To the Head of the Scientific Jury, Assigned in accordance with Order № P-109-315/07.08.2020 Of the Rector of Medical University-Varna

REVIEW

By: **Prof. Dr Ani Belcheva-Krivorova**, DDS,PhD,MSc, Professor in the Department of Paediatric Dentistry, FDM, Medical University-Plovdiv, member of the Scientific Jury

About: the procedure for awarding the "Associate Professor" Degree in the University Education Area 7. "Healthcare and Sport" in the professional direction 7.2. "Dental Medicine" and scientific specialty "Pediatric Dentistry" for the needs of the Department of Pediatric Dentistry, FDM, MU – Varna, published in the State Gazette 53/12.06.2020, with 2 candidates – Ass.Prof.Milena Todorova Georgieva-Dimitrova, PhD and Ass.Prof. Sirma Todorova Angelova, PhD.

The presented set of materials for application are in accordance with the Guidelines for application of the Act for Development of the Academic Staff in the Republic of Bulgaria and the procedural codex of Medical University-Varna: Procedure for awarding the Academic Degree "Associate Professor".

The presented materials are as follows: autobiography of the candidates, copies of diplomas for the Educational Degree "Master" and the Educational and Scientific Degree "Doctor", copies of the Specialty Diploma for the Specialty of Paediatric Dentistry, reference on the candidates' curriculum and certificates for educational experience.

The candidates admitted to the procedures are listed in alphabetical order:

About Dr Milena Todorova Georgieva-Dimitrova:

I. BIOGRAPHIC DATA

- Dr Milena Todorova Georgieva-Dimitrova was born on 03.01.1989 in the city of Veliko Tarnovo
- Graduated from the "Vasil Drumev" High School for Science and Mathematics in the year 2008
- Graduated from the FDM-Varna in the year 2014 with Excellent Performance
- Worked as an Honoured Assistant Professor in the Department of Paediatric Dentistry, FDM-Varna since 2015
- Works as a full-time Assistant Professor in the Department of Paediatric Dentistry, FDM-Varna since 2016. Elected to work as an administrative assistant professor. Since the year 2019 – has been promoted to chief assistant professor.

- In the year 2018 completed her Educational and Scientific Degree "Doctor" with a topic for her PhD "Indirect esthetic restorations, constructed via the CAD-CAM technology, in permanent teeth in children".
- In the year 2019 completed her Paediatric Dentistry Specialty
- In the year 2020 started her Operative Treatment and Endodontics Specialty

Total experience in the field: 5 years 11 months 11 days

Dr Georgieva has presented a reference for registered scientific profiles in: Google Scholar, Orcid, ResearchGate, SciProfiles.

II. SCIENTIFIC AND RESEARCH DATA

In the present procedure Dr Georgieva has entered a total list of scientific works, out of which 24 publications in national and international collections and journals. The total participation list of the candidate in scientific forums includes national and international.

Publications:

- 1 PhD Dissertation Work
- 1 monograph "Main Problems in Pediatric Dentistry. Restoration of severely destroyed teeth." MU-Varna, 2020.
- 24 publications in scientific journals.
- 1. Real publications in scientific journals: 24 (1 under revision) 22 in Bulgarian journals:
- 4 in "Journal of IMAB"
- 11 in "Scripta Scientificae Medicinae Dentalis"
- 1 іп "Варненски медицински форум";
- 5 in "Medinform"
- 1 in "Union of the Scientists in Bulgaria";
 - 2 in international journals:
- 1 in Romanian Journal of Oral Rehabilitation
- 1 in International Journal of Medical Dentistry (under publication).

First author: in 4 (17%) of all publications in journals

Single author: in 8 (33%)

Second author: in 7 (29%)

Author after second: in 7 (29%)

6 of the aforementioned works have been published in journals indexed in the Web of Science database.

2. Participation in scientific congresses and forums: 3

All participations are in national scientific forums in Bulgaria, 2 are with international participation.

Dr Georgieva presented a total of 22 certificates for participation in seminars, meetings and others.

3. Citations – a total of 23, of which – 4 in referred and indexed in an international database journals and 19 in non-referred journals.

