OPEN POSITION: INVESTIGATING HOW THE ENDOTHELIN-1 RECEPTOR SIGNALING INTEGRATES MECHANICAL FORCES TO SUSTAIN PARP INHIBITOR TOLERANCE IN OVARIAN CANCER

RESEARCH PROJECT

The research project of our team is focused on the identification and characterization of the molecular mechanisms triggered by the endothelin-1 (ET-1)/ET-1 receptors (ET-1R: ET_AR and ET_BR) axis activation and implicated in the high-grade serous ovarian cancer (HG-SOC) progression, in its interaction with the surrounding tumor microenvironment and in the poor response to a specific class of drugs, the PARP inhibitors (PARPi). Our specific aims are to: 1. Uncover and validate tumor/TME shared biomarkers; 2. Design new integrated therapeutic strategies incorporating different drugs, including ET-1R antagonists, PARPi and immune checkpoint inhibitors (ICI), to overcome PARPi resistance. To develop the project, we will use multidisciplinary approaches, employing both *in vitro* and *in vivo* pertinent HG-SOC patient-derived (PD) preclinical models, including HG-SOC PD primary cell cultures and HG-SOC PD xenografts (PDX).

CANDIDATE PROFILE

- Master's degree in Biological Sciences or equivalent degrees;
- Documented experience (at least one-year post-lauream) in the cancer research field with acquired skills in cell and molecular biology and biochemistry;
- Proven experience in microscopy would be highly appreciated;
- Proven experience in the animal experimentation field would represent a plus;
- Ability to report, organize and publish research data;
- Excellent PC skills and good knowledge of standards Microsoft office applications. A good knowledge of the GraphPad Prism program would be highly appreciated;
- Track record of publications in peer-reviewed journals, would be considered a plus;
- Attitudes: strong communication skills, willingness to collaborate, problem-solving abilities, motivation to learn, effective time and priority management.

TYPE OF CONTRACT

Research fellowship, competitive salary (24000 €/year).

DURATION:

12 months (renewable for 2 year).

LOCATION:

IRCCS, Regina Elena National Cancer Institute (IFO), Rome, Preclinical Models and New Therapeutic Agents Unit.

CONTACT DETAILS

Candidate should sent their CV to piera.tocci@ifo.it