Chapter 5

The Group Structure of the Society

5.1 Introduction

In 1964 the Officers of the Society received a proposal which was to have a greater effect on the future development of the Society than probably any other proposal apart from that to buy the *Biochemical Journal* from Benjamin Moore in 1912. The 1964 proposal was from Dr (now Professor) H. Gutfreund, who requested the establishment of a Molecular Enzymology Group as a "section" of the Society and the provision of £100 [£650] p.a. to run it. As can be imagined, the Committee treated the proposal with as much respect and distrust as if it had been a time bomb. The main worry, which in the circumstances was real enough, was that if the principle were adopted it would splinter the Society irrevocably and that the Society itself would disappear. A second worry, strongly held by some members, was that the "cosy" view of the Society as a Club in which all members knew one another and were

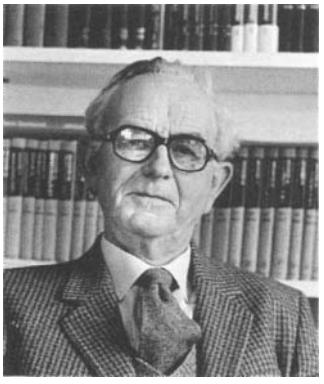

Fig. 5.1. Professor R. R. Porter, C.H., F.R.S. Nobel Laureate. Chairman of the Society Committee, 1977–1980. Honorary Member, 1985.

interested in and could understand each other's work would vanish; at best the result would be an impersonal central administration dealing with isolated groups, rather in the way the MCC runs County Cricket.

To deal with the second point first, however much one sympathized with the protagonists who formulated it, this attitude was entirely unrealistic in the face of the enormous expansion of Biochemistry which was already in full flow in the 1960s and has continued unabated ever since. A central administration has indeed developed which, as we shall see later, deals most effectively with Groups. It is by no means impersonal, it is always making new proposals and exhorting members to suggest new initiatives. If the truth be told it is the Membership which has become impersonal. They take part avidly in the various scientific activities provided but do not take much interest in the running of the Society. At the ballot for Committee Members in 1985 the maximum number of votes cast was 440; the membership numbers about 6500. Furthermore, at the A.G.M. in Oxford in 1985, although there were some 800 biochemists attending the Meeting, only about 50 (probably all over 45 years old) attended the A.G.M., even though one of the most distinguished of contemporary biochemists, the late Professor R. R. Porter, Nobel Laureate (Fig. 5.1), was being elected an Honorary Member of the Society in his home University. Perhaps we should take heart that in the same year 46 members attended the A.G.M. of the Royal Society of Chemistry, a much larger Society than ours. Maybe this lack of interest in "running the Show" is a characteristic of all Societies which provide a satisfactory service.

We can now see that the Group structure was the salvation of the Society; it makes for flexibility of approach to new developments and allows the Society to maintain a major presence in most of these. By far the most frequent comment received by the author from members was in praise of the Group System. Professor Helen Porter (Chairman, 1965–1967, Fig. 3.9) wrote: "the most important thing during my time on the Committee and as Chairman was the introduction of specialist groups about which I held the firm view that if the 'free for all' at every meeting was retained separate and independent groups would arise to meet the needs of the rapidly expanding subject, whereas it was in the interests of all that they should be under a B.S. umbrella ... As I see it, any real contribution to events at the time I made was to fight for separate groups". As a Committee colleague of Professor Porter at that time the author followed with approbation her doughty defence of the Group System against the arguments of some of the Committee "backwoodsmen". Other comments include: "The establishment and development of the Groups System, within the Biochemical Society, did much to keep it together. Those who arranged funds for Groups and who

served in Group Committees deserve our warm thanks" (J. K. Grant, Symposium Organizer, 1958–1963). "I personally feel that it was the institution in the 1960s of specialist Groups within the Society that can be considered as one of the most successful adaptations to the vast changes that have occurred in the last generation. These have filled a much felt need which would otherwise, I am sure, have been satisfied with the formation of a plethora of smaller societies" (J. Goddard, Secretary of the Nucleotide and Nucleic Acid Group, 1978–1981). "I have always been an admirer of the Society's Group structure ... during my time with the IUB I have constantly worked to initiate the concept on the international scene" (W. J. Whelan, Honorary Secretary, sometime General Secretary IUB; Fig. 3.10).

