

We would like to acknowledge Khaled Youssef Kamal Moustafa for the PhD thesis from Departamento de Genetica, Facultad de Biologia, Universidad Complutense de Madrid “Alteraciones inducidas por cambios gravitatorios en células proliferantes en cultivo de *Arabidopsis thaliana*” for the cell cycle figure in Fig. 9 (as the pink-shade labeled area in the figure below).

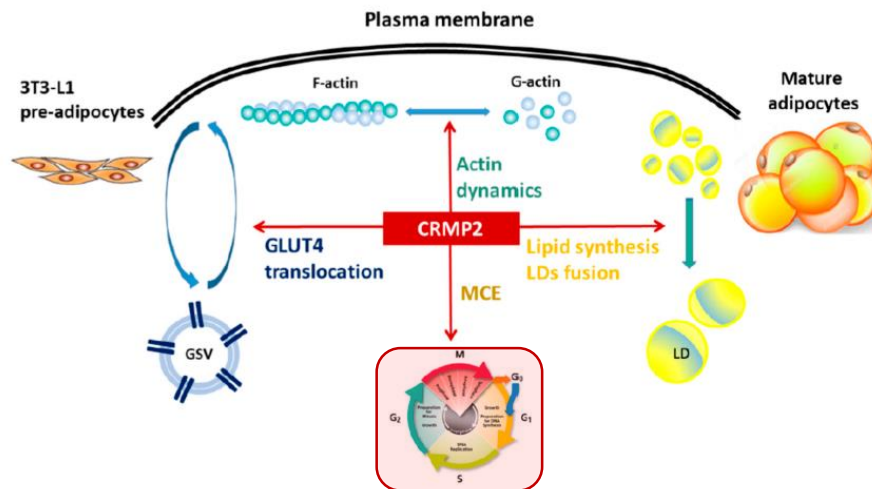


Figure 9. CRMP2 regulates adipocyte differentiation and lipid deposits. CRMP2 exerts multiple functions in mediating adipogenesis and determining lipid deposits in the mature adipocytes via [1] modulating cell proliferation at MCE phase; [2] regulating the expression of critical adipogenic transcription factors; [3] mediating the expression of adipogenic markers and lipid-synthesizing enzymes for lipid accumulation, and thus the lipid contents; and [4] modulating cytoskeleton polymerization required for GLUT4 translocation and LDs fusion. Accordingly, CRMP2 expression and function are correlated with the morphological changes and energy metabolism of adipocytes during adipogenesis, which determines the lipid deposits and therefore the mass of adipose reservoir. GSVs: GLUT4 storage vesicles; LD, lipid droplet.