







Press release - 11 June 2021

France-Spain-USA: a new international associated laboratory dedicated to climate impacts on freshwater ecosystems

On 10 June 2021, Philippe Mauguin, Chair and CEO of INRAE; Noam Pines, Associate Director at the University of California, Berkeley; Laurent Bordes, President of the University of Pau and the Adour Region; and Eva Ferreira Garcia, Rector of the University of the Basque Country in Bilbao; undertook to create a new international associated laboratory: the LIA MacLife. By bringing together complementary disciplinary expertise, this new "laboratory without walls" will be dedicated to knowledge on the impacts of climate change on freshwater organisms and ecosystems. The joint work of the teams involved should support new policies for the management of aquatic environments.

By bringing together their knowledge, skills and experimental facilities through the LIA MacLife, the three teams¹ will explore the impacts of climate change at various levels of ecological organisation (from genes to ecosystems) and the way they interact on different time and space scales. The aim is to inform new policies and management actions that promote the stability, resilience and adaptation of aquatic populations and communities to climate change.

The purpose of the MacLife project is to understand how ecological networks and biodiversity (at several interconnected levels of organisation) constitute networks that support adaptive responses by species and the resilience of freshwater ecosystems to rapid environmental change. Particular attention will be paid to the consequences of extreme events (increased frequency of floods, droughts, etc.) on aquatic organisms, including threatened heritage and fishery resource species (e.g. migratory species such as salmon and eel), as well as on ecosystems and the services they provide. This understanding should enable scientists to better anticipate risks based on the climatic diversity of the study sites (France, California, Spain).

The project seeks to transfer knowledge to the wider scientific community and resource managers to develop future management strategies for natural resources, ecosystems and their associated benefits.

This new LIA is the result of a long collaboration between the partners. The I-Site Energy Environment Solutions (E2S), supported by the University of Pau and the Adour Region, is playing a major role by providing funding for thesis and post-doctoral projects for the next two years, in line with their historical partnership with UMR Ecobiop.

¹ The UMR Ecobiop joint research unit in Saint-Pée-sur-Nivelle, the Freshwater Group in Berkeley and the Aquatic Ecology Group in Bilbao.

Press contact:

INRAE Press Office: presse@inrae.fr + +33 1 42 75 91 86

University of Pau and the Adour Region Press Office – communication@univ-pau.fr - +33 6 28 66

17 62