

OPINION

From Prof. Hristo Hinkov, PhD, MD, National Center of Public Health and Analyses,
member of the scientific jury, by order № 170/08.04.22
of the Director of NCPHA

Subject: Competition for the academic position "Associate Professor" in the field of higher education 7. "Health and Sport" under professional direction 7.1 "Medicine", specialty "Social Medicine and Health Management", for the needs of the Department "Analysis of Health Policies and Accreditation Procedures" of the Directorate "Promotion of Health and Prevention of Diseases" - NATIONAL HEALTH) (SG Issue 14 of 18.02.2022). The contest is for two positions. Dr. Atanas Radinov Radinov is one of the applicants.

This opinion is prepared on the basis of the submitted documents, in accordance with the requirements of the Academic Staff Development Act, its Implementing Regulations and the Rules of Procedure for acquiring scientific degrees and holding academic positions in the National Center for Public Health and Analysis. The applicant's documentation complies with the regulatory requirements

Short biographical data

Dr. Atanas Radinov was born on February 25, 1962. Ivan Rilski Sofia. Throughout his professional experience he has held various leadership and research positions in medical institutions such as Tokuda Sofia Hospital, XXV DK Sofia Hospital, IV Hospital Sofia, Military Medical Academy Sofia.

Between 2003 and 2006, the applicant worked in the UK (IELTS, PLAB 1 and PLAB 2), where he gained experience in various NHS hospitals, most importantly in the Hematology Clinic of Guy's Hospital. For 15 years, the candidate has been the principal investigator of dozens of clinical studies in the field of clinical hematology and oncology. He has been particularly active in the field of clinical studies since joining the newly opened Tokuda Hospital in 2006, where he initially headed the hematology sector and in 2008 established an independent Department of Hematology, which later grew into a Clinic of Hematology and Oncology, and from 2011 to 2014 he held successive positions of Head of Hematology Department, Medical Director and Member of the Board of Directors of Tokuda Hospital.

In 2014, together with part of his team, the candidate moved to St. Ivan Rilski University Hospital, where he established the Clinic of Clinical Hematology, which again includes departments of clinical hematology and medical oncology. In addition to being head of clinical activity at the Clinic of Hematology, the candidate also works as principal investigator of dozens of clinical studies in the field of clinical hematology and medical oncology.

Assessment of the materials submitted

The submitted report on the scientific contributions of the works covers a period from 1990 to 2021 and includes areas of scientific, scientifically applied, clinico-diagnostic and clinico-therapeutic nature. The applicant's scientific publications follow the stages of his/her professional development, related to his work at the Center for Immunology of the MMA 1990-1995, Clinic of Hematology, Chemotherapy and Oncology of The University of Varna – 1995-

2003, IV Hospital 2003-2006, Tokuda Hospital 2006-2014 and Department of Clinical Hematology at St. Ivan Rilski University Hospital since 2014 so far. The total number of scientific participations, outside the dissertation work, is 105, 42 of which are publications in Bulgarian and English, 13 of which are in prestigious foreign magazines with a very high impact factor and numerous quotes, 26 are in referenced Bulgarian editions and 3 are chapters of monographs. In addition, 1 scientific project, which has won funding from the National Research Institute, 17 participations in world congresses and 37 participations in national congresses and conferences, 1 publication in an unreferenced journal and 7 participations in regional scientific meetings are presented.

Quantitative indicators

The applicant exceeds the required minimum points according to the requirements of the associate professor's degree.

| Group of indicators | Indicator | Atanas Radinov points |
|---------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|
| A | 1. Dissertation for the award of educational and scientific degree "Doctor" | 50 |
| B | 4. Habilitation work, in the form of scientific publications (not less than 10) in publications that are referenced and indexed in world-famous databases of scientific information (only Scopus and Web of science); | 102.28 |
| G | 7. Publications and reports published in scientific journals, referenced and indexed in world-famous databases of scientific information (Scopus and Web of science only) | 110 |
| | 8. Publications and reports published in non-peer-reviewed peer-reviewed journals or published in edited collective volumes n = number of authors | 130.41 |
| | 9. Published chapter of a collective monograph n = number of authors | 38.9 |
| | v.7 + v.8 + v.9 | 279.33 |
| D | 10. Citations and / or reviews in scientific journals, referenced and indexed in world-famous databases of scientific information (Scopus and Web of science only) | 1430x15=21450 |
| | 12. Citation and / or reviews in non-peer-reviewed journals with scientific peer-review v.10 + v.12 | 10x5 = 50 21550 |
| E | 15. Acquired medical specialty | 2x40=80 |
| | 18. Management of a national scientific or educational project | 1x30=30 |
| | 22. Training of interns, trainees and doctoral students (seminars and practical classes) | 4x30=120 |
| | v.15 + v.18 + v.22 | 230 |
| Total Points | 50+102.28+279.33+21550+230 | 22211.61 |

Training and teaching activities

The educational and teaching activity of the applicant is mainly related to the training of graduates in clinical hematology, medical oncology, gastroenterology, endocrinology and others. During the Clinic of Hematology at St. Ivan Rilski University Hospital in the last seven years, nine doctors have received training as graduates in clinical hematology, four of whom have been head of specialization (two of whom have successfully passed a specialty exam), and all have conducted the necessary colloquiums (32 in total). According to module "Hematology" passed 49 people, some of which were also held colloquiums.

