



Second Edition

Second Edition

Textbook of Human Histology

COLOR Atlas, Hand-drawn Illustrations and Flowcharts With Functional Correlation

Highlights of the book

- A complete textbook on the subject for undergraduate students
- Rewritten to fulfil requirements of the **Competency Based Undergraduate Curriculum for the Indian Medical Graduate**.
- **Functional Histology** concept to form foundation for understanding the concepts of histopathology.
- **Concise text** for quick recapitulation during examination.
- **400 plus Figures with 200 plus three-dimensional illustrations** to support the text for easy understanding.
- **120 plus Photomicrographs** help to identify the microscopic structures.
- **100 plus Practice figures (H&E pencil drawings)** are easy to draw for written assessments.
- **Clinical correlation** orients toward pathogenesis of diseases (vertical integration).
- **130 plus Flowcharts** help for rapid revision and memorizing the microanatomy.
- **Summary (examination guide)** to overcome the difficulty of summarizing the facts in written assessments.
- **NExT, Identification feature, MCQ, Viva voce and Clinical fact** markings for preparation of various upcoming academic entrance examinations.
- **Tables** to summarize essential facts.
- **Boxes and Some interesting facts** to isolate the key material from the main text.
- **Special topics** such as uterine cervix, sections of spinal cord at different levels, placenta, umbilical cord, cochlea, are included as per the requirements of CBME curriculum.
- QR codes for **eSmartQuiz - Online MCQ test** of each chapter for self-assessment.

Yogesh Sontakke MBBS, MD (Anatomy)

is currently Additional Professor, Department of Anatomy, Jawaharlal Institute of Postgraduate Medical Education & Research (JIPMER), Puducherry, an Institution of National Importance under the Ministry of Health & Family Welfare, Government of India. He is a compassionate teacher and admired by the students for chalk-n-board teaching. He is also a leading medical illustrator and known for stunning illustrations in anatomy. His constant perseverance, dedication and passion towards the field of teaching is reflected in his well-read books: *Textbook of Human Anatomy Vols. 1-6*, *Textbook of Human Embryology 2/e*, *Principles of Clinical Genetics 2/e*, *MCQs and Viva Voce in Human Embryology*, *MCQs and Viva Voce in Human Histology*, *Principles of Scientific Writing*, and *Principles of Histological Techniques, Immunohistochemistry and Microscopy*.



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Yogesh Sontakke



CBS Publishers & Distributors Pvt Ltd
4819/XI, Prahlad Street, 24 Ansari Road, Daryaganj, New Delhi 110 002, India
E-mail: delhi@cbspd.com, customercare@cbspd.com; Website: www.cbspd.com
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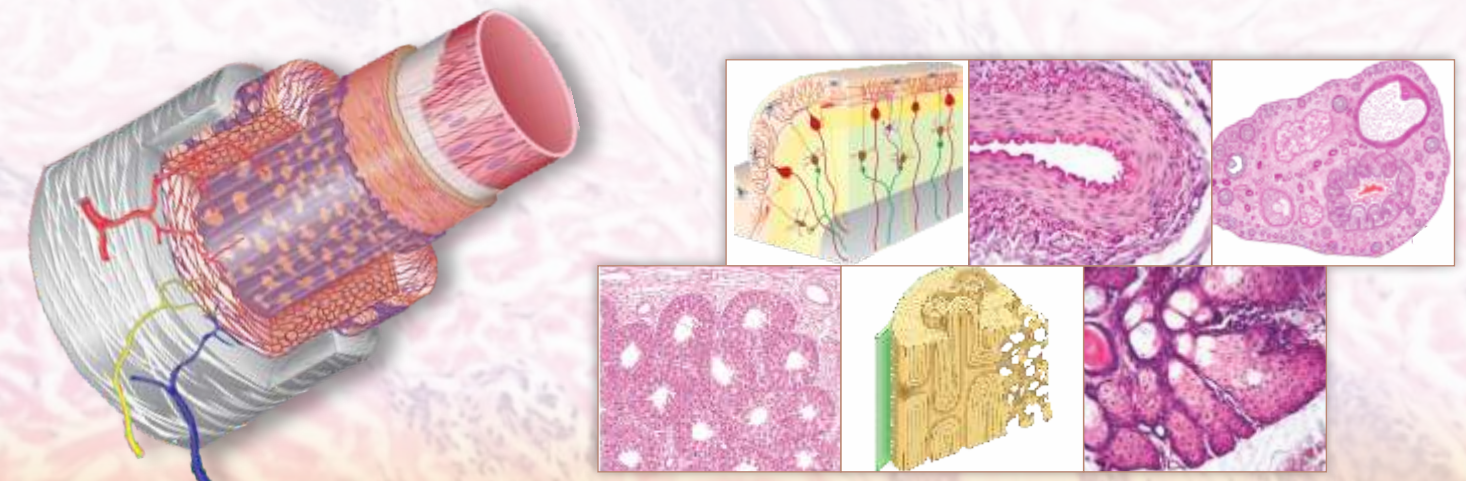
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Yogesh Ashok Sontakke MBBS MD

