Michel Hernould, Ph.D.

Date of Birth: February 03, 1964

Affiliation:

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Academic History:

1985	Faculty of Life Sciences,	BS in Biochemistry University of Bordeaux, France
1987	Faculty of Life Sciences,	MS in Cell and Molecular Biology University of Bordeaux, France
1993	Doctoral School of Life Sciences and Health	PhD in Plant Biology University of Bordeaux, France

Professional/Scientific Career:

1993-1995	Postdoctoral Fellow Genetic Centre, Swedish University of Agricultural Sciences, Sweden		
1995-2007	Associate Professor	Faculty of Life Sciences	University of Bordeaux
2007-2014	Professor	Faculty of Life Sciences	University of Bordeaux
2009-2012	Vice-Dean of the Faculty of Life Sciences		University of Bordeaux
2009-Present	Master Biology and Health Program Manager		Faculty of Life Sciences University of Bordeaux
2014-Present	Professor	Faculty of Biology	University of Bordeaux

Research Area/ Interests:

Our research team is interested in the genetic programs that control flower and fruit development with the aim of gaining a better understanding of the mechanisms involved in the development of reproductive organs. Through the study of floral induction to early fruit development, we aim at contributing to the improvement of fruit quality, using tomato and strawberry fruits as a model fruit and an application fruit respectively. Our team is interested in the characterization of genetic, physiological, cytological and molecular events involved in the processes of fruiting and early fruit development that contribute to the development of the final fruit size and quality.

The study of the mechanisms involved in control of cell size and the final size of the fruit is a historical thematic focus of the team, ensuring its reputation and international positioning. Studies on strawberry fruit on the determinism of flower induction and developmental and genetic determinants contributing to the quality of the fruit are highly recognized both internationally and nationally, and benefits from a strong integration into the strawberry chain production.

The strategies used to study these problems involve a combination of complementary approaches including quantitative and association genetics, functional genomics, and cytology.

Selected publication (Original article, 43; Review, 6)

1 - Azzi L, Deluche C, Gévaudant F, Frangne N, Delmas F, **Hernould M**, Chevalier C. Fruit growth-related genes in tomato. J Exp Bot. 66(4):1075-86, 2015

2 - Aouini A, **Hernould M**, Ariizumi T, Matsukura C, Ezura H and Asamizu E. Overexpression of the tomato glutamate receptor-like genes SlGLR1.1 and SlGLR3.5 hinders Ca2+ utilization and promotes hypersensitivity to Na+ and K+ stresses. Plant Biotech., 29, 3: 229-235, 2012

3 - Chevalier C, Nafati M, Mathieu-Rivet E, Bourdon M, Frangne N, Cheniclet C, Renaudin JP, Gévaudant F, **Hernould M**. Elucidating the functional role of endoreduplication in tomato fruit development. Ann Bot. 107, 7 : 1159-1169, 2011.

4 - Mathieu-Rivet E, Gévaudant F, Sicard A, Salar S, Do PT, Mouras A, Fernie AR, Gibon Y, Rothan C, Chevalier C, **Hernould M**. Functional analysis of the anaphase promoting complex activator CCS52A highlights the crucial role of endo-reduplication for fruit growth in tomato. Plant J. 62:727-41, 2010.

5 - Sicard A, Petit J, Mouras A, Chevalier C, **Hernould M**. Meristem activity during flower and ovule development in tomato is controlled by the mini zinc finger gene INHIBITOR OF MERISTEM ACTIVITY. Plant J. 55:415-27, 2008.

6 - Pracros, P., Renaudin, J, Eveillard, S., Mouras, A, **Hernould M**. Tomato flower abnormalities induced by stolbur phytoplasma infection are associated with changes of gene expression during flower development. MPMI 19: 62-68, 2006.

7 - Brukhin, V; **Hernould**, M.; Gonzalez, N.; Chevalier, C.; Mouras, A. Flower development schedule in tomato Lycopersicon esculentum cv.Sweet Cherry. Sexual Plant Reproduction 15: 311-320, 2003.

8 - **Hernould M**, Glimelius K, Veuskens J, Bergman P, Mouras A. Microdissection and amplification of coding sequences from a chromosome fragment restoring male fertility in alloplasmic male-sterile tobacco. Plant J. 12: 703-9, 1997.

9 - **Hernould M**, Bonzon, N., Rabaud, M. and Graves, P. V. "An UV-spectroscopic study of the *in vitro* association of type I+III collagens with elastin solubilized peptides". Journal of Materials Science: Materials in Medecine. 1994

10 - **Hernould M**, Suharsono S, Litvak S, Araya A, Mouras A. Male-sterility induction in transgenic tobacco plants with an unedited atp9 mitochondrial gene from wheat. PNAS 15: 2370-4, 1993.