

<b>TITLE</b>	<b>Exploring plant adaptation to climate change (EOI-TSP2-04)</b>
<b>RESEARCHER PROFILE</b>	Postdoctoral: First Stage Researcher (R1) or Recognised Researcher (R2)
<b>TYPE OF CONTRACT</b>	Temporary contract of 2 years
<b>IP</b>	<b>Mar Castellano Moreno</b>
<b>GROUP INFORMATION</b>	<a href="http://www.cbgp.upm.es/index.php/es/informacion-cientifica/interaccion-de-las-plantas-con-el-medio-ipm/regulation-of-translation">http://www.cbgp.upm.es/index.php/es/informacion-cientifica/interaccion-de-las-plantas-con-el-medio-ipm/regulation-of-translation</a>
<b>OFFER DETAILS</b>	<p>One of the main challenges for agriculture is to optimize crop production to meet the food needs for the increasing world's population. In this sense, it is essential to face the drastic reduction on crop yield caused by environmental stresses, such as heat or pests. In the coming years, this problem is expected to worsen as a result of climate change, since models predict a rise of global average temperature, which, in turn, will increase the appearance of pest on an even broader host range. This project aims at the study of the role of different cochaperones in the plant response to the increase of temperature and to biotic stress. In addition, we will evaluate the potential use of these proteins as biotechnological tools to enhance plant tolerance to these two important environmental challenges that cause important losses in crop production.</p> <p><a href="http://www.cbgp.upm.es/index.php/es/informacion-cientifica/interaccion-de-las-plantas-con-el-medio-ipm/regulation-of-translation">http://www.cbgp.upm.es/index.php/es/informacion-cientifica/interaccion-de-las-plantas-con-el-medio-ipm/regulation-of-translation</a></p> <p><a href="http://www.cbgp.upm.es/index.php/es/informacion-cientifica/interaccion-de-las-plantas-con-el-medio-ipm/plant-defence">http://www.cbgp.upm.es/index.php/es/informacion-cientifica/interaccion-de-las-plantas-con-el-medio-ipm/plant-defence</a></p> <p><a href="http://www.cbgp.upm.es/index.php/es/informacion-cientifica/desarrollo-de-plantas/lateral-root">http://www.cbgp.upm.es/index.php/es/informacion-cientifica/desarrollo-de-plantas/lateral-root</a></p>
<b>MAIN RESPONSABILITIES</b>	<p>The candidate will perform the following tasks:</p> <ul style="list-style-type: none"> <li>- Protein-protein interaction analyses including immunoprecipitation in planta.</li> <li>- Genetic crosses and selection of the desired individuals.</li> <li>- Analysis of gene expression by RT-qPCR, RNAseq and Riboseq.</li> <li>- Protein stability assays.</li> <li>- Physiological and molecular characterization of different mutants to hormone treatments.</li> <li>- Phenotypic and molecular analysis of different mutants to abiotic and biotic stresses, specifically to heat stress and to spider mite infestation.</li> </ul>
<b>SPECIFIC OFFER REQUIREMENTS</b>	Applications should contain a detailed CV and two recommendation letters. Personal interview by Skype could be required.
<b>REQUIRED QUALIFICATIONS</b>	3 years of postdoctoral training in plant molecular biology. We are looking for a highly motivated researcher specialist in plant biology. The candidate should demonstrate experience in the study of plant response to abiotic and/or biotic stresses and in phytohormones. Expertise in the study of cochaperones and plant response to auxin will be highly valuable. Good English level.
<b>ELIGIBILITY CRITERIA</b>	Experience in the tasks to be performed and in the field of research. Personal interview.