

STATEMENT

On the competition for the academic position of Associate Professor in the professional field 7.1 Medicine (Internal Medicine), announced in State Gazette No. 37 of 26.04.2024 (for the needs of the Faculty of Medicine, Department of Internal Medicine, Pharmacology and Clinical Pharmacology, Paediatrics, Epidemiology, Infectious and Skin Diseases)

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The statement was prepared on the basis of the Academic Staff Development Act in the Republic of Bulgaria (ASDA), the Regulations for the Implementation of the ASDA and the Regulations for the Conditions and Procedures for the Acquisition of Scientific Degrees and for Holding Academic Positions at Sofia University "St. Kliment Ohridski" (RURPNAZAADSU). It was written and submitted on the basis of the Order No. RD-38-358/05.07.2024 of the Rector of Sofia University "St. Kliment Ohridski University" on the appointment of the scientific jury for the competition, as well as on the decision of the scientific jury for the procedure.

Documents for participation in the competition were submitted electronically by two candidates within the statutory deadline as follows:

- 1. Dr. Nonka Nikolova Yurukova, MD, PhD and**
- 2. Dr. Rada Nikolaeva Gancheva MD, PhD**

General description of the submitted materials

I have been granted access to the candidates' documents prior to the first meeting of the scientific jury by the secretary of the jury. The candidate has submitted all the materials required by the RMPNAZADSU: CV; copies of diplomas of higher education; copy of the PhD diploma; certificate of experience in the specialisation of the academic post of "assistant"; reference to teaching load; list of all publications; list of publications submitted for the competition; list of publications, conferences and scientific activities and publications generated by the "Authors" system; reference to the fulfilment of the minimum national

requirements, according to the Regulations for the implementation of the RASDP; a reference on the citations; an author's reference on the contributory nature of the publications; a reference on the indicators under Article 122, paragraph 2 of the RASDP, copies of the scientific publications; a copy of the advertisement in the State Gazette.

Candidate: Assistant Professor Dr. Nonka Nikolova Yurukova, MD, PhD

Brief biographical information

Nonka Nikolova Yurukova was born in 1971 in the town of Pazardzhik. Graduates MU-Sofia in 1996 with specialisation in medicine. In 2003 and 2007 Dr. Nonka Nikolova Yurukova acquired a diploma of recognized specialty in the health care system in Internal Medicine and Gastroenterology. She defended her dissertation for the degree of “Doctor“ in Cardiology (scientific specialty 03.01.47) on "Metabolic syndrome, non-alcoholic steatohepatosis diseases cardiovascular complications - diagnosis and treatment" in 2019. From 2003-2010 Dr. Yurukova was a resident at the Department of Cardiology of the University Hospital "Lozenets", and subsequently from 2010 to 2013 – Assistant Professor (part-time). From 2013 until now Dr. Nonka Yurukova is a regular (full-time) assistant professor at the Lozenets University Hospital - MF, St.. Kliment Ohridski"

Teaching Activities

According to the attached teaching workload report, Dr. Nonka Yurukova's teaching workload for the period 2021-2024 is sufficient according to the teaching workload requirements of the University of Sofia: total teaching time (auditory) of **1085** hours and 72.5 hours extra-auditory.

Scientific research

Scientific metrics and fulfilment of minimum national requirements

For participation in the competition (aside from the publications on the dissertation and the assets for the acquisition of the academic position "Associate Professor") Dr. Yurukova submitted a stand-alone monograph "Metabolic Syndrome, Nonalcoholic Steatosis and Cardiovascular Complications", The total candidate's scientific publications submitted for participation in the competition are **13** (4 stand-alone, 2 are with two authors and 7 are with three or more authors):

1. Articles in a scientific journal - **9**;
2. Published book based on defended dissertation - **1**;

3. Article in conference proceedings -2;
4. Monograph 1.

The candidate has no participation in scientific projects.

