KRASSIMIRA OLEGOVA TODOROVA-HAYRABEDYAN, PhD, DSc

PERSONAL INFORMATION

Current correspondence address:
Mladost 1, block 70A, entr. 2, apt. 1
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Bulgaria

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Date of birth: 24 May 1977
Place of Birth: Sofia, Bulgaria
Marital Status: Married

HIGHLIGHTS

Head of Laboratory of Reproductive OMICs technologies - supervision and management of two Associate Professors scientific and teaching activities as well as all assigned students; Supervision of several Master and PhD students in the lab; Organising and conducting professional skills training in laboratory for 11 students in biology and other related disciplines, as well as lecturing and examination of acquired skills and knowledge. Internal PhD student examiner. Participation in PhD evaluation boards and progress assessment procedures as member of Scientific Council.

After years of prostate cancer markers evaluation, current research interests are focused on the role of specific micro-RNAs in the epigenetic and transcriptional regulation of prostate cancer metastasis. Another tightly related trend of research is focused on the expressional regulation and the modes of action of prostate-specific fusion oncoproteins with regulatory function and poor prognosis association such as TMPRSS2-ERG.

EDUCATION AND SCIENTIFIC ACHIEVEMENTS

September 2015 **Institute of Biology and Immunology of Reproduction, Bulgarian Academy of Sciences, Sofia**

DSc (Doctor of Sciences)
Dissertation thesis: " Gene regulatory network involving microRNA-204, the oncofusion TMPRSS2:ERG and transcriptional factors important for metastatic cancer "

2007 - 2008 **Harvard Cutaneous Biology Research Center, Massachusetts General Hospital, Dermatology dept.**
Postdoctoral Fellow

December 2006 **Institute of Biology and Immunology of Reproduction, Bulgarian Academy of Sciences, Sofia**
PhD, Immunology

Dissertation thesis: „A study on prostate carcinoma biomarkers with diagnostic and therapeutic significance",

- *Financial support: in part by Grant No.903 from Bulgarian Ministry of Education and Sciences, in part by Grant N00014-00-1-0787 from the United States Office of Naval Research, American Foundation for Biological Research, Bulgarian Foundation for Biomedical Research.*

March 2000 **Sofia University "St. Kliment Ohridsky", Bulgaria**
Masters degree in Cell biology and Developmental biology

Institute of Zoology, Bulgarian Academy of Sciences, Sofia

Masters thesis: "Induction of chromosome alterations in salivary gland chromosomes of *Glyptotendipes salinus* by lead nitrate",
- *The work was supported by a Joint project from the UK Royal Society*

March 2000 **Sofia University"St. Kliment Ohridsky", Bulgaria**
Masters degree in pedagogics – Biology and Chemistry

1995 **High school "St.st. Cyril and Methodii"**
Majors in Biology and Chemistry

RESEARCH POSITIONS

Institute of Biology and Immunology of Reproduction, Bulgarian Academy of Sciences, Sofia
January 2015 - Head of Laboratory of Reproductive OMICs technologies

Institute of Biology and Immunology of Reproduction, Bulgarian Academy of Sciences, Sofia
2013 – present Associate Professor in Immunology

Institute of Biology and Immunology of Reproduction, Bulgarian Academy of Sciences, Sofia
2010 – 2013 Chief Assistant Professor, Department of Reproductive Immunology

2007 - 2008 **Cutaneous Biology Research Center, Massachusetts General Hospital, Harvard Medical School, Dermatology dept.**
Postdoc Fellow

Institute of Biology and Immunology of Reproduction, Bulgarian Academy of Sciences, Sofia
2006 – 2007 Research associate II degree, Department of Molecular Immunology
2002 – 2006 Research associate III degree, Department of Molecular Immunology
2001 – 2002 Research Biologist, Department of Molecular Immunology

1998 – 2000 **Institute of Zoology, Bulgarian Academy of Sciences, Sofia**
Undergraduate fellow, Master thesis pursuit

RESEARCH TRAININGS

3.2012 – 4.2012 Visiting Researcher at **Essex University**, School of Biological Sciences, Colchester, UK

