STSM REPORT

1. Purpose of the STSM

The interest in the species marble trout (Salmo marmoratus), is the result of the concern caused by the risk of extinction of this species. The causes of the population decline of this species both in the geographical distribution limitation as hybridization with the introduced brown trout.

For this reason, there is an interest in developing methods for conservation of this species. Such protocols will improve the sperm cryopreservation capacity in order to improve the quality of gametes. For this reason, the main objective of this visit is to expand and explore the application of sperm cryopreservation techniques in other species such as marble trout.

And secondly, to expand my knowledge about sperm cryopreservation techniques, having potential application in European eel (*Anguilla anguilla*), species studied in my Doctoral Thesis.

2. Description of the work carried out during STSM

The principal aim was to learn techniques used during collection of fish on the spawning sites, sperm collection from wild males, sperm storage, quality control and cryopreservation.

3. Description of the main results obtained

We could make samplings in order to collect sperm samples of marble trout. The different samples were analyzed by CASA system and cryopreserved until use. For fertilization were going to use females from farm, but eventually we could not get eggs therefore not carried out any fertilization.

4. Confirmation by the host institution of the successful execution of the STSM

Production manager, Dušan Jesenšek, from Tolmin Angling Association certifies that MaCarmen Vilchez Olivencia visited us a PhD student from 4th to 8th of November of 2013, thanks to a grant awarded by Short Term Scientific Mission, COST Action FA 1205.

Signed: Dušan Jesenšek

Signed: MaCarmen Vilchez