

INTERNATIONAL CONFERENCE

ANIMAL GENETICS and GENOMICS - OLSZTYN 2-4 July 2018

MONDAY, 2 July 2018

Conference site: University of Warmia and Mazury, Centrum Innowacji i Transferu Technologii "Stara Kotłownia", Prawocheńskiego st. 9, Olsztyn,

8.00-17.00 REGISTRATION

Attention: all oral presentations for Monday should be uploaded to conference computer between 8.00 and 8.45.

INAUGURAL SESSION

9.00-9.30 Welcome speech 1 - **Prof. Stanisław Kamiński**, Chief of Organizing and Scientific Committee
Welcome speech 2 - **Prof. Ryszard Górecki**, Rector of University of Warmia and Mazury in Olsztyn

9.30-10.00 Inaugural speech 1
Filozofia w cieniu genetyki
Philosophy in the shadow of genetics
Prof. Krzysztof Wiczorek, Institute of Philosophy, Silesian University, Poland

10.00-10.30 Inaugural speech 2
Modelling of the breadth of expression from promoter architectures identifies pro-housekeeping transcription factors.
Dr Łukasz Huminiecki, Institute of Animal Genetics and Breeding, Polish Academy of Sciences, Jastrzębiec, Poland

10.00-11.00 Coffee/tea break

Attention: All posters should be placed on poster stands under appropriate number before 14.00

SESSION 1 – Genetic and genomic analysis of traits

Chairman: Dr hab. Maria Siwek, University of Science and Technology, Bydgoszcz, Poland

11.00-11.30 Leading lecture
Methods for detection of single loci effects – challenges and limits
Prof. Tomasz Szwaczkowski, Life Science University, Poznań, Poland

11.30-11.50 Invited speech
Application of population genome methods for identification of genetic background of functional and production traits.

- Dr hab. Artur Gurgul**, National Research Institute of Animal Production, Balice/Kraków, Poland
 11.50-12.10 Invited speech
Genetic background of litter size variability in pigs
Dr hab. Ewa Sell-Kubiak, Life Science University, Poznań, Poland
- 12.20-14.00 *Lunch near Kortowo Lake*, Restauracja Kortowska, Olsztyn, Heweliusza st. 28

SESSION 2 – Effects of single genes/markers on traits/Miscellaneous

Chairman: Prof. Marek Świtoński, Life Science University, Poznań

- 14.00-14.30 Leading lecture
Breeding activities against Johne's disease (Paratuberculosis) in dairy cattle – a promising approach?
Prof. Georg Erhardt, Justus-Liebig University, Giessen, Germany
- 14.30-15.00 Invited speech
Molecular genetics of the QTLs in chicken and cattle
Prof. Alexei Sazanov, Technical University, Genomic Laboratory, Sankt Petersburg, Russian Federation
- 15.00-15.20 Invited speech
Major and candidate genes as genetic markers in selection of horses
Dr hab. Katarzyna Ropka-Molik, National Research Institute of Animal Production, Balice, Poland
- 15.20-16.00 Coffee/tea break
- 16.00-16.20 Invited speech
Genetic background of glycolytic and energetic reactions analyzed on molecular level and the quality of pork
Dr hab. Elżbieta Krzęcio-Nieczyporuk
 University of Humanities and Life Sciences, Siedlce, Poland
- 16.20-16.40 Invited speech
Challenges in DNA/RNA sequencing
Dr hab. Tadeusz Malewski, Institute – Museum of Zoology, Polish Academy of Sciences, Warsaw, Poland
- 16.45-18.00 **POSTER SESSION**
- 18.15-21.30 **WELCOME PARTY near Kortowo Lake**
 Restauracja Kortowska, Heweliusza st. 28
- 21.30 Bus, boarding back to hotels

TUESDAY 03 July 2018

8:00-14:00 REGISTRATION

Attention: all oral presentations for Tuesday should be uploaded to conference computer between 8.00 and 8.45.

SESSION 3 Genetic biodiversity and phylogenetic analysis

Chairman: Prof. Bożena Szafrąńska, University of Warmia and Mazury, Olsztyn

- 9:00-9:30 Leading lecture
*Genetics and metagenomics based conservation efforts for two flagship species: A tale of Bengal tiger (*Panthera tigris tigris*) and giant panda (*Ailuropoda melanoleuca*)*
Dr Sudhanshu Mishra, Wildlife Institute of India; currently at: Sichuan Agricultural University, China
- 9.30-9.50 Invited speech
Single nucleotide polymorphism in studies of marine exploited populations: effects of size selective fisheries
Prof. Roman Wenne, Institute of Oceanology, Polish Academy of Sciences, Sopot, Poland
- 9.50-10.10 Invited speech
Bison in Europe - fall and recovery
Dr hab. Małgorzata Tokarska, Institute of Mammal Biology, Polish Academy of Sciences, Białowieża, Poland
- 10.10-10.20 *Investigation of genetic diversity of indigenous cattle populations in Czech Republic: preliminary study*
Dr Jitka Kyselova, Institute of Animal Science, Prague, Czech Republic
- 10.20-10.30 *Whether the Atlantic cod (*Gadus morhua*) fast adaptation to variable salinity environment and population structure can be determined by alternatively spliced variants?*
Dr Agnieszka Kijewska, Institute of Oceanology, Polish Academy of Sciences, Sopot, Poland
- 10.30-10.40 *Are Polish Arabian horses still “pure Polish?”*
Dr hab. Iwona Głazewska, University of Gdańsk, Faculty of Biology, Poland
- 10:40-11.15 Coffee/Tea break

