NACIONALNI INŠTITUT ZA **BIOLOGIJO**
NATIONAL INSTITUTE OF **BIOLOGY**

Young researcher – PhD student (Research on biology and persistence of microbes in environment)

We are announcing a position for young researcher who will be included in a dynamic and globally recognized group of virologists and molecular biologists.

About the Institute

National Institute of Biology (NIB) is the largest Public Research Institution for Life Sciences in Slovenia. The basic activity of the Institute is basic, developmental and applicative research in the fields of biotechnology, biomedicine, marine biology, ecology and agriculture.

About the Department

Department of Biotechnology and Systems Biology (FITO) is committed to generate highest quality scientific knowledge about complex biological processes with an emphasis on interactions between pathogens and their hosts. This is achieved using state-of-the-art equipment, inclusion in European infrastructural centers, an established quality control system, and involvement in many European and other international projects. The department is recognized for systems biology using omics approaches, bioinformatics and statistics, research on viruses and bacteria, metrology aspects in life science, and research on genetically modified organisms and therapeutic viruses. Two high-tech spinout companies were founded in last ten years as a result of transferring cutting edge research from the department into biotech applications.

About the Group

At Microbiology unit, we perform research spanning from biology, biodiversity, evolution, epidemiology, and diagnostics of microbes to development and validation of tools for their detection. We use state-of-the art techniques to address different research questions, e.g., quantitative and digital PCR, LAMP, cryo-electron microscopy, high-throughput sequencing and bioinformatics. Our research is focused on plant pathogens and other organisms pathogenic to human and animals, environmental virology and viral ecology (studies of viruses in environmental samples) and development of non-chemical solution for virus elimination from water samples. We are part of European reference laboratory for pests on plants (for viruses and phytoplasmas). Recently, we have established procedures for evaluating antimicrobial agents and testing efficiency of protective equipment. Group is active in national and international projects in biology, epidemiology and microbial identification, e.g. EU projects for monitoring and identification of pathogenic microorganisms in air.

Candidate's profile

We expect from the candidate a desire to explore the unknown, creativity, self-initiative, sound critical judgment and the ability to work in a team. Working in international collaborations requires a good knowledge of the English language. We expect education in biological, microbiological, biochemical, biotechnological or other related fields, and experience in working in a molecular laboratory is desirable.

The candidate will perform research work in laboratories with the most modern research equipment, an established quality system and will be included into international team of researchers. He/she will cooperate in international projects and with the most recognised research institutions in Slovenia and abroad, as well as with high-tech Slovenian and foreign companies that are our partners. Through work and participation in

various workshops, the candidate will gain skills that enable a successful career after graduation, good employability and personal growth, including critical thinking skills, audience-friendly reporting and communication, teamwork, project planning and management, knowledge of the quality system and similar.

The planned research work will connect knowledge from various fields of science, especially virology, biotechnology and bioinformatics. Research will focus on understanding the biology and epidemiology of various pathogens. The work will include analyses with various molecular methods, such as quantitative and digital PCR, high-performance sequencing and others, as well as interpretation of results and development of new effective diagnostic approaches, all with the aim of solving current problems. The training program of the young researcher and the exact content of the PhD project will be finally agreed with the selected candidate.

The young researcher will work at the Department of Biotechnology and Systems Biology in Ljubljana.

Application:

Information: dr. Polona Kogovšek, e-mail: polona.kogovsek@nib.si, phone: 059 23 28 29

Please send the motivational letter, CV and recommendations to: kadrovska.sluzba@nib.si until 17th of June 2021.