

Practical Histology WORKBOOK

Third
Edition

follows the sixth edition of GARG/RATH/CHANDRA: *Textbook of Histology* (CBSPD), which has been thoroughly revised and updated including substantial addition of *viva voce* questions and answers in all the chapters.

Many of the diagrams in the *Workbook* have been redrawn and greatly improved to match with those in the *Textbook*. This step would provide ideal orientation to the students for better diagnosis and prognosis of the histopathological tissues during their clinical years of study.

As everyone knows, *histology* forms the basis of *histopathology*, which in turn is the backbone of medical and surgical diagnosis and treatment. Therefore, correct and proper knowledge of histology is need of the hour for every MBBS student, and the budding future clinician.

Krishna Garg MBBS MS PhD FIMSA FIAMS FAMS FASI is ex-Professor and Head, Department of Anatomy, Lady Hardinge Medical College (LHMC), New Delhi, where she completed her MS and PhD and taught anatomy including histology till her retirement.



She is chief editor of *BD Chaurasia's Human Anatomy 9/e (Vols 1-4)*; editor of *BD Chaurasia's Human Anatomy for Dental Students 5/e*, *BDC Handbook of General Anatomy 7/e*, *BD Charurasia's Applied Anatomy and Physiology for BSc Nursing Students*; author of *Human Anatomy and Physiology: Practical Workbook*; co-author of *Manual of Human Anatomy Dissection: Textbook of Histology 6/e*, *Textbook of Neuroanatomy 6/e*, *Practical Anatomy Workbook* and *Practical Anatomy Workbook for Dental Students*. She has 52 scientific publications and has received awards from Delhi Medical Association.

Shilpa Garg MBBS, MD is a board certified physician in family practice and hospice and palliative medicine. She is the medical director of the home-based primary care program at Wilmington Veterans Affairs Medical Center in Delaware, USA, providing care to elderly veterans with complex medical problems and psychosocial issues.



She also has a strong interest and passion in holistic medicine and has completed a 1000 hours training in sky breathing and meditation through the Art of Living Foundation which is a non-profit organization. She is involved in organizing power breath meditation workshops for the veterans in Delaware and meditation sessions for staff wellness.



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ISBN: 978-93-5466-611-7



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Practical Histology WORKBOOK

