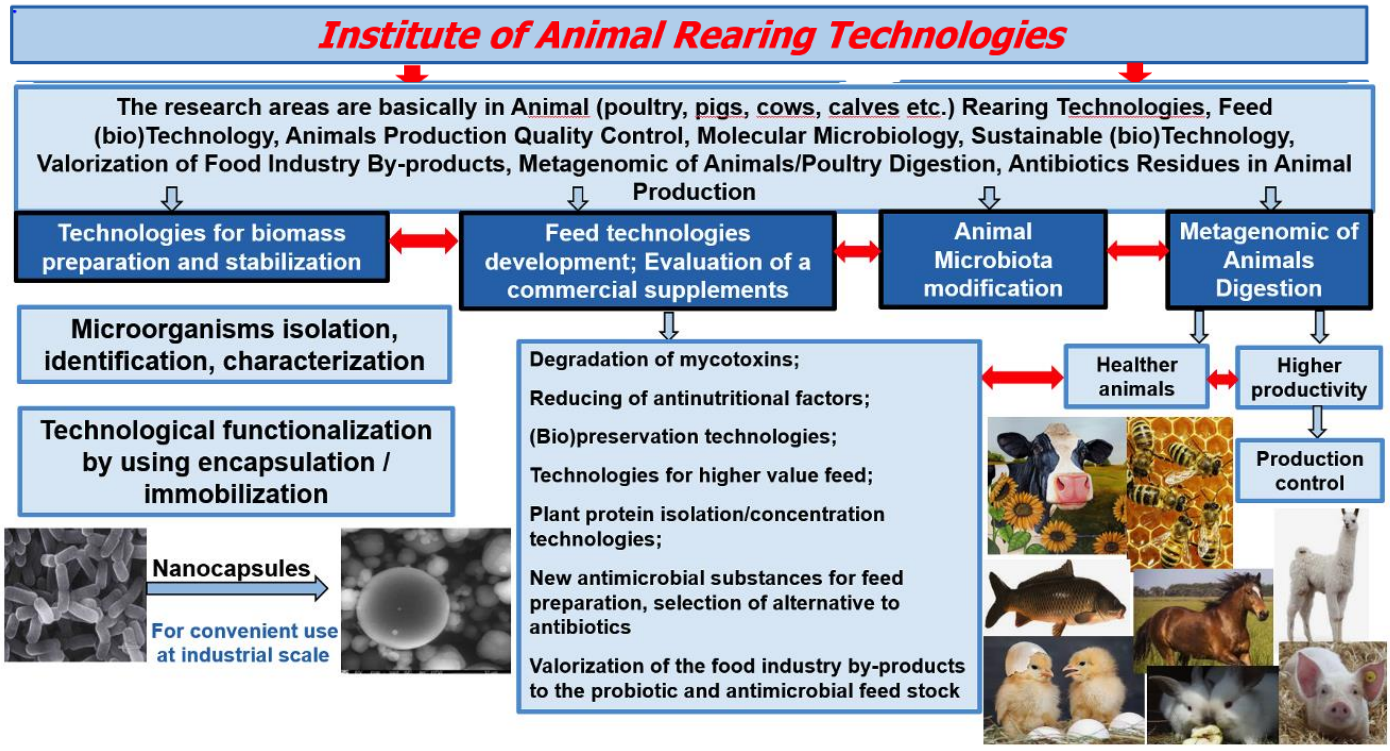
BOVA intensive Bachelor and Master course

Practical technologies for the small animal farm systems – from animal rearing to production processing

Venue: Lithuania, Kaunas, Lithuanian University of Health Sciences, Veterinary Academy, Faculty of Animal Sciences, Institute of Animal Rearing Technologies

Take a part in a BOVA course and get international experience!

Please register online: https://www.bova-university.org/form/bova-mobility-registration-form
Registration deadline: **March 31th, 2022**



The main aim of the course is to provide knowledge and practices for bachelor and master level students about the animal rearing technologies in small farm systems, as well as the possible preparation technologies for animal production processing to high quality products.
During this course students will be practically able to settle the scope on animal production and quality of products "**from farm to fork"**.

Number of credits in ECTS (number also depends on distance learning part) **3**

Course period: Distance learning part 04 04 2022 – 08 04 2020
Meeting in person 02 05 2022 – 06 05 2022

Lectures will take about **10%** of the course time, **practical works** – **60%**, **group work** – **30%**. At the end of the course students will make poster presentations of their group work as a course evaluation on the selected topic during distance learning part along with the group work during the course.

Following topics of the work program are intended:

Welcome (specification of course objectives, discussion of working agenda, project works)

Challenges associated with the animal rearing technologies in small farms. Practical technologies for the small animal farm systems – from animal rearing to production processing. Innovations in meat products processing at Latvia University of Life Science and Technologies: The new processing technology for fresh meat – high hydrostatic pressure; Meat shelf life extension possibilities – herbal extracts, lactic acid bacteria culture, active packaging; Wet/fresh and dry aged meat – possibilities and changes of quality (chemical composition, microbiological, physical). Milk quality assurance and control. The breeds, varieties and production of alpaca‘s and llama‘s. Identification of active components and assessment potential health benefits of honey bee products. Aquaculture in small farms. Achievements and problems. Effect of lactobacillus and essential oils on sheep meat quality parameters.

