DEPUTY EDITOR-IN-CHIEF'S PREFACE TO ISSUE 4, 2025

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Dear colleagues!

We present to you the new autumn issue of the journal "Acta Biomedica Scientifica". This issue has become truly interdisciplinary, reflecting the full breadth and depth of modern medical research. We have collected under one cover works that contain key areas: from fundamental genetics and microbiology to current issues of clinical practice in gynecology, cardiology, surgery and psychiatry. We are confident that every reader will find here valuable information for professional activities and scientific research.

The focus of this issue is a personalized approach to medicine. A number of articles are devoted to the role of genetic factors in the development of pathologies. Thus, **E.B. Polyakova** (Moscow) in her work demonstrates clinical and electrocardiographic features and results of genetic examination of children with tachy-bradycardia syndrome, and **A.M. Miromanov et al.** (Chita) analyze the influence of bone metabolism gene polymorphism on the level of encoded proteins in patients with long bone fractures. The unique clinical case of **Yu.I. Kotsenko** (Donetsk) demonstrates a modern algorithm for diagnosing myofibrillar myopathy using DNA sequencing, which is an example of an interdisciplinary approach in complex diagnostic situations.

Other pressing medical issues are not ignored either. A pilot study by **A.S. Gorkavenko et al.** (Irkutsk) revealed strain-specific antagonistic potential of lactobacilli against multidrug-resistant pathogens, which opens up prospects for the creation of new probiotics. The work of **A.O. Anisimova et al.** (Irkutsk) convincingly demonstrates a close connection between excessive screen time of adolescents and risk factors for chronic non-communicable diseases.

A significant block of articles is devoted to innovative approaches in traumatology and surgery. **M.D. Luchchev et al** (Novosibirsk) presented an original method of osteochondroplasty in the treatment of Freiberg's disease. **S.V. Glinany** and co-authors (Surgut) substantiated the effectiveness of simultaneous fixation of rib and clavicle fractures in combined thoracic trauma. An experimental study by **A.G. Vaganov et al.** (Nalchik, Grozny) showed that using of a polypropylene endoprosthesis with a Nafion coating leads to improved regeneration processes in the area of its implantation on the anterior abdominal wall.

Fundamental reviews add particular significance to the issue. **E.M. Ustinov et al** (Blagoveshchensk) comprehensively analyze the functional role of gangliosides in the pathogenesis of neurodegenerative and infectious diseases, **N.N. Dremina** and co-authors (Irkutsk) study the key enzyme of fibrogenesis – lysyl oxidase. We would also like to note the profound and philosophical article by **E.D. Savilov** (Irkutsk), which is devoted to the analysis of paradigms and scientific revolutions in epidemiology. The work makes you think about the process of scientific knowledge itself.

In concluding, we can confidently say that this issue turned out to be extremely rich and multifaceted. The wide range of presented studies reflects the complexity and dynamism of modern medical science. This is undoubtedly a contribution of our authors and reviewers, whose dedicated work and high professionalism ensured the highest quality of publications.

We thank all the participants in the creation of this issue and wish our fellow readers inspiration, bright scientific discoveries and new professional achievements!

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