



Coordinating European Research on Molecular Communications

Acronimo: **CIRCLE**

Call: **H2020-FETOPEN-2014-CSA**

Responsabile UNIPG: **Prof. Paolo GRESELE**

Abstract: Molecular communications, i.e. the transmission and reception of information by means of molecules, represent a growing research area because the classical transmission of informations is increasingly oriented towards the nanoscale. Cell interactions, neural networks, etc. represent examples of nano-communications and intense research is ongoing to unravel their mechanisms and to develop electronic simulators able to reproduce and predict these nano-communications. The CIRCLE project, funded by the European Community, aims to ensure that Europe becomes leader in the world for collaborative research on Molecular Communications by tackling a number of barriers to the advancement. In particular it will harmonize research on molecular communications within Europe, enabling young researchers to acquire the necessary interdisciplinary skills, knowledge, and experience, and it will establish a structured scientific community ensuring the necessary framework to allow technological advancement. CIRCLE consortium includes 9 units from 8 countries, two of them from the University of Perugia: Prof. Paolo Gresele, Department of Medicine, as Hemostasis and Thrombosis research unit; Prof. Gianluca Reali, Department of Engineering, as "Consorzio Nazionale Interuniversitario per le Telecomunicazioni", also responsible of one of the five work packages of the project. University of Perugia participates to CIRCLE with the Department of Medicine