

# OPINION

By Assoc. Prof. Petar Milchev Petrov MD, PhD  
Medical University "Prof. Dr. P. Stoyanov" Varna

Regarding: Competition for the academic position of Associate Professor in the scientific specialty Psychiatry in the field of higher education 7. Health care and sports, professional direction 7.1. Medicine, for the needs of the Department of Psychiatry and Medical Psychology to the Faculty of Medicine, MU – Varna and Second Psychiatric Clinic of University Hospital "St. Marina" Varna, announced in SG no. 28/28.03.2023.

According to: Order No. R-109-267/25.05.2023 of the Rector of the MU – Varna, based on The Law on the Development of the Academic Staff in the Republic of Bulgaria, the regulations of Medical University – Varna and decision with Protocol No. 2/04.05.2023 of the Faculty Council of the Faculty of Medicine and Protocol No. 1/07.06.2023 from the first meeting of the scientific jury I was designated as a reviewer.

Candidate: Single candidate – Dr. Zhivko Pavlinov Apostolov, PhD - Department of Psychiatry and Medical Psychology to the Faculty of Medicine, Medical University – Varna and Second Psychiatric Clinic – University Hospital St. Marina Varna.

## **I. Biographical data**

Zhivko Apostolov MD, PhD was born in 1986 in city of Varna. In 1995 he graduated in Medicine at the Medical University "Prof. Dr. Paraskev Stoyanov" - Varna.

## **II. Education and scientific degrees**

2010 – Master of Medicine – Medical University Varna

2014 – PhD in Medicine

2016 – Acquired the specialty of "Psychiatry"

## **III. Professional Development**

2010-2011 Emergency Medical Care Center

2011-2012 GP Practice

2012 and cont. – University Hospital "St. Marina" Varna

2017-2021 Psychiatrist (outpatient) DCC "St. Marina" Varna

#### **IV. Academic Development and Teaching activity**

- 2011-2013 Full-time PhD Student in Medical University Varna – Dept. Psychiatry and Medical Psychology
- 2016-2018 Honorary Assistant Professor in Medical University Varna – Dept. Psychiatry and Medical Psychology
- 2018-2019 Assistant Professor in Medical University Varna – Dept. Psychiatry and Medical Psychology
- От 2019 and cont. Chief Assistant Professor in Medical University Varna – Dept. Psychiatry and Medical Psychology.

During all these years Chief Assistant Professor Zhivko Apostolov taught Psychiatry and Medical Psychology to medical students in Bulgarian and English. His academic load exceeds the requirements according to regulations.

#### **V. Memberships**

Zhivko Apostolov MD, PhD is member of Bulgarian Medical Association, Bulgaria Psychiatric Association and Royal College of Psychiatrists.

#### **VI. Quantitative scientific indicators and Scientific activity**

Chief Assistant Professor Zhivko Apostolov presents a report on the implementation of the minimum national requirements and the requirements of the regulations of the Medical University - Varna, prepared in the Library of the MU - Varna, in accordance with the Regulations for the implementation of the law on the development of the academic staff in the Republic of Bulgaria and the Regulations for the development of the academic staff of the Medical University - Varna. According to the presented reference, Chief Assistant Professor Zhivko Apostolov, meets the requirements to take the academic position "Associate Professor".

Indicators	Points required	Points presented by the Candidate
A	50	50 p
C	100	100 p
D	200	270 p
E	50	55 p

Tab 1. Compliance with the scientometric requirements of the MU - Varna for occupying the academic position of professor according to the presented academic reference of the library at the MU - Varna.

The total number of scientific works of Chief Assistant Professor Zhivko Apostolov from the report submitted includes:

- Abstract of PhD thesis
- Monography work – 1
- Scientific publications - 15
- Number of citations reflecting scientific activity – 11

From the Full-text scientific publications – 4 are in English, and 11 are in Bulgarian.

In the presented scientific works, Chief Assistant Professor Zhivko Apostolov is the first author of 6 publications and the only author in 5.

All works of Chief Assistant Professor Zhivko Apostolov are in the scientific fields - Psychiatry.

