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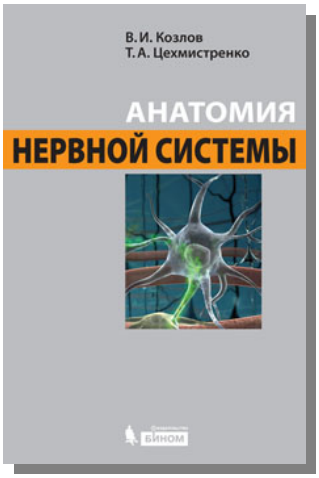


ANATOMY OF THE NERVOUS SYSTEM: A TEXTBOOK FOR STUDENTS, 2ND ED.

V. I. Kozlov, T. A.Tsehmistrenko

ISBN 978-5-9963-1602-1

208 pp., hardcover

2014

The textbook has been prepared in accordance with the curriculum "Anatomy of the Central Nervous System". It describes the issues of general anatomy, development and structure of brain and spinal cord, peripheral nervous system, as well as general principles and features of the autonomic nervous system structural organization. In describing the integrative systems of brain the authors give special attention to the construction of sensory and pyramidal pathways and morphofunctional features of extrapyramidal and limbic systems; moreover their role in human psyche formation are described. The book includes the anatomical description of senses, the issues of blood supply of brain and spinal cord, the structure of meningeal and liquor system as a whole. The material presentation is accompanied by traditional and original drawings and paintings.

The anatomical terms are based on the International Anatomical Nomenclature recommendations adopted by the International Committee on Anatomical Terminology (FCAT, 1998).

The book is intended for students of university psychological and medical departments, teacher training universities, as well as specialists interested in the anatomy of the nervous system.

APPLIED ECOBIOTECHNOLOGY. 2-VOLUME SET

A. E. Kuznetsov [etc.]

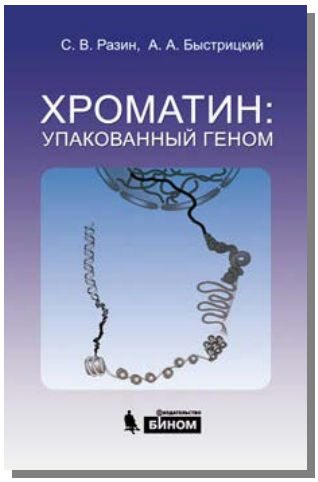
ISBN 978-5-9963-0151-5
ISBN 978-5-9963-0152-2 (V. 1)
ISBN 978-5-9963-0153-9 (V. 2)
1114 pp., hardcover
165 x 235 mm
2010

The book contains systematized and generalized material on biological, engineering, ecological-economic bases, practical methods, ways of modern biotechnology use and realization aimed at environment protection. The focus is placed on biological ways of polluted water purification, deodorizations of air-gas emissions, waste processing, soils remediation, feature of bio damages and bio corrosion, obtaining and usage of biodecomposed polymers, bioindication and biomonitoring, and also ecological, economic and legislative bases of nature conservative measures.

The book is written by skilled teachers, known scientists and technologists from Russia and Germany.

The book is intended for graduate and post-graduate students, higher school teachers, scientists, process engineers and other experts in the biotechnology, who deal with the problems of environment protection and rational use of natural resources.

Alexander E. Kuznetsov Ph.D. in Chemistry, Member-Correspondent of the Russian Engineering Academy.



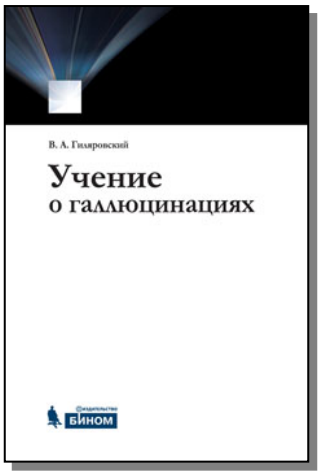
CHROMATIN: PACKED GENOME, 3rd ED.

S. V. Razin, A. A. Bystritskiy

ISBN 978-5-9963-1611-3
176 pp.+16 pp., hardcover
145 x 215 mm
2013

This monograph thoroughly describes different aspects of eukaryotic genome structure and functions from the point of view of its chromatin nature. To the histone code is given special attention as well as its influence on genes' expression. Also modern data and models concerning genome organization in chromosome territories are discussed. A reader would find primary information on the function of higher eukaryotes' genome. The book contains a color insert of 16 pages. The book is written by one of the world's leading cell nucleus and chromatin researchers, Deputy Head of Molecular Biology Chair in the Lomonosov Moscow State University professor Sergey V. Razin.

The book is intended for university students studying and skilled molecular biologists.



DOCTRINE OF HALLUCINATIONS, 3RD ED., REV.

V. A. Gilyarovsky

ISBN 978-5-9963-0462-2

224 pp., hardcover

145 x 215 mm

2011

The scientific research by the classic Russian psychiatrist provides detailed assessment of the hallucinations problem. The book is devoted to one of the disordered perception issues such as hallucinatory disorders. The author describes clinical hallucinatory states of various genesis. Special attention is given to psychogenic and toxic hallucinations.

The book will be useful to psychiatrists, neurologists, psychologists and others, as well as students and practitioners in related disciplines.

BASICS SOMNOLOGY PHYSIOLOGY AND NEUROCHEMISTRY OF THE CYCLE "WAKE—SLEEP", 3RD ED.

