

### **8<sup>th</sup> call for STSM-Applications**

COST Action 1205: AQUAGAMETE - Identification and manipulation of early stage germ cell in sturgeon for further applications in European eel.

**Name:** Juan German Herranz Jurdado

**STSM Title:** Grant period 4, 8<sup>th</sup> call

**STSM Reference:** COST-STSM-FA1205-121016-081260

**Dates:** 12.10.2016 to 12.11.2016

**Location:** Faculty of Fisheries and Protection of Waters in Vodnany, University of South Bohemia, Czech Republic

**Host:** Dr Martin Pšenička

### **STSM purpose**

The aim of this STSM was to learn techniques for the isolation and identification of spermatogonia, as well as xenotransplantation techniques in sturgeon with the goal of potential further application in the European eel.

### **Work description**

During the STSM at the Faculty of Fisheries and Protection of Waters in Vodnany, we performed the identification, isolation and manipulation of spermatogonia from male sturgeons.

We performed the isolation of spermatogonia from Siberian sturgeon (*Acipenser baerii*) testis by using enzymatic dissociation and a Percoll gradient. The success of the isolation was confirmed by observation under light microscope. In addition, viability of spermatogonia was evaluated with light microscopy using trypan blue staining.

For transplantation of germ cells, spermatogonia obtained by Percoll gradient were stained using PKH26 Red Fluorescent Cell Linker Kit and loaded into a glass needle for microinjection into a host larvae.

The techniques and protocols learned during this STSM are intent to be adapted to European eel.

**Confirmation by the host institution of the successful completion of the STSM**

Dr Martin Pšenička certifies that Juan German Herranz Jurdado has completed a Short-Term Scientific Mission awarded by COST Action FA1205 in the period 12.10.2016 – 12.11.2016

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Dr Martin Pšenička  
(Host institution)

A handwritten signature in blue ink, appearing to read 'JD', is written over a faint, light blue watermark that says 'AQUAGAMETE'.

Juan German Herranz Jurdado  
(STSM applicant)