

BASIC AND ORAL HISTOLOGY AND EMBRYOLOGY

by Prof. Dr. Vesna Lačković, Prof. Dr. Ivan R. Nikolić and Prof. Dr. Vera Todorović,
edited and illustrated by Ivan R. Nikolić
– Critiques and Reviews –

REVIEW¹

by Prof. Dr. Radivoj Krstić²

I am very pleased to give a brief opinion of the book *Basic and Oral Histology and Embryology* in the following lines.

This monumental book was made with enormous creative and didactic efforts combined with an excellent knowledge from our profession, all with the aim of aiding students in dealing more easily with the subject matter of histology and embryology. The didactic approach of the authors is systematic, ultramodern and rich, which is easily seen from the fact that all the structures that were dealt with were located, described, and illustrated in detail, so the students are able to get a very clear and up-to-date subject overview – from macroscopic anatomy, to molecular biology, both in terms of medical histology and embryology, as well as that of dentistry. In addition, parallel treatment of histology and embryology, together with numerous information boxes inside of the book, improves its quality.

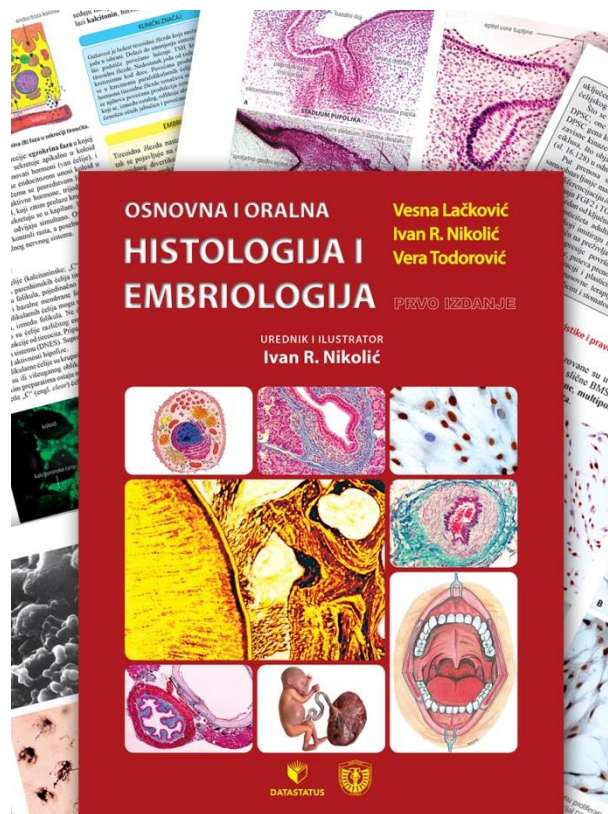
All of the micrographs – either being light or electron micrographs – are of the best quality, whereas the drawings, tables and diagrams are clear and distinct. It is an especially good idea to indicate the origin of cells, tissues and organs by the choice of colour in a drawing. The technical setup of the book is excellent: paper is of the best quality, which allows for the superb reproduction of details and colours.

The cover design with symbolic images from histology and embryology draws the reader's attention and, at the same time, gives an implication regarding the subject matter of the book – which makes it a complete success. Naturally, there is criticism for every book, my own and the one in question included, though, in this case, it is strictly cosmetic in nature and is of lesser importance.

Prof. Dr. Radivoj Krstić,
22nd June 2012

¹ The text is taken from an electronic letter sent to Prof. Dr. Ivan R. Nikolić on 22nd June 2012 by Prof. Dr. Radivoj Krstić.

² Prof. Dr. Radivoj Krstić is one of the currently most prominent histologists and illustrators, the Co-director of many years at the Institute of Histology and Embryology, Faculty of Medicine in Lausanne, Switzerland, whose five books were published by Springer, a global publishing company, and to whom this book is dedicated.

**REVIEW**

The manuscript titled *Basic and Oral Histology and Embryology*, whose authors are Vesna Lačković, Professor of Histology and Embryology at the Faculty of Medicine (the University of Belgrade), Ivan Nikolić, Professor of Histology and Embryology at the Faculty of Medicine (the University of Niš), who is also the editor of the book, and Vera Todorović, Professor of Histology and Embryology at the Faculty of Dental Medicine in Pančevo (the University Business Academy in Novi Sad), represents an exceptional book in the fields of histology and embryology, designed primarily for the students of the Faculty of Dental Medicine. It is a universal work, the content of which encompasses all of the teaching units of this subject's curriculum. The book discusses cytology, general histology, histological development of organs, as well as embryology, which can be found at the end of each chapter. There is a special attention given to histology and embryology of the oral cavity, which for the first time, in both our and foreign professional literature, constitutes an integral part

of a single textbook from histology and embryology for the students of the Faculty of Dental Medicine.

It is a book of 300 pages and of an exquisite technical setup (hard cover, glossy paper, full colour) in A4 format. The content is divided into 21 chapters and is written in a distinctive style of the writers, who have already proved themselves as the creators of some widely accepted textbooks, atlases, and practicums in the fields of histology and embryology. The text has three clearly distinct sections. The main text is intended for students of the General Dentistry studies and is characterized by its conciseness, with the emphasis on the necessary morphological, functional and embryological facts, which eases the understanding of a complex microscopic structure of cells, tissues and organs, especially of those that compose the oral cavity. Apart from the main text, there are also sections written in small print, which display additional information in the field of anatomy, physiology, or molecular biology. The yellow parts contain very concise embryology, while the blue ones indicate the information concerning clinical significance.

