

Institutional commitments

Ref: 2020 My First AIRC Grant (MFAG) - Call for applications

Applicant: Dr Chiara Cencioni

Title of the application: Insight into TGF β /Zeb1 circuitry promoting melanoma immunotherapy resistance through endothelial cell anergy.

24/02/2020

In my position as Head of the Hosting Institution, the Institute for Systems Analysis and Computer Science (IASI), it is my great pleasure to write this letter in support of Dr. Chiara Cencioni to carry out her research proposal as an independent principal investigator (PI). IASI is an institute of the CNR established in 2002 from a partnership among CNR scientists with complementary expertise and interests derived from two Institutes: the Institute for Systems Analysis and Informatics and the Centre for the Study of the Pathophysiology of Shock. The main institute site is located in Via dei Taurini – 19, Rome (Italy) where mathematics modelling techniques for biomedicine and in particular for tumor growth are conducted together with bioinformatics analyses of genes involved in tumor onset. The secondary institute site in Rome is dislocated into two units at Policlinico Gemelli and at the Medical Faculty of Catholic University of Sacred Heart (UCSC), which research activities focus on physiopathology, metabolism, oncology and immunology to uncover novel molecular and cellular mechanisms contributing to the development of human pathologies. IASI currently includes about 70 staff members (scientists, technicians and administrative personnel) plus a cohort of post-doctoral scientists, PhD students and associated members, working together. The secondary IASI site at UCSC represents the perfect environment where to conduct Dr Cencioni's project proposal for the presence of several researchers already funded by AIRC and of all the facilities necessary to achieve the goals described.

Percentage of time dedicated to the project

The applicant will have at least 50% of the time dedicated to the MFAG research project.

Lab and office space

Dr. Cencioni is a permanent junior CNR researcher since December 2016, who joined IASI in September 2019 after the suppression of the CNR Institute of Cell Biology and Neurobiology (IBCN). She works at the secondary IASI site at the Institute of Medical Pathology and Human Physiology belonging to the Medical Faculty of UCSC, as regulated by the formal agreement signed between IASI and UCSC in January 2020. She has already been granted with the necessary infrastructures to develop her research projects, including free access to all facilities available (see below). She has been successfully integrated in this cooperative environment and set up a collaboration with the Department of Oncology of the University of Turin to obtain melanoma samples and with the Transgenic Animals Facility at CNR Monterotondo campus in the new established CNR Institute of Biochemistry and Cell Biology (IBBC).

Hosting Institution facilities and resources

Due to the strict interconnection among all above mentioned research centres, the applicant will benefit from training opportunities organized by all these Institutions. The PI will have the opportunity for critical professional interactions with senior colleagues already working in the field of molecular oncology and will benefit from outstanding invited speakers giving seminars at UCSC. The laboratories located there are fully equipped for standard molecular/cell biology experiments. Thanks to the signed agreement between IASI and UCSC, the applicant will have free access also to the following equipment: QS Series Real Time PCR (Applied Biosystems); QX-200 Droplet Digital PCR (Bio-Rad); Bioruptor Sonicator; Nanodrop; Confocal microscope; reverted-phase contrast-, immunofluorescence-, video time-lapse-, stereotactic-microscopes, flow cytometer, thermocycler, Instant Imager, VersaDoc 3000, Victor2 (fluorimeter, luminometer, ELISA), ELISA Readers/Washers, Seahorse Biosciences® XP technology, spectrophotometer, cryostat, microtome, vibratome; cold room; P2 facility for virus work; and a recently renovated animal facility.

Authorship in publications

In all publications stemming from the research carried out with this grant, the applicant will be last author and corresponding author as well.

PI scientific independence

The unit headed by Dr Cencioni will be indicated as an independent unit in IASI staff directories, website and public reports. I will provide full commitment to assist the PI during her “transition to independence”, supporting all necessary steps to reach a position of scientific independence within IASI by the end of the grant.

In conclusion, I fully support Dr Cencioni’s application to MFAG call 2020. This will be of great value for IASI and of high importance for her future scientific career. She will consolidate her background in Zeb1, epigenetics and metabolism translating it to molecular oncology. MFAG will offer a great opportunity to young scientists like Dr Cencioni to develop their own ideas and be immediately competitive even in a field of study where competition is undoubtedly fierce. I do believe that AIRC support will advance her career as a fully independent cancer researcher.

Signature

This document does not require a signature. By signing the application, Legal Representative of the Hosting Institution certifies that he/she will comply with the conditions described in this letter in order to foster the applicant’s research career and his/her independence.