


Isma Belouah Ph.D. in Biochemistry

19/09/1990

Rue d'Alembert, Résidence Le Prado Bât NO appt 49 | 33400 Talence | France

 06 08 55 34 94

|  isma.belouah@gmail.com

|  [Belouah Isma](#)

Highlights

- Expertise in proteomic data analysis
- Integrative analysis of several omics data
- Experience in mammal and plant cells physiology
- Background in physiology of metabolic disease

Education

- 2014-2017 **Ph.D. in Biochemistry** *INRA UMR 1332, University of Bordeaux*
Integrative and predictive analysis of omics data
- 2012–2014 **M.Sc. Human Health and Nutrition** *University of Bordeaux*
Specialization Nutrition and neuroscience; Nutrition and pathophysiology
- 2010–2012 **B.Sc. Molecular biology, cellular and physiology** *University of Bordeaux*
Specialization in biochemistry

Professional experience

- 2014–2017 **Ph.D.** *INRA UMR 1332 BFP Metabolism Team, Bordeaux*
Supervisor: **Sophie Colombié (CR)**, Group of Dr Yves Gibon (DR2)
Integrative study of the proteome throughout tomato fruit development
- Extraction, digestion, purification and dosage of proteins ; 1D electrophoresis
 - Integrative analysis of omics (Proteome, Transcriptome, Metabolome and Activome)
 - Prediction of synthesis and degradation rate constants of proteins using a mathematical model of protein translation
- 01-06 2014 **Internship** *CBMN CNRS UMR 5248, Bordeaux*
Supervisor: **Matthieu Raoux (Assistant Professor)**; Group of Pr Jochen Lang
Long-term exploration of circadian rhythms in pancreatic islets using an innovative bio-sensor
- Cell culture (human, mouse) and pancreatic islet isolation (mouse)
 - Extracellular electrophysiology using multielectrode arrays (MEA, 60 electrodes)
 - Development of a protocol for long-term measurements (>24h)

04-06 2013 **Internship INRA AgroParisTech UMR 0914 PNCA, Paris**
Supervisor: **Marion Soto (Ph.D.)**; Group of Gilles Fromentin
Effects of chronic intake of soft drinks on weight gain and satiety in susceptible or obesity-resistant mice

- Determination of sugar and insulin (ELISA assay) levels
- Tissues and organ harvesting from mice (fats pads, lean tissue and liver)
- Collection of fecal and urine samples

Publications

2015 **Slow potentials encode intercellular coupling and insulin demand in pancreatic beta cells.** Lebreton F, Pirog A, Belouah I, Bosco D, Berney T, Meda P, Bornat Y, Catargi B, Renaud S, Raoux M, Lang J. *Diabetologia*. 2015 Jun; 58(6):1291-9. doi: 10.1007/s00125-015-3558-z.

Submitted **Primary metabolism into perspective for better fruit.** Beauvoit B, Belouah I, Bertin N, Belmys Cakpo C, Colombié S, Dai Z, Gautier H, Génard M, Moing A, Roch L, Vercambre G, Gibon Y. *Annals of Botany*.

Submitted **Peptide filtering differently affects the performances of XIC-based quantification methods** Belouah I., Blein-Nicolas M., Balliau T., Zivy M, Colombié S.

Conference/ Posters

March 2018 **Talk in Forum Labo Lyon (Lyon) organized by SFEAP, RFMF, MetaboHub and Profi Proteomics societies:** Omics integration and modeling: Prediction of protein lifetime in tomato fruit.

April 2017 **Talk in Doctoral School Day (Bordeaux):** Toward an absolute quantification of tomato fruit proteins from label free shotgun analysis.

June 2016 **Poster at the 12th International Conference of the Metabolomics Society (Dublin):** Isma Belouah, Thierry Balliau et al. The timing of shifts in the transcriptome and proteome in relation to metabolic state during tomato fruit development.

March 2016 **Poster in Doctoral School Day:** Isma Belouah, Camille Bénard et al. Genetic bases of enzyme activities during tomato fruit development

Complementary skills

Software R, Biostatflow, Latex, Inkscape, Microsoft Office

Language French (native speaker), English (fluent)

Science promotion Website manager and organization of 'INRA Young Researchers' event (<https://journées.inra.fr/jjcbapbordeaux>)

References

- **Dr Raoux:** CBMN UMR 5248, Bordeaux, matthieu.raoux@u-bordeaux.fr, +33 (0)6 63 60 38 82
- **Dr Zivy:** PAPPISO UMR GQE, Gif-sur-Yvette, zivy@moulon.inra.fr, +33 (0)1 69 33 23 65
- **Dr Colombié:** BFP UMR 1332, Bordeaux, sophie.colombie@inra.fr, +33 (0)5 57 12 25 77