SESSION 4 Genetic diseases, cytogenetics and animal biotechnologies

Chairman: Prof. Monika Bugno-Poniewierska, University of Agriculture, Kraków

- 11:15-11:45 Leading lecture
Manipulations of genes – facta and myths
Dr hab. Jacek Jura, National Research Institute of Animal Production, Balice/Kraków, Poland
- 11.45-12.05 Invited speech
Fish genome manipulations: advances and applications
Dr hab. Konrad Ocalewicz, University of Gdańsk, Poland
- 12.05-12.25 Invited speech
Biotechnology of chicken and egg
Dr hab. Maria Siwek, University of Science and Technology, Bydgoszcz, Poland
- 12.25-12:45 Invited speech
Defects of the mitochondrial genome in human and canine tumors
Dr hab. Brygida Ślaska, Life Science University, Lublin, Poland
- 12.45-12.55 *Fast and reliable detection of XX/XY leukocyte chimerism in freemartin pigs with the use of droplet Digital PCR (ddPCR) approach*
Dr hab. Izabela Szczerbal, University of Life Sciences, Poznań, Poland
- 12.55-13.05 *Analysis of Hyaluronidase Family genes in horse genome and their association with osteochondrosis*
Prof. Agnieszka Korwin-Kossakowska, Institute of Genetics and Animal Breeding, PAS, Jastrzębiec, Poland

13.15-14.45 **Lunch near Kortowo Lake, Restauracja Kortowska, Heweliusza st. 28**

miniSESSION

Nauczanie genetyki zwierząt w Polsce/Education of animal genetics in Poland

Chairman: Dr hab. Joanna Gruszczyńska, University of Life Sciences, Warsaw

- 14.45-15.15 Leading lecture
Historia, ewolucja i perspektywy nauczania genetyki zwierząt w Polsce
History, evolution and perspectives for education of animals genetics in Poland
Prof. Józef Bieniek, University of Agriculture, Department of Animal Genetics, Kraków
Prof. Stanisław Kamiński, University of Warmia and Mazury, Department of Animal Genetics, Olsztyn
- 15.15-15.30 Discussion
- 15.30 Bus boarding to EXCURSION
- 16.00-18.00 **EXCURSION** "Nicolaus Copernicus in Olsztyn Castle"
- 18.15 Bus boarding, coming back to hotels
- 20.15-20.30 Bus boarding, from hotels to Gala Dinner
- 20.45-23.00 **GALA DINNER** near Krzywe Lake, Restaurant of Hotel OMEGA, Olsztyn, Sielska st. 4A
- 23.00 Bus boarding, back to hotels

WEDNESDAY, 4 July 2018

8.30-11.15 REGISTRATION

Attention: all oral presentations for Wednesday should be uploaded to conference computer between 9.00 and 9.30

SESSION 5 Functional genomics, epigenomics and nutrigenomics

Chairman: dr hab. Izabela Szczerbal, University of Life Sciences, Poznań

- 9.30-10.00 Leading lecture
Functional analysis of differentially expressed genes after feeding pigs with different types of fat and amounts of cDDGS
Dr hab. Maria Oczkowicz, National Research Institute of Animal Production, Balice, Poland
- 10.00-10.20 Invited speech
Pregnancy-Associated glycoproteins family in various mammals
Dr Grzegorz Panasiwicz, University of Warmia and Mazury, Olsztyn, Poland
- 10.20-10.30 *Hepatic DNA methylation and expression profiles upon prenatal restricted diet in three generations of rats*
Dr Joanna Nowacka-Woszuik, University of Life Sciences, Poznań
- 10.30-10.40 *Transcriptome analysis of endometrial changes in the course of equine endometrosis*
Dr Anna Szóstek-Mioduchowska, Institute of Animal Reproduction and Food Research, PAS, Olsztyn, Poland

10.40-11.20 Coffee/Tea break

FORUM - SCIENCE faced to BREEDING PRACTICE

Chairman: Prof. Agnieszka Korwin-Kossakowska, Insitute of Animal Genetics and Breeding, PAS, Jastrzębiec,

- 11.20-11.40 Introductory speech
Genomic revolution in dairy cattle breeding – facts and promises from Polish perspective
Revolucja genomowa w hodowli bydła mlecznego – fakty i obietnice z polskiej perspektywy
Prof. Stanisław Kamiński, University of Warmia and Mazury, Olsztyn
- 11.40-12.10 Invited speech
Implementation of claw health genomic indexes in France
Zastosowanie indeksów genomowych dla zdrowotności racic we Francji
Dr Amelie Vallee, Genes Diffusion Ltd., France
- 12.10-12.40 Invited speech
Osiągnięcia genetyki populacji i ich aplikacja do praktyki hodowlanej bydła mlecznego
Achievements of population genetics and their application in practice of dairy cattle breeding
Dr hab. Tomasz Strabel, Life Science University, Poznań,
Genetic Centre, Polish Federation of Dairy cattle Breeders and Milk Producers,
Poznań, Poland
- 12.40-13.10 **OPEN DISCUSSION**
- 13.10-13.20 Best poster/oral presentation - ZLOTY RUMAK Award (*sponsored by Polish Society of Genetics supported by selected Sponsors*)
Announcement on next conference organizer (2022)
CLOSING THE CONFERENCE - Prof. Stanisław Kamiński
- 13.30 – 15.00 **Lunch near Kortowo Lake, Restauracja Kortowska, Heweliusza st. 28; Distribution of travel food packages**