5.2 Early Developments

After very thorough, not to say heated, discussions of the Gutfreund proposal, the Committee agreed that a recommendation to form an Enzymology Group be submitted to a General Meeting on 11 December 1964. It is interesting that the adjective 'molecular' was omitted — at the time this was to many members an unacceptable vogue word! The General Meeting, however, approved the formation of a Molecular Enzymology Group; the allegedly perjorative adjective had been restored without anyone apparently noticing it. The rules of the Group were drawn up, approved by the Committee and the first official meeting was held at UCL on 30 April 1965, the subject being a discussion on "The Interaction of Myosin with Adenosine Triphosphate and Actin".

The next proposal to reach the Committee was early in 1966 when they were asked to consider the initiation of a "Pharmacology and Toxicology Group". This was accepted with some apprehension, both financial and scientific, and only with the name of the Group changed to "Pharmacological Biochemistry". The Committee were now clearly soon to be faced with further proposals and needed to formulate a detailed policy for the future. This job was assigned to a subcommittee, which reported strongly in favour of the formation of Subject Groups and suggested guide lines for the formation of Groups and for their financing and administration. These guide lines, which recommended a relaxed but firm central control with a great deal of Group autonomy, were an excellent basis on which to build a successful Group system. As the years have gone by further consideration by a subcommittee (1968) and by Working Parties (1972, 1976) have built on the original guide lines, altering them only to incorporate recommendations for the broadening of the general activities of the Groups. There are currently 16 guide lines, which are worth quoting in full:

1. The total number of Groups supported by the Society will be limited to 15, excluding the Irish Area Section, which represents geographical rather than subject interests.
2. All Groups must have an adequate field of interest and activity. So far as possible the titles of Groups shall be broad enough to allow accommodation of likely growth points in Biochemistry.
3. A signed proposal, from at least 30 people, proposing an organizing committee and defining the field of operation, must be submitted to the Biochemical Society for consideration before the formation of the Group.
4. The proposal must include a draft constitution and a draft programme and budget for the first 12 months of the Group's existence, and must in the first instance be referred to a meeting of the Group Secretaries. Proposals which are endorsed by the latter will be submitted to the Committee of the Society for consideration. The Committee has power to authorize the constitution of Groups, to effect modifications, to refuse the establishment of Groups and to dissolve Groups.
5. Groups may be invited to amalgamate when such a course appears desirable.
6. The need for the continued existence of each Group must be reviewed by the Committee of the Society at least every three years. This is done by consideration of each Group's annual report.
7. The meetings of the Groups will be controlled by their respective organizing committees.
8. Every Group Committee must comprise a Secretary/Treasurer and not more than nine members, with at least one member of the Committee of the Society amongst them, the latter being nominated by the Committee of the Society.
9. Elections to Group Committees will be by postal ballot of Members.
10. Block finance for the Group movement as a whole will be decided by the Committee of the Society, or the Finance Board if delegated with necessary powers.
11. Groups may make small charges to meet the incidental costs of meetings. On occasions of joint meetings arranged with other societies or groups thereof where such other societies have an established practice of levying charges, the Groups concerned may follow the practice of the co-organizers and make similar meetings charges.
12. Groups are expected to give a reasonable account in their annual report of attendance at meetings and, in return for financial support, to submit their accounts.

13. The Society encourages Groups to meet in conjunction with Main Meetings. A grant of £2500 per annum is made to defray the cost of speakers' expenses at such Group Colloquia.
14. Groups will be encouraged to engender interdisciplinary activity and also to initiate proposals for joint Society meetings.
15. The Honorary Meetings Secretary is responsible for the co-ordination of Group activity.
16. The Society expects that Groups will publish the proceedings of at least one Colloquium each year in the *Biochemical Society Transactions*, in extended form of up to 2000 words per paper, and to this end, will pay the publication costs of one Colloquium. Additional Colloquia may be published at the Group's expense. Groups wishing to publish proceedings must give the Society first refusal; an appropriate clause may be found in each Group constitution.

The generous financial support (item 13) is a clear inducement to organize international colloquia and is particularly noteworthy.

In addition there is a general annual subvention of £1500, as well as Committee and Secretarial expenses of £300 and £96, respectively, and an allowance of £200 for entertaining overseas speakers [1986 figures].