Krishna Garg
Shilpa Garg

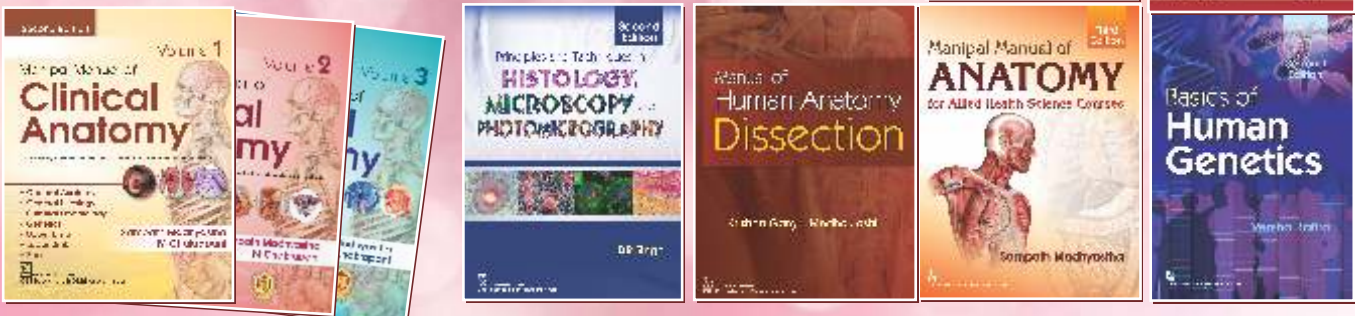
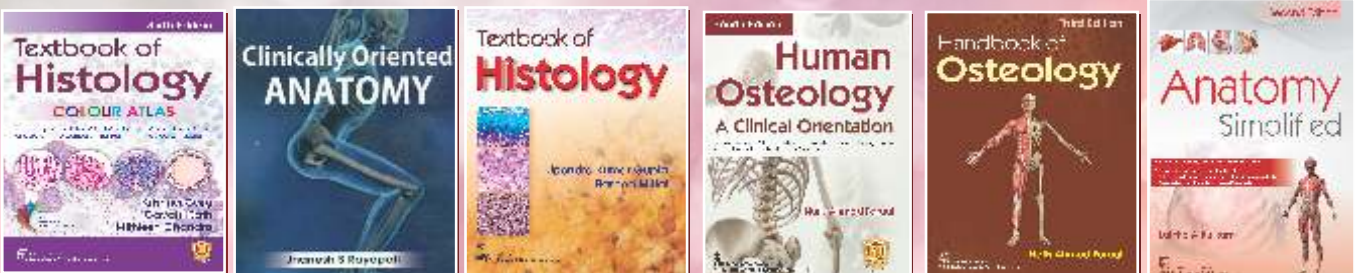
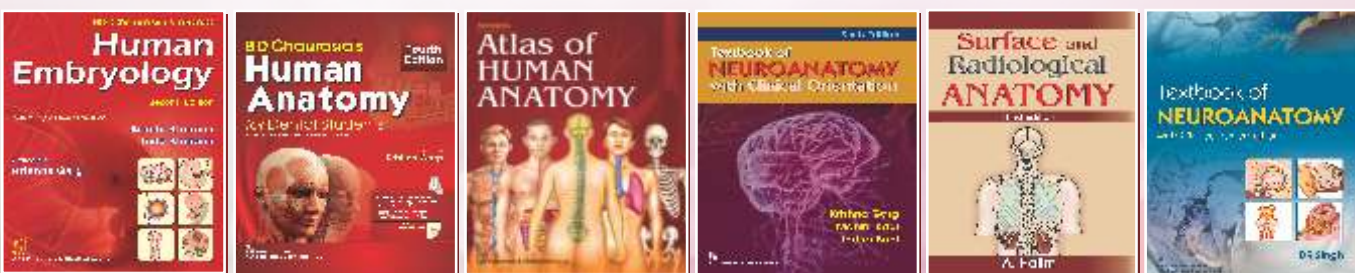
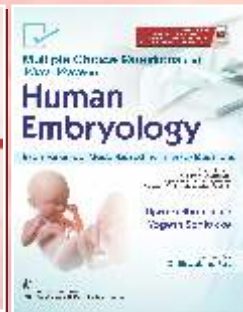
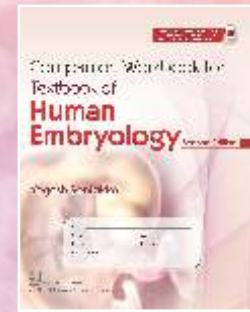
