



*Venerdì 6 Dicembre, ore 14.30*

Aula Bignami

Viale Regina Elena 324 - Policlinico Umberto I



**Dr. Miguel Angel Del Pozo**

Mechanoadaptation & Caveolae Biology Lab, Cell and Developmental Biology Area,  
Centro Nacional de Investigaciones Cardiovasculares (CNIC), Madrid 28029, Spain.



***Molecular mechanisms of caveolae-dependent membrane organization, mechanoadaptation and trafficking***

We aim to understand how changes in plasma membrane tension impact on its organization and trafficking, to be translated into biochemical signals that orchestrate cell and tissue responses to mechanical strain, with a focus on the specific role of caveolae and their components. Here, I'll contribute our recent research at different levels, focusing on (i) novel principles of Cav1-dependent membrane organization and mechanical adaptation;

(ii) the role of caveolae-dependent mechanoadaptation in adipocyte expansion and homeostasis; and (iii) a novel role for Cav1 as a regulator of exosome biogenesis and ECM cargosorting. Our studies support a model whereby mechanical and biochemical cues from the surrounding environment converge on Cav1 to integrate cell adaptation and protection, and active physical and biochemical remodeling of the ECM, both locally and at long distances.



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FONDAZIONE CENCI BOLOGNETTI

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**LA RICERCA IN PERSONA**