm Springs, California, 7 and 8 January 1971.  |
|            | McIlwain contributed to Panel Discussion II on 'Cerebral Hypoxia'   |
|            | Annotated 'agenda'; 5pp draft of McIlwain's contribution.   |

| F.25-F.27 | Visit to Japan, 22 August - 17 September 1973.   |
|-----------|--|
|           | McIlwain made a study visit to Japan under the Royal Society Japan Programme. He attended the 4th International Meeting of the International Society for Neurochemistry (Tokyo, 26 - 31 August) and visited laboratories of university departments, research institutes and a pharmaceuticals company during his stay in Japan.  |
| F.25      | Correspondence re arrangements.  |
| F.26      | Information and memorabilia.   |
| F.27      | Manuscript notes made by McIlwain during his visit; abstracts of conference papers; report on visit for Royal Society (printed booklet).   |
| F.28      | European Training Programme in Brain and Behaviour Research Conference on Cyclic Nucleotides and the Nervous System (Second Mont Ste Odile Conference on Neurobiology), 19-23 March 1974.  |
|           | Programme and list of participants. See also D.106.  |
| F.29      | Sir Henry Dale Centennial Symposium on 'Post-Synaptic Actions of Neurotransmitters', Cambridge, 17-19 September 1975.  |
|           | Annotated programme and abstracts booklet  |
| F.30-F.35 | Visit to the USA and Canada, March 1976.   |
|           | McIlwain was invited to participate in the Seventh Annual Meeting of the American Society for Neurochemistry (ASN) held in Vancouver, British Columbia, 15-19 March and arranged a number of visits to research centres in the USA including the Mental Retardation Center of the University of California at Los Angeles Center for the Health Sciences, the Department of Psychology of the University of Iowa at Iowa City, Iowa and the National Institutes of Health, Bethesda, Maryland. |
|           | Correspondence with colleagues <i>re</i> arrangements. Arranged by McIlwain in an alphabetical sequence.   |

F.30 J.P. Blass R.M. Burton (Programme Chairman ASN meeting) F.31 J.R. Cooper J.T. Cummins J. Daly G. Feuer F.32 J.A. Harvey F.33 E. Lewin R.N. Lolley N. Marks S. Ochs J.J. O'Neill F.34 E. Roberts S. Roberts R.B. Sloane

P.D. Swanson

| F.35       | D.B. Tower   |
|------------|--|
|            | J. de Vellis   |
|            | J.R. Wherrett  |
|            | J.M. Wood  |
| F.36       | Not used.  |
| F.37, F.38 | First meeting of the European Society of Neurochemistry on 'Basic Aspects of Neurochemistry Related to the Epilepsies', Bath, 19-23 September 1976.  |
| F.37       | Programme; agenda for business meeting; abstracts for workshop on cerebrospinal fluid etc.   |
| F.38       | Abstracts for meeting (bound volume).  |
| F.39       | International Conference on Physiological and Regulatory Functions of Adenosine and Adenine Nucleotides (sponsored by the Pharmaceutical Society of Canada), Banff, Alberta, 11-16 June 1978.  |
|            | McIlwain gave a paper on 'Adenosine and its mononucleotides as regulatory and adaptive signals in the brain'.  |
|            | Conference booklet comprising programme, abstracts, list of participants etc. Inside front cover, title page, subsequent blank pages used for McIlwain's notes on conference proceedings. Copy of scientific programme found loose inside booklet. |
| F.40       | First World Congress of the International Brain Research Organization (IBRO) on 'The Brain in Health and Disease', Lausanne, 31 March - 6 April 1982.  |
|            | The provisional title of McIlwain's proposed contribution was 'Extended messenger roles in the brain for cyclic nucleotides'.  |
|            | First announcement; poster advertising Congress; letter from McIlwain to congress organiser.   |

| F.41       | International Symposium on Adenosine, University of Virginia, Charlottesville, Virginia, 7-11 June 1982.   |
|------------|--|
|            | Summaries of presentations and abstracts of posters (in binder). Conference programme found stapled inside front cover.  |
| F.42-F.45  | 9th International Meeting of the International Society for Neurochemistry, Vancouver, British Columbia, 10-15 July 1983.   |
|            | McIlwain organised a Round Table on the History of Neurochemistry with the title 'Particle and molecular concepts of neural action and abnormality'. McIlwain's own contribution was entitled 'Assay-guided isolation, linking cerebral substances and functions.' |
| F.42       | General information re 9th ISN meeting including business meeting.   |
| F.43-F.45  | Correspondence re organisation of McIlwain's Round Table, abstracts etc.   |
|            | 3 folders.   |
| F.46, F.47 | International Union of Pharmacology 9th International Congress of Pharmacology, London, 29 July - 3 August 1984.   |
| F.46       | 'Interim' announcement of Congress; invitation to McIlwain to chair a session of a satellite symposium on 'Purines: Pharmacology and Physiological Roles' with information about symposium.  |
| F.47       | Programme and poster abstracts of satellite symposium (in binder). Inside front cover, inside back cover etc used for McIlwain's notes of symposium proceedings.   |
| F.48-F.52  | 10th International Meeting of the International Society for Neurochemistry, Riva del Garda, Italy, May 1985.   |
|            | McIlwain organised (with G.B. Ansell) a Round Table on the History of Neurochemistry with the title 'History of transmitters: personal experiences'. McIlwain's own contribution was on the relationship to general metabolism, pre-1950.                          |

