REVIEW

by Prof. Dr. Atanas Dimitrov Shterev

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Subject: Competition for the occupation of the academic position of associate professor in the professional field 7.1. Medicine, 7. Health care and sports — one position for the needs of the Faculty of Medicine, Department of Obstetrics and Gynecology Magazine and the Gynecology ward at the "Prof. Dr. D. Stamatov" SPECIALIZED HOSPITAL IN OBSTETRICS, GYNECOLOGY AND NEONATOLOGY FOR ACTIVE TREATMENT (SHOGNAT) - Varna, EOOD.

I submit this review in accordance with the Academic Staff Development in the Republic of Bulgaria Act (ASDRBA), the Rules for its implementation, the criteria for occupying an academic position of **Associated Professor** at the Faculty of Medicine of the "Prof. Dr. Paraskev Ivanov Stoyanov" University of Medicine, Varna, as a member of the Scientific Jury of this competition, according to the order of Rector **No. P-109-316 of 7.10.2019**, For the preparation of the review on the only one submitted application for the academic position of **Assoc. Prof. Dr. Stefan Vasilev Kisyov, PhD**.

I. SUMMARIZED CV DATA OF THE APPLICANT, PROFESSIONAL EXPERIENCE AND POSITIONS HELD

Dr. Stefan Vasilev Kisyov, PhD was born in 1978 in Varna. He graduated high school in 1996 in Varna. In 2002 he graduated in medicine from the Medical University, Varna. Since 2011 he has been appointed as a full-time assistant at the Department of Obstetrics and Gynecology Magazine at the Medical University, Varna. Since 2005, he has been appointed to the position of a doctor at the "Prof. Dr. D. Stamatov" SHOGNAT-Varna, EOOD. From 2008 until now he has been working as a physician in Obstetrics and Gynecology Magazine at the Medical Center for Assisted Reproduction (GMCAR) in Varna. In 2018 after winning a competition, he has been holding the position of Chief Assistant in the Obstetrics and Gynecology Magazine Department at the Medical University, Varna.

In 2014, Dr. Kisyov was enrolled to a free doctorate at the of Obstetrics and Gynecology Magazine Department at the Medical University-Varna and in 2017 he successfully defended his dissertation on "The Place of Reproductive Surgery in the Complex Treatment of Infertility" with scientific supervisor Prof. Dr. Emil Georgiev Kovachev, PhD. He acquired a specialty in Obstetrics and Gynecology Magazine in 2014.