CERTIFICATES

2010 Certificate for Theoretical Training in Flow cytometry application, NCIPD, Sofia

2011 Certificate for Practical Training in Flow cytometry application, NCIPD, Sofia

2012 Certificate for Practical Training in Techniques for micromanipulation and visualization of oocytes and embryos

TEACHING EXPERIENCE

December 2015 **Institute of Biology and Immunology of Reproduction, Bulgarian Academy of Sciences, Sofia**
Internal examiner of PhD student

2014 - 2015 **Institute of Biology and Immunology of Reproduction, Bulgarian Academy of Sciences, Sofia**
Mentor of 11 students (MSc and BSc in biology, biotechnology and microbiology)

2005 – 2006 **Institute of Biology and Immunology of Reproduction, Bulgarian Academy of Sciences, Sofia**
Scientific Mentor of Master degree thesis: "CD105 and hCG as diagnostic markers of prostate carcinoma"

1999 – 2001 **High school – Mladost 1, Sofia and High school – Sitniakovo, Sofia**
Teacher in Biology to undergraduate and junior classes

RESEARCH INTERESTS

- tumour cell biology and tumour angiogenesis
- stem cell / progenitor cell involvement in cancer development
- DNA vaccines, humoral and cellular immune response
- cell imaging
- cytogenetics, immunology

AWARDS & SCHOLARSHIPS

100 Bulgarian Young Scientist – Biographical Encyclopaedia, 2012
Marquis Who's Who in the World, 2010 award
Marquis Who's Who in the World, 2009 award
Nomination for Young Bulgarian Scientists Award 2006 – 2nd Level
Masters study in Cell Biology – full scholarship, 1995

RESEARCH PROJECTS

LEADER

2011 - 2015 **Project Leader**, **funded by National Science Fund**, Bulgarian Ministry of Education and Science: Young Scientists Project Competition - "Gene regulatory networks involving miRNA, transcription factors and onco-fusion proteins in Prostate Cancerogenesis with diagnostic and therapeutic significance"

PARTICIPANT

2014 - 2015
Project "**Students'Internships**" (BG051PO001-3.3.07-0002) funded by EU Operational Programme "Human Resource Development" and co-funded by the European Social Fund"

2010 – 2013 **Project ReProForce, funded by 7th FP of EU**: Current Scientific Research presentation to international partners, Tutoring of 2 Training Events: 1). PCR sexing of farm animals sperm subject to further embryotransfer; 2). Flow cytometry evaluation of sperm in animal reproduction and human IVF practice.

2012 – 2013 **Project for Inter-academic Cooperation between Bulgarian Academy of Sciences and Academy of Sciences of the Czech Republic**: Gene and protein expression in reproductive system.

2007 **Medical University of Pleven** – Scientific Projects Proprietary Funding: "Investigation of sentinel lymph nodes in prostate carcinoma using immunohistochemical markers – CK MNF 116 and PSAP for micro-metastases detection" *Establishing a correlation between the highly-specific marker for prostate carcinoma prostate specific acid phosphatase and dendritic cell population in sentinel lymph nodes;*

2006 – 2007 **National Science Fund**, Bulgarian Ministry of Education and Science: Project TK-614/2006 ("Study on the possibilities to control the proliferation in tumour cells applying small interfering RNAs") *Isolation of epithelial and stromal primary cell cultures of human prostate carcinoma; subsequent isolation of CD133 positive stem-like cells;*

2005 – 2006 **Medical University of Pleven** – Scientific Projects Proprietary Funding: Project No. 03/2005 ("Comparative analysis of the immunohistochemical expression of PSMA, P504S, p63, COX2, iNOS in proliferative inflammatory atrophy, prostate intraepithelial neoplasia and prostate carcinoma: differential-diagnostic and prognostic significance") *project participation described in Recent Research under Research Experience;;*

