To the Chairman of the Scientific Jury, appointed by order of Rector of the Medical University - Varna No: P-109-398 / 20.09.2021.

OPINION

by Assoc. Prof. Dr. Tanya Kirilova Shivacheva, PhD First Department of Internal Medicine at the Medical University - Varna

Member of the Scientific Jury for the competition (State Newspaper No. 61 / 23.07.2021) for acquiring the academic position "Associate Professor" in the field of higher education 7. "Health and Sports", professional field 7.1. "Medicine" and scientific specialty "Rheumatology" for the needs of the Faculty of Medicine, First Department of Internal Medicine and Clinic of Rheumatology at the University Hospital "St. Marina" Varna

By order of the Rector of MU Varna P -109-398 / 20.09.2021. I was elected a member of the Scientific Jury, and under protocol N:1 of the first meeting of the Scientific jury, I was elected to prepare an opinion on the procedure for acquisition of academic position "Associate Professor" for the needs of the Faculty of Medicine, First Department of Internal Medicine and the Clinic of Rheumatology at the University Hospital "St. Marina" Varna.

The procedure for announcing the competition is in compliance with the legal requirements, no procedural violations have been established. Documents for the competition have been submitted by one candidate - Dr. Tsvetoslav Antonov Georgiev, PhD.

1. Short biographic data for the candidate

Dr. Tsvetoslav Antonov Georgiev graduated from the Medical University of Sofia in 2012. During the period 2013-2014 he worked as a junior specialist / junior expert in the Executive Agency for Transplantation, and from 2014 to 2018 as a specialist in the Clinic of Rheumatology, University Hospital "St. Ivan Rilski "- EAD, Sofia. From 01.2019 to 07.2019, Dr. Georgiev worked as a doctor in MHAT "Serdika" - Sofia, and since 07.2019, as a doctor in the Clinic of Rheumatology, University Hospital "St. Marina", Varna. In July 2020, Dr. Georgiev was elected Chief Assistant at the First Department of Internal Medicine, MU-Varna.

Dr. Tsvetoslav Georgiev has many additional professional qualifications for which he has the necessary certificates:

- Musculoskeletal ultrasound;
- Capillaroscopy;
- Imaging diagnostics in rheumatology;

In 2018, Dr. Tsvetoslav Georgiev acquired the specialty of Rheumatology and educational and scientific degree "Doctor" with the topic of dissertation "Clinical, serological and imaging studies in patients with knee osteoarthritis treated with various therapeutic agents."

The candidate meets the requirements for habilitation on this indicator.

2. Scientific and research activity of the candidate - assessment of the quantitative and qualitative indicators

Dr. Tsvetoslav Georgiev has submitted for review the following scientific work:

- Monograph: Dr. Georgiev, "Knee osteoarthritis", ISBN 978-619-7168-07-5, 157 p.
- Full-text publications in scientific journals, referenced and indexed in a global database with scientific information: 16 pcs.
- Full-text publications in scientific journals with scientific review: 4 pcs.
- Participation in national congresses and conferences: 19 pcs.
- Participation in international congresses and conferences: 9 pcs.

Dr. Georgiev is an independent author in 5 scientific publications. He is the first author in 12 publications and respectively the second author in 5, and subsequent in 3 scientific papers. Dr. Georgiev's individual hirsh index is 7 (Google Scholar).

Dr. Tsvetoslav Georgiev has over 200 citations and 289 reviews.

The specified activity on this indicator covers the minimum state requirements of the Act on Development of the Academic Staff in the Republic of Bulgaria of MU-Varna for acquiring the academic position of Associate Professor.

3. Scientific fields in which the candidate has mainly worked:

- 3.1 Osteoarthritis;
- 3.2 Biomarkers;
- 3.3 Imaging diagnostics of the musculoskeletal system;
- 3.4 Rheumatic diseases and COVID-19;
- 3.5 Inflammatory joint diseases.

The issues in the presented scientific-applied developments of the candidate correspond to his research interests and his scientific-applied activity, and correspond to the professional field in which the competition has been announced. The subject of the works completely and entirely covers the scientific specialty for which the competition is.

