



Robin Siadous, Technician of Research (TCN - Inserm)



Responsibility in lab:

Responsible Molecular Biology Laboratory

Technical expertise:

Cell biology: Primary and Secondary cell culture (MSCs isolation of bone marrow, ASCs from fat and EPCs from blood). Mono and co-culture of cells in 2D and 3D in biomaterials. Cytotoxicity test (MTT/NR, Alamar Blue). Proliferation evaluation (Cyquant) Tagging primary culture by lentiviruses, cell characterization by flow cytometry and development of labeling protocols

Molecular Biology: Development of RNA extraction techniques in a 3D matrix (A.hyaluronique, PUDNA...) RTqPCR. Micro Array

Biochemistry: Protein Assay (technical BCA), Protein Array.

Histology: cryostat and immunostaining of cryosections.

Microscopy: conventional fluorescence microscopy and confocal

Community: Sheets qualities referent staff on cryostat cytometry equipment and multiplate reader. Design of an automated management software frozen cell stock (completion by VBA language computer)

Softwares: Excel, Word, Power point, Graphpad Prism, Cflow software, Image J, Inkscape

Keywords:

- Human cell culture
- 3D culture
- Cytotoxicity
- Molecular Biology
- PCR, RtgPCR
- Protein dosage
- Immunofluorescence
- Histology
- Cryostat
- Confocal microscopy
- Immunostaining
- Bioreactors
- Tissue-engineering
- Bioengineering
- Regenerative Medicine
- Vascular graft
- Bone graft

Selected publications:

- 1- The proangiogenic potential of a novel calcium releasing biomaterial: Impact on cell recruitment. OLIVEIRA H, CATROS S, BOIZIAU C, SIADOUS R, MARTI-MUNOZ J, BAREILLE R, REY S, CASTANO O, PLANELL J, AMEDEE J, ENGEL E. Acta Biomater. 2016 Jan 1;29:435-45.
- 2- In vitro assessment of a collagen/alginate composite scaffold for regenerative endodontics. DEVILLARD R, REMY M, KALISKY J, BOURGET JM, KEROUREDAN O, SIADOUS R, BAREILLE R, AMEDEE-VILAMITJANA J, CHASSANDE O, FRICAIN JC. Int Endod J. 2015 Dec 9.
- 3- Colorectal tissue engineering: A comparative study between porcine small intestinal submucosa (SIS) and chitosan hydrogel patches. DENOST Q, ADAM JP, PONTALLIER A, MONTEBAULT A, BAREILLE R, SIADOUS R, DELMOND S, RULLIER E, DAVID L, BORDENAVE L. Surgery. 2015 .158(6):1714-23.
- 4- Labeling and qualification of endothelial progenitor cells for tracking in the context of tissue engineering : an in vitro study. THEBAUD NB, AUSSEL A, SIADOUS R, TOUTAIN J, BAREILLE R, MONTEBAULT A, DAVID L, BORDENAVE L. IJAO 2015. IJAO-D-1400160R1
- 5- The use of total human bone marrow fraction in a direct 3D expansion approach for bone tissue engineering applications: focus on angiogenesis and osteogenesis. GUERRERO J, OLIVEIRA H, CATROS S, SIADOUS R, DERKAOUI M, BAREILLE R, LETOURNEUR D, AMEDEE J. Tissue Eng Part A. 2015 Mars
- 6- Cell interactions between human progenitor-derived endothelial cells and human mesenchymal stem cells in a three-dimensional macroporous polysaccharide-based scaffold promote osteogenesis. GUERRERO J, CATROS S, DERKAOUI SM, LALANDE C, SIADOUS R, BAREILLE R, THEBAUD N, BORDENAVE L, CHASSANDE O, LE VISAGE C, LETOURNEUR D, AMEDEE J. Acta Biomater. 2013, 2013, (9):8200-13.
- 7- Composition and properties of silver-containing calcium carbonate-calcium phosphate bone cement. JACQUART S, SIADOUS R, HENOCQ-PIGASSE C, BAREILLE R, ROQUES C, REY C, COMBES C. J Mater Sci Mater Med. 2013, 24(12):2665-75.
- 8- Development of an injectable composite for bone regeneration. S JACQUART, A BELIME, C PIGASSE, R SIADOUS, M FATNASSI, S TADIER, R AUZÉLY-VELTY, S GIROD-FULLANA, R BAREILLE, C ROQUES, N EL KISSI, F ANAGNOSTOU, A BIGNON, D CORDIER, C REY, F BROUILLET, J AMÉDÉE, H GALLIARD, C COMBES. IRBM: Volume 34, Issue 2, April 2013, Pages 176–179 (Revue)
- 9- A nano-hydroxyapatite - Pullulan/dextran polysaccharide composite macroporous material for bone tissue engineering. FRICAIN JC, SCHLAUBITZ S, LE VISAGE C, ARNAULT I, DERKAOUI SM, SIADOUS R, CATROS S, LALANDE C, BAREILLE R, RENARD M, FABRE T, CORNET S, DURAND M, LEONARD A, SAHRAOUI N, LETOURNEUR D, AMEDEE J. Biomaterials 2013; 34:2947-2959.

- 10- Physicochemical modulation of chitosan-based hydrogels induces different biological responses: Interest for tissue engineering. L. RAMI, S. MALAISE, S. DELMOND, JC. FRICAIN, R. SIADOUS, S. SCHLAUBITZ, E. LAURICHESSE, J. AMEDEE, A MONTEMBAULT, L. DAVID, L. BORDENAVE. JBMR part A 2013
- 11- Strontium-loaded mineral bone cements as sustained release systems: Compositions, release properties, and effects on human osteoprogenitor cells. S TADIER, R BAREILLE, R SIADOUS, O MARSAN, C CHARVILLAT, S CAZALBOU, J AMEDEE, C REY, C COMBES. JBMR 2012
- 12- Whatever their differentiation status, human progenitor derived - or mature - endothelial cells induce osteoblastic differentiation of bone marrow stromal cells. NB THÉBAUD, R SIADOUS, R BAREILLE, M REMY, R DACULSI, J AMÉDÉE, L BORDENAVE J Tissue Eng Regen Med 2012

Memberships:

BIOMAT : The French association for the development of biomaterials, Tissue Engineering and Regenerative Medicine

SATC : The Aquitain society of cellular therapy

Education and Internships:

2015	Intership	Quantitative real time PCR for gene studies
2013:	Intership	50 hours in the development of English
2012:	Internship	The use of statistical software GraphPad Prism.
2011:	Insternship	Immunohistochemistry, cryostat, microscopy
2010	Internship	The basis of tissue growth
2008-10	BTS Biotechnologie	Lycée Saint Louis, Bordeaux, France Laboratoire d'Angiogenèse Expérimentale / LOEX
2006	Baccalauréat STL	Lycée Louis Pasteur, Avignon, France

Links:

BIOMAT : The French association for the development of biomaterials, Tissue Engineering and Regenerative Medicine: <http://www.biomat.fr>