

TO  
The Chairperson  
of the Scientific Jury

## STATEMENT

By Prof. Katya Stefanova Kovacheva, MD, PhD,  
Department of Medical Genetics  
Faculty of Pharmacy, Medical University - Pleven

**Subject.** A competition for acquiring a half-time position of Associate Professor in Medical Genetics, Professional field 7.1 Medicine, Higher Education field 7. Healthcare and sport, at the Department of Medical Genetics, Faculty of Medicine, MU – Varna and a full-time position in the Laboratory of Medical Genetics at “St. Marina” University Hospital EAD - Varna.

### Procedural issues

By Order NoR-109-130/16.03.2026 of the Rector of “Prof. Dr. Paraskev Stoyanov” Medical University I was been appointed member of the Scientific Jury for the Competition for "Associate Professor" in the specialty "Medical Genetics", Professional field 7.1 Medicine, Higher Education field 7. Healthcare and sport - for the needs of half-time position at the Department of Medical Genetics, Faculty of Medicine, MU - Varna and a full-time position for the Laboratory of Medical Genetics at St. Marina University Hospital EAD - Varna, announced in State Gazette No. 6 of 16.01.2026.

One candidate has applied for the competition and has been admitted for participation – Senior Assist. Professor Dr. Mari Ara Hachmerian-Andreeva, MD, Ph.D. This procedure and the relevant documents and materials submitted to me are in accordance with Art. 4, para. 1 and para. 2 of the Academic Staff Development Act in the Republic of Bulgaria, art. 57, para. 1, Art. 127 para. 1 and 2 of the Regulations for the Development of Academic Staff at the MU - Varna.

### Education and career development

Dr. Mari Ara Hachmerian-Andreeva graduated in Medicine in 2011 at “Prof. Dr. Paraskev Stoyanov” Medical University - Varna. Immediately after graduating in the period 2012-2019, she started working as a doctor at Laboratory of Medical Genetics, “St. Marina” University Hospital – Varna. In the same year 2012, she started working as an assistant professor in Medical Genetics at the Department of Medical Genetics, "Prof. Dr. Paraskev Stoyanov" Medical University - Varna. In the period 2012 to 2018, she held the position of full-time Assistant Professor, and since 2018 to present she has been a Senior Assistant Professor" at the same Department of Medical Genetics, Medical University - Varna. After completing master's degree program training, in 2015, Dr. Hachmerian graduated successfully in the specialty “Molecular biology and biotechnology”. Since

2018, she has a recognized specialty in "Medical Genetics". Since 2019, she is a Head of the Laboratory of Medical Genetics, St. Marina University Hospital –Varna.

In the period 2012 – 2017, Dr. Mari Hachmerian is a full-time PhD student of specialty "Genetics", Professional field 4.3 Biological science at the Department of Medical Genetics, Medical University - Varna and obtained her PhD diploma in the doctoral program, defending a dissertation on "*Maternal biochemical screening as a method of genetic prevention*". In the following period 2024-2025 she is a full-time PhD student of specialty "Medical Genetics", Professional field 7.1 Medicine at the same Department. In December 2025 she obtained her PhD diploma in the doctoral program "Medical genetics", defending a dissertation on "*Genetic counseling of patients with suspected cancer syndrome*".

### **Research interests**

Dr. Mari Hachmerian's research interests are related to research in the following areas:

