

To the Chairman of the Scientific Jury,
Appointed by Order of the Rector of Medical University-Varna

N: P-109-93/21.03.2024

REVIEW

By Assoc. Prof. Dr. Irina Ivanova Ivanova, MD, PhD, Head of the Department of Gastroenterology, Hepatology and Nutrition at the Second Department of Internal Medicine, Faculty of Medicine, "Dr. P. Stoyanov" Medical University, Varna

Regarding: announced procedure for the academic position "Professor" in the field of higher education 7. Health care and sports, professional direction 7.1 Medicine in the scientific specialty "Gastroenterology", promulgated in the D.V, N 07 (23/01/2024)

By order of the Rector of MU-Varna P-109-93/21.03.2024, I was appointed as a member of the Scientific jury for the mentioned procedure, and by the decision of the Scientific jury reflected in Protocol N.1 of 04.4.2024, I was assigned to prepare that review.

According to the announced procedure, one candidate submitted documents: Associate Professor Dr. Antonia Yordanova Atanasova, MD, PhD, and D.Sc.

I declare that I have no conflict of interest with the candidate

I received all the necessary documents for the preparation of the review from the "Career Development", MU-Varna, precisely described and arranged by the candidate. I prepared the review, in accordance with the requirements of the ZRASRB, the Regulations for its implementation and the Regulations for the development of the academic staff of MU-Varna.

• A brief biographical reference

Antonia Yordanova Atanasova was born on June 16, 1961, in the city of Varna. In 1980, he graduated with honours from secondary education at the Fourth Language High School with advanced learning of French language in Varna, and higher education in the specialty "Medicine" with excellent degree in 1986 at the Medical University - Varna. After a short work as a resident doctor in Shumen, in June 1987 he won a competition and began his professional activity at the Gastroenterology Clinic of the "St. Marina" and the University of Varna, successively as an assistant - physician, senior assistant physician (since 1994), chief assistant physician (since 1997) and associate professor (since 2015), which continues on at present. She acquired 2 specialties: "Internal Diseases" in 1994 and "Gastroenterology" in 1996. Consecutively, she defended the doctorate in the

specialty "Gastroenterology" in 2014 with a dissertation entitled "Clinical assessment of patients with ulcerative colitis-modern approach" and "Doctor of Sciences" in the same specialty in 2021 with an honorary doctorate entitled "The serum expression of microribonucleic acids in patients with chronic inflammatory bowel diseases". The candidate uses fluently French, English, and Russian languages.

- **Scientific activity**

The overall scientific activity of Assoc. Prof. Dr. Antonia Yordanova Atanasova is consisted from a total of 201 publications, 2 dissertations on the topics "Clinical evaluation of patients with ulcerative colitis - modern approach" and "The serum expression of microribonucleic acids in patients with chronic inflammatory bowel diseases", respectively; a monography (habilitation thesis) from 2013 entitled "Chronic inflammatory bowel diseases - a view from the XXI century (modern aspects)" and 3 participations as an author and co-author in a textbooks ("Notebooks for students", (2001), "Handbook of Hepatogastroenterology for the Family Physician", (2002), "Emergency Paediatrics" (2013). Assoc. Prof. Atanasova has participated in 71 scientific forums with a report or poster presentation, with a significant contribution from the abstract publications of the annual participation in the congresses for the European Organization for Crohn's and Colitis (ESCO), obtaining the high IF from publication in "Journal of Crohn's and colitis".

For the current procedure, Assoc. Prof. Atanasova presents the following scientific publications: 10 full-text scientific papers, published in the referenced and indexed in world-renowned databases journals (with a contribution of 336.5 scientometric points), equivalent to a habilitation thesis; the described two doctorates; 14 publications and reports in scientific journals, most (12 of them) in English-language literature, as well as 40 publications and reports from non-refereed peer-reviewed journals. According to the provided academic report, Assoc. Prof. Atanasova's scientific output significantly exceeds the minimum quantitative scientometric requirements for occupying the academic degree "Professor" provided by the PRAS of MU-Varna in all indicators:

- according to indicator B4, it represents 336.5 points;
- by indicator G7-G8 – 884.31 points;
- according to indicator D10-12 – presents 22 citations (310 items);
- according to indicator E13-22 – 295 points;
- Additionally, 5 full-text publications beyond the minimum scientometric requirements for holding AD "Professor" must be specified.

