English CV

Name RODET
Surname Franck

orcid.org/0000-0002-7612-0282

ResearcherID :M-9220-2018

I-Carrier Synthesis

Scientific Titles

PhD in Molecular and Cell Biology

Cursus

04/2006–06/2008 : **Post-doctoral position**, INSERM U690, Hôpital R.Debré Paris, supervised by Dr. N. de Roux

01/2006-03/2006 : **Post-doctoral position**, Laboratoire de Biologie et Biotechnologies Marines – UMR IFREMER 100 « Physiologie et Ecophysiologie des Mollusques Marins » - Université de Caen, supervised by Pr. P. Favrel

12/2005 : **PhD in Molecular and Cell Biology**, Laboratoire de Biologie et Biotechnologies Marines – UMR IFREMER 100 « Physiologie et Ecophysiologie des Mollusques Marins » - Université de Caen, supervised by Pr. P. Favrel

2001 : **Postgraduate degree (DEA) in Integrated Biology of Invertebrates**
University of Paris VI - *Rank: 3/19 with Good*

2000 : **Masters degree in Cellular Biology and Physiology**
University of Caen - *Rank: 1/37 with Good*

1997 – 1999 : **Bachelor degree in General Biology and Geology**
University of Caen - Rank: 9/127 – *Pass 60-70%*

1996 : **Baccalaureat in Sciences**
High school Beaussier, La Seyne/Mer (83)

Current Situation

Associate Professor at PRISM « Protéomique, Réponse Inflammatoire, Spectrométrie de Masse », INSERM U1192 - University of Lille

Functions

Assistant Professor :
Researches about (i) The production of antibodies by neural cells (Regenesis – Nobody Project) and (ii) PC1/3 inhibition combined with TLR stimulation to develop a therapeutic strategy allowing macrophages activation within tumor (MacBeth Project).

Since 2012 : **French ethic comity approval level 1** to perform researches on animals

Teaching in Animal Biology, Cell Biology, Immunology and Proteomics.

II-National and International Knowledge

Publications

Journal articles

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

Rodet F, Duhamel M, Murgoci AN, Desjardins R, Gagnon H, Wisztorski M, Fournier I, Day R, Salzet M. **(2016)** The proprotein convertase PC1/3 regulates TLR9 trafficking and the associated signaling pathways. Sci Rep. 2016 Jan 18;6:19360

Tasiemski A, Massol F, Cuvillier-Hot V, Boidin-Wichlacz C, Roger E, **Rodet F**, Fournier I, Thomas F, Salzet M. **(2015)** Reciprocal immune benefit based on complementary production of antibiotics by the leech Hirudo verbana and its gut symbiont Aeromonas veronii. Sci Rep. 2015 Dec 4;5:17498

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. **(2015)** Molecular Consequences of Proprotein Convertase 1/3 (PC1/3) Inhibition in Macrophages for Application to Cancer Immunotherapy: A Proteomic Study. Mol Cell Proteomics. 2015 Nov;14(11):2857-77

Rodet F, Tasiemski A, Boidin-Wichlacz C, Van Camp C, Vuillaume C, Slomianny C, Salzet M. **(2015)** Hm-MyD88 and Hm-SARM: two key regulators of the neuroimmune system and neural repair in the medicinal leech. Sci Rep. 2015 Apr 16;5:9624

Bigot L, Zatylny-Gaudin C, **Rodet F**, Bernay B, Boudry P, Favrel P. (**2012**) Characterization of GnRH-related peptides from the Pacific oyster Crassostrea gigas. Peptides 34(2):303-10

Rodet F., Lelong C., Dubos M.P., Favrel P. (**2008**) Alternative splicing of a single precursor mRNA generates two subtypes of gonadotropin-releasing hormone receptor orthologues and their variants in the bivalve mollusc Crassostrea gigas. Gene 414 : 1-9

Lelong C., Badariotti F., Le Quere H., **Rodet F**., Dubos M.P., Favrel P. (**2006**) Cg-TGF-beta, a TGFbeta/activin homologue in the Pacific Oyster Crassostrea gigas, is involved in immunity against Gram-negative microbial infection. Dev. Comp. Immunol. 31(1): 30-38

Rodet F., Lelong C., Dubos M.P., Costil K., Favrel P. (**2005**) Molecular cloning of a molluscan orthologous GnRH receptor specifically expressed in the gonad. Biochim. Biophys. Acta. 1730(3): 187-195

Herpin A., Badariotti F., **Rodet F**., Favrel P. (**2004**) Molecular Characterization of a New Leucine-Rich Repeat-Containing G Protein-coupled receptor (LGR) from a Lophotrochozoan Invertebrate: Evolutionary Implications. Biochim. Biophys. Acta. 1680(3): 137-144

Dubos M.P., Badariotti F. **Rodet F**., Lelong C., Favrel P. **(2003)** Molecular and physiological characterisation of an invertebrate homologue of a calcitonin-related receptor. *Biochem. Biophys. Res. Com.* 310 : 972-978.

Minier C., Lelong C., Djemel N., **Rodet F**., Tutundjian R., Favrel P., Mathieu M., Leboulanger F. **(2002)** Expression and activity of a multixenobiotic resistance system in the Pacific oyster *Crassostrea gigas*. *Mar Environ Res.* 54(3-5):455-9.

