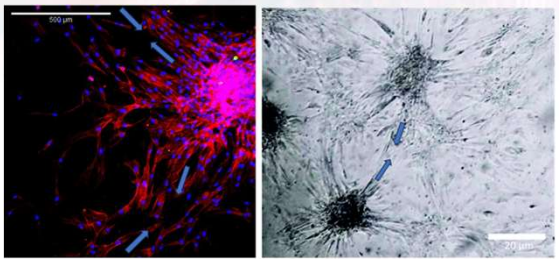
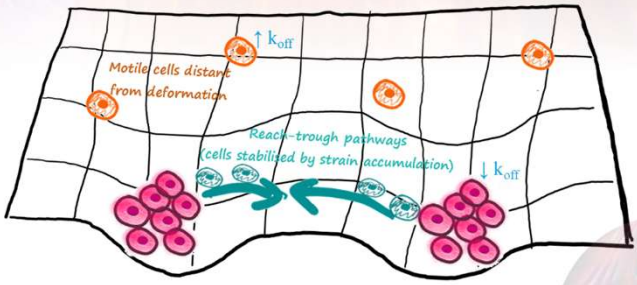
Investigating the Principles behind Cell Coordinated Migration as a function of Microenvironment Space-time Warping

Francesco Fontana, Paolo Signorello, Wendy Balestri, Adele Magi, Alessia Acchiappati, Gabriele Di Palma, Ludovica Cacopardo

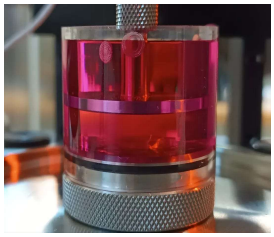
Department of Information Engineering and Research Center 'E. Piaggio' - University of Pisa, Centro 3R - Pisa

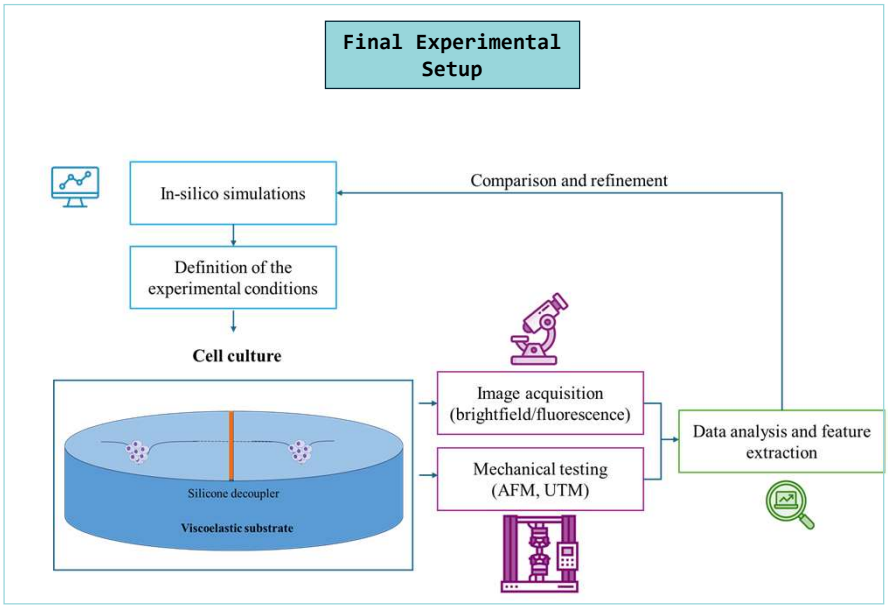


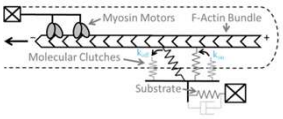




That **cell-generated warping** can be used by cells as a *long-distance contactless communication and navigation tool* is an unprecedented concept. INTERCELLAR aims to fill this knowledge gap, elucidating cell coordinated migration in the presence of cell clusters which, inducing significant deformations, emphasises micro-relativity effects.



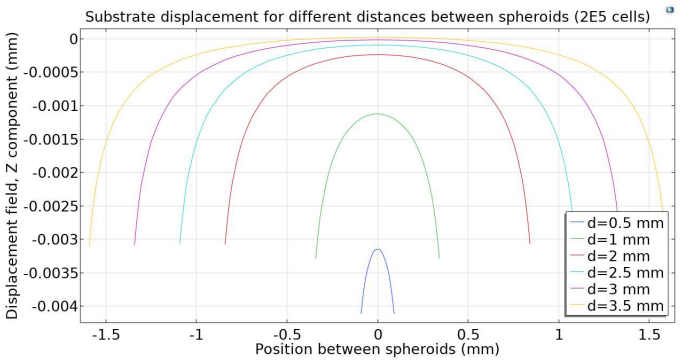


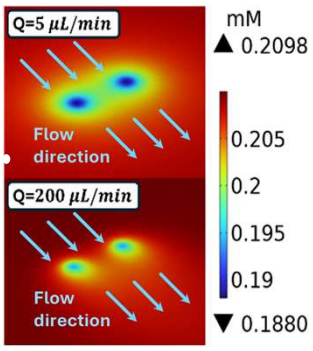


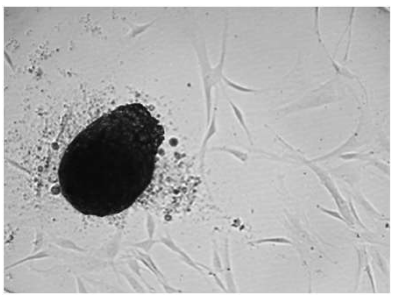
Material testing and modelling

Decoupling

Optimisation of cell culture







Behind the *understanding and characterisation of the mechanobiological process responsible for the orchestration of cell coordinated motion*, INTERCELLAR will foster the **comprehension, prediction** and **manipulation of a wide range of pathological and physiological process,** enabling the definition of *advanced in-vitro and in-silico tools as well as future novel diagnostic and therapeutic approaches*.

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