## **REVIEW**

on a competition for filling the academic position *Professor* in the speciality *Paediatrics* for the needs of the Department of Paediatrics at the Faculty of Medicine at the Medical University "*Prof. Dr. Paraskev Stoyanov*" - Varna

Subject: The announced competition for filling the academic position "professor" in the field of higher education 7. Health and Sports, professional field 7.1 Medicine and scientific specialty Paediatrics for the needs of the Faculty of Medicine, Department of Paediatrics, at the Medical University – Varna and the Paediatric Haematology and Oncology Clinic at the University Multifunctional Hospital for Active Treatment "Sveta Marina" Varna, published in the State Gazette, issue 62 dated 06th of August 2019.

Reviewer: Prof. Iskra Ruseva Hristozova, MD, PhD Member of the Scientific Selection Committee by the Rector's order № P – 109-315/07.10.2019 of the MU - Varna, appointed as a reviewer

Only one candidate, Assoc. Prof. Dr. Valeria Ignatova Kaleva, has admitted to the competition, a Doctor, Head of the Paediatric Haematology and Oncology Clinic at the University Multifunctional Hospital for Active Treatment "Sv. Marina" and Head of the Department of Paediatrics at Medical University - Varna.

## Biographical data

Assoc. Prof. Dr. Valeria Kaleva was born on 17.02.1955 in Staro selo, District of Silistra. She graduated from the Mathematical High School in Ruse. In the same year she was admitted to the Higher Medical Institute - Varna, specialty medicine. She graduated in 1979 with excellence grades. She began her career as an intern at the Paediatrics (Children's) Ward – town of Omurtag, and after that she continued as a clinical intern paediatrician at the University Multifunctional Hospital for Active Treatment "Sv. Marina" - Varna. After her acquiring a specialty in childhood diseases in 1984, she became Head of the Paediatrics Ward – town of Omurtag. In 1987 she won an assistant competition at the Department of Paediatrics, Higher Medical Institute – Varna at the Paediatric Haematology and Oncology Clinic (PHOC), where she has been working currently. Consistently she passed through the academic positions of senior assistant (1989) and chief assistant (1992), and in 2007 she was habilitated (Diploma No. 24185/19.04.2007). In 2005 she defended her doctoral thesis with a subject Febrile neutropenic and infectious complications for children with oncology diseases, and obtained her educational and scientific degree Doctor of Paediatrics and she has obtained her educational and scientific degree of Paediatrics with Diploma No.29557/26.02.2005.

## Professional and academic development

Assoc. Prof. Kaleva has acquired three medical specialties: *Paediatric Diseases* (Diploma 27386/15.10.1984), *Clinical Haematology* (Diploma 40061/16.07.1992) and *Paediatric Clinical Haematology and Oncology* (Diploma 1641/10.10.2007).

Her specialties are mainly related to malignant blood diseases in children, anaemia and coagulation disorders. In the period 1990-1992 she passed through several courses at the Paediatric Haematology and Oncology Clinic (PHOC) and at the National Institute of Haematology (NIKH) in Sofia. She held several specializations in prestigious European centers and courses abroad in the field of rare blood diseases in the period 2006-2016 - Cyprus, Greece, Germany, Sweden, Belgium, Portugal, etc. She has further certified training in palliative medicine, abdominal ultrasound, joint ultrasound in patients with haemophilia, transplantation of HSC and others. She is a holder of diploma for *Healthcare Management*.

In 2005, Assoc. Prof. Kaleva won a competition for the Head of the Paediatric Haematology and Oncology Clinic at the University Multifunctional Hospital for Active Treatment "Sv. Marina", where she has been occupying this position currently. In 2013 the first expert center for rare diseases in Bulgaria - Expert Center for Coagulopathy and Rare Anaemia was opened at this clinic, and in 2017 the Center for Transplantation of HSC in Children was opened at the clinic.

