



Jelena Begovic

Acting Director

Institute of Molecular Genetics and Genetic Engineering

<http://www.imgge.bg.ac.rs>

Bilateral Meetings

- (11:30 - 15:00)

Description

Institute of Molecular Genetics and Genetic Engineering (IMGGE), University of Belgrade is a leading institution in the country in the field of molecular genetics research. Along with basic research, IMGGE intensified activities directed towards the application of knowledge and research results in human and veterinary medicine, agriculture, food industry, pharmaceutical industry and environmental protection. Set as one of the strategic goals, IMGGE will provide an inspiring environment for the development of innovation. Since its foundation IMGGE seeks to encourage creativity among its researchers and thereby further increase the quality of its scientific research. For past five years IMGGE through various activities motivates researchers and creates awareness of the importance of intellectual property and the process of technology transfer in the development of innovations. Innovation should become an integral part of all activities within IMGGE. This process should contribute to long-term networking with leading national and international research and development institutes and companies. Technology transfer and innovation should in the future provide additional funding for the research and development of IMGGE.

Organization Type

University

Organization Size

101-250

Email

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Country

Serbia

City

Belgrade, Vojvode Stepe 444a [Google map](#)

Areas of Activities

agriculture

Offer

DEVELOPMENT OF INNOVATIVE PROBIOTICS FOR ANIMALS

Introduction of beneficial microorganisms through the food has a positive effect on the health of humans and animals. While the use of probiotics for humans is widespread, the use of probiotics in livestock and accompanied animals is still negligible. The increased interest in the use of probiotics for animals was driven by tighter European regulations on the use of antibiotics in livestock production. Therefore, probiotics are considered adequate alternative when it comes to intestinal infections in domestic animals, especially in the period from birth to weaning. In addition, recent studies reported that use of probiotics can be useful for prevention and treatment of various non-communicable diseases. Therefore, Laboratory for Molecular Microbiology, Institute of Molecular Genetics and Genetic Engineering (LMM-IMGGE), University of Belgrade, is dedicated to development of novel probiotics for animals based on natural isolates of lactic acid bacteria. The ultimate goal is production of innovative standardized probiotics for animals in the prevention and treatment of various diseases in animals. We look for partners in the field of livestock production and small veterinary practice, as well as for distributors for innovative probiotics from all countries in the Balkan region.

Keywords: animal health

Cooperation Offered

1. License agreement
2. Technical co-operation

Cooperation Requested

1. Investment/Financing
2. Sales / Distribution
3. Manufacturing agreement

Offer

COMPREHENSIVE GENETIC TESTING OF BEEF CATTLE

Our aim is to introduce new technology in DNA sequencing in the process of animal breeding, which would include an analysis of a large number of genetic markers related to the origin (paternity), hereditary diseases, quality of meat and milk and fertility. This innovative approach will accelerate the program of positive selection in cattle breeding which would lead to the overall improvement of the genetic potential of the cattle population in the region, improvement of breeding programs, rapid development of animal husbandry and development of commercial capacities related to milk and meat production. We look for veterinarians and stockbreeders and cattle breeding organizations from all countries in the Balkan region in order to apply for common projects (Cross-border calls, Danube initiative etc).

Keywords: cattle breeding genetic testing

Cooperation Offered

1. Technical co-operation

Cooperation Requested

1. Investment/Financing

Offer

DEVELOPMENT OF NOVEL ANTIMICROBIAL AGENTS, BIOCATALYST AND BIOPOLYMERS

Microorganisms have been unmatched source of compounds for drug discovery, as well as enzymes for biocatalytic applications, and they continue to deliver new scaffolds and leads to the fields of medical and industrial biotechnology. The therapeutic areas of infectious diseases and oncology have benefited from abundant scaffold diversity in microbial natural products, as they have continued to enter clinical trials or to provide leads for compounds that have entered clinical trials. The use of bacteria and/or their enzymes in industry, besides beneficial economical aspects, could also improve the sustainability of our industry and our environment. Biocatalysis offers beneficial solutions to the problems of synthesis of fine chemical in an efficient and environmentally benign manner. The characteristics of bio-based polymers and their ability to achieve improved functionalities that surpass those of fossil-based ones, offers opportunities to expand market applications for biopolymers far beyond the current state-of-art. Our Laboratory for Microbial Molecular Genetics and Ecology, IMGGE is continuously discovering and developing new small molecule drug candidates, biocatalysts and bacterial biopolymers with advanced functionalities from microbial resources for high performance applications. We offer to develop and deliver novel bioactive compounds, biocatalysts and biomaterials originating from in-house laboratory collection, as well as other microbial resources with the aim to improve people's lifestyle and environment.

Antimicrobial agents - novel agents with new structures that overcome resistance and prevent formation or disrupt preformed biofilms.

Novel biocatalysts - development of novel biosynthetic routes which overcome problems in synthesis of fine chemicals (chemical or pharmaceutical industry).

Natural polymers - discovery of novel biomaterials from bacteria and functionalization of bioplastics and nanocellulose.

Keywords: bioactive compounds Antimicrobial agents biocatalysts Natural polymers

Cooperation Offered

1. Technical co-operation
2. Other

Cooperation Requested

1. Investment/Financing
2. Other