

## Lucile ESPERT

### PhD, HDR, DR2 CNRS

**Team Leader** - "Autophagy Machinery in Infection (AMI)"

**IRIM** - Institut de Recherche en Infectiologie de Montpellier

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### PROFESSIONAL EXPERIENCE

Since October 2007: CNRS researcher permanent position - IRIM, University of Montpellier.

2005-2007: Post-doctoral internship, CNRS UMR5121, University of Montpellier.

2003-2005: Post-doctoral internship, CNRS UPR9045 (Villejuif).

### EDUCATION

2013: **HDR** (Habilitation à Diriger des recherches), University of Montpellier.

1999-2003: **PhD** thesis in life science, Biochemistry, Molecular and Cellular Biology, INSERM U475 and CNRS UMR5094, University of Montpellier.

### EXPERTISE

Viral infection, Immune Response, Molecular and Cellular Biology, Autophagy, atg8ylation.

### SCIENTIFIC EVALUATION

#### ➤ Grant reviewing

- **Sidaction Scientific and Medical Committee** (from September 2014 to November 2022).
- **International and National grant reviewing** (FINOVI, ANSES, DIM1-Health, NSERC Discovery Grants, France 2030-HARMI).

#### ➤ Participation in selection panels

- 2020 - Recruitment of a lecturer in virology – Paris-Saclay University
- 2016 - Recruitment of a lecturer in virology – Paris-Saclay University

#### ➤ Scientific Articles Reviewing - Biochimie, Autophagy, Apoptosis, Scientific Reports, Viruses, Frontiers Microbiology, Frontiers in Cellular and Infection Microbiology, mBio, International Review of Cell and Molecular Biology, Communication Biology, Molecular Aspects of Medicine, Cell reports

#### ➤ PhD thesis and HDR Jury (2 HDR as a reviewer, 13 PhD thesis as a reviewer, 4 PhD thesis as an examiner)

#### ➤ Doctoral school

- 2016 - Member of the committee for doctoral contract allocation – CBS2 doctoral school - Montpellier University.
- 2019 - Member of the selection committee for candidates competing for university doctoral fellowships/contracts

## SELECTED PUBLICATIONS

- Author of 53 publications (29 original articles, 18 reviews, 4 book chapters and 2 meeting reports), including 24 as 1<sup>st</sup>/last/corresponding author, since 2000.
- h-index (Web Of Science): 24 et h-index (Google Scholar): 28.

1. Villares M, **Espert L**, Daussy CF. Peroxisomes are underappreciated organelles hijacked by viruses. **Trends Cell Biol.** **2024 Dec 11:S0962-8924(24)00248-4.**
2. Baptiste Pradel, Guilhem Cantaloube, Marie Villares, Maïka S. Deffieu, Véronique Robert-Hebmann, Vincent Lucansky, Mathias Faure, Nathalie Chazal, Raphaël Gaudin and **Lucile Espert**. LC3B conjugation machinery promotes autophagy-independent HIV-1 entry in CD4+ T lymphocytes. **Autophagy.** **2024 Aug;20(8):1825-1836.**
3. Coralie F Daussy, Mathilde Galais, Baptiste Pradel, Véronique Robert-Hebmann, Sophie Sagnier, Sophie Patingre, Martine Biard-Piechaczyk and **Lucile Espert**. HIV-1 Env induces pexophagy and an oxidative stress leading to uninfected CD4+ T cell death. **Autophagy.** **2021 Sep;17(9):2465-2474.**
4. Daniel J. Klionsky,..., **Lucile Espert**, .... Tong CK. Guidelines for the use and interpretation of assays for monitoring autophagy (4rd edition). **Autophagy.** **2021 Jan;17(1):1-382.**
5. Jamal Alfaisal, Alice Machado, Mathilde Galais, Véronique Robert-Hebmann, Laetitia Arnauné-Pelloquin, **Lucile Espert\***, Martine Biard-Piechaczyk\*. \* **Co-Last authors**. HIV-1 Vpr inhibits autophagy during the early steps of infection of CD4 T cells. **Biol Cell.** **2019 Dec;111(12):308-318.**
6. Coralie F. Daussy, Bruno Beaumelle and **Lucile Espert**. Autophagy restricts HIV-1 infection. **Oncotarget.** **2015 Aug 28; 6(25):20752-3.**
7. Sophie Borel, Véronique Robert-Hebmann, Jamal Alfaisal, Ashish Jain, Mathias Faure, **Lucile Espert**, Laurent Chaloin, Jean-Christophe Paillart, Terje Johansen, Martine Biard-Piechaczyk. HIV-1 Vif interacts with LC3 and inhibits autophagy. **AIDS,** **2015 29: 275-286.**
8. Sophie Sagnier, Coralie F. Daussy, Sophie Borel, Véronique Robert-Hebmann, Mathias Faure, Fabien P. Blanchet, Bruno Beaumelle, Martine Biard-Piechaczyk and **Lucile Espert**. Autophagy restricts HIV-1 infection by selectively degrading Tat in CD4+ T lymphocytes. **J Virol.** **2015 Jan;89(1):615-25.**
9. Denizot M, Varbanov M, **Espert L**, Robert-Hebmann V, Sagnier S, Garcia E, Curriu M, Mamoun R, Blanco J, Biard-Piechaczyk M. HIV-1 gp41 fusogenic function triggers autophagy in uninfected cells. **Autophagy.** **2008 Nov 16;4(8):998-1008.**
10. **Lucile Espert**, Mélanie Denizot, Marina Grimaldi, Véronique Robert-Hebmann, Bernard Gay, Mihayl Varbanov, Patrice Codogno and Martine Biard-Piechaczyk. Autophagy is involved in T cell death after binding of HIV-1 envelope proteins to CXCR4. **J Clin Invest.** **2006 Aug;116(8):2161-72.**