

Textbook of Human Embryology

with Clinical Cases, 3D Illustrations and Flowcharts

Third Edition

is the completely rewritten, revised and updated edition of the popular textbook designed to meet the requirements of students and teachers as per the latest NMC Guidelines | CBME Curriculum. It aims to serve as a comprehensive textbook on human embryology for undergraduate medical, dental, AYUSH, paramedical and nursing students.

Salient Features of the Book

- Concise text with **clinical correlation** for quick recapitulation during examination.
- Colour atlas 3D illustrations to provide easy **imagining** of developing structures.
- Line diagrams are easy to **draw figures** for theory examination.
- Flowcharts help to **revise and memorise** the text and to consolidate the knowledge.
- Tables to **summarise** essential facts.
- Summary (examination guide) to overcome the difficulty of summarising the facts and developmental sequence in theory examinations.
- NExT, MCQ, Viva Voce, High Yielding Facts and Clinical Facts markings for **preparation** of various upcoming academic entrance examinations.
- Boxes to focus on **important topics**.
- Interesting facts to isolate them from the main text so that these facts should not be missed by readers and **ease the reading burden**.
- 40 Scanning electron micrographs to give **real insight** in developing structures.
- Clinical cases for early clinical exposure of various clinical anomalies encountered by eminent clinicians (**vertical integration**).
- QR codes for revision video series for quick and effective revision of high-yield topics.
- QR codes for self-assessment MCQ tests.

Free Clinical Embryology Workbook: The main textbook is supported with a workbook, which has the following:

- 22 Mind Maps for summarizing major topics for rapid revision.
- Clinical-based Embryology Reasoning Questions to encourage students to think critically.
- Clinical Case Scenario-based MCQs and practice figures for preparation of various academic examinations.

Free access to digital content through **CBSiCentral app**:

- Diagram videos and animated videos for learning “how to draw line diagrams”
- Additional topics, clinical aspects and recent advances
- Chapter-wise **hand-written** notes
- **Self-assessment** MCQ tests

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Third
Edition

Textbook of
Human Embryology

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ISBN:978-93-49881-70-9



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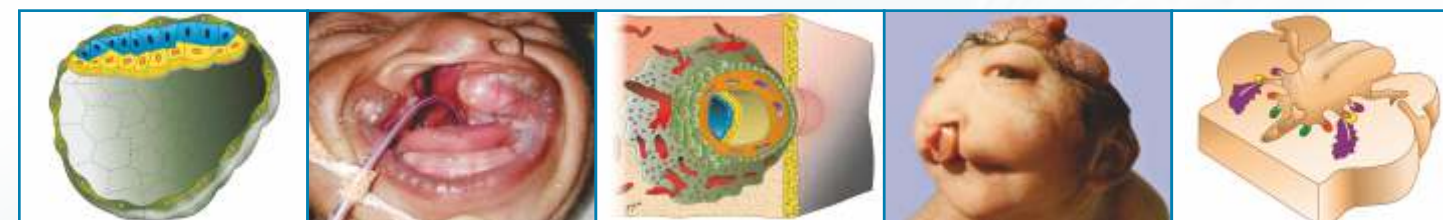


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with Clinical Cases, 3D Illustrations and Flowcharts

As per the latest NMC Guidelines | Competency Based Medical Education (CBME)
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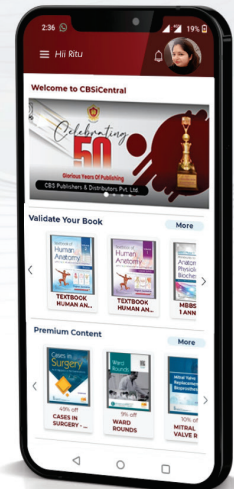


