

EURO-CHOLANGIO-NET COST Action CA18122

“COST for MSCA” PROGRAM – AVAILABILITY FORM FOR HOSTING LABORATORY

This availability form has to be mailed to: melissa.kerr@uniroma1.it by **April 30, 2023**

NAME OF HOSTING MENTOR (<i>last, first, middle, title</i>) Raggi Chiara, PhD Marra Fabio, MD PhD	
INSTITUTION / ORGANIZATION Name University of Florence Mailing Address (<i>street, city, state/province, postal code, country</i>) Department of Experimental and Clinical Medicine, University of Florence, Cubo Centro Polivalente 2, Viale Pieraccini, 6, I50139 Florence, Italy	
TELEPHONE / FAX (<i>country code, area code & extension</i>)	EMAIL ADDRESS
TEL +390552758128	FAX: chiara.raggi@unifi.it ; fabio.marra@unifi.it
WEBPAGE: https://www.unifi.it/cercachi-per-21162.html ; https://www.researchgate.net/profile/Chiara-Raggi https://www.unifi.it/p-doc2-0-0-A-3f2a3d2f332f2d.html	

RESEARCH FIELD (*please insert here a brief summary of the research interests of your lab*).

Our group is mainly interested in translational aspects of hepatic tumors. Particularly our focus is the understanding the pathogenetic role of stem cells of hepatobiliary tumors, developing in vitro models (e.g. organoids with human cells; 3D cultures) and in vivo (models of orthotopic cholangiocarcinoma in mice). We also intend to implement the use of new hypothetical-independent approaches (so-called omics) also strengthening the network of national and international collaborations developed over the years.

There are currently two major lines of research: one concerning the contribution of mitochondria-related metabolism with particular attention to the role of glucose and lipid metabolic pathways in the maintenance of stemness state of hepatobiliary tumors. The second line concerns the interplay of liver cancer stem-like cells with the tumor stroma. In particular the investigation of signals generated by myeloid-epithelial- reproductive tyrosine kinase (MerTK)-expressing macrophages (M2c macrophage subset) that can modulate the biology of stem-like cancer cells.

SKILLS (*please list here the skills – technical and soft – that a potential fellow **could** learn in your lab*)

Manual ability in performing of molecular and cellular biology techniques including RNA extraction, retro-transcription and Real-time PCR; isolation and maintenance in culture of eukaryotic cells; migration, survival, proliferation and cell growth tests; analysis of protein expression by using immunoprecipitation, western-blotting, immunofluorescence analysis, and cytofluorimetry analysis.

MENTOR (please list here your previous experience in mentoring post-doctoral fellows including MSCA fellows)

Number of PhD students supervised: 13

Number of Postdoctoral Fellow supervised: 15

Number of MSCA Fellows supervised: 0

Other (please specify): short term visiting fellows :5

INSTITUTION/ORGANIZATION (please briefly write here the support your Institution/Organization has established for foreign postdoctoral fellows)

The University of Florence is one of the most important Italian public universities and has a strong international vocation. It fosters cooperation with academic and research institutions all over the world and welcomes foreign teaching staff, researchers and students to promote cultural and scientific internationalization. To this end, through its Departments and Schools, the University promotes the hospitality of highly qualified guests from all over the world. Moreover, it traditionally devotes particular attention to the development of collaborative relationships with foreign universities and to the process of internationalization, which has become a strategic and dominant aspect of the life of the university in research, teaching, the organization of study programs, mobility of teachers, researchers and students. For these reasons, the University of Florence qualifies itself as one of the privileged destinations for international guests.

Accommodation facilities for students, PhDs, research fellows, and foreign post-docs, in the context of specific projects funded by European / international institutions, can be booked through the Welcome Service.

The Biomedical Library offers its services to all users affiliated to the University of Florence - in particular students and teaching staff of the School of Human Health. Within the on-going project of seamless integration of services, internal users' status is granted also to affiliates of the Meyer Children's Hospital and ARS (the Tuscan Regional Health Services).

Our department, the Department of Experimental and Clinical Medicine (DMSC) is equipped with 4 technological platforms: imaging, flow cytometry, sequencing and tissue engineering and opto-mechanical functional analysis, all provided by new-generation and high throughput instruments. Moreover, DMSC shares with other Departments of UNIFI and AOUCareggi the following facilities: a. Microarray System for genotypic and molecular characterization of patients, b. Bioinformatic platform for data analysis c. Proteomics platform, d. Molecular and cellular biology platform e. Advanced microscopies: confocal, multiphoton and scanning probe for cellular imaging. In particular, the Immunology laboratory of DMSC is involved in advanced flow cytometric technologies. It possesses a 2 BD LSR II, 1 FACSAria III sorter and in the next months a BD FACSymphony A5 SE able to evaluate simultaneously at least 34 parameters and equipped with both conventional and spectra flow cytometry acquisition mode. In addition, our group has access to the facility of Molecular Medicine, recently set up in the Department of Experimental and Clinical Biomedical Sciences, that includes a STED confocal ultra-high definition microscope, an IVIS LUMINA S5 preclinical In Vivo Imaging for mice, a photoacoustic imaging echography system (EVOS), a full equipped protein and RNA expression analytic system (RNAScope, laser microdissector, histopathology instrumentation).