III. EDUCATIONAL ACTIVITY

- 1. Teaching activity:
- Exercises and lectures, Student supervision in the Bulgarian and English Paediatric Dentistry courses;
- Total teaching load: 488 hours (2017/2018), 310 (2018/2019), 419 (2019/2020).
- 2. Specialties:

Paediatric Dentistry – diploma № 4162/2019.,

reg. № 023086;

- 3. Foreign languages English and Russian
- 4. Contributions

I accept the self-evaluation of the contributions by Dr Georgieva, which are as follows: the main topics in Dr Georgieva's publications are in the area of Pediatric Dentistry – behavioral characteristics in different age groups, caries prevalence in children.

- A thorough clinical evaluation of relative percentages of carious lesions with a diagnostic threshold D1 has been completed in adolescents from Varna
- The high prevalence of dental caries in children age 12-18 has been confirmed, along with the intensity of caries progression in teeth groups and surfaces.
- For the first time in Bulgaria a thorough risk profile and evaluation of the caries risk in children age 5-7 has been completed in relation to risk and protective factors as marked in a specially designed instrument for caries risk assessment. A thorough percentile distribution has been described for the children of the age group in association with carbohydrate intake, oral hygiene, fluoride prevention, caries activity of the child and the parents, dental visits, social-economic status of the family.
- For the first time in Bulgaria a total comparative grading of the behavior of children age 5-7 in the dental office by the dentist has been completed, based on the Simplified Frankl Scale and on a questionnaire for the parent, which had its effect on the chosen treatment methods, restorative materials and the result of the treatment.
- For the first time in Bulgaria a connection was described between the behavior of the child in the dental office and premature tooth loss.
- For the first time in Bulgaria a thorough investigation of the malocclusion prevalence in children in the North-Eastern part of the country has been completed, as well as comparative evaluation of children with average and severe malocclusion in children from urban and rural areas.

About AssistProf Sirma Todorova Angelova:

I. BIOGRAPHIC DATA

- Dr Sirma Todorova Angelova was born on 14.12.1980. in Dobrich.
- Graduated High School in 1999 in Dobrich with extensive courses in English and German
- Graduated the Economic University in Varna in 2005, Masters in International Finances
- Graduated FDM, MU-Varna in 2011.
- Started work as an Assistant Professor in the Department of Pediatric Dentistry in 2012
- Completed her Pediatric Dentistry Specialty in 2015
- In the year 2017 completed her Educational and Scientific Degree "Doctor" with a topic for her PhD "Evaluation and prevention of the risk of dental caries in children with certain kidney conditions".

Total experience in the field: 8 years, 9 months, 17 days.

Dr Angelova has presented a reference for registered scientific profiles in: Google Scholar, Orcid, ResearchGate.

II. SCIENTIFIC AND RESEARCH DATA

In the present procedure Dr Sirma Angelova has entered a total list of 33 scientific works, out of which 12 are abstracts and 21 are publications in national and international collections and journals. The total participation list of the candidate in scientific forums includes 32 national and international ones.

- 1. Publications:
 - 1 PhD Dissertation Work
- 1 monography
- 12 Abstracts
- 21 publications

6 of the aforementioned works have been published in journals indexed in the Web of Science and Scopus database.

- 1 publication is in journal with IF =3,267
 - 2. Participation in scientific congresses and forums: 32
 - 3. Participation in scientific projects –
 Dr Angelova presents proof for participation and positive completion of the following project:
- Major scientific project approved for funding in the financing competition for projects by the "Science" Fund in MU-Varna: Project 18036 "Identification of biomarkers in

saliva for the evaluation of the risk profile for gingival health in children". Scientific directions and groups in the Scientific research institute in MU-Varna.

- Direction: Communal health and management of diseases. Scientific group: Molecular biomarkers for personalized medicine.
- 4. Citations a total of 25, of which 3 in referred and indexed in an international database journals and 22 in non-referred journals.

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III. EDUCATIONAL ACTIVITY

- 1. Teaching activity:
- Lectures -Student supervision in the Bulgarian and English Pediatric Dentistry courses;
- 6th year students education
- Total teaching load: 502 hours (2017/2018), 526 (2018/2019), 438 (2019/2020).
- 2. Specialties:

Pediatric Dentistry – diploma № 3629/22. 02. 2016г., per. № 019980;

- 3. Foreign languages English and German
- 4. Contributions:

I accept the self-evaluation of the contributions by Dr Angelova, which are as follows: the main topics in Dr Angelova's publications are in the area of Pediatric Dentistry – caries development, oral pathology, treatment of children with nephrotic syndrome.

