

## Visualizing the transcriptomic adaptation of *L.monocytogenes*



I'm Ignasi Ferrer Iluis, I'm 23 years old and I come from Girona, Catalunya. I have studied biomedical engineering at the Universitat Politècnica de Catalunya (UPC) and carried on finishing with my master degree at both Universitat de Barcelona (UB) and Universitat Politècnica de Catalunya (UPC). During my studies I have collaborated in different biomedical research groups, such as the signal processing department at the biomedical engineering institute of Catalunya (IBEC), the Research center of biomedical engineering (CREB) or the magnetic resonance investigation department at Valld'Hebron hospital, as well as studied abroad for 6 months to improve my skills and learn about other cultures and working habits.





The main goal of the project is to better understand how the bacterium *Listeria monocytogenes* adapts to different conditions and environments. This topic is very important in order to be able to provide different tools and methods to prevent *Listeria monocytogenes* from growing in the different environments involving the food chain. *Listeria Monocytogenes* is nowadays in the EU the leading cause of mortality and food recalls due to foodborne pathogens, costing the EU millions of euro per annum in medical care and associated costs in the food sector.

## **Objectives**

The analysis of how *Listeria monocytogenes* adapts to different conditions will be performed through Proteomic and Transcriptomic deep sequencing analysis. My main interests on this project are related to how the transcriptomic data acquired from the different experiments can be treated and processed in the best way, besides, I am also interested in interpreting the data from the different experiments to understand how *Listeria monocytogenes* reacts to these different conditions.

Regarding my interests, my main objectives for this project are focused in developing a proper data schema as well as performing bioinformatics analysis with the samples gathered from the different experiments to be able to retrieve information from them. Furthermore, another very important topic is to develop visualization tools for a better understanding of the information acquired from the data.

For developing my objectives I will adapt to GenXPRO GmbH current algorithms and try to incorporate new applications to fulfill with the desired goals.

## Contact

iferrer@genxpro.de

http://blog.u-bourgogne.fr/list-maps/