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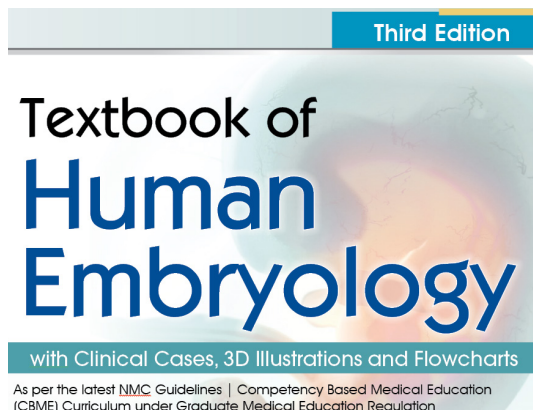
(An Institute of National Importance under the Ministry of Health and Family Welfare, Government of India)

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ISBN: 978-93-49881-70-9

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Illustrations: © Yogesh Sontakke

Third Edition 2026

Second Edition 2022

Reprint: 2022, 2023

Revised Reprint: 2024, 2025

First Edition 2019

Reprint: 2020

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Published by **Satish Kumar Jain** and produced by **Varun Jain** for

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Printed at Magic International Pvt. Ltd., Greater Noida, UP, India

Preface to the Third Edition

This edition of *Textbook of Human Embryology* has been carefully revised to fulfil the requirements of students and teachers as per the latest Competency Based Undergraduate Curriculum for Indian Medical Graduate.

Features of this book:

- **Concise text** with clinical correlation for quick recapitulation during examination.
- **257 Color atlas 3D illustrations** to provide easy imagining of developing structures.
- **105 Line diagrams** (practice figures) are easy to draw figures for theory examination.
- **107 Flowcharts** help to revise and memorize the text and to overcome the difficulty of summarizing the facts and developmental sequence in theory examinations and consolidation of knowledge.
- **61 Tables** to summarize essential facts.
- **Summary (examination guide)** to overcome the difficulty of summarizing the facts in theory examinations.
- **NExT, MCQ, Viva, High yielding facts and Clinical facts** markings for preparation of various upcoming academic entrance examinations.
- **62 Boxes** to focus on important topics.
- **Interesting facts** to isolate them from the main text, so that these facts should not be missed by readers and ease the reading burden.
- **40 Scanning electron micrographs** to give real insight into developing structures.
- **88 Clinical cases** for *early clinical exposure* of various clinical anomalies encountered by eminent clinicians (vertical integration).
- QR codes for **eSmartQuiz**—Chapter-wise Online MCQ test for self-assessment.
- QR codes for **revision video series** for quick and effective revision of high-yield topics.

Free Clinical Embryology Workbook: The main textbook is supported with a workbook, which has the following:

- **22 MindMaps for summarizing major topics:** Mind-Maps or ConceptMaps are provided to summarize intricate topics for rapid revision.
- **Clinical-based embryology reasoning questions:** This section includes reasoning-based questions that encourage students to think critically about developmental abnormalities, teratogens, genetic influences, and their impact on human health.
- **Clinical Case Scenario-based MCQs:** The MCQs are a fundamental part of medical assessments. This section provides clinically oriented MCQs that challenge students to apply their embryological knowledge to clinical case scenarios.
- **Practice figures:** To help out the students by making them aware of practicing selected figures for preparation of theory examinations.

Free access to Digital content through CBSiCentral app: It includes the following:

- Additional topics, clinical aspects and recent advances
- Chapter-wise **Hand-written notes**
- **Diagram videos** – Animated videos for learning “how to draw line diagrams”
- Self-assessment **MCQ tests**

I am hopeful that this book will help to fulfil all the requirements of students and teachers. Students are suggested to read the book in the following sequence:

Color atlas 3D illustrations → Stages of development → Flowchart → Table → Summary (Examination Guide) → Practice Figure

Any suggestions from the readers are welcome.

Yogesh Sontakke

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Preface to the First Edition

This *Textbook of Human Embryology* has been written keeping in mind the requirements of students and teachers. Due to the complexity of the subject, readers face difficulty in understanding and imagining the developing human structures. Hence, in the present book, the attempt has been made to provide all necessary information for easy understanding.

