Chapter 3

Communicating Biochemistry: Meetings and Events

Ian Dransfield and Brian Beechey

Scientific conferences organized by the Biochemical Society represent a key facet of activity throughout the Society's history and remain central to the present mission of promoting the advancement of molecular biosciences. Importantly, scientific conferences are an important means of communicating research findings, establishing collaborations and, critically, a means of cementing the community of biochemical scientists together. However, in the past 25 years, we have seen major changes to the way in which science is communicated and also in the way that scientists interact and establish collaborations. For example, the ability to show videos, "fly through" molecular structures or show time-lapse or real-time movies of molecular events within cells has had a very positive impact on conveying difficult concepts in presentations. However, increased pressures on researchers to obtain/maintain funding can mean that there is a general reluctance to present novel, unpublished data. In addition, the development of email and electronic access to scientific journals has dramatically altered the potential for communication and accessibility of information, perhaps reducing the necessity of attending meetings to make new contacts and to hear exciting new science. The Biochemical Society has responded to these challenges by progressive development of the meetings format to better match the needs and expectations of delegates, while maintaining delivery of high-quality scientific programmes.

Key personnel

The co-ordination of the programme of scientific meetings during the last 25 years of the Biochemical Society history has largely been achieved through the hard work of the Meetings Office and the voluntary contributions of the Meetings Committee (and latterly the Meetings Board) which is chaired by the Honorary Meetings Secretary (see Table 1)

The successful delivery of the full programme of Biochemical Society meetings is critically dependent on the dedication and hard work of the Society's staff. The first Meetings Officer, Doris Herriott, was appointed in 1961. However, the increasing demands of meetings organization required that a Meetings Assistant was also necessary. The first Assistant Meetings Officer was Robert Dale, who was followed by Kathy Gallagher (1987–1994) and subsequently by Luisa Hambley in 1994. Robert Dale was appointed Meetings Officer in 1988 and replaced by Lisa Palin, who held the role from 1996 to 1997, until the creation of the new role the Director of Society Activities in 1997.

Table 1. The Biochemical Society's Honorary Meetings Secretaries 1986–2011

Term of office	Meetings Secretary	Affiliation
1986–1991	Alan Malcolm	Biochemistry Department, St. Mary's Hospital Medical School, University of London
1991–1996	Catherine Rice-Evans	Division of Biochemistry, UMDS, Guy's Hospital, London
1996–2001	Norma Ryan	Department of Biochemistry, University College Cork, Ireland
2001–2006	Brian Beechey	The Physiological Laboratory, University of Liverpool
2006–2011	Ian Dransfield	MRC Centre for Inflammation Research, University of Edinburgh

The appointment of Sheila Alink-Brunsdon (then Mills) as Director of Society Activities was a key event in realizing many of the different ambitions and key changes in the Society's meetings programme and she remained in post until the spring of 2011, the centenary year. Working with several successive Honorary Meetings Secretaries, Sheila has seen aspects of the somewhat cyclic pattern of changes to meetings that have occurred over time. Under her direction, the Meetings team has been held together through many changes in staff (not to mention job titles!). The creation of the role of Conference Co-ordinator in 2000 allowed the appointment of Kay Miller (2000–2004) who was pivotal to the establishment of Focused Meetings and the success of the first BioScience meeting in Glasgow in 2004. Helen Davies took over this role in 2004 and subsequently, Christine Cook in 2006. Kay Miller, working together with Helen Davies on a job-share, returned to the role of Conference Co-ordinator in 2006. In 2011, following Sheila's retirement, Kay became Group Head of Membership Activities, and is responsible for implementing the Society's strategic plan as it relates to meetings, membership, the Society website, award lectures and international affairs. The centenary year has also seen the development of two new roles within the Society to ensure the communication of the Society's activities and engagement with its members: Amy Cox is now Communications Manager and Helen Davies is Head of Membership.

75 Years and beyond

In line with the its mission to "advance the science of biochemistry by means of meetings and publications", the Biochemical Society organized four meetings annually between 1986 and 1998. The Annual Symposium was hosted at one of the main meetings, which were usually held over 2–4 days and had a number of parallel sessions with colloquia on specialized topics. There were dedicated sessions

Kay Miller (current Group Head, Membership Activities), Sheila Alink-Brunsdon [Mills] (Group Head of Society Activities, 1997–2011) and Helen Davies (current Head of Membership).

where members had the opportunity to present short communications that related directly to these colloquia. In addition, there were open communication sessions, where members could present data on topics that were unrelated to the main colloquia topics. Another important feature of meetings was the inclusion of poster sessions, which were proving to be very popular as a means of presenting research findings. The quality of individual colloquia was very high, including presentations from scientists of truly international status. The Biochemical Society meetings thus provided considerable opportunities for undergraduate and postgraduate students to become exposed to high-quality, cutting-edge research and to present their work in front of an informed audience. In this way, Society meetings provided a splendid forum for the dissemination of biochemical research findings.

The Society's celebrations of its 75th year (1986) included main meetings held in Dundee, Liverpool, Cambridge and at University College London (UCL). In total, there were 40 separate colloquia in addition to the Annual Symposium and Harden Conferences, with around 400 speakers and 800 free communications. In contrast to the first meeting of the Society at UCL, which had 38 members in attendance, there were over 1200 members present for the UCL meeting in 1986. The Sir Frederick Gowland Hopkins Memorial Lecture, entitled 'Antibody diversity and maturation of the immune response', was delivered by César Milstein and was recorded on video for the Society's archives. In addition to the Annual Symposium on 'Molecular Pathology' (held jointly with the Wellcome Trust to celebrate its 50th anniversary), there was a host colloquium on 'Glycolytic enzymes in relation to their function in muscle'. At the Liverpool meeting, Trevor Goodwin discussed the Liverpool connection in terms of the origins of the Biochemical Society. The involvement of Swiss, German, Canadian and Swedish Biochemical Societies in colloquia organized at Cambridge and Trinity College, Dublin may have contributed to the higher than average attendance of overseas members at these meetings.

Although the meetings programme in 1987 appeared less intense than that of the 75th year, the science programme still comprised 34 different colloquia with over 700 free communications. At the main meeting in Leicester, Nobel Laureate Rita Levi-Montalcini delivered the Thudichum Medal Lecture on 'NGF and its place in developmental neurobiology'. The meeting held at University College Dublin exemplified what the Irish meetings could deliver with a successful pre-doctoral meeting in which the student prize-winner (L. Meacher) would have the opportunity to give her talk at the Education group colloquia. In addition, there were special lectures from Vincent Massey on 'Co-enzyme engineering' (Irish Area Section Lecture), Donald T. Elmore on 'Synthesis of peptides as a service to biochemistry and medicine' (Royal Irish Academy Lecture) and Joseph Monahan on 'Growth factors in development of cancer' (Pre-doctoral meeting lecture).

Challenges and problems

Some of the meetings that were organized by the Society were expansive in terms of the demands for facilities. Often there was a requirement for venues to house three concurrent sessions, each of which had a dedicated poster and/or oral communication session. Some universities simply did not have the necessary capacity to accommodate meetings of this size. Another headache for the Meetings Committee was trying to predict the numbers of delegates that would turn up for individual colloquia, a factor which could lead to severe overcrowding of lecture theatres and give rise to the potential discontent of delegates. In addition, the use of university venues required that meetings were held out of university teaching times, placing restrictions on timings of meetings. One particular problem that was faced by the Meetings Committee in 1986 was that it was becoming necessary to book venues well in advance of the meeting, causing problems for the reservation of accommodation. Following a review, it was decided that it would not be possible to guarantee accommodation for delegates and to set a reservation deadline 5 weeks prior to the meeting.

Meetings Secretaries Ian Dransfield (2006–2011) and Brian Beechey (2001–2005).