The next two Groups to be founded were the Neurochemical Group and the Irish Area Section, which were constituted on 20 September 1967 after being approved at the A.G.M. the previous July in Oxford. Eyebrows were slightly raised at the time at the idea that the Irish Area Section constituted a subject Group, but if it were necessary to have an exception to the rules then no better example could have been found. It represented a most sensible compromise which amicably solved what might have been a difficult situation. This is further discussed under "Irish Area Section" below. Since then there has been a steady stream of new Groups, the last being the Education Group, again not strictly a subject Group. The formation of this Group brought the total up to the maximum currently permitted by the Committee, following the recommendation of the 1976 Working Party (for this purpose the Irish Area Section is not considered a Group). Some hard decisions will have to be made in the future when new proposals come forward, which, if implemented, could result in this number being exceeded. In some cases amalgamation with existing Groups may be possible rather than the drastic step of complete removal of Groups considered "old hat" to make way for newer Groups. However, the pressure for an increase in the number of Groups may become irresistible. A recent sensible extension of a Group's activity was implied

by the change of name in 1982 of the Industrial Biochemistry Group to the "Industrial Biochemistry and Biotechnology Group".

A complete list of the present Groups is recorded in Table 5.1, together with the names of the founding Secretaries and Chairmen, whose enthusiasm probably were responsible for bringing the Groups into being. A full up-to-date list of Group Committee members is recorded annually in the Society's Annual Reports.

5.3 Individual Groups

5.3.1 Molecular Enzymology Group

This Group, having been first in the field, came of age in 1985, and like all good offspring, has matured most responsibly and effectively and is now a pillar of the Society. One cannot even detect any adolescent hiccoughs in its steady development.

5.3.2 Pharmacological Biochemistry Group

In the decade between 1940 and 1950 a small group of specialist biochemists were concerning themselves with the metabolism of drugs, pesticides, herbicides and similar foreign compounds. British workers were well to the fore in this development, none more so than R. T. Williams, Professor of

Table 5.1. The Society's Groups with their first Secretaries and Chairmen

Group	Date of Founding	First Secretary	First Chairman
Molecular Enzymology	11 December 1964	A. P. Mathias	B. R. Rabin
Pharmacological Biochemistry	6 July 1966	D. V. Parke	T. J. Franklin
Neurochemical	20 September 1967	H. S. Bachelard	G. B. Ansell
Irish Area Section	20 September 1967	W. K. Downey	D. T. Elmore
Lipid	14 February 1968	C. H. S. Hitchcock	T. W. Goodwin
Biochemical Immunology[1]	18 April 1968	D. R. Stanworth	R. R. Porter
Hormone[2]	19 February 1969	V. H. T. James	G. A. D. Haslewood
Techniques[3]	16 April 1969	G. N. Graham	J. H. Ottaway
Nucleotide & Nucleic Acid[4]	8 April 1970	D. W. Hutchinson	A. S. Jones
Carbohydrate	15 October 1970	A. R. Archibald	J. Baddiley
Industrial Biochemistry and Biotechnology	17 December 1970	E. F. Annison	P. J. Heald
Peptide & Protein[4]	18 February 1972	R. C. Sheppard	H. N. Rydon
Bioenergetics	4 July 1972	D. E. Griffiths	F. R. Whatley
Membrane	13 April 1973	A. H. Maddy	J. A. Lucy
Regulation in Metabolism	7 July 1977	J. Mowbray	D. A. Hems
Education	20 July 1984	T. G. Vickers	E. J. Wood

[1] Jointly with the British Society of Immunology.
[2] Jointly with the Society of Endocrinology.
[3] Jointly with the British Biophysical Society.
[4] Jointly with the Chemical Society (Royal Society of Chemistry). Recently renamed Nucleic Acid and Molecular Biology Group.

Biochemistry at St Mary's (Fig. 3.16), and it was fitting that one of his group, Dr D. V. Parke (now Professor at the University of Surrey), should propose in February 1966 the founding of a "Biochemical and Pharmacology and Toxicology Group". The first reaction of the Committee was equivocal; the possible financial commitment worried some members. However, in May 1966 the proposal was accepted but as stated earlier in this chapter the Committee insisted on a change of title to that which still holds today. As indicated in the comments of Dr P. T. Nowell (Secretary of the Group) below, some of the steam had gone out of the Group by the mid-1970s and the 1976 Working Party recommended that the Group be merged with the Industrial Biochemistry Group. Eventually this suggestion was not implemented and the Group still survives and continues to make important contributions. Dr Nowell assesses its impact over the years:

"The formation of the Pharmacological Biochemistry group was a progressive and enlightened move which had far-reaching repercussions. Although its original proponents were biochemists, it brought together a wide variety of scientists concerned with pharmacology and toxicology, including clinicians, pharmaceutical chemists, histopathologists and immunologists from both academic and industrial establishments on an informal basis. At the time, there was virtually no other forum in the U.K. where this could occur, since the other main societies involved with pharmacology, notably the British Pharmacological Society and the Physiological Society, tended to be more restrictive in their activities with emphasis being concentrated primarily on pharmacodynamics and the electrophysiological aspects of pharmacology.

