

ATLAS OF HUMAN HISTOLOGY

DI FIORE

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AN ATLAS OF HUMAN HISTOLOGY

99 ORIGINAL COLOR PLATES

156 FIGURES

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FOREWORD

The medical student is frequently left on his own to pursue his studies. In some schools the instructor purposely employs such a procedure to develop initiative and self-reliance in the student. In other schools the marked growth in medical education has produced a shortage of personnel to meet instructional needs in the basic medical sciences. It is with these thoughts in mind that Dr. Di Fiore's ATLAS OF HUMAN HISTOLOGY is presented by the publisher as a right hand to the student receiving initial instruction in histology and to the instructor as an aid in conserving his time.

The illustrations are designed as composite drawings of what may be seen by the student only after a study of several slides. This is done for the pure didactic purpose of reducing the number of illustrations necessary for study, and to curtail the cost of publication. The illustrations are designed to cover the *principles of histology* clearly and concisely. They are not intended to present the student with a bewildering array of every last item known to the professional histologist.

It is felt that Dr. Di Fiore's ATLAS offers an admirable reference work for the student, with a minimum of words and a maximum of clarity. It is not intended to supplant a textbook of histology but rather to stand as a supplementary text.

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ABBREVIATIONS ON PLATES

h. s. — horizontal section
l. s. — longitudinal section
o. s. — oblique section
tg. s. — tangential section
t. s. — transverse section
v. s. — vertical section

PLATE 1

OÖCYTE IN A DEVELOPING OVARIAN FOLLICLE

In the center of the plate is a large cell, the female germ cell (2), limited by the cell membrane or oölemma (1). The cytoplasm (2) is granular and shows clear areas alternating irregularly with areas stained more or less intensely pink. The nucleus (3) is spherical and placed eccentrically; it is surrounded by the nuclear membrane (8) and contains nucleoplasm, clumps of chromatin, and the spherical, acidophilic nucleolus (9).

Surrounding this large cell is a prominent pink band; this band is termed the zona pellucida (unlabelled), as it is a clear area in living tissue. Radiating from the zona pellucida are several layers of cells, collectively termed the corona radiata (4, 7). The corona radiata is, in turn, surrounded by the spindle-shaped connective tissue cells composing the follicular theca (6).

A cell in the process of mitosis is shown (10); its chromosomes are in the equatorial plate (metaphase). A blood capillary (11) is seen between the cells of the inner theca. Follicular fluid (5) surrounds the cells of the follicular epithelium.