

MAURITIUS RESEARCH AND INNOVATION COUNCIL (MRIC)

POLE OF INNOVATION GRANT SCHEME (PoIGS)

Project Summary

Title of Project: UoM Pole of Innovation for Health- MRC funded
Hosting Institution: Centre for Biomedical and Biomaterials Research (CBBR), University of Mauritius
Collaborating Institutions/Companies: Cyclotron Réunion Océan Indien (GIP-CYROI), La Réunion - Collaborating institution Axonova Ltd - Collaborating partner Smart Health Ltd - Collaborating partner
Innovation Leader: Dr Archana Bhaw-Luximon (CBBR)
Collaborators: Dr Nowsheen Goonoo - Innovation collaborator (CBBR) Ms Honita Ramphul - Innovation collaborator (CBBR) Ms Itisha Chummun (Ms) - Innovation collaborator (CBBR) Dr Shakuntala Baichoo - Innovation partner (PRE Computational Biology and Bioinformatics, University of Mauritius) Mrs Zahra Mungloo Dilmohamud (Mrs) - Innovation collaborator (PRE Computational Biology and Bioinformatics, University of Mauritius) Dr Anisah Ghoorah - Innovation collaborator (PRE Computational Biology and Bioinformatics, University of Mauritius) Dr Sébastien Bénard - Innovation partner (CYROI, La Réunion) Dr Fanny Gimié - Innovation collaborator (CYROI, La Réunion) Dr Emmanuelle Jestin - Innovation collaborator (CYROI, La Réunion) Dr Imade Ait Arsa Imade - CYROI Technician in Animal facility and Imaging engineering (CYROI, La Réunion) Ms Jessica Andries - CYROI Technician in In vivo and in vitro techniques (CYROI, La Réunion) Mr Vincent Meneyrol - CYROI Technician in Radiochemistry and organic chemistry engineering (CYROI, La Réunion) Mr Fabien Puaud – Financial Manager (CYROI, La Réunion) Dr Maya Cesari - Scientific Manager (CYROI, La Réunion) Dr Fabien Boullé - CEO, Axonova Ltd Dr Amal Bholah - CEO, Smart Health Ltd

Technical Abstract

The National Research Chair programme Biomaterials and Drug Delivery (2012–2017) under the Mauritius Research Council had the merit of setting-up the base for Applied Nanotechnology research. It allowed building of strong research infrastructure previously inexistent. In line with national priorities, the proposed Pole focuses on the application of technology to the health sector with cross-cutting interests in the ocean economy and agriculture through the use of biomaterials from land and marine resources. The Pole aims at developing medical devices for addressing regenerative medicine using nanotechnology and developing computational models for determining the best solutions in the area. The motivation of this Pole is to contribute towards raising opportunity-driven entrepreneurship in Mauritius and aims to function as a model for the creation of other Poles of Innovation to boost our economic development.

Benefits will include:

1. Developing home-grown innovation and techniques through the emergence of possible spin-off companies
2. Contributing towards the emergence of a new high-end economic sector
3. Development of computational models as valuable tools to plan for clinical studies

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Key Words: health sector, biomaterials, nanotechnology, medical devices, computational models