

# SCIENTIFIC PROGRAM

of the Animal Biotechnology 2014, Nitra, December 11<sup>th</sup>, 2014

**09.00 - 10.30 Registration, coffee**

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**10.30 - 11.00 Opening**

**P. Chrenek (Š. Mihina, J. Slamečka)** – Research Institute for Animal Production Nitra, NAFC, Slovak University of Agriculture, Nitra, Slovak Republic

*Dedicated to Prof. Ing. Jozef Bulla, DrSc., on the occasion of his 70<sup>th</sup> Anniversary*

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**11.00 - 13.00 Plenary session**

Chairman: P. Chrenek

*Invited speakers*

*The role of microRNAs in rabbit preimplantation embryos and pluripotent stem cells*

**E. Gócza**, Agricultural Biotechnological Centre, Gödöllő, Hungary

*Avian primordial germ cells and their application*

**M. Bednarczyk**, University of Technology and Life Sciences, Bydgoszcz, Poland

*Health in contemporary cattle breeding*

**J. Čítek**, University of South Bohemia in České Budějovice, Czech Republic

*Laboratory of the biotechnology – actual trends – I.*

**R. Noška, D. Pianka**, LABO-SK, s.r.o., Bratislava, Slovak Republic

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**13.00 - 14.00 Lunch**

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**14.00 - 15.40 Sections I and II in parallels**

**Section I – Animal Biotechnology**

Chairmen: **A. Makarevič, M. Bauer**

*Transition problem of dairy cows*

**G. Kováč**, University of Veterinary Medicine and Pharmacy in Košice, Slovak Republic

***ISG12 is a critical modulator of innate immune responses in murine models of sepsis***

P. Uhrín, Medicine University, Vienna, Austria

***Effect of an extender on resistance of bovine semen against cold shock and its survivability***

J. Beran, Czech University of Life Sciences Prague, Czech Republic

***Preimplantation maternal restraint stress and its negative effect on mouse development***

J. Burkuš, Institute of Animal Physiology, Slovak Academy of Science, Košice, Slovak Republic

***The effect of maternal body condition on in vivo production of oocytes and embryos in mice***

D. Fabián, Institute of Animal Physiology, Slovak Academy of Science, Košice, Slovak Republic

***The response to the superovulation in cows with different inbreeding level***

J. Bezdíček, Palacký University Olomouc, Czech Republic

***Use of the micronucleus assay for evaluation of white mistletoe toxicity in mouse bone marrow cells***

I. Šutiaková, University of Prešov, Slovak Republic

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***Section II - Rabbit Model – Genetics, Reproduction, Nutrition and Health***

Chairmen: V. Parkányi, Ľ. Ondruška

***Bacteriocin substance-durancin ED26E7 and its effect in rabbits***

A. Lauková, Institute of Animal Physiology, Slovak Academy of Sciences, Košice, Slovak Republic

***Effect of dietary milk thistle (*Silybum marianum*) extract on fattening performance and health status in broiler rabbits***

A. Dokoupilová, Czech University of Life Sciences Prague, Czech Republic

***Assessment of the effects of amygdalin on reproductive functions***

A. Kolesárová, Slovak University of Agriculture, Nitra, Slovak Republic

***Enterococcus faecium CCM7420, bacteriocin-producing and probiotic strain and its benefit in rabbits***

M. Pogány Simonová, Institute of Animal Physiology, Slovak Academy of Sciences, Košice, Slovak Republic

***The effect of *Yucca Schidigera* plant extract on rabbit embryo development in vitro***

M. Földešiová, Slovak University of Agriculture, Nitra, Slovak Republic

***Detection of rabbit spermiphages***

L. Kuželová, Slovak University of Agriculture, Nitra, Slovak Republic

***Intravaginal application of biologically active substances and its effect on fertility of rabbits***

L. Ondruška, Research Institute for Animal Production Nitra, NAFC, Slovak Republic

***Laboratory of the biotechnology – actual trends – II.***

R. Noška, D. Pianka, LABO-SK, s.r.o., Bratislava, Slovak Republic

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**15.45 - 16.00    Coffee break**

