

Non-invasive hydrodynamic imaging

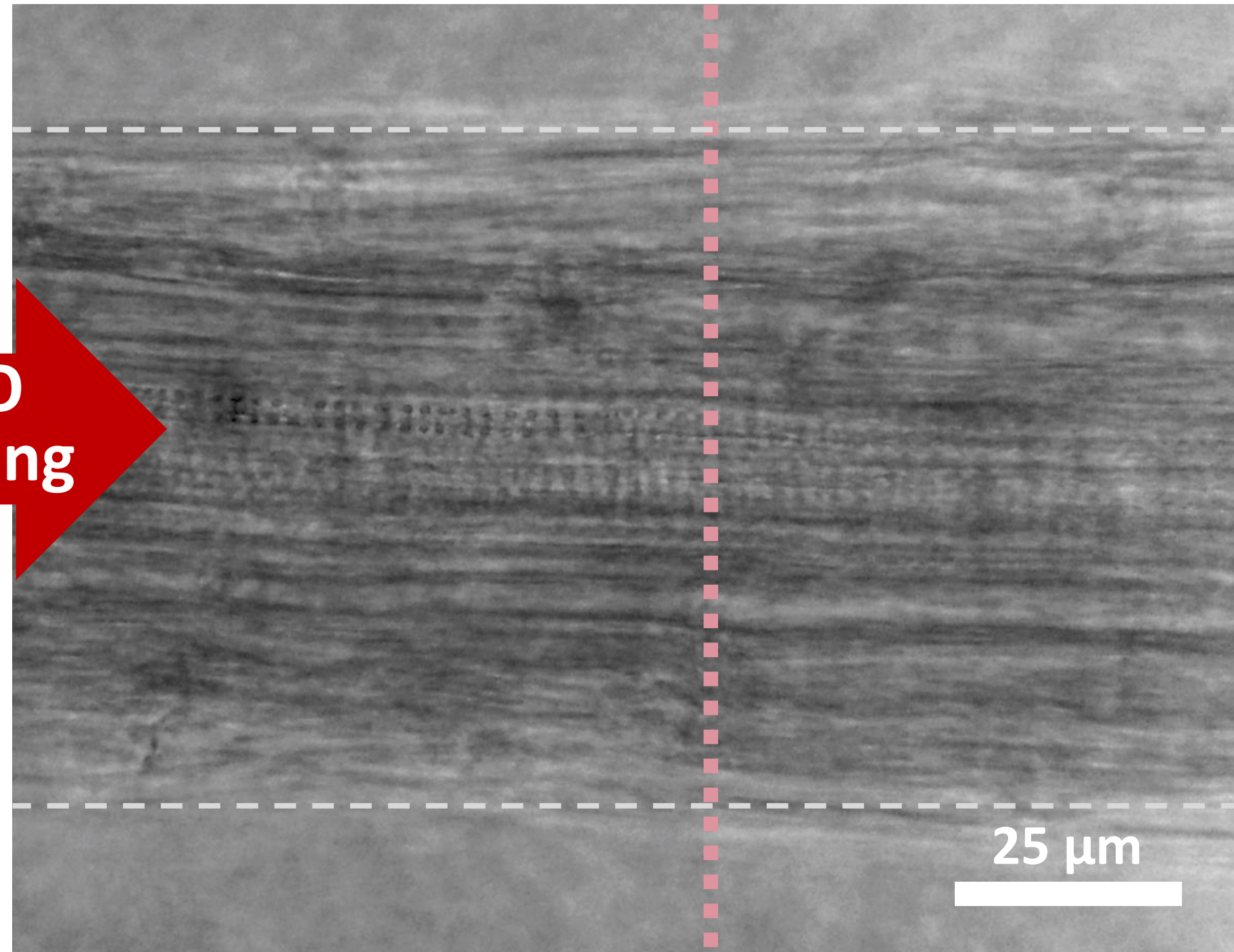


in plant roots
at **cell resolution**

FC Pascut, V Couvreur, D Dietrich, N Leftley, G Reyt, Y Boursiac, M Calvo-Polanco, I Casimiro, C Maurel, DE Salt, X Draye, DM Wells, MJ Bennett & KF Webb

