

Call for 6 Post-Doctoral Researcher Positions (2.5 years) at IPHES

Having been awarded the Maria de Maeztu Unit of Excellence (CEX2019-000945-M), the *Institut Català de Paleoecologia Humana i Evolució Social* (IPHES) is offering 6 postdoctoral positions for a duration of 2.5 years in the research topics stipulated below (ANNEX 1).

No restrictions on gender, age, ethnic groups, national or social origin, religion or beliefs, sexual orientation, disability, political opinion, social or economic conditions apply to positions. IPHES is committed to pro-active policies on equal opportunities and gender issues following its endorsed principles of the HR4SR <http://www.iphes.cat/hr-excellence-research>.

The process will select the best candidates according to evaluation criteria, without taking into account a thematic distribution related to the 5 strategic research lines of the IPHES (see the Annex 1). Therefore, there are no pre-assigned quotas to the number of researchers to be selected in each thematic distribution as the call operates with no quotas whatsoever.

The successful candidates should commence their employment on April 2021.

1.- Benefits

The gross salary will be 30,250€/year, according to the PhD salary scales at IPHES. Vacation days, parental leave and medical coverage are included according to the Spanish employment regulation and Social Security system.

2. Eligibility criteria and application requirements

Eligibility criteria. Researchers of any nationality are eligible. The profile of the candidates should belong to R2 or R3 stages, according to the European Framework for Research Careers. Please, you can find about this in IPHES' Career Development Guide at www.iphes.cat/career-development-guide

Application requirements. Applications will be submitted to the email account specifically created for this purpose: jobsmaeztu@iphes.cat

The submission period of the applications will remain open during 3 weeks: **from 11 January 2021 to 29 January 2021**

All the required information and documents must be complete in order to be considered. Applications must include the following documents (in English):

- 1) **Application form**, following the template that can be download from the **IPHES** webpage.
- 2) A **motivation letter** (no longer than 2 pages, Times New Roman/Arial or similar (size 11 and spacing 1), addressing:
 - The professional background of the candidate
 - The interest in developing their project at IPHES, regarding her or his previous work
 - The potential of the candidate regarding the impact on the IPHES strategic goals

- 3) **Curriculum Vitae** completed in the template available in the **IPHES** webpage
- 4) A **research project** (no longer than 6 pages, Times New Roman/Arial or similar (size 11 and spacing 1). The project will include:
 - An introduction and the state-of-the-Art of the topic
 - The Objectives of the research proposal
 - Research methodology and approach
 - Implementation and feasibility of the project
 - Gantt chart (activities & schedule)
 - Expected Scientific impact of the project regarding the topic applied for and the impact on the professional career of the researcher aligned with IPHES main strategic goals.

3.- Organization of the selection process

The recruitment and selection of researchers is based on the **OMT-R** (Open, Transparent and Merit-based Recruitment) defined by the European Union, which represents the main pillar of the European Charter for Researchers and the Code of Conduct for their recruitment, in which the candidates will be hired.

The **evaluation process** will consist of 4 steps:

Step 1: First screening (2-3 weeks). Checking of the documentation, and evaluation of CVs and motivation letters. Accomplished by the IPHES **Maria de Maeztu Steering Committee**, checking the suitability of the candidate for the scientific and strategic goals of the IPHES.

Step 2: Evaluation of the research projects of the shortlisted candidates (2-3 weeks). Accomplished by the 5 members of the **Selection Committee (SC)**. Two of the jury members will be researchers from the IPHES staff. The members of IPHES Scientific Advisory Board (SAB) will be invited to participate as one of the five evaluators. In the case of the impossibility to participate, researchers of similar knowledge of the Centre will be proposed. Two of the 5 members will be researchers from Academic institutions and/or research organizations internationally recognized. The SC will be gender balanced.

Step 3: Interview of the proposed candidates (2 weeks). Accomplished by the 5 members of the **Selection Committee (SC)** using on-line platforms.

Step 4: Final scoring (1 week). A list of the proposed and reserve candidates based on the ranks of the previous 3 steps will be communicated to the candidates. The list of the candidates will be available in the web page of IPHES, as well as the procedures of the evaluation process.

