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## PhD candidate: Pierre Fabre Dermocosmetic / PRISM

Laboratoire Protéomique, Réponse Inflammatoire et Spectrométrie de Masse (PRISM), INSERM U1192, Bât SN3, 1er étage, Université de Lille, 59655 Villeneuve d'Ascq Cedex

Laboratoire Pierre Fabre Dermo-cosmétique  
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Centre de recherche européen sur la peau  
Hôtel-Dieu Saint-Jacques, 2 rue viguerie. Toulouse

### EDUCATION

- 2013-2015** M.Sc. in Biology and Biotechnology - Proteomic specialty. University of Lille, France
- 2011-2013** Biology Bachelor - Cellular biology and physiology. Research label, University of Lille, France

### PROFESSIONAL EXPERIENCES

- 04/2018 - Present** PhD Candidate - SpiderMass for skin condition analysis. In collaboration between PFDC and PRISM Laboratory, INSERM U1192. University of Lille, France  
Supervised by JOSSE Gwendal and FOURNIER Isabelle
- 03/2016 - 04/2018** Technology transfer engineer - SpiderMass: guided surgery by real-time mass spectrometry. SATT-Nord employed in PRISM Laboratory, INSERM U1192. University of Lille, France
- 09/2015 - 02/2016** Engineer - SpiderMass: guided surgery by real-time mass spectrometry. PRISM Laboratory, INSERM U1192. University of Lille, France
- 2015 Summer** Telephone operator. Société Française de Prévention. Lille, France
- 01/2015 - 07/2015** Internship, Master Thesis - Development of a new in-vivo and real-time analysis tool based on mass spectrometry for guided surgery of cancer. PRISM laboratory, INSERM U1192. University of Lille, France
- 2014 Summer** Technician. Anatomical and Cellular Pathology (ACP) laboratory. NordPathologie. Lille, France
- Saturdays**  
**02/2014 - 04/2014** Free Internship - Uses of the optical coherence tomography for the prostatic cancer diagnosis. ACP department of St-Vincent-de-Paul hospital. Lille, France
- 01/2014** Internship - Study of the Protein Kinase A localisation changes during the cell cycle. IRI laboratory, CNRS USR3078. University of Lille, France
- 2013 Summer** Technician. ACP department of St-Vincent-de-Paul hospital. Lille, France
- 05/2013 - 06/2013** Internship, Bachelor Thesis - Study of the mice mammary gland development by optical coherence tomography. ACP department of St-Vincent-de-Paul hospital. Lille, France
- 2010/2012 Summer** Bank teller. La Banque Postale. Lille, France

## SKILLS & QUALIFICATIONS

### Technical expertise

- <b>Proteomic &amp; Lipidomic</b>	Direct analysis strategies Liquid chromatography MALDI Imaging	Bottom-up analysis Micro-proteomic Matrix sublimation / spraying
- <b>Bioinformatics</b>	Univariate analysis Databank handling R software	Multivariate analysis Mass spectrometry imaging
- <b>Pathology</b>	Paraffin embedding Histological colorations	Microtome and cryotome cutting Fresh sample biobanking
- <b>Instruments</b>	HCT Ion Trap, Bruker Synapt-G2S, Waters CHIP-1000, Shimadzu ImagePrep, Bruker	QExactive, ThermoScientific MicroTOF-QII, Bruker LESA+, Advion OPO Mid-IR Laser, OPOTEK
- <b>Prototyping</b>	Computer Assisted Design	Plastic 3D printing

### Clinical Expertise




#### - **Trainings:**

Production of non- & submitted studies files	Good Clinical Practices
Electronical Case Report Files (e-CRF)	Clinical units handling
Volunteer welcoming and clinical interview	GDPR






#### - **Clinical Studies:**

- « Évaluation de la faisabilité technique des mesures *in vivo* par SpiderMass sur les avant-bras d'un panel de volontaires et faisabilité technique de mesure *ex vivo* sur prélèvement de peau normale/mixte ou grasse sur le front » **June 2019**
- « Étude exploratoire, utilisant la MS en temps réel pour l'analyse des profils moléculaires de l'épiderme de sujets atteints de dermatose inflammatoire chronique versus groupe contrôle », **November 2019**