"For approximately 10 years from 1966 to 1975, the Pharmacological Biochemistry group occupied a key position in bringing biochemistry, pharmacology and toxicology into close proximity with each other by giving close attention to molecular mechanisms and their wider implications. Following its success, other multidisciplinary groups emerged under different auspices, with usually more expanded or specialized functions. The most notable of these developments were the formation of the clinical pharmacology section of the British Pharmacological Society and the independent drug metabolism group, together with the toxicology club and the drug metabolism group; the impetus [for the formation of these groups] was from biochemists who saw the requirements for these in the light of international events. They were quickly joined by other scientists, particularly from the growing band of those working in these areas in industry.

"Despite all the above happening, the Pharmacological Biochemistry group continued to function, although perhaps not with quite such a wide range of activities as previously. In addition, other Society groups such as the industrial biochemistry group and the neurochemical group frequently became involved with pharmacological and toxicological topics. The Society in fostering these activities has been a major influence in contributing to

knowledge about the actions of drugs and toxic agents. Although this type of work can often become very specialized because of the type of procedures used, it must of necessity proceed on a broad front along multidisciplinary lines in order to give a meaningful overall picture".

5.3.3 The Irish Area Section

In 1964 E. R. Tully and L. Downey organized a Christmas reunion of graduates of the Biochemistry Department of University College Cork at which papers were read by a number of returning alumni. At that meeting an informal Working Party was set up to consider the desirability of establishing an Irish Biochemical Society. This was at the time when the Society was beginning to develop its Group structure and, with positive support from the Society's Officers and Chairman, the concept of an Irish Area Section within the parent Society emerged. In 1966 a meeting of more than 200 Irish biochemists decided not to form a separate Society but agreed to ask the Society to authorize the formation of an Irish Section with which was coupled the request to hold one Society meeting in Ireland per year. At that time an official meeting in Ireland was held only every sixth year. On 13 July 1967 the General Meeting of the Society accepted both proposals and the Section was formally inaugurated on 20 September 1967 with L. Downey, a protagonist in the early negotiations, as its first Honorary Secretary. The Society's meetings are now held in rotation at the three constituent colleges of the National University of Ireland, at Trinity College Dublin and at Queens University, Belfast.

The successful conception and parturition of the Section were due not only to the enthusiasm of the local activists but also to the far-sightedness of the Society's Officers at that time in appreciating and encouraging the natural aspirations of Irish biochemists to have their own formal organization.

The Section has maintained the liveliness of its early years and has made many innovations, in particular "The Irish Lecture Tour". Annually a distinguished biochemist is invited to lecture at the four major University centres during a four-day whistle-stop tour. The Section's Annual Special Meeting for predoctoral students has also been a very successful development.

The continuing success of the Section reflects the hard work of the local Officers and Committee over the years. Professor M. G. Harrington (U.C. Dublin), who has provided much information about the Section, claims that the success has much to do with the 'simple organization' of the Section Committee. In the early days "the Section Committee was set up annually by a gentleman's agreement. Part of the unwritten agreement was the exclusion therefrom of those over 35. The

elder statesman element was provided by the nominated representatives of the Society Committee". This relaxed approach was encouraged by a "Guinness Lunch", which was kindly provided at one of the three annual Committee meetings. Apparently, occasional well-meaning attempts to improve the efficiency of one in three Committee meetings by eliminating the "Guinness Lunch" "have been singularly unsuccessful". Apart from the provision of these legendary lunches the Guinness Research Laboratories, through the good offices of Dr A. K. Mills, the Research Director at that time, helped in many other ways. Dr Mills arranged facilities for Committee meetings, provided financial support and actively encouraged his younger colleagues to take a positive part in the business of the Section; Dr R. Letters, for example, was Secretary for some years.

5.3.4 Neurochemical Group

This was the third Group to be established, coming into formal existence on 20 September 1967, and it has had a distinguished history. Professor H. Bachelard (St Thomas's Hospital Medical School) has kindly provided a detailed history of the Group in its relation to the development of the International Society for Neurochemistry and a European Society of Neurochemistry (ESN). It is reproduced here with only minor amendments and omissions:

