

To the Chairman of the Scientific Jury,
determined by Order No. 15-05-09#2/30.01.2024

REVIEW

by Prof. Dr. Asen Ivanov Nikolov, PhD
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Subject: Competition for the occupation of the academic position "Docent" in the field of higher education 7. "Health and sport", professional direction 7.1. "Medicine", scientific specialty "Obstetrics and gynecology", for the needs of the Obstetrics and Gynecology Clinic of "Acibadem City Clinic UMBAL Tokuda" Sofia, promulgated in the Official Gazette no. 98 of 24.11.2023

Regarding the procedure:

One candidate, Dr. Maria Gicheva Atanasova-Elenkova, submitted documents within the legal deadline and was allowed to participate in the current competition for the academic position "Associate Professor". All the requirements of the Law on the Development of the Academic Staff in the Republic of Bulgaria and the Rules for its Application in Achibadem City Clinic UMBAL "Tokuda", Sofia have been complied with and observed.

Biographical data, professional development

Dr. Maria Atanasova was born on April 22, 1980, in Gabrovo. In 2004, he completed his higher education and obtained a master's degree in Medicine at the Faculty of Medicine (MF), Medical University (MU) - Sofia. Since 2009, he has been a doctoral student at the Department of Obstetrics and Gynecology at the MF, MU, Sofia - SBALAG "Maichin dom". In 2010, after winning a competition, he started working at the Maternity Clinic of SBALAG "Maichin dom"

EAD, Sofia, where he elected as an assistant in the Department of Obstetrics and Gynecology, MF, MU, Sofia until 2018.

Dr. Maria Atanasova has acquired a specialty in obstetrics and gynecology since 2009. In 2014, she defended a dissertation for the educational and scientific degree "doctor" on the topic "Management of epidural analgesia delivery". As a doctor, he specializes in SBALAG "Mother's House" EAD. Participates in qualification courses in Bulgaria and abroad.

He is fluent in English and Russian, and has excellent computer literacy.

Research activity

Scientific indicators

Scientific research activity of Dr. Maria Atanasova includes 35 scientific works in scientific and medical publications, with participation in 28 scientific forums, at which 28 reports, presentations, posters were presented. The fact that 24 publications were published in specialized scientific medical journals in the Bulgarian language and 8 in foreign medical publications is striking. Publications in international specialized journals with IF are 8, respectively 2 articles and 6 abstracts.

Accordingly, the distribution of scientometric indicators is as follows:

35 works were published in scientific and medical publications first author on 13; second author of 11; third and subsequent author of 11=

Articles (publications) in specialized scientific medical journals – 28 first author on 12; second author of 11; third and subsequent author of 5,

Articles (publications) in scientific thematic collections – 7, first author of 1; second author of 2; third and subsequent author of 4

Dissertation for the educational and scientific degree "PhD" – 1. Participation in 1 textbooks and manuals first author on 0; second author of 1

Participation in 23 scientific forums (congresses, conferences and symposia)

- 17 in Bulgaria - 4 national congresses, 9 national conferences, 3 symposiums

- 6 at international scientific forums - 2 world congresses, - 1 European Congress

- 3 conferences, 28 reports, presentations, posters were presented

- 22 in Bulgaria, - 13 at national congresses, - 5 at national conferences, - 4 at symposia, - 6 at international scientific forums, - 2 at world congresses,

- 2 at European congresses

- 2 at conferences and symposiums

The high quality of scientific production is also evidenced by the authority of the journals in which the author publishes the results of her developments and studies: "Ultrasound in Obstetrics and Gynecology", "HLA Immune Response Genetics", "Journal of Clinical Laboratory", "Journal of Maternal- Fetal and Neonatal Medicine", "Journal of Perinatal Medicine", "Tissue Antigens", "Acta Medica Bulgarica", "Obstetrics and Gynecology", "Anesthesiology and Intensive Care", etc.

The data on the citations that the candidate presents, their respective distribution in Bulgarian and foreign publications, as well as the calculated impact factor (based on the SCOPUS and WEB of Knowledge databases) and the h-index indicator are as follows.

35 positive citations of the scientific publications were found - 12 in Bulgarian scientific literature, - 33 in foreign scientific literature, Impact factor (IF):

total IF = 15.378 and individual IF - 2.799

- of publications (articles and abstracts): total IF = 15,378; individual IF - 2,799

H - index established on SCOPUS and WEB of Knowledge database is 2, with an average number of citations at least 3 times a year.

