

BOURIGAULT Yvann

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CNU section 64

Associate professor at Université de Bretagne Sud (UBS) since 2024

Education and work experience

2019-2023: PhD at CBSA lab (UR4312): Bacterial biocontrol: Microscopy as a tool to characterize bacterial molecular mechanisms applied to phytoprotection under the supervision of Pr Xavier Latour, Dr Corinne Barbey and Dr Annabelle Merieau

2022-2023: Visiting student at LISM (Cascales Lab): Microscopic characterization of the Type VI Secretion System of *Pseudomonas fluorescens* MFE01 and evaluation of its antibacterial activity under the supervision of Dr Eric Cascales and Dr Thierry Doan

2023-2024: Post-doctoral researcher at deDuve Institute (Laloux Lab): Exploration of non-binary cell division of a bacterial predator: Spatiotemporal characterization and regulation during the cell cycle under the supervision of Pr Geraldine Laloux

Summary of research activities and skills

Research topics: Bacterial biofilm, antibiofilm strategies, bacterial interactions, host-pathogen interactions, predatory bacteria, Type VI Secretion system

Skills: microbiology, molecular biology (mutagenesis, genomic, transcriptomic), microscopy (CLSM, epifluorescence), proteomic

Summary of teaching activities

Teaching at all levels of University diploma in microbiology, molecular and cellular biology and biotechnology.

Publications

10 articles published in international scientific journals, 5 and 8 communications (oral presentations or posters) in national and international congresses, respectively.

5 selected publications:

Bourigault Y, Rodrigues S, Crépin A, Chane A, Taupin L, Bouteiller M, Dupont C, Merieau A, Konto-Ghiorgi Y, Boukerb A, Turner M, Hamon C, Dufour A, Barbey C, and Latour X (2021). **Biocontrol of Biofilm formation: Jamming of Sessile-Associated Rhizobial Communication by Rhodococcal Quorum-Quenching**. *Int. J. Mol. Sci.*, IF₂₀₂₁ : **5,923**

Bourigault Y, Dupont CA, Desjardins JB, Doan T, Bouteiller M, Le Guenno H, Chevalier S, Barbey C, Latour X, Cascales E and Merieau A (2023). ***Pseudomonas fluorescens* MFE01 delivers a putative type VI secretion amidase that confers biocontrol against the soft-rot pathogen *Pectobacterium atrosepticum***. *Environ Microbiol.*, IF₂₀₂₃: **5,476**

Dupont CA, **Bourigault Y**, Osmond T, Nier M, Barbey C, Latour X, Konto-Ghiorgi Y, Verdo J, Merieau A. ***Pseudomonas fluorescens* MFE01 uses 1-undecene as aerial communication molecule**. *Front Microbiol.*, IF₂₀₂₃: **6,064**

Santin YG, Sogues A, **Bourigault Y**, Remaut HK, Laloux G. (2023). **Lifecycle of a predatory bacterium vampirizing its prey through the cell envelope and S-layer**. *Nat Comm*, IF₂₀₂₄: 14,7, doi: 10.1101/2023.10.25.563945

Dupont CA, **Bourigault Y**, Biziere-Maco H, Boukerb AM, Latour X, Barbey C, Verdon J, Merieau A (2025). **The GacS/GacA two-component system strongly regulates antimicrobial competition mechanisms of *Pseudomonas fluorescens* MFE01 strain**. *J Bacteriol*, IF₂₀₂₄:2,7 <https://doi.org/10.1128/jb.00388-24>