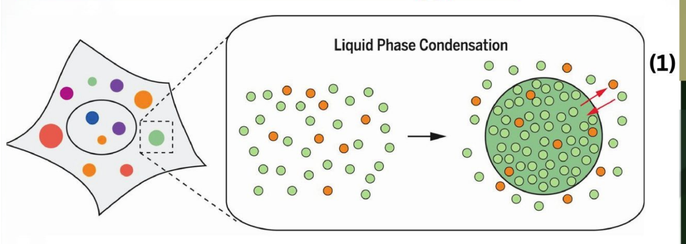
Boundary Without Fence:

Could Synthetic Organelles Unlock the Next Level of CRISPR Precision?

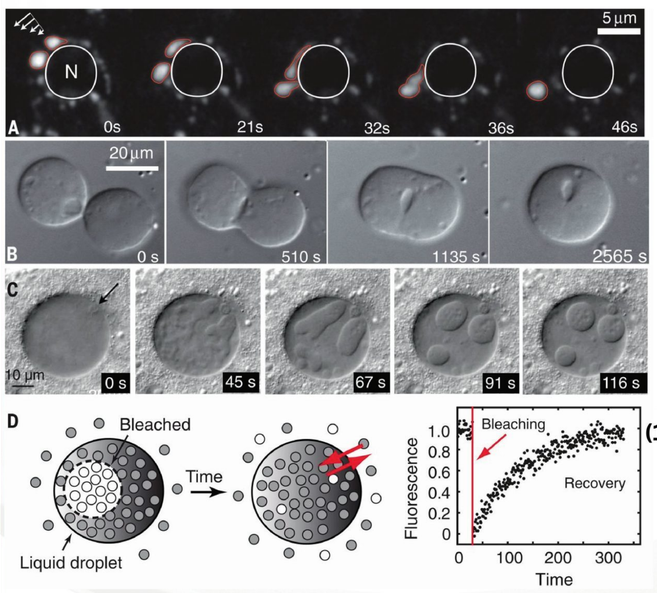


Exploring the Cell's Hidden Realm: The Wonders of Liquid-Liquid Phase Separation in Membraneless Condensates.

Foundational Insights

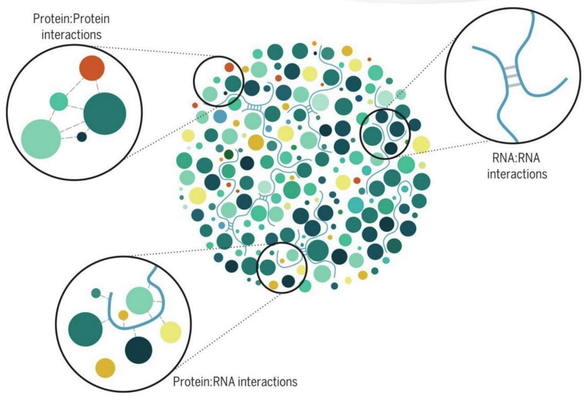


(1)



(1)

Unraveling the formation

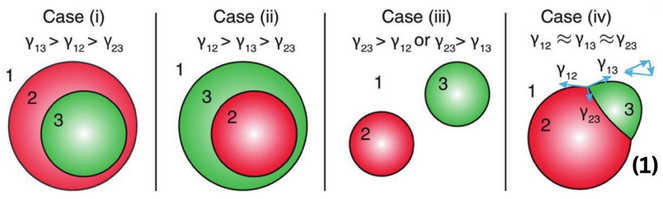


(2)

$$\chi = \frac{z(\epsilon AB - \frac{1}{2}(\epsilon AA + \epsilon_{BB}))}{kT}$$

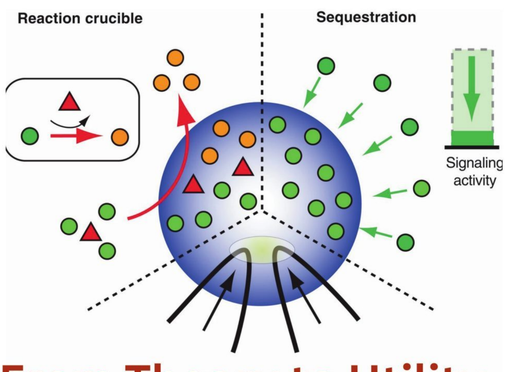
- χ is the Flory-Huggins interaction parameter;
- z is the coordination number (number of nearest neighbors);
- ϵAB, ϵAA, and ϵBB are the interaction energies for heterolytic and homolytic interactions, respectively;
- k is the Boltzmann constant;
- T is the absolute temperature.

(3 & 4)



(1)

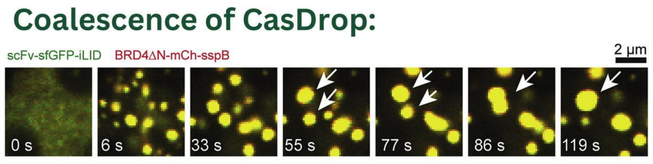
Why It Matters?



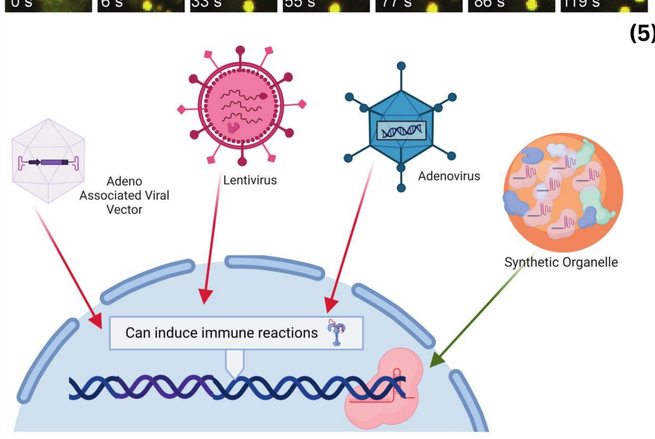
(1)

From Theory to Utility

Coalescence of CasDrop:



(5)



Sources & Citations

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