

OPINION

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member of the Scientific Jury in the competition for the academic position of "Associate Professor" in field of higher education 7. "Health Care and Sports", professional field 7.1. "Medicine", scientific specialty "Rheumatology"

Re: competition for the academic position of "Associate Professor" in the scientific specialty "Rheumatology" for the needs of the Faculty of Medicine, Department of Cardiology and Rheumatology at the Medical University "Prof. Dr. Paraskev Stoyanov" - Varna and the Clinic of Rheumatology at University Hospital "St. Marina" - Varna

The competition was announced in the State Gazette, issue No. 50 of 02.06.2026, for the academic position of "Associate Professor" in the scientific specialty "Rheumatology" - a 0.5 full-time equivalent position for the Department of Cardiology and Rheumatology, Faculty of Medicine, Medical University - Varna, and one full-time position for the Clinic of Rheumatology at University Hospital "St. Marina" - Varna. By Order No. P-109-274/30.07.2026 of the Rector of the Medical University - Varna, I was appointed as a member of the Scientific Jury. Pursuant to Minutes No. 1 of the first meeting of the Scientific Jury, I was assigned to prepare an opinion on the procedure. One candidate has submitted documents for participation in the competition - Dr. Simona Bogdanova-Petrova, MD, PhD. The documentation presented allows a comprehensive assessment of her research, teaching, and clinical activities.

I. Analysis of the candidate's career profile

Dr. Simona Bogdanova-Petrova was born in 1984 in Kochani, Republic of North Macedonia. She graduated with distinction from the Mathematics High School in her hometown. In 2009, she graduated in Medicine with distinction from the Medical University "Prof. Dr. Paraskev Stoyanov" - Varna and received an award for outstanding academic achievement among international students, granting her the right to pursue specialty training of her choice.

Her professional career has been consistently associated with the Clinic of Rheumatology at University Hospital "St. Marina" - Varna, where she has worked since 12.01.2010. Over the years, she has successively held positions as physician, resident physician, and specialist physician, alongside the academic positions of Assistant Professor and Chief Assistant Professor. She acquired the specialty "Rheumatology" on 01.06.2017, certified by Certificate No. 3857/07.07.2017.

Her academic career at the Medical University - Varna began on 23.09.2015 as an Assistant Professor. The official teaching experience certificate documents continuous employment as an Assistant

Professor until 30.05.2024, after which she assumed the academic position of Chief Assistant Professor. She is currently Chief Assistant Professor in the Department of Cardiology and Rheumatology, Educational Sector of Rheumatology. As of 04.06.2026, her total teaching experience amounts to 10 years, 8 months, and 12 days.

In 2022-2023, Dr. Bogdanova-Petrova was an independent-study doctoral student in the doctoral programme "Internal Medicine" at the Department of Propedeutics of Internal Medicine, Medical University - Varna. Following the successful defence of her dissertation entitled "Pain as Part of the Rheumatological Manifestations of COVID-19 Viral Infection", she acquired the educational and scientific degree "Doctor" (PhD) on 01.06.2023; Diploma No. 609 was issued on 21.12.2023.

The candidate's career development demonstrates continuity between clinical specialization, academic advancement, and research activity. This continuity is particularly important in a competition for an academic position in a clinical specialty, where scientific output should be assessed in the context of actual clinical and teaching competence.

II. General description of the materials submitted for the competition

The candidate has submitted a complete set of documents, including an academic CV, diplomas for the acquired educational qualification and educational and scientific degree, a certificate of acquired medical specialty, certificates of professional and teaching experience, teaching workload reports, an academic performance report, a monographic work, publications, summaries of the scientific works, a statement of scientific contributions, evidence of participation in scientific forums, qualification courses, and other documents certifying her professional activity.

The academic performance report dated 03.06.2026 documents fulfilment of the minimum scientometric requirements for the academic position of "Associate Professor" in field 7. "Health Care and Sports", professional field 7.1. "Medicine". No deficiencies were identified in the indicators included in the report. The two publications used in the procedure for acquisition of the educational and scientific degree "Doctor" (PhD) are separately identified and are not counted again in the present procedure.

