Book review:
Functional anatomy of the locomotor system

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This book is the second, supplemented edition authored by Emer. Professor DSc Predrag Keros and Professor Marko Pećina, Fellow of the Croatian Academy of Sciences and Arts, modernised and completed with additional material in comparison with the first edition, which was published by the same publisher in 2006. Immediately after its publication, the first edition induced major interest and received many acknowledgements. Inter alia, the book was awarded the *Josip Juraj Strossmayer Award*, and the fact that the edition was sold out proves the value of the book.

In this new, supplemented edition, individual chapters have been amended and two entirely new chapters added. The chapter on human gait analysis will be of particular interest and significance both to medical experts and clinical kinesiologists. The author of this new chapter is physiotherapist Nikolino Žura, Head of the Chair of Kinesiology at the University of Applied Health Sciences in Zagreb. The fundaments of radiological anatomy, in the sense of the options offered by the latest technologies (MRI images) in presenting anatomical structures – joints in particular, have been analysed by Professor DSc Igor Borić, eminent radiologist specialising in locomotor system and sports injuries.

The book consists of seven chapters and numbers 585 pages, including the Glossary of Latin / Greek / Croatian anatomical terms, literature, and fifteen tables in colour. The book furthermore contains more than 300 images and drawings. The reader will find the comprehensive Index very helpful in understanding the multitude of anatomical terms.

This comprehensive volume tackles – from the viewpoints of competent experts in anatomy, orthopaedics, surgery, radiology and physiotherapy – issues related to the anatomy of human musculoskeletal system based on objective professional and scientific knowledge. The authors' clinical experience, included in the book in order to offer anatomical basis for the etiology and diagnostics of clinical syndromes, is particularly valuable.

In general, this is an excellent anatomy textbook treating the structure, function and functional characteristics of human locomotor system. Taking into account its scope and content, the book is first and foremost intended for postgraduate and graduate students of medicine and kinesiology, as well as for students of the University of Applied Health Sciences. It is moreover of great importance for specialists in orthopaedics and traumatology, physical medicine and rehabilitation, and rheumatology. It is furthermore useful for neurologists, radiologists, and specialists in sports medicine. The book contains relevant information and data, analysed by the authors in a highly logical and approachable manner.

This book has been accepted as official textbook both at the University of Zagreb and at the University of Applied Health Sciences in Zagreb.

Book review: Clinical Psychoneuroendocrinoimmunology

Publisher: Croatian academy of sciences and arts, Orlando medicus, Zagreb

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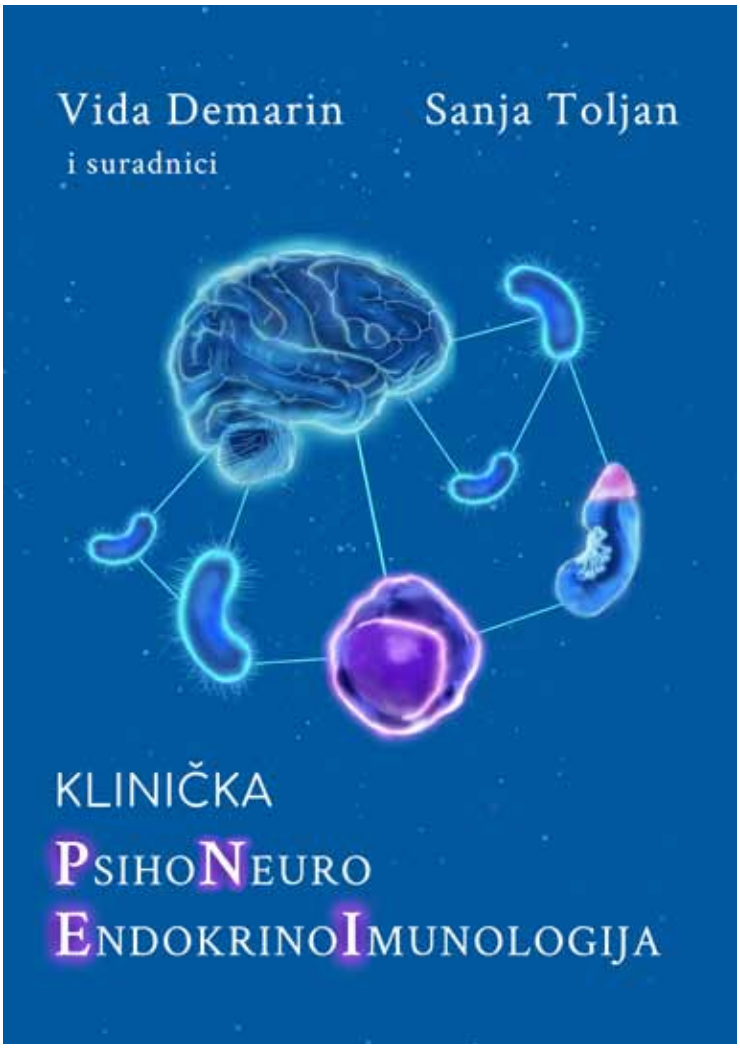