There is a special quality given to the manuscript by copious illustrations contained in over 500 colour drawings and schemes, light micrographs and electron micrographs, macroscopic representations, ultrasonic and X-ray shots. The cells in the drawings are painted in the colours of embryonic leaves (endoderm – yellow, mesoderm – red, ectoderm – blue), which facilitates the understanding of embryology. The photographs of the histological samples, during the preparation of which both routine and complex histochemical techniques of colouring were used, as well as the latest immunohistochemical techniques, are technically immaculate. Apart from the drawings and the photographs, the manuscript also contains tabular displays. At the end of the book, there is a bibliography and a glossary, which also improves the significance of the book. Since it displays the important and up-to-date facts from histology and embryology, as well as their connection to the clinical practice, this work will be very useful not only to dental students, but also to the students of other biomedical courses, both the undergraduates and the postgraduates.

Taking into account its universality, didacticism, illustrativeness and technical fitness, I suggest that the manuscript titled *Basic and Oral Histology and Embryology* be published as a textbook for dental students.

Academic Vladimir Bumbaširević,
Professor of Histology and Embryology
at the Faculty of Medicine in Belgrade,
Belgrade, 8th March 2012

REVIEW

General information

The title of the manuscript is *Basic and Oral Histology and Embryology*.

The editor and the illustrator is Prof. Dr. Ivan Nikolic, and the authors are Prof. Dr. Vesna Lačković, Prof. Dr. Ivan Nikolić and Prof. Dr. Vera Todorović. These are the authors with many years of experience who have

already published a significant number of monographs, textbooks for both undergraduates and postgraduates, atlases, practicums and handbooks. The publisher of this work is Data Status from Belgrade.

Technical information

It is a manuscript of 300 pages, technically very well equipped, hard-covered, with glossy paper and numerous photo documents in colour. The drawings and the micrographs are either presented individually or in the form of composite images. The manuscript contains 276 drawings, 440 micrographs, 43 electron micrographs, as well as many macroscopic images: direct sample slides, ultrasonic and X-ray photographs.

Content overview and the book organization

The content of the book is divided into 21 chapters:

1. Histology, basic histological methods and microscopy,
2. Cell,
3. Basic characteristics of tissues, organs and systems of organs,
4. General embryology,
5. Epithelial tissue,
6. Connective tissue,
7. Blood, bone marrow and haematopoiesis,
8. Muscle tissue,
9. Nervous tissue and nervous system,
10. Eye, the organ of sight,
11. Ear, the organ of hearing and balance,
12. Cardiovascular and lymphatic system,
13. Immune system and lymphoid organs,
14. Endocrine system,
15. Respiratory system,
16. Digestive system, oral cavity,
17. Digestive system, esophagus, stomach, small and large intestine,
18. Digestive system, liver, bile ducts, gallbladder and pancreas,
19. Urinary system,
20. Male and female reproductive systems,
21. Skin.

The chapter *Oral Cavity* is the most elaborate. It was written in 77 pages and illustrated in 130 images. It deals with the teaching units that correspond to the curriculum for histology and embryology for the students of integrated dental studies: basic anatomic characteristics of head and its bones, oral cavity (general characteristics, division and content), salivary glands, oral mucosa, lips, cheeks, palate, gingiva, alveolar mucosa, tongue, lymphatic tissue of oral cavity, general characteristics of teeth and the surrounding tissue, enamel, pulpo-dentinal complex, dental cement, periodontium, alveolar extension and embryology of oral cavity, which is all followed by an emphasis on the clinical significance of certain structures.

There is a special attention given to a currently modern field that deals with dental stem cells. This section will also be useful to the dental students completing their doctoral studies. At the end of the book, there is a bibliography and a glossary, which facilitates the usage of the book.

Conclusion

Taking into account all of the stated facts, we can conclude that this is a universal, richly illustrated work in the field of basic and oral histology and embryology, prepared according to the regular curriculum of this subject, and therefore, I suggest that this work be published as a textbook for dental students.

Academic Vojislav Leković,
Professor at the Faculty of Dental Medicine,
the University of Belgrade,
Belgrade, 8th March 2012

**REVIEW³
on the manuscript*****Basic and Oral Histology and Embryology***

Apart from the common information, regarding morphology of cells, tissues and organs, the manuscript, which appears in the form of a supplementary study material, follows the current trends of emphasizing the clinical significance, in order for the first-year students, who already study normal structures and functions of the organism, to have an insight into the importance of those same structures as well in cases when they are affected by pathological processes that show certain clinical manifestations, the knowledge of which is inspiring for further study. In this way the connection is established between preclinical, relatively complicated and arid disciplines, and clinical medicine, which represents the final aim of education of the majority of students. In this sense, the manuscript contains basic, informative and, in a popular manner displayed, nosological, etiological, pathological, pathophysiological and clinical facts concerning the most common diseases, which affect some tissues and organs (inflammations, tumors, immune system disorders and alike).

Conclusion

The manuscript *Basic and Oral Histology and Embryology*, edited by Ivan Nikolic, written by Vesna Lačković, Ivan Nikolić and Vera Todorović, on the account of its content, which fully integrates all of the segments of the subject Histology and Embryology for Dental Students, which is of an appropriate scope, richly illustrated, and which by its technical setting and a manner of displaying the content in its entirety does not fall behind similar works from the rest of the world literature, should be published as **a textbook for students of the integrated dental studies**, even though it can also be used by the students of other biomedical disciplines who have the subject Histology and Embryology as part of their curriculum.

Academician Vladisav Stefanović,
Professor of Internal Medicine
at the Faculty of Medicine in Niš

Translated from Serbian by

Jelena Mladenović,
Master Philologist in English Language and Literature

³ An excerpt.