### Languages

- <b>French</b>	Native speaker	
- <b>English</b>	Advanced level, both written and oral CEFR Level C1. TOEIC Level 3 (Score 910/990)	
- <b>German / Spanish</b>	Basic knowledge	

### Computer skills

- <b>Microsoft Office</b>	Word / PowerPoint Excel	 
- <b>CAD</b>	Sketchup, Fusion360, Simplify3D	
- <b>Adobe Creative suite</b>	Photoshop / Illustrator AfterEffect / Premier Pro	 

## PROFESSIONAL RESPONSIBILITIES

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- 2016-2020**            **Member of the administration committee** - Vice-Treasurer, Treasurer, Communication document designer.  
**BioAddoct**, Doctoral school PhD student association
- 2016-2017**            **Member of the organising committee** - Communication partner and Webmaster. **Ourcon-V** International Mass Spectrometry Imaging Conference, 25<sup>th</sup>-28<sup>th</sup> September 2017. Doorn, The Netherlands.

## PROFESSIONAL MEMBERSHIP

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- 2017-2018**            Member of the Mass Spectrometry Imaging Society (MSIS)
- 2016-Present**        Member of the Société Française de Spectrométrie de Masse (SFSM)

## PUBLICATIONS & COMMUNICATIONS

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### Publications

1. Ogrinc N & **Saudemont P**, Balog J, Robin YM, Gimeno JP, Pascal Q, Tierny D, Takats Z, Salzet M, Fournier I. *Water-assisted laser desorption/ionization mass spectrometry for minimally invasive in vivo and real-time surface analysis using SpiderMass*. Nature Protocols (**November 2019**)
2. **Saudemont P.** & Quanico J., Fatou B., Tierny D., Pascal Q., Focsa C., Takats Z., Ziskind M., Salzet M., Fournier I. *Real-Time Molecular Diagnosis of Tumors Using Water-Assisted Laser Desorption/Ionization Mass Spectrometry Technology*. Cancer cell (**November 2018**)
3. 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. Biotechnology (**September 2018**).
4. Fatou B., Ziskind M., **Saudemont P.**, Focsa C., Salzet M., Fournier I. *Remote Atmospheric Pressure Infrared Matrix-Assisted Laser Desorption-Ionization Mass Spectrometry of Proteins*. Mol Cell Phy (**March 2018**)
5. Fatou, B., **Saudemont, P.**, Leblanc, E., Vinatier, D., Mesdag, V., Wisztorski, M., Focsa, C., Salzet, M., Ziskind, M., and Fournier, I. *In vivo Real-Time Mass Spectrometry for Guided Surgery Application*. Sci. Rep. 6: 25919 (**May 2016**)

### Oral Communications            (\*\* = Speaker)

1. **Saudemont P.\***, Quanico J., Fatou B., Tierny D., Pascal Q., Focsa C., Takats Z., Ziskind M., Salzet M., Fournier I. Real-time and ex-vivo lipidomic analyses by mid-infrared laser ablation ambient mass spectrometry applied to dog sarcoma pathology: The SpiderMass™ system for diagnosis, classification and margin detection. 6<sup>th</sup> BIOSARC day from the French sarcoma group, Montpellier, France. **October 13, 2017**.
2. Fatou B.\*, **Saudemont P.**, Leblanc E., Vinatier D., Wisztorski M., Focsa C., Salzet M., Ziskind M., Fournier I.; Development of Micro Sampling Tools through Laser Ablation and Mass Spectrometry for the Characterization of Biological Tissues. SMMAP 2017, Disneyland Paris, France. **October 3, 2017**
3. **Saudemont P.**, Quanico J., Fatou B., Tierny D., Pascal Q., Focsa C., Takats Z., Ziskind M., Salzet M., Fournier I\*. Can Real-Time Molecular Analyses Change the Paradigm of Dog Sarcoma Diagnosis & Classification? OurCon V, Doorn, The Netherlands. **September 28, 2017**.
4. Duhamel M., **Saudemont P.**, Fatou B., Le Rhun E., Ziskind M., Salzet M., Fournier I\*. ; Clinical MALDI MS Imaging: From Bench to Surgery room; XII ItPA Congress, Lecce, Italy. **June 13, 2017**.

