**Christophe Beloin,** 48 yo**,** Genetics of Biofilms Unit,Institut Pasteur - (IP-GBU)

**EDUCATION AND TRAINING**

2007 Habilitation à Diriger les Recherches. University Paris VII

1998 PhD thesis, Microbiology, University of Paris VII

**PRofessional EXPERIENCE**

2011- present Co-Director Microbiology Course, Institut Pasteur, Paris

2013 Associate Professor, (Directeur de Recherche), Institut Pasteur, Paris

2003 Assistant Professor (Chargé de Recherche), Institut Pasteur, Paris

2001-2003 Post-doctoral fellow Institut Pasteur, Genetics of Biofilms Unit, Paris

1998-2001 Post-doctoral fellow Trinity College, Moyne Institute of Preventive Medicine, Dublin

**SCIENTIFIC ACTIVITIES**

76 publications, 24 invited lectures, 2 international patents - Hirsch h-index : 32, 2888 citations 09/2018

3 PhD theses, 12 Post Doc, 19 diverse students supervisions

Participation in > 20 thesis defenses and regular teaching in masters and doctoral formations

Co-director of the Microbiology Course of the Institut Pasteur and Teaching in several master, undergraduate and doctoral formations

Academic Editor PLoS One, and Reviewer for > 20 journals and funding agencies

**ADMINISTRATIVE RESPONSIBILITIES and EXPERTISE**

2015-present Group leader within the Genetics of Biofilms Unit

Academic Editor PLoS One, Review in Frontiers in Cellular and Infection Microbiology and Reviewer for > 20 journals and funding agencies

**MAIN RECENT RESEARCH FUNDING**

- 2014-2017 **FRM Team.** *Study of bacterial biofilm formation*. 270k€. Co-investigator

- 2016 **Center for Translational Research Institut Pasteur.** *Pharmalock*. 30k€. Co-investigator

- 2016 **PEPS FAIDORA CNRS.** *Evaluation des signes précurseurs de la nanotoxicité de dendrimères sur bactéries : de la nanoparticule unique à l’effet populationnel – nanodUP*. 15k€. Partner.

- 2017-2019 **PTR Institut Pasteur** – *A multi-disciplinary investigation of the Negativicutes: atypical Firmicutes with LPS-outer membranes that inhibit the human gut*. 60 k€. Partner.

- 2017-2020 **French National Research Agency (ANR)** – *Firmicutes with an outer membrane: toward new models to study the diderm/monoderm cell envelope transition.* 183 k€. Partner.

- 2018-2022 **French National Research Agency (ANR)** – *Evolution and dynamics of dissemination of Tolerance towards AntiBiotics in biofilms***.** 320 k€. PI.

**RECENT SELECTED PUBLICATIONS** (Full list: https://research.pasteur.fr/en/member/christophe-beloin/)

• Szczesny M, **Beloin C**, Ghigo JM. Increased Osmolarity in Biofilm Triggers RcsB-Dependent Lipid A Palmitoylation in *Escherichia coli*. mBio. 2018;9(4). doi: 10.1128/mBio.01415-18. PubMed PMID: 30131361; PubMed Central PMCID: PMC6106083.

• Duvernoy M-C, Mora T, Ardré M, Croquette V, Bensimon V, Quilliet C, Ghigo J-M, Balland M, **Beloin C**, Lecuyer S, Desprat N. Asymmetric adhesion of rod-shaped bacteria controls microcolony morphogenesis. Nature Communications. 2018; in press

• Stressmann FA, Couve-Beacon E, Chainier D, Chauhan A, Wessel A, Durand-Fontanier S, Escande MC, Kriegel I, François B, Ploy MC, **Beloin C\***, Ghigo JM\*. Comparative Analysis of Bacterial Community Composition and Structure in Clinically Symptomatic and Asymptomatic Central Venous Catheters. mSphere. 2017;2(5):pii: e00146-17. doi: 10.1128/mSphere.00146-17. PubMed PMID: 28959736; PubMed Central PMCID: PMC5615130.

• Poppleton DI, Duchateau M, Hourdel V, Matondo M, Flechsler J, Klingl A, **Beloin C\***, Gribaldo S\*. Outer Membrane Proteome of *Veillonella* *parvula*: A Diderm Firmicute of the Human Microbiome. Front Microbiol. 2017;8:1215. doi: 10.3389/fmicb.2017.01215. PubMed PMID: 28713344; PubMed Central PMCID: PMC5491611.

• Martinez-Gil M, Goh KHK, Rackaityte E, Sakamoto C, Audrain B, Moriel DG, Totsika M, Ghigo JM, Schembri MA, **Beloin C\***. YeeJ is an inverse autotransporter from *Escherichia coli* that binds to peptidoglycan and promotes biofilm formation. Scientific Reports. 2017 ;7(1) :11326. Doi :10.1038/s41598-017-10902-0. PubMed PMID : 28900103.

• Gominet, M., Compain F., **Beloin C**. and D. Lebeaux. **2017**. Central venous catheters and biofilms: where do we stand in 2017? ***APMIS*** 125 :365-375.

• Antunes L.C., Poppleton D., Klingl A., Criscuolo A., Dupuy B., Brochier-Armanet C., **Beloin C.** and S. Gribaldo\*. **2016.** Phylogenomic analysis supports the ancestral presence of LPS-outer membranes in the Firmicutes. ***eLife*** pii: e14589. *cited in F1000Prime*