



POST-DOCTORAL FELLOWSHIP (F/M/D)

In the framework of the SNSF research program
**TOWARDS A RENEWED VISION OF ALPINE AGRO-PASTORAL SOCIETIES
THROUGH THE ANALYSIS OF FOODPRACTICES, LIFESTYLES AND PEOPLING
DYNAMICS**

We offer a

POST-DOCTORAL FELLOWSHIP IN BIOANTHROPOLOGY

**from January 1st, 2024 to December 31st, 2025
(2 years, full time - renewable contract after the first year)**

Research focus

Paleopathological study of the first alpine agro-pastoral societies

Conditions of appointment

- Hold a PhD in bioanthropology (or equivalent, with a specialization in paleopathology) for less than 5 years,
- Excellent teamwork skills,
- Fluency in French and English (oral and written),
- Be willing to reside in Geneva or its vicinity during the contract period,
- Salary scale of the Swiss National Science Foundation (SNSF).

Submission requirements

A cover letter, 2 letters of recommendation, and a detailed curriculum vitae should be sent to Dr Jocelyne Desideri (jocelyne.desideri@unige.ch) before **September 1st, 2023**.

Hosting institution

Laboratory of Archaeology of Africa and Anthropology (ARCAN), Biology Section,
Faculty of Sciences, University of Geneva.

<https://arcan.unige.ch/>

Integration of the position in the project

The research project concerns a period of prehistory, the Neolithic, which developed between 5500 and 2200 BC in Western Switzerland and which saw great changes in the way of living and the functioning of its societies. These were the first Swiss agro-pastoral communities, for which there is a relatively complete and well-documented sequence of burial practices. A significant number of individuals have been the subject of research studies, which have made it possible to draw a partial portrait of these ancient populations.

The dietary behavior, lifestyles and mobility of these first farmer-breeders will be studied. Only a few specific studies on these questions have been conducted to date. The aim here is to acquire a broad and complete vision to understand how these Neolithic communities of Western Switzerland lived and evolved between the 5th and 3rd millennia.

The first part of the project aims to analyze the evolution of diets and subsistence practices. These issues will be treated with the use of two approaches: an isotopic geochemical approach, through the analysis of carbon, nitrogen and sulfur, and a paleopathological approach to assess the global health status through environmental impacts and bio-cultural markers.

The second part of the project aims to reconstruct peopling dynamics, by studying the mobility of individuals throughout the Neolithic. This issue will be treated with the use of three approaches: the isotopic geochemical approach, by the analysis of strontium, oxygen and neodymium, the study of dental non-metric variations and paleogenomics.

The canton of Valais provides remarkable human occupations between the Middle Neolithic and the Bell Beaker period. The funerary discoveries are important, both in quality and in number. This situation, which is extremely rare and precious in archaeology, enables to work on populations coming from a defined territory and spread over a chronological period without major hiatus. This research project includes more than 350 individuals covering the most important and original sites of the Swiss Neolithic.

This project will, in the long term, constitute a complete reference system of original data for a region, which is an unprecedented and exceptional situation. The behavior of the first Neolithic agro-pastoral communities in their new environment will be deciphered; the scientific information will be enriched and refined by the mutual contribution of the different complementary approaches envisaged.

Assignments of the Post-Doc Fellow (2 years)

Within the framework of the post-doctorate, the aim is to contribute to this major theme by carrying out the paleopathological analysis of the individuals included in the project. The paleopathological contribution will allow not only to identify the environment in which the individuals lived (pathogenic environments, vitamin or oligo-element deficiencies), but also to complete the general picture of their bio-cultural environment (differentiated access to resources or care).

Previous studies have already been conducted among the Neolithic populations of Western Switzerland. However, they need to be completed, either because they require an update of the analysis methods, or because they require additional observations - on oral and dental evidences and metabolic disorders, in particular. A complete paleopathological study will be carried out for individuals belonging to recently discovered sites.

The aim is to evaluate the prevalence and frequency of the observed diseases, in order to establish a general health profile of these populations. They will then be linked with data from isotopic geochemistry to address the issues of socio-cultural behavior, both in terms of access to resources and their exploitation.