

CALL EUROVA - European Oocyte Biology Research Innovation Training Net, Horizon 2020 MSCA-ITN-2019 MSCA-ITN-ETN

"EUROVA" ITN Early Stage Researcher positions

Applications are invited from suitably qualified candidates for TWO full-time fixed term Early Stage Researcher positions as PhD scholarships available at the Università degli Studi di Milano (ITALY), in the framework of the EU-funded Marie Skłodowska - Curie ITN-ETN training network "EUROVA"

*"Ex Ovo Omnia"*: *"From the egg comes all"* (William Harvey 1578-1657): The **EUROVA** training network recognizes that **excellent basic oocyte biology research** is central to the development of safe new therapies and interventions in fertility enhancement or fertility preservation for all mammalian species. We invite enthusiastic talented early stage researchers to apply to join our exciting multidisciplinary research program. The *EUROVA* training network will recruit and train 15 PhD students who will work on projects that include the safe storage and re-transplantation of ovarian tissue from female cancer patients, identifying therapies to improve the quality of oocytes from patients who suffer from metabolic conditions, adapting ART to save the Southern White Rhinoceros from extinction and building a cross species compendium of the molecular pathways and key processes involved in oocyte growth and development.

The positions are funded by the Horizon 2020 program of the European Union, *(No.* 860960, *Grant Agreement signed in August 2019)* and will be available in Autumn 2019. The appointments will be on a full-time basis for a period of 3 years. The remuneration will be in line with the European Commission rules for Marie Skłodowska-Curie grant holders (Early-Stage Researchers, Initial Training Network).

#### The Research Projects at Università degli Studi di Milano

# Project n. 3: Physiological culture systems to access untapped ovarian reserves for improving reproductive efficiency

Scientist(s)-in-charge: Prof. Alberto Maria Luciano, University of Milan, Italy

PROJECT: The cohort of growing oocytes within preantral secondary follicles is a potentially larger source of oocytes compared with those in antral follicles. However, growing oocytes are still undergoing cytoplasmic changes, transcription and chromatin modifications that are essential for the control of gene expression and are required for the establishment of a proper maternal specific genomic imprinting and global methylation patterns. These processes are crucial for the attainment of the full embryonic developmental competence of a functional gamete. The project aims at determining the critical constituents of the ovarian microenvironment that orchestrate oocyte differentiation from preantral-to-antral stage of follicle development, leading to the definition of a multi-step preantral culture strategy that closely mimics the physiological environment.

#### Job Detail

Type of Contract: Temporary (36 months); Status: Full-time (40 hours/week)

Specific Requirements for the project: Reproductive physiology, developmental biology, molecular biology

Organization/Institute: UNIVERSITA DEGLI STUDI DI MILANO, ITALY

Website: http://www.redbiolab.unimi.it

## Project n. 7: Somatic signals regulating mRNA translation in mammalian oocytes

Scientist(s)-in-charge: Dr Federica Franciosi, University of Milan, Italy

PROJECT: During oocyte maturation transcription is repressed and cellular functions, comprising meiotic progression and reprogramming of the genome to totipotency, are mainly regulated by the timely translation of maternal mRNAaccumulated during oocyte growth.Recent studies show that the follicular/cultural environment affects oocyte developmental competence by acting on the program of maternal mRNA translation, through the activation of the PI3K/AKT pathway in the oocyte. However, the intercellular signaling linking the somatic and germline side of this cascade has not been elucidated. The aim of the project is to dissect the ability of signals originating in the follicular cells, transduced to the oocyte in response to the ovulatory stimulus, to affect the oocyte translational program.

#### Job Detail

Type of Contract: Temporary (36 months); Status: Full-time (40 hours/week)

Specific Requirements for the project: Developmental biology, molecular biology, bioinformatics

Organisation/Institute: UNIVERSITA DEGLI STUDI DI MILANO, ITALY

Website: http://www.redbiolab.unimi.it

## **Benefits**

## Training

The *EUROVA* training program will train a community of oocyte biologists working to integrate a wide spectrum of knowledge, technical expertise, data, platforms and technologies across several species and ultimately advance innovation in this field of research. The 15 ESRs will be registered to a full-time, three-year, structured doctoral program at leading European academic institutions. The highly qualified network of international research-intensive academic and industrial organizations and the incorporation of carefully planned secondments will ensure that the training of each of the 15 ESRs will equip its ESRs with appropriate scientific and transferable skills. Scientific training will be supplemented with workshops devoted to academia/industry collaboration, dissemination and public engagement, as well as the maintenance of a successful research environment. ESRs will meet other ESRs involved in the program during the network meetings, secondments and international meetings.

