

Formation of aerobic granular sludge biofilms for sustainable wastewater treatment

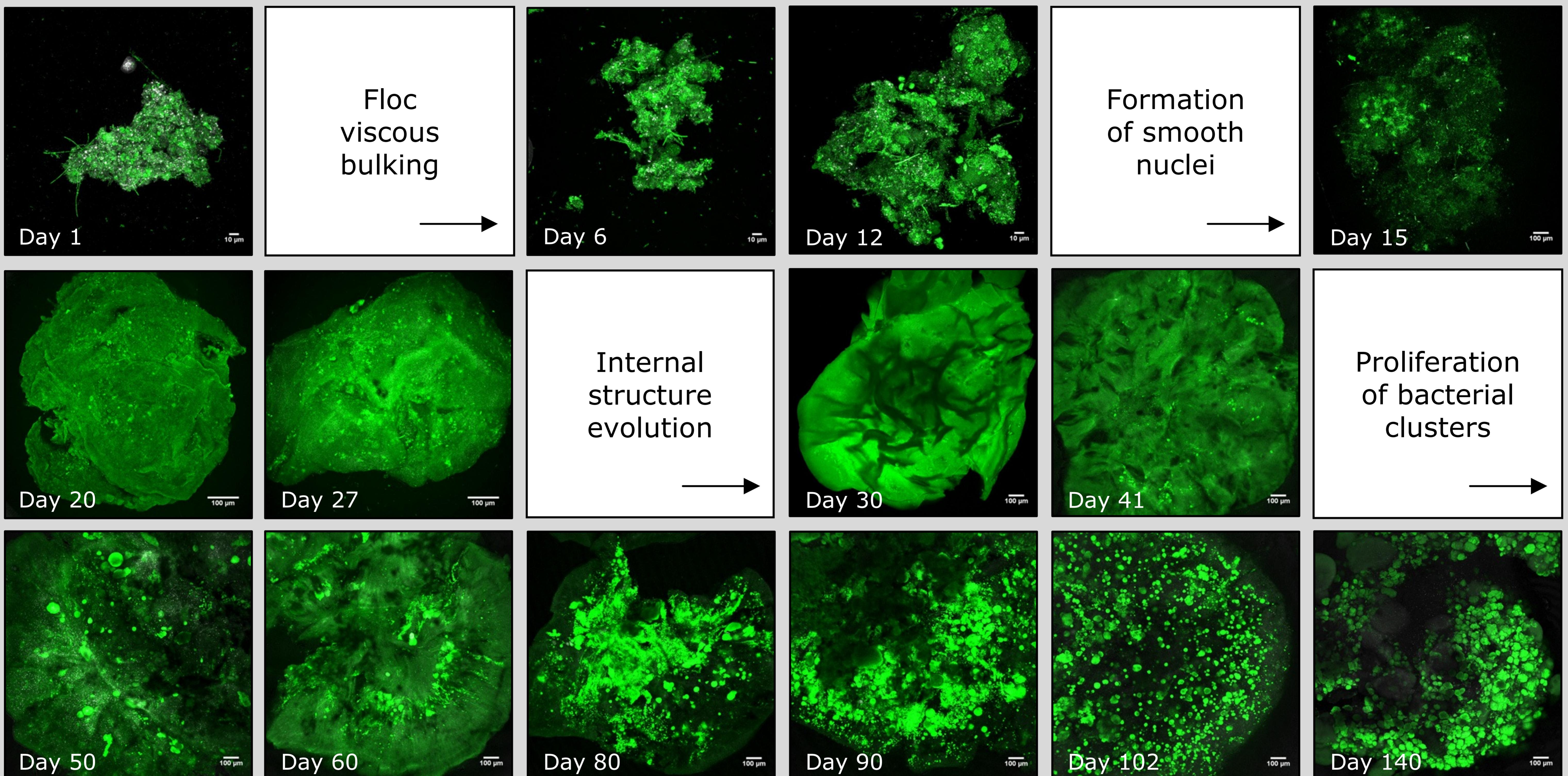
