

**Frédéric Delmas, Ph.D.**

Date of Birth: April 27, 1975

Affiliation:

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**Academic History:**

2000	Department of Biology and Health,	MS in Biology and Health Sciences University of Bordeaux, France
2004	Department of Biology and Health,	PhD in Biology and Medical Sciences University of Bordeaux, France

**Professional/Scientific Career:**

2004-2005	Assistant Professor	Department of Biology and Health, University of Bordeaux, France
2005-2008	Postdoctoral Fellow	Department of Botany, University of Toronto, Canada
2008-present	Associate Professor	Department of Life and Health Sciences University of Bordeaux, France

**Research Area/ Interests:**

Team: Fruit organogenesis and endoreduplication

The "**Fruit organogenesis and endoreduplication**" (OrFE) team is interested in the developmental biology of fleshy fruits, 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. The OrFE 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.

### **Selected publication**

1. Lamia Azzi, Cynthia Deluche, Frédéric Gévaudant, Nathalie Frangne, **Frédéric Delmas**, Michel Hernould, Christian Chevalier. Fruit growth-related genes in tomato. *Journal of Experimental Botany* **66**: 1075-86, 2015.
2. **Delmas F**, Sankaranarayanan S, Deb S, Widdup E, Bournonville C, Bollier N, Northey JG, McCourt P, Samuel MA. ABI3 controls embryo degreening through Mendel's I locus. *Proceedings of the National Academy of Sciences, USA*. **110** (40): E3888–E3894, 2013.
3. Lumba S, Tsuchiya Y, **Delmas F**, Hezky J, Provart NJ, Shi Lu Q, McCourt P, Gazzarrini S. The embryonic leaf identity gene FUSCA3 regulates vegetative phase transitions by negatively modulating ethylene-regulated gene expression in Arabidopsis. *BioMed Central Biology* **10**:8, 2012.
4. Séveno M, Séveno-Carpentier E, Voxeur A, Menu-Bouaouiche L, Rihouey C, **Delmas F**, Chevalier C, Driouich A, Lerouge P. Characterization of a putative 3-deoxy-D-manno-2-octulosonic acid (Kdo) transferase gene from Arabidopsis thaliana. *Glycobiology* **20**: 617-28, 2010.
5. Samuel M. A., Mudgil Y, Salt J., **Delmas F**, Ramachandran S, Chilelli A and Goring D. R. Interactions between the S-Domain receptor kinases and AtPUB-ARM E3 ubiquitin ligases suggest a conserved signaling pathway in Arabidopsis. *Plant Physiology* **147**: 2084-2095, 2008.
6. **Frédéric Delmas**, Martial Séveno, Julian G. B. Northey, Michel Hernould, Patrice Lerouge, Peter McCourt and Christian Chevalier. The synthesis of the Rhamnogalacturonan II component 3-deoxy-d-manno-2-octulosonic acid (Kdo) is required for pollen tube growth and elongation. *Journal of Experimental Botany* **59**: 2639-47, 2008.
7. Paccalet T, Bardor M, Rihouey C, **Delmas F**, Chevalier C, D'Aoust MA, Faye L, Vezina L, Gomord V, Lerouge P. Engineering of a sialic acid synthesis pathway in transgenic plants by expression of bacterial Neu5Ac-synthesizing enzymes. *Plant Biotechnology Journal* **5**: 16-25, 2007.
8. **Frédéric Delmas**, Badia Bisbis, Jérôme Joubès, Adrien Sicard, Michel Hernould, Dirk Inzé, Armand Mouras, and Christian Chevalier. Cyclin-dependent Kinase (CDK) Inhibitors

- Regulate the CDK-Cyclin Complex Activities in Endoreduplicating Cells of Developing Tomato Fruit. *The Journal of Biological Chemistry* **281**: 7374-7383, 2006.
9. Nathalie Gonzalez, Michel Hernould, **Frédéric Delmas**, Frédéric Gévaudant, Philippe Duffe, Mathilde Causse, Armand Mouras and Christian Chevalier. Molecular characterization and expression analysis of a WEE1 homologue in tomato (*Lycopersicon esculentum* Mill.). *Plant Molecular Biology* **56**: 849-61, 2004.
  10. **Frédéric Delmas**, Johann Petit, Martial Séveno, Thomas Paccalet, Jérôme Joubès, Michel Hernould, Patrice Lerouge, Armand Mouras and Christian Chevalier. The gene expression and enzyme activity of plant 3-deoxy-D-manno-2-octulosonic acid-8-phosphate (Kdo-8-P) Synthase are preferentially associated with dividing cells and are cell-cycle regulated. *Plant Physiology*. **133**: 348-60, 2003.