

## **COST** Action FA1205: AQUAGAMETE - Assessing and improving the quality of aquatic animal gametes to enhance aquatic resources. The need to harmonize and standardize evolving methodologies, and improve transfer from academia to industry

## TRAINING SCHOOL "Optical Microscopy and Image Analysis"

Vodnany (Czech Republic), 16<sup>th</sup> – 20<sup>th</sup> March 2015

Dear colleagues,

The AQUAGAMETE COST Action (aquagamete.webs.upv.es/web) is pleased to announce the 4th AQUAGAMETE Training School. This Training School is aimed towards young researchers (PhD students, young post-docs and MSc students) as well as representatives from industry. The course will be focused on Optical Microscopy Techniques and Image Analysis Facilities assisted by Computer used in Reproductive Biology, potentially applicable to aquatic gametes and early embryos. Various aspects of expertise and topics will be covered, such as:

\* Principles of optical microscopy techniques applied to Biology.

\* Practical applications of optical combinations: phase-contrast, differential interference contrast, dark-field, fluorescence, confocal and optical sectioning microscopy.

\* Collection of images generated by a microscope: photo- or video-cameras, including high-speed video-cameras.

\* Computer assisted image analysis applied to fast moving microscopic objects like spermatozoa or to large and still objects like eggs.

\* Data analysis using different soft-wares dedicated to these applications: CASA, Image J plug-ins, cell morphometry soft-wares, etc.

\* Modelisation and quantitative predictions of cell behavior.

The 4th AQUAGAMETE Training School will highlight the most recent developments in each topic, thanks to invited lecturers so as to promote a strong interaction between trainees working on different aspects of Reproductive Biology of Aquatic Gametes and experienced trainers as specialists in the use, improvement and development involved in the above-mentioned Optical and Computer applications.

The Training Course will take place from 16th to 20th of March 2015 in the facilities of the Faculty of Fisheries and Quality of Waters, in Vodnany (Czech Republic) and its organization will rely mostly on the staff of the Laboratory of Reproductive Physiology belonging to the Research Institute of Fish Culture and Hydrobiology, with assistance of members of the Institute of Complex Systems.

For efficiency reasons, good level of know-how transfer and practical access of trainees to microscopes, the number of participants will be restricted to 12 trained persons. Financial support from the AQUAGAMETE COST Action will be available for students. Registration fee for students (250 euros) and for industry representatives (400 euros) will include all lunches and breakfasts, accommodation for 5 nights, access to lectures and laboratory practices, support material, transport between facilities and main accommodation place.

The application deadline is 10th of January 2015 and complete applications must be sent via e-mail to aquagamete@gmail.com. Eligible candidates will be announced by the 7th of February 2015. For more detailed information, you can e-mail your message to local contacts: Jacky Cosson (jacosson@gmail.com) or Klára Kovaříková (kkovarikova@frov.jcu.cz).

Applications should include:

- \* Application form;
- \* Short Curriculum Vitae in the area (only for students);

\* Motivation letter for participating in the training school, which should indicate the academic/professional status of the applicant;

\* Letter of recommendation from the applicant's supervisor or employer;

\* Financial Support justification (only for students), in which trainees should make an estimation of their expenses during the week of the Training School.

We would appreciate if you could forward this announcement via e-mail to colleagues or students who may be interested in participating.

Practical information: Closest city with international airport is Prague (PRAHA). We shall try to arrange a shuttle bus to lead attendants from Prague airport to our Faculty in Vodnany. Also, a shuttle bus would be organized to drive your from local accommodation place to our Institute.

More information will be available soon at: http://aquagamete.webs.upv.es/