

## **Research Fellow MR Physics**

A grant for a 1-year position is available for a Research Fellow in the team of dr. Dario Longo ([www.cim.unito.it/website/PI/Longo/home.html](http://www.cim.unito.it/website/PI/Longo/home.html)) at the Molecular Imaging Center ([www.cim.unito.it](http://www.cim.unito.it)) - University of Torino (Torino, Italy) starting on April 1st, 2018.



### **About the lab:**

The Longo lab is interested in understanding the role of tumor acidosis and its heterogeneity in tumor progression, invasion and drug resistance. A major focus of the lab is the in vivo characterization of tumor microenvironment, including acidosis, vascularization and hypoxia and in assessing therapeutic response to inhibitors of cancer metabolism in preclinical tumor murine models throughout non-invasive MR imaging approaches.

### **Position Highlight:**

Dr. Dario Longo is recruiting a highly motivated research fellow interested in developing new Magnetic Resonance Imaging (MRI) acquisition protocols and post-processing tools for preclinical scanning. Key responsibilities will include the development of new methodological approaches, algorithms, and software analysis pipelines and tools for MRI and MRI-CEST imaging. Potential research activities include development of novel pulse sequences and contrast mechanisms for assessing tumor acidosis and response to inhibitors of cancer metabolism. The successful candidate will join an internationally renowned lab with a highly multi-disciplinary working environment with access to two 7T and one 3T Bruker preclinical MRI scanners.

### **Candidate requirements:**

- MSc or PhD degree in Physics, Biomedical Engineering, Magnetic Resonance Physics or related disciplines earned within the last two years
- Applicants will need to demonstrate interest and proficiency in all aspects of MRI acquisition and analysis techniques and experience in pulse sequence programming (Bruker experience a plus).
- Experience with in vivo cancer imaging of experimental small animals (mice) is required with high field (3-11.7T) experimental MRI platforms
- At least one publication in peer-reviewed journals related to the fellowship
- Highly motivated person with strong interest in research and willingness to participate in several ongoing research projects related to tumor pH imaging
- Fluid in spoken and written English

Interested candidates should send a single PDF file that includes a current curriculum vitae with publications, a short description of previous training and work experiences and contact information for two references to Dr. Dario Longo via email to: [dario.longo@unito.it](mailto:dario.longo@unito.it)