

LIST OF PUBLICATIONS OF ASSOC. PROF. RALITSA ZHIVKOVA

I. Selected Articles

1. S. Delimitreva, M. Markova, R. Zhivkova. Optimal metaphase plate preparation in mouse oocytes requires specific conditions for spindle disintegration. *Comptes rendus de l'Academie bulgare des Sciences* (1999), vol. 52, No. 7-8: 105-108.
2. S. Delimitreva, R. Zhivkova, P. Janakiev, I. Vatev. Pilot models of preimplantation genetic diagnosis by PCR and FISH in human gametes and cleaving embryos. *Comptes rendus de l'Academie bulgare des Sciences* (1999), vol. 52, No. 9-10: 107-110
3. Zhivkova R., S.M. Delimitreva, I.Ts. Vatev, D.I. Toncheva: Cytogenetic and FISH analysis of human gametes and preimplantation embryos. *BJMG* (1999), 2 (4): 37-40.
4. S. Delimitreva, R. Zhivkova, I. Vatev: Supernumerary human preembryos provide potential for preimplantation genetic diagnosis. *Folia Biologica -Praha* (2001), 47: 88-81.
5. Zhivkova R Ploidity and chromatin status of human oocytes after failed in vitro fertilization. *European Journal of Obstetrics, Gynecology and Reproductive Biology* (2003), 109: 185-189.
6. Markova, M.D. and Zhivkova R.S. Possible cytoskeletal structures of rainbow trout sperm revealed by electron microscopic observation after detergent extraction. *Anim. Reprod. Sci.*, (2003), 79: 127-32.
7. Delimitreva SM, Zhivkova RS, Vatev IT, Toncheva DI Chromosomal disorders, nuclear and cell destruction in cleaving human embryos. *Int J Dev Biol* (2005), 49: 409-16.
8. Живкова Р., И. Ватев. Аномалии на овогенезата и оплождането, свързани с практиката за in vitro оплождане. *Акушерство и гинекология – София* (2005), 44, 6: 36-40
9. Delimitreva S, Zhivkova R, Isachenko E, Umland N, Nayudu PL. Meiotic abnormalities in in vitro-matured marmoset monkey (*Callithrix jacchus*) oocytes: development of a non-human primate model to investigate causal factors. *Hum Reprod* (2006) 21, 240-7.
10. Zhivkova RS, S. Delimitreva, D. Toncheva, I. Vatev Analysis of human unfertilized oocytes and pronuclear zygotes – correlation between chromosome / chromatin status and patient-related factors. *Eur J Obstet Gynecol Reprod Biol* 2007 Jan;130(1): 73-83.
11. Zhivkova R, M. Punevska, S. Delimitreva, B. Rukova, D. Toncheva, I. Vatev. Analysis of single oocytes and follicles from surgically recovered ovarian tissue of patients with ovarian polycystosis. *Obstetrics and Gynecology Sofia* (2009), 48 (3): 19-26.

12. Zhivkova R, S. Delimitreva, D. Toncheva, I.Vatev. Chromatin quality as a crucial factor for the success of FISH analysis of unfertilized oocytes, polar bodies and arrested zygotes. BJMG, (2010), 13 (1): 1-8.
13. Nikolova V., S. Delimitreva, R. Zhivkova, I. Chakarova, D. Dimitrova, M. Markova. Cytoskeletal changes during mouse oocyte maturation revealed by a variation of nuclear matrix and intermediate filaments (NM-IF) extraction. Comptes rendus de l'Academie bulgare des Sciences (2011), 64 (11): 1571-1576. **IF 0,219**
14. Nikolova V., , R. Zhivkova, M. Markova, T. Topouzova-Hristova, A. Mitkova, S. Delimitreva. Characterization of mouse oocytes and oocyte–cumulus complexes extracted for nuclear matrix and intermediate filaments (NM-IF). Acta morphologica et anthropologica (2012), 19:149-152.
15. Nikolova V., I. Chakarova, R. Zhivkova, M. Markova, R. Dimitrov, S. Delimitreva. Comparison of in vitro matured oocytes from two inbred mouse strains and their hybrids. Embryology (2012), 7 (1): 10-14.
16. Damyanova V.,I. Dimova, A.Savov, D.Nesheva, S.Hadjidekova, B.Rukova, R.Jivkova (Zhivkova), V.Nikolova, Il.Vatev, D.Toncheva. Comprehensive genomic study in patients with idiopathic azoospermia and oligoasthenoteratozoospermia. Biotechnology & Biotechnological Equipment, 2012 (in press) **IF 0.760**

II. Selected Abstracts - Congresses and Conferences Participation

1. P. Janakiev, S. Delimitreva, R. Zhivkova, I. Vatev. Preimplantation diagnosis models based on PCR of DNA from mouse and human gametes and preimplantation embryos. XII Congress of Bulgarian Anatomists with international participation, Plovdiv, Bulgaria, October 1995.
2. I. Vatev, R. Stanislavov, B. Tarlatzis, R. Zhivkova, S. Delimitreva. Application of intracytoplasmic sperm injection in the treatment of cases with male immunological infertility. First National Congress of andrology with international participation – Sofia, Bulgaria, May 1996.
3. Delimitreva S., I. Vatev, P. Janakiev, R. Zhivkova. Pilot investigations of some preimplantation diagnosis models based on PCR and FISH. 11th Balkan Biochemical Biophysical Days - Thessaloniki, May 1997, Abstr. No 277.