The reference submitted by Dr. Yurukova, for the implementation of the MNR under Art. 2b of the ZPADRB for scientific area 7. Health and Sport, professional field 7.1 Medicine by Indicators, has been prepared accurately, clearly and correctly. All the data presented on the impact factors of the publications are correctly reflected for the respective years of publication, according to the data from the Journal Citation Reports (JCR) of Web of Science and Scimago Journal Rank (SJR) for the metrics of scientific publications referenced in Scopus. The report shows that the candidate meets and exceeds, for groups G-E indicators, the minimum national requirements for the post of Associate Professor.

Group of indicators	Content	MNR (Assoc. Professor)	Reference of Dr. Nonka Yurukova
A	Indicator 1 Dissertation for the degree of "Doctor"	50	50 т.
B	Indicator 2	-	-
B	Indicator 3 or 4	100	100 т.
G	Sum of indicators 5 to 9	200	239,8
D	Sum of indicators 10 to 12	50 Included citations and reviews	150 т.
E	Sum of indicators 13 to 22	Not required for Assoc. Professor	50 т.
			Total 589.8 т.

The total number of citations of the scientific works of Dr. Nonka Yurukova in journals, refereed in Web of Science and Scopus for the period 2019-2024 is 36 and 50, respectively (with the exclusion of self-citations and hidden self-citations), h-index by Scopus- 1. Citations in Bulgarian sources : 1

Citations in other freely available international sources : 9

Contributions of the candidate's scientific works

Scientific publications

The scientific publications submitted for the competition by Dr. Yurukova describe various pathological conditions in the following areas.

1. Metabolic syndrome, Nonalcoholic steatohepatosis and cardiovascular complications - diagnosis and treatment (II.1, IV.1; IV.1). The contributions are scientifically applied. The relevance of Metabolic Syndrome (MetS) and Nonalcoholic Fatty Liver Disease (NAFLD) to cardiovascular disease (CVD) and complications has been established. The algorithm developed to assess CVD risk in patients with MetS and NAFLD allows prediction of cardiovascular risk using noninvasive markers of assessment (II.1, IV.1; IV.1).

2. Mathematical models for the assessment of outcome in adult liver transplantation and predictors of severe Covid-19. including patients after liver transplantation (II.4, II.6, II.7, II.8, III.1 and III.2).

3. Role of T cells in liver transplantation (I.3 and I.9.) Contains scientific contributions.

Results of a preliminary study on the importance of sCD30 and Tregs for monitoring the early post-transplant period are presented. Liver recipients showed an increase in Tregs at day 7 (D7) followed by a gradual decrease to D30, whereas renal recipients showed a steady trend towards a decrease, starting from D7. In hepatic recipients, the increase in Tregs preceded the normalization of albumin, whereas in renal recipients, sCD30 was found to be predictive of creatinine levels. The results suggest that sCD30 and peripheral blood Tregs are valuable parameters in the immunological monitoring of transplant recipients. Th17 and Treg subpopulations in the posttransplant period in LT patients on immunosuppressive therapy, are analysed as well as the Treg/Th17 ratio and soluble CD30 (sCD30) as possible additional markers to characterize the immune status of transplanted patients. The pilot study showed both reduced immune tolerance and increased immune activation in LT patients compared to healthy controls.

4. Intestinal microbiome, Irritable bowel syndrome and food intolerance

(I.1, I.2 and I.5). A pilot study was conducted on IgG-mediated immune reactivity in patients with irritable bowel syndrome. It has been established that the presence of specific antibodies against various food antigens is a possible mechanism by which food may mediate pathophysiological changes in AD. The levels of *Akkermansia muciniphila* and *Faecalibacterium prausnitzii* in immunosuppressed patients were quantitatively investigated, showing a decrease in the total amount of the two bacteria studied in transplanted patients compared to a control group of healthy subjects. Evidence for the role of food intolerance in patients with CRC is reviewed based on available epidemiological and pathophysiological data from clinical studies (I.2; I.5).

