Otho Mantegazza - CV

Personal information

Birth date: 21st October, 1987

Social: Github - Linkedin - Twitter
website: otho.netlify.com

Work Experience

January 2018 - December 2018

Postdoc at IRD (Institut de Recherche pour le Développement)

During this period I have been working on the **architecture of rice panicles**, a trait of agronomic interest.

In this period I've helped a research team to **analyze and visualize phenotypic and transcriptomic data**. With those data we observed which gene controls panicle branching of Asian and African Rices.

Reference Contact: Dr. Stephane Jouannic stephane.jouannic@ird.fr

April 2015 - October 2017

Postdoc at CEPLAS (Cluster of Excellence in Plant Science)

During this period I have investigated the genetic basis of alternative photosynthetic systems which could improve crop yield in warm and dry climate.

My main tasks have been to **analyze transcriptomic data** and to **supervise a PhD student** that used genome editing to mimic the first stages of evolution of C4 photosynthesis in a C3 model plant.

Here, I have also realized how complicated genetic data are, and that it is important that we learn to communicate those data with **clear and simple english** and with **data visualizations**.

Reference Contact: Prof. Andreas Weber andreas.weber@uni-duesseldorf.de

November 2011 - November 2014

PhD Student at the University of Milan

Under the guidance of **Professor Martin Kater** and **Dr. Veronica Gregis** I have explored which gene control flower development in plants.

During my PhD I have also supervised several master student which contributed to my research projects.

Reference Contact: Prof. Martin Kater martin.kater@unimi.it

February 2010 - October 2011

Scientific Museum Guide

At the *Museo Nazionale della Scienza e della Tecnologia Leonardo da Vinci* I have been conducting tours in the sections about air, land and water transport.

Tools

Proficient in **R** for data analysis. Both with **base** R and with **Bioconductor** and **Tidyverse** packages. Elements of R **package** development.

Elements of **Python**, elements of **bash**, and elements of **Web development**; mostly with static website generators and with d3.js for data visualization.

Skills

Data analysis and data visualization in R

Data wrangling, visualization and communication. Intermediate statistical modeling and R programming.

Bioinformatic analysis

Mapping and quantifying of transcriptomic data. Elements of *de novo* assembly and annotation of genomes. Statistical analysis of transcriptomic data, elements of proteomics and metabolomics data analysis. Modeling of phenotypic data.

Molecular Biology

Molecular cloning, genome editing, real-time qPCR, Laser microdissection.

Communication

Data visualization, elements of web development and markdown.

Education

PhD in Biomolecular Sciences
Awarded in **November 2014**
Università degli Studi di Milano, Department of Biosciences, Milan, Italy.

Master of Science in Molecular Biotechnology,
Awarded in **October 2011**,
Università degli Studi di Milano, Milano, Italy.

Bachelor of Science in Industrial and Environmental Biotechnology
Awarded in **October 2009**,
Università degli Studi di Milano, Milan, Italy.

Diploma Liceo Scientifico (High School)
September 2001 - July 2006,
Scuola Rudolf Steiner, Milano https://www.scuolasteinermilano.it/

Selected Publications

Hahn, Florian, **Otho Mantegazza**, André Greiner, Peter Hegemann, Marion Eisenhut, and Andreas PM Weber. An efficient visual screen for CRISPR/Cas9 activity in Arabidopsis thaliana. *Frontiers in plant science 8 (2017)*.

Lundquist, Peter K., **Otho Mantegazza**, Anja Stefanski, Kai Stühler, and Andreas PM Weber. Surveying the oligomeric state of Arabidopsis thaliana chloroplasts. *Molecular plant 10, no. 1 (2017): 197-211*.

Mantegazza, Otho, Veronica Gregis, Matteo Chiara, Caterina Selva, Giulia Leo, David S. Horner, and Martin M. Kater. Gene coexpression patterns during early development of the native Arabidopsis reproductive meristem: novel candidate developmental regulators and patterns of functional redundancy. *The Plant Journal 79, no. 5 (2014): 861-877*.

Languages

Italian (native), English (fluent), German (beginner), French (beginner).