

PEER REVIEW

Concerning: The competition for the occupation of the academic position "Professor" in the field of higher education 7. Health and sports, professional direction 7.1. Medicine, specialty «Gastroenterology» -0.5 half-time position for the needs of the Department of Anatomy and Cell Biology of the Faculty of Medicine at the Medical University «Prof. Dr. Paraskev Stoyanov"-Varna and one full-time position for the needs of the "Gastroenterology" Clinic at the University hospital "St. Marina" EAD-Varna, according to Order No. R-109-93/21.03.2024 of the Rector of the Medical University Prof. Dr. Dimitar Raykov, MD, PhD, DSc, which has been published in State Gazette No. 7/23.01.2024

Peer reviewer: Prof. Krasimir Antonov Antonov, MD, PhD, DSc, Clinic of Gastroenterology, Department of Internal Medicine at St. Ivan Rilski University hospital, Faculty of Medicine, Sofia University

Pursuant to Order No. R-109-93/21.03.2024 of the Rector of the Medical University «Prof. Dr. Paraskev Stoyanov"-Varna, I have been elected as an external member of the Scientific Jury under the procedure for occupying the academic position of "Professor" at the Medical University-Varna and I have been appointed to prepare a review regarding the competition. The only candidate is Associate Professor Dr. Antonia Yordanova Atanasova, MD, PhD, DSc, in the Department of Anatomy and Cell Biology and in the Clinic of Gastroenterology at University hospital "St. Marina".

The documents provided to me have been prepared based on the normative documents of Article 4, paragraph 1 and paragraph 2 of the Law on the Development of the Academic Staff in the Republic of Bulgaria, Article 6, paragraph 1 and Article 139, paragraph 3 of the Regulations for the development of the academic staff of the Medical University - Varna. There are no established procedural violations.

I declare that there is no conflict of interest within the meaning of Art. 4, Paragraph 5 of the Law on the Development of the Academic Staff in the Republic of Bulgaria.

Teaching activity, academic work, research activity and scientific activity of Associate Professor Dr. Antonia Atanasova, MD, PhD, DSc were assessed according to the requirements of the Regulations for the Development of the Academic Staff of the Medical University of 21.11.22, the Law on the Development of the Academic Staff of the Republic of Bulgaria (19.07.2022)

and the Regulations for the Implementation of the Law on the Development of the Academic Staff of the Republic of Bulgaria.

I. Concise the biographical and career data about the candidate

In 1986, Assoc. Prof. Dr. Antonia Atanasova, MD, PhD, DSc graduated from High Medical Institute-Varna, assistant of the university flag, with excellent marks. From 01.12.1986 - 17.06.1987 he worked as a resident doctor in the internal department of District Hospital-Shumen. After successfully passing a competitive exam from 17.06.1987 - 28.03.1994. is an assistant at the Clinic of Gastroenterology MBAL" St. Marina", MU Varna, from 28.03.1994 - 07.07.1997 he was a physician, senior assistant in the Clinic of Gastroenterology, and from 07.07.1997 - 16.12.2015 he was a chief assistant in the Clinic of Gastroenterology. Since 17.12.2015 he is an Associate Professor in the Department of Anatomy and Cell Biology.

Assoc. Prof. Antonia Atanasova from 07/09/2013 was enrolled as a free doctoral student at the Department of "Internal Diseases", scientific specialty Gastroenterology - with the topic "Clinical evaluation of patients with ulcerative colitis - modern approach" On 12.12.2014, she obtained the scientific and educational degree "doctor", in the scientific specialty: Gastroenterology ; topic "Clinical evaluation of patients with ulcerative colitis - modern approach", diploma with registration number 088/19.12.2014.

On 23.07.2021, he obtained the scientific degree "Doctor of Sciences" with the topic of the dissertation work "The serum expression of microribonucleic acids in Inflammatory Bowel Diseases patients." Dissertation work for the Scientific Degree "Doctor of Sciences", MU - Varna, diploma with registration number 454/23.12.2021.