4. Zhivkova R., S.M. Delimitreva, I.Ts. Vatev, D.I. Toncheva: Cytogenetic and FISH analysis of gametes and preimplantation embryos. . II European Cytogenetic Conference, July, Vienna, 1999, Cytogenet. Cell Genet. 1999, 85:5-181.
5. S.Delimitreva, M. Markova, R.Zhivkova: Preparation of optimal metaphase plates from mouse oocytes under specific conditions for spindle disintegration. . III национална конференция по медицинска биология - Пловдив, септември 1999.
6. S.Delimitreva , R.Zhivkova, I.Vatev, D. Toncheva: Potential for preimplantation genetic diagnosis in a University IVF center – Sofia, Bulgaria. 3rd European Cytogenetics Conference – Paris, July 2001.
7. R.Zhivkova, S.Delimitreva, I. Vatev, D. Toncheva: FISH combined with cytogenetics is more informative for genetic studies of unfertilized oocytes. 3rd European Cytogenetics Conference – Paris, July 2001.
8. S. Delimitreva, R. Zhivkova, D. Toncheva, I. Vatev: Chromatin defects in preimplantation embryos and oocytes after unsuccessful IVF procedures. Първи национален конгрес по перинатална медицина, София, октомври 2001.
9. R. Zhivkova, S. Delimitreva, D. Toncheva, I. Vatev Genetic investigations of unfertilized in vitro human oocytes – classical cytogenetics and fluorescent in situ hybridization. Първи национален конгрес по перинатална медицина, София, октомври 2001.
10. Delimitreva, S., R. Zhivkova, B. Zaharieva, D. Toncheva, Vatev: Apoptotic changes of the chromatin is a critical factor for FISH aneuploidy testing of human preimplantation embryos. Proceedings of Vth Balkan Congress of Human Genetics, Sofia, Bulgaria (August 2002).
11. R. Zhivkova, Delimitreva, S., B. Zaharieva, D. Toncheva, I. Vatev: Aneuploidy in unfertilized human oocytes and pronuclear zygotes after IVF. Proceedings of Vth Balkan Congress of Human Genetics, Sofia, Bulgaria (August 2002).
12. Delimitreva S., R. Zhivkova, N. Umland, P. Nayudu. Chromosomal anomalies of in vitro matured marmosed oocytes. 4th European Cytogenetics Conference, Bologna, Italy (September 2003). Ann. Genet. 2003 Sep.; 46 (2-3) p. 182.
13. R. Zhivkova, S. Delimitreva, D. Toncheva, I. Vatev: Importance of aneuploidy in human oocytes, zygotes and preimplantation embryos in evaluation of results after failed IVF. 4-th European Cytogenetics Conference, Bologna, Italy, September 2003. Ann. Genet. 2003 Sep.; 46 (2-3) p. 191.

14. Delimitreva S., R. Zhivkova, N. Umland, P. Nayudu. Cytogenetic analysis of marmoset oocytes after in vitro maturation. Proceedings of V National Conference of Medical Biology, Stara Zagora, Bulgaria (September 2003).
15. R. Zhivkova, S. Delimitreva, D. Toncheva, I. Vatev. Evaluation of failed IVF attempts by ploid analysis of human oocytes, zygotes and preimplantation embryos. Proceedings of V National Conference of Medical Biology, Stara Zagora, Bulgaria (September 2003).
16. R. Zhivkova, S. Delimitreva, D. Toncheva, I. Vatev. Cytogenetic analysis of human oocytes, zygotes and polar bodies – correlation between chromatin status and patient-related factors. 5th European Cytogenetics Conference, Madrid, Spain (June 2005). Chromosome Research 13, Suppl. 1, 127.
17. Delimitreva S., R. Zhivkova, N. Umland, E. Isachenko, P. Nayudu. Chromosomal and meiotic spindle abnormalities in in vitro matured marmoset monkey oocytes: a model for human. 5th European Cytogenetics Conference, Madrid, Spain (June 2005). Chromosome Research, 13, Suppl. 1, 128.
18. Vatev I., Delimitreva, S., R. Zhivkova, D. Toncheva. Chromosomal disorders, nuclear and cell destruction in cleaving human embryos. 5th European Cytogenetics Conference, Madrid, Spain (June 2005). Chromosome Research, 13, Suppl. 1, 129.
19. Delimitreva, S., R. Zhivkova, D. Toncheva, I. Vatev. Chromosomal disorders, nuclear and cell destruction in cleaving embryos from successful and unsuccessful IVF cycles. Proceedings of VI National Conference of Medical Biology, Stara Zagora, Bulgaria (September 2005).
20. Zhivkova R., S. Delimitreva, D. Toncheva, I. Vatev. Influence of some patient-related factors on the ploid and chromatin status of human oocytes, zygotes and polar bodies. Proceedings of VI National Conference of Medical Biology, Stara Zagora, Bulgaria (September 2005).
21. Zhivkova R., M. Punevska, S. Delimitreva, I. Vatev. FISH analysis of immature oocytes and follicles isolated from polycystic ovaries. VIII Congress of European Society of Gynecology, Roma, Italy (September 2009).
22. Zhivkova R., M. Punevska, S. Delimitreva, B. Rukova, D. Toncheva, I. Vatev. Analysis of single oocytes and follicles from surgically recovered ovarian tissue of patients with ovarian polycystosis. Proceedings of VIII National Conference of Medical Biology, Sofia, Bulgaria (September 2009).
23. Panevska M., R. Zhivkova, K. Mainhard. Results of biopsy of ovaries in PCOS patients. 18th Annual Congress of the European Society for Gynaecological Endoscopy, Florence, Italy (October 2009). Gynecol Surg, 2009, 6 (Suppl 1): S127-S208.

