Laboratoire de Recherche en Sciences de la Vie et de la Santé

PhD in Host Response: Cellular Biology and immunology

Laurent GORVEL_ 21/04/1986_ French
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PROFESSIONAL EXPERIENCES

Academic Experience

11/2017- : **Young Scientist,** CRCM, Marseille, France

- Cervical and Breast cancer microenvironment, tissue immunology
- Identification of immunotherapy targets

2014-2017 **Postdocoral Research Associate**, Washington University School of Medicine, USA

- Project writing
- Designing and planning of experimental work
- Data processing, writing of reports and scientific articles
- Data presentation in international and local meetings
- Work in collaboration with others researchers in the context of a scientific research
- Team work

2010-2013 **PhD in Host Response and Infectious Diseases,** URMITE, Aix-Marseille University, France

- Designing and planning of experimental work
- Data processing, writing of reports and scientific articles
- Organization and planning of research works
- Work in collaboration with others researchers in the context of a scientific research

TECHNICAL SKILLS

- ***Cellular biology:*** Intracellular trafficking of bacteria, lipopolysaccharide, antibody internalization,
- ***Cells culture:*** Human monocytes, human DCs, human Tcells, human NK cells, PBMCs, primary cells from tissues BMDM, THP1, HeLa cells, HEK293T, bacteria, co-culture DCs/Tcells, DCs/NKs, human macrophages.
- ***Molecular biology:*** PCR, RT-PCR, microarrays, RNAseq analysis
- ***Biochemistry:*** Western blot
- ***Microscopy assay***: optical, epifluorescence and confocal microscope
- ***Flow cytometry:*** multiparametric, compensations, intracellular and extracellular staining, Legend-Plex, cell sorting
- ***Tissue Immunology, Immunotherapies and Microbiology***

EDUCATION

2014-2017 **Postdoctoral training:** Washington University School of Medicine, Saint-Louis, USA

2010-2013 **PhD in Host Response Infectious Diseases:** Aix-Marseille Université, France

2008-2010 **Masters: Human Pathology and Infectious Disease,** Aix-Marseille Université, France

2004-2008 **Licence of Cellular biology and Immunology**, Université de la Méditerranée, France

COMPLEMENTARY INFORMATIONS

- **Languages**: French (maternal), English and Spanish
- **Grants**: ARC young scientist/experienced post-doctoral funding (2018)
- **Talks and Conference Proceedings**:
  - National Psoriasis Foundation Research Symposium CD5 Expressing DCs are New Players in the Immunobiology of Psoriasis. Portland, OR, USA
  - Evaluation par un dispositif de test « one pass » de l'efficacité de deux réacteurs expérimentaux de traitement microbiologique de l'air. Proceedings of Congrès Français sur les Aérosols 2013, 28th CFA 2013
  - Aix-Marseille University Doctoral School Symposium : Human Monocyte-derived DCs and Intracellular Bacterial Infections Aix-Marseille Université, France
  - Invited speaker : Pr. E. Moreno Laboratory (2016), WashU Immunobiology seminar series (2016), Infectiopole sud seminar series (2013), Pr. D. Chaussabel Laboratory (2012)

SCIENTIFICS PUBLICATIONS

1- Electrophilic properties of itaconate and derivatives regulate the IκBζ-ATF3 inflammatory axis. Bambouskova M, **Gorvel Laurent**, Lampropoulou V, Sergushichev A, Loginicheva E, Johnson K, Korenfeld D, Mathyer ME, Kim H, Huang LH, Duncan D, Bregman H, Keskin A, Santeford A, Apte RS, Sehgal R, Johnson B, Amarasinghe GK, Soares MP, Satoh T, Akira S, Hai T, de Guzman Strong C, Auclair K, Roddy TP, Biller SA, Jovanovic M, Klechevsky E, Stewart KM, Randolph GJ, Artyomov MN. Nature. 2018 Apr;556(7702):501-504. doi: 10.1038/s41586-018-0052-z. Epub 2018 Apr 18. PMID: 29670287

2- Inducible Co-Stimulator (ICOS) as a potential therapeutic target for anti-cancer therapy. Amatore F, **Gorvel Laurent**, Olive D. Expert Opin Ther Targets. 2018 Apr;22(4):343-351. doi:10.1080/14728222.2018.1444753. Epub 2018 Mar 1.

3- **Laurent Gorvel**, Daniel Korenfeld, Thomas Tung, Eynav Klechevsky: Dendritic Cell-Derived IL-32α-A Novel Inhibitory cytokine of Natural Killer Cell Function. The Journal of Immunology. 06/2017. DOI:https://doi.org/10.4049/jimmunol.1601477

4- Daniel Korenfeld, **Laurent Gorvel**, Adiel Munk, Joshua Mann, Andras Schaffer, Thomas Tung, Caroline Mann, Eynav Klechevsky. A type of human skin dendritic cell marked by CD5 is associated with the development of inflammatory skin disease. JCI Insight 09/2017. DOI:10.1172/jci.insight.96101