In the latter half of the 1980s, there had been a trend towards increased attendance of members at Society meetings and the numbers of papers presented as free communications. The growth in attendance at Society meetings was nicely illustrated by the 1988 meeting 'Gene Expression, Regulation at RNA and Protein Levels' in Nottingham which had nearly 1000 delegates. At this meeting, there was a dinner attended by over 300 members to mark the retirement of the Meetings Officer, Doris Herriott, who had been involved in meetings organization for many years. The Society also held its first 4-day meeting in 1988 at Sheffield University; the meeting title was 'Molecular Recognition' and fittingly, the R.R. Porter Memorial Lecture on the 'Immunoglobulin superfamily' was delivered by Alan Williams and the Ciba Medal Lecture by Tom Blundell on 'X-ray analysis, protein structure and drug design'. In 1988, a total of 400 invited speakers presented their work in 36 different colloquia and the Annual Symposium, with these meetings attracting over 900 free communications.

One key factor that was regarded as being very important to the ethos of Biochemical Society meetings was the absence of registration fees. Although attendees had to pay for accommodation and subsistence (teas/coffees and meals), the costs of hosting the meeting were met entirely by the Society. The use of different university venues around the UK to host Biochemical Society meetings provided an opportunity to showcase the research strengths of individual Biochemistry Departments. The geographical spread of locations for Society main meetings was remarkably diverse and at least one of the main meetings was held in Ireland each year. This laudable aim of dissemination of cutting-edge research in biochemistry around the UK was increasingly under threat as Government funding for universities was being reduced.

Traditionally, many universities had not imposed charges for use of lecture theatres and projection facilities, staff costs and provision of rooms/boards for posters etc., thus limiting the costs incurred by the Society. However, the situation was shifting as universities were increasingly required to recover the costs of those hidden activities associated with hosting a meeting. Eventually, the meetings costs to the Society would reach levels (considered in terms of per delegate costs) that were unsustainable, requiring the introduction of registration fees in 2001.

Battling the elements

Extreme weather, together with strikes and cancellations threatened to dampen enthusiasm for meetings activity in 1989. Closure of the Severn Bridge hampered travel to the meeting in Aberystwyth, which was a smaller meeting with only four colloquia. For the Guildford meeting in July, attendance was lower than expected with British Rail strikes and a heat wave combining to thwart delegate travel. Even the supply of refreshments at the meeting was short-lived when refrigeration in the ice-cream van broke. For the meeting held in Cork, there were severe delays due to storms, and cancellation of ferries and flights hampered delegates' travel plans. Those who did travel were subjected to a week of horizontal rain, although the high quality of the science and inevitable dark Irish beer did help revive the spirits.

The Ciba Medal Lecture 'Inositol lipids and phosphates in cell regulation' was delivered by Bob Michell at the December meeting at St. Bartholomew's Hospital Medical College, fitting well with the Annual Symposium on 'G Proteins and Signal Transduction'. In total, there were 600 free communications submitted to the 34 colloquia organized that year. A similar number of free communication submissions were made to Society meetings in 1990. Honorary Meetings Secretary, Catherine Rice-Evans noted that in addition to the main meetings and Annual Symposium there were eight independent group meetings, a trend it was hoped would continue.

Social aspects

A notable feature of the Society main meetings was the reception and dinner associated with the event. Often, there was an address from a distinguished speaker. For example, at the 621st Meeting at University College London, the speaker was Sir Hans Kornberg, then the Sir William Dunn Professor of Biochemistry at Cambridge University. On many occasions, there were addresses by representatives from overseas biochemical societies, for example Professor Yasutomi Nishizuka from Japan and Dr Elsa Reiner from Yugoslavia. The venues chosen for these events were memorable and included art galleries (e.g. Hunterian Gallery, Glasgow), museums (e.g. the Museum of the Moving Image, London and the Museum of British Transport, Coventry), industrial museums (Kelham Island, Sheffield), heritage sites (Roman Baths in Bath) and football grounds (Manchester United's Old Trafford). Many universities provided splendid facilities for dining (e.g. the Trinity College Dining Hall in Dublin), although the Society also made use of more sybaritic facilities such as the Waldorf Hotel in London. The presence of alcohol at these events was undoubtedly a significant factor in promoting scientific communication. There were visits to wine cellars, whisky tasting at meetings held in Scotland and the ubiquitous presence of copious quantities of Guinness at Irish meetings. Perhaps to counter these bacchanalian tendencies, there were recitals by choirs and string ensembles. Not to be outdone, notable academics have been known to turn their hands to magic to entertain, as exemplified by Professor Edwin Dawes at the 1986 Cambridge meeting.

A structure for meetings organization

The establishment of the Special Interest Groups (SIGs) in the late 1960s was recognized as a way of keeping the Society together during a period of rapid expansion of the discipline of Biochemistry. In 1999, these groups (listed alphabetically) were:

- Biochemical Immunology;
- Bioenergetics;
- Hormone;
- Education;
- Glycobiology;

- Industrial Biochemistry and Biotechnology;
- Lipid;
- Regulation in Metabolism;
- Membrane;
- Molecular & Cellular Pharmacology;
- Molecular Enzymology;
- Neuroscience;
- Nucleic Acids & Molecular Biology;
- Protein & Peptide;
- Techniques;
- the Irish Area Section.

It was the role of these groups to develop ideas for colloquia and present the case for support of these colloquia at the Meetings Committee. Until 1999, the SIGs each had their own budget and accounts, allowing them to have committee meetings and providing a considerable degree of flexibility in terms of meetings organization. The Society paid each group an annual subvention, together with an additional colloquium allowance that was paid to the group in support of the speaker and organizer costs, once the Meetings Committee had agreed to a colloquium. Groups were also able to raise their own funds from external sources, for example industry. However, some groups were more successful at raising funds than others and the maintenance of significant balances in group accounts was potentially in conflict with financial regulations relating to UK charities. A particular strength of the group structure was the potential for collaboration with other societies in the organization of meetings. For example, in 1988 there were

Tony Watts, Morton Lecturer for 1999, with Norma Ryan (Honorary Meetings Secretary, 1996–2000).

colloquia organized by the Membrane Group and the Phytochemical Society of Europe, and the Peptide and Protein Group and the Royal Society of Chemistry, In addition, the Techniques Group organized two joint meetings, one with the Irish Society for Electron Microscopy and the other with the Bioengineering Society.

The Meetings Committee was comprised of the secretaries of the 16 SIGs, and hence was colloquially known as the "Group Secretaries Meeting". Importantly, the Society Meetings office was still responsible for arranging venues and other aspects of meeting logistics, including registration, catering and facilities for posters. The involvement of the Meetings Office permitted a similar high standard to be achieved at all meetings that were organized in the Society's name. This strategy for meetings organization also enabled great flexibility for submission of proposals that could then be considered on a competitive basis by the Meetings Committee, which also assumed the role of programme committee. The criteria for judging whether colloquia were likely to represent successful topics were primarily scientific merit and timeliness, budget considerations, and a commitment for speakers to publish in the Society's journal *Biochemical Society Transactions*.

Harden Conferences

The first Harden Conference was held in 1969 and this format of meeting was well established as the Society by the time of the Society's 75th anniversary in 1986. Since the proceedings of Harden Conferences are not published and they are residential, the opportunities for informal discussion and establishment of scientific collaborations are facilitated and these conferences remain a very popular among delegates. One of the key strengths of the Harden Conferences is that the topic can be relatively focused and the participants can also explore exciting new developing areas without the requirement

Attendees at the 2011 70th Harden Conference, 'Synthetic Biology: Design and Engineering Through Understanding held at Keele University, UK.

for publication. Up until 1993, the Harden Conferences were held at Wye College in Kent, but in that year the conference, entitled 'Regulation of Gene Expression by Oxidative Stress' was held in Scotland, at Nethybridge, near Aviemore.

During the period that Norma Ryan was Honorary Meetings Secretary (1996–2000), the Harden Conference Committee was dissolved and the task was subsumed by the Meetings Committee. The range of topics covered in Harden Conferences has been particularly impressive and these meetings have been organized by some of the leading scientists in their fields. For example, as Alan Malcolm began his term as Meetings Secretary in 1985, Alan Fersht, FRS and Greg Winter organized the 24th Conference on 'Protein Engineering and Site-Directed Mutagenesis'. As might be expected there was often fierce competition amongst potential organizers for the two available Harden Conferences each year. In 2011, the Society organized the 70th ('Synthetic Biology: Design and Engineering Through Understanding') and 71st ('Metabolic Pathway Analysis') Conferences.