In 2005, Assoc. Prof. Kaleva was elected as a member of the Board of Directors at the University Hospital for Active Treatment "Sv. Marina" - Varna, and for the period 2012-2015 she was a member of the Advisory Board of the hospital. She is the permanent chairwoman of the Hospital Committee for Blood and Blood Products Transfusion, the Children's Oncology Committee and she is a member of the committees: Medicinal, Ethical, Hospital Oncology Committee. She is a coordinator of many hospital innovative projects.

From 2012 until now Assoc. Prof. Kaleva is the Head of the Department of Paediatrics at the Medical University - Varna, a member of the Scientific Council for Therapeutic Sciences, the Program Councils of the Faculty of *Medicine* and *Public Health* and others. During the period 2006-2015 she was a member of the Faculty and Academic Council at the Medical University - Varna.

### Research activity

#### Scientometric indicators

Assoc. Prof. Valeria Kaleva participated in the competition with a total of 282 scientific works and publications, as 189 of them were realized after she had received the academic Associate Professor's title. In addition, a reference was presented by her for 82 participations with reports and posters in scientific forums in Bulgaria after she had received the academic Associate Professor's title, which had not been proposed for review, posters or reports. The distribution of the works before and after the acquisition of the Associate Professor has been presented in the following table.

Scientific works - total (before and after the academic Associated Professor title had acquired)	Number
Dissertations	1
Chapters in a monograph	4
Book chapters	1
Chapters in methodical instructions and guides	10
Full-text publications in Bulgarian magazines/journals	88
Full-text publications in international magazines/journals - 4 with IF	9
Summaries published in Bulgarian magazines/journals	19
Summaries published in international magazines/journals – all 9 with IF	9
Summaries published in Bulgarian corpuses	100
Summaries published in international corpuses	41
Total number	282

The 189 scientific publications submitted for review are distributed as follows: 58 full-text publications in journals/magazines, of which 50 in Bulgarian and 8 in international, as 4 of the latters are with IF; 21 published summaries in journals, 15 of them in Bulgarian and 6 in international ones, all 6 with IF; 96 published summaries, 63 of them in Bulgarian and 33 in international ones; 3 publications in the form of chapters of monographs, one in a textbook and 10 publications in a collective authorship in the form of methodical instructions and manuals. The scientific papers submitted for review after the acquisition of the Associate Professor are presented in the following table.

Scientific works - after academic Associated Professor title had acquired	Number
Chapters in a monograph	3
Book chapters	1
Chapters in methodical instructions and guides	10
Full-text publications in Bulgarian magazines/journals	50
Full-text publications in international magazines/journals - 4 with IF	8
Summaries published in Bulgarian magazines/journals	15
Summaries published in international magazines/journals – all 9 with IF	6
Summaries published in Bulgarian corpuses	63
Summaries published in international corpuses	33
Total number	189

In the submitted documentation for participation in the competition, the scientific works and papers are divided in two parts. The first includes the publications through which Assoc. Prof. Kaleva covers the minimum requirements for occupation of the academic position *professor*, according to Act for the Development of the Academic Staff in the Republic of Bulgaria dated 2018, issue 28, and the second one included all the rest 161.

In 53 publications (28%) she is the sole or first author: the sole author in 32 scientific papers (19%), the first author in 21 publications (12%). In collective works she participated as the second author in 43 (22%), the third one in 29 (15%) and the further author in 64 (32%).

Assoc. Prof. V. Kaleva's impact factor is 64.14 (14,622 out of 4 journals with full-text publications and 49,518 out of 9 journals with published summaries), which has been calculated by a systematic source of information *Web of Science*. The number of quotes is 65, of which 58 are quotes in scientific journals, referred and indexed in world-famous scientific information

databases, one quote is in a monograph and 6 are quotes in non-refereed scientific non-reviewed journals. The quotes was prepared in the Library of MU - Varna grounded on the information from international scientific databases *Web of Science, Scopus Google Scholar u eLibrary.ru*.