User-friendly features of this book with their purposes are as follows:

- **Concise text** is given in easy language; unnecessary details are avoided.
- **3D illustrations** to provide easy imagining of developing structures.
- **Flowcharts** to revise and memorise the developmental sequence.
- **Tables** to summarise essential facts.
- **Summary (examination guide)** to overcome the difficulty of summarising the facts in theory examinations.
- **Neet, MCQ, Viva Voce and Clinical facts** markings for preparation of various upcoming academic entrance examinations.
- **Boxes** to focus on important topics.
- **Interesting facts** to isolate them from the main text, so that these facts should not be missed by readers.
- **40 Scanning electron micrographs** to give real insight in developing structures.
- **70 Clinical cases** for early clinical exposure of various clinical anomalies encountered by eminent clinicians.
- **Special topics** such as assisted reproductive techniques (including *in vitro* fertilisation) and ultrasonography in embryology are also included to give orientation towards clinical aspects.

I am hopeful that this book will help to fulfil all the requirements of students and teachers.

Students are suggested to read in the following sequence:

Illustrations → Stages of development → Flowchart → Table → Summary (examination guide) → Practice Figure

Any suggestions from the readers for rectification and improvement are welcome at dryogeshas@rediffmail.com

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Acknowledgements

I am thankful to Professor Dr Vir Singh Negi, Director, Jawaharlal Institute of Postgraduate Medical Education and Research (JIPMER), Puducherry and Professor Dr Vikram Kate (Dean Academics), JIPMER, Puducherry, Dr Parkash Chand, former Professor, Senior Scale in Anatomy for their continuous encouragement.

I am obliged to Prof Kathleen Sulik (Chapel Hill, North Carolina, USA), Dr Kumaravel S (Paediatric Surgery, JIPMER), Dr Bibekanand Jindal (Paediatric Surgery, JIPMER), Dr Uday Kumbhar (General Surgery, Puducherry), Dr Adhisivam B (Neonatology, JIPMER), Dr Subashini Kaliaperumal (Ophthalmology, JIPMER), Dr Haritha Sagili (OBGY, JIPMER), Dr Mamatha Gowda (OBGY, JIPMER), Dr Keshav Malhotra (Rainbow IVF, Agra), Dr Saikat Chakraborty (Oral Pathology, Puducherry), Dr Rohit Rao (Ophthalmology, Raipur), Dr Prakhar Mohaniya (Paediatrician, Jhansi) for their contribution of scanning electron micrographs, clinical images and suggestions.

I acknowledge Dr K Aravindhan, Professor and Dr Suma HY, Professor; Dr Sarasu J, Professor and Head, Department of Anatomy, JIPMER, Puducherry; for their continuous encouragement and inspiration. I acknowledge the encouragement and continuous unconditional support from Dr Raveendranath V, Dr Suman Verma, Dr Sulochana Sakthivel, and Dr Rajasekhar SSSN. I am especially thankful to Dr V Gladwin, (Professor Examination), Dr Dharmaraj Tamgire, Dr Dinesh Kumar V, Dr R Sarah, Dr Ujwala Bhanarkar, Dr Saleena N Ali, Dr Payal Kasat, Dr G Dhivya Lakshmi, Dr Sabin Malik, Dr Jahira T Banu, Dr Taquiuddin Mohammed, Dr Jakkula Akhil, Dr Jayasree S, Dr Raghunandan Ramanathan, Dr Harsimrajit Kaur, Dr Danushiya for their critical suggestions.

I also acknowledge Drs Ambiga R, Nikilesh S, Gomathi R, and Nithya D (Senior Residents) for their support. I also acknowledge Drs Bharathy Mohan P, Nandhini S, Sancy Charly, Madhusingh Thakur, Tarakeshwari RB, Dhivyaa Shree R, Thaiyal Nayagi M, Prasanna Raj AV, Abirami Sobana R, Rajalakshmi K, Arulvel V, Devasuriya K, and Ishwarya SB (Junior Residents) for their help.

