

REVIEW

by Prof. Dr. Rasho Kolev Rashkov, PhD, DSc, Medical University - Sofia,
Head of the Clinic of Rheumatology at the University Hospital "St. Ivan Rilski ", Sofia
of the materials submitted for participation in a competition for the academic position "Associate
Professor" in the specialty "Rheumatology"

According to a letter with outgoing number 109-762/14.10.2021 and Order # P-109-398/20.09.2021 from the Rector of the Medical University – Varna, I was provided with materials for preparation of a review under a procedure for holding an academic position “Associate Professor” in the field of higher education 7. Healthcare and sports, professional field 7.1. Medicine, specialty "Rheumatology", at the Medical University - Varna, for Chief Assistant **Dr. TSVETOSLAV ANTONOV GEORGIEV, Ph.D.**

Within the legally established time period, documents were submitted by one candidate: Dr. Tsvetoslav Antonov Georgiev, PhD, who was admitted to the competition in accordance with the requirements of the Law on the Development of Academic Staff in the Republic of Bulgaria, the Regulations for its implementation and the Regulations for development of the academic staff at the Medical University "Prof. Dr. Paraskev Stoyanov" – Varna.

1. General description of the presented materials

To participate in the competition, in accordance with the scientometric requirements for holding the academic position of "Associate Professor", the candidate has defended a dissertation for educational and scientific degree "Doctor" and acquired the specialty "Rheumatology". For the purposes of the competition Chief Assistant Professor Dr. Tsvetoslav Georgiev, PhD has submitted the following important documents:

- monographic work;
- a list of a total of 23 scientific publications not used in his dissertation. Of these, 13 scientific publications are presented as evidence, covering the minimum scientometric indicators for borrowing of AD "Associate Professor".
- 19 publications referenced from world-famous databases (from the list of 23 publications);
- list of 10 citations of articles indexed in world-renowned bibliographic databases;

- references from the chairman of the Bulgarian Society of Rheumatology and the head of the largest rheumatology clinic in Bulgaria, which show that the candidate is a specialist in practice;
- awards that unequivocally prove that the candidate has achievements in the field of rheumatology both nationally and globally;
- Certificates of mastery of musculoskeletal ultrasound from the European League against Rheumatism (EULAR);
- a report from Publons, showing the extensive review and editorial work in international journals.

It should be noted that 19 of the presented scientific publications are indexed and referenced in the world-renowned databases Scopus and/or Web of Science, showing the internationally recognized research activity of the candidate.

To date, the candidate for the academic position of "Associate Professor" has RG Score 25.2 and h-index 8 according to ResearchGate, as well as h-index 7 and i10-index 6 - according to Google Scholar, and h-index 6 - according to the reference of the world-renowned database for scientific literature Scopus, and according to the Web of Science - h-index 5.

2. Short biographical data

Chief Assistant Professor Dr. Tsvetoslav Antonov Georgiev, PhD was born in Burgas. He completed his secondary education at the First Language School in Varna with training in English in 2006. In the period between 2006 and 2012, he studied medicine at the Medical University - Sofia. In 2018, he defended his doctoral dissertation entitled "Clinical, serological and imaging studies in patients with knee osteoarthritis treated with various therapeutic agents."

From 2012 to 2013, he worked and gained practical experience in the Transplant Agency at the Ministry of Health. After graduating from Medical University of Sofia, he gained practical experience, realizing himself as a specialist in Rheumatology in 2018. He participates in many Bulgarian and international courses in musculoskeletal ultrasound and imaging, holding national and international certificates. He has conducted seminars and lectures on writing and reviewing scientific literature. He has numerous articles published in peer-reviewed medical journals, mainly on osteoarthritis, and more recently on COVID-19 and rheumatic diseases. He participated in the compilation of the Bulgarian consensus on osteoarthritis under the auspices of the Bulgarian Society of Rheumatology. Since 2019, he has been an associate editor of an international and world-renowned scientific journal.

As a full-time Ph.D. student (2013 - 2018) in the Department of Internal Medicine at MU-Sofia, with an education base the Clinic of Rheumatology, University Hospital "St. Iv. Rilski", Sofia, Dr. Georgiev participated in the teaching process of fifth-year medical students. After starting work at the University Hospital "St. Marina ", Varna, the candidate successively became a part-time assistant (2019 - 2020) at the Department of Propaedeutics of Internal Medicine at the Medical University - Varna, and in 2021 - Chief Assistant at the Department of Rheumatology at the First Department of Internal Medicine - academic position, which occupies to this day.

3. Educational and pedagogical activity

According to the requirements of the position, the candidate has submitted the following documents certifying his competence in the educational and pedagogical process:

- Certificate for teaching activity at the Department of Internal Medicine at the Medical University - Sofia;
- Certificate for teaching as a part-time assistant in the academic year 2019/2020;
- Certificate for teaching as a senior assistant in the academic year 2021/2022.

