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**B3Africa – EU Grant**

We are delighted to announce the successful participation of IARC in the B3Africa EU grant application (654404). The Grant will commence in July 2015 and will run for a period of 3 years. BCNet members will have the opportunity to participate and benefit from the B3Africa program and from the training and dissemination activities in particular, the two workpackages being led by IARC.

**B3Africa** (Bridging Biobanking and Biomedical Research across Europe and Africa). The African population has the greatest genomic diversity on the planet and represents an incredible resource of information to advance biomedical research. Together with established European biobanks and the rapidly evolving African biobanks there is an invaluable resource to improve and facilitate the development of better predictive, preventive and personalized healthcare worldwide.

**B3Africa** aims to implement a cooperation platform and technical informatics framework for biobank integration between Africa and Europe. The collaboration will harmonize the ethical and legal framework, biobank data representation and bioinformatics pipelines for sharing data and knowledge among biobanks and allowing access for researchers from both continents. Main actors from the relevant initiatives including Human Heredity and Health in Africa project (H3Africa), European Biobanking and Biomolecular Resources research infrastructure (BBMRI-ERIC) and LMIC Biobank and Cohort Building Network (BCNet) will collaborate in B3Africa to address the following objectives:

- Defining an ethical and regulatory framework for biobank data sharing between Europe and Africa
- Defining data models for representing biobank and research data based on existing best practices, standards and ontologies
- Designing an informatics platform using existing open-source software (with eBioKit and BiBBBox as essential modules) integrating workflows for biobank applications
- Implementation of an education and training system for information and capacity building
- Validating the B3Africa concept with existing biobanks from both continents, B3Africa will provide the critical mass to maximise efficiency in biomedical research, support defragmentation through integration and allow efficient leverage of existing biobanks and e-infrastructures in Europe and Africa. The technical informatics framework will be designed for easy upscaling and integration with other research infrastructures.

**Partners:**

Dr Eric Bongcam, Department of Animal Breeding and Genetics, Sveriges Lantbruksuniversitet, Sweden  
**(Project co-ordinator)**

Prof Jan-Eric Litton, BBMRI-ERIC, Austria

Prof Joakim Dillner, Dr Roxana Merino Martinez, BBMRI-se, Karolinska Institutet, Sweden

Prof Jane Reichel, Centre for Research Ethics and Bioethics, Uppsala Universitet, Sweden

Prof Alan Christoffels, South African National Bioinformatics Institute, University of the Western Cape, South Africa

Prof Moses Joloba, Dr Samuel Kyobe, Makerere University, Uganda

Prof Emmanuel Akin Abayomi, Department of Haematopathology, Stellenbosch University, South Africa

Dr Maimuna Mendy, Laboratory Services and Biobank Group, IARC, France (BCNet)

Prof Steve Kemp, Animal Biosciences Program, International Livestock Research Institute, Kenya

Prof Kurt Zatloukal, Institute of Pathology, Medizinische Universität Graz, Austria (BBMRI.at)

Dr Alashle Abimiku, Lab Diagnostics & Lab Research, Institute of Human Virology, Nigeria (H3Africa)

The **work packages** are as follows:

**WP 1 Ethics and Legal framework for the storage, analysis and sharing of biobank and research data:** will provide a framework of legal and ethical regulations, which enable biobank data sharing under controlled conditions, taking into account different levels of legal protections of data in African countries and in the EU Member States concerned. It will express the ethical and legal issues based on international guidelines for personal data protection and the ethical and legal issues based on laws in the respective African countries. This will be implemented through a data management policy and information model representing biobank data and research data. It will also define the legal and ethical requirements for interaction with the industry.

**WP 2 Integration and Support:** will create the technical framework for the integration of software and hardware to be used in the proof of concept (WP7). The software for biobanking (LIMS) from WP3, bioinformatics analysis (WP4), interfaces between processes and databases and for the training and education system (WP5) will be defined as well as hardware requirements for implementation of the whole platform and integration with external infrastructures.

**WP 3 LIMS in a Box:** will provide the Lab Information Management System (LIMS) to be integrated to the platform (WP2) and used in the proof of concept (WP7).

**WP 4 Bioinformatics:** will provide the bioinformatics framework for the B3Africa project. It will provide guidelines on how to implement bioinformatics analysis pipelines, use and reuse of experimental omics data, how to share datasets and results observing ethics and regulations regarding personal data protection and intellectual data protection based on the regulatory framework provided by WP1. This WP will also identify open-source software, services and e-infrastructures available for bioinformatics analysis pipelines. This WP will reuse and improve the eBioKit from H3Africa project.

**WP 5 Training and Education:** will aim at developing and implementing a package for education and training on the use of the platform, best practices in biobanking, bioinformatics data analysis and data sharing observing ethics and regulations.

**WP 6 Dissemination:** will widely disseminate knowledge about the B3Africa project, the B3Africa informatics platform, and the possibilities it will provide for biobanks and research groups in Africa and Europe. Another major goal of this WP is to build trust among the research community, as a key prerequisite to the adoption of the regulatory framework for biobank data sharing, the guidelines, standards and protocols for biobanking and bioinformatics as well as to stimulate the adoption of the informatics platform implemented for the proof of concept of this project. Another important objective of this WP is to stimulate the participation of researchers in the training and education system provided by WP5 beyond the lifetime of this project.

**WP 7 Use case:** implementation of the platform as a proof of concept. Several partner institutions (including BCNet members) will take part in this use case to test harmonization of ethics and regulations, biobanking best practices (LIMS in a Box), bioinformatics pipelines and education and training in B3Africa platform.

**WP 8 Management:** will deal with the day to day project management issues by the project coordinator and the project manager. Note: audit certificate-related costs are provisioned for all partners under the management section of B3Africa. WP8 will also manage external collaboration with other stakeholders. This task is essential to promote the creation of project clusters where constructive synergies can be achieved.

Training and General Assembly meeting (IARC, Lyon 3-5<sup>th</sup> November 2015)

Plans are well underway for the training and general meeting. Please take note of the following action points and dates

- 1) Submission of names of nominated representatives from each institution (latest 15<sup>th</sup> July).
- 2) IARC will cover the travel and accommodation costs of one participant from each BCNet member institution.
- 3) IARC Coordinator will prepare invitation letters for visa purposes.
- 4) Education and Training Working Group will be contacting you shortly with information about pre-training exercises.
- 5) You will soon be able to access the online biobank training courses which we have established in collaboration with CTRNet and ISBER.
- 6) Each institute will be asked to prepare a short presentation based on the pre training exercises. A template for this will be circulated shortly.