Please feel free to contact us and share with us your questions, suggestions, recommendations, briefly and concisely at the email address: cy.biobank@ucy.ac.cy

Proposal Acronym: CY-Biobank
Title of Proposal: Biobanking and the Cyprus Human Genome Project

Project Coordinator: Prof. Constantinos Deltas

EUROPEAN COMMISSION-Horizon 2020 - Research and Innovation Framework Programme
Call: H2020-WIDESPREAD-2014-1-FPA
Funding scheme: Framework Partnership Agreement
Proposal number: 664561
Duration (months): 12

Budget: 460,638 euro

List of participants
1. UNIVERSITY OF CYPRUS, CY
2. MEDIZINISCHE UNIVERSITAT GRAZ, AT (BBMRI.at)
3. BIOBANKING & BIOMOLECULAR RESOURCES RESEARCH INFRASTRUCTURE-EUROPEAN RESEARCH INFRASTRUCTURE CONSORTIUM (BBMRI-ERIC)
4. RTD TALOS LIMITED

Key Personnel of CY-Biobank Partners

C. Deltas, MMRC Director, Project Coordinator
K. Zatloukal, Director BBMRI.at
H. Müller, Senior Scientist, BBMRI.at
J-E. Litton, Director General, BBMRI-ERIC
M. Pasterk, Administrative Director BBMRI-ERIC
C. Schizas, UCY/MMRC Partner

A. Pierides, MMRC Clinical Coordinator
K. Voskarides, MMRC Biobank Coordinator
A. Michaelides, CEO, RTD TALOS LTD
M. Kuthy, Director, RTD TALOS LTD
D. Eliades, Collaborator, RTD TALOS LTD
E. Christofidou, UCY/MMRC Executive Assistant
The clinical and genetic investigations of diseases of the Cypriot population as well as eHealth are a priority of the Smart Specialization Strategy of the Cyprus government. This strategy can best be served by creating a Centre of Excellence (CoE) with two main spear heads: a) A contemporary disease-oriented Biobank and b) a state-of-the-art research facility for developing the Cyprus Human Genome Project.

Biobanks are organized collections of medical records and biological material of all types, serving as repositories and distribution centers, aimed to support biomedical research. Cyprus, as a Low Performing Member State, was the last country that started a Biobank, when 4 years ago we were competitively funded by the European Regional Development Fund & the Republic of Cyprus through the Cyprus Research Promotion Foundation. That project provided €2m for creating a seed infrastructure for genetic disease-oriented Biobanking and for research in inherited kidney diseases. Here, we propose to upgrade the existing small infrastructure and turning it into a CoE with the assistance of Advanced Partners who led a similar operation Europe-wide. Prof. K. Zatloukal, Coordinator of the preparatory phase for Biobanking & BioMolecular Resources Research Infrastructure that recently became an ERIC (European Research Infrastructure Consortium) directed by Jan-Eric Litton (BBMRI-ERIC) located in Graz, Austria. Our previous Biobanking experience is going to serve as a starting point for upgrading MMRC into a larger scale operation of European standard, aimed at leading the Cyprus Human Genome Project, part of which will be the Sequencing of 1000 Cypriot genomes. This CoE will provide the prospects for innovative research and lead Cyprus into the European Research Area.

This TEAMING proposal is going to be implemented in two Stages. The main objective and most important deliverable of Stage 1 project that we have been approved for, is the preparation of a Business Plan where we will describe our most ambitious goals for Big Science in Cyprus, which will be implemented if approved for funding through Stage 2. Briefly our goals for Stage 2, are the following:

1. Upgrading the existing Biobank and Molecular Medicine Research Center (MMRC) into a Center of Excellence (CoE) that will have contemporary capabilities for biobanking and research on monogenic and multifactorial diseases by developing the Cyprus Human Genome Project.

2. Create an outpatient clinic for inviting patients or healthy volunteers to participate in the Biobank and ongoing or future projects. In Cyprus academic medicine is on the start and there is limited capacity for biomedical research, clinical or otherwise. Our CoE will serve the medical community and research in several ways in the next decade and beyond. We aim to hire appropriate personnel of doctors and nurses to engage in recruiting patients. In collaboration with doctors in the private and public sector, patients will be referred to the CoE for advice, counselling and enrolment to the Biobank, upon signing an informed consent form. With help from the Advanced Partners, MMRC will implement an e-Health platform integrating into the public health system and electronic records for global benefit, while it will be a CoE available to the emerging Medical Faculty.