Dr. Yurukova has not presented documents for membership in national and international professional associations.

Candidate: Assistant Professor Dr. Rada Nikolaeva Gancheva, MD, PhD

Brief biographical data

Dr. Rada Nikolaeva Gancheva was born in 1985 in the town of Dupnitsa. In 2018 Dr. Rada Gancheva acquired a diploma of recognized specialty in the health care system in Rheumatology. She defended her PhD thesis in Rheumatology (scientific specialty 03.01.18) on "Gout and cardiovascular risk" in 2015. Since 01.03.2017 Dr. Gancheva is a resident doctor at the Clinic of Rheumatology at the University Hospital "St. Iv. Rilski in Sofia. From 01.02.2021 to 02.10.2022 she is a Regular Assistant Professor of Rheumatology at the Department of Rheumatology, Medical University of Sofia. From 04.10.2022 Dr. Gancheva is an assistant professor (visiting) of rheumatology at Sofia University "St. Kliment Ohridski".

Teaching Load

From the attached report on Dr. Gancheva's teaching load, it can be seen that she has the required teaching load at SU. Dr. Gancheva teaches students of the specialty "Medicine" and "Medicine in English" in internal diseases. For the period 2020-22, Dr. Gancheva has **520** hours of lecture activity, of which with postgraduate students **50** hours and 296 hours lectures in English. For 22-24, the auditorial employment is 162 hrs. In total for the period 2020-2024 - 682 hours of lecture activity.

Research activity

Scientific metrics and fulfilment of minimum national requirements

For participation in the competition (aside from the publications on the dissertation and assets for the acquisition of the academic position "Associate Professor") Dr. Gancheva submitted her own monograph "**Renal and cardiovascular complications in gout**" and 6 book chapters.

The total number of publications is 54, of which 40 publications in publications referenced and indexed in the world-renowned databases of scientific information Web of Science and Scopus, of which 18 in English; 2 of the publications are in journals referenced in Google Scholar, Crossref, Semantic Scholar; Publications in NON-refereed journals with scientific peer review total 12 of which 3 in English. 12 publications in non-referenced journals with scientific peer-review. Publications with IF are 11 (total IF 24.794).

22 participations in congresses and conferences with summaries published in journals indexed in Web of Science and Scopus, 11 of them in international scientific forums, with a total IF 149.329), as well as 3 participations in scientific projects. 17 of the participations in scientific forums have abstracts published in non-referenced journals.

The report submitted by Dr. Gancheva, on the implementation of the MNR under Article 2b of the Law on Research and Development for scientific area 7. Health and Sport, professional field 7.1 Medicine by indicators, was prepared precisely, clearly and correctly. All the data presented on the impact factors of the publications are correctly reflected for the respective years of publication, according to the data from the Journal Citation Reports (JCR) of Web of Science and Scimago Journal Rank (SJR) for the metric of scientific publications peer-reviewed in Scopus. The review shows that the candidate fully meets and exceeds, for groups B-E indicators, the minimum national requirements for the title of Associate Professor.

Group of indicators	Content	MNR (Assoc. Professor)	Reference of Dr. Rada Gancheva
A	Indicator 1 Dissertation for the degree of "Doctor"	50	50 т.
B	Indicator 2	-	-
B	Indicator 3 or 4	100	131,7 т.
G	Sum of indicators 5 to 9	200	516.7 т.
D	Sum of indicators 10 to 12	50 Included citations and reviews	1220 т.
E	Sum of indicators 13 to 22	Not required for Assoc. Professor	115 т.
			Total 2033 т.

The total number of citations of Dr. Gancheva's scientific works in journals submitted for the competition, peer-reviewed in Web of Science and Scopus for the period 2012-2024 is 70 (excluding self-citations and hidden self-citations), Scopus h-index - 4.

