

NEPAD SANBio / BioFISA II Study Tour to Finland

27.11.-5.12.2017



BioFISA II funded projects in health sector:

Name	Butana Mboniswa
Position	Director
E-mail	butana.mboniswa@inqababiotec.co.za
Company/institution background	Inqaba Biotechnical Industries (Pty) Ltd (www.inqababiotec.co.za) A genomics company established in 2002. Inqaba biotec is based in South Africa with subsidiaries in Kenya and Nigeria. We offer core services in DNA synthesis, Sanger Sequencing, Next Generation Sequencing, SNP genotyping and methylation analysis, Bioinformatics solutions as well as Animal genetics.
Product being developed in BioFISA project	International testing of a forensic genotyping prototype kit
Short background of the project	Poor discriminatory performance of existing forensic genotyping kits among African (White, Black, Coloured and Asian) men adds to the injustice of convicting innocent persons or wrongfully releasing perpetrators of rape. This project conception is intended to provide a solution to the poor performance of existing genotyping kits.

Name	Dr Natasha Beeton-Kempen
Position	Senior Researcher
E-mail	nbeetonkempen@csir.co.za
Company/institution background	Council for Scientific and Industrial Research (CSIR) , South Africa (www.csir.co.za)
Product being developed in BioFISA project	A diagnostic kit specific for African strains of Foot-and-Mouth Disease in cattle
Short background of the project	There are several infectious diseases of livestock that are prevalent throughout Africa, and for which there are strains (serotypes) that are only or more commonly found in Africa than elsewhere in the world. For many such diseases there are no commercially available diagnostic kits that are specific for these African strains, despite the fact that these very diseases are responsible for significant losses both economically and in terms of food security for African nations. Foot-and-Mouth disease is one such disease, for which we are developing an African-focused diagnostic kit.

Name	Dr Justen Manasa
Position	Senior Scientist
E-mail	jmanasa@gmail.com
Company/institution background	African Institute of Biomedical Science and Technology / Research and Training Institute with a focus on the sciences of drug discovery and optimization of therapies (Zimbabwe) (www.aibst.com)
Product being developed in BioFISA project	GeneDose EFV, a genotyping and dosing algorithm to help optimize EFV therapy so as to reduce the incidence of EFV induced side effects
Short background of the project	Sub-Saharan Africa is associated with three of the most important infectious diseases in the world, HIV, TB and Malaria. That and an emerging epidemic of non-communicable diseases such as diabetes and hypertension make the management of patients more complicated. Thus there are numerous opportunities in (1) Diagnostics, especially molecular diagnostics and the discovery of biomarkers (2) Drug discovery development and Deployment, (3) Given genetic diversity and disease burden. There are also opportunities to develop tools for the optimization of patient management for safer and more efficacious use of medicine, integrating the principles of precision public health and precision medicine in Africa.

Name	Dr Philippa Jane Randall (married surname Heydenrych)
Position	Research Fellow and Head of Diagnostics Group and Innovation Hub, Lung Infection and Immunity Unit
E-mail	rndphi004@myuct.ac.za
Company/institution background	The Lung Infection and Immunity Unit (LIU, http://lunginstitute.co.za/liiu/), led by Professor Keertan Dheda, is one of the clinical research units encompassed within

	University of Cape Town (UCT) Lung Institute. The LIU seeks to enhance the prevention, diagnosis, and effective management of pulmonary infections including TB. Our mission, through our academic and clinical activities, is to reduce mortality, and improve the health-related quality of life of people with infections associated with poverty (TB, HIV and pneumonia).
Product being developed in BioFISA project	A new test to diagnose tuberculous meningitis (TBM)
Short background of the project	There is lack of effective, sensitive and rapid diagnostics for TB outside of the lungs and one such aggressive form is TBM. The World Health Organisation (WHO) estimates that the largest potential available market worldwide for a TB screening test is 193 million patient evaluations/year, of which 70% (137 million patient evaluations/year) is concentrated in the 22 high-burden countries. Of that 193 million evaluations per year, 18.9 million (15%) relate to extra-pulmonary TB diagnosis.

Name	Thomas Sutcliffe
Position	Product Development Specialist & Programme Manager
E-mail	thomass@lifeassay.com
Company/institution background	Lifeassay Diagnostics (Pty) Ltd (www.lifeassay.com) is a Cape Town-based manufacturer of medical devices, specialising in diagnostics. Whilst our main focus is to manufacture diagnostic tests for government and NGO procurement for the African continent, we are also currently manufacturing OEM products for private customers worldwide
Product being developed in BioFISA project	A rapid and simple field test for the serodiagnosis of bovine brucellosis.
Short background of the project	Brucellosis is a serious neglected tropical disease and is recognized as an emerging zoonosis. Bovine brucellosis occurs throughout Africa and most developing countries worldwide, and bovine brucellosis prevalence reaches 53% in some Southern African regions. The project LifeAssay is involved in commercializes a rapid and simple field test for serodiagnosis of bovine brucellosis. The test is novel and ground-breaking as it is more reliable and better priced than any of the current methods used to detect bovine brucellosis, capable of being performed at the animal's side without need for refrigeration or electricity and provides the user with a result in 15 minutes.