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**16.00 - 17.00**

***Section III - Animal Biotechnology - short presentation of PhD. Students***

Chairmen: P. Chrenek, M. Capcarová

***Tetraspanin CD9 in bovine reproduction system***

P. Cupperová, Institute of Animal Biochemistry and Genetics, Slovak Academy of Sciences, Ivanka pri Dunaji, Slovak Republic

***Expression of the immune-related genes in chicken B lymphocytes stimulated in vitro with KLH, LTA and LPS antigens***

A. Dunislawska, University of Technology and Life Sciences, Bydgoszcz, Poland

***Immunomodulatory effect of pre/synbiotics delivered in ovo on chicken microbiome***

A. Plowiec, University of Technology and Life Sciences, Bydgoszcz, Poland

***Nitra and Zobor rabbits semen cryopreservation***

B. Kulíková, Constantine the Philosopher University in Nitra, Slovak Republic

***Characterization of rabbit mesenchymal stem cells by fluorescent analyses***

M. Kováč, Slovak University of Agriculture, Nitra, Slovak Republic

***Closing ceremony***

P. Chrenek, Research Institute for Animal Production Nitra, NAFC, Slovak University of Agriculture, Nitra, Slovak Republic

**17.00 - 18.00    Poster presentations**

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**18.00 - 22.00    Reception**

## Posters

1. ***Acrosomal status of bovine sperm can be evaluated by a monoclonal antibody IVA-520***  
J. Antalíková, Institute of Animal Biochemistry and Genetics, Slovak Academy of Sciences, Ivanka pri Dunaji, Slovak Republic
2. ***In vitro study on effects of mycotoxins on superoxide dismutase activity in porcine ovarian granulosa cells***  
M. Capcarová, Slovak University of Agriculture, Nitra, Slovak Republic
3. ***Influence of amygdalin substance on chromosomal ploidy in rabbit***  
J. Čurlej, Slovak University of Agriculture, Nitra, Slovak Republic
4. ***S-allyl cysteine but not alliin influences meiotic maturation of porcine oocytes***  
M. Dvořáková, Research Institute of Animal Production, Uhřetěves, Czech Republic
5. ***The effect of 4 weeks application of strawberry leaves and patulin on macro- and trace element concentration in rabbit meat***  
J. Emrichová, Slovak University of Agriculture, Nitra, Slovak Republic
6. ***Changes in ovarian hormonal secretion induced by amygdalin application in vitro***  
M. Halenár, Slovak University of Agriculture, Nitra, Slovak Republic
7. ***Effect of rooster on egg weight of Oravka breed chicken***  
E. Hanusová, Research Institute for Animal Production Nitra, NAFC, Slovak Republic
8. ***The role of calcineurin in oogenesis of porcine oocytes***  
K. Hošková, Czech University of Life Sciences Prague, Czech Republic
9. ***Efficient detection of the ASIP mutations in the domestic dog***  
D. Jakabová, Vetgene/Metgene s.r.o., Bratislava, Slovakia
10. ***Ubiquitous distribution of CD46 in non-reproductive body systems in cattle***  
J. Jankovičová, Institute of Animal Biochemistry and Genetics of the Slovak Academy of Sciences, Ivanka pri Dunaji, Slovak Republic
11. ***Influence of maternal stress on preimplantation rate in mice***  
M. Kačmarová, Institute of Animal Physiology, Slovak Academy of Sciences, Košice, Slovakia
12. ***Evaluation of liver enzymes activities after application of quercetin in the rabbits***  
A. Kalafová, Slovak University of Agriculture, Nitra, Slovak Republic