There are recurrent themes that have been explored at Harden Conferences, including signal transduction processes. The 32nd Harden organized by Bob Michell on 'Inositol Lipids in Cell Function' in 1989 was revisited in 2005, when the 60th Conference on 'Inositol Phosphates and Lipids - Regulation and Functions' was organized by Peter Cullen and Robin Irvine.

In 1987, the first Harden Discussion Group Meeting entitled 'Mapping Large Genomes, Strategies and Applications' was held. These meetings were previously known as "Refresher courses" and were more focused on technological advances. Two further Harden Discussion Meetings were held in 1988, together with the first Harden Satellite Meeting entitled 'Extracellular Matrix Control of Cell Behaviour' held at Sutton Bonnington in Nottinghamshire, which complemented the Membrane Group Colloquium on 'Fibronectin–Cell Interactions". A second Harden Satellite Meeting was held in conjunction with the British Photobiology Society entitled 'Towards a Molecular Basis of Skin Photobiology'. Although the Harden Conference Committee responsible for organization of these meetings noted the concerns of some Society members that the policy of limiting numbers attending was restrictive, participation of those at the forefront of a particular field was deemed necessary for their future success. The themes of all of the Harden Conferences are detailed in the Appendix to this chapter (Table A1; page 43).

Annual Symposia

Another long-standing feature of the Biochemical Society meetings programme is the Annual Symposium, which has traditionally been seen as the most prestigious event in the meetings calendar. The Symposia cover a selected topic at the forefront of research in some aspect of the cellular and molecular life sciences and are intended to be a timely coming together of recognized experts for a state-of-the-art meeting. Like the Harden Conferences, the topics covered in the Annual Symposia are impressive in their diversity (see Table A2 in the Appendix; page 45).

The proccedings of these were originally published as stand-alone volumes in the *Biochemical Society Symposia* series; however, as demand for print copy has diminished, in 2006, the Executive Committee took the decision that from 2007, the Annual Symposium would be held in December each year and that it would also be published as a separate volume of the *Biochemical Society Transactions,* effectively bringing the output of all the Society's meetings under a single title.

In 2004, the Annual Symposium 'Lipids, Rafts and Traffic' organized by Jeff McIlhinney and Nigel Hooper was held as part of the BioScience2004 meeting held in Glasgow. However, a highly successful meeting which had previously been held in the UK without Biochemical Society involvement 'Transcription UK' was chosen as the Annual Symposium meeting in 2005. In 2006, a meeting entitled 'The Cell Biology of Inositol Lipids and Phosphates' organized by Michael Wakelam at Birmingham University provided a vehicle to celebrate the pioneering work of Bob Michell in this research area.

Towards a new type of meeting

The early 1990s were a time of change in the Society, with a recent move to new London headquarters at Portland Place and the creation of Portland Press Limited. During this time, attendance at meetings continued to grow and was matched by a desire to produce a comprehensive meetings programme. The Education Group played a prominent role in Society meetings during this time. Examples of the educational treats facilitated in 1992 include the colloquium organized jointly with the British Association for the Advancement of Science at Southampton, entitled 'Communicating Science: the Role of the Press Officer' and a meeting organized jointly with the Physiological Society, 'New Directions for Biochemistry and Physiology Teaching", at the Royal Free Hospital meeting in London. In 1992, a full programme of meetings comprised 31 colloquia, an Annual Symposium, four independent group meetings, two Harden Conferences, a Harden Satellite Meeting and a Harden Discussion Meeting. The following year, the Society put together successful bids for the 4th International Congress of Biochemistry and Molecular Biology (IUBMB) conference on the 'Life and Death of the Cell' (to be held in Edinburgh in 1996) and the 18th IUBMB congress (to be held in Birmingham in 2000), which would radically re-shape the meetings programme in those years. Plans were already in place for a joint meeting with the British Society for Immunology in Harrogate in 1996 (discussed further later in this chapter).

In 1994, the Meetings Office processed approximately 2000 records of delegates wishing to attend the meetings; 49 days of science were organized and 400 speakers were invited to present their work. This level of output was difficult to sustain at a time when there was no fee for attending Biochemical Society meetings. In 1995, the meeting held at UCL recorded the highest numbers of delegates attending that year, while 600 delegates registered for that year's meeting in Dublin. In addition, submissions of free communications had increased by 7% from the previous year, and it was becoming clear that the rapid evolution of the Society required a move towards either a larger or different type of meeting. A Strategy Working Party was set

The 18th IUBMB Congress, held in Birmingham in 2000, was organized by the Biochemical Society.

up in 1993 comprising the Chairman of the Society, Alan Malcolm, Harold Baum, Brian Beechey, Robert Freedman, Simon van Heyningen, Chris Pogson, Catherine Rice-Evans, Keith Snell and Tony Turner, to consider the future directions of the Society. The group consulted widely within the Society to ensure that the views of members were taken into consideration. In view of the high level of demand on Society resources relating to organization of meetings, one key recommendation of the Working Party was that the number of main meetings be reduced from four to three. The implementation of the recommendations of the Working Party would be overseen by the Strategy Co-ordinator, Brian Beechey.

Into the naughties

There were particular challenges for Honorary Meetings Secretary Norma Ryan during her term of office, with many meetings being organized around the world to celebrate the new millennium, leading to fierce competition to attract scientists to attend. The Society played a pivotal role in the organization of the 18th IUBMB Congrees in Birmingham in 2000. This 5-day meeting was the first joint meeting between the Federation of European Biochemical Societies (FEBS) and the IUBMB and had 52 scientific sessions and nine plenary lectures (see Table 2). To efficiently organize this meeting, a scientific programme committee was established with Keith Gull in the chair.

The hard work of the Society staff and organizers was paid off by attendance of around 3000 delegates and speakers. There were an enormous number of posters presented at the meeting, with over 1300 submissions. In addition, a Young Scientist Symposium was organized that preceded the main IUBMB congress, attracting approximately 120 young scientists from around the world. Keynote lectures at the Young Researcher meeting were presented by Bob Michell on cell signalling and Paul Nurse on the cell cycle. This innovative mechanism for engaging researchers in the early stage of their career is one that the Biochemical Society is still actively pursuing. IUBMB 2000 also included a novel experiment to introduce history sessions within the 'Education' section of the meeting. These were organized by John Lagnado and Peter Nicholls as one of the ancillary events, entitled '50 Years of Molecular Biochemistry', and attracted an unexpectedly large and responsive audience – we expected 50, some 200 came!

2000 was an eventful year, being the first year that abstract submission for Society meetings was undertaken electronically. As in previous years, when submissions were received in camera-ready format, the task of examining the abstracts for scientific robustness was undertaken by the Meetings Secretary and/or the SIGs responsible for organizing individual colloquia. This was a considerable undertaking for the staff of the meetings office and the meetings secretary, often requiring many hours of work to read the

Table 2. Key speakers at the IUBMB/FEBS meeting in 2000

Speaker	Lecture	Title
Craig Venter (Rockville, MA, USA)	Severo Ochoa	Decoding the human genome
Sir John Walker (Cambridge, UK)	Kunio Yagi	Rotary mechanisms of ATP synthesis
Dirk Gorlich (Heidelberg, Germany)	EMBO	Transport into and out of the nucleus
Anne Ephrussi (Heidelberg, Germany)	E.C. Slater	RNA localization and translational control in establishment of embryonic polarity
Thomas Steitz (Yale, New Haven, CT, USA)	Sir Hans Krebs Medal	Posthumous: Paul Sigler's work
Luis Herrera-Estrella (Mexico City, Mexico)	PABMB	Metabolic engineering of plants
Suzanne Cory (Melbourne, Australia)	Chester Beatty	Bcl-2 family: arbiters of life and death
Stanley Prusiner (San Francisco, CA, USA)	Osamu Hayaishi	Molecular biology and genetics of prions
George Poste (SmithKline Beecham)	Datta	Molecular medicine, population genetics and the future of healthcare delivery

piles of abstracts before the Meetings Committee meeting itself. For the IUBMB meeting, there were over a thousand submitted abstracts, providing Meetings Secretary Norma Ryan with many hours of hard graft.