5- Aurélie Gagnaire, **Laurent Gorvel**, Alexia Papadopoulos, Kristin Von Bargen, Jean-Louis Mège, Jean-Pierre Gorvel: COX-2 Inhibition Reduces Brucella Bacterial Burden in Draining Lymph Nodes. Frontiers in Microbiology. 12/2016. DOI:https://doi.org/10.3389/fmicb.2016.01987

6- Wenjie Yin, **Laurent Gorvel**, Sandra Zurawski, Dapeng Li, Ling Ni, Dorothée Duluc, Katherine Upchurch, JongRok, Kim, Chao Gu, Richard Ouedraogo, Zhiqing Wang, Yaming Xue, HyeMee Joo, Jean-Pierre Gorvel, Gerard, Zurawski, SangKon Oh: Functional Specialty of CD40 and Dendritic Cell Surface Lectins for Exogenous Antigen Presentation to CD8+ and CD4+ T Cells. EBioMedicine 01/2016; 5(C). DOI:10.1016/j.ebiom.2016.01.029

7- Maxim N Artyomov, Adiel Munk, **Laurent Gorvel**, Daniel Korenfeld, Marina Cella, Thomas Tung, Eynav Klechevsky: Modular expression analysis reveals functional conservation between human Langerhans cells and mouse cross-priming dendritic cells. Journal of Experimental Medicine 04/2015; 212(5). DOI:10.1084/jem.20131675

8- **Laurent Gorvel**, Amira Ben Amara, Mignane B Ka, Julien Textoris, Jean-Pierre Gorvel, Jean-Louis Mege: Myeloid decidual dendritic cells and immunoregulation of pregnancy: defective responsiveness to Coxiella burnetii and Brucella abortus. Frontiers in Cellular and Infection Microbiology 12/2014; 4. DOI:10.3389/fcimb.2014.00179

9- **Laurent Gorvel**, Julien Textoris, Romain Banchereau, Amira Ben Amara, Wiwit Tantibhedhyangkul, Kristin von Bargen, Mignane B Ka, Christian Capo, Eric Ghigo, Jean-Pierre Gorvel, Jean-Louis Mege: Intracellular Bacteria Interfere with Dendritic Cell Functions: Role of the Type I Interferon Pathway. PLoS ONE 06/2014; 9(6):e99420. DOI:10.1371/journal.pone.0099420

10- **Laurent Gorvel**, Matthieu Yver, Evelyne Robert, Michel Harmant, Manuel Rosa-Calatrava, Bruno Lina, Jean-Pierre Gorvel, Vincent Moulès, Raphaël Albalate, Carole Gaüzère: Innovative

Germicidal UV and Photocatalytic System Dedicated to Aircraft Cabin Eliminates Volatile Organic Compounds and Pathogenic Micro-Organisms. CLEAN – Soil Air Water 06/2014; 42(6):703–712. DOI:10.1002/clen.201300085

11- Virginie Trouplin, Nicolas Boucherit, **Laurent Gorvel**, Filippo Conti, Giovanna Mottola, Eric Ghigo: Bone Marrow-derived Macrophage Production. Journal of Visualized Experiments 11/2013; 81(81). DOI:10.3791/50966

12- Amira Ben Amara, **Laurent Gorvel**, Karine Baulan, Justine Derain-Court, Christophe Buffat, Christel Vérollet, Julien Textoris, Eric Ghigo, Florence Bretelle, Isabelle Maridonneau-Parini, Jean-Louis Mege: Placental Macrophages Are Impaired in Chorioamnionitis, an Infectious Pathology of the Placenta. The Journal of Immunology 10/2013; 191(11). DOI:10.4049/jimmunol.1300988

13- Anna Martirosyan, Yoichiro Ohne, Clara Degos, **Laurent Gorvel**, Ignacio Moriyón, Sangkon Oh, Jean-Pierre Gorvel: Lipopolysaccharides with Acylation Defects Potentiate TLR4 Signaling and Shape T Cell Responses. PLoS ONE 02/2013; 8(2):e55117. DOI:10.1371/journal.pone.0055117

14- Wiwit Tantibhedhyangkul, Amira Ben Amara, Julien Textoris, **Laurent Gorvel**, Eric Ghigo, Christian Capo, Jean-Louis Mege: Orientia tsutsugamushi, the causative agent of scrub typhus, induces an inflammatory program in human macrophages. Microbial Pathogenesis 10/2012; 55(1). DOI:10.1016/j.micpath.2012.10.001

15- Amélie Delaby, **Laurent Gorvel**, Leon Espinosa, Catherine Lépolard, Didier Raoult, Eric Ghigo, Christian Capo, Jean-Louis Mege: Defective Monocyte Dynamics in Q Fever Granuloma Deficiency. The Journal of Infectious Diseases 04/2012; 205(7):1086-94. DOI:10.1093/infdis/jis013

16- **L Gorvel**, K Al Moussawi, E Ghigo, C Capo, J-L Mege, B Desnues: Tropheryma whipplei, the Whipple's disease bacillus, induces macrophage apoptosis through the extrinsic pathway. Cell Death & Disease 04/2010; 1(4):e34. DOI:10.1038/cddis.2010.11