The indicated activity under this indicator covers the minimum state requirements of the Law on the Administration of the Republic of Bulgaria and the Regulations of MU-Varna for acquiring the academic position of Associate Professor.

4. Scientific and applied contributions:

The main field in which Dr. Georgiev has been working and developing scientific activity over the years is osteoarthritis. The dissertation work of the candidate is also in this field. It should be noted that he is involved in scientific studies investigating clinical parameters and functional deficits in patients with knee osteoarthritis. In his scientific works, the potential modifiable risk factors for knee osteoarthritis are classified and a protocol for their modification is proposed through a combination of intervention measures. The clinical efficacy of two different regimens for intra-articular cross-linked high molecular weight hyaluronic acid injection in patients with knee osteoarthritis was compared for the first time in the Bulgarian population. Dr. Georgiev has participated in a study of the levels of an early biomarker for cartilage degeneration in women with polycystic ovary syndrome and hyperandrogenism, which is a novelty worldwide. Dr. Georgiev's research includes research on biomarkers. A team with his participation has established the relationship between the levels of MMP-3 and the progression of cartilage degeneration in patients with knee osteoarthritis, monitored by magnetic resonance imaging. The assessment of the momentum cartilage loss in young women with hyperandrogenism using serum levels of cartilage oligomeric matrix protein can be defined as a scientific and applied novelty in the world. The biomarkers MMP-3, COMP and VEGF were evaluated for the first time in Bulgaria in patients with psoriatic arthritis.

In the field of imaging studies, Dr. Georgiev participated in the study of the influence of structural changes in knee osteoarthritis, assessed by radiography and ultrasound, on the intensity of pain in patients with the disease. The morphological changes of the muscles in the lumbosacral region in patients with axial spondyloarthritis have been described and evaluated by magnetic resonance imaging for the first time for the Bulgarian population.

The scientific works of the candidate studying COVID-19 in the context of rheumatic diseases are especially relevant. For the first time in Bulgaria, a study was conducted on the prevalence and type of rheumatic manifestations in the cohort of patients with COVID-19. Factors that may affect the safety and efficacy of SARS-CoV-2 vaccines in patients with autoimmune inflammatory diseases have been analyzed.

5. Educational and teaching activity:

- Dr. Georgiev is a lecturer with diverse experience in different levels of teaching. As a full-time doctoral student, he participated in the training of 5th year medical students at the Medical Faculty, Medical University of Sofia in the period from 2013 to 2018.
- After his appointment as a specialist at the University Hospital "St. Marina Dr. Georgiev participates in the training of third year medical students as a part-time assistant in the Department of Propaedeutics of Internal Medicine in the academic year 2019/2020, Faculty of Medicine with a teaching load of 140 hours.
- Since 07.2020, Dr. Georgiev holds the academic position of "Chief Assistant" in the First Department of Internal Medicine, Department of Rheumatology at the Faculty of Medicine at MU - Varna. For the 2020/2021 academic year, Dr. Georgiev has 152 hours of workload.

Dr. Tsvetoslav Georgiev has a study load of not less than 100 hours per year for the period of work at MU-Varna and has proven achievements in his field.

In conclusion

Dr. Tsvetoslav Antonov Georgiev is a developed professionalist in the field of rheumatology, with in-depth knowledge and skills and excellent training, and proven qualities. A young and promising clinician and scientist. His scientific output is sufficient in volume, covers more than the minimum national requirements and shows a variety of interests; his publications are in scientific journals of different nature. The candidate meets the requirements of the Act for Development of the Academic Staff in the Republic of Bulgaria and the Regulations for Development of the Academic Staff in MU-Varna. This gives me reason to recommend to the esteemed members of the scientific jury to vote positively for awarding the academic position "Associate Professor" to Dr. Tsvetoslav Antonov Georgiev, PhD. in the scientific specialty "Rheumatology" for the needs of the First Department of Internal Medicine, Rheumatology Department at the Faculty of Medicine at the Medical University – Varna.

03 nov 2021

Reviewer..... (Assoc. Prof. Tanya Shivacheva, PhD)