Notable award lectures at the meetings in Leeds (April) and Sussex (December) of that year included those given by Jeff Watkins (the Thudichum Medal Lecture on 'Glutamate'), Martin Humphries (the Wellcome Trust Award Lecture on 'Integrin structure and function'), Kiyoshi E. Nagai (the Novartis Medal Lecture entitled 'Structure and function of the pre-mRNA splicing machinery' and John Sulston (the Sir Frederick Gowland Hopkins Memorial Lecture on 'Society and the human genome').

The publication of *Biochemical Society Transactions* free communications for each meeting as a booklet was highly regarded by delegates. With approximately 150 free communications per main meeting, together with papers from over 300 speakers, *Transactions* certainly had plenty of science to communicate. Furthermore, the potential for disseminating science through this combined meetings/publication strategy is exemplified by some 300 citations of the *Transactions* manuscript for Martin Humphries' Wellcome Trust Award Lecture.

A number of significant issues that became apparent around this time triggered further changes in the pattern of future meetings. In particular, the science programmes for meetings contained a wide mix of topics, with individual colloquia often restricted to a single day or half-day session. While this programme diversity might be considered as potentially attractive to delegates, there was a growing appreciation that delegates were choosing to attend meetings with content that was more relevant to their research interests. Norma Ryan first suggested that the Society might consider organizing meetings dedicated to single topics. This proposal specifically addressed some of the issues which were becoming potential drawbacks to the success of meetings. At a Biochemical Society strategy review meeting in 2001 chaired by Keith Gull, Brian Beechey (newly elected Honorary Meetings Secretary) suggested that the concept proposed by Norma Ryan be formally adopted and that a single large main meeting be organized. This high-profile meeting would allow Society members to come together and allow topics to be addressed within a wider context. It was therefore proposed to change from three main meetings per year to an annual flagship meeting and a series of stand-alone meetings which would be termed Focused Meetings. The rationale for such meetings may be similar to that for the introduction the Special Colloquia in 1984 which were originally intended to bridge the gaps in scientific coverage of the Interest Groups.

Early in the new millennium, a working party chaired by Peter Downes also began a detailed review of the role of the 16 SIGs. While no questions were raised as to the effectiveness of the groups in terms of quality of the colloquia that were organized at Society meetings, there were concerns that the scope of topics was somewhat restricted to the imagination of the individuals on the group committees. Furthermore, despite mechanisms for formation of new groups, the group structure had remained static for 15 years. Indeed, it was suggested that the list of titles for groups would have made an excellent contents page for an out-of-date textbook! More pertinently, group structure was felt to not adequately represent the research interests of members, with notable gaps in rapidly developing areas, for example bioinformatics and the use of transgenic animals to study biochemical processes. One implication was that there was a lack of connection between the SIGs and the grassroots membership of the Society. The working party set up to examine scientific coverage sought the opinions of Group Committee Members themselves, and of the membership at large. It concluded that to adequately represent such a lively, broad and dynamic discipline as biochemistry, a new structure comprising a number of Theme Panels should be established.

Although the main objective of the Theme Panels was to widen scientific coverage, there was intense debate as to how the groups could be re-structured to achieve this. One early proposal was that the existing Interest Groups should be re-aligned to newly formed Theme Panels as appropriate. However, the potential for this to simply maintain the *status quo* was an issue that needed addressing. The working party considered a suggestion from Ian Dransfield (then Chairman of the Biochemical Immunology Group) that the existing Interest Groups be done away with completely, allowing the Theme Panels to

cover wider subject areas. One advantage of this proposal would be the inherent ability of broad-ranging Theme Panels to adapt to future changes in research trends. The final titles that emerged for the seven Theme Panels were: (I) Genes, (II) Molecular Structure, (III) Bioenergetics and Metabolomics, (IV) Cell Biology, (V) Signal Transduction, (VI) Biotechnology and Bioinformatics and (VII) Development and Disease. Initially, the new theme panels were largely populated from existing members of the SIGs, perhaps softening the blow of their demise. In practice, this provided an almost seamless progression, particularly as turnover of members of the Theme Panels led to their repopulation with new members within a few years. The re-organization of the SIG structure in 2002 meant that meetings organization was now the responsibility of the newly-formed Meetings Board, comprising the chairs of the Theme Panels.

The emergence of Focused Meetings

The first meeting of the newly inaugurated Meetings Board (chaired by Brian Beechey) revealed some of the shortcomings of the previous system where colloquia for individual groups were almost guaranteed. In the new structure, there could be real competition for funding for proposals, with judgements made on scientific criteria. The Meetings Board and the newly-formed Theme Panels responded enthusiastically to the new challenges that arose. Financial considerations represented a significant additional challenge. As outlined previously, costs for venue hire and catering, speaker travel and accommodation were all increasing and placing considerable strain on Society budgets. Brian Beechey highlighted the possibility that charges for meetings would need to be introduced. By setting realistic budgets and charging delegates accordingly, meetings could be organized to be essentially cost-neutral, thereby ensuring future delivery of a programme of meetings annually. In the early days of adapting to this new meetings pattern, it was recognized that the Focused Meetings would need to be commissioned until the format became established. To provide support for Brian Beechey, who was tasked with the challenge of organizing the first of the flagship meetings, Ian Dransfield was appointed to a new post of Meetings Co-Ordinator. During this transitional phase, many Focused Meetings were commissioned and organized in close collaboration with pharmaceutical companies, including GlaxoSmithKline, Novartis, AstraZeneca and Organon. The collaborative organization of meetings with these companies

The 'Dynamic Cell' meeting in Edinburgh 2009.

Table 3. Analysis of the attendance for Focused Meetings from 2003 to 2010

Year	Number of meetings	Number of delegates	Number of delegates per meeting
2003	11	933	85
2004	10	677	68
2005	11	887	81
2006	11	694	63
2007	9	744	82
2008	14	1188	84
2009	12	1071	89
2010	13	1076	83

was extremely productive, with venues often provided free of charge and with considerable sponsorship. Although there are significant financial pressures within the pharmaceutical industry, maintenance and development of these important links between the Society and industry remain imperative. At a time when the establishment of BioScience (see the subsequent section) meetings was consuming considerable resources, the active involvement of these companies was very much appreciated.

The consensus view is that the Focused Meetings format has been a successful formula. The adoption of 'themed' meetings by other Societies in recent years is perhaps an acknowledgement of this fact. Table 3 summarizes a few key statistics relating to Focused Meetings from 2003 to 2010.

These data reveal some interesting results, for example, in 1996 there were three main meetings held in Bath, Dundee and Galway. In total, there were a total of 19 scientific sessions, with a different number of scientific sessions at each meeting. The total number of attendees (speakers and delegates) at these three meetings was 1620, an average of 540. This figure was fairly typical for meetings towards the end of the 1990s and early 2000s, although the 668th Meeting in 1999 in Glasgow had approximately twice that number. For the series of meetings from 1996 to 2001 for which detailed data are available, the average number of attendees for individual sessions was 85. The comparison is perhaps a little unscientific, but this figure is remarkably close to the average number of paying delegates registering for Focused Meetings (83) over the period 2003–2008. Plus ça change, plus c'est la même chose!

The BioScience meetings: 2004–2006

BioScience2004

In July 2004, the high-profile meeting called 'BioScience2004 - from Molecules to Organisms' was held at the Scottish Exhibition and Conference Centre (SECC) in Glasgow. The scientific organizers of this meeting (chaired by Robin Irvine) put together an outstanding programme of scientific speakers that focused on biochemical research aiming to provide a molecular explanation and understanding of a range of biological phenomena important in health and disease, a goal which could succinctly summarize one of the key missions of the Biochemical Society. The contribution of Robin Irvine, whose enthusiasm and energy was key to the success of this meeting, cannot be understated. Colin Blakemore, Chief Executive of the Medical Research Council, gave the welcome address on 'Research in the biomedical and life sciences over the next decade'. The keynote speakers included Roger Tsien, who set the scene with a lecture entitled 'Breeding molecules to spy on cells' and Graham Warren, who gave a talk on the 'Biogenesis of the Golgi apparatus'. With an early start being a feature of this meeting (8.30am on Monday morning!) Graham took the packed audience on a guided tour of the Golgi apparatus before focusing on the main part of his talk. Anthony Pawson provided a great lecture on the subject of modular protein–protein interactions in cell regulation.

