



GOAL: to achieve new developments in **Stem Cell-based therapies**, as well as treatment options and diagnostics by **Stem Cell bioprocessing**.

R&D Activities focused on **bioprocess development to cultivate and purify Stem cells/progenitors and their derivatives** targeting their application in **Regenerative Medicine** settings and **toxicology/pharmacological testing**.

SCBL-RM (PI: Joaquim Cabral) main research topics:

1. **Clinical Manufacturing of Stem Cell-based Therapies** (PI: Cláudia Lobato da Silva);
2. **Multi-Scale Strategies for Human Pluripotent Stem Cell Bioprocessing** (PI: Margarida Diogo);
3. **Ex-vivo Gene Therapy for Regenerative Medicine Applications** (PI: Catarina Madeira);
4. **Tailoring Biomaterials to Support Stem Cell Cultivation** (PI: Frederico Ferreira).

Stem Cell Bioengineering & Regenerative Medicine Laboratory

2014-2017: "**CARDIOSTEM**- Engineered cardiac tissues and stem cell-based therapies for cardiovascular applications" MITP-TB/ECE/0013/2013, FCT, MIT-Portugal Program (PI: Lino Ferreira, CNC/BIOCANT / Cláudia Lobato da Silva, IST-IBB)



2014-2015: "**CARDIOSAFER** –Safety and efficacy of intracoronary mesenchymal stem/stromal cell (MSC)-based therapy for myocardial regeneration: a microcirculation study" EXPL/BIM-MED/1970/2013, FCT (PI: Cláudia Lobato da Silva, IST-IBB)



2013-2015: "Induction of Immune Tolerance in Human Allogeneic Hematopoietic Stem Cell Transplantation" HMSP-ICT/0001/2011, FCT, Harvard Medical School – Portugal Program in Translational Research and Information (PI: João Lacerda, IMM / Joaquim Cabral, IST-IBB)



2013-2014: "Development of a novel adoptive cell therapy for leukemia: characterization and optimization of gamma-delta T lymphocytes for clinical application" EXPL/BIM-ONC/0490/2012, FCT) (PI: Bruno Silva Santos, IMM / Cláudia Lobato da Silva, IST-IBB)



Presentation as featured in the information & networking session:

FUNDING AND COOPERATION OPPORTUNITIES IN R&D AND INNOVATION IN HEALTH – SUPPORT INSTRUMENTS FOR R&D INSTITUTIONS, HOSPITALS, ENTREPRENEURS AND COMPANIES.

02 October 2014 | Auditorium of Fundação D. Pedro IV | Lisboa



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2013-2014: "Bioengenharia do esfíncter uretral utilizando células estaminais e matrizes descelularizadas: um modelo *in vitro* para o estudo da incontinência urinária" Bolsa de Investigação Jaba Recordati Urologia 2013 (PI: Paulo Vale, Hospital Garcia de Orta / Cláudia Lobato da Silva, IST-IBB)



2007-2009: "Isolation and *Ex-vivo* Expansion of Human Mesenchymal Stem Cells for the Prevention and Treatment of Graft-versus-host Disease", Portuguese Association Against Leukemia (PI: Cláudia Lobato da Silva, IST-IBB)



2007-2008: "*Ex-vivo* expansion of MSC under GMP (Good Manufacturing Practices) for Cellular Therapy" (8 patients) (PI: Manuel Abecasis, IPOFG Lisboa / Joaquim Cabral, IST-IBB)



Other Collaborations:

