МЕДИЦИНСКИ УНИВЕРСИТЕТ
ПЛОВДИВ
Вх. № Р-8022/ 14.08.2024 г.

TO: The Chairman of the Scientific Jury,
determined by Order No. R-2392/12.07.2024
of the Vice Rector of the Medical University - Plovdiv

STATEMENT

By Prof. Dr. Sonia Borisova Sergieva,
Head of Nuclear Medicine Clinic, Acibadem City Clinic
UMBAL "Tokuda"-Sofia

Regarding: Competition for the appointment of AP "Associate Professor" in the scientific specialty "Medical radiology and roentgenology (incl. use of radioactive isotopes)", field of higher education 7. Health care and sports, professional direction 7.1. Medicine at the "Clinical Oncology" Department, MF at the MU-Plovdiv for the teaching of Bulgarian and English speaking students, announced in State Gazette, no. 35 / 19.04.2024
Only candidate: Chief Assistant Dr. Albena Dimitrova Botushanova, PhD

DEAR MADAM PRESIDENT,

Pursuant to Art. 4(2) and Art. 25 of the LDASRB and Art. 2, Art. 57(2) of the Regulations for the Implementation of the LDASRB and order of the Vice Rector of the MU Plovdiv No. R-2392/12.07.2024 I am designated as member of the scientific jury. At the first meeting of the jury, there was a decision to present a statement on the competition.

Career development of the candidate
Dr. Albena Dimitrova Botushanova was born on 05.06.1966. She graduated from the Faculty of Medicine of the Medical University of Plovdiv in 1992 with excellent results. From 07.02.1995 she started working as a resident doctor in the Radiotherapy Clinic in the Laboratory of Radiobiology at UMBAL "St. Georgi" EAD - Plovdiv. She has acquired a medical specialty "Radiobiology" Diploma series BS No. 000033, Reg. No. 002850/ 06.05.1998 Since 1999, she has been working in the Department of Nuclear Medicine at the Radiotherapy Clinic and in 2003 she acquired a second specialty in Nuclear Medicine - Diploma Series Bs No. 000422, Reg No. 007872/ 27.01.2003. Since 2004, she has been working on the scientific topic "Nuclear medicine methods for the diagnosis of abnormal parathyroid glands in primary and secondary hyperparathyroidism" and obtained the educational and scientific degree "Doctor" in the scientific specialty "Medical radiology and roentgenology " (incl. use of radioactive isotopes) " at the Medical University "Prof. Dr. Paraskev Stoyanov", Varna, Diploma Reg № 336/ 23.05.2019. Since September 2019, she has been elected as an assistant at the "Clinical Oncology" department of the MU - Plovdiv. Participates in the teaching of students of medicine and dentistry in the study discipline "Radiology". He is also a teacher at the Medical College - Plovdiv of X-ray laboratory assistants in the academic disciplines "Nuclear Medicine" and "Radiobiology".
Dr. A. Botushanova graduated as a Master in Health Management at the Higher School of Agribusiness and Regional Development, Plovdiv, Faculty of Economics and Management with Diploma Reg № 336/ 23.05.2019.

Since 2020,she is the head of the Department of Nuclear Medicine at the UMBAL "St. Georgi" EAD - Plovdiv, which has two bases with hybrid SPECT/CT and PET/CT gamma camera equipment. From 2021, after a competition, Dr. A. Botushanova, PhD, holds the position of "Chief Assistant" at the Department of Clinical Oncology.