| F.48-F.50 | Correspondence re organisation of the Round Table.   |
|-----------|--|
|           | 3 folders.   |
| F.51      | Manuscript notes and drafts for McIlwain's contribution.   |
| F.52      | Notice for History of Neurochemistry Round Table, abstracts, manuscript notes for McIlwain's introductory remarks as Chairman, etc.  |
| F.53      | Wellcome Symposium on the History of Medicine 'The development of biochemistry in Britain', London, 6 June 1986.   |
|           | Brief correspondence; list of participants, programme etc, with McIlwain's notes of proceedings on verso.  |
| F.54      | First joint meeting of the International Society for Neurochemistry and the American Society for Neurochemistry, La Guaira, Venezuela, 31 May-5 June 1987.   |
|           | McIlwain proposed a session on 'Principles and practice in neurochemical history' which was not accepted by the Programme Committee.   |
|           | Correspondence re organisation of proposed session with prospective contributors and Chairman of Programme Committee (B. Hamprecht).   |
| F.55-F.65 | 12th biennial meeting of the International Society for Neurochemistry, Algarve, Portugal, 23-28 April 1989.  |
|           | McIlwain organised a Round Table on the History of Neurochemistry with the title 'Contributions to early neurochemical development by drugs and medicaments, 1850s-1950s'. He also attended a symposium in honour of T.L. Sourkes which followed the main ISN meeting and chaired one of the symposium sessions. |
| F.55      | General information about ISN meeting.   |
| F.56-F.60 | Correspondence re organisation of Round Table.   |
|           | 5 folders.   |

| F.61       | Abstracts; manuscript notes for McIlwain's introductory remarks; illustrative material for McIlwain's slides, etc.  |
|------------|---|
| F.62       | Copy of Round Table paper by T.L. Sourkes 'Early clinical neurochemistry of some drugs acting on the CNS [Central Nervous System]'  |
| F.63       | Revised version of paper given at Round Table by V.P. Whittaker 'The contribution made by drugs and toxins to our knowledge of cholinergic function.'   |
| F.64, F.65 | Correspondence with T.L. Sourkes and correspondence and papers <i>re</i> symposium in his honour.   |
| F.66-F.74  | 13th biennial meeting of the International Society for Neurochemistry, Sydney, 15-19 July 1991.   |
|            | McIlwain organised a Colloquium on the History of Neurochemistry with the title 'Influences on the development of neurochemistry'. He gave a colloquium paper entitled 'An ecology of neurochemical knowledge' and a poster presentation entitled 'A neurological lineage portrayed'. |
| F.66, F.67 | General information about the ISN meeting, neurochemistry in Australia.   |
| F.66       | Programme booklet.  |
| F.67       | Correspondence and papers.  |
| F.68-F.71  | Correspondence re organisation of McIlwain's colloquium.  |
|            | 4 folders   |
| F.72, F.73 | 'Copies of photographs used in poster, Sydney, 1991. Originals returned to ISN Collection'. Contents of envelope so inscribed.  2 folders.  |
|            |   |

F.74 International symposium 'Molecular events in neurotransmission' to honour the memory of Professor Eduardo DeRobertis (Satellite of the 13th ISN meeting), 20 July 1991.

Annotated programme and abstracts booklet.

F.75 -F.76A 14th biennial meeting of the International Society for Neurochemistry, Montpellier, France, 1993.

McIlwain proposed (with G. Curzon) an historical session which was accepted by the Programme Committee. However, McIlwain's illness and then death in September 1992 prevented his participation in the symposium. After his death the structure of the session was altered to convert it in part to a session in his honour and in the honour of Paul Mandel, a distinguished French neurochemist who had also recently died

F.75, F.76 Correspondence re organisation of historical session (to May 1992).

2 folders

F.76A Abstracts and photocopied manuscript notes and slides of Curzon's presentation that related to McIlwain's work (papers received from Professor Curzon, March 1997).

F.77- F.79 Miscellaneous shorter correspondence and papers *re* visits and conferences, 1946-1992.

3 folders.

G.1-G.44

GENERAL SCIENTIFIC CORRESPONDENCE

Correspondence with individuals. In alphabetical order with an indication of information of particular biographical, historical or scientific interest.