2003 – 2004 **United States Dept. of Defence**, Office of Naval Research, Grant N00014-00-1-0787, "Immunotherapy of prostate cancer -- prostate cancer vaccine clinical trial", granted to **George Washington University** *The patient sera investigation for humoral immune response after DNA vaccine was part of this Research project and part of the Doctoral thesis research described above (Education)*

1998 – 2000 **Royal Society Joint Project Grant** between Bulgarian Academy of Sciences and Manchester University, UK, *The Project covers the content and supports financially the research carried on the Master thesis described above (Education)*

PROFESSIONAL MEMBERSHIPS

Bulgarian Union of Reproductive Immunology, 2004 – present
Union of Scientists in Bulgaria, 2006 – present
European Society for Reproductive Immunology (ESRI), 2010 – present
International Society for Immunology of Reproduction (ISIR), 2013 -

LANGUAGES

English
Russian

RESEARCH ARTICLES AND MASTER THESIS INVITED REVIEWS

Invited review of Scientific Reports (Nature Publishing Group)
Invited review of British Journal of Cancer
Invited review of International Journal of Biochemistry and Review (sciencedomain international)
Invited review of European Journal of Obstetrics and Gynaecology and Reproductive Biology
Invited review of Comptes rendus de l'Academie bulgare des Sciences
Invited review of Master thesis, Institute of Chemistry
Invited review of Master thesis, Sofia University

PUBLICATIONS (120 citations, h-index 6, IF = 36.416):

1. **Krassimira Todorova**, Dissertation thesis: „ A study on prostate carcinoma biomarkers with diagnostic and therapeutic significance ", 2006 (PhD)

2. **Krassimira Todorova**, Dissertation thesis: "Gene regulatory network involving microRNA-204, the oncofusion TMPRSS2:ERG and transcriptional factors important for metastatic cancer ", 2015 (DSc)

Books:

3. **Krassimira Todorova** and Soren Hayrabedyan. Handbook of Prostate Cancer Cell Research – Growth, Signaling and Survival. NOVA BIOMEDICAL. The Stem Cell Paradigm and Its Application to prostate Cancer – An Old and Young Idea. Chapter 3, 127-177, 2009. ISBN: 978-1-60741-954-9. (Published by Nova Science Publishers, Inc. New York)

4. Ivailo Vangelov, Julieta Dineva, **Krassimira Todorova**, Soren Hayrabedyan and Maria D. Ivanova (2012). Ovarian Biomarkers in Infertility, Trends in Immunolabelled and Related Techniques, Eltayb Abuelzein (Ed.), ISBN: 978-953-51-0570-1, InTech, (http://www.intechopen.com/books/trends-in-immunolabelled-and-related-techniques/ovarian-biomarkers- in-infertility)

Pubications (IF = 36.416):

5. **Todorova K**., Mourdjeva M., Damjanov H., Mladenov D., Petrov S., Kyurkchiev S., Kehayov I. A study of potential markers of prostate tumors. Onkologos, 2002; V.3-4, p. 51-53

6. **Todorova K**., Hayrabedyan S., Karaivanov M., Kehayov I., Kyurkchiev S. Potential markers for prostate carcinoma malignancy characterization. Clinical Application of Immunology 2004; vol.3/N 2, pp. 386-390

7. **Krasimira Todorova**, Irena Ignatova, Stoyan Tchakarov, Iskra Altankova, Serguei Zoubak, Stanimir Kyurkchiev, and Milcho Mincheff. Humoral immune response in prostate cancer patients after immunization with gene-based vaccines that encode for a protein that is proteasomally degraded. Cancer Immunity 2005; 5:1

8. **Todorova K**., Ignatova I., Botev Ch., Mincheff M., Kyurkchiev S. Biochemical characteristic of epitopes recognized by antibodies induced after gene-based vaccination in prostate cancer patients. Comptes rendus de l'Academie bulgare des Sciences, 2005; Tome 58, N1, pp.79-84

9. **Todorova K.**, Zoubak S., Mincheff M., Kyurkchiev S. Biochemical Nature and mapping of PSMA epitopes recognized by human antibodies induced after immunization with gene-based vaccines. Anticancer research, 2005; Vol. 25;4727-4732 (IF = 1.872)

