

EDITORIAL

THE INCEPTION OF THE NORTH-AMERICAN SOCIETY OF BIORHEOLOGY
AND THE GROWTH OF BIORHEOLOGY AS AN ORGANIZED SCIENCE

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For several years I have been active in persuading colleagues working in the United States and Canada that the time was ripe to start a society of biorheology in North America. This incentive was prompted by the fact that national or regional societies of biorheology first began many years ago in Japan and later in France. At present, each of these societies has grown to about 300 members. Meanwhile, societies of hemorheology were founded in Italy and Portugal. In addition, there exists the European Conference on Clinical Hemorheology. Its fifth conference will be at Bordeaux, France from 29 June-2 July, 1987. Its Chairmen are J.F. Stoltz, P. Bouvin and M.R. Boisseau. There are national societies or groups of clinical hemorheology in England, France, West Germany and Austria. Moreover, there are certain groups of biorheology which are part of other national scientific societies, such as in Argentina and East Germany.

Since the main interest in different fields of biorheology is at present in Japan, France and North America, it became important to have a society in the United States and Canada, where many biorheological studies are pursued. North America may as well include Mexico, where, to my knowledge, active research in any biorheological field has not yet been instituted.

I am particularly glad that I could interest Shu Chien in such a venture. Over the past few years, we had several meetings during which we discussed the pros and cons for the establishment of such

a society.

There are already many national and binational biological or biomedical societies in Canada and the United States with numerous annual and semi-annual meetings. It would, therefore, be difficult to add additional conferences to a highly charged program of each biorheologist in his/her participation in a new scientific society and to present original research there as well. For the past twenty years the International Congress of the International Society of Biorheology was held every three years, with the exception of its Congress in Baden-Baden (which was held after two years). There are, moreover, congresses of international scientific unions and societies, as well as of international and national societies or groups, at which biorheologists from North America present original contributions.

What could a new society contribute to the advancement of the science of biorheology? The answer to this question is based on a premise, advanced five years ago in a plenary lecture on the future of biorheology at the Fourth International Congress of Biorheology in Tokyo (1). There, I considered biorheology as the missing link between most life sciences. Active biorheological research is predominantly pursued in hemorheology, which, in accordance with a new definition, is the rheology of the vessel-blood organ (1-4). Biorheological research is carried out on the rheology of mucus, cytoplasm, bone, sap movements in trees and lianas, the interaction of cells, surface hemorheology, parahemorheology (2-5), electrobiorheology (6), among others. Thus, there still remain most life sciences and their fields which, toward their own advancement, await biorheological exploration and study.

In the last issue of BIORHEOLOGY, Silberberg and I reemphasized in an Editorial that biorheologists have the mission to make our science known to fellow scientists working in many other life sciences (7). In my appraisal, this missionary role will be essentially one of the main activities of the new Society, as it continues to be of the International Society of Biorheology and of the other international and national societies or groups pertaining to biorheology and its most active branch, viz., hemorheology.

In other words, the newly established North-American Society of Biorheology (NASB), which was founded during the Sixth International Congress of Biorheology, held at Vancouver, BC, Canada, and its members will need to make efforts to organize meetings or participate in meetings of other biological societies. In this way, they will act as missionaries or messengers of the science of biorheology as the missing link to most life sciences.

In our discussions, Shu Chien and I stressed that biorheological research in North America will need to involve biologists active in most other life sciences. It was mainly on this basis that a letter was signed by the following nine colleagues: Donald E. Brooks, Shu Chien, A.L. Copley, Y.C. (Bert) Fung, Harry L. Goldsmith, Joseph F. Gross, Herbert J. Meiselman, Geoffrey V.F. Seaman and Richard Skalak. It was sent one-and-a-half years ago to biorheologists in Canada and USA by Shu Chien with the result that more than seventy colleagues responded enthusiastically to this letter and its questionnaire regarding the formation of NASB. This consensus led Shu Chien to call a meeting, held on April 21, 1985 in Anaheim, CA. I was glad to make the journey for this historical event in our science and to participate in this meeting. A Steering Committee was formed there with Shu Chien as its Chairman. It had, in addition to the nine original signers, four more members, viz., Morton Friedman, Donald E. McMillan, Robert M. Nerem and Eugene Strandness. The Steering Committee was given the task to propose a constitution for the new Society. It was decided that the final foundation of NASB will be on July 31, 1986 during the Sixth International Congress of Biorheology at Vancouver.