13. ***The interaction between copper and bovine serum albumin in their action on the spermatozoa motility in vitro***  
Z. Kňazická, Slovak University of Agriculture, Nitra, Slovak Republic
14. ***Identification of glucocorticoid receptor protein in murine and bovine blastocysts***  
J. Kubandová, Institute of Animal Physiology, Slovak Academy of Science, Košice, Slovak Republic
15. ***Polymorphism of BoLA-DQA1 gene in Holstein-Friesian cattle***  
D. Kulaj, University of Agriculture in Krakow, Poland
16. ***Enterocin genes and bacteriocin activity among Enterococci from European hare***  
A. Lauková, Institute of Animal Physiology, Slovak Academy of Sciences, Košice, Slovak Republic
17. ***Characterization of the genetic diversity in Slovak geese breeds***  
S. Mindek, Slovak University of Agriculture, Nitra, Slovak Republic
18. ***Bioactive compounds from pomegranate and their effects on release of steroid hormones by rabbit ovarian fragments***  
D. Packová, Slovak University of Agriculture, Nitra, Slovak Republic
19. ***Enterococcus faecium CCM7420, bacteriocin-producing and probiotic strain and its benefit in rabbits***  
M. Pogány-Simonová, Institute of Animal Physiology, Slovak Academy of Sciences, Košice, Slovak Republic
20. ***The impact of the T2264A polymorphism of FASN gene on the fatty acid content in Polish Red cow's milk***  
J. Pokorska, University of Agriculture in Krakow, Poland
21. ***Effect of T-2 toxin on serum albumin and bilirubin level in rabbit blood***  
P. Petruška, Slovak University of Agriculture, Nitra, Slovak Republic
22. ***Impact of selected metabolic parameters in profits and quality of embryos in mouflon female donors***  
T. Pošiváková, University of Prešov in Prešov, Slovak Republic
23. ***Expression of CD46 molecule during the development of bovine gametes***  
M. Simon, Institute of Animal Biochemistry and Genetics of the Slovak Academy of Sciences, Ivanka pri Dunaji, Slovak Republic
24. ***Adherence of vaginal and intestinal strains to mucus collected from different parts of reproductive tract of heifers and cows***  
E. Styková, Clinic of Horses, University of Veterinary Medicine and Pharmacy, Košice, Slovak Republic

25. ***Annexin-V detected alterations in bull fresh and frozen-thawed semen***  
E. Špaleková, Research Institute for Animal Production Nitra, NAFC, Slovak Republic
26. ***Use of microsatellite markers for determining the origin of bees***  
M. Šťastný, Constantine the Philosopher University in Nitra, Slovak Republic
27. ***Precision electronic system for measuring milk flow kinetic during milking of ewes***  
V. Tančin, Slovak University of Agriculture, Nitra, Slovak Republic
28. ***Genotyping of the single nucleotide polymorphism associated with meat production in Pinzgau heifers***  
J. Tomka, Research Institute for Animal Production Nitra, NAFC, Slovak Republic
29. ***Genetic diversity of rabbit genetic resources in Slovakia***  
D. Vašíček, Research Institute for Animal Production Nitra, NAFC, Slovak Republic
30. ***The effect of paternal bull on fatty acid composition of milk fat of dairy cows of different breeds***  
M. Vršková, Research Institute for Animal Production Nitra, NAFC, Slovak Republic
31. ***Hydrogen sulphide donor accelerates meiotic maturation of porcine oocytes by regulation of kinase activity***  
K. Zámotná, Czech University of Life Sciences Prague, Czech Republic
32. ***Activity of superoxid dismutase and glutathione peroxidase after exposure of porcine blood to zearalenone in vitro***  
K. Zbyňovská, Slovak University of Agriculture, Nitra, Slovak Republic
33. ***The influence of bisphenol S on meiotic maturation of porcine oocytes***  
T. Žalmanová, Czech University of Life Sciences Prague, Czech Republic
34. ***Genetic traceability of food based on assisted machine learning***  
R. Židek, Slovak University of Agriculture, Nitra, Slovak Republic
35. ***Hydrogen sulfide: a signal molecule in oocyte maturation and cumulus expansion***  
I. Weingartová, Czech University of Life Sciences Prague, Czech Republic