V. M. Kovalzon

ISBN 978-5-9963-1204-7

239 pp., hardcover

145 x 215 mm

2014

The book deals with the following issues related to the cycle "wake—sleep" regulation: phenomenology and definitions, anatomy, physiology and neurochemistry of the corresponding brain systems, organization of diurnal "biological clock " of the body, interaction of circadian and homeostatic mechanisms, molecular genetic mechanisms; evolution of sleep; sleep deprivation, sleep and memory, sleep and hormones, peptide DSIP role in the regulation of sleep. The information, based on the latest data, is for the first time published in Russian.

Each chapter contains brief introduction to this problem, and the list of recommended English-language theoretical works' review. The annex contains six short essays on the history of somnology.

The book is intended for scientists and university teachers and can be used as a textbook for undergraduate and graduate students specializing in the fields of physiology, psychophysiology and psycho neurology.

LIGHT-SENSITIVE BIOSYNTHESIS OF CHLOROPHYLL

O. B. Beljaeva; F. F. Litvina (ed.)

ISBN 978-5-94774-926-7

232 pp.

145 x 215 mm, hardcover

2009

The book deals with stages of the chlorophyll biosynthesis from active protohlorofillid-fermental complex formation to the development of photosynthesis reactionary centers pigments. Recent and modern fundamental molecular biology research is being discussed. Special attention is given to priority research of Russian scientists.

The book is intended for biophysicists, and also for teachers, graduate and post-graduate students of biological higher schools.

Olga B. Beljaeva The leading research assistant of the Biological Faculty of the Lomonosov Moscow State University, Doctor of Biological Sciences. The author of 75 scientific publications.

MOLECULAR EVOLUTION AND PHYLOGENETIC ANALYSIS

V. V. Lukashov

ISBN 978-5-9963-0114-0

256 pp., hardcover

145 x 215 мм

2009

The book contains a broad spectrum of theoretical and practical issues of the molecular evolution and phylogenetic analysis: the principles, goals and terminology; sequence alignment; evolutionary models and genetic distances; phylogenetic tree building methods. Recombination analysis, nucleotide and amino acid composition, codon usage, the analysis of mitochondrial DNA and molecular clock are described in the book. Special attention is given to the role of evolutionary analysis in studying the epidemiology of infectious disease – molecular epidemiology. All these issues are considered using actual experimental data. A reader would also find information about computer programmes used in the evolutionary analysis.

This book is written by the author who is Associate Professor of the University of Amsterdam (The Netherlands) and senior researcher of the D.I. Ivanovsky Institute of Virology (Moscow, Russia).

The book is intended for pre- and postgraduate students as well as researchers.

MOLECULAR GENETIC AND BIOCHEMICAL METHODS IN MODERN PLANT BIOLOGY

V. V. Kuznetsov, V. V. Kuznetsov, G. A. Romanov

487 pp., hardcover

165 x 235 mm

2011

The book describes more than 30 methods of modern experimental biology, which are actively used in the study of plants: the methods of genetic engineering and bioinformatics, functional genomics, protein chemistry and histologic chemistry, methods of biologically active compounds and signal transduction study as well as cell biology and analysis of subcellular structures. The structure and method of the book materials presentation facilitate the task of methods' mastering and help to avoid mistakes in the course of the experiment and to interpret the results correctly. Many of the described methods are widely used both in the study of plant objects and objects of the kingdoms of living organisms.

The book is intended for students, researchers conducting basic or applied research in the field of plant biology and agriculture.

NGS: HIGHLY EFFICIENT SEQUENCING

D. V. Rebrikov, D. O. Korostin, E. S. Shubin, V. V. Ilinsky

ISBN 978-5-9963-1784-4

288 c., hardcover

145 x 215 mm

2014

With the advent of the new generation of nucleotide DNA sequence determining methods genetics has reached fundamentally different level of living systems research. Large-scale sequencing of genomes, transcriptomes and microbiomes gives a huge amount of information, feeding the new research field "bioinformatics". There is no doubt that highly efficient sequencing data interpretation will shortly lead to breakthrough discoveries in biology. This book deals with the peculiarities of new generation sequencing (NGS) methods, both in the laboratory and in bioinformatics.

The book is intended for research laboratories and medical diagnostic laboratories staff and students seeking to understand the features of new generation sequencing methods.

QUANTUM BIOPHYSICS OF ANIMALS AND MAN : THE MANUAL, 4th ED.

A. I. Zhuravlev

ISBN 978-5-9963-0448-6

398 pp.

145 x 215 mm

2011

The book is devoted to an actual problem of research of free radical processes, active forms of oxygen and antioxidant systems roles in animals' and man metabolism. The manual includes the material which deals with many aspects of this scientific direction: from the molecular mechanisms connected with generation and liquidation of free radicals, to medicamentous recommendations. The material will be of great interest to students-biophysicists (molecular biophysicists) and students of medical specialties.

REAL-TIME PCR, 3rd ED.

D.V. Rebrikov (ed.)

ISBN 978-5-9963-0600-8

221 pp., hardcover

145 x 215 мм

2011

The purpose of this manual is to provide enlightenment to anyone seeking to maximize the quality of real-time PCR, qPCR or qRT-PCR results. The book describes various variants and features of the equipment for carrying out PCR in real time. It offers recommendations for choice of the amplifier. The systems of fluorescent registration of accumulation of DNA are considered. A reader would find the key factors defining the choice of oligonucleotide sequence and amplification programs parameters. Special attention is given to preparation of tests and features of the received data analysis that is necessary for getting authentic results.

Separate chapters are devoted to PCR application in real time for the solving various problems: definitions of the transcript level, virus loading, nucleotide polymorphism, relative maintenance of nucleic acids on GMO example.

The book is intended for employees of genetic engineering and medical diagnostics laboratories, and also for teachers and students specializing in the area of molecular biology.

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