

Curriculum Vitæ

Professor Christian JORGENSEN

Born on the 14th December 1961 in Copenhagen, (Denmark) French nationality



Contact : Institute Regenerative medicine & biotherapy IRMB, 80 rue Augustin Fliche, 34295 Montpellier cedex 5, France
christian.jorgensen@inserm.fr
04 67 33 01 90

Current position titles

- Director of Institute Regenerative medicine & biotherapy (IRMB)
- Director of the research unit UMR1183 INSERM/Université de Montpellier, IRMB
- Head of the clinical unit of Immuno-Rheumatology & biotherapy, Hospital Lapeyronie
- Head of the Biotherapy Department, University Hospital
- Coordinator of the national research infrastructure, ECELLFrance

Education

Institution and location	Degree	Year	Field of study
Professor in Medicine, Therapeutics and Rheumatology Université Montpellier	Professeur "Classe exceptionnelle"	2017	Immunology
Professor in Medicine, Therapeutics and Rheumatology Université Montpellier	Professeur	2002	Biotherapy
Habilitation à Diriger des Recherches, Université Montpellier	HDR	1997	Immunology
Doctorat d'Etat de Biologie-Santé Université Montpellier	PhD	1996	Immunology
Diplôme d'Etudes Supérieures Spécialisées Université Paris	Master	1990	Rheumatology
DEA d'Etudes Approfondies Université Orsay-Paris Sud	Master	1989	Immunology
Diplôme d'Université d'Arthroscopie	DU	1989	Intervational

Université Paris VII			Arthroscopy
Doctorat d'Etat en Médecine Université Paris XII	MD	1988	Medicine

Personal Statement

Christian Jorgensen is specialized in translational research for a better application of stem cells in immunology and rheumatology. He gathers scientists and clinicians on regenerative medicine and innovative immunotherapies. He has extensively published, has a strong track record for competitive research grants, was principal investigators in several EU programs and has coordinated several clinical trials. C Jorgensen clinical interest are in stem cell , immunology and rheumatology. He is head of the clinical unit, "Immuno-therapy Rheumatology", University Hospital "Lapeyronie" (Montpellier). He leads Institute for Regenerative Medicine and Biotherapy IRMB dedicated to regenerative medicine. IRMB gathers scientist and clinicians on regenerative medicine and innovative immunotherapies. The objectives of IRMB are to increase the knowledge of stem cell biology, interactions between stem cells and immune cells, stem cell niches and homing, as well as the role of epigenetics mechanisms in chronic and age related diseases. These researches include both basic biological aspects and innovative applications of regenerative therapy. C Jorgensen has published extensively (over 180 publications in the field of Immunology and stem cell therapy applied for rheumatic diseases), and has a strong track record for competitive research grant from EU and ANR. Finally, today it coordinates the H2020 ADIPOA project, large scale project focusing on adipose-derived mesenchymal stem cells in osteoarthritis therapy and RESPINE on bone marrow stem cells for intervertebral disc. This translational actcity leads to the launch of the biotech Medxcell.

The clinical research is conducted in the clinical department for immunotherapy with 20 beds dedicated to biotherapy applied to Rheumatoid Arthritis and other autoimmune diseases. Pr Christian Jorgensen, specialist in Therapeutics and Rheumatology, is head of research INSERM unit U1183 ("Stem cells, cell plasticity, regenerative medicine & immunotherapies") and department of biotherapy. C Jorgensen is a professor in the Faculty of Medicine Montpellier-Nimes (responsible teacher of DES Rheumatology). He is also responsible for teaching the Master Pro "Evaluation & methodology of therapeutic trials. He is expert for Biologics at French National Authority or Health (HAS), where he was former member of Transparency Comity at HAS, and member of national scientific board of Inserm.

During his free time, I am part of jazz band "Ducks & Drakes", proposing standards of the American songbook.

Scientific functions

- 2018 - today co-chair of the work group "cell therapy in musculoskeletal disease at ISCT
- 2015 - today coord. EULAR study group for gene & cell therapy
- 2015 - today Coordinator of FHU REGENHAB
- 2014 - today Director of Institute for Regenerative Medicine & Biotherapy
- 2014 - today Director the research unit UMR1183 INSERM/Université de Montpellier, IRMB
- 2012 - today Coordinator of ECELLFrance, national research infrastructure "Biology Health PIA"

Hospital functions

- 2014 - today Director of Biotherapy department
- 2005 - today Head of clinical unit of Immuno-Rhumatology & biotherapy, Hospital Lapeyronie

1993 - today Hospital Practitioner in Rheumatology
 1990 - 1993 Assistant of the Hospitals of Montpellier
 1988 - 1989 Army service, doctor at the Bégin Hospital at St Mandé
 1985 - 1988 Intern in the Hospitals of Paris

University functions

1997 – today Lecturer in Master 2 "Rhumatologie"
 1997 – today Lecturer in Master 2 "Gestion des essais thérapeutiques"
 1997 – today Director of master "Ingénierie de la Santé – Méthodologie des essais cliniques"
 1997 – today Deputy director of "école doctorale CBS2"
 1996 – today Tutoring of 5 MD students and 5 PhD students to their thesis
 1996 – today Lecturer at the Faculty of Medicine Montpellier-Nîmes (MT11, MB4)
 1996 – today professor/hospital practitioner (PU/PH) classe exceptionnelle at University of Montpellier