II. LIST OF PUBLICATIONS OF DR. STEFAN KYSOV

- 1. K. Tsvetkov, P. Koleva, U. Petkova, **St. Kisyov**, "Abnormal uterine bleeding in pre-menopausal women diagnosis, treatment, prophylaxis". Obstetrics and Gynecology Magazine, 45, 2006, suppl. 2, pp. 29-34
- 2. I. Kozovski, K. Alexandrov, E. Kovachev, **St. Kisyov**, V. Markova, "Strategy for Hormonal Ovarian Stimulation at IVF on material from the Center for Assisted Reproduction Varna", Obstetrics and Gynecology Magazine, issue no. 4, 2010, pp. 18-21
- 3. St. Ivanov, E. Kovachev, R. Minkov, B. Balev, P. Panchev, P. Madzharov, N. Mircheva, **St. Kisyov**, A. Tsonev, M. Veseli, S. Koko, "A rare case of pregnancy combined with a large ovarian tumor". Obstetrics and Gynecology Magazine, 2012, suppl. 1, vol. 51, pp. 29-32
- 4. E. Kovachev, I. Kozovski, V. Markova, K. Alexandrov, **St. Kisyov**, "Ectopic and Heterotopic Pregnancy, Reproductive Health Magazine, 2013, issue 20, pp. 15-20
- 5. I. Kozovski, E. Kovachev, K. Alexandrov, **St. Kisyov**, V. Marko, "Gestational surrogacy benefit, whim or need, Obstetrics and Gynecology Magazine, 2014, issue 3, vol. 53, pp. 47-50
- 6. E. Kovachev, I. Kozovski, S. Ivanov, Y. Kornovski, N. Mircheva, P. Koleva, A. Tsonev, E. Ismail, **St. Kisyov**, N. Kolev, "Case of bilateral tubal pregnancy after IVF-ET". Obstetrics and Gynecology Magazine, vol. 52, issue 4, 2013, pp. 33-37.
- 7. I. Kozovski, E. Kovachev, K. Tsvetkov, S. Ivanov, R. Minkov, Ts. Tsvetkov, **St. Kisyov**, "A healing algorithm for life-threatening bleeding during caesarean section or with a large rupture of the vagina and cervix. After natural birth", Obstetrics and Gynecology Magazine, vol. 53, suppl. 2, 2014 4-5
- 8. E. Kovachev, I. Kozovski, M. Angelova, Y. Kornovski, **St. Kisyov**, V. Ivanova, "The case of a unicorn uterus with an atypically located hyper stimulated ovary after IVF-ET", Reproductive Health Magazine, 2015, No. 22, 22-23 pages
- 9. **St. Kisyov**, E. Kovachev, K. Alexandrov, A. Alexandrov, "The Place of Reconstructive Laparoscopic Surgery in the Treatment of Female Infertility", Reproductive Health Magazine, issue 25, 2017, pp. 14-17
- 10. E. Kovachev, S. Anzhel, Y. Kornovski, **St. Kisyov**, J. Zhekov, "Asherman Syndrome clinical cases", Obstetrics and Gynecology Magazine, suppl. 2, vol. 56, ISSN 0324-0959, 2017, pp. 3-7
- 11. Emil Kovachev, Stephan Ivanov, Blagovest Belchev, Nikolay Kolev, **Stephan Kisyov**, Simona Anzhel, "Relation between Chlamydia trachomatis, the trophoblast and preterm delivery", Scripta Scientifica Medica, vol. 48, No. 1, 2016, pp. 16-20
- 12. S. Anzhel, E. Kovachev, **St. Kisyov**, A case of heterotopic pregnancy after frozen embryo transfer, Reproductive Health Magazine, issue 28, 2018, pp. 16-19;
- 13. A. Alexandrov, E. Kovachev, **St. Kisyov**, S. Anzhel, K. Tsvetkov, K. Alexandrov, "Transvaginal laparoscopy a modern method in the diagnosis of female infertility", Reproductive Health, issue 29/2019, pp. 3-7;

- 14. A Case of Secondary Abdominal Pregnancy after in Vitro Fertilization Pre-Embryo Transfer (IVF-ET) Mariya Angelova, Emil Georgiev Kovachev, Ivan Kozovski, Yavor Dimitrov Kornovski, **Stefan Vasilev Kisyov**, Vilislava Robert Ivanova, Macedonian Journal of Medical Sciences (OAMJMS), Vol 3, No 3 (2015)
- 15. A Case of Unicornuate Uterus with Atypical Located Hyper Stimulated Ovary after in Vitro Fertilization Pre-Embryo Transfer (IVF-ET) Mariya Angelova Angelova, Emil Georgiev Kovachev, **Stefan Vasilev Kisyov**, Vilislava Robert Ivanova, Macedonian Journal of Medical Sciences (OAMJMS), Vol 3, No 3 (2015)
- E. Kovachev, S. Anzhel, Y. Kornovski, St. Kisyov, K. Tsvetkov, "ART Problems and Solutions", Obstetrics and Gynecology Magazine, 56, 2017, suppl. 2, pp. 48-54
- 17. E. Kovachev, A. Tsvetkova, S. Anzhel, K. Alexandrov, **St. Kisyov**, "Complications of ART Ovarian Torsion and Bleeding after IVF Procedure", Obstetrics and Gynecology Magazine, 2017, vol. 56, issue 3, pp. 49-53
- 18. E. Kovachev, Y. Kornovski, **St. Kisyov**, K. Alexandrov, S. Anzhel, A. Alexandrov, "Office hysteroscopy for the diagnosis and treatment of female infertility" Obstetrics and Gynecology Magazine, 2018, vol. 57, suppl. 1, pp. 3-7
- 19. E. Kovachev, **St. Kisyov**, A. Tsvetkova, S. Staneva, S. Radeva, S. Tsvetkova, S. Anzhel, "Diagnosis of Preterm Birth Challenges for Obstetrician-Gynecologist", Obstetrics and Gynecology Magazine, 2018, vol. 57, suppl. 2, pp. 3-10
- 20. S. Anzhel, E. Kovachev, K. Tsvetkov, Z. Zhekov, S. Kisyov, A. Aleksandrov, "Cervical Ectopic Pregnancies after Spontaneous Conception: Case reports, Current Opinion", Gynecology and Obstetrics, ISSN 2637-4617, 2018, pp. 95-99
- 21. K. Aleksandrov, **S. Kisyov**, E. Kovachev, V. Markova, I. Kozovski, ""Flare up" and modified natural cycle IVF for patients with expected poor response", Gynecology and Obstetrics, vol. 2, 2011, pp. 11-13
- 22. Emil Kovachev, Vilislava Ivanova, **Stefan Kisyov**, "THE "VANISHING TWIN" SYNDROME A MYTH OR CLINICAL REALITY IN THE OBSTETRIC PRACTICE?", JOURNAL OF IMAB, vol. 21, issue 3, 2015, pp. 853-855

