

MICROSCOPIC ANATOMY OF VERTEBRATES

BY

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THIRD EDITION, THOROUGHLY REVISED
WITH 225 ILLUSTRATIONS

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HENRY KIMPTON
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PREFACE TO THE THIRD EDITION

THIS edition is presented, as was the second, to supply a working knowledge of vertebrate microscopic anatomy, based on selected representatives of the various classes, to supplement courses in comparative anatomy and embryology, and to provide a foundation for physiology and graduate work. In presenting the systems of each class, a general description is given and a common representative is described in smaller print except in the case of the mammals where only the general description is given. It is intended to avoid undue emphasis on human or mammalian material since this field is covered by a number of excellent histological texts prepared especially for medical and graduate students.

To the extent which time permits, the student should be encouraged to indulge in collateral reading of scientific journals to acquire information from original sources and to supplement text material which is all too brief in many instances. This reading should also give a better appreciation of the constantly changing applications, and interpretations of histological problems in relation to other fields; such as physiology, chemistry, and physics; and may counteract a common impression that textbooks alone are adequate for study. As an introduction to such reading, a limited number of references, mostly current, have been chosen from readily available journals and are listed for each chapter in an appendix. References to earlier contributions and other sources may be obtained from the bibliographies of these papers.

Experience continues to justify the belief that by actual preparation of histological slides the student acquires valuable practice in laboratory procedures and also a better understanding of the problems, limitations, and effects introduced by various procedures required to produce the preparations he studies. The chapter on technique presents briefly some of the essentials for understanding histological procedures and also a few standard methods for the

preparation of slides. Whenever practical, observations should be made on living tissues for comparison or contrast with conditions later observed in the fixed and stained preparations of the same or similar material.

I wish to extend my thanks to my colleagues and students for their helpful suggestions.

J. K.

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