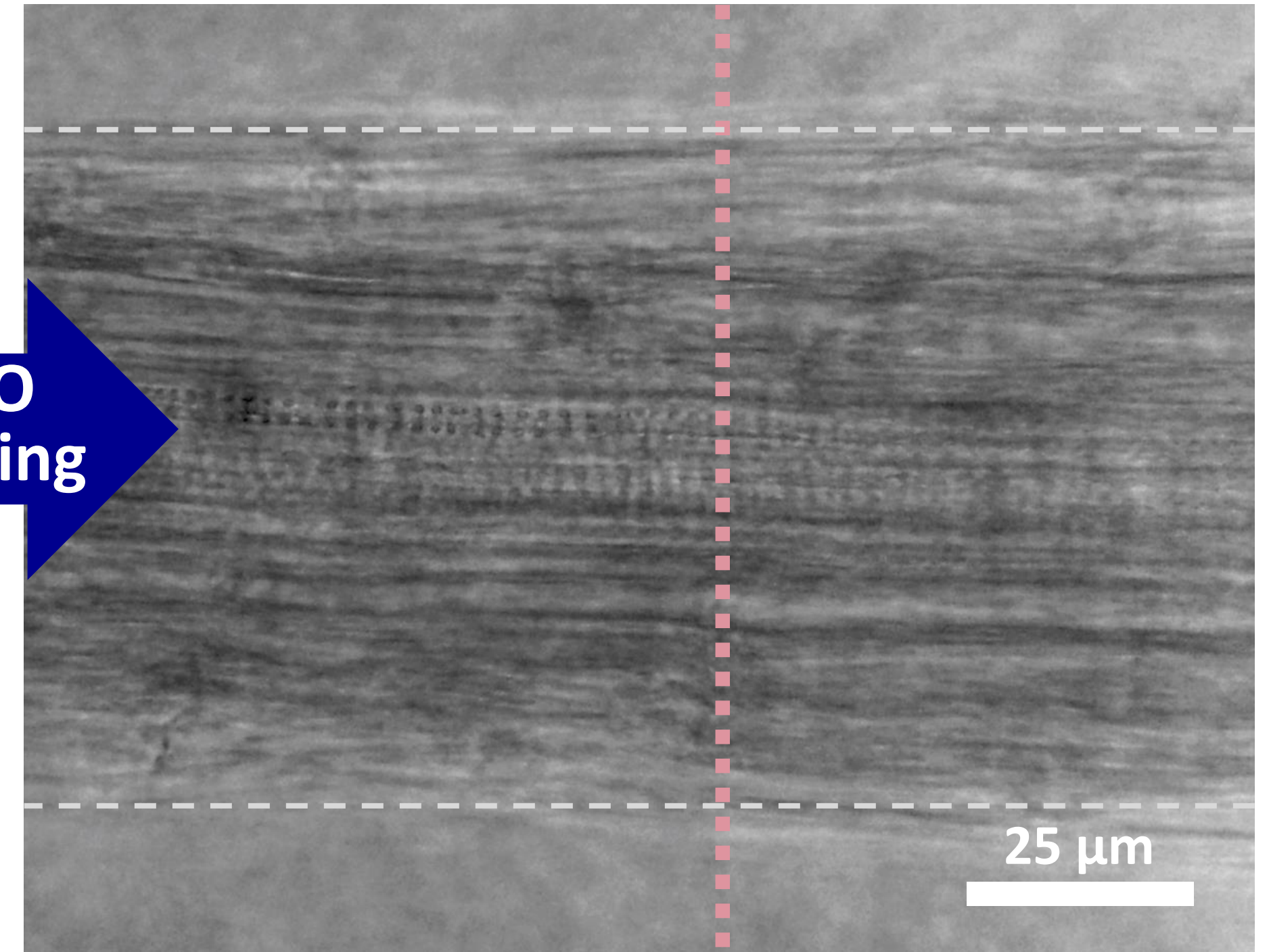
Laser

D₂O
