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Professional Biography:

2015-now *Associate professor.* Centro de Ciencias Genómicas. Universidad Nacional Autónoma de México. Cuernavaca Morelos, México.

2008-2014 *Junior group leader.* Department of Biology, University of Fribourg, Fribourg, Switzerland. Group of Prof. Jean-Pierre Métraux.

2004-2008 *Post-doctoral position.* Max Planck Institute for Plant Breeding Research, Cologne, Germany. Group of Prof. Paul Schulze-Lefert.

Studies:

2004 PhD in Plant Biotechnology. CINVESTAV Campus Irapuato. México.

2000 MSc in Plant Biotechnology. CINVESTAV Campus Irapuato. México.

1995 Ing. In Agronomy, specialized in horticulture. Universidad Autónoma Agraria Antonio Narro. México

RESEARCH INTERESTS:

The line of research of our group is the characterization of innate immunity to the necrotrophic fungus *Botrytis cinerea*. The project is based on the identification and characterization of the molecular elements that link the degradation of the cuticle and the induction of innate immunity in plants. To achieve this goal, the *Arabidopsis thaliana-Botrytis cinerea* interaction model and traditional genomics and chemical genomics tools are used. Likewise, in recent years we have focused on the isolation and molecular characterization of biocontrols of *Botrytis cinerea* from the microbiota of plants and animals.

PUBLICATIONS:

Maruri-López I, Aviles-Baltazar NY, Buchala A and **Serrano M** (2019). Intra and extracellular journey of the phytohormone salicylic acid. *Frontiers in Plant Science*. 10: 423

Ferreira Saab M, Formey D, Torres M, Aragon W, Padilla EA, Tromas A, Sohlenkamp C, Freitas Schwan-Estrada KR and **Serrano M** (2018). Compounds released by the biocontrol yeast *Hanseniaspora opuntiae* protect plants against *Corynespora cassiicola* and *Botrytis cinerea*. *Frontiers in Microbiology*. 9: 1596.

Blanc C, Coluccia F, L'Haridon F, Torres M, Ortiz-Berrocal M, Stahl E, Reymond P, Schreiber L, Nawrath C, Métraux J-P and **Serrano M** (2018). The cuticle mutant *eca2* modifies the plant defense responses to biotrophic and necrotrophic pathogens and herbivory insects. *Molecular Plant-Microbe Interactions*. 31 (3), 344-355.

Aragón W, Reina-Pinto JJ and **Serrano M** (2017). The intimate talk between plants and microorganisms at the leaf surface. *Journal of Experimental Botany*. 68 (19), 5339–5350.

Gkizi D, Lehmann S, L'Haridon F, **Serrano M**, Paplomatas EJ, Métraux J-P, Tjamos SE (2016). The innate immune signaling system as a regulator of disease resistance and ISR activity against *Verticillium dahliae*. *Molecular Plant-Microbe Interactions*. 29 (4): 313-323.

Hael-Conrad V, Abou-Mansour E, Díaz-Ricci J-C, Métraux J-P and **Serrano M** (2015). The novel elicitor AsES triggers a defense response against *Botrytis cinerea* in *Arabidopsis thaliana*. *Plant Science*. 241: 120–127.