The publication activity for the purposes of the competition is evenly distributed over the period of the last 10 years and excludes the candidate's publications for the

purposes of the degree "Doctor of Sciences" and for the procedure for the scientific degree "Assoc. Professor". Assoc. Prof. Atanasova is the first author in 60% of the publications equivalent to a habilitation thesis, and 3 (30%) of the provided papers have a total IF = 7.7 which were published in the last 4 years. Therefore, Assoc. Prof. Atanasova is a leading author in publication activity with enduring scientific interests in the field of gastroenterology. The fields of Assoc. Prof. Atanasova's developments and scientific contributions can be summarized in the following areas:

- An extensive study of the clinical and scientific aspects of Inflammatory Bowel Diseases (IBD), both Crohn's Disease (CD) and Ulcerative Colitis (UC) - methods for their early diagnosis, severity assessment, including patient's point of view, the quality of life, long-term follow-up of evolution, the effectiveness of pathogenetic treatment with the identification of prognostic markers supporting clinical decision-making. Assoc. Prof. Atanasova has been a recognized expert in all areas of IBD pathology in Bulgaria for many years. She competently summarizes the empirical long-term clinical experience of more than 30 years in dissertations, articles, reports, and monographs. Assoc. Prof. Atanasova introduced and developed endoscopic methods for the evaluation of IBD and trained several doctors in the practical aspects of endoscopic diagnosis. Undoubtedly, an important and original scientific contribution is related to the evaluation of extracellular, serum miRNA expression by RT-qPCR in IBD, as a potential marker of inflammatory activity, extension, and phenotype of the disease. Although initial, on a small number of patients, Assoc. Prof. Atanasova's research shows that: the miRNA profile in CD and UC activity is different and miRNAs are an applicable additional indicator for prognosis and treatment effectiveness. She summarizes in many reports at scientific forums the clinical experience of the application of biological treatment in IBD. Finally, the data of Assoc. Prof. Atanasova on the relationship between vitamin D deficiencies should be mentioned, in relation to miRNA expression and IBD severity, as well as the role of programmed necrosis, bearing scientific knowledge on the pathogenesis of intestinal inflammation. Assoc. Prof. Atanasova is a co-author of the publications showing an increase in the immunohistochemical expression of RIPK3 in intestinal biopsy in active UC and CD. Another direction is the study of the serum level of adenosine deaminase (ADA), as a potential non-invasive indicator of IBD activity. Assoc. Prof. Atanasova is an erudite and experienced researcher of the relationship between pulmonary and extrapulmonary tuberculosis (TB) and IBD. Her publications in Bulgarian and in European scientific forums in determining risk patients for TB reactivation, methods of early detection of these infectious complications and clinical manifestation in these difficult patients have been well recognized.
- Scientific, applied, and methodical contributions to hepatology, especially in the field of steatotic liver disease associated with metabolic dysfunction and insulin resistance,

a comprehensive analysis of the probable relationship between the bacterial intestinal flora and the epidemic rise of obesity. Also, Assoc. Prof. Atanasova made an indisputable contribution to the registration and management of patients with chronic HBV and HCV hepatitis, to their assessment and innovative antiviral treatment. Assoc. Prof. Atanasova develops the methods for ultrasound (US) diagnosis of patients with chronic liver diseases, including the US-guided liver biopsy in the Gastroenterology Clinic at UMBAL "St. Marina".

- General internist scientific interests and participation in the transition of young patients with chronic diseases from childhood to adult pathology with clinical consultations, joint registries, and publications with the Department of Paediatrics' at MU-Varna.

Proof of Assoc. Prof. Atanasova's research activity is the participation in 4 scientific projects, 1 of which is international. Assoc. Prof. Atanasova is the leader of two of the scientific projects, and the latest and current project at the Faculty of Medicine of the University of Varna concerns the study of modern biomarkers in non-alcoholic fatty liver disease. Assoc. Prof. Atanasova is the scientific supervisor of 3 doctoral students at the University of Varna, 2 of whom have successfully defended their dissertations in the specialty "Gastroenterology". Assoc. Prof. Atanasova is a recognized, erudite member of the Bulgarian Society of Gastroenterology, Endoscopy and Echography and of the European Crohn's and Colitis Organization (ECCO). She is a co-founder of the Bulgarian Society of Pediatric Gastroenterology, Hepatology and Nutrition. As an expert, she participates in a scientific jury, reviewing articles, evaluating scientific projects.

