

OPINION

Subject: Competition for the academic position of **Associate Professor** in the professional field: 7.1.Medicine (Medical Genetics) for the needs of the Faculty of Medicine, St. Kliment Ohridski Sofia University, announced in State Gazette, issue 88, dated: 13 October 2020.

By: Ludmila Borislavova Ivanova, MD, PhD, Professor at the Medical Faculty of St. Kliment Ohridski Sofia University and a member of the Scientific Jury, appointed by the Rector's order (RD 38-601, dated: 16 December 2020).

The only applicant in the competition is Radoslava Vassileva Vazharova, MD, PhD in genetics – Assistant Professor in the Department of Biology, Medical Genetics and Microbiology “ at the Faculty of Medicine, St. Kliment Ohridski Sofia University.

Applicant's curriculum vitae and academic development

Radoslava Vazharova was born in 1969 in Sofia, Bulgaria. In 1988 she completed her secondary education with honors at a German school, Sofia.

In 1994 she was awarded the academic degree "Master in Medicine" with the professional qualification "Physician- Doctor of Medicine" from the Medical Faculty of the Medical University of Sofia, with excellent results (Diploma № 012341 with registration № 41201 / 27.12.1994). In 2000 she had acquired a specialty in medical genetics from the Higher Medical Institute-Sofia (Certificate series AC № 006691 from 01.01.2000).

In 2016 she defended his doctoral thesis on "Analytical approach for diagnosis of rare diseases through DNA next - generation sequencing" and obtained the educational and scientific degree "Doctor of Genetics" from the Medical Faculty of the Medical University - Sofia (Diploma series MUS № 000486, reg. № 429-D / 20.07.2016).

Dr. Vazharova obtained international trainings through several prestigious courses for mastering modern laboratory methods in genetics in the UK (Cambridge, 2008, Oxford, 2010), France (Paris, 2009), the Czech Republic (Prague, 2007).

After graduating her higher education, in the period of 1995-2008 Dr. Vazharova worked as an Assistant / Senior Assistant Professor in the Department of Medical Genetics, and in the period from 2008 to 2012 she was also an Assistant / Senior Assistant Professor in the Department of Obstetrics and Gynecology, Faculty of Medicine, Medical University, Sofia.

Since 2012 onwards she has been Assistant, and since 2017 an Senior Assistant Professor at the Department of "Biology, Medical Genetics and Microbiology" at the Medical Faculty of St. Kliment Ohridski Sofia University.

Alongside with her teaching and research she has occupied a position of Physician and Consultant in medical genetics at "Majchin dom" Hospital (from 2008 to 2012), in the laboratory of genetics at the Medical center "Dr. Malinov" (from 2012 to 2017), and since 2017 and until now she is a specialist in medical genetics in the Laboratory of Medical Genetics and Molecular Biology at Lozenets Hospital Ltd.

Research and Scientometric Indicators

The applicant's scientometric data evaluated in their entirety correspond to the criteria and indicators recommended in the assessment protocols when conducting a competition for the title of Associate Professor.

The scientific papers presented by the applicant to participate in the competition are related to serious scientific and applied research in the field of medical genetics and especially in the study of rare genetic diseases. The presented list of publications includes a dissertation abstract and 48 scientific publications in leading international and national scientific journals beyond those related to the dissertation. Ten of the publications presented as habilitation thesis are in academic journals indexed and referenced in notable scientific databases with research literature. Twenty-two of the publications are referred to in journals and indexed in world-recognized databases with scientific information; of which 12 are with IF (total IF of the articles with the participation of the candidate is 26,037). Twenty-one of the papers submitted are published in national medical journals with scientific review and 5 are in foreign journals. The candidate presents a list of 29 reports in international scientific forums and 4 reports in national forums, apart from those related to the doctoral dissertation. Some of the presented reports of Dr. Vazharova have received the highest recognition at the scientific forums.

In three of the publications in the peer-reviewed journals Dr. Vazharova is the first author, in four she is the second author and in 15 she is the third and consecutive in the author's team.

Citation: Articles with the participation of Dr. Vazharova are cited in 208 scientific publications, 207 of which are in referenced and indexed world-recognized databases with research literature and 1 is in an unrefereed scientific publication.

