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Trans-disciplinary research approaches: integration of fluid mechanics with cell biology

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ABSTRACT

At the level of the individual molecule, outstanding discoveries leading the the 2012 Nobel Prize in Chemistry clarified G-protein coupled receptors (GPCRs) crystallographic structures and functions. Nevertheless, a large number of such receptors cooperate to ultimately determine the cell response. Henceforth, understanding their group effects becomes crucial to predict the activity of the GPCRs populating the various cell aggregates.