- 1. Clinical dysmorphology and rare genetic syndromes:** Diagnostic's challenges associated with the process of defining of clinical and genetic diagnosis in cases of rare syndromes; Defining of genotype-phenotype correlations in rare syndromes; Analysis of the clinical characteristics in some rare phenotypes; Role of clinical follow-up of patients with rare disorders for the finding some early multisystem complications.
- 2. Reproductive genetics:** The role of genetic factors in predisposition to repeated spontaneous abortions; Role of some immune factors (HLA-G and TNF-alpha) for assessment of maternal-fetal immune tolerance; Comparative analysis of gene thrombophilic polymorphisms in risk patients in order to precise anticoagulant therapy; Significance of genetic screening and test of some immune biomarkers in order to personalize of therapy in couples with history of reproductive failures.
- 3. Modern aspects of genetic counseling:** Transformation of the tasks of genetic counseling in the era of modern genomic (NGS) technologies. Challenges in the process of genetic counseling associated with application of genetic tests; Role of the genetic counseling as a critical element of the approach of personalize therapy and care of patients; Position of the genetic counseling in the new branch of medicine – precise medicine; Problems of genetic counseling in cases with rare genetic syndromes; Ethical aspects of medical genetic counseling.
- 4. Oncogenetics and hereditary cancer-predisposed syndromes:** Role of cytogenetic and molecular tests in onco-haematology; Role and characteristics of genetic counseling of patients with high risk for cancer development; Assessment of diagnostic success of application of NGS technology in patients with common hereditary cancer syndromes.
- 5. Prenatal diagnosis and modern genomic technologies:** Optimizing of the algorithms for mass prenatal screening; NIPT – socio-philological and medical analysis of it application.

### **SCIENTIFIC-RESEARCH ACTIVITIES**

Scientific-metric indicators:

#### **Group A**

***Indicator 1 - 50 points /minimum required 50 points/***

- Dissertation - for awarding the educational and scientific PhD degree " - 50 points

- 3 publications related to the dissertation (2 of them are in journals, refereed and indexed in Scopus, 1 publication in a non-refereed journal) – **30 points (minimum 30 points required for a PhD degree).**

**Group B – 101,74 points /minimum required 100 points/**

***Indicator 4 – 101,74 points***

- **Habilitation thesis**

Regarding habilitation, submitted **10 publications in refereed and indexed journals with IF or SJR**, mainly dedicated on the problems in diagnosis of rare dysmorphic syndromes, role of genetic thrombophilic polymorphisms for thrombotic risk, genetic factors in etiology of reproductive failures, oncogenetics. Of the 10 publications submitted, 3 were in IF journals (with a total IF of 4,3); in 3 of them Dr. Hachmerian is the first author.

**Group D – 201,26 points /minimum required 200 points/**

***Indicator 6 –40 points***

**Published book based on the defended dissertation for PhD degree** – “Genetic code of the cancer. Guidebook for patients and their families”, City Center, 2025.

***Indicator 7 – 136,95 points***

**Publications in refereed and indexed scientific journals** – No submitted full text publications. Submitted **14 abstracts** from participations in scientific forums abroad, that have been published in **refereed and indexed scientific journals with IF** - European Journal of Human Genetics и Prenatal Diagnosis (with a total IF of 53,482). In 6 (43%) of the submitted 14 published abstract, Dr Hachmerian is the first author.

***Indicator 8 – 24,31 points***

**Publications in non-refereed and non-indexed scientific journals – 6 publications**  
In 2 (1/3) of them, Dr Hachmerian is the first author.

**Group E - 105 points /minimum required 80 points/**

***Indicator 10 - 105 points***

- **Citations** in scientific journals, monographs and collective volumes, refereed and indexed in world-known databases of scientific information (Web of Science and Scopus) (**7 pcs.**)  
Two of Dr. Levkova's publications have been cited in a total of 7 scientific journals, refereed and indexed in world-renowned databases (7pcs. × 15 pts.;**105 pts.**).