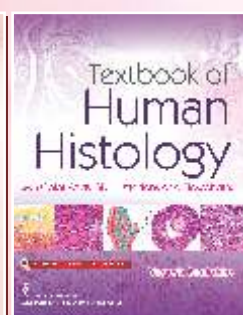
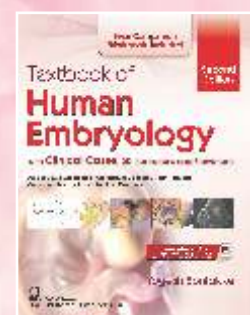
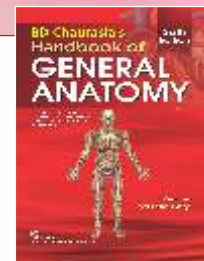
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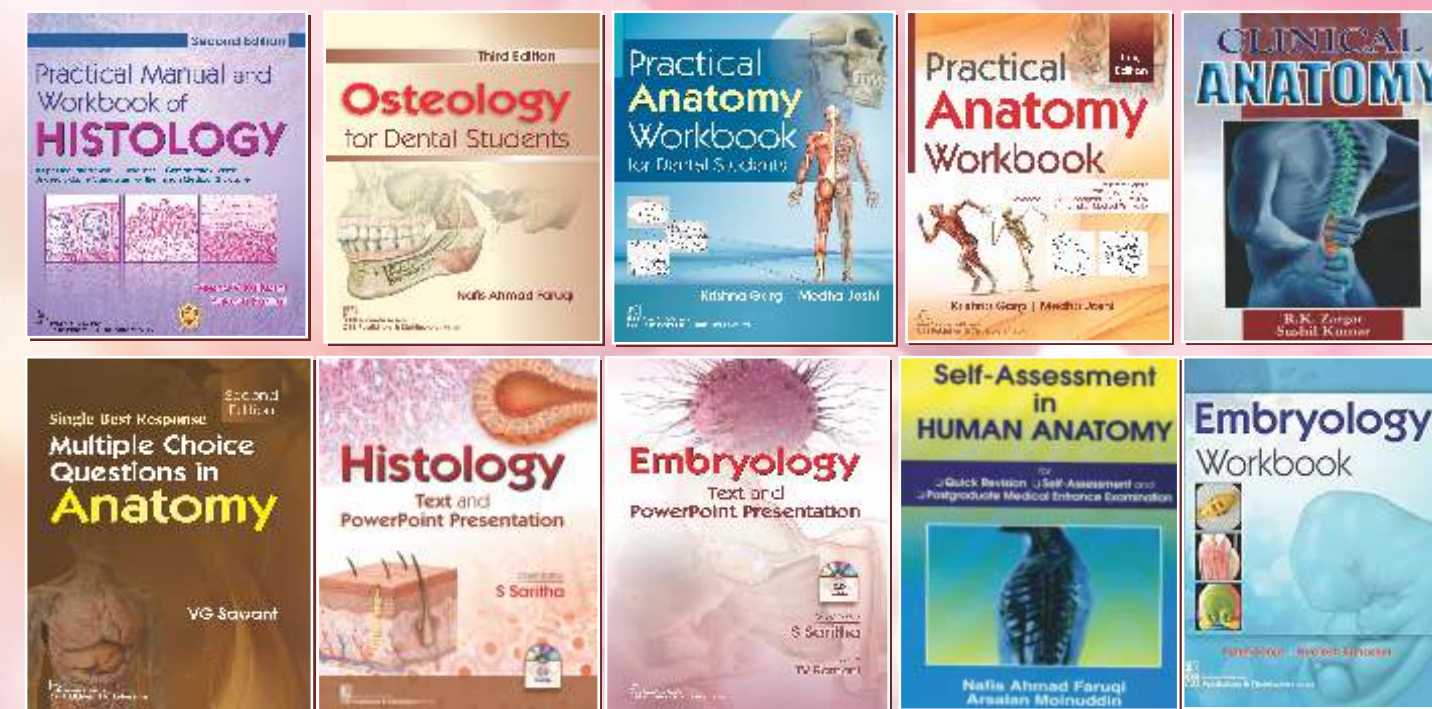