loading



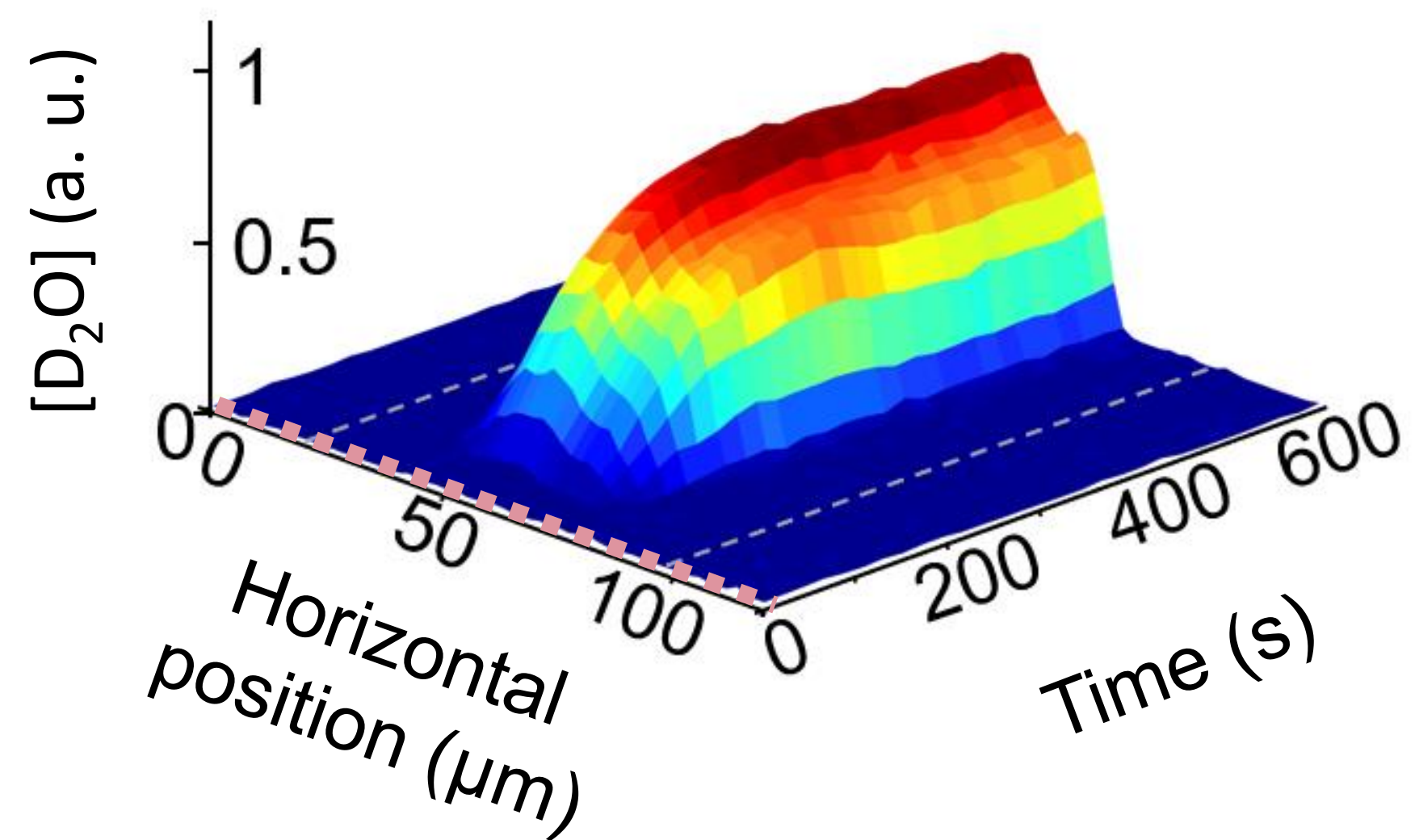
