BAZIRE Alexis

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Section CNU 64

Education, work experience and current position

Lecturer and researcher at Université de Bretagne Sud (UBS) since 2007.

**2005 :** Ph. D. at UBS on rhamnolipid production and regulation in *P. aeruginosa*, under the supervision of Prs Dufour and Haras.

**2005-2006** : Postdoctoral position at UBS. Role of sigma factor AlgU in *P. aeruginosa* biofilm formation. ATER fellowship.

**2006-2007** : Postdoctoral position at Denmark Technical University (DTU). Plasmid transfer in biofilm of *P. putida*. European Marie Curie excellence fellowship

**2015** : Habilited to supervise Ph. D. students. Contribution to understand biofilm formation.

**9 supervision of Ph. D. students** (8 defended and 1 in progress) and 9 Master students.

**6 post-doctoral** supervisions.

Summary of research activities and skills

All my researches focus on bacterial biofilm formation. We investigate how bacteria organized each other at genetic and physiologic levels. We use molecular (transcriptionnal fusion, qPCR, mutagenesis, omics…) and microscopy (Confocal Laser Scanning, Scanning electronical…) tools. We also research new anti-biofilm molecules from marine environment and try to elucidate their mechanisms of action, what are the targets? Quorum sensing, mobility, exopolysaccharides secretion…

Summary of teaching activities

Teaching at all level of University diploma in molecular and cellular biology, microbiology and biotchnology.

Pedagogic and administrative duties

In charge of L3 Biotechnologies and L3 Biosanté (UBS) and of cycle of preparation of medical school (UBS) and new medicine cursus.

Member of science University council of UBS and of science council of European University Institute of the Sea (IUEM)

38 articles in international journals, 5 examples:

1.Rodrigues S., Paillard C., Le Pennec G., Dufour A., Bazire A. ***Vibrio tapetis*, the Causative Agent of Brown Ring Disease, Forms Biofilms with Spherical Components**. 2015. Frontiers in Microbiology 6, 1384 (IF 4)

**2.** Rodrigues S., Paillard C., Van Dillen S., Tahrioui A., Berjeaud J. M., Dufour A. and Bazire A**. Relation between biofilm and virulence in *Vibrio tapetis*, a transcriptomic study.** 2018. Pathogens, 7(4). (IF: 3.4)

3. Thomas T., Elain A., Bazire A., and Bruzaud S. **Complete genome sequence of the halophilic PHA-producing bacterium *Halomonas* sp. SF2003: insights into its biotechnological potential**. 2019. World Journal of Microbiology and Biotechnology, 35:50. (IF 2.1)

4. Boukerb M. A., Simon M., Pernet E., Jouault A., Portier E., Persyn E., Bouffartigues E., Bazire A., Chevalier S., Feuilloley M.G.J., Lesouhaitier O., Caillon J., and A. Dufour. **Draft genome sequences of four *Pseudomonas aeruginosa* clinical strains with various biofilm phenotypes**. 2019. Microbial Resources Annoucement

5. Doghri I., Brian-Jaisson F., Graber M., Bazire A., Dufour A., Bellon-fontaine M. N., Herry J. M., Ferro A. C., Sopena V., Lanneluc I., and Sable S. **Antibiofilm activity in the culture supernatant of a marine *Peudomonas sp.* Bacterium.** 2019. Microbiology.