There were also a number of award lectures, including the Colworth Medal Lecture, which is awarded to a person under the age of 35 annually for outstanding research in any field of biochemistry;

the 2004 winner, James Naismith, gave his Lecture on 'Chemical insights from structural studies of enzymes'. Peter Parker gave the Morton Lecture entitled 'Phosphorylating proteins and lipids' and the Biochemical Society Award Lecture was given by Sir David Lane, recounting '25 years of p53'. This was nicely complemented by Karen Vousden who talked about the potential of p53 as a therapeutic target. Stephen O'Rahilly discussed 'Human obesity and insulin resistance: lessons from experiments of nature'. Stephen explained that human patients have certain advantages over smaller species: "they tend to come to you, rather than you having to go to them, they tend not to be eaten by their parents, and we have sophisticated ways of phenotyping them, including talking to them". Finally, Chris Dobson delivered the EMBO Lecture on protein misfolding, epitomizing how interdisciplinary approaches can shed light on important disease processes. The range of colloquia topics covered at this meeting was impressive.

One strength of this meeting was a whole series of sessions on signal transduction processes, e.g. 'Regulators of GPCR' (two sessions), 'PI3-kinase in the immune system', 'GPCR–ion channel interactions', 'β-catenin–Wnt signalling', 'Insulin signalling' and 'Signalling: lipid–protein interaction'. In addition, there were sessions on 'Dynamic imaging', 'Cell trafficking at the atomic level' and 'Observing single molecules' which offered nice complementarities. There was also a focus on gene transcription and translation, with topics including 'Chromatin and gene regulation', 'Mechanisms of gene regulation', 'DNA repair and checkpoints', 'Transcription regulation in development/signalling', 'Nuclear RNA splicing', 'mRNA and protein synthesis localization', 'RNAi and RNAi applications' and 'Ribosomes and chaperones'. With additional interesting sessions on cellular processes such as 'Glycosylation', 'Cell cycle control', 'Cellular motors', 'Control of cell motility', 'Immune synapses', and 'Adhesion contacts and integrins', this meeting had a fabulous programme. BioScience2004 was attended by over 1200 speakers and delegates, with more than 500 poster presentations being made. In addition, a satellite meeting, 'GPCR Allosterism and Accessory Proteins: New Insights into Drug Discovery', held at Organon, Newhouse was also well attended and considered to be a great success.

An extensive programme of interactive shows and fun-packed hands-on science exploited the full potential of the SECC and the associated Glasgow Science Centre in the weekend preceding the main conference, with sessions co-organized with the Glasgow Science Centre entitled BioScience Kids: Bugs, Bananas and Body Bits. Some of the main highlights included Dr Bunhead performing his 'Exploding Vegetable Show' and energizing audiences with his visually dynamic demonstrations. The Biochemical Society also recruited a team of students from Glasgow University to help out with a microscopy session entitled 'What lurks in the murky depths?' and they needed little help in engaging the general public.

BioScience2005

BioScience2004 proved to be a hard act to follow. For the follow-up meeting, proposals for topics were sought from Theme Panels and from members of the Society at large and then put together into a cohesive programme. The range of topics selected for BioScience2005 was very impressive with a strapline 'From Genes to Systems'. A notable keynote lecture from Robert Lefkovitz, described the role of β-arrestins in receptor signal transduction. Two different approaches to the study of complex systems were presented: one by Mattias Mann, the EMBO Lecturer, who demonstrated the role that quantitative proteomics might have in systems biology and the other by Wolfgang Baumeister, who discussed how cryoelectron tomography would be used to map molecular landscapes. The Novartis Medal and Prize was awarded to Alan Hall, who presented his exciting work relating to control of cell behaviour by Rho family GTPases. Walter Kolch described elegant studies relating to the Raf kinase signalling pathway. The Colworth Medal Lecture was presented by Ian Collinson, describing work leading to an atomic model of the membrane-bound protein translocation complex SecYEG. Leslie Dutton presented an intriguing lecture 'Darwin at a molecular scale' which demonstrated how variance and selection occurred in the electron

transport system. Finally, David Stuart described the 'Lessons that could be learnt from the study of nature's pirates', providing insight into the complex regulatory machinery of viruses. There was an equally impressive line-up of speakers for the individual colloquia, covering topics such as the nucleus and gene expression, protein structure, stem cell biology and development. BioScience2005 also provided an opportunity for additional sessions covering Careers (CV clinics and 'Speed Data' sessions) and a 'Science in Society' colloquium. However, overall attendance at the meeting was disappointing, with fewer than 500 paying delegates, remarkably similar to the numbers attending "old-style main meetings".

BioScience2006

BioScience2006, which had the theme 'Bioscience for the 21st Century' was run back-to-back with a memorable 1-day meeting entitled 'Literature, Legacy, Life. Biochemistry for the 21st Century' organized by George Banting, Peter Parker and Guy Salvesen as part of the centenary year of the *Biochemical Journal*. The impressive line-up of keynote speakers included Mike Waterfield, who delivered the EMBO Lecture 'Cracking the mild, difficult and fiendish codes within and downstream of the EGFR to link diagnostics and therapeutics' and Louise Johnson, who discussed the potential therapeutic exploitation of protein kinases. Signal transduction was also a subject covered by both Donny Strosberg, who described new mechanisms of signal transduction modulated by G-protein-coupled receptors, and Steve Huber, who provided an insight into protein phosphorylation in plants. Alfred Goldberg introduced the proteasome, detailing the roles of protein degradation in immune surveillance and cancer therapy, while Mina Bissell discussed mechanisms relating to cancer development and metastasis. Stephen O'Rahilly gave an entertaining lecture entitled 'Translating metabolic biochemistry into the clinic' and Lewis Wolpert discussed the public's belief about biology. The whole event was a splendid celebration of the *Biochemical Journal*'s centenary.

The Biochemical Society Award is presented to scientists who have "successfully challenged dogma, created a new field of research, elucidated a new paradigm or made a fundamental change to established thinking". There were two such awards made at BioScience2006. Sir Greg Winter described the impact of recombinant protein technology in his 'Antibody revolution' lecture, while the co-ordination of intracellular events during development was the theme of Martin Raff's lecture. James Barber discussed photosystem II structure and the insight provided into the hydrolysis process it catalyses in his Novartis Medal and Prize Lecture. Seamas Martin presented the increasingly complex regulation of apoptosis by caspases in his GlaxoSmithKline Award Lecture entitled 'Death by a thousand cuts'. Kim Nasmyth (in the Sir Fredrick Gowland Hopkins Memorial Lecture) presented work on sister chromatid cohesion and dissolution at anaphase and, in the Colworth Medal Lecture, Simon Boulton outlined the role of BRCA tumour suppressors in DNA repair. The Morton Lecture was given by Phil Hawkins who talked (almost compulsorily) about signal transduction via PI3-kinase in neutrophils.

As with BioScience2005, overall feedback from delegates attending this meeting was excellent. An impressive array of speakers covered topics ranging from the molecular basis of transcription, ion channels, nuclear receptors, information processing and molecular signalling, to the mechanisms underlying control of cellular process and the regulation of immunity. Such an exciting programme might have been predicted to attract large numbers to the conference but in fact, the number of paying delegates registered for this meeting was similar to that for the 2005 conference. One possibility was that this broad spectrum of research topics might not be the most attractive to Society members or other potential delegates with the increasing pressures on resources and time. As a debriefing exercise following the great deal of time, effort and financial resource invested in the BioScience meetings, the Society established a working party chaired by Martin Humphries, and comprising John Coggins, Ian Dransfield, Melanie Welham, Chris Kirk and Sheila Alink-Brunsdon, to consider possible future strategies for main meetings.