10. **Todorova K.**, Hayrabedyan S., Kehayov I., Kyurkchiev S. Quantitive assessment of the expression levels of PSMA, hCG and endoglin in prostate carcinoma tissues. Clinical Application of Immunology, 2006, N3, p512-515

11. Michailova P., **Todorova K**., White K. The effect of lead on the salivary gland chromosomes of Glyptotendipes salinus Michailova (Chironomidae, Diptera). Biologia, Bratislava 2002, Vol. 57, Iss. 3, pp. 359-367 (IF = 0.6)

12. **Todorova K**., Hayrabedyan S., Kuzmanov A. Karaivanov M. Kehayov I., Kyurkchiev S. Expression patterns of PSMA, COX-2, iNOS and GST in prostate carcinoma, adenoma and normal human tissues. Comptes rendus de l'Academie bulgare des Sciences, 2006; Tome 59, N4, pp.459-462

13. Karaivanov M., **Todorova K.**, Kuzmanov A., Hayrabedyan S., Kehayov I., Kyurkchiev S. Immunohistochemical comparative analysis of the expression of p63, AMACR, COX-2 and GSTP1 in proliferative inflammatory atrophy, prostate intraepithelial neoplasia and prostate carcinoma: differential diagnosis and predicative significance. Comptes rendus de l'Academie bulgare des Sciences, 2006; Tome 59, N8, pp. 885-889

14. Karaivanov M.*, **Todorova K.***, Kuzmanov A., Hayrabedyan S. Quantitative immunohistochemical detection of the molecular expression patterns in proliferative inflammatory atrophy. J Mol Histol. 2006 Dec 15. (***equal contribution with the first author**) (IF = 1.972)

15. Kuzmanov A., **Todorova K**., Hayrabedyan S., Karaivanov M., Kehayov I., Kyurkchiev S. Subpopulation of basal cell as putative human prostate carcinoma stem cells. Comptes rendus de l'Academie bulgare des Sciences, 2006, Tome 59, N 12, pp 1327-1330

16. A. Kuzmanov, S. Hayrabedyan, M. Karaivanov, **K. Todorova**. Basal cell subpopulation as putative human prostate carcinoma stem cells. Folia Histochem Cytobiol. 2007, Vol. 45, N 2 pp 75-80. (IF = 1.081)

17. **K. Todorova**, T. Shamov, S. Hayrabedyan, A. Kuzmanov, S. Kyurkchiev, I. Kehayov Quantitative evaluation of angiogenesis in glioblastoma with CD105. Comptes rendus de l'Academie bulgare des Sciences, 2007, Tome 60, No. 5, pp.577-580 (IF = 0.160)

18. **K. Todorova,** S. Hayrabedyan, T. Shamov, M. Karaivanov, A. Kuzmanov, S. Kyurkchiev, I. Kehayov. Quantitative evaluation of AMACR in glioblastoma. Comptes rendus de l'Academie bulgare des Sciences, 2007, Tome 60, No10 pp.1123-1126 (IF= 0.160)

19. **Todorova K**., I. Vangelov, J. Dineva,V. Penchev, S. Hayrabedyan, G. Nikolov, M. Mollova, M. Ivanova. Lysiloxidase as a potential biomarker for predicting oocyte quality. Comptes rendus de l'Academie bulgare des Sciences. 2011,Vol 64, No9, pp. 1355-1362. (IF = 0.210)

20. **Todorova K**., D. Zasheva, S. Hayrabedyan, J. Dineva, I. Vangelov, V. Penchev, G. Nikolov, M. Mollova, M. Ivanova. Gene panel in human cumulus cells as biomarker for successful in vitro procedures. Comptes rendus de l'Academie bulgare des Sciences. 2011, ISSN: 1310-1331 Vol 64, No8, pp.1143-1150. (IF = 0.210)