#### Thematic areas and contributions

Assoc. Prof. Kaleva's scientific contributions have classified in 6 directions: (1) rare haematological diseases, (2) other haematological disorders and diseases in childhood, (3) malignant diseases in childhood, (4) febrile neutropenia and infectious complications in oncologically sick children, (4) other paediatric problems and diseases, and (5) evidence-based haematological guidelines/standards

1. As an expert in the field of thalassemia and haemophilia, Assoc. Prof. Dr. Kaleva realizes significant scientific production dedicated to these two rare diseases. In her theoretical publications for the first time in Bulgaria have been defined the principles and algorithms for the establishment and functioning of a certified expert center for thalassemia and haemophilia, corresponding to European and world standards.

The first summarized national assessment of the clinical status of Bulgarian patients with thalassemia major (as of December 2014) is being conducted and future directions for their complex care are formulated. She has participated in a series of clinical studies evaluating for the first time the therapeutic efficacy of mono- or combination with iron chelation therapy in Bulgarian patients with thalassemia major. In collaboration with international research teams the detection was introduced for the first time, quantification and prediction of myocardial iron load by cardiovascular MRI (the value of T2\*). She is a mentor in a series of original echocardiographic evaluation studies (E /e') of parameters for systolic and diastolic dysfunction in thalassemia, correlations between laboratory and echocardiographic indexes (NT-proBNP and LAVi), the epidemiological profile of rhythmic disturbances and pulmonary hypertension. She is also co-author of clinical studies analyzing endocrine disorders, reproductive health, tube dysfunction, oral, hepatic and gastrointestinal disorders in patients with thalassemia major.

- 2. As a national expert on haemophilia, Assoc. Prof. Kaleva participated in the first global epidemiological study on structure, clinical status and therapeutic behaviour in children with congenital coagulopathies in Bulgaria and she is co-author to the comparative national studies on patients with haemophilia analyzing therapeutically efficiency and economic expedience on the categories of prophylactic regimens with coagulation factors, including the new product *BAY 81-8973*. As a contributing to the national hematology, her reports demonstrate the strategy for inducing immune tolerance in inhibitory haemophilia and recommend the most modern therapeutic behaviour protocols.
- **3.** In the field of malignant diseases, Assoc. Prof. Kaleva is the author of a very useful guide to the practice of malignant pleural effusions associated with malignant lymphomas, acute and chronic leukemias, multiple myeloma, *Castleman's* disease, radiation therapy and more. She participates in national studies summarizing the efficacy of different therapeutic models in acute lymphoblastic leukemia, acute myeloblastic leukemia, and chronic childhood myeloblastic leukemia. She is the co-author of publications describing clinical casuistics a child with blast

plasmacytoid dendritic cell neoplasia and acute lymphoblastic leukemia with the simultaneous appearance of transcripts for the first time in our country.

In the field of childhood solid tumors, Assoc. Prof. Kaleva participates as a co-author of summarizing national studies on the prognostic factors and therapeutic parameters of the most common solid tumors in childhood. She is the author of sections in the National Evidence-Based Guide to Neuroblastoma Behaviour.

- **4.** Assoc. Prof. Kaleva is a leading author of a series of reviews and original clinical studies analyzing for the first time in Bulgaria the epidemiological model of febrile neutropenia in children with cancer and related infectious complications categories, frequency, structure and microbiological spectrum. She is co-author of studies introducing evaluation criteria for oral and dental status and determining probiotic prophylaxis of oral mucositis.
- 5. Assoc. Prof. Kaleva has a significant contribution to the national onco-haematology and defines the problems of adherence to drug treatment and methods for its evaluation, discusses approaches to its improvement, through patient education, optimization of treatment regimens and improvement of communication between physicians and patients.
- **6.** Assoc. Prof. Kaleva is co-author of the first Bulgarian publication presenting the GRADE approach as the most contemporary and creative method for developing evidence-based clinical guidelines.