Working with other societies

LifeSciences2007

The Society has long recognized that working jointly with other societies represents an important way forward for the future of scientific meetings. In 2007, the annual Biochemical Society meeting was organized jointly with the Physiological Society and the British Pharmacological Society. This huge logistical undertaking was initially overseen by the Meetings Secretary (Brian Beechey) and his counterparts in the other societies, Stephen Hill for British Pharmacological Society and Bridget Lumb for the Physiological Society. The respective society staff involved were Louisa Hambley (British Pharmacological Society), Nick Boross-Toby (Physiological Society) and Sheila Alink-Brunsdon (Biochemical Society). The realization of this meeting, which was re-branded as LifeSciences 2007, was a great achievement. To facilitate organization and develop a coherent programme, an organizing committee along the lines of BioScience2004 was established, with two members of each society (David Beech, Stephen Hill, Prem Kumar, Mauro Perretti, Sheila Graham and Ian Dransfield). In total there were approximately 60 scientific sessions developed under 11 broad overarching themes: G-protein coupled receptors, exercise, signalling, cardiovascular, imaging, inflammation, ion channels, central nervous system, cancer, metabolism and education. In planning the programme, the organizing committee insisted that session organizers maximize opportunities for oral communications selected from submitted abstracts. With so many sessions, there were more than 150 oral communications and an impressive poster session with 600 submissions. As with the BioScience meetings of the previous 3 years, LifeSciences2007 was held at the SECC in Glasgow. The experience gained from these meetings led to an improved organization of posters and the trade exhibition and had a positive impact on the opportunities for networking. Despite the large venue and lower than expected number of delegates, the meeting had a real intensity and buzz about it. In total, there were 970 paying delegates at LifeSciences2007, and these gave overwhelmingly positive feedback after the meeting.

Young Life Scientists

Prior to the main LifeSciences2007 meeting, there was a 'Young Life Scientists' meeting organized by four young researcher members of the Biochemical Society, the British Pharmacological Society and the Physiological Society. These individuals were supported in their efforts by the Education Managers from the different societies and were given a limited budget jointly from all three societies.

Approximately 160 registered delegates from all regions of the UK and from around the world, including Japan, Australia, Canada, USA, Slovakia and China. The theme of the symposium was 'Advances in Signalling'. Phill Hawkins gave an insightful keynote lecture covering not only current research on membrane lipids and associated kinases, but also an insight into his own path into this area of research. Nina Balthasar gave an equally inspiring talk relating to her experience of the transition from a young researcher to an independent group leader and the establishment of a research programme in the field of neuronal pathways involved in control of metabolic balance. To complement these talks, 12 oral communications were selected from submitted abstracts allowing ongoing research in the areas of neuronal, calcium, cardiovascular and cellular signalling to be highlighted. In addition, there were two poster sessions showcasing almost 100 abstracts.

Other joint meetings

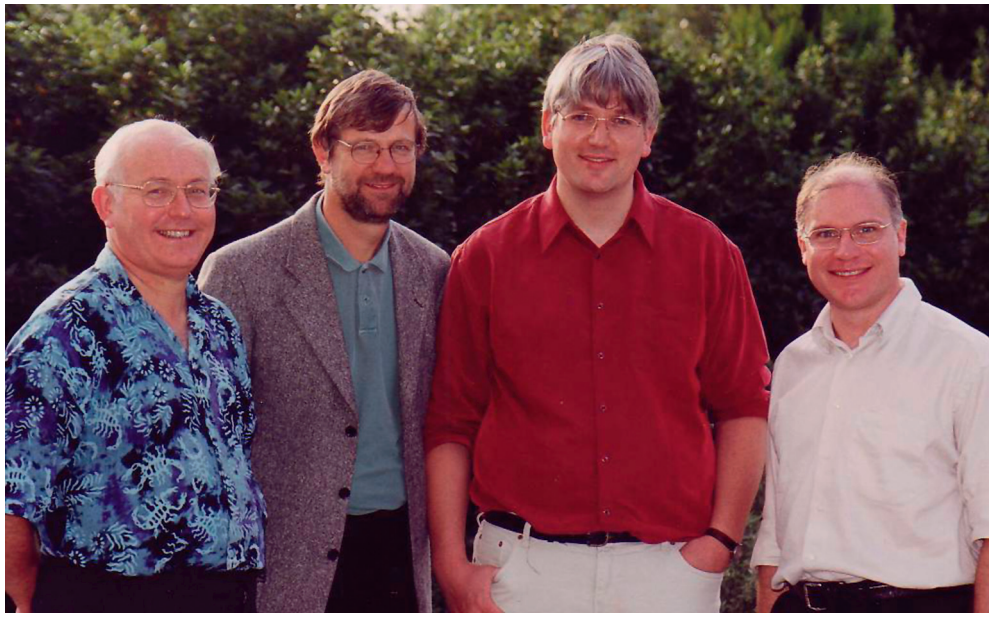
Differences in operating methods and requirements for publication of meetings proceedings represent operational difficulties that hinder UK societies working collaboratively in terms of meetings. Despite

The organizers and speakers from Young Life Scientists Symposium held in at the University of Birmingham on 26 May 2011: (from left to right) Will Rook, Andrew Holmes, Ella Stone, Prem Kumar, Doreen Hartwich, Keith Brain, John Coote, Steve Watson and James Fisher.

these issues, there have been some other notable successes. In 1996, the Society held a very successful joint meeting with the British Society for Immunology (BSI) in Harrogate with nearly 2000 attendees. The smooth organization of this meeting was facilitated by the ability of Norma Ryan and her counterpart in the BSI, Mike Kemeny, to talk freely and frankly about the problems of organizing a joint meeting. In addition, the close collaboration between Robert Dale and Lisa Palin in the Meetings Office and Kay Dorelli of the BSI really helped to ensure that this meeting was a success. Although there was some initial resistance from the Executive Committees of both societies, the persuasive efforts of Norma and Mike and their joint determination to see this meeting happen culminated in the realization of this joint venture. In total there were 22 colloquia over 3 days, many of which were organized in a truly joint manner with the BSI. There was a unique atmosphere created by bringing the two communities of biochemists and immunologists together and rough estimates of numbers attending each colloquia revealed that the average number of attendees per session was around 250, which was a remarkable achievement.

Similarly in 2000, a satellite meeting to the IUBMB congress was organized jointly with the British Society for Parasitology in Manchester. This meeting entitled 'Gene Action and Cellular Function in Parasitic Protozoa' was attended by 120 delegates and was very timely with the genome sequences for some species of *Plasmodium*, *Toxoplasma* and *Trypanosoma* having been recently defined. A repeat meeting with the BSI remains on the agenda given the obvious overlap between the two disciplines.

A series of discussions between Meetings Secretary Ian Dransfield and his counterpart in the British Society for Cell Biology (BSCB) Kairbaan Hodivala-Dilke, led to the formulation of a joint meeting 'The Dynamic Cell', which was held in Edinburgh in 2009. During discussions, it had become apparent that there was an opportunity for joint working as the British Society for Developmental Biology would not be organizing a joint meeting with the BSCB that year. A programme committee, comprising Robert Insall and Barbara Reeves (Biochemical Society) and Margarete Heck and Andrew McAinsh (BSCB), was established allowing the generation of a co-ordinated programme that would be appealing to delegates. For this 3-day meeting, it was decided not to badge individual sessions as being either 'Biochemical Society' or 'BSCB'. In addition, there would be plenary lectures and just two parallel sessions organized



Colworth medallists: (from left to right) Sir Philip Cohen (1977), Peter Downes (1987), Dario Alessi (2000) and Michael Ferguson (1991).

each day, allowing delegates from both societies to integrate fully. In total, there were about 250 delegates at this meeting held in Edinburgh, with 167 posters providing evidence of a high level of participation. A number of medal lectures were presented at this meeting, including one by David Komander, recipient of the Biochemical Society Early Career Research Award, who talked about 'Phosphorylation and ubiquitination in signal transduction events'. The Jubilee Lecture was given by Joan Steitz covering her work on the regulation of gene expression in vertebrates. In addition, there were two lectures supported by the BSCB, the Hooke Medal Lecture (awarded to Erik Sahai) and the Borden Lecture (awarded to Michael Bornens). There was a single final morning scientific session in the meeting relating to the impact that technological advances in imaging had made on the study of dynamic processes in cells, which together with the conference dinner (held at the Dynamic Earth exhibition centre) and inevitable Ceilidh, ensured that any divisions between delegates from either Society were minimized.

