

## **Post-doc position in fish physiology and immunology**

**A post-doctoral position is available at the University of Namur, BE\* to study the biology and physiology of migrating eel and Atlantic salmon in the Belgian Meuse River**

A post-doctoral position is available from the 1<sup>st</sup> of January 2021 to work on the physiological and health status of migrating eel *Anguilla anguilla* and Atlantic salmon *Salmo salar* inhabiting the Meuse river basin, Belgium. The post-doctoral researcher will work at the Laboratory of Environmental Physiology and Toxicology of the Research Unit in Environmental and Evolutionary Biology, UNamur, Belgium under the supervision of Prof. Patrick Kestemont. The research program is a part of a large European Commission Life project (Life4Fish) in collaboration with different private companies (EDF-Luminus, coord., EDF-R&D, ProFish technology) and the university of Liège(ULG, BE).

This post-doc position is for 1 year potentially renewable, depending on budget remaining on Life4Fish as well as on other new research projects. Maximum duration is 3 years (international mobility status).

### *Life4Fish project description*

The proposed "Life4Fish" project runs for 5 years from October 2017 to September 2022. The Meuse River lies in an environment of great ecological value but has suffered much damage due to high industrialization. Various ambitious species restoration programs are in progress, targeting Atlantic salmon and European eel. The LIFE4FISH focus on these two species. The project aimed to characterize the European eel and Atlantic salmon populations and downstream migration routes along the Lower Meuse River. The proposal includes installation, implementation and monitoring of innovative solutions designed to facilitate passage through the hydropower facilities. The solutions consist of specific technologies (repulsive barriers and fish passes) and new hydropower control strategies accounting for the downstream migrating process.

The post-doc researcher will be responsible of two of the workpackages of this Life program research, with the objectives (1)to characterize the physiological and immunological status of resident fish in the upstream area compared to migrating fish challenged by the passage through water turbines or fish passes, and (2) to evaluate the long-term impact of such water barriers on fish defence capacity and welfare status. Numerous studies covering these objectives have already been carried out, and the post-doc researcher will be in charge of the follow-up of some confirmatory tests as well as the finalisation of the reports and valorisation of some available data.

### *Contacts*

For more information, please contact Prof. Patrick Kestemont ([patrick.kestemont@unamur.be](mailto:patrick.kestemont@unamur.be)) or Dr. Robert Mandiki ([robert.mandiki@unamur.be](mailto:robert.mandiki@unamur.be)) from the Laboratory of Environmental Physiology and Toxicology, Research Unit in Environmental and Evolutionary Biology, University of Namur.

*Application*

Applicants should be in a situation of international mobility. He (she) should have a PhD degree in Biology or Bioengineering or Molecular Life Sciences with a specialization in comparative physiology and/or immunology, fish biology and fisheries, or similar. The successful candidate should be proficient in English and should demonstrate his (her) motivation to work in a multidisciplinary research team with a highly collaborative spirit.

**The closing date for applications is the 15<sup>th</sup> of November 2020.**

Interested applicants should send a cover letter (briefly describing research experience, interests, and career goal), curriculum vitae (with list of publications), and the names of three references (including address, phone number and Email) to Prof. Patrick Kestemont ([patrick.kestemont@unamur.be](mailto:patrick.kestemont@unamur.be))

**Publication related to Life4Fish:**

Ben Ammar, I, Baeklandt, S, Cornet, V, Antipine, S, Sonny, D, Mandiki, SNM & Kestemont, P 2020, 'Passage through a hydropower plant affects the physiological and health status of Atlantic salmon smolts', Comparative biochemistry and physiology. Part A, Molecular & integrative physiology, vol. 247, 110745. <https://doi.org/10.1016/j.cbpa.2020.110745>