The research and scientific-applied activity of the candidate is in the field of medical genetics in which Dr. Vazharova is a recognized specialist with significant scientific achievements. The main directions in her scientific research work are the rare genetic diseases - mechanisms of occurrence, the variability of phenotypic manifestation, approaches for genetic testing, screening, and prevention. Her research focuses on the clinical and genetic characterization of rare monogenic/chromosomal disorders and polymalformative syndrome and includes the detection of phenotype-genotype associations in complex phenotypes such as psychiatric diseases, cardiovascular diseases, neuromuscular diseases, longevity. The most significant contributions in these areas are the discovery of novel gene variants associated with monogenic diseases, with 14 extremely rare gene variants of phenotypic significance being deposited in the ClinVar database.

The mastery and introduction in the practice of modern methods of genetic testing (microchips, massive parallel sequencing (NGS)) allows to diagnose patients with a number of serious genetic diseases - malformation syndromes and intellectual disabilities, establishing a genetic predisposition to mental illness, as well as and to study longevity genes. A significant scientific and practical contribution of Dr. Vazharova's doctoral dissertation is the

proposed algorithm for the application of NGS testing in patients with rare monogenic diseases.

Serious scientific and practical contributions are presented as Habilitation thesis ten publications in leading international peer-reviewed journals with impact factor, which combine the latest achievements in the field of pre-and postnatal diagnosis of chromosomal and monogenic diseases in humans, which is confirmed with high impact factor (total IF 11.79) and citation (four of them were cited 41 times). Genetic testing allows shortening the path from the onset of symptoms to clarifying the underlying genetic factor, as well as a prenatal diagnosis for the prevention of hereditary diseases, predispositions, and congenital anomalies to avoid giving birth to children with disabilities, which has an impact not only for the individual and his family but for public health as well.

Special advantages of the candidate are not only her serious theoretical professional training and research experience but also her highly qualified consulting activity in medical genetics

Project Participation: Dr. Vazharova participates in four prestigious national projects from the Bulgarian National Science Fund at the Ministry of Education and Science and one of them is headed by her.

Teaching and Lecturing: Dr. R. Vazharova is a full-time lecturer in medical genetics in the specialty of medicine and medicine in English, a "Master" degree, and a faculty member at the Medical Faculty of " St. Kl. Ohridski Sofia University". She has performed 1706.4 hours of teaching/tutoring sessions for the period from 2017 to 2019.

Membership in scientific and professional organizations: Bulgarian Medical Union, Bulgarian Society of Human Genetics and Genomics, Bulgarian Alliance for Precision and Personalized Medicine, and European Society of Human Genetics.

Compliance with the Minimum National Requirements for the Scientific and Teaching Requirements of Applicants for acquiring a Scientific Degree and for Occupying the Academic Position of Associate Professor in the Professional Field 7.1. Medicine

Group of Indicators	Content	Minimum Natl. Requirements for an „Associated Professor” (points)	Radoslava Vazharova , MD, PhD (points)
A	Indicator 1	50	50
B	Indicator 2	-	-
B	Indicator 4	100	121.38
Г	Sum of indicators from 5 to 9	200	278.71

Д	Sum of indicators from 10 to 12	50	3110
Е	Sum of indicators from 13 to the end	-	70
Total		400	3508.71

CONCLUSION

The teaching, and research activities of Senior Associated Professor Radoslava Vazharova, MD, Ph.D., shows extremely high competence in the field of genetics. Her scientific research has made a significant international contribution to the development of medical genetics and to the practical application of genetic testing for the detection of rare genetic diseases. Dr. Vazharova is a responsible and serious lecturer with strong medical and professional background

The submitted documents exceed the minimum national requirements of the Development of Academic Staff in the Republic of Bulgaria Act and the Regulations on the terms and conditions for acquiring scientific degrees and holding academic positions at St. Kliment Ohridski Sofia University for holding the academic position of Associate Professor in the professional field: 7.1. Medicine

I strongly recommend to the honorable members of the Scientific Jury to resolve on the election of Radoslava Vassileva Vazharova, MD, Ph.D. to become an Associated Professor in the field: 7.1. Medicine (Medical Genetics) and hold this academic position at the Faculty of Medicine of St. Kliment Ohridski Sofia University.

Member of the scientific jury:

Prof. Dr. Ludmila Borislavova Ivanova, MD

