

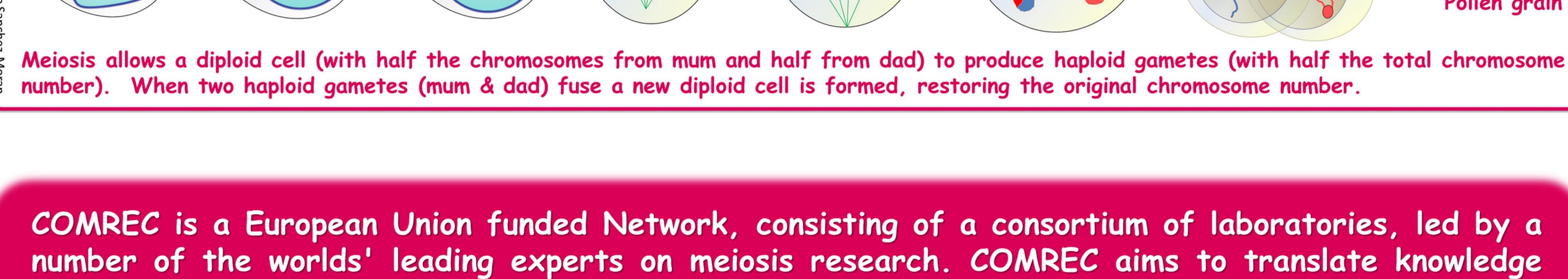
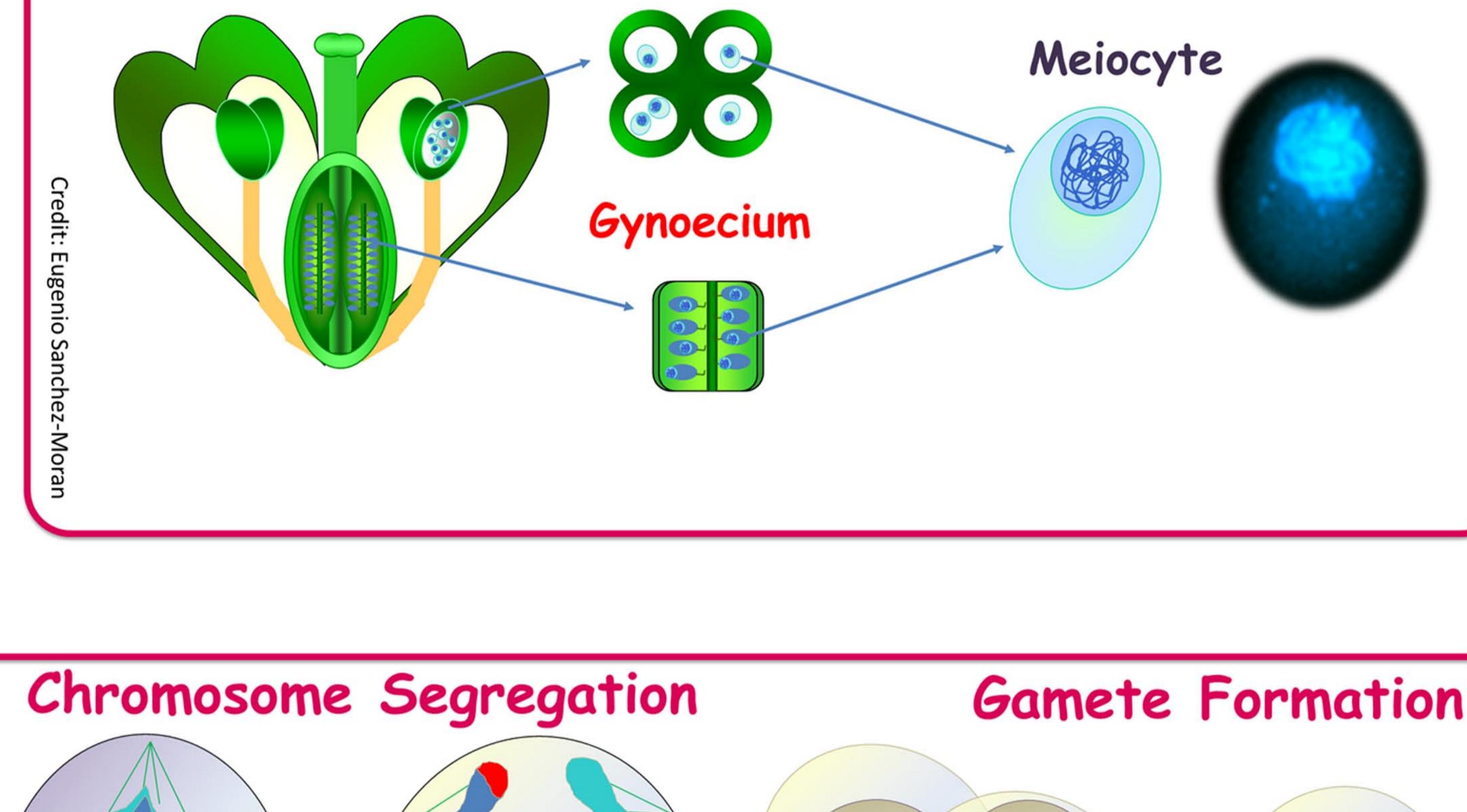
# COMREC