#### Employment

The successful candidates will be employees of the beneficiary's institutions, with a contract period of 36 or 48 months, depending on the length of the PhD program at the hosting institute. The position is funded by a Marie Curie Initial Training Network initiative. The successful candidates will receive an attractive salary in accordance with the Marie Skłodowska-Curie Actions (MSCA) regulations for early stage researchers. The exact salary will be confirmed upon appointment and is dependent on the country correction coefficients (to allow for the difference in cost of living in different EU Member States) as well as applicable regulations. Basic gross rates include a living allowance subject to taxes, social security, employee and employer pension contributions), a mobility allowance and a family allowance.

Envisaged job Starting Date: within June 1<sup>st</sup>, 2020.

# **Eligibility criteria**

Candidates must have not been awarded a doctoral degree. Candidates must have excellent proficiency in written and spoken English (at least level B2) and fulfil the specific University recruitment criteria of each position. Candidates can be of any nationality but need to demonstrate mobility in terms of moving from one country to another when taking up their appointment. Importantly, candidates must not have resided or carried out their activities - work, studies, etc.- in the country of their host organization for more than 12 months in the 3 years immediately before November 15th, 2019.

## **Application procedure**

List of Documents to provide:

- Accompanying letter (with list of documents enclosed)
- Letter of motivation (max. 1 page)
- Copies of degree and academic transcripts (with grades and rankings)

- Resumé of the Master's thesis (max. 3 pages)
- Short CV including a publication list (if any)

• Two reference letters from academics, prepared according to the attached template. The letters can be sent directly by the academics, but candidates must indicate the academics' details when applying

Passport copy

• English proficiency certificate (optional. It must be presented by the candidate, if selected, before the enrolment)

All the above-mentioned documents must be collected in pdf format, preferably in a unique file. The pdf file(s) have to be sent, in a single email, within November 15th, 2019 to the EUROVA Coordination Office at the following email address: eurovaetn@ucd.ie

## **Selection process**

<u>First selection step:</u> CV's will be evaluated by the foreseen local supervisors. Numerical scores will be awarded for grading criteria such as relevant studies and experience, study marks, motivation and reference letters.

<u>Second selection step:</u> Prospective Supervisors (PIs) will have face-to-face or web-based video interviews with candidates. Scoring will be according to background knowledge, dedication, and motivation, based on a semi-quantitative scale. PIs will rank preferred candidates for their project.

Final decisions on the selection of candidates will be made by the primary supervisor and will be finalized during a tele-conference meeting with all PIs. In case of equal-scoring candidates, preference will be given to women and researchers with refugee status (provided they have or are able to obtain work permits).

# Additional comments

The positions are filled within June 1<sup>st</sup>, 2020 and the ESRs will be based in Italy. General Data Protection Regulation (GDPR).

*EUROVA*-ETN will process data collected from the applicants for recruitment purposes only, according to the GDPR policies. The data will be kept for a period of five years after the end of the project for the purpose of an audit by the EU.

# **Offer Requirements**

**REQUIRED LANGUAGES** 

ENGLISH: Good

Skills/Qualifications

#### Candidates

We are looking for talented and highly motivated early career researchers educated in biology, biochemistry, computer science, biochemical engineering or related subjects and experience in cellular biology, artificial intelligence, biochemistry. Applicants should possess scientific curiosity, a strong work ethic and the capacity to teamwork in an interdisciplinary environment. The positions are filled within June 1<sup>st</sup>, 2020 and the ESRs will be based in Italy.

## **Specific Requirements**

Candidates can be of any nationality but need to demonstrate mobility in terms of moving from one country to another when taking up their appointment.

Candidates must have excellent proficiency in written and spoken English (at least level B2) and fulfil the specific University recruitment criteria of each position.

Candidates must have not been awarded a doctoral degree and must be eligible to enroll on a PhD program at the host institution (Università degli Studi di Milano). In addition:

*H2020 MSCA Mobility Rule*: researchers must not have resided or carried out their main activity (work, studies, etc.) in the country of the host organization (Belgium) for more than 12 months in the 3 years immediately before the recruitment date. Compulsory national service, short stays such as holidays, and time spent as part of a procedure for obtaining refugee status are not taken into account.

H2020 MSCA eligibility criteria: Early Stage Researchers (ESRs) must, at the date of recruitment by the host organization, be in the first four years (full-time equivalent research experience) of their research careers and have not been awarded a doctoral degree. Full-Time Equivalent Research Experience is measured from the date when the researcher obtained the degree entitling him/her to embark on a doctorate (either in the country in which the degree was obtained or in the country in which the researcher is recruited, even if a doctorate was never started or envisaged).

For any further inquiry or information, please write to: redbiolab@unimi.it