Conflicts of interest: Members of the Selection Committee (SC) are expected to be impartial and objective, and to behave throughout in a professional manner. Experts must disclose beforehand any known conflicts of interest and should immediately inform the Maria de Maeztu Steering Committee if one becomes apparent during the course of the evaluation. A conflict of interest may also arise if:

- the expert has had relevant scientific collaborations with one of the candidates they are evaluating (i.e. co-authoring a paper during the last 4 years, supervisor of the candidate's PhD thesis)
- the expert has family- relative ties or other type of relevant connection to the candidates being evaluated.

Should any member of the SC be found to breach the above defined conditions, she/he will be replaced by another expert.

4.- Evaluation Criteria

The evaluation and selection process will be based on scientific achievements, excellence, motivation and scientific potential of the candidates. Before the start of the evaluation process, the experts will be informed on the procedure and criteria to be applied and followed, as well as provided with clear instructions of their responsibilities in the process.

4.1.- Criteria for the selections of researchers:

Step 1: Evaluation of CV (60%), motivation letter and suitability of the candidate for the scientific and strategic goals of the IPHES (40%) – Score 1

Curriculum Vitae (60%): The curriculum vitae will be scored over 100 points. Eligible applications will undergo a selection process based on scientific qualifications and research merits. The following items will be assessed:

- Scientific publications (indexed by Scopus and/or WoS)
- Research mobility
- Presentations in international scientific meetings
- Participation in research projects
- Other activities (i.e. outreach activities, RRI activities, supervision of PhD Thesis and/or Master Thesis).

To reward the merits achieved by the applicants in the shortest possible time after the PhD thesis, the following **correction coefficient** will be introduced for the applicants with more than one year after the PhD thesis: **total score / 1.08^X**, where “X” is the number of years after the PhD thesis. (e.g. total score 60 / 1.084 for 4 years after the PhD thesis = 55.35).

Motivation letter and suitability of the candidate for the scientific and strategic goals of the IPHES (40%)

The motivation letter and suitability of the candidate for the scientific and strategic goals of the IPHES will be assessed and will be scored over 100 points.

Specifically, the following items will be assessed:

- The professional background
- Interest in developing the project at IPHES
- Suitability of the candidate/project for IPHES strategic goals
- Potential impact on the IPHES research goals
- The applicant career prospective

Candidates are asked to highlight any career breaks in their Motivation letter (e.g. maternity leave, paternity leave, national service, etc.). These career breaks will be evaluated positively, taken into account by **Maria de Maeztu Steering Committee**, and are not to be penalized but rather contemplated as a potentially valuable contribution to the professional development of researchers towards a multi-dimensional career path.

Candidates will have to reach a minimum score of 75 points in Step 1 to be selected to the next step.

Step 2: Evaluation of research proposals – Score 2

The evaluation of research proposals will be scored over 100 points. The research project of the selected candidates after step 1 will be evaluated based on the following criteria:

- Scientific significance of the proposal objectives, originality/Innovation of the proposed research
- Research methodology and approach
- Expected scientific impact
- Scheduling of the proposal, including its feasibility and a detailed Gantt chart (Milestones, Tasks, Deliverables)

Each research project will be evaluated independently by the 5 remote experts of the **Selection Committee**. The final score of this step will be the average of the score of the 5 experts.

Candidates will have to reach a minimum score of 80 points to be selected and to pass to the next step.

Step 3: Evaluation of interviews and Final ranking and results – Score 3

The evaluation of interviews will be scored over 100 points. The remote interviews will be evaluated by two main criteria:

- Short presentation of the candidate's research project (maximum 10 minutes)
- Competency-based interview

The commitment of the candidate to apply into an ERC Grant during the development of the contract will be highly valued. An evidence of this could be a good knowledge of the ERC program and to have a real idea of a proposal.

Each member of the SC will give a score (over 100) for the short presentation and the interview. The final score in Step 3 for each candidate will be the average of the scores obtained by the five SC members.