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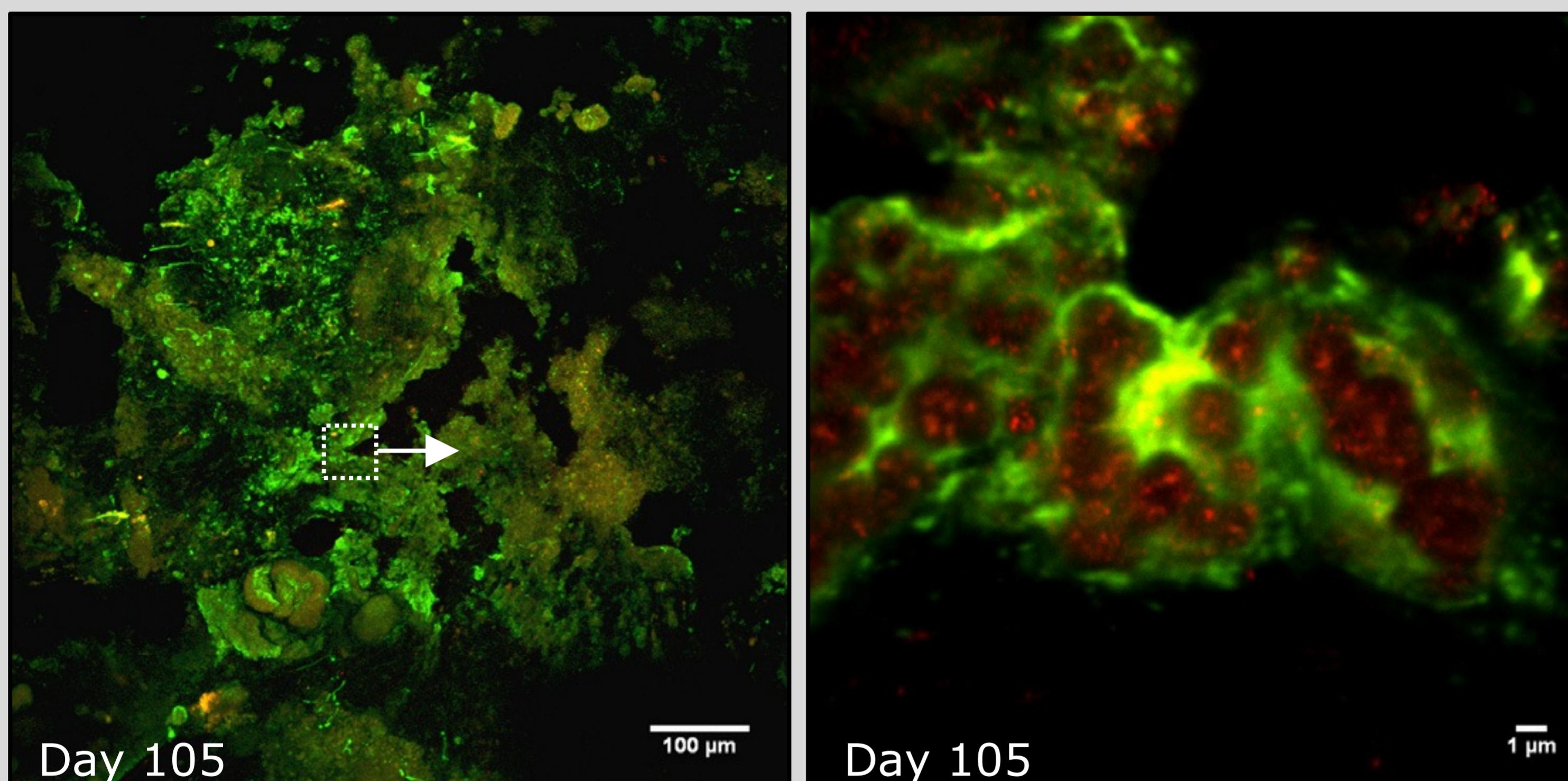
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