

### **Who we are**

FlowMetric Europe S.p.A. (FME) is a company established in July 2014 with the objective of developing and commercializing high dimensional polychromatic flow cytometry and cell sorting services. It is an affiliate company to FlowMetric, Inc. (<https://www.flowcytometryservices.com>), and was formed to expand the company's global presence in Europe as a contract research organization.

### **Where we are**

FME is in the Openzone scientific campus, located in Bresso (Via Ariosto 21, CAP: 20091), near to the north/east periphery of Milano (Italy). It is distant almost 20 Km from Linate airport (30 min by car), and 48 Km from Malpensa airport (45 min by car). Open Zone campus is managed by Zambon S.p.A. and hosts 25 biotech companies, with 65 million euro of investment in the campus in the next 3 years.

### **What we can do**

Equipped with a 16-color BD LSR Fortessa X-20 (with HTS reader), a 16-color BD FACSAria™ III cell sorter and a cell culture facility, FME provides comprehensive and precise test services to small and large pharmaceutical companies, to clinical research organizations (CRO), to companies active in the discovery of bio-actives products and academic institutions.

FME provides recognized long-standing expertise and experience in many state-of-the-art flow cytometry techniques. It can create and optimize panels for flow cytometry studies, provide a fine characterization of the cell phenotype, identify, quantify and isolate specific cell subsets or rare populations, detect and measure cytokines production. Moreover, FME can perform many functional assays in order to study mechanisms of cell differentiation, activation, proliferation, cell death, phosphorylation, cytotoxicity, degranulation, receptor occupancy. In addition, FME can also provide unbiased high dimensional flow cytometry data analysis for given datasets.

### **Role of FME in the project**

In the project FME will use high dimensional polychromatic flow cytometry to carefully characterize primary human immune cells from peripheral blood of donors at different ages in order to create a reliable diagnostic reference panel that reflects phenotypical difference in functional potential of young vs. adult blood cell populations.

FME will create specific flow cytometry panels to detect intracellular and cell surface biomarkers on immune cells (T cells, B cells, NK cells, Monocytes and other immune cell populations) in order to define age-related changes in hematopoiesis.

FME activities will also include isolation by cell sorting of immune cell subsets combined with extensive in vitro experiments in order to investigate age-related changes in cell functionality. Cell sorting will be also combined with gene expression analysis in order to identify ageing associated molecules in the sorted cells.

The ESR will be enrolled in the PhD Program in Translational and Molecular Medicine - DIMET at the University of Milano-Bicocca <http://www.dimet.org/>

### **About The FlowMetric Family of Companies**

*The FlowMetric Family of Companies consist of FlowMetric, Inc and two additional companies, FlowMetric Europe, S.p.A. and FlowMetric Diagnostics, Inc. FlowMetric, Inc. and FlowMetric Europe, S.p.A., founded in 2010 and 2014 respectively, are niche contract research organizations (CROs), focused on providing polychromatic flow cytometry and cell sorting services to bio-pharma and drug discovery companies. FlowMetric Diagnostics, Inc., founded in 2014, utilizes a flow cytometry-based platform to analyze cell-mediated immune responses. The company's proprietary assays can be readily adapted for infection screening and immune response evaluation through highly sensitive biomarker analysis. The FlowMetric family of companies are committed to providing independent, unbiased, comprehensive and precise results delivered with an uncompromising commitment to quality.*