- **Teaching and education activity**

Assoc. Prof. Atanasova has been a teacher of "Internal Diseases" since 1987 and is currently the most experienced educator of "Medicine" students in the Unit of Gastroenterology, Hepatology and Nutrition. At MU-Varna Assoc. Prof. Atanasova is a lecturer and leader of seminars and exercises in two areas: anatomy and internal medicine, successfully combining extensive preclinical and clinical knowledge. Traditionally, she is a beloved teacher with high pedagogical qualities of students in the 5th year and trainee doctors in the discipline "Internal diseases - part 2" and elective discipline "Abdominal ultrasound in gastroenterology", actively participates in the training and mentorship of specialists in "Internal diseases" and 'Gastroenterology'. Assoc. Prof. Atanasova leads lectures and seminars at the Department of Anatomy and Cell Biology for students of "Medicine", "Dental Medicine", MK-Health Inspectors, and participates in the lecture course on "Propaedeutics of internal diseases". Assoc. Prof. Atanasova is also involved in English language education of the students of "Medicine", in seminars and lectures on internal diseases for obstetricians, "Pharmacotherapy of internal diseases" for students of "Pharmacology", and thus the annual horary exceeds the minimum requirements of MU-Varna. Assoc. Prof. Atanasova is a member of examination

committees for students in "Medicine" and in the committee for the state examination in "Internal Diseases". She actively participates in the basic course of specialists in "Gastroenterology" and in the thematic training courses in abdominal ultrasound and gastrointestinal endoscopy with lectures. She is also the head of training for ultrasound and endoscopy specialists, as well as the head of the commission in the field of gastrointestinal endoscopy level I and II. Under the authoritative guidance and training of Assoc. Prof. Atanasova, most of the successful practicing specialists in "Gastroenterology" in the city of Varna and North-Eastern Bulgaria have been prepared, and I have witnessed good words and memories of colleagues to whom she devoted time to their training. As the head of the Gastroenterology Clinic, I can be grateful and confirm that Assoc. Prof. Atanasova is the tutor of every single doctor in the unit's team. Recognition of her activity is the participation in an examination committee in the specialty "Gastroenterology". Assoc. Prof. Atanasova is the scientific supervisor of 3 doctoral students, and with her help, at least 1 more doctoral student of the Department of Gastroenterology, Hepatology and Nutrition completed their work. In addition, it should be noted the participation in training courses of family doctors, in the post-graduate training of other specialties, such as surgery.

In the presented report on the study load of Assoc. Prof. Atanasova, issued by the University of Varna, the candidate meets and exceeds the requirements for the study load for holding the scientific degree "Professor" according to the PRAS of the University of Varna.

- **Therapeutic-diagnostic and expert activity**

Assoc. Prof. Atanasova has extensive clinical experience, as part of physicians' team of the Gastroenterology Clinic since 1986. She completed numerous post-graduate training courses in the specialty: at the Hepatology and Gastroenterology Clinic at the Jean-Minot University Hospital under Prof. Jean-Philippe Miquet in 1998; participation in the academies of the European organizations EAGEN, ECCO, ESGE and in the national "schools" of gastroenterology, ultrasound, and endoscopy. Assoc. Prof. Atanasova develops the methods of conventional and multiparametric and invasive abdominal ultrasound and gastrointestinal endoscopy. She is a pioneer in the creation of the "Inflammatory bowel diseases" and "Chronic viral hepatitis" registries at the unit, as a level III reference center. Heads the scientific-practical direction of IBD at UMBAL "St. Marina" with authoritative reviews from Bulgarian gastroenterologists. She is the chair of the Committee for Biological Treatment of IBD and is a member of the Committees for antiviral therapy of hepatitis B and C, chelation treatment of Wilson's disease, administration of pancreatic enzyme preparations at UMBAL "St. Marina". She accepts and currently leads the gastrointestinal endoscopy training school at the Gastroenterology Clinic and is the chairperson of the committees for upper and lower endoscopies I and II level. She is a consultant at the Cystic Fibrosis Expert Center at the UMBAL "St. Marina"

since 1997. By participating in advisory activities in the Paediatric Clinics, she successfully managed to help the transition of children with chronic diseases to their care in the Gastroenterology Clinic. Assoc. Prof. Atanasova is an authoritative member of the Bulgarian Society of Gastroenterology, Endoscopy and Abdominal Echography, the Bulgarian Society of Paediatric Gastroenterology, Hepatology and Nutrition and the European IBD Organization - ECCO. Finally, in outpatient practice, she is recognized as a successful and dedicated specialist with excellent patient's reviews.

- **Conclusion**

Assoc. Prof. Dr. Antonia Yordanova Atanasova has a rich scientific research activity and is a recognized, established physician with excellent skills as a multidisciplinary clinician, gastroenterologist, and educator. Its development in all the indicated directions, proven by the materials provided by the candidate and my personal impressions, give grounds for a positive assessment of the proposal to award the academic position "Professor" to Assoc. Prof. Dr. Antonia Atanasova.

May 13, 2024

Varna

/Assoc. Prof. D-r Irina Ivanova/

Заличено на основание чл. 5,
§1, б. „В“ от Регламент (ЕС)
2016/679