Biochemical Society award lectures

The first Biochemical Society award lecture was the Sir Frederick Gowland Hopkins Memorial Lecture, which was established in 1958. Subsequent years saw the introduction of a number of other award lectures, and those inaugurated in the past 25 years have included the following:

- the Heatley Medal and Prize, which recognizes work that makes biochemistry widely accessible and usable;
- the AstraZeneca Award, for work which, through biomedical advances, leads to the development of a new reagent or method;
- the Biochemical Society Award, which seeks to widen recognition of excellence to span more diverse fields of endeavour within, or related to, the biochemical sciences;

- the GlaxoSmithKline Award, which is given in recognition of distinguished research carried out in the UK or Ireland within the previous 7 years and that has lead to new advances in medical science;
- Early Career Research Awards, which recognize the impact of research carried out by early career scientists within 5 years of obtaining their PhD;
- the Centenary Award, which is made to a biochemist of distinction from any part of the world; and
- The Sir Philip Randle Lecture, which recognizes a contribution to the understanding of mammalian metabolism.

Society award lectures have been delivered at a variety of Society meetings over the years and all the winners of these awards for the past 25 years are listed in the Appendix to this chapter (Table A3; page 46).

Nahum Sonenberg; the Centenary Award winner 2011.

Sir John Sulston, Sir Frederick Gowland Hopkins Memorial Lecturer for 2002, with Sir Philip Randle (President, 1996–2000).

Steve Busby (Vice-Chair, 2011–date) with Venki Ramakrishnan, winner of the Heatley Medal and Prize for 2008.

Independent Meetings

As the Society moved away from a large meeting format, there was a realization that the material available for publication in *Biochemical Society Transactions* would diminish. Plans to establish an Independent Meetings fund were made in 2005, allowing the financial support of the Society to be extended to meetings organized by other smaller groups and societies, with the option of providing manuscripts for publication in *Transactions* in return. The first meeting that was supported, held in 1996, was the '8th International Symposium on P450 biodiversity and Biotechnology' at Swansea Medical School. The Society has supported 46 independent meetings to date, including regional meetings (e.g. the North of England Cell Biology

Forum), postgraduate discussion meetings (e.g. Christmas Bioenergetics/Photosynthesis Meeting) and international meetings (e.g. the European Conference on Tetraspanins). Support of Independent Meetings can help to raise the profile of the Society both nationally and internationally and the Society continues to support these conferences, offering finance for named lectures, poster prizes and travel grants.

Looking forward

The success of the Biochemical Society meetings' organizational structure results in a timetable that is filled many months in advance. To address this issue, the Society has introduced "Hot Topic" meetings, for which the time from consideration of the proposal to hosting the meeting is greatly shortened. The Hot Topics approach will facilitate organization of meetings on topics in rapidly developing areas of research, a format that is likely to be adopted by other societies in the near future. As cross-discipline approaches to answering research questions become commonplace, collaborative meetings represent an excellent way to move forward.

While conference organizers inevitably wish to fill their programmes with high-profile speakers, encouraging and promoting development of talented younger researchers is also important. The Biochemical Society aims to encourage organizers to consider providing more speaker slots for 'elevated' abstracts, offering opportunities for those researchers actually doing the work to present their research findings. It is important that the success of the Society's meetings programme is not judged solely by the number of delegates who attend. There is presently sufficient flexibility to support meetings of high quality in 'niche' areas which yield positive feedback from delegates, despite below average attendance.

At the end of 2009, the Society moved into a refurbished building in Central London, Charles Darwin House. As part of the re-fit of the building, a dedicated conference suite was included, offering new opportunities to host meetings and workshops either alone or jointly with other societies. By the end of 2011, Charles Darwin House has been the venue for a wide variety of different meetings, including a joint meeting held with the Society for Experimental Biology and the British Ecological Society ('Stress Responses: Molecules, Organisms, Environments'), a workshop ('MicroRNAs'), a Young Life Scientists meeting ('Fatty Acids: Medicine and Menace') and the first Biochemical Society Hot Topic event ('Pseudokinases'), in addition to Focused Meetings ('Lysosomes in Health and Disease' and 'mTOR signalling') and an Independent Meeting (Metabolism: Present and Future). Feedback from delegates regarding the venue has been overwhelmingly positive and all of the meetings have been well attended, with registration having to be closed early for some events.

One of the strengths of the Biochemical Society has been its willingness to embrace change and move forward, something that will be critical in shaping the future pattern of scientific conferences for the communication of biochemical research.

Appendix

Table A1. Harden Conferences 1969–2011

Number	Date	Title
1st	1969	The Structure and Biological Role of Proteins
2nd	1970	Cell Walls and Cell Membranes
3rd	1971	The Cell Nucleus
4th	1972	Morphogenesis Pattern Formation in Animals and Plants
5th	1973	Phospholipids
6th	1973	A New Look at Virus Latency
7th	1974	Enzymes, Evolution, Specificity and Control
8th	1975	Control Systems in Normal and Malignant Cells
9th	1976	Plasmid Recombinants in Molecular Biology
10th	1977	The Molecular Genetics of Immune Response
11th	1977	Neural and Humoral Receptors and their Mechanism
12th	1978	Mechanisms of Action of the Reproductive Hormones
13th	1978	Specificity and Plasticity in Brain Development
14th	1979	The Delivery and Targetting of Therapeutic Agents with Particular Reference to Liposomes
15th	1979	Sequence Organization and Transcription in Eukaryotes
16th	1980	Microtubules and Microfilaments Structures and Function
17th	1981	Interferon
18th	1982	Cell Cycles
19th	1982	Applications of Spectroscopy to Biological Problems
20th	1983	Molecular Basis of Virulence in Bacteria and Certain Parasites
21st	1983	Structure and Biology of Lymphocyte Membranes
22nd	1984	Plant Genes Structure, Expression, Mobility
23rd	1984	Molecular and Cellular Aspects of Reproduction
24th	1985	Protein Engineering and Site Directed Mutagenesis
25th	1985	The Cytoskeleton Expression, Organization and Dynamics
26th	1986	Cellular and Molecular Responses to Growth Regulating Factors
27th	1986	The Biochemical Basis of Herbicide Action
28th	1987	Collagen
29th	1987	Regulation of Plant Gene Expression
30th	1988	Nucleic Acids and their Interactions with Proteins
31st	1988	Microbes Under Stress: Metabolic and Developmental Choices
32nd	1989	Inositol Lipids in Cell Function
33rd	1989	Cellular Barriers and Drug Targetting
34th	1990	Free Radicals Cell Growth, Disease and Repair Mechanisms
35th	1990	Cell–Cell Interactions in the Nervous System
36th	1991	GTP-Binding Proteins
37th	1991	The Molecular and Structural Basis of Regulation in Photosynthesis
38th	1992	Haemopoietic Cell Growth Factors

contd..

Table A1 continued

Number	Date	Title
39th	1992	The Secretory Pathway
40th	1993	Regulation of Gene Expression by Oxidative Stress Implications for Health and Disease
41st	1993	Photoinhibition of Photosynthesis Molecular Mechanisms to the Field
42nd	1994	Viruses Their Regulation and Control
43rd	1995	Nuclear and Cell Division Molecular Mechanisms and Machinery
44th	1996	The Biochemical Basis of Microbial Morphogenesis
45th	1996	Gastrointestinal Function in Health and Disease
46th	1997	Structure and Mechanisms of Oxidases and Related Systems
47th	1997	Regulation of Carbohydrate Metabolism in Normal and Diseased States
48th	1998	The Nutrient Regulation of Gene Expression
49th	1999	Functional Aspects of Energy Metabolism in Brain Relationship to Brain Development and Neurodegenerative Disease
50th	1999	The Annexins
51st	2000	Fatty Acids Desaturases: Form, Function and Future
52nd	2000	Signalling in Plants
53rd	2001	Proteoglycans
54th	2002	Emerging Trends and Future Prospects
55th	2002	Dynamics of Membrane Traffic
56th	2003	Biological Electron and Proton Transfer
57th	2003	Proteinase Structure and Function
58th	2004	(EMBO Workshop) Telomeres and Genome Stability
59th	2004	(Joint EMBO Conference) The Ubiquitin–Proteasome System in Health and Disease
60th	2005	Inositol Phosphates and Lipids – Regulation and Functions
61st	2005	(EMBO Workshop) Molecular Motors: Structure and Function
62nd	2005	(Joint EMBO Conference) NO; a Radical in Control. The Biological Diversity of Nitric Oxide Metabolism and Signalling
63rd	2007	Protein Folding and Assembly *in vitro* and *in vivo*
64th	2007	(MiP2007) Mitochondrial Physiology
65th	2008	Enzymes: Nature's Molecular Machines
66th	2008	Ion Channels and Synaptic Function
67th	2009	Decoding the Biology of Heparan Sulphate Proteoglycans
68th	2010	Autophagy: from Molecules to Disease
69th	2010	RNAP2010 – Structure, Function and Evolution of RNA Polymerases. A joint Biochemical Society/ Wellcome Trust Conference.
70th	2011	Synthetic Biology: Design and Engineering Through Understanding
71st	2011	Metabolic Pathway Analysis 2011