Additional Professor
Department of Anatomy

Jawaharlal Institute of Postgraduate Medical Education and Research (JIPMER)
(An Institute of National Importance under the Ministry of Health and Family Welfare, Government of India)
Puducherry, India

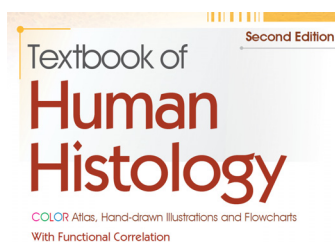


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4819/XI Prahlad Street, 24 Ansari Road, Daryaganj, New Delhi 110 002, India

Ph: 011-23289259, 23266861

Website: www.cbspd.com

e-mail: delhi@cbspd.com

Corporate Office: 204 FIE, Industrial Area, Patparganj, Delhi 110 092, India

Ph: 0114934 4934

Fax: 011-4934 4935

e-mail: publishing@cbspd.com; publicity@cbspd.com

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Preface to the Second Edition

Concepts of medical field are changing from theoretical knowledge to the practical utility of the subject. Similarly, for the histology learning, a Competency Based Undergraduate Curriculum for Indian Medical Graduate has focused on functional correlation of microscopic structures. This second edition's *Textbook of Human Histology* has been modified to uplift the concept of **Functional Histology**. It will help in foundation for histopathology. It will also help in horizontal and vertical integrations of knowledge.

This textbook is featured to provide the following help to the learner:

For Conceptual Histology

- **Concise text** for quick recapitulation during examination.
- **Functional correlation** for strengthen foundation of the subject.
- **400 plus figures with 200 plus three-dimensional illustrations** to support the text for easy understanding.
- **Clinical correlation** orients toward pathogenesis of diseases (vertical integration).

For Practical Examinations

- **120 plus photomicrographs** help identify the microscopic structures during practical examination.
- **100 plus practice figures (H&E pencil drawings)** are easy to draw for written assessments.
- **'Identification feature'** markings for supporting practical identification of microscopic structure.

For Theory and Entrance Examinations

- **130 plus flowcharts** help for rapid revision that helps in memorizing the microanatomy.
- **Summary (examination guide)** to overcome the difficulty of summarizing the facts in written assessments.
- **NEXT, MCQ, viva voce, and clinical fact** markings for preparation of various upcoming academic entrance examinations.
- **Tables** to summarize essential facts.

Additional Topics

- **Boxes** to focus on important topics.
- **Some interesting facts** to isolate them from main text, so that these facts should not be missed.
- **Special topics** such as uterine cervix, sections of spinal coded at different levels, placenta, umbilical cord, eye, and ear are included as per need of CBME curriculum.

Students are suggested to read the book in the following sequence:

Text → Flowchart → Summary (examination guide) → Draw practice figures in log book.

Any suggestions from the reader for rectification and improvement are welcome.