G.45-G.73

SHORTER SCIENTIFIC CORRESPONDENCE
In chronological order.

REFERENCES

G.74-G.81

### Correspondence

#### GENERAL SCIENTIFIC CORRESPONDENCE

1952-1956 G.1 Abood, L.G. 1959-1964 G.2 Ansell, G.B. Ansell was based in the Department of Experimental Psychiatry (later Neuropharmacology), University of Birmingham Medical School. Correspondence 1959 relates to the possibility of forming a 'Neurochemical Club'. G.3, G.4 Bachelard, H.S. 1972-1974, 1979 Bachelard was a colleague of McIlwain's at the Institute of Psychiatry, University of London. Grant application for work in the area of neurochemical and behavioural aspects of drug dependence. 2 folders. G.5 Bielschowsky, F. 1948-1955 Bielschowsky was based at the Medical School, Dunedin, New Zealand. McIlwain visited New Zealand in 1954. G.6 Clemo, G.R. various dates 1936-1957 Clemo was Professor of Chemistry at King's College University of Durham. Research. various dates 1963-1985 **G.7** Cohen, M.M. Cohen was based at the University of Illinois College of Medicine, Chicago

(1963) and the Rush-Presbyterian-St. Lukes Medical Center, Chicago.

of NMR studies by Cohen and T. Glonek.

In 1981 McIlwain was invited to serve as biochemical consultant in respect

### Correspondence

G.8 Dickens, F.

various dates 1936-1968

Dickens was Research Director of the North of England Council of British Empire Cancer Campaign, 1933-1946 and Professor of Experimental Biochemistry, Middlesex Hospital Medical School, 1946-1967.

Research.

G.9 Edson, N.L.

1953-1958, 1961,1963

Edson was Professor of Biochemistry, University of Otago Medical School, Dunedin,

McIlwain visited New Zealand in 1954 and Edson visited the UK in 1956.

G.10 Elliott, K.A.C.

1952-1967, 1983, 1988, 1990

Elliott was based at the Montreal Neurological Institute, McGill University.

Research, visit to London (1963), 80th birthday celebration (1983).

G.11-G.14 Fildes, P.G.

1940-1948, 1957, nd.

In 1934 Fildes established the Medical Research Council Bacterial Chemistry Unit at the Middlesex Hospital Medical School, London. During the Second World War he was seconded to the Chemical Warfare Experimental Station at Porton Down.

Wartime research; McIlwain's postwar career plans, Royal Society discussion meeting, etc.

G.11 1940-1941.

G.12 1942.

G.13 1943-1948, 1957.

G.14 Nd.

### Correspondence

G.15 Gaddum, J.H.

1957,1962

Gaddum was Director of the Agricultural Research Council Institute of Animal Physiology, Babraham, 1958-1965.

1957 correspondence relates to the use of the term 'chemotherapy'. See also D.17.

1962 correspondence relates to visit by McIlwain to Babraham and research there

G.16

Gale, E.F.

1946-1947

Gale was based at the School of Biochemistry, Cambridge.

Research.

G.17

Gerard, R.W.

1952-1953, 1957-1958

Gerard moved from the Illinois Neuropsychiatric Institute, Chicago to the University of Michigan, Ann Arbor during the period covered by the correspondence.

Research including Gerard's survey on tests for schizophrenia.

G.18

### Glaxo Laboratories Ltd

1941-1943, 1945

McIlwain's correspondents at Glaxo were J. W. Barnett and F.A. Robinson.

Wartime research.

G.19

## Goldberg, L.

various dates 1938-1965

Goldberg was at Exeter College, Oxford in 1938 and spent periods in South Africa and at Manchester University before moving to Benger Laboratories Limited in the 1950s.

G.20

Greville, G.D.

1947-1950, 1959-1960

Greville was based at the Department of Biochemistry, Cambridge and (1960) the ARC Institute of Animal Physiology, Babraham.

G.21 Hawking, F.

1942-1943, 1963

Hawking was based at the National Institute for Medical Research, London.

Research.

G.22 Himwich, H. E. 1952-1953, 1964-1965

Himwich was Director of Research, Galesburg State Research Hospital, Galesburg, Illinois.

Visits.

G.23 Hughes, D. E.

1949-1950, 1953

Hughes was a member of the MRC Unit for Research in Cell Metabolism, Department of Biochemistry, Sheffield University.

Research.

G.24 Imperial Chemical Industries Limited (ICI) various dates 1949-1971

McIlwain was an ICI Consultant.

Research, visits.

G.25 Kety, S. S. 1952-1965

Kety was Associate Director of Research, National Institute of Mental and Neurological Diseases and Blindness, Bethesda, Maryland.

Visits, research, international neurochemical symposium.

G.26 Knight, B. C. J. G.

