

**MAIN TOPIC**

Biomedical, in vivo and in vitro diagnostic

**TITLE**

## TRAIN-high throughput screening and big data analysis for innovation

**PROJECT LEADER**

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**PROJECT ABSTRACT**

TRAIN project manages interdisciplinary research based on innovative technologies. The Consortium is composed by 2 Research Centers of Excellence (International Centre for Genetic Engineering and Biotechnology – ICGEB, Institut “Jozef Stefan” – IJS), 1 training institute (High Specialization Institute Josef Stefan - MPS), 1 biomedical SME (Expert Team) and 2 clusters of biotech companies (Biovalley – BVI, Tehnološki park Ljubljana – TPLJ).

TRAIN wishes to combine current expertise in biomedicine and bio-informatics to improve diagnosis and treatment of various diseases (e.g., myocardial infarction, difficult wounds and inflammatory diseases); the expected result is to accelerate transfer from research to industry through the development of kits and service that academic institutions and biomedical companies can exploit for creating new biopharmaceutical products. Specifically, the main objectives and expected outputs are:

1. biological and bioinformatic services for identifying new biomarkers and therapeutic compounds;
2. test tube disease models;
3. validated kits ready for use;
4. technology transfer to biotech companies.

**INNOVATIVE FEATURES & COMPETITIVE ADVANTAGE**

TRAIN is an innovative project, as it combines for the first time two different research areas, cellular biology and machine learning/bioinformatics, to develop services and ready-to-use assays for professionals in the biomedical sector. This interdisciplinary approach is expected to cross-fertilise both the academic and industrial sector, increasing commercialization and exploitation opportunities within throughout the cross-border area.

**MARKET SECTOR & FUTURE COMMERCIAL PROSPECTIVES**

SMEs, clinical professionals, students and researchers, patients and health systems are the main stakeholders of TRAIN. The TRAIN approach can be summarized in three steps: 1. Combining two different scientific fields; 2. Involving SMEs within the Consortium in a case study; 3. Technology transfer of results to companies. The cross-border approach is a key point for gaining a greater scientific, economic and social impact, thanks to the complementary skills involved in the program area.

Results, deliverables and milestones of TRAIN will open novel commercial opportunities for SMEs and industries in the biomedical sector. In particular, TRAIN will offer a list of ready-to-use assays, which could be exploited by local industries and possibly inserted in their pipelines. Additionally, collaborative work from TRAIN partners will be tailored on the need of industries through a global and personalized mapping of enterprises existing within the cross-border territory.

**TARGET MARKET**

International

**PATENTED TECHNOLOGIES**

No

**TRL**

4 technology validated in lab

**FUNDING PROGRAM**

Interreg V-A Italia-Slovenia 2014-2020

**Interreg**

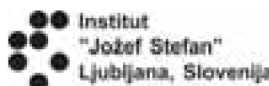


**ITALIA-SLOVENIJA**



**TRAIN**

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**biovalley investments**