In general, the scientific directions of the published scientific works are distributed by the candidate in the fields of:

1. Schizophrenia
2. Evolutionary psychiatry
3. Philosophy and Psychiatry
4. Depression and Anxiety Disorders
5. Brain Asymmetry

### **1. Schizophrenia**

In this section, the author presents 5 scientific publications (D.7.1; D.8.2; D.8.3; D.8.4; D.8.9). They present a comprehensive view of the disease - from the historical view, through the course, to the different therapeutic approaches. Particular attention is paid to the evolution of drug treatment in patients with schizophrenia. Over the past 20 years, the search for new and different medications to treat both positive and negative symptoms of schizophrenia has not yielded the expected results. However, second-generation antipsychotics are now widely used to treat schizophrenia, even in first-episode psychosis. The author has presented a brief overview of the latest, as well as some future, pharmacotherapeutic options in the treatment of schizophrenia.

This section also presents a publication that discuss the possibilities of psychotherapeutic interventions in the treatment of schizophrenia.

### **2. Evolutionary psychiatry**

In this section, 1 scientific publications and one monograph by the author are presented (C.3.; D.8.1;). They have been reviewed:

- the evolutionary role of social cognition and the social brain in the emergence of psychopathology
- Evolutionary theories related to most mental illnesses are reviewed, with a primary focus on schizophrenia. Also included is an evolutionary theory

look at some of the most common disorders in the field of child and adolescent psychiatry - autism, ADHD, eating disorders.

### **3. Philosophy and psychiatry**

In this section, the author presents 1 scientific publication (D.7.2).

In recent years, there has been a trend towards an increasingly electronic, schematic or downright simplified representation of everything around us, and this does not exclude the human body and brain. The presented overview of embodied cognition rejects or reformulates the computational nature of cognitive science, emphasizing the importance of the physical body in cognitive abilities. Unifying for researchers of embodied cognition is the idea that the body's interactions with the environment constitute or contribute to cognition in ways that require a new framework for its study. The brain is not just a computer and it is not an independent center of cognition. These theoretical and empirical developments portend implications for the study and treatment of schizophrenia. Whatever the future of embodied cognition, careful study of its goals, methods, conceptual foundations, and motivations will undoubtedly enrich the philosophy of psychology.

Examining the theoretical foundations of Spinoza, Schopenhauer, Merleau-Ponty and others, in their subsequent development, combined with modern neurological research, certainly gives a very different view of the presentation, explanation and very meaning of the concept of "mind" and its "diseases".

### **4. Depression and Anxiety Disorders**

Included are 6 scientific publications related to various significant aspects regarding the presence of depressive and anxiety symptoms in somatic conditions - cardiovascular, endocrinological, pregnancy. The methods of personalized medicine in the treatment of depressive disorders are presented.

### **5. Brain asymmetry**

This section presents the candidate's dissertation work. It discusses:

- an attempt to reveal deficits in lateralized cognitive functions in patients with schizophrenia
- the frequency of non-right-handedness (left-handedness) among patients with schizophrenia and is compared with that in the Bulgarian population
- assumption that in individuals with different types of manual dominance, specifically left-handed and right-handed, the connections between brain asymmetry and schizophrenia may be presented differently

- hypothetical projections of brain asymmetry in the diathesis-stress model for schizophrenia

## VII. Conclusion

Chief Assistant Professor Zhivko Apostolov MD, PhD is experienced educator, researcher and clinician. The presented indicators for scientific research and teaching activities meet the requirements of the law and the regulations for its implementation, as well as the Regulations for the development of the academic staff of the Medical University - Varna.

**In conclusion, I give a positive opinion and propose to the other members of the scientific jury to vote positively for awarding the academic position "Associate Professor" to Chief Assistant Professor Zhivko Apostolov, in the field of higher education 7. "Health and Sports", professional direction 7.1. "Medicine", in the scientific specialty "Psychiatry", for the needs of the Department of "Psychiatry and Medical Psychology", Faculty of Medicine of the Medical University - Varna and the Second Psychiatric Clinic at University Hospital "St. Marina" - Varna.**

05.Aug.2023  
Varna

Assoc. Prof. Petar Petrov