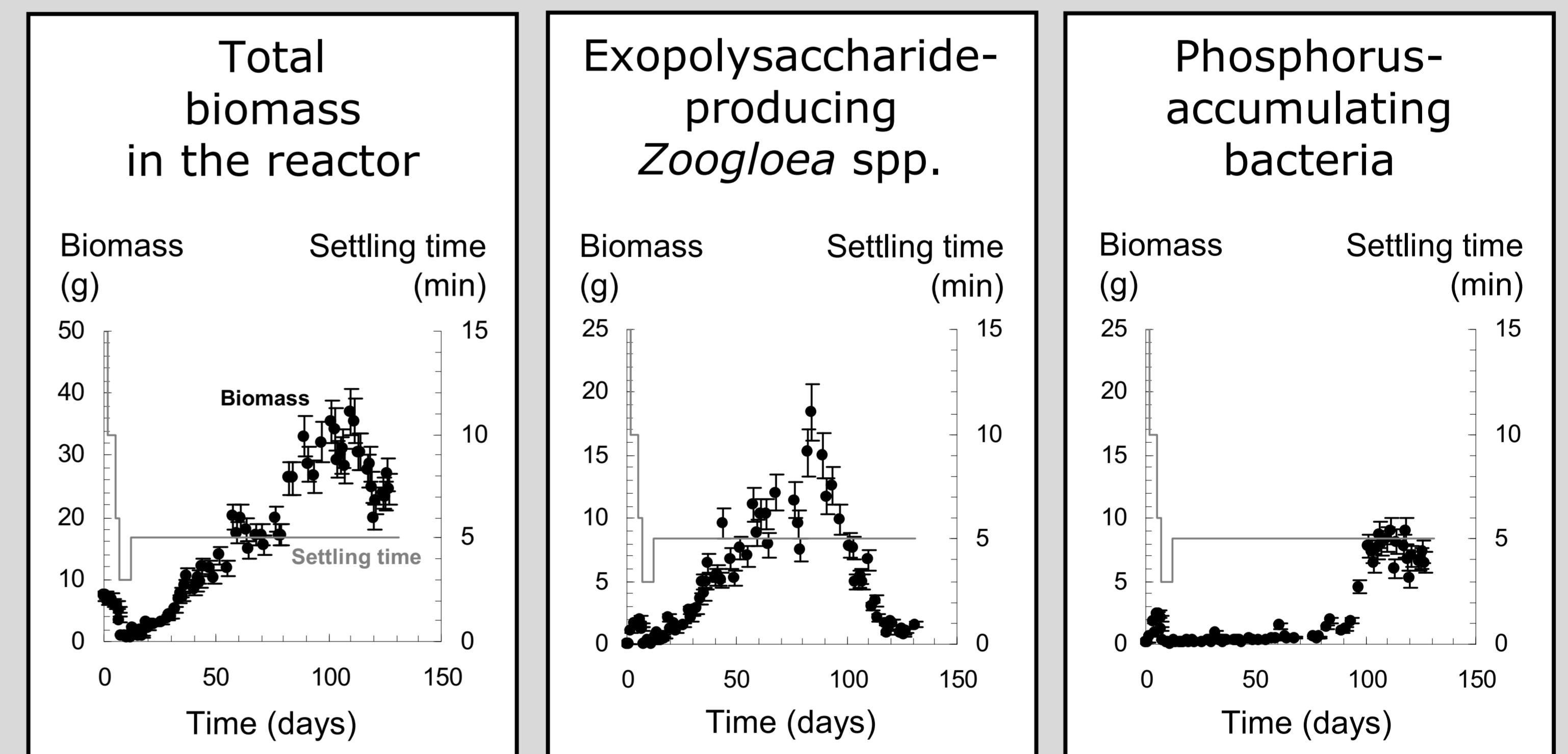
From activated sludge flocs to aerobic granular microbial biofilms (Confocal laser scanning microscopy analysis)



