

EXPRESSION OF INTEREST FOR A HORIZON 2020 PROJECT

Title of the targeted call for proposals and Topic of interest:

WP title : Building a low-carbon, climate resilient future: Green Deal call
Area 7: Ecosystems and Biodiversity
Call number and title : *LC-GD-7-1-2020: Restoring biodiversity and ecosystem services*

Contact details

Country	FRANCE
Name of the organisation	Aix-Marseille University (AMU)
Laboratory	Mediterranean Institute of Oceanography
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Short description of AMU:

Aix-Marseille University (AMU) was created in 2012, resulting from the merger of the University of Provence, the University of the Mediterranean and Paul Cézanne University. It has more than 78,000 students including 10,000 international students, 7,680 faculty and staff members, 12 doctoral schools and nearly 3,300 PhD students. AMU is the coordinator of the Erasmus + European University Alliance "CIVIS". AMU has been involved in more than 100 FP7 projects and until now 102 H2020 projects.

AMU Laboratory/ies involved:

Mediterranean Institute of Oceanography / Pythéas Institute:

Areas of potential contribution:

Indicate your expertise and areas of potential contribution + a short profile of the persons who may be involved in the project

Our research projects deal with the evolution of marine species facing environmental change and particularly climate change. We develop genomic studies to better understand how population and species may adapt to different environments. This includes the adaptation to different thermal conditions (particularly depths) and to anthropized environments (including polluted environments and artificial substrates such as artificial reefs, wrecks, dykes...). The adaptation to these environments will include colonisation or recolonisation abilities, demographic rescue, genetic adaptation or acclimatization and changes in microbial communities. The connectivity network at the scale of seascape is particularly important as well. These research areas can be used for the development of new methods for ecosystem restorations, particularly in peri-

urban areas. The integration of genetic and ecological approaches is particularly efficient to implement nature-based solutions. We work on these subjects in the Holodiv project funded by A*Midex (<https://holodiv.mio.osupytheas.fr/>) and the green deal call would be an opportunity to go further on these questions.

Persons involved in the project:

- Didier AURELLE, associate professor AMU, MIO / OSU Pythéas
population genomics of marine organisms, evolution, adaptation,
connectivity, speciation

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