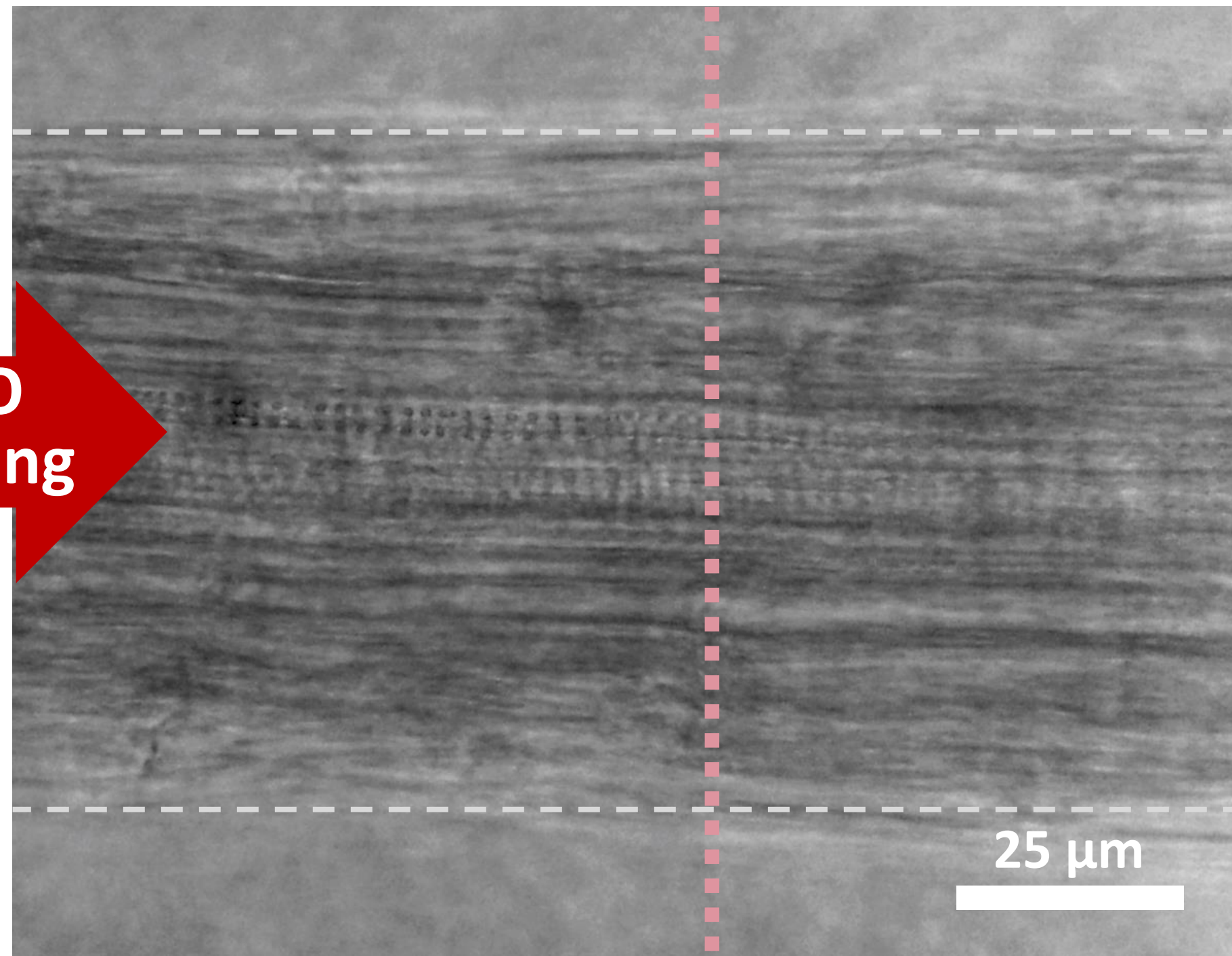
Laser