> "Neurochemistry has formed an integral part of the interest of chemists and biochemists since the time biochemistry was first recognised as a distinct scientific discipline, so any appraisal of the development of neurochemistry in the U.K. should include an acknowledgement of the early contributions of some of our eminent biochemists. In addition to the pioneering chemical analyses of the brain, performed by Thudichum over a century ago (below), many biochemists found in the brain their major research interest.
>
> "One of the first specifically biochemical posts in the U.K. was that of Sydney A. Mann, appointed in 1901 to the Central Pathological Laboratories of the London County Council's Mental Health Services. Mann was a founder member of the Biochemical Society, and many of his publications reflected his interests in cerebral and endocrinological themes. He was prominent among those who contributed to the development of neurochemistry as a distinct speciality within mainstream biochemistry and cognate to the neurosciences as well as to psychiatry.
>
> "Notable amongst these pioneers in the years between the two World Wars was Sir Rudolph Peters (Fig. 3.11) who used cerebral preparations in his classical work on vitamins at Cambridge. Also at Cambridge, and subsequently in Cardiff, Judah Quastel (Fig. 5.2) was performing his innovative work on the metabolism of acetylcholine and the monoamines, and also on barbiturates and

Fig. 5.2. Professor J. H. Quastel, C.H., F.R.S. Honorary Member, 1973.

anaesthetics. Derek Richter in the late 1930s with Hermann Blaschko in Cambridge, did much towards characterizing the monoamine oxidases; Richter was subsequently at Mann's L.C.C. laboratories and then in Cardiff, from where many papers on amphetamines and catecholamines emerged. A major proportion of the scientific announcements of the work of all these scientists appeared in the *Biochemical Journal.*

"In the late 1940s and early 1950s, neurochemical themes became prominent as parts of organized meetings of the Biochemical Society, as reflected in the Society's Symposium on "Metabolism and Function of the Nervous System" in 1952. This was organized by Henry McIlwain, another of the major contributors to the early development of the subject. He was at that time at the Institute of Psychiatry in London — an institution which is, interestingly, a linear descendant of the Central Pathological Laboratories of the L.C.C. attached to the Maudsley Hospital. Neurochemistry has frequently formed a vital part of subsequent meetings of the Biochemical Society in many parts of the country.

"Concurrently with these developments, neurochemistry was becoming recognized and organized at international level. Many members of the Biochemical Society contributed to International Neurochemical Symposia (the fore-runners of the International Society for Neurochemistry) between 1955 and 1965; among them, Hermann Blaschko, Henry McIlwain (who has recently written on the early days of the ESN) and Derek Richter were on the organizing committees. These Symposia, like the meetings of the International Society which succeeded them, were held only every two years — occasions were therefore sought for smaller and more frequent meetings in Britain. As a result of correspondence between Brian Ansell and Henry McIlwain around 1960, the idea of a national neurochemical group or club began to be formulated. With the announcement of the first proposed group within the Biochemical Society (the Molecular Enzymology Group) this structure was seen as a welcome framework for neurochemists. Henry McIlwain and Herman Bachelard then contacted interested biochemists early in 1967, who met informally in May 1967. It was agreed that the Biochemical Society be asked to approve the formation of this Group, and that Herman Bachelard would attend to the details as provisional Secretary. Official approval was granted during the Oxford meeting in July 1967 and the first scientific meeting of the group took place at the Institute of Neurology, London, in November 1967. Over the first three full years of operation, four meetings were held each year with average attendances of *c.* 100. During this period a policy was designed to render the A.G.M. attractive — by offering refreshments and having an historical talk; speakers included J. N. Cumings. D. Richter, Dr R. Peters and H. McIlwain. Since then this momentum has been maintained.

"In 1969 and again in 1970, the possibility of a European Society for Neurochemistry (ESN) was mooted but not formally initiated. Finally, largely as a result of initiatives from the Neurochemical Group through Alan Davison, the ESN was established in 1976. The first ESN Executive Committee to be elected, 1976, included four members of the Group Committee and the first

formal meeting of the Society was held in Bath in 1976. The organizing committee were all members of the Biochemical Society.

"Special Workshops (roughly biennial) were initiated in 1972 (to get clinicians and scientists together on specified topics). These have all been published as having emanated from the Neurochemical Group.

"Thudichum Medal Lectures were inaugurated in 1974, to honour eminent scientists who had made outstanding contributions to neurochemistry and related subjects. Although Thudichum (Fig. 5.3) was an undoubted pioneer of brain chemistry a century ago, his contribution to the overall academic development of the subject has been controversial [1], so there was some doubt expressed about the wisdom of striking a Medal in his honour. Nevertheless the majority view prevailed and the attractive Medals were struck in hall-marked sterling silver in a batch of 11 (to save money!) (Fig. 5.4). The dies (the most expensive items) are stored in the Biochemical Society safe for future use. (The cost of preparing and striking the Medal came from Group funds.) The lectures have become very happy occasions; recipients of the Medal so far have been: H. Blaschko (1974), H. McIlwain (1975), M. Vogt (1976), H. Kosterlitz (1980), V. P. Whittaker (1983). (Four of the five lectures have been published in *Transactions*.)"