Associate Professor Antonia Atanasova, MD, PhD, DSc, has obtained the specialty of Internal Medicine (02.02.1994) and the specialty Gastroenterology (01.06.1996). He also obtained various diplomas and certificates: Certificate of professional qualification and highly specialized activity first and second level; Diagnostic upper and lower gastrointestinal endoscopy - first level and second level; Diagnostic abdominal echoscopy - first level; Abdominal Doppler ultrasound in gastroenterology-2 level; Interventional and endoscopic abdominal ultrasound in gastroenterology - third level, various international certificates for abdominal ultrasound in Inflammatory Bowel Diseases - basic and advanced courses.

Participates in the international program TEMPUS-PHARE/JEP09839-95 "Restructuring of medical education" France, University of Franche-Comté-

Besançon, Clinic of Hepatology and Clinic of Gastroenterology at the University Hospital Jean-Minot, Prof. Jean-Philippe Miguet, 16.02-10.04 .1998; She has diplomas for participation in numerous international training schools and specialist meetings at home and abroad, in Athens, Amsterdam, Budapest, Belgrade, Barcelona, Brussels, Rome, Vienna, Oxford, Prague, Leuven.

Assoc. Prof. Atanasova, MD, PhD, DSc, is also a consultant to the Cystic Fibrosis Expert Center, since 07.2019.

She is fluent in written and spoken English, French and Russian. She has excellent computer literacy and uses the most innovative communication technologies.

II. Evaluation of candidate's research activity

The materials presented by Assoc. Prof. Antonia Atanasova for participation in the current competition for the Academic Position "Professor" reflect the scientific activity in the last 9 years (after receiving the Academic Position "Associate Professor") and include 92 publications, divided into 3 groups: 1. Dissertation for awarding the scientific degree "Doctor of Sciences" 1 issue.; 2. Ten scientific publications equivalent to habilitation work, published in journals, which are referenced and indexed in world-famous databases with scientific information, some of which also have an impact factor with (IF) 3. Articles in Bulgarian and foreign scientific journals - 67 items, including in magazines with IF. 4. Abstracts of reports in periodicals and abstract books presented at national and international congresses, conferences, symposia and sessions at home and abroad- 24 items and participation in other scientific meetings abroad- 71 items.

With an impact factor, there are 3 publications in full text, after the selection and for an associate professor with IF 7.7 and a total impact factor of all publications 101.6 (after the selection and for an associate professor). (The impact factor has been calculated only for the system sources for it recognized by the regulations of the Varna Medical University-Varna).

The scientific publications are cited in are mainly abroad - 29 literary sources (after the election and for associate professor) - 27 citations or reviews in scientific publications, referenced and indexed in world-famous databases with scientific information or in monographs and collective volumes; 2 citations or reviews in non-refereed peer-reviewed journals abroad.

Assoc. Prof. Antonia Atanasova is the scientific supervisor of three doctoral students, one in the doctoral program "Gastroenterology" and two in the doctoral program "Internal Diseases". Two of the doctoral students: Elena

Panayotova Panayotova, MD, PhD (Doctoral program "Internal Diseases") and Mirela Moneva-Petrova, MD, PhD (Doctoral program "Gastroenterology") have successfully defended their doctoral thesis and obtained the Educational and Scientific Degree Doctor.

She is the principal investigator in two national and educational projects financed by the Science Fund: "Metabolic syndrome in Inflammatory Bowel Diseases patients", started in 2020, successfully completed and certified in January 2023; The other project "Research of modern biomarkers in non-alcoholic fatty liver disease"/ FS-13/09.01.24r, started in early 2024. She is also a participant in an international project: Interreg Danube Transnational Program CD SKILLS - 2019-2022 - Funded by the European Union. She also participated as a researcher in a national and educational project financed by the Science Fund "Etiology, clinical picture and diagnosis of non-alcoholic fatty liver disease in children and adolescents", 21.12.2020 - 21.12.2022.