In the period 2010-2018 she is the author, updating annually the section on the behaviour of febrile neutropenia in the Bulgarian *Standard for systemic therapy of solid tumors in adults* and co-author of the original editions and updates of the haematological methodological guidelines and therapeutic standards.

# Participation in projects

- Scientific project at Science Fund, Medical University Varna (2019-2021)
- $\bullet$  Joint international projects with other educational institutions and research groups -6 pcs for the period 2013-2019.

# **Educational and Lecture activity**

Assoc. Prof. Kaleva is a lecturer with over 35 years of academic experience. She teaches at the Medical University - Varna the specialty of *Paediatrics* in Bulgarian language to students in the specialty *medicine* at the Faculty of Medicine, the specialties *nurse* and *midwife* at the Faculty of Public Health and the specialties *radiology laboratory assistant and public health inspector* at the Medical College - Varna. The teaching of the students in the field of *nurse* and *midwife*, Assoc. Prof. Dr. Kaleva conducts an interactive remote, allowing for the simultaneous teaching of the students from the university bases in Varna, as well as in the branches of Sliven, Shumen and Veliko Tarnovo.

The average and annual academic burdened in the last 3 years is 188 hours with a standard of 126 hours, as her number of teaching hours includes mostly teaching lessons.

As a department head, two updates to the paediatric syllabus in the specialties she teaches have been made.

She also provides training in individual courses for postgraduate qualifications in paediatric onco-haematology and chemotransfusion, and she has a personal merit in creating and coordinating two new courses at the university - *Emergency Conditions in Pediatrics* and *HSC Transplantation*.

Thanks to her active participation, a theoretical and practical training *Rare Diseases in Paediatrics* has been introduced. She participates in the development of a pilot project for the acquisition of a qualification degree in *Health Assistant* and *Caregiver* in the specialty of *Health Care* at the Faculty of Public Health, MU-Varna.

Assoc. Prof. Kaleva is the supervisor of three post-graduate students of paediatric and four post-graduate students of paediatric clinical haematology and oncology, three of whom work in the field of paediatric healthcare.

Assoc. Prof. V. Kaleva is a member of committees for the acquisition of a clinical specialty in the Paediatric Haematology and Oncology and Clinical haematology. She is the supervisor of one graduating student and five PhD students, two of whom have defended dissertations.

She is a reviewer of thesis and doctoral dissertations in the field of medicine, scientific works and papers of candidates for the *chief assistant*, associate professor and professor acquisition. She has reviewed monographs and scientific projects.

She is also a member of the editorial boards of scientific journals/magazines - Clinical Haematology, Rare Diseases and Paediatrics.

Since 2011 she is a member of the Administrative Board of the Bulgarian Medical Association of Haematology and the Administrative Board of the Bulgarian Paediatric Association (BPA), she is a member of the Regional staff – Varna of BPA, a member of Bulgarian Medical Association on paediatric oncology, Bulgarian Oncology Association, the European Association for Haematology (EHA), the European Association of Paediatric Oncology (SIOPE) and the International Network of Clinicians for Endocrinopathies in Thalassemia and Adolescence Medicine (ICET).

## Public and expert activities

Assoc. Prof. Kaleva is a member of the Committee on Rare Diseases (since 2013), of the Expert Council on the medical specialty *paediatric haematology and oncology*, and of the Expert Council on the medical specialty *paediatrics* at the Ministry of Health (since 2019). Since 2016 she has been a member of the National Council on Haemophilia at the Advisory Council *Partnership for Health* at the Council of Ministers, and since 2009 she is a permanent chairwoman of the National Working Group on Thalassemia and Hemophilia at BMAH. Since 2011 she is an external expert of the NHIF for rare anaemia and coagulopathies, in the period 2013-2018 she is an expert at the CFTC at the Ministry of Health in 2019 and since 2019 - a member of the Commission for the treatment of children in Bulgaria and abroad at the NHIF.