Participation of Dr. A. Botushanovav in annual congresses of EANM:

1. M. Yaneva, A. Botushanova, M. Marovska, B. Popova, V. Stanchev, V. Andonov Renal Dynamic Scintigraphy with 99mTC- DTPA in patients with Liver Cirrhosis – Annual Congress of the EANM Istanbul, Turkey 2005 Eur J Nucl Med Mol Imaging Volume 32–Supplement 1 – September 2005;P504
2. M. Yaneva, M. Marovska, A. Botushanova, A. Mihov, B. Popova, V. Stanchev. The role of radioiodine therapy in the treatment of patients with hyperthyroidism- Annual Congress of the EANM Athens, Greece 2006 Eur J Nucl Med Mol Imaging Volume 33 -Supplement 2– September 2006;P536
3. M. Yaneva, A. Botushanova, M. Marovska, B. Popova. Renal dynamic scintigraphy with 99mTC – DTPA in patients with abnormal kidneys - Annual Congress of the EANM Athens, Greece. Eur J Nucl Med Mol Imaging 2006 ,Volume 33 -Supplement 2– September 2006;P276
4. M. Yaneva, E. Kumchev, D. Dimitrakov. A. Botushanova. Does Vitamin D Receptor Polymorphism / FOK I/ influence intact Parathyroid Hormone Level and some Biochemical Markers of Bone Turnover in Predialysis Patients with Chronic Renal Failure? -Annual Congress of the EANM Copenhagen, Denmark Eur J Nucl Med Mol Imaging ,Supplement 2–October 2007, Volume 34;P533
5. M. Yaneva, A. Botushanova, M. Marovska. Renal dynamic scintigraphy with 99mTc-DTPA for evaluation of the kidney function in patients with an ectopic kidney- Annual Congress of the EANM Copenhagen, Denmark Eur J Nucl Med Mol Imaging ,Volume 34 -Supplement 2– October 2007;P530
6 M. Yaneva, A. Botushanova, M. Marovska. Scintigraphic assessment of thyroid remnants in the postoperative follow-up of patients with well-differentiated thyroid carcinoma with 99mTc pertechnetate. Eur J Nucl Med Mol Imaging 2010;37 (Suppl 2): S333-S481;P387
7. M. Yaneva, A. Botushanova, M. Marovska. Functional changes of the kidneys in patients with liver cirrhosis assessed with renal dynamic scintigraphy with 99mTc – DTPA- Eur J Nucl Med Mol Imaging 2011; 38 (Suppl 2): S260-S44; P597
8. M.Yaneva, A. Botushanova Required therapeutic dose of 131I for thyroid ablation after surgery for differentiated thyroid carcinoma- -Annual Congress of the EANM October 2013, Lyon, France; P412
9. M. Yaneva, A. Botushanova. The role of combined single-isotope dual-phase scintigraphy with 99mTc-tetrofosmin with SPECT technique in minimally invasive parathyroidectomy. EANN Congres 2015-Hamburg

Participation of Dr. A. Botushanova in national scientific forums:

1. Reports of the XVI Congress of BAR Suppl.2015:86-87 and the XI National Congress of Endocrinology, Plovdiv, October 11-13, 2018.
2. Participation with a poster in the Jubilee Scientific Conference "Medicine of the Future" - 29-31 October 2020 on the occasion of the 75th Anniversary of Medical University of Plovdiv - Folia Medica I 2020 I Vol. 62 I Suppl

3. Participation with posters at the XVII National Congress of Cardiology 29.09 - 02.10.2022 and XIX Congress of BAR, Plovdiv, 03-06.11.2022.
4. Dr. A. Botushanova, PhD, participated in the National Program "Young scientists and postdoctoral fellows - 2" 2022.
5. Dr. A. Botushanova, MD is the Head of a scientific project NO - 07/2023. on: Diagnosis of bone metastases by hybrid SPECT/CT and markers of bone metabolism in patients with prostate carcinoma.
6. Dr. Botushanova, MD participated in the European School of Nuclear Medicine - Varna 2008 and Varna 2012. She underwent training to work with RET/ST in the city of Erlangen, Germany in December 2015.
7. Dr. Botushanova, PhD, was the supervisor of two medical interns. He is a member of the Bulgarian Society of Nuclear Medicine, BAR, ESR, UEMS, SUB. He is also a member of the expert committee of Nuclear medicine.

Submitted documents and scientific materials for participation in the competition

The documents presented by the candidate, Dr. Albena Botushanova, are in accordance with the requirements of the LDASRB and the Regulations for the implementation of the LDASRB in MU-Plovdiv, according to the procedure for awarding the AP "Associate professor". All the necessary materials are available, informative, very well structured, which allows a detailed analysis and conclusions about the candidate's complex activity.