In the period between 2013 and 2018, the candidate is a full-time doctoral student, and since 2019 he has been a part-time and later Chief Assistant Professor. He has developed practicals, lecture courses and lectures /in English and Bulgarian/ in the following disciplines:

- Propaedeutics of Internal Medicine;
- Internal Medicine Part I with direction Rheumatology.

Dr. Georgiev participates in the author's team of 1 textbook suitable for graduates and specialists in rheumatology and internal medicine.

I believe that the educational and pedagogical activity of Chief Assistant Professor Dr. Tsvetoslav Georgiev, PhD fully meets the necessary requirements for the academic position of "Associate Professor".

4. Scientific and scientific applied activity

From the presented materials, it is obvious that the research and applied activity of the candidate is mainly related to the research linked to osteoarthritis, biomarkers, imaging of the musculoskeletal system and inflammatory joint diseases.

Other areas of research are related to the evaluation of COVID-19 in the context of rheumatic and autoimmune diseases. For the first time, a publication that he is co-authoring

described the distribution of rheumatic manifestations in a Bulgarian cohort of patients with COVID-19. Another of his research papers was cited 30 times according to Google Scholar for 2021 and analyzed factors that may affect the safety and efficacy of SARS-CoV-2 vaccines in patients with autoimmune inflammatory diseases.

The report presented in Publons for review and editorial activity (item 20.12) shows that he is a reviewer of 289 articles in 29 scientific peer-reviewed journals, while 26 of those journals are referenced in the Web of Science. In the light of his work as a reviewer, he received the Publons Award from 2018 and 2019 for review and the award of the Korean Journal of Medical Science for the best reviewer in the field of Rheumatology in 2019.

The large number of publications in the considered fields, the defended dissertation for awarding the educational and scientific degree "Doctor of Medicine", the large number of citations (over 200) outside the minimum requirements, as well as the report from Publons and the awards for reviewing scientific literature makes dr. Georgiev an eminent scientist in the field of the announced competition, recognized by the scientific community at home and abroad.

I would like to emphasize that the topic of his scientific and applied research is extremely relevant due to the increased requirements for working with COVID-19 in the current pandemic.

5. Main scientific contributions

I agree with the author's view of his contributions to the field of medicine and rheumatology. They are divided into a total of five areas:

I. Direction "Osteoarthritis"

- Clinical parameters and biomarkers determining the functional deficit in patients with knee osteoarthritis for the first time in Bulgaria were analyzed.
- Potential adjustable 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 injection of intra-articular cross-linked high molecular weight hyaluronic acid in patients with knee osteoarthritis for the first time in the Bulgarian population was compared.
- The relationship between osteoarthritis and polycystic ovary syndrome was analyzed by detecting early symptoms of knee osteoarthritis in women with polycystic ovaries for the first time in Bulgaria.
- The study of the levels of early biomarker for cartilage degeneration in women with polycystic ovary syndrome can be qualified as a scientific novelty in the world.

- The relationship between the clinical and laboratory characteristics of women with hyperandrogenism with the early symptoms of knee osteoarthritis and cartilage thickness was studied.

II. Direction "Biomarkers"

- The relationship between MMP-3 levels and the progression of cartilage degeneration in patients with knee osteoarthritis, monitored by magnetic resonance imaging, has been studied and established, which is a novelty worldwide.
- The assessment of the instantaneous loss of cartilage 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.
- For the first time in Bulgaria, the biomarkers MMP-3, COMP and VEGF were evaluated in patients with psoriatic arthritis.
- The relationship between magnetic resonance imaging and serum levels of cartilage oligomeric matrix protein in patients with knee osteoarthritis was evaluated in a study conducted for the first time in Bulgaria.

III. Direction "Imaging diagnostics of the musculoskeletal system"

- For the first time in Bulgaria, the influence of the structural changes in knee osteoarthritis, assessed by radiography and ultrasound, was studied in correlation with the intensity of pain in patients with knee osteoarthritis.
- 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.
- For the first time in Bulgaria a comparison of the area of paravertebral muscles was performed in patients with axial spondyloarthritis and a group of patients with chronic low back pain.

IV. Direction "Rheumatic Diseases and COVID-19"

- 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.

V. Direction "Inflammatory joint diseases"

- For the first time, the publishing activity of Bulgarian authors in the field of inflammatory joint diseases and rheumatology was studied.
- The possibilities and benefits of the application of the pharmacoeconomic cost-effectiveness analysis in the treatment of patients with rheumatoid arthritis have been studied.

I believe that the teaching and methodological contributions fully and fully meet the requirements for the academic position of "Associate Professor".

6. Significance of contributions to science and practice

From the presented contribution elements of the candidate, it can be concluded that they have scientific, scientifically-applied, applied, and scientific-methodical character and that they are subordinated to an extremely important topic for medicine - osteoarthritis, inflammatory joint diseases and related to COVID- 19 rheumatic manifestations.