For the indicators in Group Γ, the candidate presents a total of 15 publications and reports - 13 under indicator Γ7 and 2 under indicator Γ8, with a total score of 286.81 points against a required minimum of 200 points. According to the academic performance report, 8 of the submitted publications are in journals referenced and indexed in Scopus and/or Web of Science, of which 4 are in journals with an Impact Factor. The proportion of review publications, case reports, and summaries is within the permissible limits specified in the report.

Under Group Д, 8 citations are presented, assessed at a total of 120 points against a minimum requirement of 80 points. In the present competition, the independent monograph "Pain, Mood and the Relationship Between Them", Steno Publishing House, 2025, ISBN 978-619-241-401-6, 160 pages, is submitted as the habilitation work.

III. Assessment of the candidate's scientific works in the context of her overall academic development

The submitted scientific output demonstrates thematic relevance to the major problems of contemporary rheumatology while also displaying an interdisciplinary character. Five main areas are delineated in the statement of scientific contributions. Some of the works are based on the candidate's own clinical observations and analyses, others are confirmatory or scientific-applied in nature, while the review papers systematize current evidence in areas of direct relevance to clinical decision-making.

1. Pain and rheumatological manifestations in COVID-19

This is the candidate's most consistently developed research area and a natural continuation of her dissertation work. The studies focus on the frequency, clinical characteristics, and persistence of arthralgia, myalgia, and other musculoskeletal manifestations in SARS-CoV-2 infection, as well as on the mechanisms through which systemic inflammation, immune dysregulation, and psycho-emotional status may modify the experience of pain.

From a scientific and applied perspective, an important aspect is the consideration of pain not merely as a symptom of the acute infectious disease, but as a complex phenomenon that may persist and contribute to the clinical picture of post-COVID conditions. The relationship between musculoskeletal pain and emotional status has also been investigated, providing a logical transition to the topic of the habilitation work submitted in the competition.

2. Immune-mediated inflammatory joint diseases

The second major area includes studies on spondyloarthritis, psoriatic arthritis, contemporary targeted therapy, and prevention in patients with autoimmune inflammatory rheumatic diseases. In the publication under indicator $\Gamma 7.7$, serum ICAM-1 and VCAM-1 were investigated as markers of endothelial activation in ankylosing spondylitis and psoriatic arthritis, contributing to the characterization of the relationship between chronic inflammation and subclinical vascular damage.

The works under indicators $\Gamma 7.8$ and $\Gamma 7.9$ present real-world clinical data on the effectiveness and safety of upadacitinib in inflammatory joint diseases. They have practical value because they assess therapeutic response outside the highly selected populations of registration trials. The comparative analysis of non-radiographic and radiographic axial spondyloarthritis ($\Gamma 7.11$) emphasizes that the absence of radiographic structural changes does not necessarily imply lower clinical severity and supports the need for early diagnosis and timely treatment.

Particularly relevant is the work devoted to vaccination prophylaxis in patients with inflammatory joint diseases ($\Gamma 7.10$). Adherence to recommended vaccines and the factors influencing vaccination behaviour were analysed. The practical conclusion is that preventive strategies and informed discussions about vaccination need to be more visibly integrated into routine rheumatology practice.

3. Systemic connective tissue diseases

In this field, works on systemic lupus erythematosus, immune-mediated glomerular diseases, and the use of intravenous immunoglobulins are presented. The prospective observation of patients with systemic

lupus erythematosus treated with belimumab (Γ7.5) provides real-world clinical data on changes in disease activity and the possibility of reducing maintenance glucocorticoid therapy while maintaining an acceptable safety profile.

The work on proteinuria in immune-mediated glomerular diseases (Γ7.6) analyses this accessible biomarker as an indicator of disease activity and therapeutic response. The review on intravenous immunoglobulins (Γ7.2) systematizes their immunomodulatory mechanisms and contemporary clinical applications, while the work under Γ8.1 addresses cognitive impairment and neuropsychiatric comorbidity in systemic lupus erythematosus.

4. Rare and interdisciplinary manifestations of relevance to the rheumatologist

The clinical case of aortitis as the first manifestation of spondyloarthritis (Γ7.4) has primarily educational and clinically applied value, as it draws attention to a rare but potentially serious extra-articular manifestation and to the need for a broad differential diagnostic approach. Another line of work addresses musculoskeletal manifestations in endocrine conditions, including polycystic ovary syndrome and thyrotoxicosis, demonstrating the candidate's interest in the interdisciplinary interfaces of rheumatology.