1943,1946, 1947,1963, 1982

In 1937 Knight joined the MRC Bacterial Chemistry Unit, Middlesex Mospital Medical School at the invitation of P.G. Fildes. He was later Professor of Microbiology at Reading University

1963 correspondence re Clostridium welchii toxin.

1982 correspondence includes McIlwain's recollections of Knight written to assist obituarist of Knight, L.J. Zatman.

G.27

Krebs, H.A.

various dates 1948-1968, 1979, nd

Krebs was Professor of Biochemistry at Sheffield University, 1945-1954, and at Oxford University, 1954-1967.

Publications, examining, meeting, recommendation etc.

Folder also includes duplicated copy of application by Krebs for the University Chair of Biochemistry tenable at St Thomas's Hospital Medical School, London, nd ca 1942.

G.28

Lajtha, A.

1966-1968, 1989

Lajtha was Director of the New York State Research Institute for Neurochemistry and Drug Addiction, and Editor of Handbook of Neurochemistry.

Visits, contribution by McIlwain to *Handbook of Neurochemistry*, symposium in Lajtha's honour,

G.29

Liébecq, C.

1955,1958-1960

Liébecq was Professor of Biochemistry at the University of Liège.

3rd International Congress of Biochemistry (1955), visit by Liébecq to London.

G.30

Mann, T.R.R.

1958

Mann was based at the ARC Unit of Reproductive Physiology, Molteno Institute, Cambridge.

Research.

G.31

Newman, M.E.

1981-1985, 1991

Newman researched with McIlwain in the Biochemistry Department, Institute of Psychiatry, London 1975-1979. During the period covered by the correspondence he was based at the Hebrew University of Jerusalem and the Jerusalem Mental Health Centre, Ezrath Nashim Hospital, Jerusalem.

Visit, research, publication, recommendations.

G.32 Pontecorvo, G.

1947, nd.

Pontecorvo was based at the Department of Genetics, University of Glasgow.

Research.

G.33 Rall, T.W.

1965-1969

Rall was based at the Department of Biochemistry, School of Medicine, Western Reserve University, Cleveland, Ohio.

Research, publication.

G.34 Richter, D.

various dates 1949-1965

Richter was based at the Neuropsychiatric Research Centre (later MRC Neuropsychiatric Research Unit), at Whitchurch Hospital, Cardiff and MRC Laboratories, Carshalton.

Visits, meetings and symposia.

G.35 Rodnight, R.

various dates 1957-1990, nd

Rodnight was a colleague of McIlwain's at the Institute of Psychiatry, London.

Includes letters from Rodnight during visits to Denmark (1963), USA (1964-1965) and Brazil (1992).

G.36 Rose, F.L.

1944-1949, 1957-1963

Rose was a research chemist with the Pharmaceuticals Division of Imperial Chemicals Industries (ICI) Limited.

Research.

G.37 Rossiter, R.J.

1953,1956, 1964

Rossiter was Professor and Head of the Biochemistry Department, Faculty of Medicine, University of Western Ontario, London, Ontario.

Visits.

G.38 Schmitt, F.O.

1960-1965, 1978, 1980

Schmitt was at the Neurosciences Research Program, Massachusetts Institute of Technology, Cambridge, Massachusetts.

Visits, research.

G.39 Shaw, F.H.

1955-1956, 1961,1966

Shaw was Professor of Pharmacology, University of Melbourne.

Research, visits.

G.40 Slater, E.C.

various dates 1949-1963

Slater was a Research Fellow at the Molteno Institute, Cambridge, 1946-1955 and Professor of Physiological Chemistry, University of Amsterdam, 1955-1985.

Research, visit.

G.40A Steinberg, H.

1979

Steinberg was Professor of Psychopharmacology at University College London.

G.41 Stephenson, M.

1942, nd

Stephenson was Reader in Chemical Microbiology, Cambridge University.

Research.

G.42 Stern, J.

1948-1953, 1956

Stern was based at the New York University College of Medicine and (1956) the Western Reserve University, Cleveland, Ohio.

Research, meetings, personal news.

G.43 Tower, D.B.

1957-1960, 1983,1988, 1989

Tower was Chief, Clinical Neurological Laboratory, National Institute of Neurological Diseases and Blindness, Bethesda, Maryland.

Research, history of science.

G.44 Woods, D.D.

1947,1948, 1955, nd

Woods moved to the Department of Biochemistry, Oxford University in

Research.

#### SHORTER SCIENTIFIC CORRESPONDENCE

| G.45 | 1938-1939. |  |  |
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1976, 1978, 1979.

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G.75

G.76

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G.77 1962 (Fleming Memorial Fund), 1964, 1965

G.78 1974, 1976.

G.79 1981-1985.

#### **Higher degrees**

G.80 1948, 1966

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G.81 1959, 1969, 1973, 1977, 1986, 1992.

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