Yogesh Ashok Sontakke
dryogeshas@gmail.com

Preface to the First Edition

This *Textbook of Human Histology* has been written to fulfill the requirements of students and teachers as per *Competency Based Undergraduate Curriculum for Indian Medical Graduate*.*

As per new curriculum, histology learning involves

- Knowledge (K) and skill (S) learning domains
- Knows (K) and knows how (KH) levels of competencies as per Miller's pyramid[#]

Most of the histology topics are in the core level of competency (must know). Only few topics are in non-core levels of competency (nice to know / desirable to know) such as cardioesophageal junction, corpus luteum, olfactory epithelium, eyelid, lip, sclerocorneal junction, optic nerve, cochlea, organ of Corti, pineal gland, and ultrastructure of muscular tissue, nervous tissue, epithelium, and connective tissue. The histology-related competencies should be taught with lectures and practical classes. Assessment methods for histology competencies involve written examination and skill assessment to identify the given slide with interpretation. Various topics of histology need horizontal integration with physiology and vertical integration with pathology.

To fulfill above requirements, this textbook is provided with the following features:

- **Concise text with functional correlation** for quick recapitulation during examination (*horizontal integration*).
- **117 Photomicrographs** help to identify the microscopic structures.
- **122 Flowcharts** help to revise and memorize the microanatomy.
- **106 Practice figures (H&E pencil drawings)** are easy to draw for *written assessments*.
- **175 Three-dimensional illustrations** provide a visual grasp and easier retention of difficult concepts.
- **Summary (examination guide)** to overcome the difficulty of summarizing the facts in *written assessments*.
- **Identification feature** markings focus readers on specific points (for knows, knows how levels of competencies).
- **Neet, MCQ, Viva voce, and Clinical fact** markings for preparation of various upcoming academic entrance examinations.
- **Tables** to summarize essential facts.
- **Boxes** to focus on important topics.
- **Some interesting facts** to isolate them from main text, so that these facts should not be missed.
- **Clinical correlation** orient toward pathogenesis of diseases (*vertical integration*).

Students are suggested to read the book in the following sequence:

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*Medical Council of India, Competency Based Undergraduate Curriculum for the Indian Medical Graduate, 2018; Vol 1:pg 41–80.

[#]Miller GE. The assessment of clinical skills/competence/performance. Acad Med. 1990;65(9 Suppl):S63–7.

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- **Dr Beena Nambiar** Professor and Head, Government Medical College, Pariyaram, Kannur, Kerala

