Consiglio Nazionale delle Ricerche
Istituto di Analisi dei Sistemi ed Informatica "Antonio Ruberti"

***Institutional commitments***

***Ref: 2022 My First AIRC Grant (MFAG) - Call for applications***

***Applicant**:* Dr Chiara Cencioni

***Title of the application:*** Insight into IDH-dependent glioblastoma stem cell epi-metabolic vulnerabilities to uncover novel therapeutic routes

***Name and role of letter's author**:* Dr Giovanni Abramo, Acting Director of the Institute for System Analysis and Computer Science (IASI-CNR)

28/02/2022

In my position as Head of the Hosting Institution, the Institute for System 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 project as an independent principal investigator (PI).

IASI is an institute of the Italian National Research Council (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 Computer Science and the Centre for the Study of the Pathophysiology of Shock, both established in 1969. The main institute site is located in via dei Taurini, 19 - Rome (Italy), where mathematical modelling studies 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 School of Catholic University of Sacred Heart (UCSC), which research activities focus on pathophysiology, metabolism, oncology, and immunology to uncover novel molecular and cellular mechanisms contributing to the development of human pathologies. IASI currently includes about 50 permanent staff members (scientists, technicians, and administrative personnel) plus a cohort of post-doctoral scientists, PhD students and associated members affiliated with universities in Rome, Florence, L'Aquila, Catania, Pisa, Montreal, 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 in the research plan.

***Percentage of time dedicated to the project***

The applicant/Principal Investigator (PI) will have at least 50% of the time dedicated to the MFAG research project.

***Lab and office space***

Dr. Cencioni is a tenured 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 School of UCSC, as regulated by the agreement signed between IASI and UCSC in January 2020. She has been granted already with the necessary infrastructures to develop her research projects, including free access to all facilities available at

UCSC (see below). She has been successfully integrated in this cooperative environment and set up collaborations with scientists and clinicians actively working on glioblastoma multiforme to uncover novel therapeutic routes.

***Hosting Institution facilities and resources***

Due to the strict interconnection among all the 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 and at IASI. The laboratories located there are fully equipped for standard molecular/cell biology experiments. Thanks to the 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 (fluorometer, 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. Moreover, IASI researchers can rely on the recently established Gemelli SCIENCE and TECHNOLOGY PARK (GSTeP). This is an "in house" 20 Research Core Facilities that offer services divided by technological topic, specifically: Microbial Analysis and Microbial WGS, Biobank for Research and Personalized Medicine, Bioinformatics, Preanalytical and Cell Biology, Liquid Biopsy, Data Collection, Epidemiology & Biostatistics, Flow Cytometry, Immunohistochemistry, Electrophysiology, Microscopy, Genomics, Organoids, Immunology, Experimental Models, Single Cell Analysis, Proteomics & Metabolomics, Real World Data, Radiomics, and 3D Bioprinting.

***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 2022. This will be of great value for IASI and of high importance for her future scientific career. She will consolidate her background in stem cells, 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***

ABRAMO
GIOVANNI
28.02.2022
11:17:43
GMT+01:00