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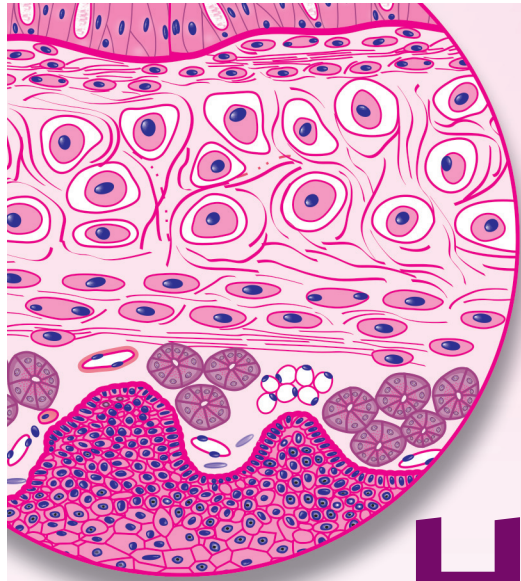


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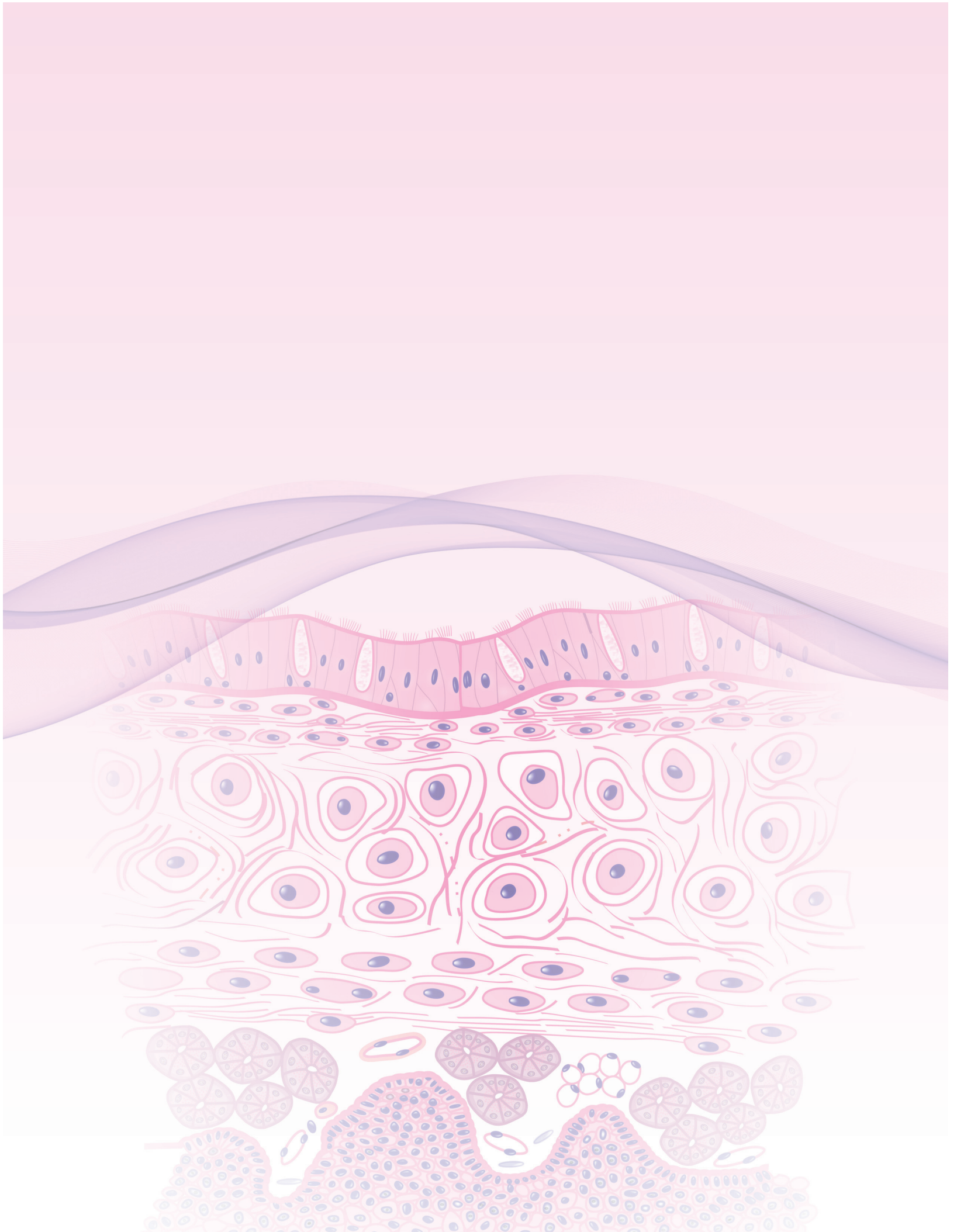
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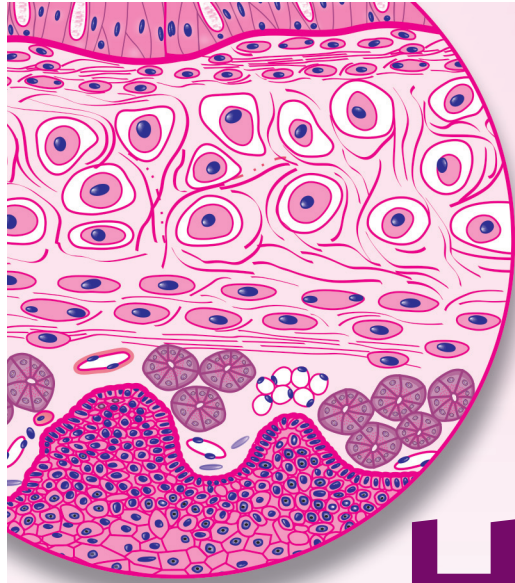
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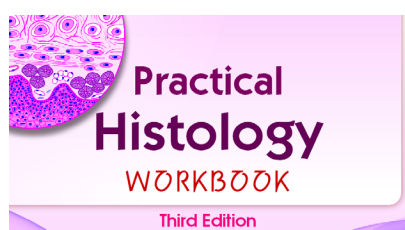


