

9 months Post-doctoral position in France Aix Marseille University

Application Deadline: as soon as possible

- **JOB TITLE**

Post doc on the BiodivAquArt project. Aquatic Biodiversity in Art: ecological, historical and conservation significance.

- **JOB PROFILE/TYPE**

Contract: temporary post-doctoral position (9 months) possibly starting first of January 2024.

DRV

Employer: Aix-Marseille University

Gross salary: depending on the professional background: the first year ranging from 2466 to 2891 €/month.

- **RESEARCH FIELD(S)**

Historical Ecology, Aquatic Ecology, Environmental history

- **JOB LOCATION**

Mediterranean Institute of Oceanography, Marseille, or Maison Méditerranéenne des Sciences de l'Homme, Aix en Provence.

- **PIs of the BiodivAquArt project**

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- **PROJECT DESCRIPTION**

Works of art are not only testimonies to past civilizations and biodiversity, but also provide fundamental information for guiding current conservation programs (Tribot et al. 2022). The success of such programs requires an understanding of the reference state of ecosystems, which is rarely known since current references are in perpetual slippage toward the acceptance of degraded ecological states (Pauly 1995). For this reason, international organizations are regularly alerted about threats to fish and aquatic resources, signaling a major challenge for our societies.

To help meet this challenge, the BiodivAquArt project aims to enrich the historical and ecological knowledge of aquatic resources in Western Europe and around the Mediterranean by analyzing the taxonomic composition of aquatic biodiversity as represented in ancient art, using the statistical tools of numerical ecology. The geographic

and temporal variations of the biodiversity represented in art are interpreted according to environmental and cultural parameters, crossed with historical archives.

The Project is coordinated by Daniel Faget (Historian at Aix-Marseille University), Thomas Changeux (biologist at the Mediterranean Institute of Oceanology) and Anne-Sophie Tribot (socioecologist at Aix-Marseille University). This project is funded by the [Fondation de France](#) and the [Mediterranean Institute for the Environmental Transition](#) (A*Midex), an interdisciplinary initiative aiming to understand the global change on society and natural resources.

Pauly, D. (1995). Anecdotes and the shifting baseline syndrome of fisheries. *Trends in Ecology & Evolution*, 10, 430

Tribot A-S, Faget D., Richard T., Changeux T. (2022). The Role of Pre-19th Century Art in Conservation Biology: An Untapped Potential for Connecting with Nature. *Biological Conservation* 276: 109791. <https://doi.org/10.1016/j.biocon.2022.109791>. doi: 10.1016/j.biocon.2022.109791

○ **JOB DESCRIPTION**

The post-doctoral project primarily focus on Early modern paintings (16th-18th). A first study was carried out on a corpus composed of 77 paintings (Tribot et al. 2021). The results revealed a convergence between the origin of the paintings and the biogeographic area of the species, and an overall decrease over time of represented taxa, particularly of continental and freshwater species. We extend this corpus to 317 paintings, including 150 from the Mediterranean. Alongside paintings, we have constituted a corpus of 334 roman mosaics mostly located around the Mediterranean and identified all the represented taxa.

The post-doctoral fellow will be in charge of exploring the Mediterranean corpus more deeply in order to reveal the geographical and temporal specificities, in connection with the historical data available. The used methods will include both statistics (multivariate analyses), crossed with bibliographic data related to (i) historical ecology of marine ecosystems, (ii) environmental history of the Mediterranean, (iii) art history and (iv) historical naturalist treatises. This work is therefore inherently interdisciplinary, and requires the ability to search and select relevant information from various sources.

Interpretation of the results may be based on different themes, to be defined according to the results of cross-referencing with bibliographic data. For example, we could deal with “emblematic” species and “orphan” species. Indeed, we observe that certain species are abundant in the environment, and often represented by artists, while they are little documented in historical writings (orphan species). Conversely, others are rarer in the environment but abundantly represented and documented (emblematic species). These observations reflect the different values and perceptions of marine animals according to different social bodies: artists, scientists,... These aspects can be discussed as part of a concluding commentary on the advantages and limitations of approaches to environmental history based on ancient works of art, recurrent question in the literature. In parallel, a part of the discussion could be centered around a specific corpus composed of artworks realized by the Recco family. This family of Napolitan painters notably produced numerous still life paintings with aquatic animals throughout the 17th century. A collaboration is planned with

a team made up of naturalist collection curators and art historians, attached to the Anton Dohrn Zoological Station (Naples), who have identified 60 to 80 images of Recco paintings, and with particular expertise of these painters.

In summary, this post-doctoral project offers numerous avenues of exploration based on data sets already created, which the candidate can refine or discard depending on the results obtained. Each of the themes covered may be the subject of a publication.

The recruited person will benefit from the expertise of the team involved into the BiodivAquArt project including statistical skills, marine and freshwater fisheries (Thomas Changeux) and Mediterranean fishing history (Daniel Faget). The team also includes the former post-doctoral researcher in charge of previous analyzes (Anne-Sophie Tribot).

Last, the post doc will interact with art historians (Céline Texeira-Ventura, Magalie Théron, Pierre Pinchon from Aix-Marseille University), and specialists in historical ecology and ichthyology (Samuel Iglésias, Gaël Denys, Philippe Bearez from Muséum National d'Histoire Naturelle).

Tribot A.-S., Faget D., Villesseche E., Richard T., [Changeux T.](#) (2021) Multi-secular and regional trends of aquatic biodiversity in European Early Modern paintings: toward an ecological and historical significance. *Ecology and Society*, 26(4):26. <https://doi.org/10.5751/ES-12740-260426>.

- **QUALIFICATIONS/SKILLS/EDUCATION & RESEARCH REQUIREMENTS/DUTIES**

A strong taste for interdisciplinary research is essential

Good knowledge of marine ecology and/or environmental history in Europe and/or in the Mediterranean région

Good knowledge and programming practice of quantitative and statistical analyzes with R

Practice of data base management

Fluent in English and, if possible, French as well

Naturalist knowledge in ichthyology or fisheries is a plus

- **APPLICATION DEADLINE** (If applicable)

As soon as possible

- **REQUESTED DOCUMENTS OF APPLICATION AND CONTACT**

To apply, candidates should send a CV, names and contact of at least 2 referees and a research statement letter (less than 2 pages including references) to Thomas Changeux [thomas.changeux@ird.fr], Daniel Faget [daniel.faget@univ-amu.fr] and Anne-Sophie Tribot [anne-sophie.tribot@univ-amu.fr]

After selection of candidates on the basis of the documents transmitted, a remote interview will be organized.