



UNIVERSITY OF AGRICULTURE
IN KRAKOW



NARODOWA AGENCJA WYMIANY AKADEMICKIEJ

Slovak University of Agriculture in Nitra
Faculty of Agrobiolgy and Food Resources
Department of Animal Genetics and Breeding Biology
Faculty of Biotechnology and Food Sciences
Department of Food Hygiene and Safety



Internship:
**“Introduction to genetic identification of animals
using low and high density data”
within
‘CULTURAL HERITAGE OF SMALL HOMELANDS’ project
under the
Polish National Agency for Academic Exchange
International Academic Partnerships**

Nitra, 03 – 05 March 2019

Programme

03 March 2019 (Sunday)

Arrival to Nitra

check in at the A. Bernolak dormitory, Tr. A. Hlinku 38 949 01, Nitra

04 March 2019 (Monday)

Tr. A. Hlinku 2, Nitra, *FAPZ, Pav. T, 1st Floor, room AT-13*

- 9:00 – 9:30 Kasarda, R. - Introduction: evaluation of levels of diversity
9:30 – 10:30 Moravčíková, N. - Analysis of diversity based on microsatellites
10:30 – 11:00 Coffee break
11:00 – 12:00 Moravčíková, N. - Computers exercises: practical analysis of diversity based on microsatellites
12:00 – 13:00 Lunch
13:00 – 14:30 Moravčíková, N. - Analysis of diversity on genome-wide level using SNP markers
14:30 – 15:00 Coffee break
15:00 – 16:00 Židek, R. - From identification to authentication
Concluding remarks and awarding of participants
16:00 – 16:30 Hernik, J. and Walczycka, M. - Actions planned and summary

05 March 2019 (Tuesday)

Departure



- Place** Nitra, Slovakia
- Organizer** Department of Animal Genetics and Breeding Biology and Department of Food Hygiene and Safety, Slovak University of Agriculture in Nitra
- Instructors** Doc. Ing. Radovan Kasarda, PhD.
Doc. Ing. Radoslav Židek, PhD.
Ing. Nina Moravčíková, PhD.
- Content** The Aim of the Internship is a basic introduction to a number of topics and common research tools used in analysis of genotyping data. Topics include: basic manipulation with low- and high-density genotyping data, genetic characterization of AnGR, population structure, relatedness, and impact of selection on genome architecture. The main focus will be on livestock, but all of the applied methods and bioinformatics tools are applicable for many other species, including plants. Lecture will be combined with hands-on computer exercises mostly using MS excel, R and command line-based programs.
- Time and place** The Internship will take place on 4 March, 2019 at the Department of Animal Genetics and Breeding Biology, SUA in Nitra, Tr. A. Hlinku 2, 949 76 Nitra. All lectures and exercises will take place in meeting room of the Department of Animal Genetics and Breeding Biology (main building, pavilion T, first floor).
- Laptop** You should bring a laptop to the course. For the course participants the Dropbox cloud will be created to download instructions for install R software environment and other necessary programs and data.