21. Dineva J., Vangelov I., **Todorova K**., Stefanova T, Nikolov G, Gulenova D, Ivanova M.D. Relationship of Nitrate levels in follicular fluids (FFls) and rate of apoptotic human granulosa luteinized cells (GLCs) with the COH/IVF outcome Comptes rendus de l'Academie bulgare des Sciences Volume 65, Issue No1, 2012, pp115-120 ISSN: 1310-1331 (IF = 0.211)

22. Julieta Dineva, Ivaylo Vangelov, **Krassimira Todorova**, Radoslav Abrashev, Diana Gulenova, Georgui Nikolov, Maria Angelova, Maria Ivanova. Study on the relationship between activity of antioxidant enzymes Superoxide dismutase and Catalase in

granulose luteinized cells with COH / IVF outcome in infertile women. Comptes rendus de l'Academie bulgare des Sciences Volume 65, Issue No2, 2012, pp181-186 (IF = 0.211)

23. Vangelov I., Dineva J., **Todorova K**., Nikolov G, Gulenova D, Ivanova M.D. Ovarian auto-antibodies are associated with poor in vitro fertilization of oocytes. Comptes rendus de l'Academie bulgare des Sciences ISSN: 1310-1331, 2012, Volume 65, Issue No 9, pp.1219-1224 (IF = 0.211)

24. Dineva J., Vangelov I., Abrashev R., **Todorova K.**, Gulenova D, Nikolov G, Rangelov I., Stamenov G., Angelova M., Ivanova M.D. The survival role of Superoxide dismutase 1 (SOD1) on human granulosa luteinized cells in vitro. Endocrine regulations. Vol. 45, 175–181, 2011

25. J. Dineva, AK. Wójtowicz, K. Augustowska, I. Vangelov, **K. Todorova,** E.L. Gregoraszczuk, M. D. Ivanova. Study on the control of apoptosis of porcine granulosa cells after in vitro luteinization. Balkan network for Biotechnology in animal Reproduction, Proceeding, Sofia, 24-25 March 2011, 63-69.

26. **K. Todorova,** S. Hayrabedyan, J. Dineva I. Vangelov, V. Penchev, D. Nikolov, M. Mollova, M. Ivanova. IVF studies on the genetic potential of cumulus cells as biomarkers for selection of oocytes. BG Journal: Reproductive Health 2011, N18, pp 23-32.

27. Boyko Georgiev, Soren Hayrabedyan, **Krassimira Todorova**, Diana Zasheva, Paulina Taushanova, Dimitrina Kacheva, Peter J. Hansen. Sperm Proteins as Potential Markers of Boar Fertility. Comptes rendus de l'Academie bulgare des Sciences 2012 Vol 65, No4, pp. 533-540, (IF = 0.211)

28. **Kr. Todorova**, S. Hayrabedyan, J. Dineva, I. Vangelov, D. Zasheva, V. Penchev, G. Nikolov, M. Mollova and M. Ivanova. Cumulus biomarker evaluation for human oocyte quality prediction. Acta Medica Bulgarica, Vol. XXXIX, 2012, No 1, 70-76

29. **K. Todorova,** N. Manolova, D. Zasheva, S. Hayrabedyan. A Relationship Between Microrna-204 And Occludin In Prostate Cancer Inflammation Signaling. Acta Medica Bulgarica, Vol. XXXIX, 2012, No 2, 23-28

30. **Krasimira Todorova**, Milcho Mincheff, Diana Zasheva, Soren Hayrabedyan. The Role Of Mir-204 And Nod1 Receptor In Prostate Cancer Inflammation Signalling (2012) Comptes Rendus de L'Academie Bulgare des Sciences, 65 (12), pp. 1739-1744, (IF = 0.211)

31. **Todorova, Krassimira,** Milcho Mincheff, Soren Hayrabedyan, Jana Mincheva, Diana Zasheva, Aleksandar Kuzmanov, and Nelson Fernández. "Fundamental Role of microRNAs in Androgen−Dependent Male Reproductive Biology and Prostate Cancerogenesis." American Journal of Reproductive Immunology 69, no. 2 (2013): 100-104. (IF = 2.668)