Table A2. Annual Symposia 1986–2011

Number	Year	Topic
53rd	1986	Molecular Pathology*
54th	1987	Krebs' Citric Acid Cycle
55th	1988	Gene Expression
56th	1989	G-Proteins and Signal Transduction
57th	1990	Protein Structure, Prediction and Design
58th	1990	The Archaebacteria
59th	1991	Neurochemistry of Drug Dependence
60th	1992	Molecular Botany
61st	1993	Free Radicals and Oxidative Stress
62nd	1994	Extracellular Regulators in Differentiation and Development
63rd	1995	Mammary Development and Cancer
64th	1996	Cellular Responses to Stress
65th	1997	Cell Behaviour, Control and Mechanism of Motility
66th	1998	Mitochondria and Cell Death
67th	1999	Neuronal Signal Transduction and Alzheimer's Disease
68th	2000	From Protein Folding to New Enzymes
69th	2001	Glycogenomics
70th	2002	Proteases and Regulation of Biological Processes
71st	2003	Free Radicals: Enzymology Signalling and Disease
72nd	2004	Lipids Rafts and Traffic
73rd	2005	Transcription
74th	2006	Cell Biology of Inositol Lipids and Phosphates
75th	2007	Structure and Function in Cell Adhesion
76th	2008	DNA Damage
77th	2009	Organelle Biogenesis and Positioning in Plants
78th	2010**	Recent Advances in Membrane Biochemistry
79th	2011**	Frontiers in Biological Catalysis

*This was held jointly in honour of the 75th anniversary of the Biochemical Society and the 50th anniversary of the Wellcome Trust.

**The Annual Symposia for 2010 and 2011 took place in January 2011 and January 2012 respectively.

Table A3. Biochemical Society Award Winners 1987–2011

Award	Year and recipient
AstraZeneca Award	2010: Bonnie Wallace
	2007: Michael Stratton
	2005: Noreen Murray
	2001: Steven Oliver
	1998: Steven Homans
	1995: C. Nick Hales
Biochemical Society Award	2011: Sir Michael Berridge
	2008: Gurdyal Besra.
	2006: Martin Raff and Gregory Winter
	2004: David Lane
	2002: Steven P.R. Rose and Bernard Dixon
Centenary Award	2011: Nahum Sonenberg
Colworth Medal	2011: Sarah Teichmann
	2010: Mark Dillingham
	2009: Giles Hardingham
	2008: John Rouse
	2007: Frank Sargent
	2006: Simon Boulton
	2005: Ian Collinson
	2004: James H. Naismith
	2003: David J. Owen
	2002: Thomas Owen-Hughes
	2001: Andrew D. Sharrocks
	2000: Dario R. Alessi
	1999: Nigel S. Scrutton
	1998: David Barford
	1997: Stephen P. Jackson
	1996: Sheena Radford
	1995: Jonathan Pines
	1994: R.L. Stephens
	1993: Nicholas C. Tonks
	1992: Angus I. Lamond
	1991: Michael A.J. Ferguson
	1990: David W. Melton
	1988: Hugh R.B. Pelham
	1987: C. Peter Downes
GlaxoSmithKline Award	2010: Gideon Davies
	2008: Stephen Jackson
	2006: Seamus Martin
	2004: David A. Lomas

contd..

Table A3. Biochemical Society Award Winners 1987–2011

Award	Year and recipient
Heatley Medal and Prize	2008: Venki Ramakrishnan
	2000: Roger Sayle
	1996: Peter Dunhill
	1994: Keith May
Keilin Memorial Lecture	2010: Andrew Halestrap
	2007: Hartmut Michel
	2005: Martin D. Brand
	2003: Peter R. Rich
	2001: Stuart J. Ferguson
	1999: Shinya Yoshikawa
	1997: Martin Wikstrom
	1995: P. Leslie Dutton
	1993: L. Ernster
	1991: W. Hol
	1989: Q.H. Gibson
	1987: R. Huber
Morton Lecture	2010: Peter Cullen
	2008: Roger Williams
	2006: Philip Hawkins
	2004: Peter J. Parker
	2002: Robert H. Michell
	1999: Anthony Watts
	1996: R.M. Evans
	1995: M. Kates
	1994: Robin F. Irvine
	1992: S.-I. Hakomori
	1989: R.E. Pagano
	1987: J.N. Hawthorne
Novartis Medal and Prize	2011: Angus Lamond
	2010: D. Grahame Hardie
	2009: Louise Johnson
	2008: Stephen West
	2007: Adrian Bird
	2006: James Barber
	2005: Alan Hall
	2004: Jean D. Beggs
	2003: Ian D. Campbell
	2002: Michael S. Neuberger
	2001: Stephen Halford
	2000: Kiyoshi .E. Nagai
	1999: Christopher J. Marshall

contd..

Table A3. Biochemical Society Award Winners 1987–2011

Award	Year and recipient
	1998: Richard N. Perham
	1997: Ronald Laskey
	1996: John E. Walker
	1995: Christopher F. Higgins
	1994: J. Subak-Sharpe
	1993: T. Rabbitts
	1992: Philip Cohen
	1991: Paul Nurse
	1988: Robert H. Michell
	1987: Thomas L. Blundell
Sir Philip Randle Lecture	2011: Stephen O'Rahilly
Thudichum Medal	2008: Eric Barnard
	2000: Jeff Watkins
	1996: P. Greengard
	1983: V.P. Whittaker
Early Career Research Awards	2011: Alena Krejci – Theme Panel I: Genes
	2011: Taufiq Rahman – Theme Panel V: Signal Transduction
	2010: M Madan Babu – Theme Panel VI: Biotechnology and Bioinformatics
	2010 Rene Frank – Theme Panel II: Molecular structure and function.
	2010: Jeremy Carlton – Theme Panel IV: Cell biology
	2009: Araxi Urrutia – Theme Panel I: Genes
	2009: Paul Curnow – Theme Panel III: Bioinformatics and Metabolism
	2009: David Komander – Theme Panel V: Signal Transduction
Sir Frederick Gowland Hopkins Memorial Lecture	2008: Karen Vousden
	2006: Kim Nasmyth
	2004: Christopher Somerville
	2002: Edwin Southern
	2000: John Sulston
	1998: Darwin J. Prockop
	1996: Alec Jeffreys
	1994: T. Hunter
	1992: Thomas Cech
	1990: R.J.P. Williams

contd..

Table A3. Biochemical Society Award Winners 1987–2011

Award	Year and recipient
Wellcome Trust Award	2002: Tony Kouzarides
	2000: Martin J. Humphries
	1998: J.A. Todd
	1996: K. Davies
	1994: R.A. Dwek
	1992: S. Humphries
	1987: A.W. Segal
Jubilee Lecture	2009: Joan Steitz
	2007: Anthony Pawson
	2005: Richard Jackson
	2003: Erkki Ruoslahti
	2001: Sara Courtneidge
	1999: Vincent Massey
	1997: J. Rothman
	1995: D. Chapman
	1993: Alan R. Fersht
	1991: P. Reichard>
	1989: S.A. Kornfeld
	1987: M.Z. Atassi