The scientific works have been published in eminent Bulgarian and international journals and scientific forums. Most of the publications are referenced in high-impact journals. Most of them are listed in the Web of Science database and have impact factor, as the total impact factor of the published full-text articles is 17.468.

The presented scientometric indicators also include 3 conference abstracts published in the Annals of Rheumatic Diseases with IF 19.103 (2020). One of the reports was selected and presented as a poster during the European Congress of Rheumatology in 2021.

The characteristic feature of the presented work is that the overall research and teaching activity of dr. Georgiev is related to the practice and has solved important problems of medicine in our country.

In Bulgaria, dr. Georgiev is a known name to the scientific community and rheumatology patients with research and applied (clinical) activities, as evidenced by the award "Doctor whom Bulgarians trust" in the newspaper 24 hours.

7. Assessment of the personal contribution of the candidate

In the presented works for the present competition dr. Georgiev is a single and sole author of a dissertation, a monograph, as well as 3 independent full-text publications.

There are 10 citations covering the minimum requirements, all of which are referenced in the world-famous Scopus database. Beyond the minimum requirements, the candidate has over 200 citations, most of which are in articles by international authors and teams.

Taking into account this fact, it can be convincingly stated that in the scientific production presented by dr. Tsvetoslav Georgiev, his personal contribution on the one hand is undoubted, and on the other - completely sufficient to hold the academic position of "associate professor".

8. Critical notes

In the further activity of the candidate I would recommend to keep in mind the following:

- to take a more active part in the writing of textbooks and teaching materials where he should describe and systematize his clinical experience and indisputable knowledge;
- to pass on their knowledge to future generations of rheumatologists, taking doctoral students under his guidance;
- to lead large research and financial research projects.

9. Personal impression

As a head of the Rheumatology Clinic at the University Hospital "St. Ivan Rilski", I know well the clinical work and scientific achievements of dr. Tsvetoslav Antonov Georgiev since 2013, when he started a full-time doctorate with a training base in the clinic I am the head of. In the course of working with patients, dr. Georgiev distinguished himself with good practical and theoretical knowledge. He knows how to work well in a team and respects his colleagues, and is able to draw valuable knowledge and skills for his work from his more experienced colleagues and teachers. During his studies at the Rheumatology Clinic, the doctoral student showed diligence and became actively involved in the work process. He is responsible for his duties in the clinic and for the tasks set.

I may recommend his candidacy with the confidence that he is a proven specialist in practice and has undoubtedly achieved and continues to achieve excellent results in rheumatology. I am convinced that his knowledge and skills will be of great use in the treatment of patients with rheumatic diseases. Dr. Tsvetoslav Antonov Georgiev has excellent communication skills and

accurate and correct expression, so I am fully convinced that he will pass on his abilities, theoretical knowledge and practical skills to medical students in the best way.

Dr. Georgiev is fluent in 2 foreign languages - English and German, which allows him to easily communicate with scientists from around the world.

I think that, as a researcher, scientist and specialist, he has many valuable qualities and that he has great opportunities and real prospects for academic development and scientific growth. In his work with patients, dr. Georgiev is responsible and diligent. With the successful completion of this competition, Medical University - Varna will be enriched with a capable, well-trained specialist both as a lecturer and as a researcher, implementer and organizer.

10. Fulfillment of the requirements of NACID, determined in accordance with the Law for development of the academic staff in the Republic of Bulgaria and the Regulations for its implementation, for academic position "associate professor" in the field of higher education 7. Health and sports, professional field 7.1 . Medicine, specialty "Rheumatology"

The publication and scientific activity of the candidate Dr. Tsvetoslav Antonov Georgiev fully covers the minimum requirements for the academic position of "Associate Professor" in the professional field of Medicine, specialty "Rheumatology".

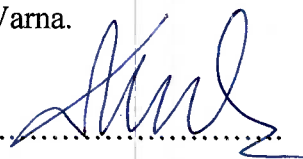
11. Conclusion

From the peer-reviewed monographs and publications, as well as from the teaching, research, applied, implementation and organizational activities in the field of medicine and rheumatology, it can be seen that Chief Assistant Professor Dr. Tsvetoslav Antonov Georgiev, PhD has significant scientific, scientific-applied, educational contributions and achievements, diverse teaching activity, large volume of publishing, reviewing and editorial activity, diverse and responsible administrative activity. He is known in Bulgaria and abroad. In addition, the candidate is a recognized specialist in rheumatological practice, with proven scientific achievements.

Based on this information, I fully believe that Chief Assistant Professor Tsvetoslav Antonov Georgiev, PhD should take the academic position of "Associate Professor" in the field of higher education 7. Health and sports, professional field 7.1. Medicine, specialty "Rheumatology", for the needs of the Medical University "Prof. Dr. Paraskev Stoyanov" – Varna.

19 Oct 2021
Sofia

Reviewer:



/Prof. Dr. Rasho K. Rashkov, PhD, DSc/