



Courtesy translation of D.R. n. 084/2023

For more details on the selection process, please refer to the Italian version of D.R. n. 084 /2023 available at <http://www.hunimed.eu/it/lavora-con-noi/>

SELECTION PROCEDURE FOR RESEARCH FELLOWSHIP

Research Program Title	Looking for a blood epigenetic <i>signature</i> to predict female infertility
Tutor	Dr. Andrea BUSNELLI
Scientific Area	05 – Biological Sciences
Gross amount of the fellowship	30.000 Euro
Duration of the fellowship	18 months
Objectives of the research	The molecular mechanisms underpinning female reproductive ageing are largely unknown. Over the past decade, DNA methylation (DNAm) based biomarkers have been developed to estimate biological age. Herein, we hypothesize that infertile women might carry a robust DNAm signature. In order to identify a disease-specific DNAm pattern, we will test, on blood samples, the reliability of the infertility-related epigenetic signature identified on mural granulosa cells (MGCs)
Activities to be carried out	<ul style="list-style-type: none">• the correct collection, centrifugation and cryopreservation of the blood samples taken from the recruited subjects;• the isolation of the granulosa cells and their cryopreservation;• the maintenance of contact with the EPIGET Lab of the University of Milan;• the organization of biological samples' transport to the EPIGET Lab of the University of Milan. The biologist will also• maintenance of relationships with recruited women and assistance in case of need;

	<ul style="list-style-type: none"> • help all the research team in the follow-up of recruited patients after the recruitment phase
Work place	PIEVE EMANUELE - Milan
Mandatory requirements	<ul style="list-style-type: none"> • 'Master degree in Biological Sciences or Medical Sciences. • PhD in a field related to the project (e.g. PhD in Medicine, PhD in Molecular Biology, PhD in Clinical Biochemistry) • Adequate scientific and professional background to carry out the research activity described in this call.
Selection process	<p>Application for admissions must be submitted at the following link:</p> <p>https://pica.cineca.it/humanitas</p> <p>No hard copy of the application must be sent by post.</p> <p>At first access, applicants need to register by clicking on “Register” and completing the requested data.</p> <p>If applicants already have LOGINMIUR credentials, they do not need to register again. They must access with their LOGINMIUR username and password in the relevant field LOGINMIUR.</p> <p>Applicants must enter all data necessary to produce the application and attach the required documents in PDF format.</p>
Selection criteria	<p>Selection criteria are predetermined by the Selection Committee. As part of the selection process, the Committee will evaluate the curriculum, titles and publications presented by the candidate and will consider, in particular:</p> <ul style="list-style-type: none"> • At least 1 year of experience in a biology laboratory of an Assisted Reproductive Technology (ART) center performing at least 1000 ART cycles per year; • Independence in the following procedures: handling biological samples, isolating and cryopreserving granulosa cells, intracytoplasmic sperm injection (ICSI), insemination by in vitro fertilization (IVF), freezing and thawing of oocytes and embryos, cellular extraction of nucleic acids, analysis by real



	<p>time PCR, statistical analysis of biological data, design and management of multicenter research projects;</p> <ul style="list-style-type: none">• Fluency in English.
--	---

FURTHER INFORMATION:

In the event of any conflict between Job Opening text and Italian D.R. text, the Italian version will prevail.

For more details on the selection process please refer to the **D.R. n. 084/2023** (<http://www.hunimed.eu/it/lavora-con-noi/>) or send an inquiry to ufficiodocenti@hunimed.eu or telephone +39 02.8224.5642/5421.