OXYGEN TRANSPORT TO TISSUE VII

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PREFACE

Since there are many different tissues and organs in the body, a study of oxygen transport to tissue necessarily involves a great diversity of bodily functions. Furthermore, these tissue functions can be approached from the viewpoint of several disciplines. Eventually, however, all of these approaches must be combined to arrive at a comprehensive picture. This multidisciplinary effort, though imperative, has been implemented slowly because traditional biological science has been largely organ- or discipline oriented. Initiatives to realize an effective international multidisciplinary collaboration have assumed increasing momentum for the past 20 years. These include meetings held in Bad Oeynhausen in 1965 (book in 1968, edited by D.W. Lübbers, U.C. Luft, G. Thews and E. Witzleb), in Nijmegen in 1968 (book in 1969, edited by F. Kreuzer), in Vancouver in 1970 (J. Strauss), and in Dortmund in 1971; this last was in connection with the 25th International Physiological Congress in Munich (book in 1973, edited by M. Kessler, D.F. Bruley, L.C. Clark, Jr., D.W. Lübbers, I.A. Silver and J. Strauss). This increasing international cooperation called for a more formal organization of these individual initiatives.

The credit for taking this decisive step goes to H.I. Bicher and D.F. Bruley from the U.S.A. and D.W. Lübbers and M. Kessler from Germany, who got together in 1972 to plan a large-scale international meeting and to organize an international society. The first meeting that originated from this combined effort was held in Clemson-Charleston, South Carolina, in 1973 (M.H. Knisely, D.F. Bruley, H.I. Bicher). Here the International Society on Oxygen Transport to Tissue (ISOTT) was founded and it was decided to convene yearly meetings alternating between the U,S.A. and Europe. The proceedings of this first ISOTT meeting were edited by H.I. Bicher and D.F. Bruley and published in two volumes in 1973 in the Advances in Experimental Medicine and Biology by Plenum Press which was to publish also all the following ISOTT volumes labeled by Roman numerals.

The next meeting in 1974 was organized by H.I. Bicher and incorporated into the FASEB program in Atlantic City; the abstracts were published in Federation Proceedings in the session on Oxygen

Transport to Tissue. The third meeting, which was the first in Europe, took place in Mainz in 1975 under the leadership of G. Thews, J. Grote and D.D. Reneau (book ISOTT-II, edited by J. Grote, D. Reneau and G. Thews). Yearly meetings followed: 1976 by B. Chance in Anaheim in conjunction with FASEB (two sessions on Oxygen Transport to Tissue in Federation Proceedings); 1977 in Cambridge, England, by I.A. Silver (book ISOTT-III, 1978, edited by I.A. Silver, M. Erecińska and H.I. Bicher); 1978 in Atlantic City again with FASEB (abstracts under code ISOTT in Federation Proceedings); 1979 in La Jolla by J. Strauss (abstracts); 1980 in Budapest as a Satellite Symposium of the 28th International Congress of Physiological Sciences by A.G.B. Kovách (book Vol. 25 of Advances in Physiological Sciences, 1981, edited by A.G.B. Kovách, E. Dóra, M. Kessler and I.A. Silver); 1981 in Detroit by H.I. Bicher (book ISOTT-IV, 1983, edited by H.I. Bicher and D.F. Bruley); 1982 in Dortmund by D.W. Lübbers (book ISOTT-V, 1984, edited by D.W. Lübbers, H. Acker, E. Leniger-Follert and T.K. Goldstick); 1983 in Ruston by D.F. Bruley (book ISOTT-VI, 1984, edited by D.F. Bruley, H.I. Bicher and D.D. Reneau).

After 12 years we are happy to report that ISOTT has prospered and has become a society of primary importance to workers in the broad field of oxygen transport to tissue. The meetings have united workers in physiology, biophysics, biochemistry, biology, anatomy, pharmacology, biomedical and chemical engineering, mathematics, clinical sciences, and industrial applications. A concerted effort has emerged in a multidisciplinary experimental, theoretical and clinical approach to the complex problems of oxygen transport to tissue. There were, at these meetings, regularly about 150 participants from all over the world, and the books of proceedings have included 100 or more papers in each volume. May an old student wish also hold for ISOTT: "Vivat, crescat, floreat"!

At the Nijmegen Meeting of 1984, we have tried to expand the scope of ISOTT somewhat by adding the topic of central gas exchange in the lungs so that the entire oxygen transport chain from ambient air to the mitochondria is covered. Our editorial practices have followed a middle course between rigorous reviewing and simple publishing the papers as submitted. Each paper was reviewed by at least one of the Editors, many by two, and a few by three of them, depending on the problems met. Reviewing concentrated on intelligibility, presentation and format whereas much liberty was granted with respect to the general message of the papers. Our main concern was on speed of publication, hopefully within one year after the Meeting. Because proceedings of a symposium often include works in progress, they are most helpful if published without too much delay. Discussions have been omitted because experience has shown that they often are rather arbitrary and of differing impact, and are often difficult to present in a consistent and useful way. The Book starts with five Minireviews covering important fields of oxygen transport to tissue. The other papers are arranged according to main topics or, in some cases are

grouped if they emanated from the same laboratory.

We wish to thank sincerely all the participants and contributors to the Nijmegen Meeting as well as the sponsors who are listed separately. The help of D.W. Lübbers and M. Kessler in preparing a short survey of the history of ISOTT is greatly appreciated. Our thanks are due to Mrs. Annemieke Minke for her secretarial help in the final preparation of the manuscripts.

F. Kreuzer
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T.K. Goldstick

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