Reviews

Franck Rodet, Alice Capuz, Tsukasa Hara, Rinaldo van Meel, Marie Duhamel, Mélanie Rose, Antonella Raffo Romero, Isabelle Fournier and Michel Salzet (**2018**) Deciphering Molecular Consequences of the Proprotein Convertase 1/3 Inhibition in Macrophages for Application in Anti-tumour Immunotherapy. Journal of Biotechnology 282 :80-85

Dasa Cizkova, Jusal Quanico, Melodie-Anne Kanoub, Fahed Zahiri, **Franck Rodet**, Adriana-Natalia Murgoci, Veronika Cubinkova, Isabelle Fournier and Michel Salzet **(2018)** Shedding New Light on Spinal Cord Injury via a Spatio- Temporal Proteomic and Physiological Approaches. Annals of Trauma & Acute Care, 2018 | Volume 2 | Issue 1 | Article 1007.

Marie Duhamel, **Franck Rodet**, Adriana Murgoci, Maxence Wisztorski, Robert Day, Isabelle Fournier, Michel Salzet **(2016)** Proprotein convertase 1/3 inhibited macrophages: A novel therapeutic based on drone macrophages. EuPA Open Proteomics 11 (2016) 20–22.

Rodet F., Huijbregts L., Villanueva C., Villoing L., Jacquier S., de Roux N. **(2008)** Le couple Kisspeptine/GPR54, un acteur majeur de la régulation neuroendocrine de la reproduction. Mt Médecine de la reproduction, Gynécologie Endocrinologie 10(2) : 1-8.

Proceedings

Michel Salzet, Jusal Quanico, Dasa Cizkova, Melodie-Anne Karnoub, Zarha Laouby, Celine Mériaux, Adriana Natalia Murgoci, **Franck Rodet**, Isabelle Fournier **(2018)** Shedding new light on spinal cord injury Journal of Biotechnology Volume 280, Supplement, 30 August 2018, Page S4

Michel Salzet, Duhamel Marie, **Rodet Franck**, Wisztorski Maxence, Fournier Isabelle **(2016)** Proprotein convertase 1/3 inhibited macrophages: A novel therapeutic based on drone macrophages Abstracts / Journal of Biotechnology 231S (2016) S4–S109

F.Rodet, G.Lemardeley, P.Zizzari, C.Aumas, M.-T.Bluet-Pajot, N.De Roux **(2006)** Le peptide kiss-1 module la sécrétion de la LH lors d'une stimulation de l'hypophyse par la GnRH. Annales d'Endocrinologie Volume 67, Issue 5, October 2006, Page 394

Journal covers

PRISM made the cover of Molecular and Cellular Proteomics (IF 6.56) in November 2015 for its publication on the Molecular Consequences of Proprotein Convertase 1/3 (PC1/3) Inhibition in Macrophages for Application to Cancer Immunotherapy : A Proteomic Study : 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. **(2015)** Molecular Consequences of Proprotein Convertase 1/3 (PC1/3) Inhibition in Macrophages for Application to Cancer Immunotherapy: A Proteomic Study. Mol Cell Proteomics. 2015 Nov;14(11):2857-77

Conferences

MACBETH: Macrophage Boost Environment Therapy
Rodet F, Duhamel M, Murgoci AN, Rose M, Wisztorski M, Fournier I and Salzet M

JRC-EC-CEI- ICGEB European Workshop on “Smart Specialization Strategy in the Field of Biotechnologies in Europe: A Challenge for CEE Region”
Bratislava - 4th-6th September 2017
Invited speaker

The proprotein convertase PC1/3 regulates TLR9 trafficking and the associated signaling pathways
Rodet F, Duhamel M, Murgoci AN, Desjardins R, Gagnon H, Wisztorski M, Fournier I, Day R and Salzet M
13th International Conference on Innate Immunity - Rhodes – 23/06/16 – 28/06/16

Hm-MyD88 and *Hm*-SARM: Two key regulators of the neuroimmune system and neural repair in the medicinal leech.
Rodet F, Tasiemski A, Boidin-Wichlacz C, Van Camp C, Vuillaume C, Slomianny C, Salzet M
Immuninv, Lille, 9-11/12/15

Le peptide Kiss-1 module la sécrétion de la LH lors d’une stimulation de l’hypophyse par la GnRH.
Rodet F., Lemardeley G., Zizzari P., Aumas C., Bluet-PajotM-T, de Roux N.

23ème Congrès de la Société Française d’Endocrinologie. Montpellier, 27 au 30 Septembre 2006.

Clonage moléculaire de récepteurs structurellement et évolutivement apparentés aux récepteurs de type GnRH de vertébrés chez l’huître du Pacifique *Crassostrea gigas* ».

Rodet F., et Favrel P.

Journée de l’Ecole Doctorale Normande de Chimie-Biologie. Caen, le 19 Mars 2004.

Awards & Medals

Price awarded for a poster design : XXXIst congress of the French Neuroendocrinology Society and 7th congress of LARC–Neurosciences 2003. Paris 15 - 17 September 2003.
Molecular cloning of receptors structurally and evolutionary related to vertebrate GnRH receptors from the Pacific oyster *Crassostrea gigas*.

Scientific Assessment

Committee member for the recruitment of assistant professors in 2014 and 2018

In 2016, reviewer for Agri Gene (Elsevier)

In 2012, get a CRCT

6th May 2009 : **Referee for the PhD dissertation** of Hanquet Anne-Caroline.

Research Contrats since 1996

2008 :**Bonus Quality Research** University Lille 1

III-Scientific Animation

Co-supervision of 1 PhD student
Supervision of 7 Master 2 students
Supervision of 3 Master 1 students
Supervision of 1 Associate’s Degree student
Supervision of 1 student in osteopathy

IV-Pedagogic Animation

Person in charge for directed works and work practices in Immunology. Bachelor degree specialty Cell Biology and Physiology; Biochemistry.

V-Administrative functions

Since 2016 : **Host of the selection comity of University Lille sections 67 and 68**

Since 2009 : **Member of the selection comity of University Lille 1 section 68**