24. Zhivkova R., S. Delimitreva, I. Chakarova, V. Nikolova, D. Dimitrova, M. Markova. Localization of cytokeratin and vimentin in maturing mouse oocytes. The Cytoskeleton in Development and Pathology – A FEBS/EMBO Lecture Course, Stockholm, Sweden (June 2010).
25. Damyanova V., I. Dimova, A. Savov, D. Nesheva, S. Hadjidekova, B. Rukova, R. Jivkova (Zhivkova), V. Nikolova, I. Vatev, D. Toncheva. Disruption of the gene for zona pellucida binding protein detected by array CGH in male infertility. European Human Genetics conference, Amsterdam, The Netherlands, May 2011: P04 27.
26. V. Nikolova, S. Delimitreva, M. Markova, R. Zhivkova, R. Dimitrov, E. Grigorova, D. Dimitrova. Dynamic changes in intermediate filaments correlated with chromatin reorganization in maturing mouse oocytes. 13-th International Symposium for Immunology of reproduction, June 2012, Varna, Bulgaria. Am J Reprod Immunol 67, Suppl s1, P1-2.
27. V. Nikolova, I. Chakarova, R. Zhivkova, S. Delimitreva. Variations of chromatin and Cytoskeletal structures among *in vitro* matured oocytes from two mouse strains. 13-th International Symposium for Immunology of reproduction, June 2012, Varna, Bulgaria. Am J Reprod Immunol 67, Suppl s1, P1-7.
28. R. Zhivkova, S. Delimitreva, I. Vatev. Contribution of oocyte cytoplasmic immaturity and cytoskeletal anomalies to human IVF failure. 13-th International Symposium for Immunology of reproduction, June 2012, Varna, Bulgaria. Am J Reprod Immunol 67, Suppl s1, PIII-48.
29. V. Nikolova, R. Zhivkova, M. Markova, T. Topuzova-Hristova, A. Mitkova, S. Delimitreva. Characterization of mouse oocytes and oocyte-cumulus complexes extracted for nuclear matrix and intermediate filaments. 5th Morphological days, Sofia, Bulgaria (June 2012).
30. I. Chakarova, V. Nikolova, R. Zhivkova, M. Markova, R. Dimitrov, V. Hadzhinesheva, T. Tenev, S. Delimitreva. Comparison of microfilament and microtubule structures of *in vitro* matured oocytes from two inbred mouse strains and their F1 hybrids. The 21st National Congress of the Bulgarian Anatomical Society. June 2013 Sofia, Bulgaria.
31. M. Markova, V. Nikolova, I. Chakarova, R. Zhivkova, R. Dimitrov, S. Delimitreva. Involvement of cytokeratins and vimentin in mouse oocyte meiotic rearrangement. The 21st National Congress of the Bulgarian Anatomical Society. June 2013 Sofia, Bulgaria.
32. V. Nikolova, S. Delimitreva, R. Zhivkova, I. Chakarova, D. Dimitrova, M. Markova. Cytoskeletal changes during mouse oocyte maturation revealed by a variation of nuclear matrix and intermediate filament (NM-IF) extraction. The 21st National Congress of the Bulgarian Anatomical Society. June 2013 Sofia, Bulgaria.

33. R. Zhivkova, M. Markova, V. Nikolova, I. Chakarova, T. Tenev, V. Hadzhinesheva, M. Panevska R. Dimitrov, S. Delimitreva. Balbiani body is present in oocytes of patient with polycystosis and reacts for intermediate filaments and F-actin. The 21st National Congress of the Bulgarian Anatomical Society. June 2013 Sofia, Bulgaria.
34. Zhivkova R. Balbiani body – an ancient asymmetry in mammalian oocytes or a structure of potential clinical significance in cases of ovarian polycystosis. Plenary lecture. X National Conference of Medical Biology, Pleven, Bulgaria, October 2013.