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- **Dr Mehendi V Mahajan** Professor, Sri Muthukumaran Medical College Hospital and Research Institute, Chennai
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- **Dr Nusrat Jabeen** Professor, Government Medical College, Jammu, J&K
- **Dr P Bapuji** Professor and Head, Alluri Sitaramaraju Academy of Medical Sciences, Eluru, AP
- **Dr PK Ramakrishnan** Professor and Head, PK Das Institute of Medical Sciences, Palakkad, Kerala
- **Dr PP Kulkarni** Professor, Prakash Institute of Medical Science and Research, Islampur, MH
- **Dr Pankaj Maheria** Professor and Head, GMERS Medical College, Valsad, GJ
- **Dr Patil Shrish** Professor and Head, Basaveshwara Medical College and Hospital, Chitradurga, Karnataka
- **Dr PG Khanwalkar** Professor and Head, Shyam Shah Medical College, Rewa, MP
- **Dr Poonam Delmotra** Professor and Head, Aadesh Medical College and Hospital, Shahbad, Haryana
- **Dr Prabhakaran K** Professor and Head, Nootan Medical College, Ahmedabad, Gujarat
- **Dr Prafulla Pralhadrao Nikam** Professor and Head, Raipur Institute of Medical Sciences, Raipur, Chhattisgarh
- **Dr Prajakta Kishve** Professor and Head, Employees State Insurance Corporation Medical College, Hyderabad, Telangana
- **Dr Prakash Baburao Hosmani** Professor and Head, Dr VM Government Medical College, Solapur, MH
- **Dr Prakash KG** Professor and Head, Geetanjali Medical College and Hospital, Udaipur, RJ
- **Dr Prasanna MB** Professor and Head, Government Medical College, Ernakulam, Kerala
- **Dr Praveen B Iyer** Additional Professor, Seth GS Medical College, Mumbai
- **Dr Praveen Singh** Professor and Head, Pramukhswami Medical College, Karamsad, GJ
- **Dr Prerna Gupta** Professor and Head, TS Mishra Medical College and Hospital, Amausi, Lucknow, UP
- **Dr Priti Sinha** Professor and Head, Sheikhul-Hind-Maualan-Mehmood Government Medical College, Saharanpur, UP
- **Dr Priya Ranganath** Professor and Head, Bangalore Medical College, Bengaluru
- **Dr R Manoranjitham** Professor and Head, Dhanalakshmi Srinivasan Medical College and Hospital, Perambalur, TN
- **Dr RS Bulagouda** Professor and Head, Shri BM Patil Medical College Hospital and Research Centre BLDE (Deemed to be University), Vijayapura, Karnataka
- **Dr Rajendra Prasad** Professor and Head, Anugrah Narayan Magadh Medical College, Gaya, Bihar
- **Dr Rajendrakumar D Virupaxi** Professor, JN Medical College, Belagavi, Karnataka
- **Dr Rajesh Arora** Professor and Head, Rajasthan University of Health Sciences Medical College, Jaipur, Rajasthan
- **Dr Rajkumar KR** Professor and Head, Gulbarga Institute of Medical Sciences, Gulbarga, Karnataka
- **Dr Rajlaxmi Panda** Professor and Head, MKCG Medical College, Berhampur, Odisha
- **Dr Rakesh Kumar Verma** Additional Professor, KGMU, Lucknow, UP
- **Dr Rakesh Mishra** Reader and Head, Sardar Patel Postgraduate Institute of Dental and Medical Sciences, Lucknow, UP
