

ONGOING RESEARCH PROJECTS

SAS – Stabilisation and development of formulations for the control release of biopharmaceutical drugs

Summary	The aim of this project is to stabilise and develop formulations for the control release of biopharmaceutical drugs
Funding	UCB BIOPHARMA – Wallonia Region under a grant « Support to Research and Technological Innovation / Aides à la Recherche et à l'Innovation technologique) (2016 – 2020)
Scientific partners	UCB BIOPHARMA - Department of Galenic Pharmacy and Biopharmacy (ULB).
Researcher in charge	Jérôme Hurllet
Period	2015-2020

Swell

Summary The aim of this project is to develop a medical device acting in the lumen of the stomach to treat obesity

Funding [Centaur Clinical](#), France



Scientific partners Centaur Clinical and INRA

Researcher in charge Joachim Caucheteux

Period 2018-2019

NANOpheles – Development of nanovectors for the targeted delivery in Anopheles mosquitoes of agents blocking transmission of Plasmodium parasites

Summary	The objective of NANOpheles is to design polymeric nanovectors for the delivery of antimalarial agents to Plasmodium stages in the mosquito.
Funding	ISGlobal ERA-NET EuroNanoMed III
Scientific partners	Coordinator: Xavier Fernández-Busquets, Fundació Institut de Bioenginyeria de Catalunya (IBEC), Spain ; Partners : Jos Paulusse, University of Twente (UT), The Netherlands Christian Grandfils, Université de Liège (ULg), Belgium ; Krijn Paaijmans, Barcelona Institute for Global Health (ISGlobal), Spain ; Inga Siden-Kiamos, Foundation for Research and Technology– Hellas (FORTH), Greece ; Fatima Nogueira, Universidade Nova de Lisboa, Portugal



Researcher in charge	Chantal Sevrin
Period	01/03/2018 - 28/02/2021

Core-shell polymeric microparticles tailored for regenerative medicine

Summary	This project aimed in the development of biodegradable and biocompatible microparticles functionalized in their surface by layers of nanoparticles in order to better control the adhesion, but also the detachment of stem cells.
Funding	Wallonia – Bruxelles International
Scientific partners	Enikolopov Institute of Synthetic Polymer Materials, Russian Academy of Sciences, Moscow, Russia and Institute for Regenerative Medicine, Sechenov University, Moscow
Researcher in charge	Prof. Christian Grandfils (CEIB) - Dr. Tatiana Demina (Moscow)
Period	01/01/2019 - 31/12/2022

ImproveStem



Summary

Improve-Stem is a research consortium interested in developing an integrated set of tools required for mesenchymal stem cells amplification

Funding

[Interreg V Grande Région](#)

co-funding: [Wallonie](#)



Wallonie

Scientific partners

Coordination : Université de Liège : Prof. D. Toye, Chemical Engineering dpt, Partners : Prof. Ch. Grandfils (CEIB), Prof. Dr. Tobias KRAUS, Innovation Center INM, Germany, Professor Christiane ZIEGLER, Grenzflächen | Nanomaterialien | Biophysik, Germany, Dr. Sivashankar KRISHNAMOORTHY, Luxembourg Institute of Science of Technology (LIST), Prof. Eric OLMOS, LRGP - Laboratoire Réactions et Génie des Procédés, Nancy, France, Dr. Naalia DE ISLA, IMoPA - Ingénierie Moléculaire et Physiopathologie Articulaire, Université de Lorraine, Nancy, France, Dr. Danièle BENSOUSSAN

Unité de Thérapie Cellulaire et banque de Tissus (UTCT), Université de Lorraine, Nancy, France.

Researcher in charge

Romain Vandenberg – Joachim Caucheteux

Period

01/01/2017 - 30/06/2020

Optimisation of biodegradable microcarriers tailored for cell therapy

Summary	This project aimed in the synthesis and surface modification of biodegradable and biocompatible microcarriers for tissue engineering
Funding	FRIA
Scientific partners	Professor Dominique Toye, (co-promotor) Chemical Engineering dpt, Université de Liège
Researcher in charge	Ir. Coralie Rocca
Period	01/10/2017 - 30/09/2021

Development of porous biocomposites for bone tissue engineering

Summary	The aim of this research project relies upon the optimization of calcium phosphate ceramics matrices functionalized at their surface by inorganic and organic gels, for application in the field of tissue reconstruction.
Funding	FRIA
Scientific partners	Professor Stéphanie Lambert, (promotor) Department Chemical Engineering, Université de Liège
Researcher in charge	Ir. Rémi Tilkin
Period	01/10/2016 - 30/09/2020

Optimisation of a synthesis procedure of materials based on aliphatic polyesters by reactive extrusion for medical applications

Summary	Our project aims at the implementation at a pilot scale of the bulk polymerization of new materials based on this aliphatic polyester by reactive extrusion.
Funding	FRIA
Scientific partners	Professor Benoit Heinrichs, (co-promotor) Department of Chemical Engineering, Université de Liège
Researcher in charge	Ir. Nicolas Régibeau
Period	01/10/2016 - 30/09/2020

Bioproduction – Sustainable microbial and biocatalytic production of advanced functional materials

Project coordinated by Prof. Costas Kiparissides, Centre for Research and Technology Hellas / Chemical Process Engineering Research Institute, CERTH/CPERI, Thessaloniki, GREECE

Summary	The present IP aims at the development of novel sustainable bioprocesses for the production of functional bioproducts (polysaccharide-based biosurfactants)
Funding	European Commission
Scientific partners	Since 2010 this collaboration has been extended with FCT Professor Maria Reis and Professor Filomena Freitas, Departamento de Química, Faculdade de Ciências e Tecnologia (FCT), Universidade Nova de Lisboa (UNL), Portugal
Researcher in charge	Diana Araujo
Period	01/10/2006 - 30/09/2010

BioDrugHybrid – Development and Characterization of Inorganic–Polymer Composites for the Delivery of Biopharmaceutical Drugs

Summary	The strategy of this project is to develop inorganic–polymer composites by 3D printing technologies aimed to control the release of biomolecules for bone reconstruction.
Funding	FNRS-CR
Scientific partners	<p>Promoter: Prof. Dr. Christian Grandfils (Interfaculty Research Center of Biomaterials (CEIB) at the University of Liège)</p> <p>Co-Promoter: Prof. Dr. Stephanie Lambert (Department of Chemical Engineering - Nanomaterials, Catalysis, Electrochemistry group (NCE) at the University of Liège)</p> <p>Collaboration: Prof. Dr. Anne Marie Habraken and Prof. Dr. Laurent Duchêne (Material and Solid Mechanics group (MSM) at the University of Liège).</p>
Researcher in charge	PhD Ana Paula de Figueiredo Monteiro
Period	01/10/2019 – 30/09/2022