The final ranking will be the result of applying the following formula: **Final score= (Score1+Score2+Score 3)/3**

Fellowships will be awarded according to the final ranking and the number of available fellowships (n=6). The list of awardees and reserve candidates will be made public through IPHES' webpage.

5.- Feedback

In line with the principle of "Transparency" of the Code of Conduct for the Recruitment of Researchers, all applicants (accepted and not accepted) will receive written or electronic notice at any stage of the selection.

Redress mechanism

IPHES will establish a procedure to deal with complaints made by applicants who believe that they have been treated negligently, unfairly or incorrectly. Appeals may be submitted by unsuccessful applicants within 7 days of receiving notification of the decision. Appeals will be assessed on the basis of one or more of the following issues:

1. Evidence of bias or conflict of interest by one or more evaluators.
2. Factual error(s) made by one or more evaluators that could have altered the outcome of evaluation.

Possible **appeals** will be evaluated and assessed by the Maria de Maeztu Steering Committee (MMST). If there is a justified cause for appeal, the MMST will convene a special joint session with the Selection Committee (SC), to review the evaluations and ranking. Providing that the conclusion confirms that the candidate should have been short-listed for concession, the provisional results can be modified to configure the final ranking. All complainants will receive a response within two weeks after the appeal submission.

ANNEX 1: Research topics (Strategic and scientific goals)

1.- Transversal multiscale microscope-based approaches

- Dental palaeoanthropology
- Dental microwear
- Multi-proxy analyses of use-wear and residues in lithic artefacts
- Geoarchaeologic characterization of lithic raw materials and archaeological soils
- Archaeobotany
- Taphonomy and zooarchaeology

Rationale: Approach based on transversal research on human evolution. It groups the application of high-resolution techniques that share many different disciplines (transdisciplinary). It also involves research and advances in methodology. This approach focuses on the complementary use of: 1) microscopy techniques (reflected light, transmitted light, digital 3D, scanning electron, transmission electron, focus variation, interferometry, and laser confocal); and 2) vibrational spectroscopy (Raman and FTIR) and Computerized Tomography (CT) for the study of organic and inorganic residues.

2.- Tapping into sharper palaeoecological studies

- Pollen taphonomy and sedimentary charcoal analysis
- Quantitative Terrestrial Palaeoclimatology (Mutual Ecogeographic Range; Bioclimatic Analysis).
- Microwear, mesowear, skeletochronology, Cementochronology.
- Isotopic analyses on plant, macro and micromammals ($\delta^{18}\text{O}$, $\delta^{13}\text{C}$ and $\delta^{15}\text{N}$)
- European neandertalization process and its palaeoecological context

Rationale: Approach based on transversal research on human evolution. It combines high-resolution techniques to answer concrete top-trend questions.

3.- Subsistence strategies from an evolutionary point of view

- Bone, diet, cooperation and meat-sharing
- Vegetables and other underground storage organs in subsistence
- Use of AI to study archaeological sites features and assemblages formed by different agents and processes
- Geometric morphometric in identifying taphonomic signals
- Implementation of spatial taphonomy
- Implementation of statistical taphonomy and machine learning for formation processes inference.

Rationale: Approach extending the goals of archaeobotany, zooarchaeology and taphonomy further than classical studies, and innovating in newly proxies.

4.- Widening insights from technology

- Stone tools, Palaeolithic landscapes and human dispersals
- Stone tools and organic tools (bone, antler, wood) as cultural and adaptive markers
- Behaviour through spatial analysis on human occupations
- Raw materials: sources, management and differential uses
- Modelling demographic growth (quantification of items/archaeol. sites/period).

Rationale: Approach extending the goals of lithic technology further than classical studies and innovating in new proxies.

5. Shifting visions on early cognition

- Cognition and social learning to knap stone tools. Identifying accidents, skills, and prehistoric individuals as a proxy to know social organization.
- Characterizing technological evolution through gestures in knapping.
- Groups' identity and territories.
- Consciousness of life and death
- Archaeology of symbolism (prehistoric art)

Rationale: New research approach, mainly based on cognitive technology, experimental archaeology and archaeology of symbolism.