



Edmund Mach Foundation's Genomics Platform

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Massimo Pindo, Simone Larger, Daniela Nicolini, Erika Stefani, Riccardo Velasco

Genomics Platform, Genomics and Biology of Fruit Crop Department, Research and Innovation Center, Fondazione Edmund Mach, Via E. Mach, 1 San Michele all'Adige, Trentino Alto Adige, Italy

The Edmund Mach Foundation's Genomics Platform takes part in the research activities using innovative methods of experimental investigation relating to sequencing and genotyping. The Platform provides comprehensive genomic services that include genome sequencing, transcriptome analysis, gene expression, genome-wide SNP genotyping, molecular assisted breeding and de-novo DNA marker discovery. Our application fields range from agriculture to environmental studies, passing through the metagenomic studies of the microbial communities in their environment (human and animal gut, plants, environmental, food).

The availability of three robotic workstations can automate a wide range of applications including primary and secondary screening, DNA extraction, amplification set-up, sample dilution, normalization and assay development. Thanks to the 96-capillary 3730xl DNA analyzer and the 16-capillary 3130xl DNA analyzer a wide variety of sequencing and fragment analysis applications including re-sequencing, microsatellite analysis, AFLP, LOH, SSCP, SNP screening and SNP validation are available to allowing researchers to save time, reduce costs and increase productivity. The 454 and Illumina platforms combined with the Illumina HiScanSQ system integrates the power and resolution of Next generation sequencing with the high-throughput capacity of genotyping and gene expression arrays, delivering unprecedented flexibility for experimental design.

The Genomics Platform explores new investigative methods, with the acquisition of new knowledge in the green biotechnology field to make them widely available.