Administrative functions

2012 - 2016 Member of national Inserm scientific board
 2011 - today Member of Scientific Technical Committee (CCRRDT) of Région Occitanie
 2011 - 2013 National Scientific Committee of clinical research PHRC
 2010 - 2012 Member of scientific council "Institut Recherche technologique CR2i"
 2009 - 2013 Member of Scientific Council of University Montpellier 1
 2008 - 2013 Member of INSERM specialty commission CSS6
 2006 - 2007 Member of ANR commission CSD8
 2004 - 2005 Member of reimbursement commission (Haute Autorité de Santé)
 2004 Member of Direction Recherche Clinique of Montpellier University Hospital
 2003 Member of Scientific Committee of "Pôle Biotechnologie Région LR"
 2002 Member of Scientific Technical Committee of CIC de Montpellier

Top 10 publications (more than 190 publications in international journal)

1. Ruiz M, Maumus M, Fonteneau G, Pers YM, Ferreira R, Dagneaux L, Delfour C, Houard X, Berenbaum F, Rannou F, Jorgensen C, Noël D. TGFβ₁ is involved in the chondrogenic differentiation of mesenchymal stem cells and is dysregulated in osteoarthritis. ***Osteoarthritis and Cartilage* 2019** Mar;27(3):493-503. doi: 10.1016/j.joca.2018.11.005 (IF 5.5, Top 10)
2. Pers YM, Quentin J, Ferreira R, Espinoza F, Abdellaoui N, Erkilic N, Cren M, Dufourcq-Lopez E, Pullig O, Nöth U, Jorgensen C, Louis-Plence P. Injection of Adipose-Derived Stromal Cells in the Knee of Patients with Severe Osteoarthritis has a Systemic Effect and Promotes an Anti-Inflammatory Phenotype of Circulating Immune Cells. ***Theranostics* 2018** Nov 5;8(20):5519-5528. doi: 10.7150/thno.27674 (IF 8.5, Top 10)
3. Cosenza S, Toupet K, Maumus M, Luz-Crawford P, Blanc-Brude O, Jorgensen C, Noël D. Mesenchymal stem cells-derived exosomes are more immunosuppressive than microparticles in inflammatory arthritis. ***Theranostics* 2018** Feb 3;8(5):1399-1410. doi: 10.7150/thno.21072 (IF 8.5, Top 10)
4. Luz-Crawford P, Espinosa-Carrasco G, Ipseiz N, Contreras R, Tejedor G, Medina DA, Vega-Letter AM, Ngo D, Morand EF, Pène J, Hernandez J, Jorgensen C, Djouad F. IL-1/Activin A as a Novel Signaling Axis Orchestrating Mesenchymal Stem Cell and Th17 Cell Interplay. ***Theranostics* 2018** Jan 1;8(3):846-859. doi: 10.7150/thno.21793 (IF 8.5, Top 10)

5. Luz-Crawford P, Ipseiz N, Espinosa-Carrasco G, Caicedo A, Tejedor G, Toupet K, Loriau J, Scholtyssek C, Stoll C, Khoury M, Noël D, Jorgensen C, Krönke G, Djouad F. PPAR β/δ directs the therapeutic potential of mesenchymal stem cells in arthritis. *Ann Rheum Dis*. 2016 Dec;75(12):2166-2174. doi: 10.1136/annrheumdis-2015-208696 (IF 12.8, Top 1)
6. Duroux-Richard I, Roubert C, Ammari M, Pr sumey J, Pers YM, Gr n JR, H upl T, Gr tzkau A, Lecellier CH, Codogno P, Jorgensen C, Apparailly F. miR-125b controls monocyte adaptation to inflammation through mitochondrial metabolism and dynamics. *Blood* 2016; 128(26) :3125-36 (IF 15.1, Top 1)
7. Morille M, Toupet K, Montero-Menei CN, Jorgensen C, No l D. PLGA-based microcarriers induce mesenchymal stem cell chondrogenesis and stimulate cartilage repair in osteoarthritis. *Biomaterials* 2016 May;88:60-9. doi: 10.1016/j.biomaterials.2016.02.022 (IF 8.4)
8. Vicente R, No l D, Pers YM, Apparailly F, Jorgensen C. Deregulation and therapeutic potential of microRNAs in arthritis. *Nat Rev Rheum*. 2016 Apr;12(4):211-20. doi: 10.1038/nrrheum.2015.162 (IF 15.7, Top 10)
9. Luz-Crawford P, Tejedor G, Mausset-Bonnefont AL, Beaulieu E, Morand EF, Jorgensen C, No l D, Djouad F. Glucocorticoid-induced leucine zipper governs the therapeutic potential of mesenchymal stem cells by inducing a switch from pathogenic to regulatory Th17 cells in a mouse model of collagen-induced arthritis. *Arthritis Rheumatol*. 2015 Jun;67(6):1514-24. doi: 10.1002/art.39069 (IF 7.8, Top 10)
10. Nguyen-Chi M, Laplace-Builhe B, Travnickova J, Luz-Crawford P, Tejedor G, Phan QT, Duroux-Richard I, Levraud JP, Kissa K, Lutfalla G, Jorgensen C, Djouad F. Identification of polarized macrophage subsets in zebrafish. *Elife*. 2015 Jul 8;4:e07288. doi: 10.7554/eLife.07288 (IF 8.3, Top 10)

