

COMPANY PROFILE FORM	
Name	GENOMEDICA SA
Short profile	<p>Genomedica is a molecular diagnostics laboratory specializing in the analysis of human hereditary biomolecules namely, DNA, RNA, chromosomes and proteins in order to detect heritable, disease-related, genetic blueprints for clinical purposes. Such purposes include the prediction of disease risk, identification of carriers, prenatal and clinical diagnosis and/or prognosis. Through state of the art technologies, products and services it will help establish human disease management through genetics.</p> <p>Technologies used include:</p> <ul style="list-style-type: none"> • Karyotyping, FISH, M-FISH, M-BAND • Immunocytochemistry • High throughput sequencing • Array-CGH • Gene expression profiling • MLPA • Real time PCR <p>Gene tests (also called DNA-based tests) is the most sophisticated development in molecular diagnostic methodologies. In gene tests a patient's DNA sample, which can be obtained from any tissue, is examined for mutated, ie. abnormal, sequences. Genetic tests are used for several reasons including:</p> <ol style="list-style-type: none"> 1. Carrier screening, which involves the identification of asymptomatic individuals carrying one copy of a gene for a disease that requires the expression of both genes to be established. 2. Prenatal diagnostic testing 3. Pre-implantation genetic diagnosis, allows couples at risk of conceiving a genetically abnormal fetus to avoid the birth of an affected child without the need for a prenatal diagnosis and selective abortion of an affected fetus. 4. Presymptomatic testing for predicting adult-onset disorders such as cardiovascular disease and also for estimating the risk of developing adult-onset diseases such as cancer. 5. Confirmational diagnosis of a symptomatic individual. 6. Forensic/identity testing, routinely used for positive identification of suspects of crimes as well as crime and catastrophe victims, establishment of paternity and other family relationships etc. <p>Genomedica is ISO 15189 accredited to internationally accepted standards for clinical laboratories and it participates in External Quality Assessment for all aspects of our service. The laboratory offers all the genetic tests available for the aforementioned objectives and it will be able to provide new ones as they are developed in clinical laboratories throughout the world and become available.</p>
Research and Development Activity:	1 Genome Analysis 2 Personalized Medicine 3 Novel Molecular Tests in Complex Diseases
Partner search with activity in the following research areas:	1 Bioinformatics 2 Clinical Genetics 3 Next Generation Sequencing 4 Microarrays

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PARTNER SEARCH FORM FOR PROPOSAL IDEA - GENOMEDICA	
Title:	
Abstract: (max 500 char.)	Biobanks –some times called biorepositories– are key to the future advancement of personalized medicine and human genomic research. Despite their great potential, the development of biobanks in Greece and abroad are still facing numerous and diverse challenges e.g. scientific, technical, financial, legal, regulatory, societal and ethical. Biobanks coupled with the advances in biomedical research is one of the most critical resources required to help accelerate this transformation. Biobanks are defined as the collections of samples of human bodily substances (e.g. cells, tissue, blood, or DNA as the physical medium of genetic information) that are or can be associated with personal data and information about their donors.
Description:	<p>The general belief is that over the next decades, personalized medicine is destined to transform medical care. Already, new diagnostic and prognostic tools are increasing the clinician's ability to predict disease outcomes and drug side effects. Investment in pharmacogenomics through clinical trials is resulting in added focus on the development of targeted therapeutics. Genomic research can aid personalized medicine and serve as an engine to enable an understanding of the interaction between genes, environment, lifestyle and disease. Subsequently this knowledge can be translated into clinical practice through innovative diagnostics, therapeutics and preventative treatment strategies</p> <p>To fully realize this vision of personalized medicine and effectively utilize and the potential of biobanks, researchers and clinicians need access to four critical types of information with the first two being the most important. The first is molecular information, including genomics, proteomics, metabolomics, pharmacogenomics and other high-throughput molecular data. The second is clinical information that includes data contained in medical and laboratory records or in clinical trial records. The third is epidemiology data that includes the data of the distribution of diseases in populations/subpopulations (epidemic or endemic) and of environmental factors that may influence the occurrence of disease. The fourth is demographic data that may include race, age, income, family status, disabilities, mobility (e.g. travel time), nutritional habits, educational achievement, employment status, home ownership and geographic location. The creation and analysis of these types of information have exploded in recent years. The idea is to appropriately annotate and integrate these data types and examine the complex underlying causes and outcomes of diseases that can effectively be revealed and thus personalized treatments realized for the Greek population.</p>
Current Stage of Development:	As a result of the Human Genome Project during the last ten years we have witnessed an explosion of new biobank facilities. So far we can identify five major types of biobank facilities/organizations (for the purpose of this proposal sperm/egg, donated blood, forensic and military/police DNA biorepositories are not included). 1) purely academic 2) non-profit organization 3) governmentally sponsored 4) private industry and 5) pharmaceutical and/or biotechnology company biobanks. As a private diagnostic lab we have sophisticated software and banking capabilities. When we are banking our material for the limited period of time required for medical and diagnostic purposes we are operating under strict certified guidelines of quality and confidentiality.
National Funding Source:	Not applicable
Type(s) of Project:	Not applicable
ORGANISATION THAT IS LOOKING FOR PARTNERS	
Type:	Genomic Diagnostics Laboratory
Size:	SME
Description of activities/other details	1 diagnostic and predictive testing 2 data analysis and association 3 biomaterial handling
TARGET PARTNER ORGANISATION(S)	
Target partner organisation type(s):	1 Academia, hospital, governmental entity 2 Pharma 3 Biotechnology
Target partner expertise sought:	1 Bioinformatics 2 Software Engineer 3 Computational Biology
Application Domain(s):	1 personalized medicine and molecular genetic information 2 epidemiology data and demographic data 3 clinical information including data contained in medical/laboratory records