H₂O
loading



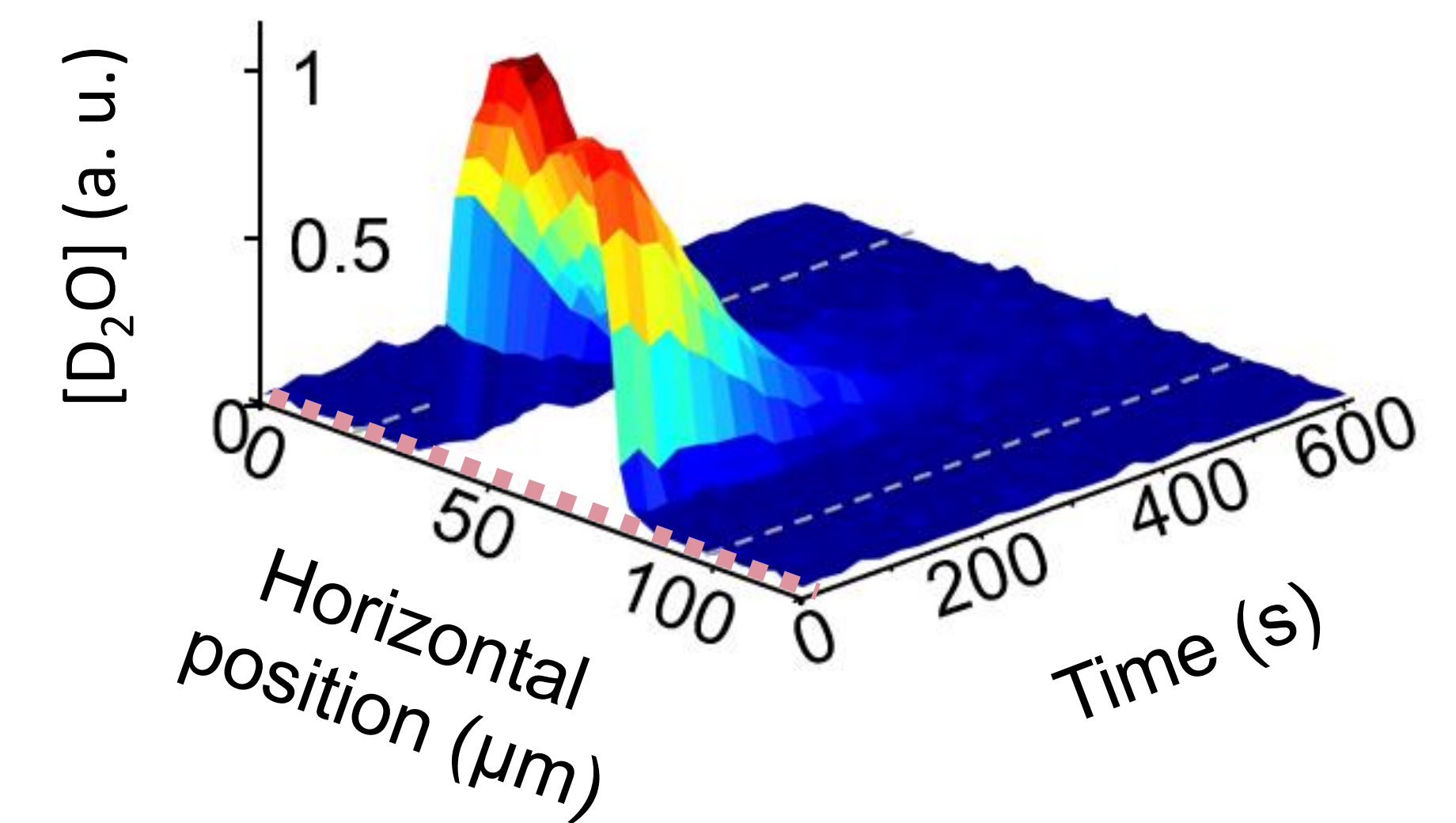