5. Artificial intelligence and digital technologies in rheumatology

The publication under indicator Γ7.1 addresses the transition towards artificial intelligence in imaging and laboratory diagnostics in rheumatology. Its contribution is primarily review-based and conceptual: it systematizes the possibilities for algorithmic analysis of radiographic, ultrasonographic, magnetic resonance, computed tomography, and laboratory data, as well as the prospects for predictive models, assessment of disease activity, and therapeutic response. This topic is highly current and delineates a promising field for the candidate's future original research.

In summary, Dr. Bogdanova-Petrova's scientific activity is focused on clinically relevant problems and demonstrates an ability to work both with original clinical data and with critical synthesis of the literature. The most clearly traceable line is "pain - psycho-emotional status - functional outcome", while parallel research is being developed in inflammatory arthritis, systemic autoimmune diseases, prevention, and new digital approaches.

IV. Assessment of the monographic work

As her habilitation work, Dr. Simona Bogdanova-Petrova presents the independent monograph "Pain, Mood and the Relationship Between Them", published by Steno Publishing House in 2025, ISBN 978-619-241-401-6, 160 pages. The monograph is thematically related to the candidate's dissertation interests but expands the problem beyond the context of COVID-19 and places pain within the broader model of interaction among biological, psychological, and social determinants.

The work considers pain as a complex and individual experience shaped by peripheral and central neurobiological mechanisms, genetic and epigenetic factors, previous experience, cognitive processes, and emotional status. An important conceptual element is the distinction between nociception as a neurophysiological process and the subjective experience of pain. This distinction has direct clinical

relevance in chronic pain syndromes, in which pain intensity and persistence cannot be explained solely by ongoing tissue damage.

Considerable attention is devoted to the bidirectional relationship between chronic pain and disturbances of mood and mental health. Contemporary diagnostic and therapeutic options are discussed, including pharmacological, psychological, rehabilitation, and neuromodulation approaches. A strength of the monograph is its interdisciplinary nature and its attempt to link fundamental mechanisms with everyday clinical decision-making.

I assess the monograph as a current and practically oriented habilitation work that demonstrates the ability to independently structure and critically present a complex scientific topic. The subject is directly relevant to rheumatology, where chronic pain often remains a major determinant of functional capacity and quality of life even when inflammatory activity is well controlled.

V. Impact (citation) of the candidate's publications in the scientific literature

The academic performance report for the present competition includes 8 citations, carrying a total of 120 points under Group Д against a minimum requirement of 80 points. The evidence presented demonstrates that the candidate's scientific output has been reflected in subsequent publications. At this stage of academic development, this result fulfils the regulatory minimum and provides a sound basis for further increasing the international visibility and citation impact of her scientific work.

VI. Comprehensive qualitative assessment of teaching and methodological activity

Dr. Bogdanova-Petrova's teaching activity is long-standing and consistent. Teaching Experience Certificate No. 099-1907/04.06.2026 documents a total academic teaching experience of 10 years, 8 months, and 12 days, including service as an Assistant Professor from 23.09.2015 and as a Chief Assistant Professor from 30.05.2024.

For the five academic years from 2020/2021 to 2024/2025, a total of 983 teaching hours are certified. The majority comprise practical classes in rheumatology for medical students; in the 2023/2024 academic year, 14 hours of teaching in English were also recorded. According to the academic CV, the candidate also participates in rheumatology lectures, practical classes in internal medicine for dental medicine students, and semester and state examination committees for both Bulgarian- and English-language programmes.

Dr. Bogdanova-Petrova is also involved in postgraduate training of residents, including seminars within the core rheumatology courses and training in capillaroscopy. Evidence has been presented of participation in the development of educational video materials and in practical workshops during scientific and professional forums. These activities demonstrate not only fulfilment of the teaching workload but also a gradual expansion of her role from clinical teacher to academic mentor.