LIST OF PUBLICATIONS OF DR. STEFAN KISYOV NOT INCLUDED IN THE REFERENCE FOR COVERING THE MINIMUM CRITERIA

- 1. St. Ivanov, E. Kovachev, R. Minkov, B. Balev, P. Panchev, P. Madzharov, N. Mircheva, **St. Kisyov**, A. Tsonev, M. Veseli, S. Koko, "A rare case of pregnancy combined with a large ovarian tumor". Obstetrics and Gynecology Magazine, 2012, suppl. 1, vol. 51, pp. 29-32
- 2. A. Alexandrov, E. Kovachev, **St. Kisyov**, S. Anzhel, "TRANSVAGINAL LAPAROSCOPY AS A METHOD FOR THE TREATMENT OF ENDOMETRIOSIS CYSTS A CLINICAL CASE", Reproductive Health Magazine, 2019 under print.

- 3. S. Anzhel, E. Kovachev, **St. Kisyov,** "Induction of ovulation with Letrozole after endoscopy oophorectomy. A clinical case". Reproductive Health Magazine, 2019 under print.
- 4. **St. Kisyov**, E. Kovachev, K. Alexandrov, K. Tsvetkov, S. Anzhel, A. Alexandrov, "Office polypectomy in patients with infertility, Reproductive Health Magazine, 2019, under print
- 5. K. Tsvetkov, E. Kovachev, S. Kisyov. The chemo-testicular barrier structure, functions and its importance for maintaining spermatogenesis, "Reproductive Health Magazine", 2019 under print.
- 6. M. Tsvetkova, L. Angelova, **St. Kisyov**, "Sub-telomeric Chromosomal Rearrangements as a Cause of Habitual (Recurrent) Miscarriages, "Reproductive Health Magazine", 2019, under print

LIST OF PARTICIPATIONS OF DR. STEFAN KYSOV IN CONFERENCES AND SYMPOSIUMS

- 1. **St. Kisyov**, K. Alexandrov, E. Kovachev, Y. Kornovski, S. Stoilov. « Cases of interstitial pregnancy, operated laparoscopically ». National Conference on Minimally Invasive Gynecological Surgery with International Participation, November 7-9, 2013, Pleven.
- 2. E. Kovachev, **St. Kisyov**, K. Alexandrov, Y. Kornovski, S. Stoilov. "Two cases of heterotopic pregnancy and a case of bilateral tubal pregnancy after IVF-ET". National Conference on Minimally Invasive Gynecological Surgery with International Participation, 7-9 November 2013, Pleven
- 3. E. Kovachev, Ivanova, **St. Kisyov**. "The "Vanishing Twin" syndrome a myth or clinical reality in the obstetric practice?", 25-th Jubilee Annual Assembly of IMAB; Varna, Bulgaria; May 14-17, 2015
- 4. **St. Kisyov**, E. Kovachev, K. Alexandrov, B. Bechev, V. Ivanova, « Laparoscopic removal of a rudimentary uterine horn after hematometer in the puerperal period ». FIFTH NATIONAL CONFERENCE ON MINIMUM INVASIVE GYNECOLOGICAL SURGERY, Stara Zagora, 01.10 03.10. 2015
- 5. **St. Kisyov**, E. Kovachev, K. Alexandrov, B. Bechev, S. Ivanov, A. Alexandrov. "The place of reproductive laparoscopic surgery in the treatment of female infertility", 17th International Conference on Sterility and Reproductive Health, Borovets, 2016.
- 6. **S. Kisyov**, E. Kovachev, K. Alexandrov, I. Kozovski, V. Markova, S. Ivanov. "Endoscopic Reproductive Surgery First Step in the Treatment of Tubal Infertility", 6th NATIONAL CONFERENCE ON MINIMUM INVASIVE GYNECOLOGICAL SURGERY, Golden Sands, 2016
- 7. **St. Kisyov**, E. Kovachev, K. Alexandrov, A. Alexandrov, "The Importance of Office Hysteroscopy in the Diagnosis and Treatment of Infertility", 18th International Conference on Sterility and Reproductive Health, Borovets, 2017

8. **St. Kisyov**, E. Kovachev, K. Alexandrov, A. Alexandrov, S. Anzhel, "An interesting clinical case in patients undergoing ART", 19th National Conference on International Sterility and Reproductive Health, Borovets, 2018.