3. Use the Biobanking & research facility for identifying the genetic causes of rare monogenic disorders that remain unknown and also develop case-control and prospective studies, aimed at identifying genetic modifiers of monogenic disorders, taking advantage of the unique characteristics of the Cypriot population and gene pool.

4. In a patient-oriented approach, MMRC aims to determine the genetic mutation load of Cypriots and generate the Cypriot 1000 whole genome project, thus completing the Genetic Map of Cyprus. Analysis of 1000 genomes will set up the basis for future personalized care & diagnostics. This information will be useful to the international community, provided it is followed by prospective studies. The Cyprus Human Genome Project can expand to studies concerned with healthy ageing and discovery of ageing biomarkers, twin studies etc.

5. Create a genomics, bioinformatics and histology studies infrastructure with necessary facilities to serve as an incubator not only for the medical and research community of UCY, the largest in the country, but also for researchers at other Universities, public or private institutions and colleagues from neighboring countries.

6. Work with our Advanced Partners in Graz, Austria, in collaborative research and educational projects of common interest. Common future projects are to be discussed during the Stage 1 action and included in our Stage 2 Business Plan. We aim to benefit from their know-how in preparing the most contemporary facilities for the Cyprus needs, establish effective management, and address Information Communication Technology (ICT) and Ethical, Legal and Social Issues (ELSI), thereby accomplishing safety and confidentiality that will encourage people to see this operation favorably.

In this project, in addition to the Advanced Partners and several external collaborators, several local organizations expressed their interest and support including the Cyprus Directorate General for European Programmes, Coordination & Development, the Ministry of Health, the Cyprus Nephrology Association, the Bank of Cyprus Oncology Center and the Cyprus Alliance for Rare Disorders.
Events/News

Kick-off Meeting

On June 9-10 the Kick-off meeting took place and was successfully completed at the premises of the University of Cyprus, which is the hosting organization of this highly promising research project application. Our Advanced Partners from Graz, Austria, Prof. Kurt Zatloukal, Director of BBMRI.at, accompanied by Dr Heimo Mueller, and Prof. Jan-Eric Litton, Director of BBMRI-ERIC, accompanied by Markus Pasterk, shared with us their enthusiasm about this common endeavour and we discussed issues relating to implementation and development.

On June 10 we had the crescendo of the Kick-off meeting with formal presentations by representatives of the UCY, BBMRI-ERIC, BBMRI.at and RTD TALOS. Importantly, at the conference we had welcoming addresses by the Rector of the UCY, Prof. C. Christofides, the President of the Cyprus Medical Association, Dr P. Agathangelou, and Dr N. Voniatis who represented the Minister of Health. Present at the conference were 50 people, including Dr M. Voniatis, President of the Cyprus National Bioethics Committee, N. Nouris, MP and member of the Parliamentary Health Committee, members of faculty of UCY, representatives of patients organizations and many colleagues. Importantly, His Excellency the Ambassador of Austria Dr Karl Mueller was also present for a large part of the conference, thus expressing his interest in viewing this Cyprus-Austrian collaboration very favourably.

In the photo, some of the participants at the Kick-off meeting during lunch break.
On June 19, the Coordinators of all 31 projects that were funded through Stage 1 of the H2020-TEAMING action were invited to attend a meeting in Brussels. During the meeting we were briefed on major issues relating to what is expected from researchers to include in the Business Plan and the research proposal, with deadlines on May 31 and August 30 2016, respectively. Some financial matters were clarified and it was made clear that every proposal is entitled to seek up to 15m euro from the European Commission, to be used as seed money for realizing the Center of Excellence. It was emphasized that a matching fund and even more is expected to be obtained from local sources, public or private and develop a Center with sustainable nature in the foreseeable future, beyond the completion of funding by the European Commission.

In the photo, the coordinators/collaborators of the 2 (out of 3) TEAMING action programs that were obtained by Cypriot teams, while in Brussels for the Coordinators’ Day.