

5th International Conference on

Clinical & Experimental Ophthalmology

August 04-06, 2015 Valencia, Spain



Jacob Lorenzo Morales

University of La Laguna, Spain

Novel therapeutic approaches against *Acanthamoeba* keratitis

Acanthamoeba species are also the causative agents of a sight threatening infection of the cornea known as *Acanthamoeba* keratitis (AK) mainly affecting contact lens wearers. Interestingly, AK is increasingly being recognized as a severe sight-threatening ocular infection worldwide. Current diagnosis of AK is challenging, and the available treatments are lengthy and not fully effective against all strains. Moreover, the pathogenesis of *Acanthamoeba* is still under study, and the identification of the key factors involved in this process should be useful for the development of fully effective therapies. The current lack of available effective treatment is mostly due to the existence of a highly resistant cyst stage of *Acanthamoeba*. Together with common misdiagnosis of AK in most cases and a lack of a consensus for AK diagnosis, AK is becoming an emerging disease presenting an increased number of cases year after year worldwide. Therefore there is a need for a fast and reliable diagnostic tool and for novel effective therapeutic agents against these pathogens. Our laboratory is developing novel therapies based on the use of siRNAs in order to validate different cellular targets in these amoebae and to search for a chemical substitute or further develop a RNAi-based technology. Moreover, we have recently established a novel therapy based on statins which was elucidated using siRNAs approaches.

Biography

Jacob Lorenzo-Morales completed his PhD in the University of La Laguna in 2001 and held his Postdoctoral positions at the University of Edinburgh until December 2011 when he was granted a Ramon y Cajal Tenure Track Fellowship by the Spanish Government. His work has been focused on Free-Living Amoebae infections, mainly *Acanthamoeba* keratitis. He has published more than 60 papers in reputed journals in the parasitology and tropical medicine fields. He has been the Scientific Secretary in the last two editions of the International free-living amoebae meetings (FLAM 2009 and 2011), invited speaker at the symposium of free-living amoebae of the International Congress of Parasitology 2014. In November 2013 he was awarded the Individual Award for Young Canary Islands Citizens by the Canary Islands Government in recognition of his research career.

jmlorenz@ull.edu.es

Notes: