

The Belgian Biochemical Society: 1952-1992 Activities and Evolution

by

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Married couples usually celebrate their 10th and their 25th wedding anniversary. Suspecting that they might not live long enough to celebrate their 50th anniversary, they also celebrate their 40th anniversary.

Why is it that the Belgian Biochemical Society behaves the same way? Unless you decide to rename the society tomorrow and consider that this is the end of the present Belgian Biochemical Society, I see no reason to believe that its golden jubilee cannot be celebrated in the year 2002. It may be however that none of the promoters will be able to participate and to recall the early years of our society.

I already gave a brief account of the history of our society at its 25th anniversary; it was published in the April 1977 issue of the Archives Internationales de Physiologie et de Biochimie. Those who attended that celebration will necessarily find part of my talk of today redundant. Will they please excuse me? Let me therefore address myself essentially to the younger generation of our members; for them I may venture to recall the early history of our society.

Our youngest members attend scientific meetings all over the country, all over Europe (e.g. at FEBS meetings) or over the world (e.g. at IUB congresses). They find this perfectly natural. They do not realize that it was not so 60 years ago (in the 1930-1940 period) when biochemistry developed as an independent discipline in most universities, in Belgian and elsewhere.

There were hardly any contacts between the four universities existing at that time, in Brussels, Ghent, Liege and Louvain. Jean Brachet told me that he had been invited by Christian de Duve to give a lecture at the Catholic University of Louvain, shortly after the war and that it was the first time a professor of the Free University of Brussels had been invited to lecture in Louvain. Elderly members met at the Belgian academies but those who were not among the selected élite presented and discussed their results at the monthly meetings of the Belgian branch of the French Société de Biologie, always held in the Medical School of the University of Brussels. Their communications were subsequently published in the Comptes Rendus de-la Société de Biologie et de ses Filiales (in Acta Biologica Belgica during the war).

Many Belgian biochemists were also members of the French Société de Chimie Biologique which used to hold meetings of their Belgian members in Belgium, with the help of a local organizer. In a sense, the Société de Chimie Biologique was the first society of the Belgian biochemists. I had joined it in 1946 after a meeting held in Ghent.

The Société de Chimie Biologique organized international congresses. One of them was in Liege in October 1946 and was very successful, being the first after the war. Particularly noteworthy were the lectures given by Ernst B. Chain, Howard W. Florey and Selman A. Waksman in the new field of antibiotics, describing the discovery of penicillin and of streptomycin.

The Belgian Physiological Society was created in 1947 as an independent national society. The society held rotating meetings in the various universities. Both Dutch and French were its official languages and the communications were given and/or printed in Dutch, English or French.

The Belgian Biochemical Society was created at the initiative of Marcel Florkin to enable a Belgian society to join the newly proposed International Union of Biochemistry. On the 15th of September 1951, Edouard J. Bigwood, Jean Brachet, Christian de Duve, Marcel Florkin, Lucien Massart, Paul Putzeys, Laurent Vandendriessche and myself drafted the statutes of our society on principles similar to those of the Belgian Physiological Society. They were approved by the first general assembly held at the University Foundation in Brussels on the 12th of January 1952. The assembly elected Marcel Florkin as president and myself as secretary and treasurer. It also decided to precirculate -the abstracts of communications (subsequently published in the Archives Internationales de Physiologie, soon renamed Archives Internationales de Physiologie et de Biochimie, now Archives Internationales de Physiologie, de Biochimie et de Biophysique) and to participate in the creation of the International Union of Biochemistry. The union was formally founded in London, in January 195 and elected Marcel Florkin as its first president.

The first scientific meeting of our society took place on the 8th of March 1952 and was chaired by Christian de Duve. It was a joint meeting with the French Société de Chimie Biologique.

Joint meetings with foreign biochemical societies have since been held with the biochemical societies of France, Germany, Great Britain and the Netherlands, either in Belgium or abroad. The 10th anniversary of our society was celebrated at a joint meeting with the (British) Biochemical Society in the presence of delegates of the Dutch and French biochemical societies.

When our society celebrated its 25th anniversary in 1977, it had organized exactly 100 scientific meetings, with more than 3000 communications, read or presented as posters, and about 100 lectures of general interest. Our society had about 700 members at that time; it had elected nine honorary members, all deceased now: Edwin J. Cohn, Carl F. Cori, Gerty T. Cori,

Jean E. Courtois, Claude Fromageot, Sir Charles Harington, Kai U. Linderstrom-Lang, Stanford Moore and Albert Szent-GyUrgyi who had all helped many of our members or our society.

Our society expanded in various ways during the following 15 years. It has now close to 950 members. Fifty additional meetings have taken place; we are also celebrating our 150th meeting today. The additional 2600 communications presented in the last 15 years are so numerous that they must now all be presented as posters. The present meeting has sessions for 96 posters, all in English; this is more than ever.

The recent meetings often have a specific theme and lectures of general interest usually open and close the sessions. A total of 125 lectures were given during the last 15 years. The poster sessions always accept general subjects as well.

The places visited by our society now include all the new university institutions created in Belgium as the result of the university expansion common to most countries in Western Europe.

Our society has diversified its fields of interest, always keeping in mind the relationship between chemical structure and biological activity, which is central to biochemistry. Our society has participated in joint meetings with other Belgian scientific societies, for biophysics, for botany, for cell biology, for chemistry, for physiology and pharmacology and for zoology. It has also participated in multidisciplinary meetings on immunodeficiency, on malignant transformation and on cell receptors.

The biochemical laboratories adopted new concepts and methods of investigation enabling them to enter or develop various new fields of biology, such as molecular and cellular biology, molecular genetics and genetic engineering, neurobiology, immunology, structure and functions of membranes and macromolecules, cellular communications, etc. As a result, scientists of various biological and medical departments and of industrial research laboratories joined our society.

The eight promoters of our society were all professors of biochemistry except Jean Brachet who was formally professor of animal morphology. The present committee of our society consists of 12 scientists who are attached to departments or laboratories of biochemistry, microbiology, molecular biology, plant biology, virology, physical chemistry, pharmacology, or medical genetics.

Our society has practically replaced the original - and still existing - Belgian branch of the French Société de Biologie, at the molecular level however. If you really want to change the name of our society, I think the best would be to name it simply Belgian Society for Molecular Biology (Société Belge de Biologie Moléculaire / Belgische Vereniging voor Moleculaire Biologie). Molecular biology includes all the fields of interest of our members. Please observe however that the present name has not prevented the diversification of our society; thus why change it?

A good illustration of the central role of biochemistry in its wide sense is that of the 18 Francqui Prizes for natural and medical sciences, 15 were awarded to members of our society, i.e. to Zenon M. Bacq, Jean Brachet, Hubert Chantrenne, Desiré Collen, Christian de Duve, Marcel

Florkin, H. Gery Hers, Raymond Jeener, Henri Koch, Isidoor Leusen, Lucien Massart, René Thomas, André Trouet and Jacques Urbain. Walter C. Fiers and Jozef Schell were awarded the Francqui Prize for mathematical, chemical and physical sciences.

Everybody remembers of course that Albert Claude and Christian de Duve have been awarded the Nobel Prize, whereas Jean Brachet and Christian de Duve have been awarded the Heineken Prize.

The quinquennial prizes of our national foundations for scientific and for medical research have been awarded to Hubert Chantrenne, Albert Claude, Walter C. Fiers, Jean-Marie Ghuysen, André Goffeau, H. Gery Hers, Georges Peeters, René Thomas and Marc van Montagu.

The Gairdner Foundation International Award in Medical Sciences has been awarded to Christian de Duve, Jean-Marie Ghuysen, H. Gery Hers and Paul Janssen.

The Prize Carlos J. Finlay in Microbiology of the UNESCO has been awarded to Walter C. Fiers and to Jean-Marie Ghuysen. Walter Fiers has also been awarded the Prize of the Foundation Artois-Baillet Latour Prize and the Robert-Koch Prize.

Prizes have finally been awarded to some of our members working in pharmaceutical research laboratories: the Prize Galien and other prizes to a research team of Smith Kline - RIT comprising some of our members and the Prize Van Gijssels to Pierre Laduron- who is at Rhône-Poulenc-Santé.

This list is surely incomplete. Please provide me with the necessary information for the printed version of this historical account. Thank you in anticipation.

Five of our members have served as rectors of our universities: Edouard J. Bigwood, Marcel Dubuisson, Lucien Massart, Laurent Vandendriessche and Maurice Welsch. One of them has survived.

Last but not least, Christian de Duve has been made viscount whereas Walter Fiers, Paul Janssen and Marc van Montagu have been made barons.

Let us now consider international organizations with which our society, or our members, have collaborated: the International Union of Biochemistry (IUB) recently renamed International Union of Biochemistry and Molecular Biology (IUBMB), the Federation of European Biochemical Societies (FEBS) and the European Molecular Biology Organization (EMBO).

IUB first

Only two scientific meetings had been organized by our society when the Second International Congress of Biochemistry took place in Paris, in the summer of 1952. We were asked to organize the Third International Congress of Biochemistry to be held in Brussels in 1955.

We accepted the challenge and succeeded in assembling some 2000 biochemists from the whole world. We had inadvertently forgotten to invite the biochemists of Taiwan, as a result of which we welcomed the first delegation from the People's Republic of China -to attend an IUB congress.

We also succeeded in offering the complete proceedings of the meeting, a volume of 544 pages later published by Academic Press, in spite of our limited resources (the registration fee was only 600 Belgian francs, or 12 US dollars) and even made a small profit from the royalties received from Academic Press after the congress. True enough there were still few congresses at that time and we did not have to pay the travel expenses of the invited speakers. Moreover we profited from the generous hospitality of the Free University of Brussels.

The members of our young society worked together for the preparation of the congress and learned to know each other better. Edouard J. Bigwood was president of the congress, Jean Brachet was chairman of the scientific committee, Paul Putzeys was treasurer and I was secretary general.

Our society has recently offered to organize another international congress of biochemistry. The offer has not been accepted yet.

FEBS now

When the international congresses of biochemistry, initially held in Europe (Cambridge in 1949, Paris in 1952, Brussels in 1955, Vienna in 1958 and Moscow in 1961) were ready to move out of Europe (to New York in 1964 and Tokyo in 1967), the British Biochemical Society invited delegates of the European biochemical societies to meet in Oxford in the summer of 1963. The assembly proposed that a Federation of European Biochemical Societies be set up. The Federation was launched on the 1st of January 1964 with Frank C. Happold as first chairman. The first meeting of the Federation was held in London in March 1964. I signed the Statutes of the Federation in the name of our society which had decided to join. Annual congresses or special meetings have since been arranged on an annual basis.

Our society invited FEBS to hold its 15th full meeting in Brussels in the summer of 1983. It had nearly as many participants as the third international congress of 1955. Its cost was more than 10 times higher however. The society had hired the services of the Brussels International Conference Centre as no other place had enough space to accommodate the 1267 posters presented. In addition, seven plenary lectures and 189 symposium lectures were given during that week.

Our society is much indebted to all those who prepared the 15th FEBS meeting, particularly to Eric Schram who was its general secretary, to Robert Crokaert who was its treasurer and to Gisèle Préaux, at the time secretary of our society, who participated in all the meetings we had with the staff of the Conference Centre. The society had asked me to be president of the meeting. It

was a real pleasure to work with Eric Schram, Robert Crokaert, Gisèle Préaux and with the numerous members of our society who took an active part in the work of the scientific committee.

For the first time in the history of FEBS, we organized a placement service during the meeting. Jean-Paul Peraudin and Jean-Paul Prieels, in charge of the service, were helped by Dr B. Clement, of the National Institutes of Health, who had regularly been running the placement service at the annual meetings of the Federation of American Societies of Experimental Biology. How many biochemists did actually find a job after having been interviewed has never been clear but we know that the two organizers of the placement service found a job that way.

The second activity of FEBS was the organization of more than 200 summer schools, renamed advanced courses when some of them were held in winter. Members of our society have arranged nine of them: eight at the Université Catholique de Louvain, one at the Katholieke Universiteit Leuven. The first one was organized by Christian de Duve in 1965 on centrifugal fractionation of animal cells. Robert R. Crichton has already organized four courses on inorganic biochemistry and will run a course on the chemistry of metals in biological systems later this year.