Assoc.Prof. Antonia Atanasova is an active participant in scientific interdisciplinary group on "Gastro-entero-hepatoprotection and therapy" within the Research Institute at Medical University of Varna. The work of this team is in line with one of the priority scientific directions of the Scientific Research Institute at Medical University-Varna (2021-2025) "Nutrition and Quality of Life".

III. Characteristics and contributions of scientific publications

Assoc. Prof. Antonia Yordanova Atanasova, MD, Ph.D., D.Sc. presents ten equivalent publications of habilitation work. These are the full-text scientific publications in publications specified in the academic reference, section B4, which are cited in referenced and indexed in the world database with scientific information - Web of Science and Scopus.

These publications carry 336.5 scientometric points out of the minimum required 100. In 60% (6 items; №3,4,5,6,9,10) of these publications, Assoc. Prof. Atanasova is the first author. In 40% (4 items; №3,4,5,6) he is the sole author. In the remaining 40%, there is a second author (№8), a third author (№2) and a consecutive author (№1,7). Three (30%) of the publications provided have an Impact Factor (IF): №2,8,9, with their overall IF =7.7 and were published in the past four years. In the publications with IF, the candidate Assoc. Prof. Atanasova is first author (№9, from 2022), second author (№8, from 2022) and third author (№2, from 2020). These facts convincingly reveal the personal involvement of Assoc.Prof. Atanasova in the presented publications, as well as the lasting interests in certain areas of publication activity. Eighty percent of the presented publications contain original developments (№3,4,5,6,9), results

achieved in teamwork (№2,7,8) and only 20% (2 articles) are devoted to a literature review, (№1,10), and one article contains own results such as observational clinical cases and literature review (№7).

The overall research activity of Assoc. Prof. Dr. Antonia Atanasova, MD, PhD, DSc, is based to a large extent on the clinical diagnostic and therapeutic activity as a gastroenterologist, with extensive practical experience and established authority among the scientific community and patients with various chronic diseases. Her scientific works are devoted to various significant areas in gastroenterology, such as: Inflammatory Bowel Diseases; chronic liver diseases; obesity and metabolic syndrome and their relationship with chronic inflammation and a number of oncological diseases; preventable infectious diseases, clinical cases of rare diseases; quality of life among different groups of patients; microribonucleic acids in clinical practice as modern markers for diagnosis, follow-up and personalization of treatment in IBD; microribonucleic acids as a non-invasive marker to assess obesity, metabolic syndrome in IBD patients, and immunohistochemical assessment of cell death/necroptosis as a prognostic marker in both ulcerative colitis and Crohn's disease in active stage and clinical remission. Scientific contributions are systematized in 10 main directions: Inflammatory Bowel Diseases; chronic liver diseases; metabolic syndrome, overweight, obesity; microribonucleic acids and their location in inflammatory bowel diseases; vitamin D and its influence on gastroenterological diseases; preventable infectious diseases; therapy of gastroenterological diseases; necroptosis in inflammatory bowel diseases; modern diagnosis of some genetic diseases and clinical cases.

With minimum scientometric indicators with a total of 550 points, Assoc. Prof. Antonia Atanasova, presents herself with **1975. 81** scientometric points.

The publications in the IBD section have theoretical-methodological and practical-applied contributions. A systematic analysis of risk factors for the progression of IBD, data on preventable infections that negatively affect the course of treatment, as well as on the evolution of diseases, was made. For the first time in Bulgaria, data are published on the place and role of microribonucleic acids in the diagnosis and follow-up of inflammatory bowel diseases in adults. Relatively rare cases of deep vein thrombosis in inflammatory bowel disease in early childhood have been described. The causes of loss of response to biological therapy, the progression of Crohn's disease after surgery, the application of modern small molecule therapy, the adverse events of treatments with established anti-TNF antibodies, the application of adjunctive therapies are analyzed, based on microribonucleic acids. An essential practical-