The new book „Clinical psychoneuroendocrinoimmunology" edited by Vida Demarin and Sanja Toljan, published by Crotian Academy of Sciences and Arts, Department of Medical Sciences and Orlando Medicus, Zagreb, December 2020. is presenting the new concept of the impact of stress on health by emphasizing the closeness between the psyche, brain, and body systems, being the basis a new discipline Psychoneuroendocrinoimmunology (PNEI). The idea of the interconnectedness of organs and organ systems is neither new nor revolutionary, moreover, it is very experientially achievable. Over the years, it has been necessary to publish the results of hundreds of thousands of scientific studies in order for this idea to be scientifically grounded. Researchers, mostly of the basic natural sciences, have found themselves on this path, whose results have been successfully incorporated, but mostly are still awaiting translation into everyday clinical practice. Some of them left a deeper mark and accelerated the process of adopting the paradigm shift.

In this book, we can find data that Psychoneuroendocrinoimmunology, which was first described in 1936, is the study of the interactions between the psyche, neural and endocrine functions and immune responses. The aim of PNEI is to apply medical knowledge to the treatment of different allergic, immune, autoimmune, rheumatic, endocrine, cardiovascular, neurologic and dental pathologies, among other disorders. Epigenetic factors and major stresses from different types of stimuli acting through distinct pathways and neurotransmitters are highly involved in altering the psychoneuroendocrinoimmune axis, resulting in the emergence of disease.

The authors point out the fact that along with the nervous and the endocrine systems, the immune system is one of the three major integrative systems in higher organisms. Growing evidence demonstrates an intimate relationship between the immune system and the endocrine and nervous systems: The psychoneuroendocrine system can influence the immune response and thereby the capacity of the organism to cope with the illness, and vice-versa the immune system can have an impact on neuroendocrine functions. Such cross-talk among systems is dependent upon feedback loops working to maintain homeostatic equilibrium.

This book is a comprehensive source of recent knowledge in this field. It is well organized comprising of more than 20 chapters, from global concept and its historical development to emphasizing its translation into clinical practice of several medical disciplines. Written by the experts in their fields (32 authors), the content of the book is the reliable source of many possible PNEI approaches in different medical fields. Each chapter ends with the list of recent references. As the PNEI axis comprises several disease-producing mechanisms in which different disciplines of medicine interact, the authors propose the need for an integrative approach. The science of PNEI must go hand in hand with health education and the promotion of healthy lifestyles in order to attain patient health.

The reader can find more new facts of how diseases are the result of an alteration at the bio-psycho-social level that can indicate lifestyle changes that should be made in addition to appropriate medical management and treatment. Emotions and stress significantly affect health and one's susceptibility to a pathology, as well as one's ability to recover from an illness. PNEI provides knowledge about the biological dynamics of conventional medicine and of importance of lifestyle changes for fighting disease.

The editors were attracted with this exeptional new approach, what was the reason to invite their co-authors from various parts of medicine, thus creating the fresh and innovative tool for

spreading the new knowledge and implenting it in everyday clinical pratice to the benefit of our patients and even more so, to prevent them becoming the patients.
This idea is the embodiment of new physiology in clinical practice. Professor Bottaccioli is the originator of a new paradigm of healing, as he transfers knowledge to practicing physicians, making it easy to understand. He is the link between science and the profession, what we need today, Professor Bottaccioli wrote the following:
We are experiencing a general crisis in the biomedical model that has been dominant for the last 2 centuries. The response to the crisis in medicine could be through PNEI, an interdisciplinary field that the human body considers a structured and networked entity where biological and psychological systems interact with each other reciprocally. Such a vision forms the basis of a new integrated approach in prevention and therapy and at the same time opens the possibility of removing the historical and philosophical opposition between mind and body, as well as medicine and psychology.
The root of PNEI lies in the study of stress, from Hans Selye to the present day. It is possible to unite 2 great traditions (biological and psychological) in the study of stress with the aim of reconstructing the balance of health and disease. What we need is a new science that will remove the narrow-mindedness of 20th century scientific culture, whose roots in reciprocal reductionism have dominated psychology and biomedicine. ”

We are sure that this completely new literature in the world of medical publishing in the Republic of Croatia will be a useful read for all those who nurture an interdisciplinary and holistic approach to the patient. Our thanks and congratulations go to all authors of this exceptionally inspirative book.