32. Soren Hayrabedyan, Milcho Mincheff, Diana Zasheva, Nelly Manolova, **Krassimira Todorova**. Autophagy Signalling Is Differentially Modulated By Mir-204 In Context Of Innate Immunity Induction. Comptes rendus de l'Acade´mie bulgare des Sciences. Tome 66, No 1, 2013, 127-132 (IF=0.198)

33. Nelly Manolova, Soren Hayrabedyan, **Krassimira Todorova**, Diana Zasheva, Milena Mourjeva, Stanimir Kyurkchiev, Maria Stamenova. In Search Of Factors In Endometriosis Peritoneal Fluid That Decreased Decidualization Process. Comptes rendus de l'Acade´mie bulgare des Sciences. Tome 66, No 1, 2013. 153-158 (IF=0.198)

34. Hayrabedyan, Soren, **Krassimira Todorova**, Shina Pashova, Margarita Mollova, and Nelson Fernández. "Sertoli Cell Quiescence–New Insights." American Journal of Reproductive Immunology 68, no. 6 (2012): 451-455. (IF = 3.317)

35. Spencer, Patrick S., Soukaina M. Hakam, Phillipe P. Laissue, Asma Jabeen, Pallavi Jain, Soren Hayrabedyan, **Krassimira Todorova** et al. "Key cellular components and interactive histocompatibility molecules regulating tolerance to the fetal allograft." American Journal of Reproductive Immunology 68, no. 2 (2012): 95-99. (IF = 3.317)

36. Soren Hayrabedyan, **Krassimira Todorova**, Diana Zasheva, Daniela Moyankova, Desislava Georgieva, Jordana Todorova & Dimitar Djilianov (2013) Haberlea Rhodopensis has Potential as a New Drug Source Based on its Broad Biological Modalities, Biotechnology & Biotechnological Equipment, 27:1, 3553-3560, (IF= 0.379)

37. Nelly Manolova, Soren Hayrabedyan, **Krassimira Todorova**, Diana Zasheva, Milena Mourjeva, Stanimir Kyurkchiev & Maria Stamenova (2013) Endometriosis Peritoneal Fluid Factors Involved in the Alteration of Decidualization Process, Biotechnology & Biotechnological Equipment, 27:4, 3982-3986, DOI: 10.5504/BBEQ.2013.0032, (IF=0.379)

38. Barnea ER, Lubman DM, Liu Y-H, Absalon-Medina V, Hayrabedyan S, **Krassimira Todorova**, Rober O. Gilbert, Joy Guingab, Timothy J Barder. (2014) Insight into PreImplantation Factor (PIF*) Mechanism for Embryo Protection and Development: Target Oxidative Stress and Protein Misfolding (PDI and HSP) through Essential RIPK Binding Site. PLoS ONE 9(7): e100263. doi:10. 1371/journal.pone.0100263, (IF= 3.534)

39. **Krassimira Todorova**, Diana Zasheva, Kristiyan Kanev, and Soren Hayrabedyan, "miR-204 Shifts the Epithelial to Mesenchymal Transition in Concert with the Transcription Factors RUNX2, ETS1, and cMYB in Prostate Cancer Cell Line Model," Journal of Cancer Research, vol. 2014, Article ID 840906, 14 pages, 2014. doi: 10.1155/2014/840906

40. **Krassimira Todorova,** Diana Zasheva, Soren Hayrabedyan. Innate Immunity Challenge Differently Modulates Inflammatory And Apoptosis Regulation In Lymph Node And Bone Marrow Metastatic Cell Line Models, Favouring Higher Metastatic

Phenotype Comptes rendus de l'Acade´mie bulgare des Sciences Tome 67, No 11, 2014, 1575-1582, (IF=0.284)

41. Eytan R. Barnea, David Kirk, **Krassimira Todorova**, James McElhinney, Soren Hayrabedyan, Nelson Fernández. PIF direct immune regulation: Blocks mitogen-activated PBMCs proliferation, promotes T_H2/T_H1 bias, independent of Ca^{2+}. Immunobiology. 2015 http://dx.doi.org/10.1016/j.imbio.2015.01.010 (IF=3.044)

42. Elena Kistanova, Mihail Chervenkov, Kiril Shumkov, Rayko Peshev, **Krasimira Todorova**, Soren Hayrabedyan, Desislava Abadjieva, Almantas Shimkus and Aldone Shimkiene Immunostimulatory Properties of Spirulina platensis against Rabbit Haemorrhagic Disease Virus (14-131). Pakistan Veterinary Journal 2015 (in press) (IF=1.392).

