

CURRICULUM VITAE

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Laboratoire PRISM Protéomique Réponse Inflammatoire et Spectrométrie de Masse, Inserm U1192
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EDUCATION

- 2013/2016: **PhD in Health and Life Sciences**
Université des Sciences et Technologies de Lille, Villeneuve d'Ascq
- 2011/2013: **Master degree in Proteomics**
Université des Sciences et Technologies de Lille, Villeneuve d'Ascq. With honours.
- 2008/2010: **Bachelor degree of biology**
Université de Picardie Jules Verne - Amiens. With honours.

EMPLOYMENTS

2018/-: **Assistant professor**, Protéomique Réponse Inflammatoire et Spectrométrie de Masse laboratory (PRISM), INSERM U-1192, University of Lille, France.
Lab director: Pr Michel Salzet.

2017/2018: **Postdoctoral position**, Laboratory of Tumor Microenvironment and Therapeutic Resistance, VIB-KU Leuven, Center for Cancer Biology, Belgium.
Investigate glioblastoma intra-tumor heterogeneity during tumor propagation and in response to antiangiogenic and immunotherapy in space and in time.
Lab director: Prof Gabriele Bergers

2016/2017: **Temporary Lecturer and Research Assistant**, Protéomique Réponse Inflammatoire et Spectrométrie de Masse laboratory (PRISM), INSERM U-1192, University of Lille, France.
Lab director: Pr Michel Salzet.
Research project: From molecular classification of glioma to a new therapeutic strategy based on macrophages reactivation within tumors.

2013/2016: **PhD thesis at « Laboratoire de Protéomique Réponse Inflammatoire et Spectrométrie de Masse »** (PRISM) INSERM U-1192, University of Lille, France.
From molecular classification of glioma to a new therapeutic strategy based on macrophages reactivation within tumors.
Lab director: Prof Michel Salzet.
Thesis director: Prof Isabelle Fournier / Supervisor: Dr Maxence Wisztorski

PUBLICATIONS

Murgoci AN, Cardon T, Aboulouard S, Duhamel M, Fournier I, Cizkova D, Salzet M. Reference and Ghost Proteins Identification in Rat C6 Glioma Extracellular Vesicles. *iScience*. 22; 23(5): 101045. (2020).

Rose M*, Duhamel M*, Aboulouard S, Kobeissy F, Le Rhun E, Desmons A, Tierny D, Fournier I, Rodet F, Salzet M. The role of a proprotein convertases inhibitor in reactivation of tumor associated

macrophages and inhibition of glioma growth. *Molecular Therapy Oncolytics*. 31; 17:31-46. (2020) (* = co-first authors)

Murgoci AN*, Duhamel M*, Raffo-Romero A, Mallah K, Aboulouard S, Lefebvre C, Kobeissy F, Fournier I, Zilkova M, Maderova D, Cizek M, Cizkova D, Salzet M. Location of neonatal microglia drives small extracellular vesicles content and biological functions in vitro. *Journal of Extracellular Vesicles*. Vol. 9, 1727637. (2020) (* = co-first authors)

Rodet F, Capuz A, Ozcan BA, Le Beillan R, Raffo-Romero A, Kobeissy F, Duhamel M, Salzet M. PC1/3 KD macrophages exhibit resistance to the inhibitory effect of IL-10 and a higher TLR4 activation rate, leading to an anti-tumoral phenotype. *Cells*. 8(12): 1490 (2019).

Lemaire Q, Duhamel M, Raffo-Romero A, Salzet M, Lefebvre C. Characterization of immune cell-derived extracellular vesicles: functional impact on cell environment. (accepted in *Jove*, 2019)

Rodet F, Capuz A, Hara T, van Meel R, Duhamel M, Rose M, Raffo-Romero A, Fournier I, Salzet M. Deciphering molecular consequences of the proprotein convertase 1/3 inhibition in macrophages for application in anti-tumour immunotherapy. *J Biotechnol*. 20; 282:80-85. (2018)

Fatou B, Saudemont P, Duhamel M, Ziskind M, Focsa C, Salzet M, Fournier I. Real time and in vivo pharmaceutical and environmental studies with SpiderMass instrument. *J Biotechnol*. 281: 61-66. (2018)

Duhamel M, Rose M, Rodet F, Murgoci A.N, Zografidou L, Régnier-Vigouroux A, Vanden Abeele F, Kobeissy F, Nataf S, Pays L, Wisztorski M, Fournier I, Salzet M. Paclitaxel treatment and PC1/3 knockdown in macrophages is a promising anti-glioma strategy as revealed by proteomics and cytotoxicity studies. *Molecular and Cellular Proteomics*. 17(6): 1126-1143 (2018).

