

GIAMPAOLO MINETTI - Curriculum

GIAMPAOLO MINETTI is Research Assistant in Biochemistry at the University of Pavia since 2002. He received his degree in Biological Sciences in 1990 at the University of Pavia and his Ph.D degree in Biochemistry in 1993. He carried out part of his post-doctoral research at the same University and, as a visiting scholar, at the Purdue University (USA), contributing to the investigation of the erythrocyte membrane protein band 3. From 1997 to 2001 he worked at the Department of Biochemistry of the University of Pavia on the optimization of additives for red cell storage under blood bank conditions. From 2004 to 2008 he participated, as "Team leader" of a research unit, to the European project "CellPROM", of the VI Framework Programme, with the objective of non-invasive "reprogramming" of individual cells using nano-structured surfaces. He participated in two projects of the National Ministry of University and Research (MIUR) PRIN 2000 and PRIN 2002 and was principal investigator in a PRIN 2008 project on neocytolysis. He is member of the Italian Society of Biochemistry and Molecular Biology (SIB). From 2010 to 2012 he participated in a project funded by the Fondazione Cariplo on Boron neutron capture therapy. From 2012 to 2014 he has been principal investigator in a project funded by the Fondazione Cariplo on the toxicology of nanoparticles. From 2015 he is team leader of his institution as partner in the European Commission Horizon 2020 project RELEVANCE (Regulation of red cell life-span, erythropoiesis, survival, senescence and clearance). His main research topics are: the cellular and membrane properties of human erythrocytes, and their modifications during cell aging, under physiological and pathological conditions and during storage under blood bank conditions; the redox processes, in particular the role of methionine sulfoxide reductase enzymes (Msr) and other selenoproteins, in blood cells. A new research line involves the use of blood cells as tools for toxicological studies of nanoparticles.