I am thankful for the acceptability of views and support of Mr SK Jain (CMD) and Mr Varun Jain (Director), CBS Publishers & Distributors Pvt Ltd. I am obliged for continuous support from Mr YN Arjuna (Senior Vice-President—Publishing, Editorial and Publicity) and his entire team, especially Ms Ritu Chawla (GM—Production), Mr Neeraj Prasad (graphic artist), Mr Binay Kumar (Proofreader) and Ms Jyoti Kaur (DTP operator). I appreciate the entire team of CBS Publishers & Distributors in the shaping of this book.

I am thankful to the support of entire CBS team for making the success of this book, especially: Mr Deepak Rao (Bengaluru), Mr S Ramesh (Chennai), Mr Prasun Bhattacharya (Kolkata), Mr S Sarkar (Mumbai), Mr James KC (Kochi), Mr Sumit Behl (New Delhi), Mr VM Suresh (Chennai), Mr Sarbajit Gon (Bengaluru), Mr Ramesh (Hyderabad), Mr Jacob Joseph (Cochin), Mr B Jothi (Chennai), Mr BL Pradeep (Bengaluru), Mr Ajay Kumar M (Bengaluru), Mr Vikrant Shah (Uttarakhand), Mr Dinesh Giri (Rajasthan), Mr Javed (Mumbai), Mr Anand C (Bengaluru), Mr Dipam Chatterjee (Jharkhand), Mr Krishnendu (Kolkata), Mr Avinash Shukla (Nagpur), Mr P Rajan (Chennai), Mr T Shinod (Calicut), Mr Narendra Singh (MP), Mr Somnath (Kolkata), Mr Sunil Pandey (Lucknow), Mr Sujeet Morabad (Belagavi), Mr Tarak (Kolkata), Mr Sachin Pojary (Bengaluru), Mr Devaraj Muthukrishnan (Chennai), Mr Sachin Chauhan (Lucknow), Mr Nitish Sharma (J&K), Mr Prashant Jadhav (Mumbai), Mr Udayan Basak (Kolkata), and Mr Ketan Oza (Gujarat), Mr B Siva Sankar (Madurai), Mr S Sankar (Chennai), Mr J Gokulanathan (Puducherry), Mr Ashish Kumar (Uttar Pradesh and Haryana), Arun Tiwari (Mumbai).

I thank my wife Dr Anindita for her suggestions and continuous support. I appreciate my daughter Aripriya for her unconditional love and support. My sincere regards to my family for moral support. I thank all my supporters who made this possible. I thank the Almighty for giving me strength and patience to continue my work.

Acknowledgements for Image Courtesy

I am grateful to the following academicians for their suggestions and contributions of clinical images (indicated in front of their names) in the present book.

- **Professor Kathleen Sulik**, PhD, Emeritus Professor, University of North Carolina School of Medicine, Department of Cell Biology and Physiology, Chapel Hill, North Carolina, USA.
Scanning electron micrographs: 7.1 to 7.5, 8.1 to 8.5, 11.1 to 11.3, 12.1 to 12.4, 13.1, 14.1, 14.2, 15.1, 18.1 to 18.4, 19.1, 20.1, 21.1 to 21.3, 22.1 to 22.4, 23.1, 23.2, 24.1, 24.2, AV.1, AV.2.
- **Dr Kumaravel S**, MBBS, MS, MCh (Paediatric Surgery), Professor, Department of Paediatric Surgery, JIPMER, Puducherry, India.
Clinical images: 7.2, 9.5, 10.1 to 10.3, 11.1, 11.3, 13.2, 14.2 to 14.9, 17.1, 18.3, 19.1, 20.1, 20.2, 21.1 to 21.5, 21.7 to 21.9, 22.1 to 22.3, 26.1, 30.1, AIII.1 to AIII.5.
- **Dr Uday Kumbhar**, Professor, Department of Surgery, JIPMER, Puducherry, India.
Clinical images 11.2, 21.6, 21.7, 27.1

