

## SCIENTIFIC REPORT OF THE STSM OF ELIAS PAPADOPOULOS

### *Purpose of the STSM*

Short Term Scientific Missions (STSM) “A multinational field parasitological expedition on the track to the vector of *Onchocerca lupi*”

*Host institution:* Universidade de Evora

*Period:* 14/04/2014 to 19/04/2014

*Reference code:* COST-STSM-ECOST-STSM-TD1303-140414-044131

*Approved amount:* EUR 800

The proposed STSM aimed at strengthening the existing networks and fostering collaborations by allowing scientists to visit University of Evora that provided opportunities to work on the neglected parasite *O. lupi* and the research aimed to discovery of its vector. Research done contributed to the TD1303 COST Action objectives of “One Health” concept in the ecology of vector-borne diseases (WG1) and investigating rare and emerging vector-borne pathogens (WG5). It also allowed participants to exchange experience in laboratory and field research methods, learn new techniques and gain access to specific environmental/epidemiological conditions concerning parasite and vectors, not available in their own countries. Two PhD students were learning new entomological/parasitological techniques and in addition, two ESRs were participating to the STSM.

### *Description of the work carried out during the STSM*

My work during the STSM was focused on collecting the blood samples from dogs in areas around forest and rivers, after owners consent, examining for the presence of *D. immitis*, *D. repens* and *A. reconditum* microfilariae (but not *O. lupi*). Collecting the skin snips from the same animals and examining them for the presence of microfilariae of *O. lupi*. Handling infested dogs and involvement in the transmission study. Learning about sampling and identification of vector flies.

### *Description of the main results obtained*

Blood samples were collected from dogs and a high percent of them were infected with microfilariae of *Dirofilaria* spp. The samples were examined as a wet preparation and using a concentration method. Also several of the skin snips were infected with *Onchocerca lupi* microfilariae confirming the high prevalence of this worm in the certain area. Spots with better attraction to the vectors were pointed out and used to repeat the collection of the specimens. I acquired knowledge and skill to identify the worms and the vectors. Also I learned the trapping of the vectors.

*Foreseen publications/articles resulting from the STSM (if applicable);*

1-2 papers in peer reviewed journals

**CONFIRMATION BY THE HOST INSTITUTION OF THE SUCCESSFUL EXECUTION OF THE STSM**

I herein confirm the present report regarding the COST-STSM-ECOST-STSM-TD1303-140414-044131 in Portugal.

Évora, 16th of May 2014



Helder Carola Espiguiinha Cortes