III. GENERAL PUBLICATION ACTIVITY

For the competition Dr. Stefan Kisyov, PhD presented:

- 1. Thesis on the topic: "The place of reproductive surgery in the complex treatment of infertility"
- 2. Monograph "Office hysteroscopy and its place in modern gynecology."
- 3. 21 full-text publications in our and foreign scientific journals, which cover the NACID criteria for taking the academic position of Associate Professor, as well as 5 publications beyond the mandatory minimum.

Publications in periodicals

- 1. Interesting casuistic cases of ovarian tumors and pregnancy have been examined and followed-up.
- 2. For the first time in Bulgaria, some rare forms of ectopic pregnancy after ART and subsequent laparoscopic treatment have been described.
- 3. Some problems and cases in gynecological endoscopy for the purposes of reproductive medicine have been considered.
- 4. The modern methods for the diagnosis of preterm birth (fetal fibronectin), induction of birth in children with intrauterine retardation, our and foreign experience in the treatment of preeclampsia have been monitored.
- 5. A treatment algorithm for life-threatening bleeding during Caesarean section or after natural birth have been considered.
- 6. For the first time in Bulgaria, some problems with assisted reproductive technologies have been considered, such as gestational surrogacy, and the quality of the ovum as a prognostic marker for the success of the IVF procedure.
- 7. For the first time in Bulgaria the place of reconstructive laparoscopic surgery in the treatment of tubal infertility have been considered
- 8. Post-ART complications such as ovarian torsion and post-puncture bleeding for IVF have been documented
- 9. Casuistic cases of unicorn uterus with atypically located ovary after stimulation have been published.
- 10. A case of secondary abdominal pregnancy after in vitro has been published
- 11. Current trends in the pathogenesis, diagnosis and treatment of genital chlamydiosis in infertile patients have been described

IV. TEACHING EXPERIENCE AT THE MEDICAL UNIVERSITY - VARNA - 7 YEARS AND 11 MONTHS

Professional experience in Obstetrics and Gynecology – 14 years **Information on academic curriculum by academic years:**

2014/2015 - 351 hours

2015/2016 - 363 hours

2016/2017 - 366 hours

2017/2018 - 401 hours

2018/2019 - 410 hours

V. PRACTICAL RESULTS AND SCIENTIFIC CONTRIBUTIONS OF THE APPLICANT IN ACCORDANCE WITH THE COMPETITION DOCUMENTS SUBMITTED

REFERENCE ON THE CONTRIBUTION OF DR. STEFAN KISYOV

A. Thesis for the award of the scientific degree of Doctor of Medicine on the topic "The place of reproductive surgery in the complex treatment of infertility", 2017. MU-Varna

A1. Scientific contributions of original nature

- 1. The first clinic in Bulgaria to have achieved over 50% success rate with IVF-ET.
- 2. Reproductive surgery is recognized as an integral part of modern infertility treatment.
- 3. Medical Center for Assisted Reproduction Varna (MCAR-VARNA) is the first clinic in Bulgaria to introduce the removal, and in the recent years, only the cutting-off of irreversibly damaged, obstructed fallopian tubes.
- 4. The skillful and consistent application of mini invasive surgery methods with subsequent IVF-ET increases the chance of pregnancy many times over.
- 5. A case of a hematometer after IVF-ET in a rudimentary horn operated laparoscopically has been described.
- 6. Two cases of interstitial ectopic pregnancy, operated laparoscopically, have been described.
- 7. Four cases of heterotopic pregnancy have been demonstrated, two of which resulted in the birth of a live, full-term fetus.

B. Scientific contributions of confirmatory nature

- 1. Factors determining the effectiveness of IVF-ET (age, number of IVF-ET trials, day of embryo transfer and number of embryos transferred) have been outlined.
- 2. The first baby in Bulgaria born after TESE-ICSI.

