

# **STSM Scientific Report**

## **1 Purpose of the STSM**

Standardization of the cryopreservation procedures in fish gametes. Study of the damages affecting the epigenetic characteristics of spermatozoa. We compared the degree of DNA methylation and histone modification between two methods of freeze-thaw, one led by Dr. Juan F. Asturiano (Universitat Politècnica de València, Spain) and the other led by Dr Akos Horvath (Sczent University, Hungary).

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

To study the degree of DNA methylation between the two protocols we performed DNA extractions of fresh spermatozoa and cryopreserved spermatozoa from the two methods. In order to observe the DNA methylation we used the restriction enzyme assay and analyzed the results by electrophoresis gel and LUMA.

## **3 Description of the main results obtained**

These results highlight the importance of the cryopreservation procedure in European eel gametes. Because of the high variability of DNA methylation we have to deep in the epigenetic study to get more information.

## **4 Future collaboration with host institution**

This stay intensifies the cooperation between the University Polytechnic of Valencia, Spain (Dr. Juan F. Asturiano), the University of Szen, Hungary (Dr Akos Horvath) and the INRA of rennes, France (Dr Catherine Labbé), opening the possibilities to new collaboration in future projects.

Signed: Marina Morini

