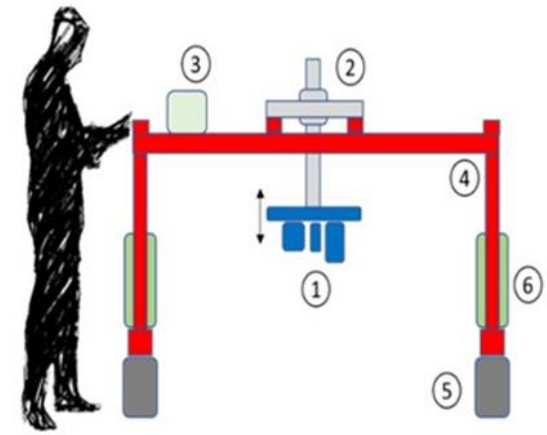

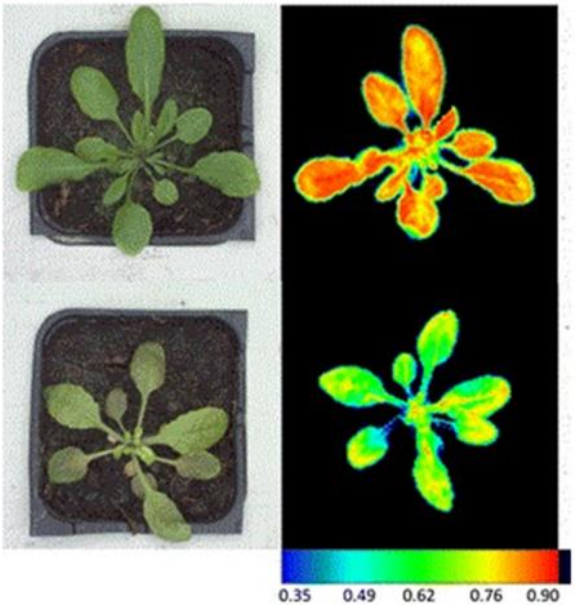

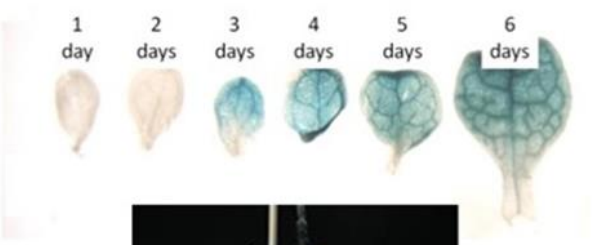

1. Line of research

Sensing and biosensing for plant high-throughput phenotyping

2. ERC descriptor

LS9_4 - Applied plant sciences

3. Job description

We propose an interdisciplinary research to investigate the potential application of multi-sensors systems for the automatic characterization of morpho-physiological parameters of plants/organs, combined with bio-sensing approaches to detect changes in gene expressions related to specific plant traits. The integrated use of such systems, even in field plots, may

disclose to new technology and novel interpretation results, with potential applications in the areas of high-throughput phenotyping or precision agriculture.

4. We offer

- ✓ Working in an interdisciplinary research group in the area of sensing and automation technologies and plant physiology;
- ✓ Using multi-sensors platforms and advanced bio-sensing techniques to study abiotic stresses in crop plants in the framework of international scientific collaborations;
- ✓ Developing distinctive and integrated skills on sensing and bio-sensing technologies, data analysis and interpretation of related physiological processes, with both laboratory and field expertise;
- ✓ Acquiring knowledge on plant molecular biology.

5. Desired skills

Applicants must have good knowledge of fundamentals of plant physiology e basic skills in data analysis techniques using any programming language. Depth knowledge of plant sensing and bio-sensing techniques can be useful. A good knowledge of the English is required.

6. Contacts

For more details on this please contact roberto.oberti@unimi.it or gianattilio.sacchi@unimi.it (La Statale @work: https://expertise.unimi.it/get/person/roberto-oberti; https://expertise.unimi.it/get/person/gianattilio-sacchi).