Fig. 5.3. Professor J. L. W. Thudichum (1829–1901).

5.3.5 The Lipid Group

A meeting of 53 members interested in lipids was arranged at the Unilever Research Laboratory, Colworth House in June 1967; four papers were read and a temporary Committee was set up to put forward plans to the Society for the formation of a Lipid Group. These were accepted and the Group came into being on 14 February 1968. Dr A. T. James of Unilever provided considerable support in these early stages and has continued to help over the years.

5.3.6 Biochemical Immunology Group

This began as the Immunoglobulin Discussion Group thanks to the persistence of Dr D. R. Stanworth, who eventually became its first secretary, and the encouragement of the Society, whose sub-committee on Groups (1966) had suggested immunology as an area for development. In spite of lukewarm support in the early stages from two eminent biochemical immunologists (one with sublime lack of logic, whilst apologizing for the delay in answering Stanworth's letter because he had been in the U.S., felt that the formation of a Group might entail "a considerable amount of travelling"), a draft constitution and proposals for Committee membership were accepted by the Society on 18 April 1968. The first formal scientific meeting was held at the Institute of Child Health on Friday, 7 June 1968 with the late Professor R. R.

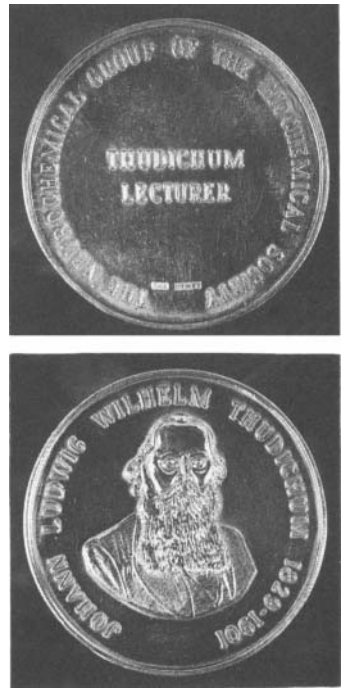

Fig. 5.4. The Thudichum Medal.

Porter (Fig. 5.1) in the Chair. The British Society for Immunology helped financially in the first year with a contribution of £15 [£90], which was offered without obligation as a token of their interest. Eventually, on the recommendation of the 1976 Working Party, the Discussion Group evolved into the Biochemical Immunology Group sponsored jointly by the Biochemical Society and the British Society for Immunology. The new name adequately mirrored the decision to widen the subject coverage from immunoglobulins to all biochemical aspects of immunology.

5.3.7 Hormone Group

This Group, which started life early in 1969 as the Steroid Biochemistry Group, was transformed into the Hormone Group on the recommendation of the 1976 Working Party, which also recommended that it should become a joint Group sponsored by the Biochemical Society and the Society for Endocrinology. This change also took place.

5.3.8 Techniques Group

The precursor of the present Group, a joint Group of the Society and the British Biophysical Society, was the Computer and Instrumentation Group formally constituted in April 1969 after a preliminary meeting in 1968. It was therefore the first joint Group approved by the Society. The 1976 Working Party's recommendations that it should continue as a jointly sponsored Group with the Biophysical Society and that it be renamed the Techniques Group were implemented in 1978.

5.3.9 The Nucleotide and Nucleic Acid Group

The origin of this Group differs from that of other Groups, except the Protein Group (q.v.), in that the initiative was taken by the Chemical Society (now the Royal Society of Chemistry), which formed a Nucleotide Group to "encourage the discussion of the chemistry including the biological chemistry of nucleotides, nucleosides and nucleic acids". The first meeting of the Group was held in Birmingham on 9 January 1968. However, it soon became clear to Dr R. T. Walker (Birmingham), the driving force in the formation of the C.S. Group, and to Professor G. R. Barker (Manchester, currently Honorary Archivist, Plate 2C) that pressure was arising within the biochemical community for the formation of a similar Group. Together they eventually persuaded the two societies to found the Joint Nucleotide Group in 1970, and thus the nonsense of the existence of two competing Groups was avoided. It is fair to say that the enthusiastic support given by the Biochemical Society has allowed the Group to blossom,

whereas the R.S.C., according to one member, barely tolerated the Group because it was a possible threat to the chemical establishment. Be that true or not the financial contribution of the Society to the Group is considerably greater than that of the R.S.C. Following the Working Party recommendation in 1976, it was renamed the Nucleotide and Nucleic Acid Group after some heart-searching from the Group Committee.