- **Dr Ramprakash Busar** Professor and Head, Mahatma Gandhi University of Medical Sciences and Technology, Jaipur, Rajasthan
- **Dr Randhir S Chauhan** Professor and Head, Maharishi Markendeshwar Medical College, Solan, HP
- **Dr Rashmi Deopujari** Professor and Head, ABV Medical College, Vidisha, MP
- **Dr Rashmi Malhotra** Additional Professor, All India Institute of Medical Sciences, Rishikesh, Uttarakhand
- **Dr Rashmi Prasad** Professor and Head, Vardhman Institute of Medical Sciences, Pawapuri, Nalanda, Bihar
- **Dr Rashmoni Jana** Professor, Vardhman Mahavir Medical College and Safdarjung Hospital, Delhi
- **Dr Ravi Kant** Professor and Head, Government Medical College, Amritsar, Punjab
- **Dr Renuka Ahankari** Professor, Smt. Kashibai Navale Medical College and General Hospital, Pune, MH
- **Dr Raviendra Marathe** Professor and Head, RR Kambe Dental College, Akola, MH
- **Dr Ritesh Shah** Professor, GCS Medical College, Ahmadabad, GJ
- **Dr Rohini Karambelkar** Professor and Head, Prakash Institute of Medical Science, Islampur, MH
- **Dr Romi S** Professor and Head of the Department, Government TD Medical College, Alappuzha, Kerala
- **Dr Rupa Chaparrwal** Professor, Sri Aurobindo Medical College and Postgraduate Institute, Indore, MP
- **Dr SK Chavan** Professor, Maharashtra Institute of Medical Education and Research, Pune, MH
- **Dr SM Belsare** Professor, MIMER Medical College, Talgaon, Pune, MH
- **Dr S Muralidhar Reddy** Professor and Head, NRI Medical College, Mangalagiri, AP
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- **Dr SS Saiyad** Professor and Head, Dr ND Desai Faculty of Medical Science, Nadiad, GJ
- **Dr Sandhya Kurup** Professor and Head, MOSC Medical College, Kolanchery, Kerala
- **Dr Sangeeta Gupta** Professor and Head, Government Medical College, Jammu, J&K
- **Dr Sangeeta M** Professor and Head, MVJ Medical College and Research Hospital, Bengaluru
- **Dr Sanjeev Kolagi** Professor and Head, S. Nijalingappa Medical College and HSK Hospital and Research Centre, Bagalkot, Karnataka
- **Dr Santhini Arulselvi** Professor and Head, Vinayaka Missions Medical College and Hospital, Karaikal, Puducherry
- **Dr Saritha S** Professor and Head, Kamineni Academy of Medical Sciences and Research Center, Hyderabad, Telangana
- **Dr Satheesha KS** Professor, Srinivas Institute of Medical Sciences and Research Center, Mangaluru, Karnataka
- **Dr Savithri Krishnan** Former Professor and Head, Government Medical College, Kollam, Kerala
- **Dr Seema Sharma** Professor and Head, Government Medical College and Associated Hospital, Rajouri, J&K
- **Dr Shashi Munjal** Professor and Head, GBCM, Jhajra, Dehradun, UK
- **Dr Sheela Sivan** Professor and Head, MES Medical College, Perinthalmanna, Malappuram, Kerala
- **Dr Seema SR** Professor and Head, ESI Postgraduate Institute of Medical Sciences and Research, Bengaluru

