



Plant Biology

XXIII Meeting of the Spanish
Society of Plant Physiology

XVI Spanish Portuguese
Congress of Plant Physiology

Pamplona
June 26-28, 2019



I completed my doctoral thesis in 1995 under the supervision of Jose Pio Beltran at the IATA-CSIC (currently IBMCP) in Valencia (Spain). After a brief postdoctoral period in Valencia, I joined Wilhelm Gruissem's lab (Univ. California at Berkeley, USA) in 1996. On this stay, I developed and consolidated my interest on the molecular study of plant metabolism in general and isoprenoid and carotenoid biosynthesis in particular. In 1999 I returned to Spain and joined Albert Boronat's lab (Univ. Barcelona). In 2001, I got a "Ramón y Cajal" award to start my independent research line on the molecular regulation of carotenogenesis in Arabidopsis. In 2006 I joined the Centre for Research in Agricultural Genomics (CRAG) as a CSIC Assistant Professor (*Científico Titular*) and in 2010 I was promoted to CSIC Associate Professor (*Investigador Científico*). In 2011 I spent a sabbatical year in the laboratory of Jay Keasling (Joint BioEnergy Institute, Berkeley, USA). During the last ten years, my work with Arabidopsis enabled to characterize rate-determining steps of the metabolic pathways responsible for the synthesis of plastidial isoprenoids (including carotenoids) and revealed novel components involved in their transcriptional and post-transcriptional control. My current interests include the application of the generated knowledge in biotechnological approaches aimed to increase the production of isoprenoids and carotenoids of interest as chemicals or phytonutrients in plants of agronomic interest (mainly tomato) and bacteria (such as *Pseudomonas putida*). To meet this goal, we are using diverse experimental approaches from molecular biology and genetics to synthetic and systems biology.