5. **Saudemont P**, Fatou B\*, Wisztorski M, Robin YM, Bouchaert E, Leblanc E, Tierny D, Salzet M, Fournier I, Amazing Spidermass: Tracing the Future of Intraoperative Diagnosis ; European Biotechnology Congress, Dubrovnik, Croatia. **May 26, 2017**.
6. Fatou B.\*, **Saudemont P.**, Leblanc E., Vinatier D., Wisztorski M., Focsa C., Salzet M., Ziskind M., Fournier I.; Ex vivo and in vivo Real-Time Mass Spectrometry Analysis using Laser Ablation for Characterization of Biological Tissues. 33<sup>rd</sup> Journées Françaises de Spectrométrie de Masse, Bordeaux, France. **September 27, 2016**
7. Fatou B.\*, **Saudemont P.**, Leblanc E., Vinatier D., Wisztorski M., Focsa C., Salzet M., Ziskind M., Fournier I.; Real-Time Mass Spectrometry Analysis for Guided-Surgery: Application to Ovarian Cancer. Mass Spectrometry: Application to the Clinical Lab, Salzburg, Austria. **September 12, 2016**
8. Wisztorski M., **Saudemont P.**, Desmons A., Gimeno J-P., Robin y-M., Fournier I., Salzet M.\*, Leblanc E.\*; Etude protéomique et imagerie moléculaire des carcinomes séreux ovariens tubaires et péritonéaux et application aux pièces d'annexectomies prophylactiques de femme à risque héréditaire pour les cancers séreux pelviens, 9<sup>th</sup> journées scientifiques du Cancéropôle Nord-Ouest, CID de Deauville, France. **May 19, 2016**
9. Duhamel M.\*, Fatou B., **Saudemont P.**, Wisztorski M., Le Rhun E., Maurage C-A., Robin Y-M., Leblanc E., Salzet M., Fournier I. \*; Bringing Mass Spectrometry from Pathologist Bench to Patient Bedside. European Biotechnology Congress, Riga, Latvia. **May 4, 2016**
10. **Saudemont P.\***, Fatou B., Wisztorski M., Focsa C., Salzet M., Ziskind M., and Fournier I.; SpiderMass: Novel MS Based Instrument for in vivo Real-Time Analysis – Application for Guided Surgery of cancer. 21<sup>st</sup> meeting of the Club Jeune de la Société Française de Spectrométrie de Masse, Moustiers-Sainte-Marie, France. **March 03, 2016**
11. Duhamel M\*, Fatou B, **Saudemont P**, Wisztorski M, Le Rhun E, Maurage CA, Robin YM, Leblanc E, Salzet M, Fournier I, Bringing Mass Spectrometry from Pathologist Bench to Patient Bedside ; European Biotechnology Congress, Riga, Latvia. **March 07, 2015**

## **Posters**

1. **Saudemont P.\***, Ogrinc N., Caux P-D., Josse G., Salzet M., Fournier I., From real-time intraoperative diagnostic to in vivo molecular imaging using SpiderMass. OurCon VII, St-Malo, France. **October 28, 2019**.
2. **Saudemont P.\***, Quanico J., Fatou B., Tierny D., Pascal Q., Focsa C., Takats Z., Ziskind M., Salzet M., Fournier I. SpiderMass : diagnosis and classification of sarcoma using a real-time low-invasiveness ms-based technology. Scientific advisory board evaluation of PRISM laboratory. Université de Lille, France. **December 12, 2017**
3. Fatou B.\*, **Saudemont P.**, Wisztorski M., Focsa C., Salzet M., Ziskind M., Fournier I.; SpiderMass: a new instrument for molecular analysis in real-time by Mass Spectrometry. 18<sup>th</sup> EURON PhD Days. Université de Lille, France **October 13-14, 2016**
4. **Saudemont, P.\***, Fatou, B., Wisztorski, M., Focsa, C., Salzet, M., Ziskind, M., and Fournier, I.; Spidermass: a novel mass spectrometry based instrument for In-vivo real-time analysis with low invasiveness. 7<sup>th</sup> annual meeting of the Institut Thématique Multi-Organismes Technologies pour la santé (ITMO-ITS) - Montpellier, France. **December 15, 2015**

## REFERENCES

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### **Pr. Michel Salzet**

*Lab director*

PRISM laboratory Director

University of Lille

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Campus cite scientifique

59650 Villeneuve d'Ascq - France

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### **Pr. Isabelle Fournier**

*Tutor, PhD director*

PRISM Lab Assistant director

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