Arabidopsis Response Regulator 6 (ARR6) Modulates Plant Cell-Wall Composition and Disease Resistance

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exciting science

Non-scientific Interests: Reading and writing (especially sci-fi!), photography, traveling, cats.

Brief-bio: If I have to define my life in a word, that would be *curiosity*. When I was a kid and to my mother's desperation-my favorite word was "why?" Therefore, when I had to decide what to study, I was totally determined to choose life sciences, as a way to finally understand why and how things surrounding me function. Biotechnology sounded cool enough for a 17-year-old girl, although I was not sure about what to expect from that degree. After my first year, I was totally convinced of the importance of plant biotechnology as a way to feed a growing world population, so I decided I would continue my studies in that field. After all, I come from a family of farmers in a small village in La Mancha, in the center of Spain. Thus, I knew well the importance of having appropriate crops that can reach good yields even in adverse conditions. The study of the cell wall role in stress resistance satisfies both my curiosity (it is a very interesting and for some time underestimated plant structure!) and my desire to work with plants. When I found Antonio Molina's group at the Centre for Plant Biotechnology and Genomics in Madrid, Spain, which focuses on plant innate immunity, including cell wall-mediated immunity, I had clear vision that I wanted to do my Ph.D. work there. During the years I spent there, I learned a lot: all the steps from starting with a set of mutants with cell wall alterations and ending with a purified cell wall-derived molecule that seems to be released upon plant cell wall damage and that could be used as a biotechnological product to trigger natural defense responses in crops, making them more resistant to pathogens and pests. I also learned about teamwork and collaborative environments, and now I am totally convinced that this is the way science should be: more based in collaboration than in competition. Right now, I am continuing to work with cell walls as a postdoc in Thorsten Hamann's group at NTNU (in Trondheim, Norway), and I am specifically focusing on how plants sense cell wall integrity.