

2. PROJECT PARTNERS

Partners in the TRAIN project

[International Centre for Genetic Engineering and Biotechnology \(Trieste, Italy\)](#)

[International Centre for Genetic Engineering and Biotechnology](#) (ICGEB) was established by the United Nations Industrial Development Organisation in 1983 as a unique, autonomous, Intergovernmental Organisation, with biotech labs in Italy, India, and South Africa. 46 state-of-the-art laboratories are operating in Trieste, Italy, New Delhi, India and Cape Town, South Africa that serve to a community of over 65 member states with 22 being enlisted for membership in the near future by the member states. ICGEB laboratories serve to the biotechnology ecosystems worldwide in research, training and technology transfer to industries.

ICGEB researchers explore frontiers in infectious diseases, medical biotechnology, non-communicable diseases, industrial biotechnology, plant biotechnology and biology.

In the field of cardiovascular disease, operates the cardiovascular biology group-lead by Serena Zacchigna PhD exploring mechanisms by which the various cell types are composing the cardiovascular system interact and communicate during development and disease.

Research performed in ICGEB has worldwide implications for improvement of gene and cell-based therapies.



[Jožef Stefan Institute \(Ljubljana, Slovenia\)](#)

[Jožef Stefan Institute](#), JSI, is the leading Slovenian research institute, covering a broad spectrum of basic and applied research in the area of natural sciences, life sciences and engineering. Most of its 960 employees hold a PhD degree. The institute is ranked among the top ten research institutes in Europe. The Department of Knowledge Technologies performs research in advanced information technologies aimed at acquiring, storing and managing knowledge, to be used in the development of an information and knowledge-based society. Established areas include intelligent data analysis (machine learning, data mining, and knowledge discovery in databases), semantic data mining and the semantic web, language technologies and computational linguistics, decision support and knowledge management, while computational creativity is a novel research area. Apart from research in knowledge technologies, mostly based on artificial intelligence methods, IJS also develops applications in envi-

ronmental sciences, medicine and health care, biomedicine and bioinformatics, economy and marketing, linguistics and digital humanities. The Department's Knowledge Technologies research programme has been evaluated as the best research programme in ICT by the Slovenian Research Agency.

The research group of prof. Dr. Sašo Džeroski which directly participated in the Train project consists of approximately 20 researchers and students. The focus of the group is on machine learning and its application to practical problems from environmental and life sciences. The major contributions of the group members to the machine learning are in the areas of relational learning, computational scientific discovery, and the data mining areas of inductive databases and constraint-based data mining. Recent contributions of group members include development of methods for structured output prediction, methods for automated modelling of dynamic systems and development of scientific ontologies.



[Technology Park Ljubljana Ltd \(Ljubljana, Slovenia\)](#)

[Technology park Ljubljana](#) (TPLj) is the largest innovation ecosystem for commercialization of knowledge and technology in south east Europe. In its premises operate over 300 member companies that employ over 1500 people. Members of the TPLj operate in areas of automation, biotechnology medicine, digital media, finance, industrial technologies, information and communication technologies, informatics and telecommunications, creative industries, environment and energy, life sciences, technology consultancy and business support services. Since its beginning in 1995 Technology park Ljubljana grew into major regional technology park, a significant player in the region for growth of small and medium sized businesses.

It acts as an enabler for growth of companies who create new technology-based changes and bring innovation to the global markets. Technology park Ljubljana stretches over 75.000 m² surface area and leads multiple initiatives and projects supporting companies with their growth and innovation such as Scale up initiative, Healthday.si initiative and multiple projects in the scope of EU funded programmes such as this project in the scope of European Union funded Interreg Slovenia-Italy programme- Train: Big Data & Disease Models: Cross-border platform for validated kits for BioTech.

[Experteam s.r.l. \(Venice, Italy\)](#)

[Experteam](#) is a company providing market with customized solutions in the field of molecular diagnostics. It was founded in 1996 by creating innovative molecular biology kits for detection of viruses, protozoa, bacteria and detection of carcinomas and genetic disorders. Experteam provides market with customized solutions in the field of molecular diagnostics in areas such as infertility, oncology, genetic diseases, human virology, environmental and food orientated microbiology and virology. The base of a wide range of products is the molecular detection using the Polymerase Chain Reaction (PCR) with either real-time PCR or gel or capillary electrophoresis. In addition to these techniques Experteam offers also quantitative fluorescence PCR (QF-PCR) kits.



[BioValley Investments s.p.a. \(Trieste, Italy\)](#)

[Biovalley Investments s.p.a.](#) supports SME's operating in bio-hightech in the Alpine Area in particular in the region of Friuli Venezia Giulia and manages the regional cluster in health sector. The purpose of operation of the Biovalley investment is to support the business growth of micro and small companies with the assistance of medium and large companies from the region. Biovalley provides professional business plans and research projects through a provision of consultancy services in 6 biomedical, bio-ICT, biotech, bio high tech sectors. It identifies high growth potentials and synergies with innovative companies in ICT, in particular in the Internet of things in connection to the traditional industries operating in health and well-being.

Biovalley investments closely collaborates with the Business Innovation Center of the region as well as with the Area Science Park – a largest regional research infrastructure based in Trieste and other technology parks in the Alpe-Adria region as well as with the newly built Urban development center built by the Trieste city to boost up growth of companies in the Internet of things (IoT) in the health, welfare and environmental domain.



[Jožef Stefan International Postgraduate School \(IPS\), Ljubljana, Slovenia](#)

[The Jožef Stefan International Postgraduate School](#) (IPS) offers postgraduate studies for Master and Doctorate students since 2004. Education and training programmes are oriented towards solving research and development problems which require a multidisciplinary collaboration. IPS was established by the Jožef Stefan research Institute with the support of key national industry in order to broaden knowledge gained at the uni-



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versity levels and to better master and develop research methods and techniques in natural sciences, »cutting edge« technologies, better understand fast developments and future orientation of the information and communication sciences and technologies, explore advanced knowledge in environmental sciences and ecotechnologies and assist with building excellency in management of the »state of the art« technologies and innovations. The aim of IPS is supporting excellence in basic research, strategic choice of priority development areas, systematic control and permanent innovation of processes and products, increasing economic efficiency and environmental acceptability; support multidisciplinary communication, comprehensive definition of problems and their solving in group work, decision making in uncertain conditions, and long-term oriented strategic planning with emphasis on sustainable development. IPS offers studies in Nanosciences and Nanotechnologies, Information and Communication Technologies, Ecotechnologies, Sensor Technologies.

IPS closely collaborated with other national research partners in particular with the National Institute of Biology (NIB) and the Institute of Metals and Technology (IMT) as well as with numerous partner companies.

Associated partners

[Region Friuli-Venezia Giulia, Italy](#)

[National Institute of Public Health, Slovenia](#)