



BOVA intensive Bachelor and Master Course

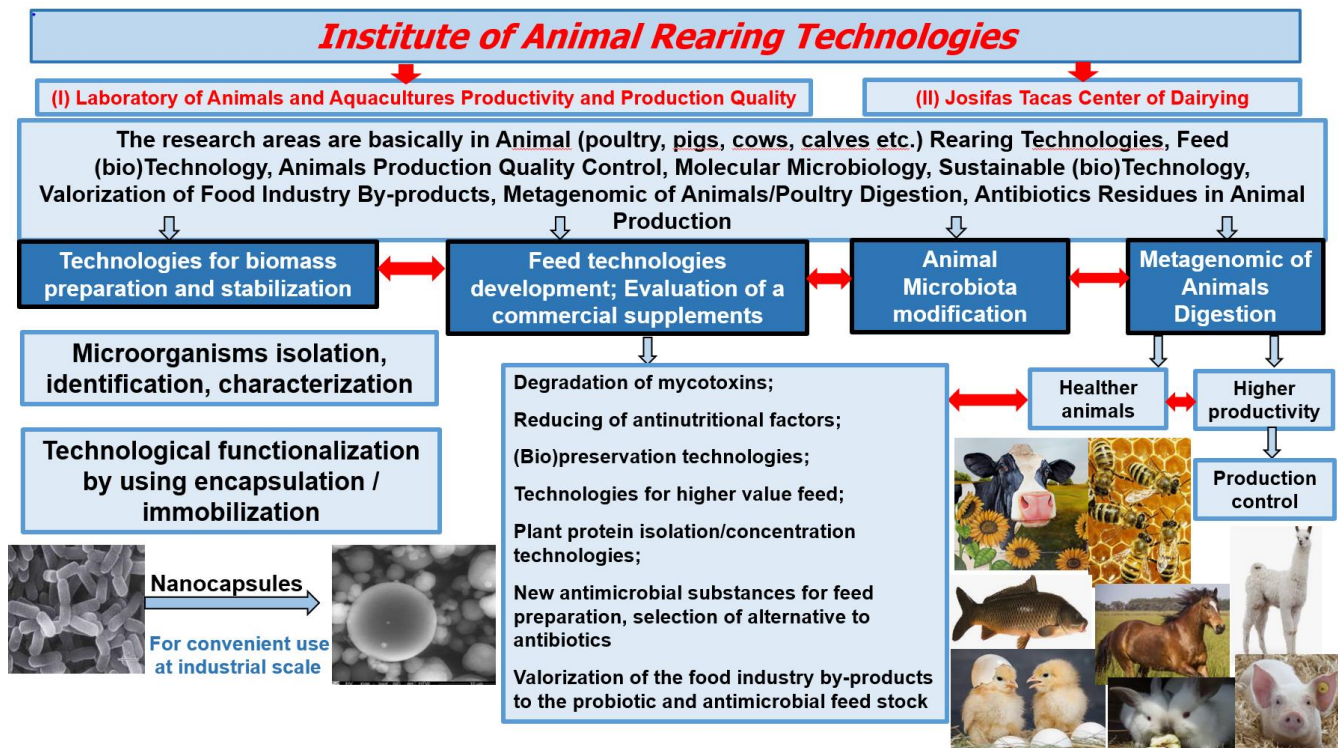
Practical technologies for the small animal farm systems – from animal rearing to production processing

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: <http://bova-university.org/>

Registration deadline: 24.04.2020



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 **24.04.2020 – 08.05.2020**
Meeting in person **11.05.2020 – 15.05.2020**

Lectures will take about **40%** of the course time, **practical works – 30%**, **excursions – 20%**, **group work – 10%**. 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. Agar-immobilized basil–lactobacillus (bio)products as goat milk taste-masking agents and natural preservatives for the production of unripened goat cheese. 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 Animal Productivity and Laboratory of Meat Characteristics and Quality Assessment. Eggs quality evaluation. Preparation of the eggs based food products. Analysis of fatty acids, haptoglobulin and progesterone in cow milk. High quality unripened cows cheese preparation. 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, active packaging, herbal extracts) on meat and meat products quality. Quality parameters analysis, presentation and discussion. 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.

Following excursions are intended: "KG Group" company, SE "Pieno Tyrimai", Alpaca's Farm, Aquaculture Farm.

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 10, 2020

Arrival, registration.

Monday, May 11, 2020

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, Latvia University of Life Sciences and Technologies).

Lunch

Laboratory practice

Eggs quality evaluation. Preparation of the eggs based food products. Data analysis, poster preparation. (dr. Dovile Klupsaite, dr. Jolita Klementavičiūtė)

Tuesday, May 12, 2020

Coffee

Lectures

1. Antimicrobial supplements for dairy cows feeding - milk yield increasing and healthy parameters improving (Lector dr. Vita Lélé)
2. Milk quality assurance and control (dr. Saulius Tušas, dr. Ramutė Mišeikienė, LSMU)
3. Agar-immobilized basil–lactobacillus bioproducts as goat milk taste-masking agents and natural preservatives for the production of unripened goat cheese (Lector prof. dr. Elena Bartkienė, LSMU)

Excursion to SE "Pieno Tyrimai" (dr. Saulius Tušas, dr. Ramutė Mišeikienė, LSMU)

Lunch

Laboratory practice: Analysis of fatty acids, haptoglobulin and progesterone in cows milk. High quality unripened cows cheese preparation. Data analysis, poster preparation (Lectors dr. Jolita Klementavičiūtė, dr. Vita Lélé, dr. Vytautė Starkutė, Paulina Zavistanavičiūtė, LSMU)

Wednesday, May 13, 2020

Coffee

Lectures

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

Excursion to Alpaca's farm organised by dr. Vilija Buckiūnienė (LSMU)

Lunch

Lectures

Identification of active components and assessment potential 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, LSMU)

Thursday, May 14, 2020

Coffee

Lectures

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

Excursion to Aquaculture farm by 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, LSMU)

Comparative analysis of pork from organic and industrial farms. Data analysis, poster preparation (prof. dr. Asta Racevičiūtė-Stupelienė, LSMU)

Friday, May 15, 2020

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, LSMU)

Lunch

Presentation of student projects - posters.

Questions and assessment of the course.