- **Dr Adhisivam B**, Professor, Department of Neonatology, JIPMER, Puducherry, India.
Clinical images: 12.2, 14.1, 22.4A, 22.5 to 22.7.
- **Dr Subashini Kaliaperumal**, MBBS, MS (Ophthalmology), FRCS, DNB (Ophthalmology), Professor and Head, Department of Ophthalmology, JIPMER, Puducherry, India. Clinical images: 23.5 to 23.9.
- **Dr Haritha Sagili**, MBBS, MD, MRCOG, MFSRH, European University Diploma in Operative Gynaecological Endoscopy, FICS, CIMP, FIMSA, Professor, Department of Obstetrics and Gynaecology, JIPMER, Puducherry, India. Clinical images: 9.1 to 9.4, 18.1, 28.1, 30.2.
- **Dr Mamatha Gowda**, Additional Professor, Department of Obstetrics and Gynaecology, JIPMER, Puducherry, India.
Clinical images: 7.1, 18.1, 18.2, 22.8 to 22.11, 29.1 to 29.4, 30.3.
- **Dr Keshav Malhotra**, MBBS MCE, Director, Rainbow IVF, Rainbow Hospitals, Agra, Uttar Pradesh.
Clinical images: 3.1, 4.1, 4.2, 4.3, 5.1.
- **Dr Rohit Rao**, MBBS, MS (Ophthalmology), IOL and Anterior Segment Fellowship (Aravind Eye Hospital), Anterior Segment Surgeon, Shri Ganesh Vinayak Eye Hospital, Raipur, Chhattisgarh, India.
Clinical images: 23.1 to 23.4, 23.10.
- **Dr Prakhar Mohniya**, MBBS, MD (Paediatrics), Fellowship in Neonatology, Senior Resident, Maharani Laxmi Bai Medical College, Jhansi, UP, India.
Clinical images: 12.1, 22.4B.
- **Dr Saikat Chakraborty**, Resident, MDS (Oral Pathology), Mahatma Gandhi Postgraduate Institute of Dental Sciences, Puducherry, India.
Clinical images: 13.1.

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Acknowledgements

We extend our heartfelt thanks to the following teachers of anatomy for their consistent academic support, encouragement, and well wishes.

- Dr AB Mishra (Mathura, UP)
- Dr A Hima Bindu (Visakhapatnam, AP)
- Dr Aaditya Madhusudan Tamekar (Nagpur, Maharashtra)
- Dr Aarushi Jain (Kota, Rajasthan)
- Dr Abhijeet Joshi (Barmer, Rajasthan)
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- Dr Amol Durgkar (Chindwada, MP)
- Dr Amol Shinde (Pune, Maharashtra)
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- Dr Anand Mishra (Basti, UP)
- Dr Anant Sachan (Orai, UP)
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- Dr Anil Agrawal (Bilaspur, CG)
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- Dr Deepanshu Shukla (Lucknow, UP)
- Dr Deepti Shastri (Salem, TN)
- Dr Dhananjay (Bareilly, UP)
- Dr Dhiraj Saxena (Jaipur, Rajasthan)
- Dr DH Gopalan (Chennai, TN)
- Dr Dibyendu Datta (Kolkata, WB)
- Dr Dimpal Patel (Ahmedabad, Gujarat)
- Dr Dinesh Kumar (Delhi)
- Dr Dipali Trivedi (Ahmedabad, Gujarat)
- Dr Dipti Gautam (Mahasamund, CG)
- Dr Dipti Nimje (Nagpur, Maharashtra)
- Dr Divya Mahajan (Chandigarh)
- Dr Durga Paswan (Greater Noida, UP)
- Dr Durgesh Singh (Mirzapur, UP)
- Dr DV Singh (Bareilly, UP)
- Dr Faizal Mohammad (Siddipet, Telangana)
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- Dr Neelam Bala (Amritsar, Punjab)
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- Dr Neeraj Pandey (Ghazipur, UP)
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- Dr Pankaj Soni (Mandi, HP)
- Dr Parveen Akhter (Jammu)
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