URGENT: M2 internship with possibility for extension to Ph.D.: ecological consequences of global warming in aquatic food webs at INRAE/IRSTEA Aix-En-Provence

One internship position focusing on the ecological consequences of temperature-induced body size shifts on aquatic ecosystems is available at the RECOVER laboratory in the freshwater ecology (FRESHCO) team at the INRAE of Aix-En-Provence (France). The student will work under the supervision of Arnaud SENTIS, Fanny COLAS and Martin DAUFRESNE. Funding for a Ph.D. starting in September 2020 is already acquired (ANR EcoTeBo) and the M2 student could be prolonged to Ph.D.

**Topic:**
Global warming leads to the body size reduction of many animal species from bacteria to fishes. However, little is known about the consequences of body size reduction for the dynamics and functioning of aquatic systems. The successful candidate will thus perform a mesocosm experiment on planktonic food webs and their fish predators specifically focused on the effect of fish body size and ecosystem processes (primary production, gas exchange, etc.) at different temperatures. This includes conducting mesocosm experiments, collecting data, and computing statistical analyses.

**Key-words:** climate change, food webs, zooplankton, fish, mesocosm, ecosystem functions.

For more information see:
https://www.irstea.fr/fr/fonctionnement-et-restauration-des-hydrosystemes-continentaux

**Candidate competences:**
We are seeking highly motivated students with good organizational skills and strong interests in experimental quantitative ecology and global change ecology. Master students in biology, ecology or a related field are welcomed. Students interested in both experimental and theoretical work are particularly encouraged to apply. Candidates should be sufficiently fluent in English to be able to engage in discussions. Previous experience with freshwater fauna, laboratory/mesocosm experiments, use of spreadsheets (e.g. Excel) and statistical analyses (R software) will be appreciated.

To apply (before the 4th of December), please send your CV and motivation letter (1 page maximum) to Arnaud Sentis (arnaud.sentis@irstea.fr), Fanny Colas (fanny.colas@irstea.fr) and Martin Daufresne (martin.daufresne@irstea.fr). Informal enquiries are welcome - please contact us by email in french or english.

**Practical information:**
**Starting date (flexible):** 1st March to 31st August 2020 **Duration:** 6 months  
**Stipend:** ~550 €/Month  
**Advisors:** Arnaud Sentis, Fanny Colas and Martin Daufresne  
**Location:** INRAE/IRSTEA, 3275 route Cézanne, 13182 Aix-en-Provence, France