Research papers and an contribution representing the overall academic development of the candidate

The academic development and contribution of the candidate for the position of AP "Associate Professor" Dr. Albena Botushanova, PhD include a complex assessment of scientific production and publication activity, application of the candidate's scientific and practical achievements, participation in educational and teaching activities, projects, management of projects and specialist doctors.

A. Scientific production and publication activity

Chief assistant professor Dr. A. Botushanova, PhD, presents her scientific works to the competition, structured in two lists, according to the requirements of the Regulations of the MU - Plovdiv, namely: Publications and reports published in scientific publications, referenced and indexed in IDB- Scopus and Web of science, of which at least three in journals with IF and List of Publications and Reports, in non-reerenced peer-reviewed journals, or in edited collective volumes. The publications are from interdisciplinary collectives in the field of nuclear medicine, nephrology, oncology. Dr. A. Botushanova, PhD is the lead author (up to second incl.) in nine of them. Scientific metrics are characterized by a total IF=15,963 of articles and presented reports with printed abstracts. A. Botushanova, PhD has a successfully defended dissertation on "Nuclear medicine methods for the diagnosis of abnormal parathyroid glands in primary and secondary hyperparathyroidism", which defines the scientific area to which her interest is focused. Various contemporary diagnostic methods and nuclear medicine equipment were used in the scientific developments. Statistical analysis was performed with the statistical processing package SPSS version 15.0 for Windows. Quantitative analysis results are presented as arithmetic mean ± standard error of the arithmetic mean ($\ddot{x}\pm S\ddot{x}$). For all comparisons, a significance level of $P<0.05$ was chosen to reject the null hypothesis. Graphical analysis for visual presentation of results was used. The percentage of sensitivity and specificity was calculated according to the following formulas: Sensitivity = PP /PP+PH X 100 Specificity = PN/PH+FP X 100.

The scientific contributions in the field of nuclear medicine and oncology practice are:

1. Nuclear medicine methods for the diagnosis of abnormal parathyroid glands in primary and secondary hyperparathyroidism: For the first time, the results of nuclear medicine examinations conducted in a large group of patients with PHPT and SHPT are summarized. The advantages and disadvantages of single-isotope dual-phase methods and two-isotope subtraction modality with 99mTc-sestamibi and 99mTc-tetrofosmin performed in patients with PHPT and SHPT are presented. The role of the SPECT technique for increasing the diagnostic sensitivity of single-isotope dual-phase and two-isotope subtraction methods is emphasized. An in-depth study was made of the relationship between scintigraphic findings and indicators of calcium-phosphorus homeostasis, as well as with the volume of the ultrasound findings in patients with PHPT and SHPT. The risks of false negative and false positive results were analyzed. Protocols have been prepared for the combined use of SPECT technique with single-isotope dual-phase and subtraction methods. An algorithm for the study of parathyroid glands has been prepared.
2. PET/CT hybrid equipment (2016): For the first time in UMBAL "St. George" EAD - Plovdiv has introduced 18F-FDG PET/CT examinations for carcinomas of: lung, stomach, mammary gland, kidney, colon, lymphoma diseases for the purpose of diagnosis, staging and monitoring the effect of therapy. Application of Standard of Nuclear Medicine protocols, image processing and interpretation.
3. SPECT/CT hybrid equipment (2022): For the first time in UMBAL "St. George" EAD - Plovdiv have introduced SPECT/CT studies with protocols according to the Standard of Nuclear Medicine, processing and interpretation of hybrid images for: bone scintigraphy, radioiodine scintigraphy, lung and parathyroid scintigraphy. In 2023, sentinel scintigraphy was introduced.

B. Participation in scientific and educational projects

Chief assistant professor Albena D. Botushanova, PhD, is the Head of the scientific project NO - 07/2023 on the topic: Diagnosis of bone metastases by hybrid SPECT/CT and markers of bone metabolism in patients with prostate carcinoma.