43. S. Hayrabedyan, **K. Todorova**. Nalp Signalling Is Required In Sertoli Cells For Tight-Junction Protein Interaction. Acta Medica Bulgarica, Vol. XLII, 2015, No 1, pp12-17.

44. **K. Todorova,** S. Hayrabedyan. Mir-15A Reconstitution In Prostate Cancer Cell Line Suppresses Cancer Progression Through Down Regulation Of Myb And Androgen Receptor Upregulation. Acta Medica Bulgarica, Vol. XLII, 2015, No 1, pp 18-22.

45. Soren B. Hayrabedyan, Diana Y. Zasheva, **Krassimira O. Todorova.** Nlrs Challenge Impacts Tight Junction Claudins In Sertoli Cells. Folia Medica, 2015; 57(1): 43-48

46. **Krassimira Todorova**, Kristiyan Kanev, Diana Zasheva, Soren Hayrabedyan. Dualistic Role Of MicroRNA-204 In Lymph Node Prostate Cancer Cell Line Model. ANDROLOGIIA, vol 24, lss. 3, 2015

47. Soren Hayrabedyan, Elina Avramska, **Krassimira Todorova**. Stemness applied to testis stem cell niche. Andrologiia, vol 25, lss. 4, 2015, pp 7-14

48. **Krassimira Todorova**, Metodi V. Metodiev, Gergana Metodieva, Diana Zasheva, Milcho Mincheff, and Soren Hayrabedyan. miR-204 is Dysregulated in Metastatic Prostate Cancer In Vitro. MOLECULAR CARCINOGENESIS, 2015; Published online in Wiley Online Library (wileyonlinelibrary.com) (**IF= 4.808**)

49. Soren Hayrabedyan, **Krassimira Todorova**, Asma Jabeen, Gergana, Metodieva, Stavri Toshkov, Metodi V. Metodiev, Milcho Mincheff, Nelson Fernández. Sertoli cells have a functional NALP3 inflammasome that can modulate autophagy and cytokine production. Scientific Reports | 5:18896 | DOI: 10.1038/srep18896; received: 15 September 2015; accepted: 27 November 2015; Published: 8 January 2016 Nature Publishing Group, **IF = 5.578**

Congress participations (IF = 39.2):

1. Michailova P., White K., **Todorova K**. Induction of chromosome alterations in salivary gland chromosomes of Glyptotendipes salinus Michailova (Diptera, Chironomidae) by lead nitrate. Xth International Balbiani Ring Workshop, Varna, Bulgaria, Sept. 1-4, 2001, oral presentation

2. **Todorova К**., Ignatova I., Botev Ch., Mincheff M., Altankova I., Kyurkchiev S. Evaluation of humoral immune response against PSMA in prostate cancer patients' sera. 2nd National Congress of Immunology, Sofia, 29 May – 1 June, 2003

3. **Todorova K.**, Ignatova I., Botev Ch., Mincheff M., Altankova I., Kyurkchiev S. Follow-up of humoral immune response in prostate cancer patients vaccinated with plasmid DNA. 10th International Symposium of Immunology of Reproduction. Varna, Bulgaria, Sept. 4-6, 2003

4. **Todorova К**., Ignatova I., Chakarov S., Altankova I., Zoubak S., Mincheff M. Kyurkchiev S. Humoral immune response in prostate cancer patients after DNA vaccination. Immunological Days in Pleven, Pleven, Bulgaria, 20-23 May, 2004