It is appropriate here to consider the suggestion made by the Working Party and approved by the Society Committee that as Biochemical Genetics and Protein Biosynthesis were under-represented in the Group structure an application to form a Group in this important growth area would be welcomed. This was promptly taken up by Professor P. N. Campbell (Plate 1B), who suggested a Group on "Gene Expression and Protein Synthesis". The Joint Nucleotide and Nucleic Acid Group Committee reacted unfavourably to this idea, claiming that their programmes covered this subject and an inevitable and unacceptable overlap would occur and that according to a letter from Professor G. R. Barker, the then Chairman, to Professor Campbell, "there is much flexibility in the present Group, whatever the name may be, and that there is no problem in providing for the needs you mention through better communication between the Group Secretary and his customers"; and there the matter rested. There is no doubt that the case made by Professor Barker at that time was correct but such is the appeal and magnetism of fashionable words that many observers of the Society's activities feel that Molecular Biology is not effectively catered for. For example, Professor W. J. Whelan commented in a letter (now in the Society's Archives) to the author, which is generally appreciative of the Group System: "If I look at the Biochemical Society's Groups, it is to see that genetics and developmental biology are conspicuous by their absence. I do believe that it is up to any organized group of biochemists to welcome and encourage the growth of exposition, discussion, debate and publication on these new areas within the Society structure itself. The kind of new Groups to which I refer might well be organized in conjunction with other societies, as is the case for five of the Society's Groups".

In what appears to be a reasonable compromise in the face of mounting pressure the Committee recently accepted the recommendation that the Group be renamed the "Nucleic Acid and Molecular Biology Group". This has now (1987) been officially approved by the Committee of Group Secretaries.

5.3.10 Carbohydrate Group

This Group came into being on 15 October 1970 after groundwork by Professor Walter Morgan (Plate 4A) and

Professor (later Sir James) Baddiley, the latter being the first Chairman.

5.3.11 Industrial Biochemistry and Biotechnology Group

The Industrial Biochemistry Group, formed on 17 December 1970, fared rather less well than other Groups and only just survived the hatchet when the 1976 Working Party discussed its future and recommended a merger with the Pharmacological Biochemistry Group. However, it did survive and in 1982, because of the rapid advances in genetic engineering which have such significant industrial possibilities, it was renamed the Industrial Biochemistry and Biotechnology Group. Its meetings have "a strong professional emphasis as well as the usual academic content".

There are two organizations, supported by the Society, which impinge on the activities of the Industrial Biochemistry and Biotechnology Group. The British Co-ordinating Committee for Biotechnology (BCCB) was formed by a group of interested parties, including the Biochemical Society, meeting at the Society of Chemical Industry: its first objective was to organize the second Congress of Biotechnology in Eastbourne in April 1981. Its long term aims are, in summary (i) to provide a forum for British Societies to exchange views and decide on concerted action; (ii) to advance the science and technology of Biotechnology; (iii) to assist members in co-ordinating meetings; (iv) to provide a focal point of references with Government Departments and other similar organizations and (v) to co-ordinate and safeguard British interests within the European Federation of Biotechnology (EFB).

EFB was established in September 1978 during a Biotechnological Congress at Interlaken in which the Biochemical Society was one of 35 European Scientific Societies taking part. The objective of the Federation, which is a voluntary and non-profit-making organization, is to advance Biotechnology as an interdisciplinary field of research and to further the application of such advances to manufacturers' processes. Up to the present its main activity in moving towards these goals has been to establish working parties to survey and report on certain areas of Biotechnology. Reports of such working parties are routed to the Society via the BCCB (the agreed procedure between EFB and BCCB) and thus to the Industrial Biochemistry and Biotechnology Group.

The Society nominates appropriate representatives to the General Assembly of EFB and pays their expenses. BCCB makes recommendations to the Society for nominations to working parties and other activities of EFB; these the Society can either accept or reject as it chooses.

Good exploratory work is being achieved by EFB and BCCB but some improvements in liaison with the Society will occur when a few administrative rough edges are filed smooth.