I greatly appreciate Shu Chien's remarks in Anaheim last year and in Vancouver recently, in which he kindly emphasized the role I played in initiating the new Society which was named the North-American Society of Biorheology. As I had done at the Vancouver meeting, I should like to thank Shu Chien for his many efforts towards making the foundation of NASB a reality.

A Nominating Committee, consisting of Bert Fung, Harry Goldsmith and Richard Skalak, recommended a slate of officers, who were unanimously elected at the Vancouver meeting. The principal offi-

cers are: H.J. Meiselman (President), Donald McMillan (Secretary), H.H. Lipowski (Treasurer) and S.P. Sutera (President-Elect). A report about NASB by D.E. McMillan will be published in forthcoming issues of BIORHEOLOGY and CLINICAL HEMORHEOLOGY. I trust that the newly elected officers of NASB will carry the torch of the science of biorheology to the practitioners of many life sciences towards their advancement.

As I envisage it, in the years to come biorheology will be accorded the role it is predestined to play towards the advancement of most life sciences and of science in general. I trust that NASB, led by the International Society of Biorheology and also in concert with the growing number of continental and national biorheological societies and groups, will strive towards this goal.

Furthermore, I trust that NASB, like any other of the societies or groups, mentioned above or to be formed in the future, will recognize the International Society of Biorheology as its Parent Society. By this I also mean that NASB will not plan any conflicting meetings of its own during the year when the International Society of Biorheology has its Congress. This has been the practice of each of the biorheological societies or groups so far in existence. Of course, there would be the exception that such a possible conference will be held in association with the Parent Society.

Finally, some liaison, now in preparation, between the Parent Society and its related societies or groups, will need to be established to further the aims and scope of the science of biorheology. These efforts will have to be continued by the leadership of these societies or groups with the President of the International Society of Biorheology and its Council.

In the above mentioned letter, signed by nine North-American biorheologists, we stated the following: "It appears that the future trend would be such that most countries with a significant number of active investigators in biorheology will form their own national societies. The International Society of Biorheology may thus eventually evolve into a federation of these national socie-

ties." To this statement, I should like to add that it may well be expected that our International Society may become, possibly not in the distant future, an International Union of Pure and Applied Biorheology and thus join as a separate International Union, the other international unions in the life sciences. This is not a farfetched thought in my appraisal, since I contend that the science of biorheology is bound to grow and as an interdisciplinary science may become what is now the missing link between most life sciences (1).

I should like to emphasize that in 1969, during the Second International Conference on Hemorheology, held at the University of Heidelberg, our Society expanded to embrace all present and future fields of biorheology. This is reflected in the change of its name from the International Society of Hemorheology to the International Society of Biorheology. At that time, we also applied to the International Union of Pure and Applied Biophysics (IUPAB) to become associated with it. The IUPAB accepted the association of our Society as an Affiliated Commission only three years after our Society was formed during our congress at the University of Iceland. It was three years later that our Society began to take part in the International Biophysics Congresses of the IUPAB at the University of Moscow with a special "Symposium on Biorheology" with A.L. Copley and V.I. Vorob'ev as Chairmen (8).

The International Congress of Biophysics, held every three years, coincided with the International Congress of Biorheology. Alex Silberberg, our Society's liaison officer with the IUPAB, recommended, therefore, that the customary interval of three years between our congresses should be changed to that of two years in the case of our Fifth Congress at Baden-Baden, after which the original interval of three years was to be continued. What I should like to convey in referring to the above is, that the International Society of Biorheology thus respects the need that our Society's International Congresses do not conflict with those of the IUPAB. I believe, it should be imperative that no regional or national society of biorheology should have any international or national conferences in the years when the International Congresses of Biorheology will convene.

The newly elected chief officers of the International Society of Biorheology are Jean-François Stoltz of Nancy, France (President), Peter Gaehtgens of West Berlin, FRG (Secretary General) and Timothy Secomb of Tucson, Arizona, USA (Treasurer). The Seventh International Congress of Biorheology will be held at Nancy in 1989 and its President will be J.F. Stoltz. The names of the present members of the Council of the International Society will be published in forthcoming issues of BIORHEOLOGY and CLINICAL HEMORHEOLOGY.

These two official journals of the International Society of Biorheology will publish in forthcoming issues reports of meetings of the different biorheological societies or groups as well as the abstracts of communications presented at these meetings, whenever they will become available. Every effort will be made by the two Journals towards the advancement and diffusion of knowledge, contributing to the growth of the science of biorheology.

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