

## **SCIENTIFIC PROJECTS IMPLEMENTED BY THE DEPARTMENT:**

Research work at the department is mainly carried out on grant research projects commissioned by the Ministry of Agriculture of the Republic of Kazakhstan and the Ministry of Education and Science of the Republic of Kazakhstan.

Over the past 10 years, employees of the department have carried out more than 10 scientific projects.

- «Development of environmentally safe complex preparations aimed at correcting intestinal biocenosis and increasing the resistance of the animal body» 2013-2015. MES RK.
  - «Identification of pasteurellosis pathogens based on genomic strains isolated on the territory of the Republic of Kazakhstan» MES RK 2013-2015.
  - «Ensuring the microbiological safety of food products from emerging infections» carried out within the framework of the state order of the Ministry of Education and Science of the Republic of Kazakhstan for 2015-2017.
  - «Biotechnology for the production of innovative biological products against enteroinfections of farm animals and birds» MES RK 2015-2017.
- «Identification of pathogens of leptospirosis based on genomic strains isolated on the territory of the Republic of Kazakhstan» MES RK 2015-2017.
- «Development of technology for the production of the probiotic drug “Enterokol” and the creation of its pilot industrial sample» of the Ministry of Education and Science of the Republic of Kazakhstan for 2018-2020.
- «Study the epizootological characteristics of the country’s territory for especially dangerous diseases and develop veterinary and sanitary measures to increase their effectiveness» for task No. 3: «Study the epizootological characteristics of the country’s territory for animal leptospirosis and develop veterinary and sanitary measures to increase their effectiveness» 2021-2023. Ministry of Agriculture of the Republic of Kazakhstan.
- «Study the epizootological characteristics of the country’s territory for particularly dangerous diseases and develop veterinary and sanitary measures to increase their effectiveness» for task No. 3: «Study the epizootological characteristics of the country’s territory for animal listeriosis

and develop veterinary and sanitary measures to increase their effectiveness» 2021-2023. Ministry of Agriculture of the Republic of Kazakhstan.

- AR19680173 «Development of technology and substantiation of the safety of synbiotics for aquaculture based on Kazakh minerals (zeolite, vermiculite) and probiotic strain (E.coli39-SN)» Ministry of Education and Science of the Republic of Kazakhstan 2023-2025.

- AP19677719 «Development of a domestic probiotic preparation based on associated strains of lactic acid bacteria to enhance the immune system in young farm animals» Ministry of Education and Science of the Republic of Kazakhstan 2023-2025.