

**Biochemistry
and Biophysics
of
Mitochondrial
Membranes**

BIOCHEMISTRY AND BIOPHYSICS OF MITOCHONDRIAL MEMBRANES

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OF MITOCHONDRIAL MEMBRANES

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PREFACE

The Symposium on Biochemistry and Biophysics of Mitochondrial Membranes held in June, 1971 in Bressanone, the Summer Headquarters of the University of Padova, follows an agreement between Italian "mitochondriacs" and their European colleagues to hold bioenergetics conferences alternately at sites in Northern and Southern Italy. Thus the Bressanone meeting is in a sense a continuation of the Bari meetings. Its organizers aimed to capture the enjoyable atmosphere and the scientific successes of the earlier conferences organized by the Bari-Amsterdam groups.

The Bari conferences originated at the beginning of a fruitful period in the history of mitochondrial research, that dealing with the transport of ionic metabolites across the membrane. It was at that time that the chemiosmotic mechanism began to make a tremendous impact on mitochondrial research. By reviewing five years of discussions of the Bari meetings, one may see quite clearly how much time and interest have been devoted to chemiosmotic energy transformations in mitochondria and to the possible role of electrical forces in affecting these transport processes across the mitochondrial membrane.

While this field has undergone considerable clarification, a new approach is now developing, namely the analysis of the structure of the mitochondrial membrane. This approach should eventually permit us to discuss the molecular mechanism of oxidative phosphorylation in terms of physical and organic chemistry. Several papers presented at the Bressanone conference were relevant to this new method of studying mitochondria.

We hope that the future Bressanone meetings will reflect our increasing understanding of the molecular structure of the energy-transducing membranes.

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Giovanni Felice Azzone
For the Editors

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