## **Bilateral projects**

Functional and morphological development of proventriculi in young ruminants Investigator for APRC Nitra: MVDr. Rudolf Žitňan, DSc.

The objective of the project is to gain new information about morphological and functional development of proventriculi and intestinal tract, aimed mainly at the mechanisms of development of the function and structure of mucosa in rumen and intestines.

Occurrence, regulation and transport-physiological importance of vacuolar H-ATPase in rumen epithelium of sheep and cattle

Investigator for APRC Nitra: MVDr. Rudolf Žitňan, DSc.

The project is aimed at molecular identification, immunolocalization and functional activity of ATPase in rumen epithelium of ruminants depending on different levels of nutrition.

Projects within bilateral and multilateral cooperation per order of foreign partner

Estimation of optimum amino acid ratios for growing pigs fed low-protein diets Investigator for APRC Nitra: MVDr. Soňa Nitrayová, PhD.

The objective of the project is to compare the growth production and nitrogen retention in young growing pigs fed conventional diets and low protein purified diets, and to determine optimum ratio of individual amino acids in low protein diets.

Study of exogene phytase influence (RONOZYME NP) on exploitation of nutrients in pig

Investigator for APRC Nitra: MVDr. Soňa Nitrayová, PhD.

The objective of the project is to determine influence of different kinds of phytase on ileal and total digestibility of phosphorus and calcium in selected pig categories, and on concentration of phosphorus in faeces and in blood.

## Substantial equivalence of GM maize and its testing in model animals

Investigator for APRC Nitra: Ing. Mária Chrenková, PhD.

The project is aimed at gaining new information about efficiency of animals and quality of production as well as about safety of foodstuffs produced from animals that consume GM maize in complete feed mixtures during the whole fattening.

## Determination of apparent and real ileal digestibility of amino acids in basal diet observing mutual leucin and tryptophan interaction

Investigator for APRC Nitra: MVDr. Soňa Nitrayová, PhD.

The objective of this project is to determine ileal digestibility of amino acids in diet for gilts.