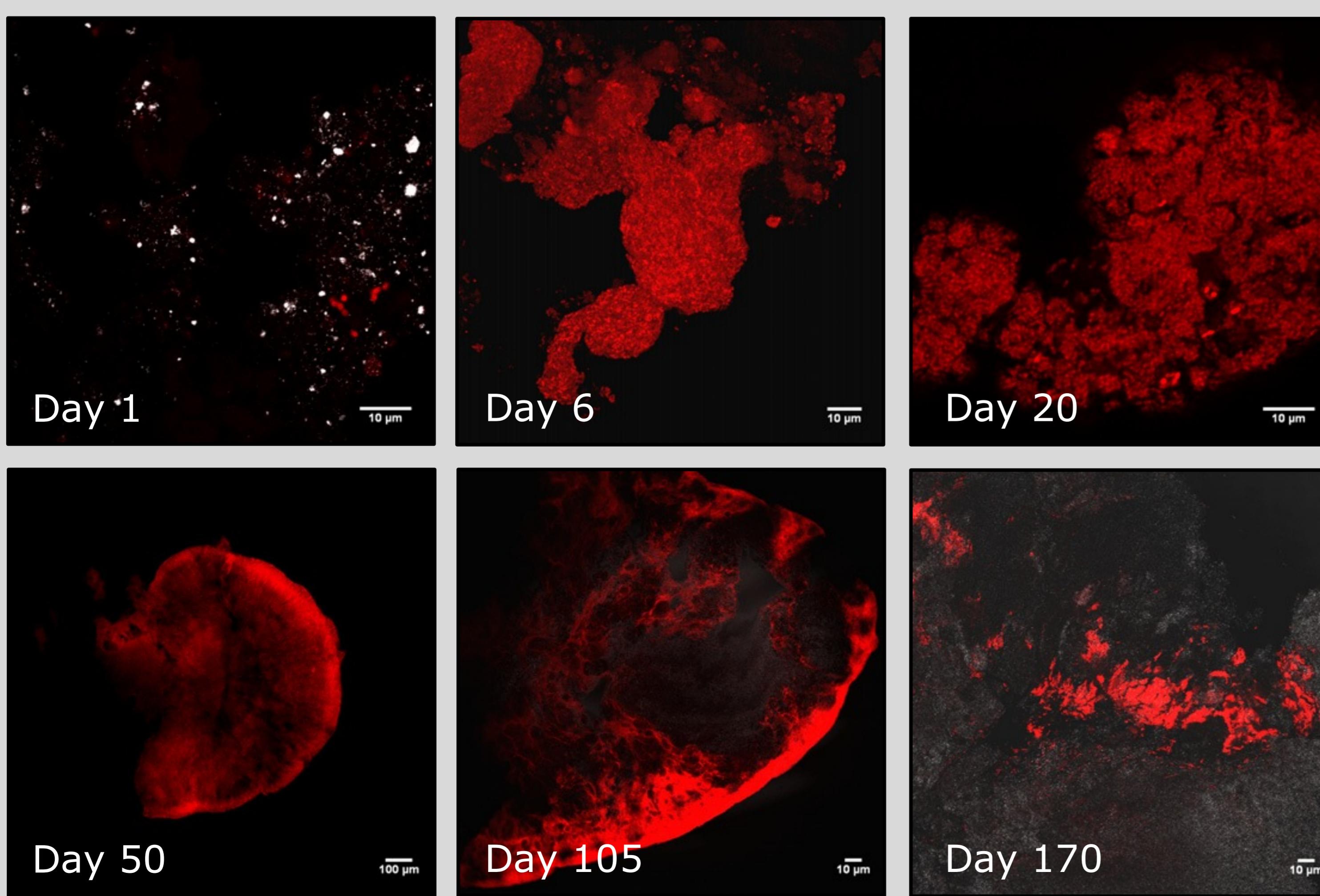
Bacteria entrapped in exopolysaccharide gel matrix
(green = exopolysaccharide matrix, red = bacteria)



Microbial succession in aerobic granular biofilms
(Terminal-restriction fragment length polymorphism analysis)



Exopolysaccharide-producing *Zoogloea* spp. form the early-stage aerobic granular biofilms, and then decline



Phosphorus-accumulating bacteria rise after 80 days



Ammonium-oxidizers form dense microcolonies