Le Rhun E*, Duhamel M*, Wisztorski M, Gimeno JP, Zairi F, Escande F, Reyns N, Kobeissy F, Maurage CA, Salzet M, Fournier I. Evaluation of Non-Supervised MALDI Mass Spectrometry Imaging Combined with MicroProteomics for Glioma Grade III Classification. *BBA Proteomics* S1570-9639(16)30249-7 (2016). (* = co-first authors)

Duhamel M, Rodet F, Murgoci A, Wisztorski M, Day R, Fournier I, Salzet M. Proprotein convertase 1/3 inhibited macrophages: A novel therapeutic based on drone macrophages. *EuPA Open Proteomics*. 11, 20-22 (2016).

Duhamel M*, Rodet F*, Murgoci A, Desjardins R, Gagnon H, Wisztorski M, Fournier I, Day R, Salzet M. The proprotein convertase PC1/3 regulates TLR9 trafficking and the associated signaling pathways. *Scientific Reports*. 6, 19360 (2016). (* = co-first authors)

Duhamel M, Rodet F, Delhem N, Vanden Abeele F, Kobeissy F, Nataf S, Pays L, Desjardins R, Gagnon H, Wisztorski M, Fournier I, Day R, Salzet M. Molecular Consequences of Proprotein Convertase 1/3 (PC1/3) Inhibition in Macrophages for Application to Cancer Immunotherapy: A Proteomic Study. *Molecular and Cellular Proteomics*. 14, 2857–77 (2015). **Journal Cover**.

Conference proceedings:

Le Rhun E, Duhamel M, Drelich D, Zairi F, Reyns N, Wisztorski M, Maurage CA, Escande F, Salzet M, Fournier I. Metb-10 Evaluation of non-supervised matrix-assisted laser desorption/ionization mass spectrometry imaging (MALDI) combined with microproteomics for determination of glioblastoma heterogeneity. *NeuroOncology* (2017) 19(suppl 6), vi130-vi130.

Duhamel M, Fatou B, Saudemont P, Wisztorski M, Le Rhun E, Maurage XA, Robin YM, Leblanc E, Salzet M, Fournier I. Bringing mass spectrometry from pathologist bench to patient bedside. *Journal of Biotechnology* 231(2016): S11

Le Rhun E, Duhamel M, Wisztorski M, Zairi F, Maurage CA, Fournier I, Reyns N, Salzet M Metb-07 Classification of high grade glioma using matrix-assisted laser desorption/ionization mass spectrometry imaging (MALDI MSI): interim results of the gliomic study. *NeuroOncology* (2016) 17 (suppl 5), v136-v137

Salzet M, Duhamel M, Rodet F, Wisztorski M, Fournier I. Journal of Biotechnology, 2016 Proprotein convertase 1/3 inhibited macrophages: A novel therapeutic based on drone macrophages. *Journal of Biotechnology* 231(2016): S6

Le Rhun E, Duhamel M, Wisztorski M, Zairi F, Maurage CA, Fournier I, Reyns N, Salzet M Classification of high grade glioma using matrix-assisted laser desorption/ionization mass spectrometry imaging (maldi msi): interim results of the gliomic study. *NeuroOncology* (2015) 17(5), V135-137

PRICES & DISTINCTIONS

PhD award received in 2017 by the French Association "SFEAP" (Société Française d'Electrophorèse et d'Analyse Protéomique)

Young-investigator award for the best presentation at the Symposium of Anti-tumor Immunotherapy, Lille, September 2016

2nd YPI Poster Award obtained at EUPA 9th Annual Congress, Milan, Italie, 23-28 June 2015

GRANTS

2020 National Cancer Initiative grant for the project: "Companion dog with spontaneous cancer as ex vivo and in vivo ethical, non-experimental model for human drugs development".

RESPONSABILITIES

Since 2019 Co-coordinator of the 3D CellOmics technical platform, PRISM laboratory
2014-2016 Secretary of the youth club SFEAP

STUDENTS SUPERVISION

3 M2 students, 2 M1 students, 3 L3 students supervised since 2013.

1 PhD in co-supervision (IEMN).