Main goal of the project
Understanding the molecular mechanisms through which Prosystemin modulates multiple defense responses in tomato

Systemin networks in tomato plants defense responses

Biotic and/or abiotic stressors affect the plants

Tomato plants modulate defense mechanisms against biotic stresses through the expression of Prosystemin

Prosystemin overexpression in transgenic tomato plants triggers a wider range of defense responses
Workflow

Prediction *in silico* of Protein-Protein interactions (PPI) occurring in Prosystemin overexpressing plants

Definition and analysis of Prosystemin’s interactions.

Design a network of proteins

Experimental validation of a number of interactions with particular interest on PPI involving transcription factors
Biotechnological applications

- Understanding molecular mechanisms of tomato defense responses
- Maximize durable resistance to environmental challenges
- Reduce the use of pesticides in agricultural practice