- A complex evaluation was completed on the risk profile for dental caries in children (age 0 to 18) suffering from diseases of the urinary system – pyelonephritis and nephrotic syndrome.
- A model was constructed for evaluation of the risk profile for dental caries in children suffering from pyelonephritis and nephrotic syndrome.
- A combination of salivary markers has been used: pH, nitrites, blood, glucose and leucocytes, to definitively prove the caries risk among children with pyelonephritis and nephrotic syndrome.
- The level of sIgA in non-stimulated salivary flow was measured as an indicator for the caries risk among children with pyelonephritis and nephrotic syndrome.
- Confirmed the role of clinical markers evaluating the condition of hard dental tissues as predictive in the caries risk assessment.

Based on the materials by the two candidates, I am hereby presenting the following comparative table:

Table 1. Distribution of the scientific work of the candidates and the minimal requirements for the academic position of Associate Professor in MU-Varna.

Indicators	Minimal requirements (points)	Dr Georgieva	Dr Angelova
PhD	50	50	50
Monograph	100	100	100
Handbooks	-	-	-
Publications in referred journals		168	132
Publications in non- referred journals	200	100	581
Citations in referred journals	50	<u>60</u>	<u>45</u>
Citations in monographs	30	<u>20</u>	-
Citations in non- referred journals		<u>85</u>	110
Real publications		24-6 in ref. journals	21 – 3 in ref. journals
Experience in years		<u>6</u>	9
Average educational load 2017-2020	360 hours	405 hours	489 hours

CONCLUSION

The submitted scientific materials by Dr Georgieva and Dr Angelova exceed the minimal scientometric requirements of MU-Varna for the position of Associate Professor. Their scientific production is almost equal.

This necessitates a more precise analysis and evaluation of additional criteria in order to emphasize certain characteristics.

Dr Georgieva shows a very precise arrangement of her documentation. She has been in the Department for a much shorter period of time which means she has had less time for her scientific research. To me, her greatest accomplishment is her monograph – on one hand it

shows excellent clinical skills in what are some of the most difficult cases in the dental practice with children, and on the other hand it is a remarkable handbook for dental professionals. I highly appreciate this clinical experience and its sharing. The completion of a monograph in a topic largely different from her completed PhD shows a wide scale of her scientific work and depth in her teaching. A good clinical practice is a basis for quality teaching especially in a clinical discipline such as Paediatric Dentistry.

Dr Angelova has presented no data about her work with patients or clinical experience. In her documents, we can see an in-depth scientific work but mostly on the topic of her PhD. An expression of her serious scientific work is her work on a project with a follow-up publication in a referred journal with high IF. I mark this as an advantage for Dr Angelova.

On the other hand, Dr Georgieva has a higher number of publications in referred and indexed journals which comes to show that her publications have a higher scientific value.

The citations of the two candidates are almost the same number, with a slight advantage to Dr Georgieva. Dr Georgieva also has a higher number of citations in referred journals. Both candidates participate in the education of English-speaking students and have an adequate teaching load.

To my knowledge none of the candidates has any special positive opinions, no organized additional courses or lectures in the country or abroad, no participation in international organizations. I find the claim of one of the candidates of being an editor in a serious editing team, proven by an online correspondence, to be inconsequential. Such emails are received daily for editing of separate publications and as an invite for publishing in non-referred journals, which I don't find as a serious enough asset.

Based on the complete critical review of the entire scientific and educational work of the candidates, participating in this procedure for the awarding of the academic and educational degree of Associate Professor — one position, in the scientific specialty Paediatric Dentistry for the needs of the Department of Paediatric Dentistry, FDM, MU-Varna, I propose the academic degree Associate Professor be awarded to Dr Milena Todorova Georgieva-Dimitrova, dm. chief assistant professor in the Department of Paediatric Dentistry, FDM, MU-Varna, due to her superiority in some of the main criteria and presence of additional personal advantages.

I confirm that all requirements of the Guidelines for application of the Act for Development of the Academic Staff in the Republic of Bulgaria and the procedural codex of Medical University-Varna: Procedure for awarding Academic Degrees have been followed to the letter.

Prof. Dr Ani Beltcheva-Krivorova, DDS, PhD, MSc

12.10.2020 Ploydiy