- **Dr Shema Nair** Professor, LN Medical College, Bhopal, MP
- **Dr Shilpa Bhimalli** Professor and Head, JN Medical College, Belagavi, Karnataka
- **Dr Shaifaly Madan Rustagi** Professor and Head, Army Medical College, Delhi
- **Dr Shailaja Shetty** Professor and Head, Department of Anatomy, MS Ramaiah Medical College, Bengaluru, Karnataka
- **Dr Shashi Munjal** Professor and Head, Shri Guru Ram Rai Institute of Medical and Health Sciences, Dehradun, UK
- **Dr Sherry Sharma** Professor, Punjab Institute of Medical Sciences, Jalandhar, Punjab
- **Dr Shobha Ramnarayan** Professor and Head, Malankara Orthodox Syrian Church Medical Mission Hospital, Kolenchery, Ernakulum, Kerala
- **Dr Shruthi BN** Professor and Head, Raja Rajeshwari Medical College, Bengaluru
- **Dr Simmi Soni** Professor, Dr VRK Womens Medical College, Aziznagar, Telangana
- **Dr Smruti Rekha Mohanty** Professor and Head, KIMS, Bhubaneswar, Odisha
- **Dr Subhash K Deshpande** Professor, SDM Medical College, Dharwad, Karnataka
- **Dr Suchetra Chaudhary** Professor and Head, BJ Medical College and Hospital, Ahmadabad, Gujarat
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- **Dr T Sreekanth** Professor and Head, Shadan Institute of Medical Sciences, Research Centre and Teaching Hospital, Peerancheru, Telangana
- **Dr Tapan Kumar Jana** Professor and Head, Murshidabad Medical College and Hospitals, Murshidabad, WB
- **Dr Tarkeshwar Golghate** Professor and Head, Government Medical College, Chandrapur, MS
- **Dr TC Singel** Professor, Zyudus Medical College and Hospital, Dahod, GJ
- **Dr V Anandhi** Professor and Head, K P Viswanathan Government Medical College, Trichy, TN
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- **Dr V Ravi Kumar** Professor and Head, Subbaiah Institute of Medical Sciences, Shimoga, Karnataka
- **Dr V Subhashini** Professor and Head, GSL Medical, College, Rajahmundry, AP
- **Dr Vaishali Inamdar** Professor and Head, Dr Shankarrao Chavan Government Medical College and Hospital, Nanded, MH
- **Dr Vandana Mehta** Director and Professor, Vardhman Mahavir Medical College and Safdarjung Hospital, New Delhi
- **Dr Vanita Gupta** Professor and Head, Acharya Shri Chander College of Medical Sciences, Jammu, J&K
- **Dr Varsha Mokhasi** Professor and Head, Vydehi Institute of Medical Sciences and Research Centre, Bengaluru
- **Dr Vasant Vaniya** Professor, Medical College and SSG Hospital, Vadodra, GJ
- **Dr Venkateshwar Reddy** Professor and Head, SVS Medical College, Mehboobnagar, Telangana
- **Dr Vijayamma KN** Professor, Belivers Medical College, Kottayam, Former Professor and Head, Kottayam Medical College, Kerala
- **Dr Vijisha Phalgunan** Professor and Head, Sri Lakshmi Narayana Institute of Medical Sciences, Pondicherry
- **Dr Vinay G** Associate Professor, AIIMS, Guwahati
- **Dr Vineet Gohiya** Professor and Head, Government Medical College, Khandwa, MP
- **Late Dr Vinnakota Sunitha** Former Professor and Head, Maharajah's Institute of Medical Science, Vizianagaram, AP
- **Dr Vinodini** Professor and Head, Gandhi Medical College, Secunderabad, Telangana
- **Dr X Chandra Philip** Professor and Head, Mahatma Gandhi Medical College and Research Institute, Puducherry
- **Dr Prashant Chaware** Associate Professor, All India Institute of Medical Sciences, Bhopal, MP
- **Dr Sumit Patil** Associate Professor, All India Institute of Medical Sciences, Bhopal, MP
- **Dr Rohini Motwani** Associate Professor, All India Institute of Medical Sciences, Bibinagar, Hyderabad, Telangana
- **Dr Sonali** Associate Professor, All India Institute of Medical Sciences, Jodhpur, Rajasthan
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- **Dr Anwar Unisa Sabry** Associate Professor, Chalmeda Anand Rao Institute of Medical Sciences, Karimnagar, Telangana
- **Dr Aparna Muraleedharan** Associate Professor, Puducherry Institute of Medical Sciences and Research, Puducherry
- **Dr Archana Kalyankar** Associate Professor, Government Medical College and Hospital, Aurangabad, MH
- **Dr Archana Kannamwar** Associate Professor, Shri Vasant Rao Naik Government Medical College, Yavatmal, MH
- **Dr Ashok Kumar Singh** Associate Professor, Vardhman Institute of Medical Sciences, Pawapuri, Nalanda, Bihar
- **Dr Bhavik Doshi** Associate Professor, GMERS Medical College, Sola, Ahmadabad, GJ
- **Dr Badal Singh** Associate Professor, Motilal Nehru Medical College, Prayagraj, UP
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- **Dr Gayatri Muthiyam** Associate Professor, All India Institute of Medical Sciences, Nagpur, MH
- **Dr Gursharan Singh** Associate Professor, Guru Govind Singh Medical College, Faridkot, Punjab
- **Dr I Gowri** Associate Professor, Dr Patnam Mahender Reddy Institute of Medical Sciences, Chevella, Telangana
- **Dr J Sreevidya** Associate Professor, Stanley Medical College, Chennai
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- **Dr Jolly Agarwal** Associate Professor, Government Medical College, Dehradun, Uttarakhand
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- **Dr KKP Singh** Associate Professor, Rajendra Institute of Medical Sciences, Ranchi, Jharkhand