VII. Clinical and professional activity

The candidate's clinical experience is a substantial advantage in a competition in rheumatology. The certificate of professional experience in the relevant specialty documents continuous employment at

University Hospital "St. Marina" - Varna since 12.01.2010. As of the date of issue of the document, 16 years, 4 months, and 21 days of total service as a physician and 10 years, 8 months, and 10 days of service credited as work in the field of rheumatology are certified.

Her professional qualifications have been systematically expanded. The submitted documents certify training in musculoskeletal ultrasonography - basic and subsequent levels, capillaroscopy, interpretation of conventional radiography, CT and MRI of the musculoskeletal system, bone densitometry, and other specialized methods. The candidate completed the ASAS Educational Course on Assessment and Treatment of SpondyloArthritis in Brussels in 2015, EULAR training in capillaroscopy and microcirculation in 2024, and European Crystal Network training in 2026.

An important part of her professional development is participation in 7 clinical trials during the period 2010-2026 in rheumatoid arthritis, ankylosing spondylitis, systemic lupus erythematosus, fibromyalgia, and Sjögren's syndrome, in different roles within the research team. This experience implies sound preparation for work under standardized protocols, assessment of efficacy and safety, and integration of new therapeutic strategies into clinical practice.

Dr. Bogdanova-Petrova also participates in specialized hospital committees. By Order No. P-903/30.12.2022, she was included in committees related to therapeutic decision-making for patients with inflammatory arthritis and systemic lupus erythematosus, and by Order No. P-406/14.05.2026 - in a committee for treatment with medicinal products outside the terms of their marketing authorization. Such activity requires not only knowledge of therapeutic algorithms but also assessment of individual risk, benefit, and regulatory requirements.

Membership in professional organizations and participation in national and international scientific forums further complement the candidate's profile. The academic CV lists participation in more than 40 scientific forums in Bulgaria and abroad and a total of 52 presentations, demonstrating sustained activity within the professional community and experience in presenting scientific and clinical results.

VIII. Critical remarks and recommendations

The materials presented provide grounds for a positive assessment, while also outlining natural directions for the next stage of Dr. Bogdanova-Petrova's academic development.

- To consolidate her thematically broad scientific activity into one or two clearly recognizable original research lines, developed through prospective and, where feasible, multicentre studies with predefined methodology and endpoints.
- To increase the proportion of publications in which she is first and/or corresponding author in international referenced and indexed journals, which would enhance the visibility and citation impact of her scientific work.
- As the next step in her academic advancement, to develop more active project and mentoring activities and gradually establish her own research group involving young physicians and residents.

These recommendations do not represent deficiencies in relation to the requirements of the present competition, but rather outline a logical perspective for development after appointment to the academic position of "Associate Professor".

IX. Overall assessment of the candidate's compliance with the requirements

Based on the materials presented and the academic performance report, I conclude that Dr. Simona Bogdanova-Petrova, MD, PhD fulfils the minimum national requirements for the academic position of "Associate Professor" in field of higher education 7. "Health Care and Sports", professional field 7.1. "Medicine", scientific specialty "Rheumatology", as well as the applicable requirements of the Medical University - Varna. Across the principal scientometric groups, the candidate has accumulated 556.81 points against a total required minimum of 430 points.

In addition to quantitative fulfilment of the criteria, the candidate has more than ten years of teaching experience, long-standing clinical work in a university rheumatology clinic, an acquired medical specialty and additional practical qualifications, and participation in clinical trials and hospital committees. Taken together, these indicators are directly aligned with the profile of the announced competition.

X. Conclusion

Following a comprehensive analysis of the submitted documents, scientific output, habilitation work, teaching activity, and professional development, I consider that Dr. Simona Bogdanova-Petrova, MD, PhD possesses the necessary scientific, teaching, and clinical competence to hold the academic position of "Associate Professor" in the scientific specialty "Rheumatology".

For the reasons stated above, I give a POSITIVE assessment of the candidacy and will vote "POSITIVELY" of Dr. Simona Bogdanova-Petrova, MD, PhD in the procedure for appointment to the academic position of "Associate Professor" in the scientific specialty "Rheumatology" for the needs of the Faculty of Medicine, Department of Cardiology and Rheumatology at the Medical University - Varna and the Clinic of Rheumatology at University Hospital "St. Marina" - Varna.

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