The following two companies were winners in our FemBioBiz competition. FemBioBiz was a regional acceleration programme for women bio entrepreneurs.

Name	Prof. Keolebogile Shirley Motaung
Position	Founder and CEO of Global Health Biotech (PTY) LTD
E-mail	smotaung@gmail.com
Company background	Global Health Biotech (Pty) Ltd. Repair of bone and cartilage continues to be a challenging clinical problem. Unfortunately, use of imported hardware placed the total cost of the procedure in the financially prohibitive region of R50 000 (including surgery costs). The ability of plant based morphogenetic factors implants suggests that they may be used to fulfil the mounting needs of patients suffering from osteoarthritis, degenerative diseases, genetic disorders, non-unions of fractures, and traumatic or post-surgical tissue defects of the skeleton. Global Health Biotech manufactures products such as La-Africa Soother (LAS) and Plant based morphogenetic factor implants (PBMF) which are natural products from medicinal plants. The product offers novel and alternative treatment opportunities for fracture healing, bone and cartilage regeneration and osteoarthritis. La-Africa Soother topical herbal paste (target beneficiaries about 75 %) offers athletes, sportsmen and women an alternative natural anti-inflammatory cream/ointment to treat pain, infection, wound healing, swelling, irritation, injury, inflammation, to stimulate chondrocytes and the expression collagen type 11 which is responsible for tensile strength of articular cartilage. La-Africa Soother topical herbal paste stimulates chondrocytes which makes it different from other competitors who sell herbs and traditional medicines. Their products alleviate pain but do not stimulate chondrocytes formation. The targeted beneficiaries (about 25%) for based morphogenetic factor (PBMF) implants are surgeries that treat orthopaedic, neurology, and periodontal, dental and cranio-maxillofacial patients.
Very short background and market opportunities in your sector	Health care type: 1. Orthopedic: <ul style="list-style-type: none"> • Osteoarthritis of the Hip and Knee • Sports injures • Rheumatoid arthritis

	<ul style="list-style-type: none"> • Knee injuries • Non-unions • Malunions • Trauma • Surgical resection of tumours • Hip replacement <p>2. Periodontal: Periodontal regeneration to prevent loss of teeth and to restore bone</p> <p>3. Dental: Filling of root voids following extraction to promote rapid bone regeneration for titanium implant procedure.</p>
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Name	Stella Gonye
Position	Research Operations Director
E-mail	Stella.gonye@yahoo.com
Company/institution background	Chengie Defluoridation Technologies is an outstanding and leading innovation and research organization in the mitigation of fluorosis in Zimbabwe and other affected Southern African countries, eradicating fluorosis and its effects and creating healthy communities. Fluorosis is a condition caused by consuming water with excess fluoride above 1ppm/mg/l and results in brown stained teeth, skeletal deformities, immune suppression, brain damage, arthritis, cancer cells development and loss of vision. Therefore the company has invented gadgets which remove excess fluoride in water (defluoridation) thereby mitigating the effects of fluorosis in communities in African countries.
Short background and market opportunities in your sector	Due to global warming and droughts affecting Sub Saharan Africa, there has been a rise in fluorosis in communities who consume underground water, these being mainly rural.

The individual below participated in the FemBioBiz Acceleration Programme as a student.

Name	Joyce Fati Masvaya
Position	Chief Executive Officer and Founder
E-mail	Joynet44@gmail.com
Company background (including short intro to your products)	Bionova company is a biotechnology company not yet in existence but the registration of the company is underway. (Zimbabwe) Biogyna – Anticandidiasis vaginal cream made from natural ingredients. The natural ingredients have antifungal properties. Thus Biogyna as a new class of treatment aims to address the current challenge of resistance. A prototype is available and in vitro tests have been done to prove efficacy of the cream.
Very short background and market opportunities in your sector	The global distribution of candidiasis is 75%. In Zimbabwe, the Candidiasis prevalence has increased from 39.9% as of 2010 to 80% as of 2016. Thus in just Harare 816 000 women are affected by candidiasis. Initially targeting 10 000 infected individuals and our potential customers are females. Specifically: <ul style="list-style-type: none"> i. Pregnant women ii. Diabetics iii. Immuno compromised individuals