- **Dr K Shanmuganathan** Associate Professor, Indira Gandhi Medical College and Research Institute, Puducherry
- **Dr Kanan Shah** Associate Professor, NHL Medical College, Ahmadabad, GJ
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- **Dr Manjusha Tabhane** Associate Professor, NKP Salve Institute of Medical Sciences and Research Centre and Lata Mangeshkar Hospital, Nagpur, MH
- **Dr Meenakshi Borkar** Associate Professor, Hindu Hruday Samrat Balasaheb Thackarey Medical College and Dr Rustom Narsi Cooper Municipal General Hospital, Mumbai
- **Dr Mohammad Mujahid Ansari** Associate Professor, Government Medical College, Shahdol, MP
- **Dr MS Arathi** Associate Professor, Chettinad Hospital and Research Institute, Chennai
- **Dr Nagraj S** Associate Professor, SVS Medical College, Mahabubnagar, Telangana.
- **Dr Naina Wakode** Associate Professor, ABV Medical College, Vidisha, MP
- **Dr Nilesh Rakate** Associate Professor, MKCG Medical College, Berhampur, Odisha
- **Dr Priya P Roy** Associate Professor, Krishna Institute of Medical Sciences, Karad, Maharashtra
- **Dr R Azhagiri** Associate Professor, ESIC Medical College & PGIMS, Chennai, Tamil Nadu
- **Dr Rajashree S Raut** Associate Professor, RCSI Government Medical College, Kolhapur, MH
- **Dr Rani Raphael M** Associate Professor, Government TD Medical College, Alappuzha, Kerala
- **Dr Ritu** Government Medical College, Rajouri, Jammu and Kashmir
- **Dr Rupali Kavitate** Associate Professor, HHSBT Medical College and Dr Rustom Narsi Cooper Municipal General Hospital, Mumbai
- **Dr S Satish Kumar** Associate Professor, Government Dharmapuri Medical College, Dharmapuri
- **Dr Sajey PS** Associate Professor, Government TD Medical College, Alappuzha, Kerala
- **Dr Sandeep S Mohite** Associate Professor, Krishna Institute of Medical Sciences, Karad, MH
- **Dr Santoshkumar A Dope** Associate Professor, Medical Superintendent, Vilasrao Deshmukh Government Institute of Medical Sciences, Latur, MH
- **Dr Saurabh Kulkarni** Associate Professor, Government Medical College, Jalgaon, MH
- **Dr Sayantan Das** Associate Professor, Mata Gujri Memorial Medical College, Kishanganj, Bihar
- **Dr Shantanu Nandy** Associate Professor, Bankura Sammilani Medical College, Bankura, WB
- **Dr Shalini Kumar** Associate Professor, Hamdard Institute of Medical Sciences and Research, Hamdard University, New Delhi
- **Dr Shilpa Sonare** Associate Professor, Shri Vasant Rao Naik Government Medical College, Yavatmal, MH
- **Dr Shrikant Verma** Associate Professor, Raipur Institute of Medical Sciences, Raipur, CG
- **Dr Sreevidya J** Associate Professor, Institute of Anatomy, MMC, Chennai, TN
- **Dr Subhash Gujar** Associate Professor, GMERS Medical College, Vadnagar, GJ
- **Dr Subodh Kumar** Associate Professor and Head, Nalanda Medical College, Patna, Bihar
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- **Dr Surekha W Meshram** Associate Professor, Government Medical College, Gondia, MH
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- **Dr Sunita Nayak** Assistant Professor, All India Institute of Medical Sciences, Patna, Bihar
- **Dr Sushant Swaroop Das** Assistant Professor, AIIMS, Bilaspur, Himachal Pradesh
- **Dr Alka V Bhingardeo** Former Assistant Professor, All India Institute of Medical Sciences, Bibi Nagar, Hyderabad
- **Dr Prashant Munjamkar** Former Assistant Professor, All India Institute of Medical Sciences, Bibi Nagar, Hyderabad
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- **Dr Aparna Dixit** Assistant Professor, Saraswati Medical College, Unnao, UP
- **Dr Amarappa S Nagaliker** Assistant Professor, Belagavi Institute of Medical Sciences, Belagavi, Karnataka
- **Dr Amrita Kumari** Assistant Professor, Patna Medical College, Patna, Bihar
- **Dr Anjali Prasad** Assistant Professor, Shri Krishna Medical College, Muzzafarpur, Bihar
- **Dr BS Patil** Assistant Professor, Shri BM Patil Medical College, Hospital and Research Centre BLDE (Deemed to be University), Vijayapura Karnataka
- **Dr Chandan Kumar Yadav** Assistant Professor, Chandra Dental College and Hospital, Lucknow, UP
- **Dr Chetan Sahni** Assistant Professor, IMS-BHU, Varanasi, UP
- **Dr Faizal Mohammad** Assistant Professor, Government Medical College, Siddipet, Telangana
- **Dr Garima Pardhi** Assistant Professor, ABV Government Medical College, Vidisha, MP
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- **Dr Lenin S** Assistant Professor, Kanyakumari Government Medical College, Kanyakumari, TN