3. Four cases of laparoscopic diagnosis and treatment of casuistic types of ectopic pregnancy have been presented and published

C. Monograph "Office Heteroscopy and its Place in Modern Gynecology, 2019, Varna, ISBN 978-619-241-068-1, p. 121

Diagnosis or rejection of some pathological findings in the uterine cavity by office hysteroscopy is of great importance for the diagnosis of female infertility as well as for the ultimate success of assisted reproductive technology (ART). Our experience has shown that in addition to diagnostics, office hysteroscopy can also be used for treatment. Quality diagnostics through this instrumental method, prior to upcoming ART procedures, increase the chance of a subsequent clinical pregnancy.

With the refinement of endoscopic equipment, the Diagnostic Office HSC is replacing the conventional one and becomes a method of choice in the study of female infertility in successive unsuccessful ART procedures.

The main advantages of office hysteroscopy for the patients are:

- 1. Thorough diagnosis;
- 2. Quality of life is not impaired;
- 3. Anesthesia is not required and its side effects are avoided;
- 4. Exclusion and removal of other pathology giving atypical symptoms;
- 5. No need for hospital stay;
- 6. No influence on patients' working capacity;
- 7. Some of the pathological findings are eliminated in one go;
- 8. Almost all intrauterine pathology cases can be treated by office hysteroscopy.
 - Diagnosis of the uterine cavity;
 - Removal of endometrial polyps;
 - Removal of uterine obstructions;
 - Removal of intrauterine adhesions;
 - Removal of fibroids up to a certain diameter;
 - Diagnosis of pathological intrauterine bleeding.

Analyzing the pathology that can be treated by office hysteroscopy, it seems that all benign changes can be treated by this methodology.

The monograph contains many tables, graphics and a wealth of photo material (including author's own ones), filling a gap in our specialist literature on the subject.

VI. CREATION OF TRAINING PROGRAMS AND CURRICULUM LOAD

Dr. Stefan Kisyov conducts practical exercises in Obstetrics and Gynecology for students in the specialties "Medicine", "Midwives" and "Dental Medicine". His total curriculum load for the last 5 years is 1891 hours.

VII. PARTICIPATION IN TRAINING COURSES:

- Training course in Ultrasound diagnostics in obstetrics and gynecology Medical University - Varna
- 2. Training course in diagnostic and operative laparoscopy Medical University Varna
- Training course in diagnostic and operative hysteroscopy Medical University -Varna
- 4. Specialized training course in hysteroscopy and laparoscopy in Leuven, Belgium, 2019.
- 5. Specialized training course in laparoscopy (deep pelvic endometriosis) IRCAD Strasbourg, France, 2019.

VIII. DIAGNOSTIC AND MEDICAL ACTIVITY AND OPERATING ACTIVITY

The diagnostic and clinical interests of Dr. Stefan Kisyov are in the field of infertility, endoscopic gynecological surgery, and in the field of obstetrics.

IX. MEMBERSHIP IN NATIONAL AND INTERNATIONAL SCIENTIFIC MEDICAL ORGANIZATIONS

Dr. Kisyov is member of: the Bulgarian Medical Association, the Bulgarian Society of Obstetrics and Gynecology, the Bulgarian Association for Sterility and Reproductive Health, the Bulgarian Association of Minimally Invasive Gynecologic Surgery, the European Society of Gastrointestinal Endoscopy, the European Society of Human Reproduction and Embryology.

X. CERTIFICATES FOR ACQUIRED QUALIFICATIONS

- Diploma of recognized specialty in Obstetrics and Gynecology
- Diploma of acquired educational and scientific degree Doctor
- Certificates of courses attended and participation in congresses

XI. FOREIGN LANGUAGES - very good level of English.

XII. COMPREHESIVE ASSESSMENT OF THE SCIENTOMETRIC INDICATORS OF THE APPLICANT ACCORDING TO THE CRITERIA FOR TAKING ACADEMIC POSITIONS

For the competition Dr. Kisyov presented a dissertation work, a monograph work, as well as 26 publications, covering the minimum criteria under the ASDRBA for taking the academic position of Associate Professor.

XIII. CONCLUSION

On the basis of the mentioned significant achievements in scientific, educational, clinical-diagnostic and operative activity, as well as on the facts stated in the documents, I confidently accept that the applicant **meets** the criteria for being granted the academic position of "Associate Professor" and call on the Scientific jury to choose, **Mr. Stefan Vasilev Kisyov, PhD** as **Assistant Professor of Obstetrics and Gynecology**.

10.11.2019	Sincerely:	
		/Prof Dr. A. Shterev, PhD/