## Control Of Meiotic RECombination

Due to the increasing global population, predicted to reach 9 billion by 2050, food security has become an issue of paramount importance, thus finding ways to produce more food to feed our future generation is a key challenge for plant scientists today

Meiosis is the process which leads to formation of gametes and enables genetic variation. Maintenance or loss of specific traits through the generations depends on how this genetic shuffling is achieved during meiosis. Therefore, understanding the factors that control meiotic recombination is of great significance for the improvement of crop breeding and application of new techniques



COMREC is a European Union funded Network, consisting of a consortium of laboratories, led by a number of the worlds' leading experts on meiosis research. COMREC aims to translate knowledge previously gained from studying meiosis in the model plant, *Arabidopsis*, to analyze this process in crops. A cohort of 13 Early Stage Researchers are receive training whilst carrying out individual research projects, to enable the development of strategies and to modify meiotic recombination in crops, contributing to efforts to ensure food security.

<p><b>Influence of temperature on CO formation in barley</b></p> <p>Who: Mikel Arrieta Where: The James Hutton Institute, United Kingdom Plant: <i>Hordeum vulgare</i> (barley) Contact: mikel.arrieta@hutton.ac.uk</p> <p></p>	<p><b>Defining recombination hotspots in tomato</b></p> <p>Who: Jihed Chouaref Where: University of Amsterdam, The Netherlands Plant: <i>Solanum lycopersicum</i> (Tomato) Contact: j.chouaref@uva.nl</p> <p></p>	<p><b>Development of cytogenetic tools for advancing breeding</b></p> <p>Who: Vanesa Calvo Where: University of Wageningen, The Netherlands Plant: <i>Arabidopsis thaliana</i> Contact: vanesa.calvo@gmail.com</p> <p></p>	<p><b>Bioinformatic analyses of meiotic recombination in tomato hybrids and related species</b></p> <p>Who: Sevgin Demirci Where: University of Wageningen, The Netherlands Plant: <i>Solanum lycopersicum</i> (Tomato) Contact: sevgin.demirci@wur.nl</p> <p></p>
<p><b>Chromosome axis organisation in relation to the coordination of meiotic recombination</b></p> <p>Who: Marina Martinez Garcia Where: University of Birmingham, UK Plant: <i>Arabidopsis thaliana</i> Contact: m.martinezgarcia@bham.ac.uk</p> <p></p>			
<p><b>A forward EMS genetic screen for <i>Arabidopsis</i> genes that control meiotic recombination</b></p> <p>Who: Divyashree Nageswaran Where: University of Cambridge, UK Plant: <i>Arabidopsis thaliana</i> Contact: dcn23@cam.ac.uk</p> <p></p>	<p><b>Control of meiotic recombination during the diploidisation of autopolyploids</b></p> <p>Who: Pablo Parra Where: Universidad Complutense de Madrid, Spain Plant: <i>Arabidopsis thaliana</i></p> <p></p>	<p><b>Understanding factors affecting CO variation in oilseed rape (<i>Brassica napus</i>)</b></p> <p>Who: Adrián Gonzalo Where: INRA, France Plant: <i>Brassica napus</i> (Oilseed rape) Contact: agonzalo@versailles.inra.es</p> <p></p>	<p><b>Roles of recombination proteins in meiotic pairing and synapsis of specific chromosomal regions in <i>Arabidopsis</i></b></p> <p>Who: Gunjita Singh Where: CNRS, France Plant: <i>Arabidopsis thaliana</i> Contact: gunjita.singh@etudiant.univ-bpclermont.fr</p> <p></p>
<p><b>We are COMREC</b></p> <p><b>Live cell imaging of meiosis in <i>Arabidopsis thaliana</i></b></p> <p>Who: Maria Ada Prusicki Where: University of Hamburg, Germany Plant: <i>Arabidopsis thaliana</i> Contact: maria.prusicki@uni-hamburg.de</p> <p></p>	<p><b>Modifying meiotic recombination in tomato</b></p> <p>Who: Amy Whitbread Where: KIT, Germany Plant: <i>Solanum lycopersicum</i> (Tomato) Contact: amy.whitbread@kit.edu</p> <p></p>	<p><b>Generation and analysis of an artificial "cold-spot" of meiotic recombination</b></p> <p>Who: Jason Sims Where: University of Wien, Austria Plant: <i>Arabidopsis thaliana</i> Contact: jason.sims@univie.ac.at</p> <p></p>	<p><b>How does meiosis work in species with holocentric chromosomes?</b></p> <p>Who: Mateusz Zelkowski Where: IPK, Germany Plant: <i>Hordeum vulgare</i> (barley) Contact: zelkowski@pk-gatersleben.de</p> <p></p>