Patents

1. Jorgensen C, Apparailly F and Tak pp. AAV vectors for *in vivo* gene therapy of rheumatoid arthritis. 2004 , PCT N : nI03/00611
2. Jorgensen C, Noel D. Endo-prosthesis for cartilage lesions patent chondrostent gbm07178. 2007, PCT N  07 301 445.8
3. Noel D, Bony-Garayt C, Jorgensen C. A method for chondrogenic differentiation of multipotent mesenchymal stromal cells. 2009, UM-INSERM PCT/IB2009/052800 - WO2010122378A1
4. Foussat A, Brun V, Asnagli H, Belmonte N, Jorgensen C. Improvements In Tr1 Compositions For Treating An Arthritic Condition Application. 2012, No PCT. 12/989,857
5. Plence P, Jorgensen C. A method for predicting the responsiveness a patient to a treatment with an IL-6 antagonist. INSERM PCT/EP2012/069279 - WO2013045672A1
6. Vignais ML, Caicedo A, Brondello JM, Jorgensen C. Methods for the intercellular transfer of isolated mitochondria in recipient cells. PCT/EP2015/066190 - WO2016008937A1
7. Laconde G, Amblard-Caussil M, Martinez J, Jorgensen C, Apparailly F, Duroux-Richard I. Stable peptide inhibitor of IRAK2/IRAK4/Myd88 as inhibitor of inflammation in RA. PCT/EP2017/084309 - WO2018115400A1
8. Foussat A, Brun V, Asnagli H, Belmonte N, Jorgensen C. Compositions for treating an arthritic condition application. 2013, EP3130666A1
9. Noel D, Jorgensen C, Devos J. miR MSC signature as potency assay licensed to Medxcell
10. Noel D, Jorgensen C, Bony C, Pers YM, De Vos J. Mesenchymal stem cells and their use. 2018, PCT/EP1830S814.8

Valorization

- The MedXCell start-up was launched in 2018 in the Cyborg incubator at IRMB. Development of adipose derived stem cells as a therapeutic product.
- C Jorgensen is scientific advisor

Clinical trials funded by European H2020 grants

- 2 coordinated programs: ADIPOA-1, RESPINE
- 6 participations: ADIPOA-2, BTCure, AUTOCURE, EURORAPS, REGENERAR, INSAID
- Authorization both national (ANSM) and EU agencies' agreement for ADIPOA-2
- VHP Obtention for RESPINE

Grants

- H2020 iPSPINE: Induced pluripotent stem cell-based therapy for spinal regeneration (365 k€; 2019-2023)
- FEDER/Région Occitanie CARTIGEN platform: Imaging, Mobility and Regeneration of musculoskeletal diseases (8 200 k€; 2019-2022)
- FOREUM SEN-OA: Targeting senescent cells in osteoarthritis: an innovative therapeutic approach (600 k€; 2018-2021)
- H2020 RESPINE: Phase 2/3 large scale randomized trial on bone marrow allogenic-derived mesenchymal stem cells in degenerative disc disease (350 k€; 2016-2020)
- Inserm AGEMED: National horizontal aid program for ageing (100 k€; 2017-2020)
- H2020 EFFICHRONIC: Enhancing health systems sustainability by providing cost-efficiency based interventions for chronic management in stratified population based on clinical and socio-economic determinants of health (150 k€; 2016-2020)
- FEDER/Région Occitanie METAMONTP platform: development for analysis of metabolites and the energy metabolism of the cell (250 k€; 2015-2018)
- H2020 ADIPOA-2: Phase 2 large scale randomized trial on adipose-derived mesenchymal stem cells in osteoarthritis therapy (300 k€; 2014-2019)
- Fondation Arthritis ROAD: Research on OsteoArthritis Diseases programme" (120 k€; 2014-2017)
- ANR MITOSTEM: Transfer of MSC mitochondria to T lymphocytes: impact on T cell metabolism, phenotype and recirculation in autoimmunity (300 k€; 2014-2017)
- PIA ECELLFrance national research infrastructure : Development of MSC based therapies (12 000 k€ ; 2012-2019)

Industrial contracts

- MedXCell (100 k€; 2019-2023)
- CellVax (15 k€; 2019-2021)
- FIRALIS (220 k€; 2017-2020)
- Cilcare (68 k€; 2016-2018)
- SERVIER (600 k€; 2015-2018)

Montpellier, le 18 juin 2019

UNITE INSERM U1183 IRMB
Directeur : Professeur Christian Jorgensen
Hôpital Saint-Éloi - CHRU de Montpellier
80 Avenue Augustin Sabatier
34295 MONTPELLIER CEDEX 5
Tél : 04 67 33 04 55