

## TITLE

Analysis of the transcriptome of Fallopian tubes epithelial cells and ovarian carcinoma cells: how many similarities and differences?

## DESCRIPTION

High-grade serous carcinoma (HGSC) is the most lethal ovarian cancer histotype. Recent studies suggest that in addition to the ovarian surface epithelium, other sites of origin may exist. Indeed, a substantial proportion of cases likely arises from precursor lesions located in the Fallopian tubal epithelium (FTE). In FTE the transcription factor PAX8 is a marker of the secretory cell lineage. PAX8 is a member of the PAX (PAired boX) gene family playing an essential role in cell proliferation and self-renewal, resistance to apoptosis and the coordination of specific differentiation programs.

The aim of this research project is to characterize the gene expression profile of FTE and ovarian carcinoma cells, in order to identify genes expressed in both cell types and genes differentially expressed. Moreover, the project aims at the clarification of PAX8 contribution to ovarian cancer through the identification of its downstream gene regulatory network in this specific context.

The achievement of the objectives of the project will be useful to identify genes potentially amenable to be new diagnostic, prognostic and therapeutic targets in ovarian cancer.

## SELECTION CRITERIA

### Eligibility Criteria

- Academic degree: Applicants shall have a master degree in in **Medicine and Surgery, Medical and Pharmaceutical Biotechnology** or in **Biological Sciences** corresponding to the second level of studies.
- Mobility rule: There will be no nationality restrictions. Applicants can be from any Country. However, according to the mobility rule, at the time of the application deadline researchers should not have resided or carried out their main activity (work, studies, etc.) in Italy for more than 12 months in the 3 years immediately prior to the reference date. Compulsory national service and/or short stays such as holidays will not be taken into account.
- Research experience: Applicants shall, at the time of the application deadline, be in the first four years (full-time equivalent research experience) of their research careers and not yet awarded a doctoral degree.

Full-Time Equivalent (FTE) Research Experience will be determined from the date when a researcher obtained the degree which would formally entitle him or her to embark on a doctorate, either in the country in which the degree was obtained or in Italy, irrespective of whether or not a doctorate is or was ever envisaged.

### Evaluation Criteria

Step 1 -Evaluation of documentation provided by the candidate: a) Academic record and training b) Research activities c) CV/motivation letter; d) Level of English; e) Reference letters.

Step 2 - Interview: a) Scientific knowledge in the field of interest; b) Research experience in the field of interest c), Motivation; d) English proficiency.