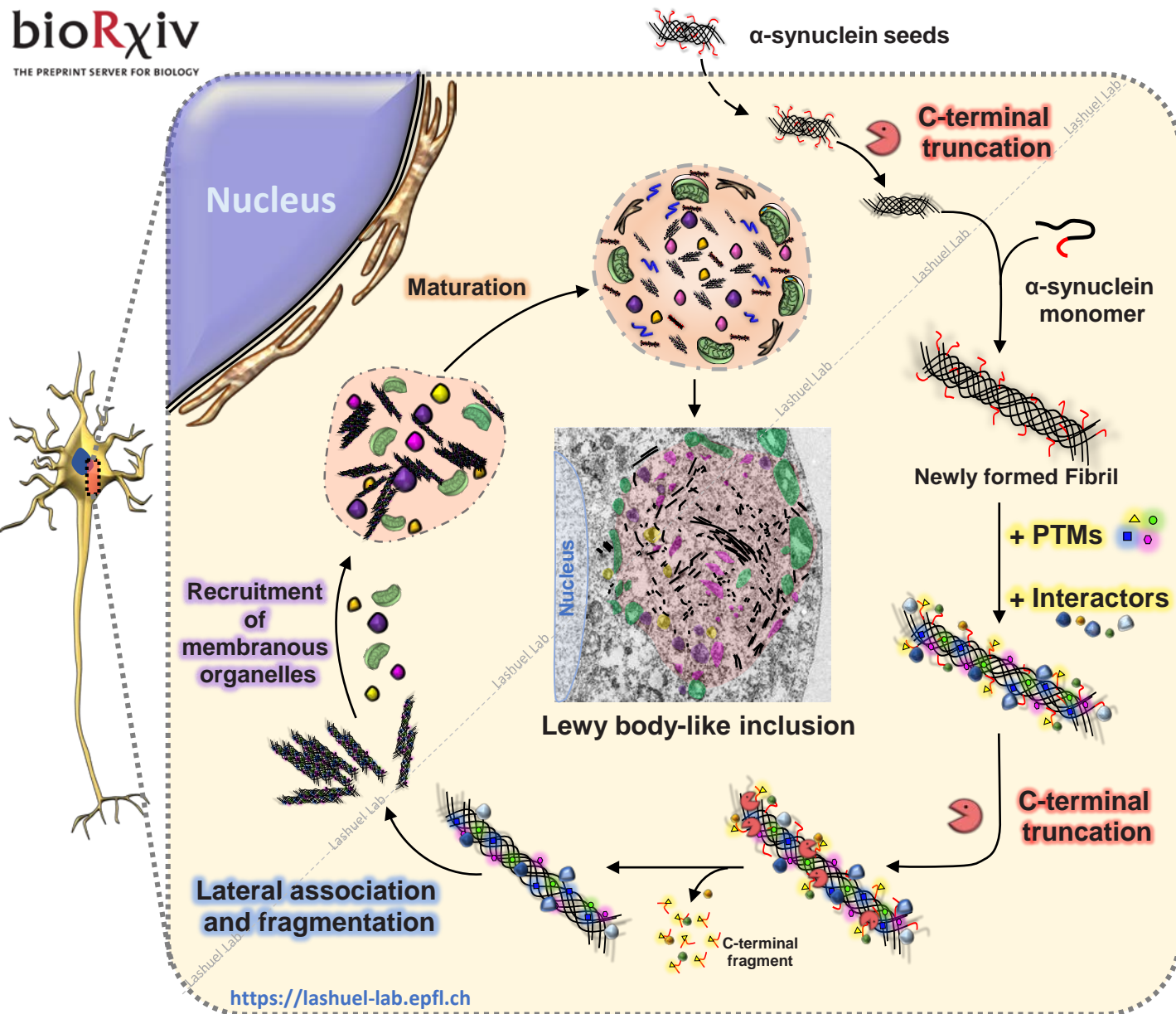


The making of a Lewy body: the role of α -synuclein post-fibrillization modifications in regulating the formation and the maturation of pathological inclusions

Anne-Laure Mahul-Mellier, Melek Firat Altay, Johannes Burtscher, Niran Maharjan, Nadine Ait-Bouziad, Anass Chiki, Siv Vingill, Richard Wade-Martins, Janice Holton, Catherine Strand, Caroline Haikal, Jia-Yi Li, Romain Hamelin, Marie Croisier, Graham Knott, Georges Mairat-Coello, Laura Weerens, Anne Michel, Patrick Downey, Martin Citron and Hilal A. Lashuel

bioRxiv
THE PREPRINT SERVER FOR BIOLOGY



Highlights

- A neuronal seeding model that recapitulate the process of Lewy body formation.
- Novel insight into the molecular, structural and cellular mechanisms underlying Lewy body formation and maturation.
- Post-fibrillization C-terminal cleavages regulate α -syn inclusions formation by modulating the interactome, processing and lateral association of α -syn newly formed fibrils.
- More tools are needed to enable accurate profiling and assessment of α -syn pathological diversity and spreading in human brain tissues.