FEBS entered the field of publication with the production of the first issue of the European Journal of Biochemistry in March 1967. I have just completed a short history of the Journal on the occasion of its 25th anniversary; you will find it in the next issue of the Journal, or March(II The Journal is published by Springer-Verlag and 'continues' the tradition of Biochemische Zeitschrift. Did you know that the first article printed in Biochemische Zeitschrift in 1906 was written by A.J.J. Vandeveldde of the University of Ghent? It is entitled: Ueber die Anwendung von biologischen Methoden zur Analyse von Nahrungsstoffen.

Louis Hue has been one of the managing editors of the European Journal of Biochemistry. Jacques Berthet and H. Gery Hers have served on its editorial board whereas Henri Beaufay, Robert R. Crichton, Walter C. Fiers, Eugene Fredericq, Jean-Marie Ghuysen, Henri Grosjean, Rene Lontie, Gerard Marbaix, Claudine Sluse-Goffart, Joel Vandekerckhove and Jean-Marie Wiame have served or are still serving on its advisory board. I have been editor-in-chief (later chairman or senior managing editor) of the Journal until the end of September 1988 when the editorial office was moved to Zurich.

Strange enough, none of our members has been invited to serve on the editorial board of FEBS Letters, the second journal created by the Federation.

Lecture tours have been organized by the Advanced Courses Committee of FEBS. Seven FEBS lecturers have thus addressed our members. The first one, a FEBS/Ferdinand-Springer lecturer actually, was Sir Hans L. Kornberg (Cambridge). The latest one, Robert J.P. Williams (Oxford), a regular FEBS lecturer, is among us today; we are all looking forward to hearing him tomorrow. The others have been Michael J. Berridge (Cambridge), Phillip Cohen (Dundee), Walter Neupert (Munich), Walter Schaffner (Zurich) and Dominique Stehelin (Lille).

Finally FEBS developed a fellowships program where requests are rapidly dealt with. Our members were granted 10 such fellowships whereas our laboratories received 13 visitors from other European countries.

EMBO finally

Strictly speaking our society is not associated with the European Molecular Biology Organization but so many of our members have played an active role in its activities that I feel permitted briefly to report on EMBO as well. I thank Hubert Chantrenne for having provided me with a memo from which I have selected the following.

The creation of an European Organization of Fundamental Biology, later renamed European Organization of Molecular Biology (EMBO), was decided at a meeting in Ravello, in September 1963, under the chairmanship of John Kendrew; Hubert Chantrenne was present.

Ravello is a wonderful place south of Naples where Otto Hoffmann-Ostenhof organized a meeting of the IUPAC-IUB Commission on Biochemical Nomenclature (CBN) which I attended a couple of years later. The well known novel (and film?) 'Set this house to fire' by William Styron ('La proie de flammes' in its French translation) takes place in Ravello.

EMBO was formally founded in 1961. Jean Brachet was a member of its first Council. Hubert Chantrenne (as vice-president), Walter C. Fiers, René Thomas and Marc Van Montagu have since been members of the Council of EMBO which is now chaired by Jozef Schell.

EMBO now has a large research institute in Heidelberg and publishes the very successful EMBO Journal but it started modestly with the allocation of short-term fellowships. Hubert Chantrenne was the first chairman of the EMBO Funds Committee.

When Max Perutz became president of EMBO, he arranged for R- K. Appleyard, working for Euratom at that time, to become honorary executive secretary of EMBO. His postal address was, from 1966 till 1973, the Biochemistry Laboratory of the Department of Molecular Biology of the Université Libre de Bruxelles, i.e. at the place where we meet today.

EMBO has also organized courses and workshops. A Toussaint and Marc Van Montagu have been members of EMBO's Course Committee. Nine courses were organized in Belgium (in Ghent, Louvain Rhode-St-Genese, and Woluwe-St-Lambert. Seven workshops were organized in Brussels, Ghent, Liege, Louvain, Louvain-la-Neuve, and Rhode-St-Genese.

Why has biochemistry been so successful? Paraphrasing Sir Frederick Gowland Hopkins, I would say 11 The biochemist may not have the last word in the description of life, but without his help, the last word will never be said

I congratulate the Belgian Biochemical Society for its achievements in its first 40 years of existence and I *wish* full success to its members in the coming 10 years preceding its golden jubilee. I hope to be present and to listen to the next historical account.

Thank you for your attention.

Rhode-St-Genese, 21 February 1992.