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ISBN: 978-93-5466-611-7

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Third Edition: 2024

First Edition: 2014

Second Edition: 2016

Revised Second Edition: 2017

Reprint: 2018, 2020

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Published by Satish Kumar Jain and produced by Varun Jain for

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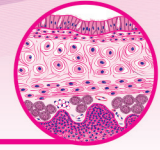
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Preface to the Third Edition

As the sixth edition of *Textbook of Histology* been published, the **Practical Histology Workbook** has also been modified to match the content and diagrams of the new edition. Many of the diagrams have been improved substantially.

We are obliged to Dr Hitant Vohra, Dr Ambika Wadhwa, Dr Anu Sharma, Dr Sanjana, Dr Sherry Sharma and Dr Vanita Gupta for helping us both in the textbook and practical workbook.

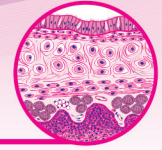
We are grateful to Dr Sunanda Raina, Dr Nusart Jabeen, Dr Anupama Mahajan, Dr Ravi Kant Sharma, Rajan Singla, Dr Poonam, Dr Anjali Jain, Dr Aprajita Sikka and Dr Mubeen for supporting this workbook.

Diagrams must be drawn with lilac and violet pencils from Faber-Castell or Aspara brands. These pencils give the same coloration as haematoxylin and eosin staining.

Our heartfelt thanks are to Mr SK Jain CMD, Mr YN Arjuna Senior Vice President—Publishing, Editorial and Publicity, and Ms Ritu Chawla General Manager—Production, and for encouraging and helping us all the time; and Mr Sanjay Chauhan graphic artist and Mr Dinesh Chandra Arya DTP operator for preparing excellent graphics and superb formatting.

Suggestions for further improvement in the workbook may please be sent at email: dr.krishnagarg@gmail.com

Krishna Garg
Shilpa Garg



Preface to the First Edition

Practical Histology Workbook would make practicals easy. Introduction to the chapter and a few points about the tissue, including its black and white diagram, is provided on the left-hand side page. The right-hand side page represents the student's page. The histology of tissue, as seen through the microscope, is to be drawn using colours representing haematoxylin and eosin stains. The three key points of identification of each figure are to be written in the space provided. Stains which colour the slides accentuate the subtle differences between normal and abnormal cells and tissues. Thus these are vital for correct diagnosis and proper treatment.

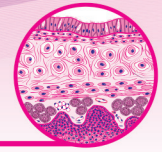
Key to identification of histological slides given in Chapter 20 provides a quick way towards achieving the goal.

Lack of space for any additional text or diagram has been compensated by blank space labelled 'Notes' with a few chapters and two blank pages labelled 'Additional figures/notes' at the end of some chapters.

Histology teaches the microscopic structure of normal tissues so that any abnormality occurring due to disease process may be diagnosed during the later period of studies and practice.

We are indebted to Dr Medha Joshi for always lending a helping hand. We are extremely thankful to Mr SK Jain CMD; Mr YN Arjuna Senior Vice-President—Publishing, Editorial and Promotion; Ms Ritu Chawla, AGM—Production; and other supporting staff of CBSP&D, for their help and guidance in completing this work.

Krishna Garg
Shilpa Garg



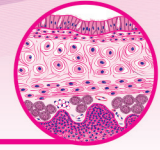
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AN71.2	Identify cartilage under the microscope and describe various types and structure–function correlation of the same.	4
AN43.2	Identify, describe and draw microanatomy of epiglottis.	4
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AN67.1	Describe and identify various types of muscle under the microscope.	5
AN67.2	Classify muscle and describe the structure–function correlation of the same.	5
AN68.1	Describe and identify multipolar and unipolar neuron, ganglia, peripheral nerve.	6
AN68.2	Describe the structure–function correlation of neuron.	6
AN69.1	Identify elastic and muscular blood vessels, capillaries under the microscope.	7
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AN70.1	Identify exocrine gland under the microscope and distinguish between serous, mucous and mixed acini.	9
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(Contd.)

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