Contributions of the candidate's scientific works

Scientific publications (publications included in I-VII).

The scientific publications submitted for the competition by Dr. Gancheva describe various pathological conditions, with detailed analysis and summaries of literature data and her own results.

Dr. Rada Gancheva is the author of an independent monograph, the first author of the National Consensus for the Diagnosis and Treatment of Gout (IVA-11).

She co-authored the International Consensus on Gout, Hyperuricemia and Crystal - Associated Disease Network (GCAN), published Annals of the Rheumatic Disease 2019 with IF 16.102. (IVA-39).

The research activity of the candidate is mainly in the area of hyperuricemia and gout as cardiovascular risk factors. The work has used a different methodological approach by searching for a relationship between CV risk and clinical stages of the disease. The complex sonographic study of patients with gout is innovative, as is the study of risk in the development of tophi relevant to atherosclerotic vascular risk (IV A-40; VI A-24; VI C-20).

The relationship of gout to obesity diabetes and psoriasis (IV A- 36, 37, 42; VI C-10) occupies a significant part of contributions.

Other original contributions include:

- The influence of echographic monosodium urate crystal deposits on target organs (IV A-40, VI A-24; VI C-20);
- The relationship between CV changes and MNU deposits in patients with asymptomatic hyperuricemia in psoriatic arthritis (IV A-42)
- The relationship between gout and chronic inflammation with a leading role in the process of atherogenesis (IV A- 10-38, VI A-22, VI C-18, 21, VII 2)
- The morphological and immunofluorescent changes in renal biopsy specimens of patients with hyperuricemia and gout resulting from the deposition of immune deposits in the kidney (IVA-41; VI A- 25).

Relationship between asymptomatic hyperuricemia and renal impairment (IVA-44; VI A- 26).

- Studies on cardiorenal syndrome, mainly in its haemodynamic aspect, by means of a study with complex multimodal sonography and the introduction of the concept of "haemodynamics at risk" (III - 5, 6; IV - 5, 25; VI C- 6; VI D- 11).
- the establishment of arteriosclerotic rather than atherosclerotic type of vascular pathological changes in advanced CHF (IV- A-6,25, 26, 31; VI A-2,4; VIC- 2,5)
- The relationship between carotid artery resistance and LV function in different stages of gout (IV- A-29; VI A-3,14)

Candidate has also worked on other rheumatological diseases including ankylosing spondylitis, rheumatoid arthritis, systemic lupus erythematosus, Sjögren's disease, etc. Part of Dr. Gancheva's contributions are published clinical cases and rare conditions.

Dr. Rada Gancheva is a reviewer of the Journal Rheumatology International for 2017 (IF 1,952).

She is a member of Bulgarian Society of Rheumatology, Bulgarian Society of Osteoporosis and Osteoarthritis, Member of Gout, Hyperuricemia and Crystal-Associated Disease Network (G-CAN).

CONCLUSION

The complex evaluation of the two applications allows me to state with conviction that both candidates Dr. Nonka Nikolova Yurukova, and Dr. Rada Nikolaeva Gancheva, MD meet the scientific and metric requirements for the academic position of Associate Professor at St. Kliment Ohridski.

The scientific metrics, scientific contributions, citations and editorial activity of Dr. Rada Nikolaeva Gancheva significantly exceed those presented by Dr. Nonka Nikolova Yurukova, MD.

On the basis of the materials and scientific works submitted for the competition, the presented analysis of their significance and the scientific contributions contained in them, I confidently give my positive assessment and recommend the Scientific Jury to prepare a report-proposal to the Faculty Council of the Faculty of Medicine at Sofia University "St. Kliment Ohridski" for awarding the academic position of "Associate Professor", in the professional field 7.1 Medicine (Internal Medicine) to Dr. Rada Nikolaeva Gancheva, PhD.

Assoc. Prof. Katerina Dimitrova Vitlianova, MD, Dsc.

August 25, 2024

Sofia