The Arid Zones Experimental Station (EEZA-CSIC) would require the incorporation of a postdoctoral researcher within the EMERGIA program (4-year contract; https://www.juntadeandalucia.es/eboja/2020/134/BOJA20-134-00040-7487-01_00174852.pdf) with the following profile: **an ecologist, physiologist and/or plant geneticist with interest and knowledge in the comparative study of C4, C3-C4 and C3 photosynthesis** from one of these general approaches: the physiological, molecular and evolutionary one.

The general **line of research** would be the study of the **"Phenotypic plasticity of photosynthetic metabolism in arid plants: its role to cope with climatic change".**

Phenotypic plasticity (PP) is a pervasive feature of life, pivotal to understand the ecology and evolution of most organisms. Although PP has been profusely studied in plants, and many traits are already known to be plastic, one important aspect remaining largely unexplored is the PP in photosynthetic metabolism. And this happens despites it could shed light on how plants cope with global change. Our lab works with Moricandia (Brassicaceae), an arid plant group with a peculiar C3-C4 photosynthetic pathway that faces two contrasting climatic conditions, mild during spring and dry and hot during summer. Because of this strong change in environmental conditions, the plants exhibit within-individual PP for several floral and vegetative traits. But little is known about how the photosynthetic metabolism respond to this change in conditions, although it is probably key to understand how plants may keep active during the harsh summer. Here, we offer a postdoctoral position to explore this phenomenon. Specifically, the position will be focused on disentangling the physiological, anatomical and genetic mechanisms underlying the seasonal change in photosynthetic metabolism. This research will be crucial to understand how plants can face harsh environments and respond to present-day anthropogenic perturbations and future climate change scenarios.

For further information and contact:

Gomez et al (2020) *Within-individual phenotypic plasticity in flowers fosters pollination niche shift*. Nature Communications, in press.

Jose Maria Gómez (jmgreyes@eeza.csic.es) and Cristina Armas (cris@eeza.csic.es)