

Methods in Enzymology

Volume 126

Biomembranes

Part N

*Transport in Bacteria, Mitochondria, and
Chloroplasts:
Protonmotive Force*

EDITED BY

*Sidney Fleischer
Becca Fleischer*

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DEPARTMENT OF MOLECULAR BIOLOGY
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Preface

Volumes 125 and 126 of *Methods in Enzymology* initiate the transport volumes of the Biomembranes series. Biological transport represents a continuation of methodology for the study of membrane function, Volumes 96–98 having dealt with membrane biogenesis, assembly, targeting, and recycling.

This is a particularly good time to cover the topic of biological membrane transport because a strong conceptual basis for its understanding now exists. Membrane transport has been divided into five topics. Topic 1 is covered in Volumes 125 and 126. The remaining four topics will be covered in subsequent volumes of the Biomembranes series.

1. Transport in Bacteria, Mitochondria, and Chloroplasts
2. ATP-Driven Pumps and Related Transport
3. General Methodology of Cellular and Subcellular Transport
4. Cellular and Subcellular Transport: Eukaryotic (Nonepithelial) Cells
5. Cellular and Subcellular Transport: Epithelial Cells

We are fortunate to have the advice and good counsel of our Advisory Board. Additional valuable input to these volumes was obtained from many individuals. Special thanks go to Giovanna Ames, Angelo Azzi, Ernesto Carafoli, Hans Heldt, Lars Ernster, Peter Pedersen, Youssef Hatefi, Dieter Oesterhelt, Saul Roseman, and Thomas Wilson. The enthusiasm and cooperation of the participants have enriched and made these volumes possible. The friendly cooperation of the staff of Academic Press is gratefully acknowledged.

These volumes are dedicated to Professor Sidney Colowick, a dear friend and colleague, who died in 1985. We shall miss his wise counsel, encouragement, and friendship.

SIDNEY FLEISCHER
BECCA FLEISCHER

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EDITED BY

Sidney P. Colowick and Nathan O. Kaplan

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UNIVERSITY OF CALIFORNIA
AT SAN DIEGO
LA JOLLA, CALIFORNIA

- I. Preparation and Assay of Enzymes
- II. Preparation and Assay of Enzymes
- III. Preparation and Assay of Substrates
- IV. Special Techniques for the Enzymologist
- V. Preparation and Assay of Enzymes
- VI. Preparation and Assay of Enzymes (*Continued*)
 - Preparation and Assay of Substrates
 - Special Techniques
- VII. Cumulative Subject Index

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IV