

Series Editor's Preface

The Benchmark Books Publishing Program is a new and unique concept, a concept that has rapidly spread to myriad fields and which has already won wide acceptance. In essence, each volume contains reproductions of the original articles vital to the development of a particular field, or to a major concept within a field. When the publisher asked me to be Series Editor for the "Benchmark Papers in Human Physiology," I decided that I should not only encourage leaders in various subdisciplines of human physiology to prepare volumes but that I should undertake two myself. The two, *Homeostasis: Origins of the Concept*, and *Contraception*, were both published in 1973. The present volume, by Dr. Mary Wiedeman, will soon be followed by others, edited for example, by Hebbel Hoff, James Warren, Julius Comroe, T. H. Benzinger, Doris Merriitt, and S. M. Husain. In due time, then, this series will contain a collection of the most important original publications in the major areas of human physiology.

Dr. Mary Wiedeman has long been recognized as a leader in the field of microcirculation. She is also a superb writer. Recently she undertook to revise the classic textbook "Physiology and Anatomy," by Esther Greisheimer. In view of the fact that I authored a competing text, I know all too well how successful Dr. Wiedeman's revision is!

Microcirculation, in current jargon, is what it's all about. The rest of the circulatory system, and indeed the respiratory system too, are designed to deliver blood with an adequate oxygen load to the microcirculation, that is, to the capillaries, where blood-tissue fluid exchange occurs. This is where the action is, and therefore, knowledge of microcirculation is essential. In this volume, the classic, early papers are presented, beginning, quite logically, with William Harvey. The giant in the field, August Krogh, is accorded a separate section, and the volume concludes with the landmark papers that followed. Characteristically modest, Dr. Wiedeman includes but one of her own publications, a crisp, meaty article that provides essential data on the dimensions of these microvessels.

Microcirculation is a rapidly expanding field. A second volume will be needed in a few years.

L. L. Langley