The main directions of Dr. Maria Atanasova's scientific developments are focused mainly on the following scientific areas:

- High risk pregnancy
- Operative obstetrics
- Labor pain relief
- Fetal medicine
- Diabetes mellitus and pregnancy
- Clinical experience with rare diagnoses
- Others - Stem cells, Ecology - Protection of the environment and human health

Analyzing the overall research and applied scientific activity of Dr. Atanasova, I appreciate the contributions in the following areas:

➤ **Scientific contributions of an original nature**

The issue of epidural analgesia during labor has been comprehensively developed - scientific papers with numbers 2, 3, 4, 14, 16, 18, 19 and 24. An extended study was carried out on factors from the side of obstetric status that could be used to predict the outcome and duration of vaginal birth anesthetized with epidural analgesia in scientific papers No. 3 and No. 4. The influence of epidural analgesia on the heart rate and condition of the newborn was

determined - scientific paper No. 2. A protocol was developed for the safe application of epidural analgesia (EA) during vaginal delivery within the framework of the dissertation.

Specific clinical conditions that complicate childbirth and increase the risk for the mother and the fetus have been thoroughly studied and described - scientific works with numbers 1, 5, 6, 34 and 35.

Paper No. 13 presents new methods for predicting the risk of preterm birth in women after treatment for cervical precancers.

➤ **Scientific and applied contributions**

An in-depth analysis of all modern methods of early screening was made; methods for early non-invasive and invasive diagnosis of structural and genetic defects of the fetus; options for conservative and surgical intrauterine treatment of the fetus in scientific paper No. 9, chapter "Fetal medicine prenatal diagnosis. Options for prenatal treatment of the fetus from the only Textbook of Neonatology in Bulgarian.

Practical guidelines have been developed to optimize the termination of pregnancy in the first trimester - scientific paper No. 17.

In paper No. 17, the complications and course of pregnancy in normoglycemic patients with hyperinsulinemia treated with Metformin before and during pregnancy were studied. In Bulgaria, this preparation is still rarely used during pregnancy and breastfeeding.

➤ **Contributions of a methodical nature**

The frequency, characteristics and indications for vaginal delivery by forceps extraction of the fetus were investigated in scientific papers No. 25, 26 and 32.

Dr. Atanasova's scientific activity is developed and enriched by her membership in a number of scientific societies and organizations in which she takes an active part. She is a member of: Bulgarian Medical Union; Bulgarian Society of Obstetrics and Gynecology, Bulgarian Association of Ultrasound in Obstetrics and Gynecology.

➤ **Teaching and learning activity**

Dr. Maria Atanasova taught at the Department of Obstetrics and Gynecology, MF, MU - Sofia from 2010-2018, where she participated in the training of students and trainee doctors in human medicine (including in English) and dentistry. She gave lectures in specialized courses of the PGE in obstetrics and gynecology and general medicine. Training of obstetrics and gynecology specialists took place under her leadership. From 2018-2021, she conducted exercises and seminars for midwives and medical assistants, took part in exam sessions,

curriculum revision, teaching aids as an assistant at the Department of Health Care at the Health Care Department of the Medical University of Sofia, Sofia. From 2018 to 2023, she is the responsible assistant of two specialists at Achibadem City Clinic UMBAL Tokuda. Dr. Atanasova has been a lecturer in thematic courses on Ultrasound and High-Risk Pregnancy. My personal impressions of Dr. Atanasova are related to our long-standing joint scientific-teaching and medical-diagnostic activity in the Department of Obstetrics and Gynecology at the "Mother's House" Sofia Hospital. She is an established teacher, scientist and clinician.

Conclusion

The analysis of the scientific-teaching, diagnostic-treatment activity of the candidate shows that she fully meets the conditions and requirements under Art. 24 of ZRASRB, the qualitative and quantitative criteria for the development of the academic staff, specified in Art. 126 of the Regulations of Achibadem City Clinic UMBAL Tokuda, Sofia for the acquisition of the academic position "Associate Professor".

Based on this, I propose that Dr. Maria Atanasova-Elenkova be elected to the academic position of "ASSOCIATE PROFESSOR" in the specialty of Obstetrics and Gynecology at Achibadem City Clinic UMBAL Tokuda, Sofia.

03/03/2024

(Prof. Dr. A. Nikolov, PhD)