

## MEICOM Marie Curie ITN 2018 ESR Progress Summary

<b>ESR Name: Roven Rommel Fuentes</b>	<b>Supervisor: Sander Peters</b>
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**Workpackage Title:** Use of optical mapping to study the influence of genome structure on recombination

**Research aims and progress for the period:** The main objective of this study is to understand how genome structure of parental species directly influence meiotic recombination. The use of optical mapping, and linked and long reads to detect crossovers (COs) and structural variants (SVs) in both parental lines and offspring is planned. Initially, we tested SV and haplotype block detection using long reads test data (tomato genome). We also detected and analysed SVs and COs in available rice and *Arabidopsis thaliana* RILs and parental genomes.

**Skills Training received:**

Algorithms for Biological Networks (BioSB Course), WUR, Netherlands

Teaching assistant in a undergraduate course (Introductory Bioinformatics), WUR, Netherlands

**Meetings attended:**

Experimental Plant Sciences (EPS) Theme 4 Symposium, Amsterdam, Netherlands

Plant Genomes in a Changing Environment, Wellcome Genome Campus, UK

**Outreach activity:**