applied contribution is the analysis of inflammatory bowel diseases during pregnancy and lactation and the determination of the time for vaccination of these patients. For the first time in Bulgaria, a systematic analysis of the application of various questionnaires on the quality of life in patients with IBD and its correlation with disease activity is carried out as a first step in personalizing the therapy. Modern concepts of the clinic, diagnosis and therapeutic behavior of various liver diseases are systematized: chronic viral hepatitis, metabolic diseases (Wilson's disease), metabolically induced fatty liver disease, Gilbert's syndrome, malignant liver tumors. Rare liver diseases - hemangiomas of the liver in childhood and their treatment with established and innovative therapies are described. The experience of genetic proof of Gilbert's syndrome in children and adolescents is shared. The role of microribonucleic acids, serological tests and transient elastography for the complex evaluation of patients with chronic hepatitis of different etiology was analyzed. A state-of-the-art analysis of some basic anthropometric characteristics of IBD patients combined with levels of circulating miRNAs was performed. These publications have innovative theoretical, practical and practical-applied contributions, being first-of-its-kind studies that provide a correlation between treatment, miRNAs expression and some basic anthropometric data in these patients. For the first time in Bulgaria, the data from a reference center for diagnosis, follow-up and treatment of IBD, regarding the frequency of latent and active tuberculosis in patients before and during biological treatment with anti-TNF-alfa antibodies, have been presented and summarized. These publications have both theoretical and practical contributions. The results are compared with data from similar European studies and global data, as there are no available publications on similar studies in other reference centers from Bulgaria. For the first time in Bulgaria, the results of genetic studies of HLA genotyping in patients with celiac disease and their relatives and the genetic results in suspected cases of Gilbert's disease are published.

IV. Scientific and teaching activity

Associate Professor Antonia Atanasova, MD, Ph.D. DSc, is a long-time lecturer in internal medicine and gastroenterology. Out of a total of 37 years of work experience, he has a total of 36 years of teaching experience. The annual study load for the last 4 academic years is as follows 219, 167, 262 and 193 hours, with the norm for an associate professor of 110 hours per year according to the Regulations of Medical University-Varna. Participates in the examination commission for the State Exam for the acquisition of a specialty in gastroenterology, Sofia, ISUL, UMBAL "Tsaritsa Joanna" Sofia, Examination commission for the State Exam in Internal Medicine, English Language

Training and Bulgarian Language Training, MU- Varna, Examination Commission, semester exam in Internal Medicine diseases, English Language Education and Bulgarian Language Education, MU-Varna. She teaches internal medicine seminars to students of the 5th year of Bulgarian Language Education, exercises in Cytology, General Histology and Embryology with 1st year students in the Department of Anatomy and Cell Biology, Medicine and Dentistry; seminars on splanchnology - microscopic part in the Department of Anatomy and Cell Biology, dental medicine; lectures on Anatomy and cell biology (splanchnology) - students 1st year Medicine; Anatomy lectures – Medical University-Varna Medical College students - public health inspectors; lectures on propaedeutics of internal diseases - students of the Faculty of Medicine, 3rd year; lectures on Internal Medicine - 5th year students, Medicine Second Department of Internal Medicine English Language Education and Bulgarian Language Education.

V. Memberships in scientific societies and organizations

Assoc. Prof. Antonia Atanasova is a member of the Bulgarian Medical Union, Bulgarian National Society of Gastroenterology with gastrointestinal endoscopy and abdominal ultrasound; Bulgarian Society of Gastrointestinal Endoscopy; The Bulgarian Society of Pediatric Gastroenterology, Hepatology and Nutrition (co-founder) and European Crohn's Colitis Organization.

Conclusion

I believe that Associate Professor Antonia Atanasova, MD, Ph.D., DSc, fully meets the mandatory and specific conditions of the Regulations for the Development of the Academic Staff of the University of Medicine - Varna, the Law on the Development of the Academic Staff of the Republic of Bulgaria and the Regulations for the Implementation of the Law on the Development of the academic staff of the Republic of Bulgaria for the terms and conditions for occupying the academic position "PROFESSOR" at the MU - Varna. I can confidently state that I will vote positively for the election of Associate Professor Antonia Atanasova, MD, for the academic position of "PROFESSOR" in the scientific specialty "Gastroenterology".

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