

Ministry of Health of Ukraine
Ukrainian Medical Stomatological Academy

IMMUNOLOGY: QUESTIONS AND ANSWERS

Lviv
Publisher Marchenko T. V.
2023

Recommended by the Academic Council of the Ukrainian Medical Stomatological Academy as a textbook for classroom and extracurricular work of English-speaking students in Microbiology, Virology and Immunology of higher medical educational institutions of the IV level of accreditation - graduates of master's degree studying in study in specialties 221 «Dentistry» and 222 «Medicine» (Minutes of the meeting № 11 dated 24.06.2020).

Authors

Hancho O. V., Fedorchenko V. I., Faustova M. O., Loban` G. A., Slipchenko L. B.

Reviewers

Deyneka S. E. – Head of Microbiology, Virology and Immunology Department of the Bukovynian State Medical Academy, MD Ph.D., Professor;

Mishina M. M. – Head of Microbiology, Virology and Immunology Department of Kharkiv National Medical University named after D.P. Grinyov, MD, Professor;

Petrushanko T. O. – Head of Therapeutic Dentistry Department of the Ukrainian Medical Stomatological Academy, MD, Professor;

Sologor I. M. – Assoc. Professor of Foreign Languages with Latin and Medical Terminology Department, Ph.D.

Immunology: questions and answers : manual / O. V. Hancho, V. I. Fedorchenko, M. O. Faustova et al. – Lviv : Publisher Marchenko T. V., 2023. – 120 p.

ISBN 978-617-7937-29-5

Handbook for practical classes in Microbiology, Virology and Immunology for classroom and extracurricular work of English-speaking students. It can be used to prepare for practical classes, current control of knowledge, final modular control of the subject.

The manual is an intellectual property and may not be copied or reproduced in whole or in part, except in manuscript form, without the written permission of the authors. Copyright is protected by the Law of Ukraine “On Copyright and Related Rights”.

УДК 612.017

CONTENT

PREFACE	4
A LIST OF ABBREVIATIONS	5
Part 1. IMMUNITY. INNATE IMMUNITY. STRUCTURE OF THE IMMUNE SYSTEM. IMMUNE CELLS	7
Part 2. ANTIGENS AND ANTIBODIES. ADAPTIVE IMMUNITY	24
Part 3. SEROLOGICAL REACTIONS	50
Part 4. VACCINES AND IMMUNE SERUMS	76
Part 5. IMMUNOLOGY OF ORAL CAVITY	90
REFERENCES	100
ILLUSTRATIONS IN COLOR	101

PREFACE

The manual is devoted to one of the most important sections of the general part of medical microbiology – immunity. Knowledge and understanding of the information that the student should study in this section is essential to understand and comprehend many aspects of medical practice. This applies to the pathogenesis of infectious diseases, immunity under conditions of infectious diseases. Knowledge of immunology is a key points to remember for the successful use of drugs for the specific prevention and treatment of infections, as well as for the development of new samples for that. There are many techniques, tests of microbiological diagnosis of infectious diseases, which are based on the application of immunological knowledge. In addition, knowledge of immunology is important for understanding the pathogenesis, as well as for the diagnosis and treatment of many diseases of non-infectious nature.

Modern immunology is a branch of knowledge that has accumulated vast amounts of extremely important information that is difficult to comprehend without knowing the basics, the «alphabet» of immunology. Therefore, the authors tried to create a manual that would present in a simple form the basic principles of immunology and cover the full range of issues required for a student of medical higher education to master the subject. The list of sections and subsections of this manual corresponds to the range of issues presented in the Standard program of the subject and are submitted for consideration for practical classes, module control and exams. The knowledge gained from the study of this section is necessary for the successful study of a number of the following disciplines.

In addition, this manual contains a section with a focus on important questions of the immune protection of the oral cavity. This section is primarily intended for dental students, but is also important for students of other faculties.

The team of authors sincerely wishes the readers of this manual a pleasant reading and solid knowledge.

Посібник для практичних занять з мікробіології, вірусології та імунології для аудиторної та позааудиторної роботи англомовних студентів. Він може бути використаний для підготовки до практичних занять, поточного контролю знань, підсумкового модульного контролю з предмету.

Навчальне видання

**Ганчо Ольга Валеріївна
Федорченко Віра Іванівна
Фаустова Марія Олексіївна
Лобань Галина Андріївна
Сліпченко Лариса Борисівна**

Імунологія: Запитання і відповіді

Навчальний посібник (англійською мовою)

Підписано до друку 23.10.2020 р.
Формат 60×84/16. Папір друк. № 2. Гарнітура Tinot.
Умовн. друк. арк. 6,98. Тираж 300 прим.

Видавець Марченко Т. В.
79053, Україна, Львів, В.Великого 51/50, тел. +38 (050) 370-19-57
e-mail: picha1938@ukr.net

Свідоцтво про внесення суб'єкта видавничої справи до Державного реєстру видавців, виготовлювачів і розповсюджувачів видавничої продукції: серія ДК № 6784 від 30.05.2019 року, видане Державним комітетом телебачення і радіомовлення України

Надруковано у друкарні видавця Марченко Т. В.