Evaluation of the monographic work submitted by the candidate for participation in the " competition for occupation AP "ASSISTANT PROFESSOR"

Chie assistant Dr. Albena D. Botushanova, PhD presents a monograph on "Nuclear Medicine and Parathyroid Glands - Past, Present and Future" Plovdiv 2023, publisher Autoprint EOOD, ISBN 978-619-7205-34-3. The monographic work is the first on the subject for our country and meets all scientific, book-publishing requirements for printing. In this work, Dr. A. Botushanova, PhD, has revealed the search for the best radiopharmaceutical for the diagnosis of abnormal parathyroid glands and the development of new methodologies in connection with the technological progress in nuclear medicine equipment.

Dr. A. Botushanova, PhD has made a personal contribution to nuclear medicine diagnostics for early, more accurate detection of parathyroid gland diseases and subsequent treatment. The publication can serve as a guide and atlas for physicians in the field of nuclear medicine, endocrinology and surgery, as well as for residents and students.

Citation of the candidate's publications in the national and foreign literature

The attached citation report of Dr. Albena Botushanova, PhD shows 20 citations. All citations are in IDB journals in SCOPUS. Official evidentiary material is presented, in which there is citation.

Comprehensive evaluation of the teaching-methodical and teaching activity

In the materials for the competition, Dr. Albena Botushanova, PhD, presented the necessary official reference from the Academic Department of the MU-Plovdiv about the personal and academic workload in the last three academic years of units with medical-clinical activity. It is reflected in it that Chief assistant Dr. Albena Botushanova, PhD, has classroom and non-auditory employment exceeding the required minimum according to the requirements of MU-Plovdiv. It includes teaching "Radiology" modules for the third year of medical students at FM, MU-Plovdiv, as well as teaching "nuclear medicine" and "Radiobiology" modules for 1st and 2nd year X-ray laboratory students at MC - Plovdiv. For the last two years (required in the self-assessment table), a total study load of 1588 hours (583 points) has been completed. Dr. Albena Botushanova, PhD, participated in the preparation of lectures and exercises for distance learning during the COVID-19 pandemic. Assists in updating the curricula of the specified disciplines. Participates in the preparation of the exam tests for the radiology semester exams. Dr. Albena Botushanova, PhD, was the Head of the specialization of two medical interns. He is a co-author in a collective of teaching aids.

Personal impressions of the candidate

I have known Dr. Albena Botushanova for many years as an erudite and motivated colleague, with very good theoretical and practical training, always striving to improve her professional qualification in the field of nuclear medicine by introducing the latest generation of hybrid imaging methods such as SPECT/ CT and PET/CT. Dr. Botushanova is a very cordial and responsive person, shows particular diligence and empathy towards the training and professional growth of young specialists in the field of nuclear medicine and oncology, enjoys the respect and trust of his colleagues and patients.

CONCLUSION

The analysis of Dr. Albena Botushanova's professional development, research activities, scientific contributions, educational and teaching activities, as well as her personal qualities show that she meets all the requirements of the Law on the Development of the Academic Staff in the Republic of Bulgaria) and the Regulations for its implementation and fully correspond to the specific requirements adopted in connection with the Regulations of the MU - Plovdiv for the application of LDASRB for the occupation of the academic position "Associate Professor".

Based on all the facts stated above, as well as my direct impressions on the professional development of Dr. Albena Botushanova, I confidently give my positive assessment and recommendation to the other respected members of the Scientific Jury to award AP "Associate Professor" in the scientific specialty "Medical radiology and roentgenology (incl. use of radioactive isotopes)", field of higher education 7. Health care and sports, professional direction 7.1. Medicine at the "Clinical Oncology" Department, FM at the MU- Plovdiv to Dr. Albena Botushanova.

Заличено на основание
Чл.5 §1, б."В" Регламент (ЕС)2016/679

17.07.2024 Prepared the opinion: ....

Prof. Dr. Sonia Borisova Sergieva, PhD