

Institutional commitments for grant transfer

Ref: 2019 My First AIRC Grant (MFAG) – Grant transfer

Applicant: Dr. Francesco Spallotta

Guarantor: Dr. Giovanni Rinaldi

Title of the application: Metabolic regulation of the DNA demethylation enzymatic machinery in pancreatic cancer

In my position as Head of the Hosting Institution, the Istituto di Analisi dei Sistemi ed Informatica "Antonio Ruberti" (IASI) (Institute for Systems Analysis and Computer Science), it is my great pleasure to write this letter to certify all my support to Dr. Spallotta, who recently was appointed as a tenured junior researcher at the Italian National Research Council (CNR), to carry out his research proposal funded by AIRC 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 Computer Science and the Center for the Study of the Pathophysiology of Shock, both established in 1969. The main site of the Institute is located in via dei Taurini 19, where mathematical modeling studies for biomedicine and in particular for tumor growth are conducted together with bioinformatics analyses of genes involved in tumor onset. Thanks to a cooperation agreement with the Catholic University of Sacred Heart (UCSC), the Institute benefits of a secondary site dislocated into two units at Policlinico Gemelli and at the Medical School of UCSC, where the 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 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. To favor the execution of this specific funded project at Dr. Spallotta's name, IASI is establishing a formal collaboration agreement with the Istituto Pasteur Italia – Fondazione Cenci Bolognetti, located at less than one kilometer from our main site, where different researchers are developing projects funded by AIRC and where there are all the facilities necessary to fully conduct the present funded proposal.

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. Spallotta joined IASI in November 2019, after he was ranked among the winners of last national public selection to recruit new researchers. He will be granted with: the possibility to continue the collaboration with his former Institute at the Department of Oncology of the University of Turin, and the necessary infrastructures to develop his research projects, including free access to all facilities available at IASI and Istituto Pasteur (see below). He will be

successfully integrated into IASI - Istituto Pasteur cooperative environment and set up a collaboration with different research institutions to obtain samples from pancreatic patients, to conduct in vivo experiments, and to perform all the OMIC analyses described in the project proposal. To permit the execution of experiments related to this project proposal, IASI and Istituto Pasteur have already agreed to sign a cooperation accord and started the necessary procedures to formally finalize the agreement.

Hosting Institution facilities and resources

Due to the strict interconnection among all the above-mentioned research centers, the applicant will benefit from training opportunities organized by all these Institutions. The Hosting Institution together with Istituto Pasteur background provides optimal working and cultural conditions for the career development of young scientists. The PI will have the opportunity for critical professional interactions with senior colleagues and will benefit from outstanding invited speakers giving seminars on a regular base. The Hosting Institution will provide all the bioinformatics support necessary to this project and, thanks to the agreement with Istituto Pasteur, Dr. Spallotta will conduct wet-lab experiments having space at their laboratories fully equipped for standard molecular/cell biology experiments. Moreover, Dr. Spallotta will have free access also to the following facilities present at Istituto Pasteur: Next Generation Sequencing (Illumina HiSeq1500), Animal and Flow Cytometry (BD FACSAria III and BD LSR Fortessa) facilities. All the other facilities needed will be granted by the Medical School of the UCSC, under the already mentioned cooperation agreement with IASI.

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. Spallotta will be indicated as an independent unit in IASI staff directories, websites, and public reports. I will provide full commitment to assist the PI during his “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. Spallotta’s funded project related to MFAG call 2019. This will be of great value for IASI and of high importance for his future scientific career. He will consolidate his background in epigenetics, metabolism and gastrointestinal tumors. MFAG will offer a great opportunity to young scientists like Dr. Spallotta 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 his career as a fully independent cancer researcher.

Date 26/02/2020

Guarantor’s signature
Dr. Giovanni Rinaldi
IASI-CNR Director