**Scientific works of Dr. Mari Hachmerian and overall characteristics:**

***Dissertation /Author abstract***

***Total number of the real publications in scientific journals - 34 pcs.***

- ***Real publications (for obtaining PhD) - 3 pcs.***
- ***Real publications for participation in the competition - 31 pcs.***  
***(beyond those for the PhD)***

- Publications in refereed and indexed journals - **24 pcs.**
  - o Submitted as Habilitation thesis - 10 pcs.
  - o Other (apart from the Habilitation thesis) - 14 pcs.
- Publications in non-refereed and non-indexed journals - **6 pcs.**
- Published book based on the defended dissertation for PhD degree - **1 pcs.**
- Outside of the participation in the competition are also submitted publications in refereed peer-reviewed journals - **1 pcs.**

***Sole or first author (in the actual 31 publications) – in 11 publications (35%)***

***Citations – 25 pcs.***

Of the scientific publications with authorship and co-authorship of Dr. Mari Hachmerian - 2 publications (in journals with IF or SJR) have been cited in a total of 7 scientific publications refereed and indexed in world-renowned databases (SCOPUS and Web of Science).

***Impact factor (of the actual publications for participation in the competition) - total 65,682***

### ***Research contributions***

I approve Dr. Mari Hachmerian author's report on the original contributions of her scientific research. These contributions are in different scientific fields: 1) Oncogenetics and hereditary cancer predisposed syndrome – improving of genetic counseling of patients with high cancer risk, assessment of diagnostic effectiveness of application of NGS technologies, guidebook for patients risk assessment; 2) Prenatal diagnosis and genomic technologies – algorithms for prenatal screening, socio-psychological effects of new NIPT; 3) Cytogenetic and molecular diagnosis in oncohaematology – combine approach of application of cytogenetic and FISH, development of ethic and diagnostic protocol for interpretation of the test results; 4) Clinical dymorphology and rare genetic disorders – construction of genotype-phenotype correlations; 5) Ethic aspects of genetic counseling.

I accept the Habilitation extended reference of Dr. Mari Hachmerian, related to the 10 articles in the Habilitation thesis, voted to studies in the following areas: Diagnostic challenges of rare genetic syndromes; Aspects of genetic counseling in the era of genomic; Reproductive genetics and role of genetic tests for assessment of the reproductive risk.

### **SCIENTIFIC ACTIVITY**

***Participation in scientific forums (besides those for obtaining PhD degree) – 45 pcs.***

- Scientific forums in Bulgaria - 25 forums
- Scientific forums abroad- 20 participations

***Participation in scientific research projects - 4 National projects***

## TEACHING ACTIVITIES

Dr. Hachmerian is a lecturer in Medical Genetics. She teaches medical students (in Bulgarian and English); pharmacy students, student nurses, for the specialties - Medicine (BEO and AEO), student midwives and nurses, and student laboratory technicians.

- **Total teaching experience - over 14 years**

## THERAPEUTIC-DIAGNOSTIC ACTIVITIES

Dr. Hachmerian actively participates in diagnostic activities and genetic counseling of the Laboratory of Medical Genetics, "St. Marina" University Hospital –Varna with a **total experience over 14 years**. Since 2019, she is a Head of the Laboratory.

## ADDITIONAL QUALIFICATION

Since 2015, Dr. Hachmerian has been a graduate master in the specialty "Molecular biology and biotechnology".

## CONCLUSIONS:

As can be judged by the attached documents, Dr. Mari Ara Hachmerian-Andreeva meets and even exceeds the scientific and metric criteria set as minimum requirements set by the Academic Staff Development Act in the Republic of Bulgaria and the Regulations for the Development of Academic Staff at the Medical University – Varna to be awarded the position of "Associate Professor". She is a qualified specialist in Medical Genetics, an experienced teacher and a recognized researcher focused on scientific aspects of human genetics. She is a qualified specialist in medical genetics, an experienced lecturer and an established researcher with interests in various scientific fields of human genetics.

I give my positive opinion and confidently propose to the members of the Scientific Jury to vote for awarding the academic position of "Associate Professor" in specialty "Medical Genetics", Professional field 7.1. Medicine to Dr. Mari Ara Hachmerian-Andreeva for the needs of the Department of Medical Genetics, Faculty of Medicine, MU -Varna and Laboratory of Medical Genetics at the "St. Marina" University Hospital EAD - Varna.

20.05.2026

Signed:.....

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

Prof. Katya Stefanova Kovacheva, MD, PhD