Eric Gomès, Ph.D.

Date of Birth: January 16, 1969 Affiliation: Ecophysiology and Functional Genomics of Grapevine, Life Science Department, Institute For Vine and Wine Sciences, University of Bordeaux E-mail address: <u>eric.gomes@bordeaux.inra.fr</u>

URL: http://www6.bordeaux-aquitaine.inra.fr/egfv_eng/

Academic History:

1991	Faculty of Science and Technology,	BS in Cell Biology and Physiology
		Bordeaux 1 University, France
1993	Institut Polytechnique De Toulouse,	MS in Agrochemistry
		INP, ENSA-Toulouse, France
1996	Faculty of Life Sciences,	PhD in Molecular and Cell Biology
		Burgundy University, France
Profess	ional/Scientific Career:	
1997-19	Postdoctoral Fellow	Department of Plant Biology,
		KVL University, Copenhagen, Denmark
1999-20	008 Associate Professor	Science and Technology Faculty,
		University of Poitiers France
2008-pr	esent Professor	Institute for Vine and Wine Sciences
		University of Bordeaux, France
		Coordinator of the "Grape berry Quality
		Group"

Research Area/ Interests:

The "Berry Quality" group of the UMR EGFV (<u>http://www6.bordeaux-aquitaine.inra.fr/egfv</u>) gathers ecophysiologists, molecular biologists and plant physiologists dedicated to study the impact of abiotic stress and trophic factors on grape berry quality buildup. Since 2007, the group has gained expertise and international recognition in berry development and metabolism regulation, in response to environmental factors. The group has identified and characterized several key molecular players of berry growth, berry metabolism and berry quality buildup, and

has started to decipher the genetic basis of berry quality traits. We also have a strong experience in applying environmental stress in controlled conditions and subsequent studies of their impact on berry composition, trough the use of ecophysiological and metabolic modelling.

Selected publication (Total original articles, 39; Book chapter, 1)

- 1. **Gomès E.**, Jakobsen M.K., Axelsen K.B., Geisler M. and Palmgren M.G. (2000) Chilling tolerance in *Arabidopsis* involves ALA1, a member of a new family of putative aminophospholipid translocases. Plant Cell, 12: 2441-2453
- Gomès E., Sagot E., Gaillard C., Laquitaine L., Poinsot B., Sannejouan Y-H., Delrot S. and Coutos-Thévenot P. (2003) Non specific lipid-transfer protein genes expression in grape (*Vitis sp.*) cells in response to fungal elicitor treatments. Mol. Plant Microb. Inter., 16: 456-464
- Acevedo De la Cruz A., Hilbert G., Rivière C., Mangin V., Ollat N., Bordenave L., Decroocq S., Delauney J.C. Delrot S., Mérillon J.M., Monti J.P. Gomès E. and Richard T. (2012) Anthocyanin identification and composition of wild *Vitis* spp. accessions by using LC-MS and LC-NMR. Anal. Chim. *Acta*, 732: 145-152
- 4. Dai Z.W., Léon C., Fail R., Lunn J., Delrot S., **Gomès E.** (2013) Metabolic profiling reveals coordinated switches in primary carbohydrate metabolism in grape berry (Vitisvinifera L.), a non climacteric fleshy fruit. J. Exp. Bot. 65: 4665-4677
- Guillaumie S., Ilg A., Réty S., Brette M., Trossat-Magnin C., Decroocq S., Léon C., Keime C., Ye T., Baltenweck-Guyot R., Claudel P., Bordenave L., Vanbraban S., Duchêne E., Delrot S., Darriet P., Hugueney P., Gomès E. (2013) Genetic analysis of the biosynthesis of 2-methoxy-3-isobutylpyrazine, a major grape-derived aroma compound impacting wine quality. Plant Physiol. 162: 605-615
- Dai Z.W., Meddar M., Renaud C., Merlin I., Hilbert G., Delrot S. and Gomès E. (2014) Long-term *in vitro* culture of grape berries and its application to assess the effects of sugar supply on anthocyanin accumulation. J. Exp. Bot. 65: 4665-4677
- Martinez-Lüscher J., Sánchez-Diaz M., Delrot S., Aguirreola J., Pascual I., Gomès E. (2016) Ultraviolet-B alleviates the uncoupling effect of elevated CO₂ and increased temperature on grape berry (*Vitis vinifera* cv. Tempranillo) anthocyanin and sugar accumulation. Austral. J. Grape Wine Res. 22: 87-95
- Martinez-Lüscher J., Sanchez-Diaz M., Delrot S., Aguirreolea J., Pascual I., and Gomès E. (2015) Ultraviolet-B radiation and water deficit interact to alter flavonol and anthocyanin profiles in grapevine berries through transcriptomic regulation. Plant Cell Physiol. 55: 1925-1936