By Assoc. Prof. Kaleva's suggestion in 2007 it was established a Thalassemia Working Group at the BMAH. Under her leadership and household, annual national scientific conferences for doctors, medical professionals and patients are held, as well as training seminars.

In 2011, the Working Group hosted the 4<sup>th</sup> European Symposium on Rare Anaemias, where Assoc. Prof. Kaleva is a chairwoman of the Organizational Committee. The monograph Guide for Clinical Behaviour at Beta Thalassemia was published under her editorship. At the initiative of the group and with the participation of other professional organizations, a Guide for the treatment of chronic hepatitis in patients with thalassemia, a Guide for cardiac complications in patients with thalassemia, a National program for adherence to iron-chelation therapy and a National registry of patients with thalassemia in Bulgaria (2010-2012) were created.

In 2009, following the model of the Thalassemia Working Group, a Working Group on Haemophilia for Children was established, with a chairwoman Assoc. Prof. Dr. Kaleva, which was later transformed into a Working Group on Haemophilia for Adults and Children. Annual national scientific education events have been held for doctors, medical professionals and patients, some of them in an international format.

Assoc. Prof. Kaleva is the founder of the first in Bulgaria Expert Center for Rare Diseases, which is internationally certified. In the beginning of 2014, the Center for Haemophilia at the University Multifunctional Hospital for Active Treatment *St. Marina* - Varna and the Center for Haemophilia at the University Hospital in Bonn, Germany started a twinning program with a winning subsidy from the World Federation of Haemophilia (WFH). Two years later, she was honored with the highest WFH award - *Twins of the Year 2015*.

In the field of paediatric onco-haematology, Assoc. Prof. Kaleva is directly involved in the organization of a number of scientific forums of national and regional significance, including hosting international workshops and scientific forums.

Assoc. Prof. Dr. Kaleva is a permanent member of the teams dedicated to the creation and updating of medical standards and therapeutic algorithms in paediatrics, children oncohematology, clinical haematology and medical oncology. The latest update of the Guide for Diagnosis and Treatment of Haematological Diseases is the author of almost the entire section on benign blood disorders and the guidance supplement entitled *Rare Coagulation Disorders*.

# Participation in other projects related to professional institutions/networks or public organizations

5 projects in total, 2007-2018

# Membership in public organizations

• 3 organizations in total

Assoc. Prof. Kaleva was honored annually with the Newspaper 24 hours- the Doctors We Trust Award, and in 2017 she was selected for a member of the Bulgarian Medical League after conducted inquiry by Darik Radio Who are the best doctors in Bulgaria.

In 2011 she received award for the Contribution to the Development of Medicine and Health Care of Open Society - Varna, in 2017 – with the award the Contribution to the Development and Implementation of Haematopoietic stem cell transplantation by the Mayor of

Varna and in 2019 - an honorary plaque for contribution in the field of rare diseases in Bulgaria by the Information Center for Rare Diseases and Orphan Drugs (ICRDOD).

#### Conclusion

Grounded on the significant scientific contribution in the field of Bulgarian paediatric haematology, oncology, rare haematological diseases and paediatrics, lecturer erudition and public respect of Assoc. Prof. Dr. Valeria Ignatova Kaleva, MD, Head of the Paediatric Haematology and Oncology Clinic at the University Multifunctional Hospital for Active Treatment "Sveta Marina" Varna, I do believe that she has all the necessary qualities and fully meets the criteria for awarding the academic position "professor" in the field of paediatrics.

I give my positive opinion. Therefore I strongly recommend that the Honorable Scientific Selection Committee to vote for awarding the academic position "*Professor*" in Paediatrics for the needs of the Department of Paediatrics at the Medical University - Varna to Assoc. Prof. Dr. Valeria Ignatova Kaleva, MD.

Date: 20.10.2019

Reviewer:

Professor Dr. Iskra Ruseva Hristozova, MD

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