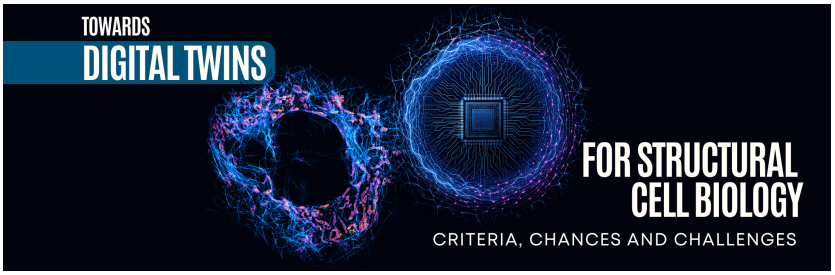

Contribution ID: **39** Type: **not specified**

HTP screening of SAR–hATG8 interactions in selective autophagy

We developed an integrative pipeline that combines multi-omics data, structural screening, AlphaFold2 modeling, and all-atom molecular dynamics to identify and characterize selective autophagy receptors (SARs). The framework enables rapid screening of canonical LIR-LDS interactions by scoring motif-based residue contacts and pocket occlusion across experimental structures, AF2 models, and MD trajectories. Our analysis reveals family-specific LIR-LDS and UIM-UDS binding patterns and shows how UDS mutations and post-translational modifications modulate SAR-hATG8 engagement.

Presenter: Dr ALEJANDRO POVEDA, Sergio Alejandro (Goethe University)

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