5. **Todorova K**., M. Karaivanov, A. Kuzmanov, S. Hayrabedyan, I. Kehayov, S. Kyurkchiev. Immunohistochemical comparative analysis of the expression of AMACR and p63 in PIA, PIN and PCA: diferential diagnosis and predicative significance. 11th International Symposium of Immunology of Reproduction. Varna, Bulgaria, June 2-4, 2006

6. Karaivanov M., A. Kuzmanov, **K. Todorova**, S. Hayrabedyan, I. Kehayov, S. Kyurkchiev. Oxydative stress in PIA, PIN and PCA – immunohistochemical study on the expression of GSTP1 and COX-2. 11th International Symposium of Immunology of Reproduction. Varna, Bulgaria, June 2-4, 2006

7. Karaivanov M., **K. Todorova**, S. Hayrabedyan, V. Ivanova, A. Kuzmanov, I. Kehayov, S. Kyurkchiev. Immunohistochemical quantitative assessment of the expression of GSTP1, iNOS and COX-2 in PIA, PIN and carcinoma in the prostate gland. IX National congress of pathology with international participants. 2-4 November 2006, Sofia, Bulgaria.

8. Karaivanov M., **K. Todorova**, S. Hayrabedyan, V. Ivanova, A. Kuzmanov, I. Kehayov, S. Kyurkchiev. Differential diagnosis and predicative significance of AMACR and p63 in PIA, PIN and prostate carcinoma. IX National congress of pathology with international participants. 2-4 November 2006, Sofia, Bulgaria.

9. Milcho Mincheff, **Krassimira Todorova**, Serguei Zoubak, Stoyan Tchakarov, Dobroslav Kiurktchiev, Yavor Pomakov, Ivan Tonev, Stanimir Kiurktchiev, Iskra Altankova Immune responses against PSMA after gene-based vaccination for immunotherapy of prostate cancer: B. Results from a clinical trial. Bulgarian-Japanese

Symposium "Genomics and Proteomics in Personalized Medicine", March 19-20, 2009, Sofia, Bulgaria, oral presentation

10. J. Dineva, AK. Wójtowicz, K. Augustowska, I. Vangelov, **K. Todorova**, EL. Gregoraszczuk, MD. Ivanova. Study on the control of apoptosis of porcine granulosa cells after in vitro luteinization. Balkan network for Biotechnology in animal Reproduction, 2011 Proceeding, Sofia, 24-25 March 2011, 63-69

11. I. Vangelov, J. Dineva, **K. Todorova**, Ts. Stefanova, G. Nikolov, D. Gulenova, M. Ivanova, Relationship of follicular fluid nitric oxide concentrations with the serum steroid (progesterone, estradiol) levels, apoptosis of granulosa luteinized cells and with the outcomes after COH/ IVF. 8th European Congress of Reproductive Immunology, November 11-14, 2010 Munich, Germany. Journal of Reproductive Immunology (IF = 2.204)

12. **Todorova K**., Hayrabedyan S., Dineva J., Vangelov I., Ivanova M., Mollova M. Gene panel in human cumulus cells as biomarker for successful in vitro procedures. ESHRE. Copenhagen, Denmark, 23-27 August, 2011 Journal of Reproductive Immunology (IF=2.966)

13. Karaivanov M., **Todorova K**., Hayrabedyan S. Immunohistochemical quantitative assessment of the expression of GSTP1, iNOS and COX-2 in PIA, PIN AND carcinoma in the prostate gland. 3rd Intercontinental Congress of Pathology, May 18- 21, 2008, Barcelona, Spain; Virchows Arch, 452 (Suppl 1):S1–S286 (2008). ISSN: 0945-6317. (IF = 2.082) – poster session

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15. Dineva J., Vangelov I., Abrashev R., **Todorova K**., Gulenova D., Nikolov G., Rangelov I., Stamenov G., Angelova M., Ivanova M. The survival role of superoxide dismutase 1 (SOD1) on human granulose lutenized cells in vitro. XVIIth symposium of Czech reproductive immunologists with international participation, Zdar, Czech Republic, May 26-29, 2011

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