The report from the Education Department of St. Ivan Rilski University Hospital on the learning workload shows that in the period 2019-2021 he gave a total of 40 hours of lectures and 180 hours of exercises.

Scientific contributions

The scientific contributions of Dr. Atanas Radinov can be summarized in three main groups: *original, confirmatory and scientifically applied*.

Two themes emerge as *original contributions* to the candidate's work. One relates to clinical trials and their importance for patients' access to innovative therapy and the other is in the field of public health in the context of crises regionally and globally.

Clinical trials are an extremely important field of medicine as they enable patients to benefit from the most advanced and innovative therapies. In this field, the candidate has achieved significant scientific and scientific and applied contributions, especially as the manager and manager of numerous clinical studies conducted in our country. As principal investigator, the applicant conducted clinical studies on antiherpetic vaccines in patients with haematological and oncological diseases, epoetin alfa in anemic patients with low-risk myelodysplastic syndrome, the results of which were published in 2018 in „*Leukemia*“, the preparation anagrelide in patients with essential thrombocythemia, the results of which were published in 2019 in the British Journal of Hematology, etc. Excellent results in the activity of clinical studies enable the candidate to work in cooperation with the teams of world-renowned scientists, such as Gisliger, Fenaux, Cervantes, Grosicki, Sekeres, Dimopoulos and many others. The results obtained are published in numerous world publications, such as Lancet, Leukemia, British Journal of Hematology, as well as presented on the EHA, ASH, ASCO forums.

Especially valuable is the study of the effect of the preparation celineexor in combination with bortezomib and dexamethasone in patients with multiple myeloma, published in the Lancet, the study of the efficacy and safety of the preparation ruxolitinib in patients with myelofibrosis and anemia, the study of the effect of pevonedistat in combination with azacitidine in patients with high-risk MDS, CML or AML with a low percentage of blasts.

Confirmatory research. In 2011, after the accident at the nuclear power plant in Fukushima, Japan, the candidate began a thorough study of the consequences of the nuclear accident and the actions of the Japanese authorities to deal with them, trying to respond the question what would have happened in our country in a similar incident here.

The focus of the applicant's scientific searches is the organizational aspects of medical care in a hospital in the event of such an accident. The work of the candidate evolves into a dissertation on "Organization and management of the eradication of the consequences of radiation contamination of the population as a result of an act of terrorism and other radiation incidents", which had been defended on 21 January 2021 at the National Centre for Public

Health and Analysis (NCOSA). The contribution of this development is that the organizational model proposed and developed in the candidate's dissertation is applicable to different types of crises nationally and globally. This topic is proving particularly relevant in the context of recent events in Europe and the world.

Other topics within the scope of the candidate's research interest are affirmative in nature and these are the quality of life in patients with oncological diseases, the handling of the side effects of chemotherapy, as well as major problems in the diagnosis and treatment of patients with oncohematological diseases. A significant scientific contribution is made by the candidate in the study of the possibilities for the diagnostic and prognostic importance of flow cytometric DNA analysis in malignant hemopathies. This is also the emphasis in his clinical work as a hematologist at the Clinic of Hematology of the Military Academic Hospital in Sofia. A number of publications and presentations have been made in scientific forums regarding the treatment of non-Hodgkin's lymphomas and Hodgkin's disease, cytogenetic studies in multiple myeloma, cytogenetic studies in chronic myeloid leukemia, myelofibrosis, myelodysplastic syndrome, non-lymphoblastic leukemias, as well as chronic lympholeukemia. The candidate is a co-author in publications of interesting cases of patients with rare diseases such as Gaussy disease, osteopetrosis, etc.

Scientifically applicable research. The third group of the applicant's scientific contributions is of a *scientifically applicable and methodological nature*, and here the main achievements are found in the field of the implementation and application of immunological methods in clinical practice. After specialization in the Department of Immunology of the University Hospital of Antwerp, Belgium, under the guidance of Professor Dirk Van Bockstal, Dr. Radinov mastered the method of flow cytometric DNA analysis with propidium iodide, which he successfully implemented in the University of The World Immunology Center using a laser flow cytometer "FACSsort". The apparatus, in addition to allowing for flow cytometric DNA analysis with propidium iodide, also enables the immunophenotyping of lymphocytic populations with the help of monoclonal antibodies conjugated with various dyes such as fluorescein isothiocyanate (FITC) and phycoerythrin (PE), as well as studies of phagocytosis. The immunophenotyping method allows extremely precise diagnosis of lymphocytic populations, and with the help of monoclonal antibodies identifies them according to the expression of surface receptors, aslogized in the CD system (cluster of designation). Based on these studies, the applicant has developed a scientific project on the topic: "Correlations between immunophenotype of the main lymphocyte populations and DNA status in the course of the neoplastic process" and has won funding from the Young Scientist Fund to the National Research Fund.

In conclusion, on the basis of the content of the scientific contributions and achievements of Dr. Atanas Radinov Radinov, I believe that the candidate fully meets the necessary criteria for habilitation. I strongly recommend to the esteemed jury to award the scientific title "Associate Professor" to Dr. Atanas Radinov Radinov in the field of higher education 7. "Health and Sport" in professional field 7.1 "Medicine", specialty "Social Medicine and Health Management", for the needs of the Department "Analysis of Health Policies and Accreditation Procedures" at the Directorate "Promotion of Health and Prevention of Diseases" – NCPHA.

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