5.3.12 Peptide and Protein Group

The formation of a Protein Group was approved by the Council of the Chemical Society on 3 April 1968, but the close links with Biochemistry were soon apparent. By 1970, informal discussions were proceeding with the Biochemical Society about the possibility of the setting up of a joint Group and these were formalized on 22 October 1971 by a letter from Dr R. C. Sheppard to the Executive Secretary:

> "I write on behalf of the Chemical Society Protein Group. For some time past the Committee have been considering the desirability of a formal association with the Biochemical Society, and I now write to suggest that the Group becomes a joint Group of the two Societies.
>
> "The Protein Group was founded in 1968 to provide a forum for discussion between scientists of all disciplines with interests in peptides and proteins. Membership has grown rapidly and now stands at 332. Of these, only 171 are Fellows of the Chemical Society, and I believe that a large proportion of the remainder, as well as many of the Fellows, are members of the Biochemical Society. Four of the five members of the present Committee are members of both the Societies. Of the eight meetings held by the Group, two have been held jointly with the Biochemical Society. There thus exists already a close relationship of the Protein Group with both Societies.
>
> "There should, of course, be no element of competition between the Protein Group and any existing Group of your Society. The interests of the Protein Group are very broad, and individual meetings often cover a wide range of topics. If an occasional overlap with the interests of another more narrowly based Group should occur, we would envisage that the particular meeting should be held jointly with the other Group concerned. In this connection, it is worth noting that one of our Committee, Dr R. Perham, is also a Member of the Committee of the Molecular Enzymology Group. Arrangements such as this should ensure that no difficulties arise.
>
> "I understand that the Nucleotide Group is now a joint Group of the two Societies. If the Biochemical Society is agreeable, we would be happy to accept a constitution essentially identical to that of the Nucleotide Group."

This proposal was received with enthusiasm by the Biochemical Society and the Joint Group was formally set up on 18 February 1972.

The field of interest in this Group, which could be almost the whole of Biochemistry, is generally accepted as peptide and protein structure.

5.3.13 Bioenergetics Group

On 4 July 1972, a Bioenergetic Organelle Group was formed and functioned as such until 1978 when its name was changed to the Bioenergetics Group following the recommendation of

the 1976 Working Party. This has close ties with the IUB/IUPAC Bioenergetics Group, which was formed after some effort by Professor W. J. Whelan, lately Secretary General of IUB, who is an admirer of our Group structure. His further efforts, "likened to pulling teeth", have now resulted in the formation of seven IUB Groups, some, like the Bioenergetics Group, co-sponsored by other Unions. However, at the moment of writing no other Society Group has formal ties with the IUB Groups.

5.3.14 Membrane Group

Formed in 13 April 1973, the Membrane Group continues to serve an important need in providing a forum for experts in this increasingly influential aspect of Biochemistry.

5.3.15 Regulation in Metabolism Group

The 1976 Working Party recommended that one new Group should be initiated to cover the area of metabolic regulation. As a result of this recommendation the Regulation in Metabolism Group was founded on 7 July 1977. Thus, after a spate of new Groups in the late 1960s and early 1970s, four years had elapsed between the formation of the Membrane Group and this Group, the last scientific Group to come into existence.

5.3.16 Education Group

This Group was set up as recently as 1984 as a result of the concern that the proper training of biochemists is becoming more and more important as knowledge and specialization increase at an alarming rate. It is now accepted that education of biochemists is a legitimate activity of the Society, although this view has not always been accepted, particularly in the 1960s. Before the current upsurge in interest in biochemical teaching the Society held a meeting in the very early days on the teaching of medical students, and more recently two Colloquia on the training of biochemists; the last two were held on 13 July 1961 in Oxford and on 15 September 1966 at Aberystwyth, chaired by the late Professor K. S. Dodgson and Professor G. R. Barker, respectively. The proceedings of both Colloquia were published. In 1967 the Society submitted a memorandum to the Royal Commission on Medical Education, reproduced in the Annual Report for 1967. The establishment of the Education Group, the ultimate accolade of Society respectability, was the result of the initiative of Dr E. J. Wood, who organized a half-day discussion session and an 'education corner' in the Poster Session during the Society's meeting at Leeds 18–20 July 1984. The interest aroused made

it possible to collect the 30 signatures required before the Committee will consider the formation of a new Group. The main aims of the Education Group are (i) to hold colloquia and present Posters and demonstrations on educational topics at Society Meetings and (ii) to facilitate exchange of educational technology — video tapes, computer-assisted programs etc.

Further aspects of the Society's present positive policy on Education are discussed in Chapter 7.

In a different way from the Irish Section, this Group is also not a conventional subject Group and assessment of its impact or otherwise is for the future to decide.

5.3.17 Monitoring of Group Activities

The overall activity of the Groups is monitored by having one member of the General Committee nominated as a member of each Group Committee. The Group Secretaries meet once a year to co-ordinate activities and discuss future developments.

Reference

1. Drabkin, D. L. (1958) *Thudichum: Chemist of the Brain*, University of Pennsylvania Press, Philadelphia.