

Fish Histology

From Cells to Organs

This new volume, **Fish Histology: From Cells to Organs**, provides up-to-date information that emphasizes the relationships and concepts by which cell and tissue structures of fish are inextricably linked with their function. The book also describes the most recent development in the sciences of fish histology.

Histology is the discipline of biology that involves the microscopic examination of tissue sections in order to study their structure and correlate it with function. Histology can detect signs of disease not easily recognized on gross examination and can therefore be of interest in fish health supervision. With fish constituting nearly 60% of all vertebrate species and of major worldwide economic importance as a food source, the information presented here will be valuable.

The volume begins with a concise introduction into the histological techniques for fish sampling, followed by an accurate up-to-date description of fish tissues. A chapter is devoted to each organ and organ systems in the fish body as well. In addition, the book includes particular diagrams to illustrate the structure of organs and to enhance the usefulness of the text.

Key features:

- covers the normal histology of six fish species: Nile tilapia (*Oreochromis niloticus*), Nile catfish (*Clarias gariepinus*), grass carp (*Ctenopharyngodon idella*), guppy (*Poecilia reticulata*), molly (*Poecilia sphenops*), and red tail shark (*Epalzeorhynchus bicolor*)
- provides detailed information on the histology of all organs of teleosts
- explores the cells at electron microscopic levels
- highlights advances, trends, and applications in the modern histological techniques and tissue preparation
- focuses on reproductive organs to create new knowledge on reproductive biology
- includes 130 original photomicrographs, tables, updated terminology, and expanded information, with over 100 in color

ABOUT THE AUTHOR

Doaa M. Mokhtar, PhD, is an Associate Professor in the Department of Anatomy and Histology, Faculty of Veterinary Medicine, at Assiut University, in Egypt. She is an Editor with the *American Journal of Life Science Research* as well as a reviewer for several journals, including the *International Journal of Molecular Zoology*, the *Journal of Microscopy and Ultrastructure*, and the *British Journal of Medicine and Medical Research*. Dr. Mokhtar is a member of the Egyptian Society of Histology and Cytology and has published over 20 international publications in the field of fish and others. She teaches undergraduate and postgraduate courses on cytology, general histology of domestic animals, histology of the body systems, histology of avian, and histology of fish.

AAP | APPLE
ACADEMIC
PRESS

www.appleacademicpress.com

ISBN: 978-1-77188-589-8



9 781771 885898