- **Dr Mangesh Lone** Assistant Professor, LTMMC and Sion Hospital, Mumbai, MH
- **Dr MM Peerzade** Assistant Professor, Dr VM Government Medical College, Solapur, MH
- **Dr M Siva Kumar** Assistant Professor, Government Thiruvannamalai Medical College, Thiruvannamalai, TN
- **Dr Mohd Ajmal** Assistant Professor, Madhav Prasad Tripathi Medical College, Siddharthnagar, Uttar Pradesh
- **Dr MP Sultana** Assistant Professor, ACSR Government Medical College Nellore, AP
- **Dr Mubeen Rashid** Assistant Professor, In-charge, Head of the Department, Government Medical College, Kathua, J&K
- **Dr Nimisha Madhu** Tutor, Anugrah Narayan Magadh Medical College, Gaya, Bihar
- **Dr Nishigandha Sadamate** Assistant Professor, Dr Kiran C Patel Medical College and Research Institute, Bharuch, Vadodara, Gujarat
- **Dr P Ashok** Assistant Professor, Deccan College of Medical Sciences, Hyderabad, Telangana
- **Dr PN Panshewdikar** Assistant Professor, Dr VM Government Medical College, Solapur, MH
- **Dr Praveen Kurrey** Assistant Professor, Pt. Jawahrlal Nehru Memorial Medical College, Raipur, CG
- **Dr Priti Nemade** Assistant Professor, Indira Gandhi Medical College and Hospital, Nagpur, MH
- **Dr Rajeev Panwar** Assistant Professor, ESIC Medical College and PGIMS, KK Nagar, Chennai, TN
- **Dr Rakesh Shukla** Assistant Professor, Prasad Institute of Medical Science, Lucknow, UP
- **Dr Rashmi S Sinha** Assistant Professor, Grant Medical College and Hospital, Mumbai, MH
- **Dr Rimpi Gupta** Assistant Professor, Kalpana Chawla Government Medical College, Karnal, Haryana
- **Dr Ritika Gaddewar** Assistant Professor, Indira Gandhi Medical College and Hospital, Nagpur, MH
- **Dr Roli Joshi** Assistant Professor, Saraswati Medical College, Unnao, UP
- **Dr Ruchi Ratnesh** Assistant Professor, AIIMS, Deoghar, Jharkhand
- **Dr Sabin Malik** Assistant Professor, Sree Narayana Institute of Medical Sciences, Ernakulam, Kerala
- **Dr Saikat Roy** Assistant Professor, College of Medicine and JNM Hospital, Kalyani, Nadia, WB
- **Dr Saleena N Ali** Assistant Professor, MES Medical College, Perinthalmanna, Malappuram, Kerala
- **Dr Sanjana Devi** Assistant Professor, Adesh Institute of Medical Sciences and Research, Bhatinda, Punjab
- **Dr Shailendra Singh** Assistant Professor, GSVM Medical College, Kanpur, UP
- **Dr Shanthini S** Assistant Professor, Zoram Medical College, Falkawn, Aizawl, Mizoram
- **Dr Shibanee Jena** Assistant Professor, Shri Jagannath Medical College and Hospital, Puri, Odisha
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- **Dr Taqiuddin Mohammed** Assistant Professor, Apollo Institute of Medical Sciences and Research, Hyderabad, Telangana
- **Dr Thuslima M** Tutor, Government Medical College, Omandurar Medical College, Chennai
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- **Dr Vishal Bhadkaria** Assistant Professor, Bundelkhand Medical College, Sagar, MP
- **Dr Yogendra Singh** Assistant Professor, Baba Raghav Das Medical College, Gorakhpur, UP
- **Dr Yogesh Shridhar Ganorkar** Assistant Professor, GMC, Gondia, Maharashtra
- **Pulkit Jain** Christian Medical College, Ludhiana, Punjab

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3	https://forms.gle/zLPDHfhRjvw8LERx6	17	https://forms.gle/rhHyujhzYareB43S9
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6	https://forms.gle/qV86nj4EXbsrNTSY6	20	https://forms.gle/TnZCG2nTQAUtj4w8
7	https://forms.gle/NuKDofF86ZGGkXhp8	21	https://forms.gle/PVjP2zj7RwEhVqhr5
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11	https://forms.gle/KAdxmD89Lott4rSv9	25	https://forms.gle/4dSFWiWwJJeQTaSR9
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13	https://forms.gle/NUUfqGZ3PN65n7Ek8	27	https://forms.gle/hhCk46v5BroieVmm9
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Government TD Medical College,
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Competencies: AN67.1, AN67.2, AN67.3

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Concept of Functional Histology

With time, the concepts of histology teaching are changing. The students should focus more on functional histology to understand the microscopic structures and functions of the tissues and organs. Hence, in this edition, more significance is given toward the functional correlation along with basic histology. It will help in laying the foundation for histopathology and increase the focus on the practical application of the fundamentals.

For functional correlation of the following structures, refer the indicated pages.

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