Following practices are intended: Practices on raw material, meat, milk quality evaluation and products preparation - LSMU VA Laboratory of Institute of Animal Rearing Technologies. Eggs quality evaluation. Preparation of the eggs and meet based added value food products. Analysis of fatty acids, haptoglubin and progesterone in cows milk. Honey bee products quality evaluation. Evaluation of the different fish meat quality parameters, preparation of the fish based foods. Comparative analysis of pork from organic and industrial farms. Influence of different factors (high hydrostatic pressure, activ packaging, herbal extracts) on meat and meat products quality. Quality parameters analysis, presentation and discusion. Microbiological quality and safety of animal products: raw materials, production of dairy and meat products and shelf-life evaluation. Possibilities of novel processing technologies to reduce microbial contamination in animal products. Rapid methods for microbial contamination detection in small animal farm systems with regards to food processing. Data analysis, poster preparation.

SCHOLARSHIP INFORMATION: Students from NOVA and BOVA universities can participate for free, they are advised to contact the local Nordplus coordinators and apply for Nordplus Express Mobility grants to cover accommodation and travel costs.

Final assessment of student achievements: **Poster preparation and presentation**

Detailed course programme

Sunday, May 1, 2022
Arrival, registration.
Monday, May 2, 2022
Coffee
Welcome – LSMU VA Dean of the Faculty of Animal Sciences Assoc. Prof. Dr. Rolandas Stankevicius, Prof. dr. Elena Bartkiene (Professor at Department of Food Safety and Quality and Chief Researcher and Head of Institute of Animal Rearing Technologies).
Welcome (Objectives of the course, discussion of working agenda, project works)
Lectures
1. Innovations in meat products processing at Latvia University of Life Science and Technologies: The new processing technology for fresh meat – high hydrostatic pressure; Meat shelf life extension possibilities – herbal extracts, lactic acid bacteria culture, active packaging; Wet/fresh and dry aged meat – possibilities and changes of quality (chemical composition, microbiological, physical) (Assoc. prof. dr. Ilze Gramatina, LLU).
2. Rapid methods for microbial contamination detection in small animal farm systems with regards to food processing (Assoc. prof. dr. Asnate Ķirse-Ozolina, LLU).
Lunch
Laboratory practice
Eggs quality evaluation. Preparation of the eggs based food products. Data analysis, poster preparation. (dr. Dovile Klupsaite)
Tuesday, May 3, 2022
Coffee

Lectures

1. Milk quality assurance and control (dr. Ramutė Mišeikienė, dr. Saulius Tušas, LSMU)
2. Milk quality evaluation. Data analysis, poster preparation (dr. Ramutė Mišeikienė, dr. Saulius Tušas, LSMU)

Lunch

Laboratory practice: Analysis of fatty acids, haptoglubin and progesterone in cows milk. Data analysis, poster preparation (Lectors dr. Vytautė Starkute, Egle Zokaityte, Ernestas Mockus, LSMU)

Laboratory practice: Microbiological quality and safety of animal products: raw materials, production of dairy and meat products and shelf-life evaluation. Possibilities of novel processing technologies to reduce microbial contamination in animal products (Assoc. prof. dr. Asnate Ķirse-Ozolina, LLU).

Wednesday, May 4, 2022

Coffee

Lectures

The breeds, varieties and production of alpaca‘s and llama‘s (dr. Vilija Buckiūnienė, LSMU)

Lunch

Lectures

Identification of active components and assessment potiantial health benefits of honey bee products (Assoc. prof. Agila Daukšienė, LSMU)

Laboratory practice

Honey bee products quality evaluation. Data analysis, poster preparation. (assoc. prof. Agila Daukšienė, dr. Jolita Klementavičiūtė, LSMU)

Thursday, May 5, 2022

Coffee

Lectures

Aquaculture in small farms. Achievements and problems (lect. Mindaugas Paleckaitis, LSMU)

Lunch

Laboratory practice

Evaluation of the different fish meat quality parameters, preparation of the fish based foods. Data analysis, poster preparation (lect. Mindaugas Paleckaitis, junior researcher Sonata Šidlauskienė, LSMU)

Comparative analysis of pork from organic and industrial farms. Data analysis, poster preparation. (prof. dr. Asta Racevičiūtė-Stupelienė, assoc. Prof. dr. Vilma Viliene, PhD student Monika Nutautaitė, LSMU)

Friday, May 6, 2022

Coffee

Lectures

Effect of lactobacillus and essential oils on sheep meat quality parameters (dr. Vilija Buckiūnienė)

Evaluation of Morphological and carcass Traits in Rabbits (assoc. prof. dr. Vilma Vilienė, PhD student Monika Nutautaitė, LSMU)

Lunch

Presentation of student projects - posters.

Questions and assessment of the course.