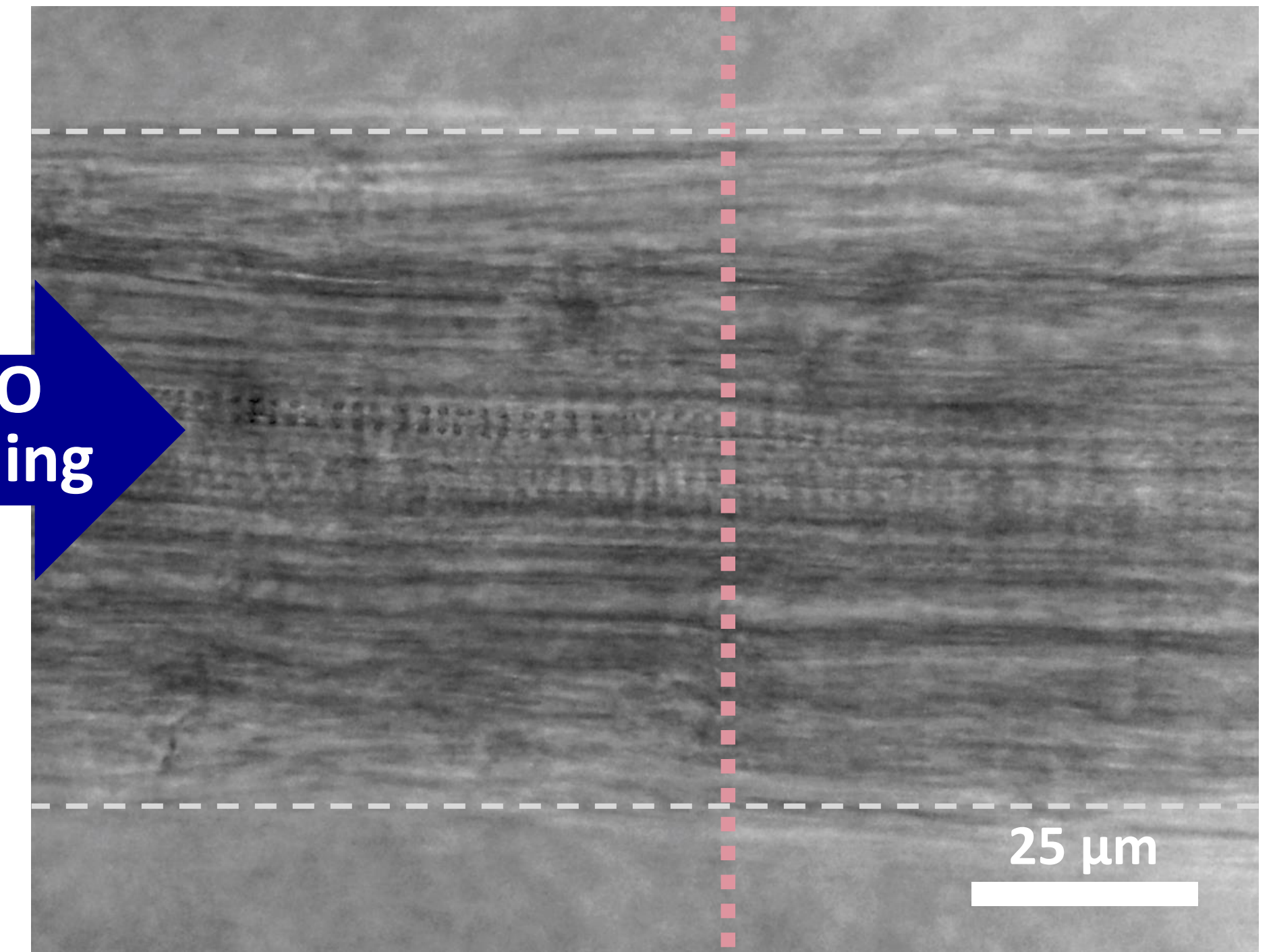
Laser

D₂O
loading



Laser

H₂O
loading



Root

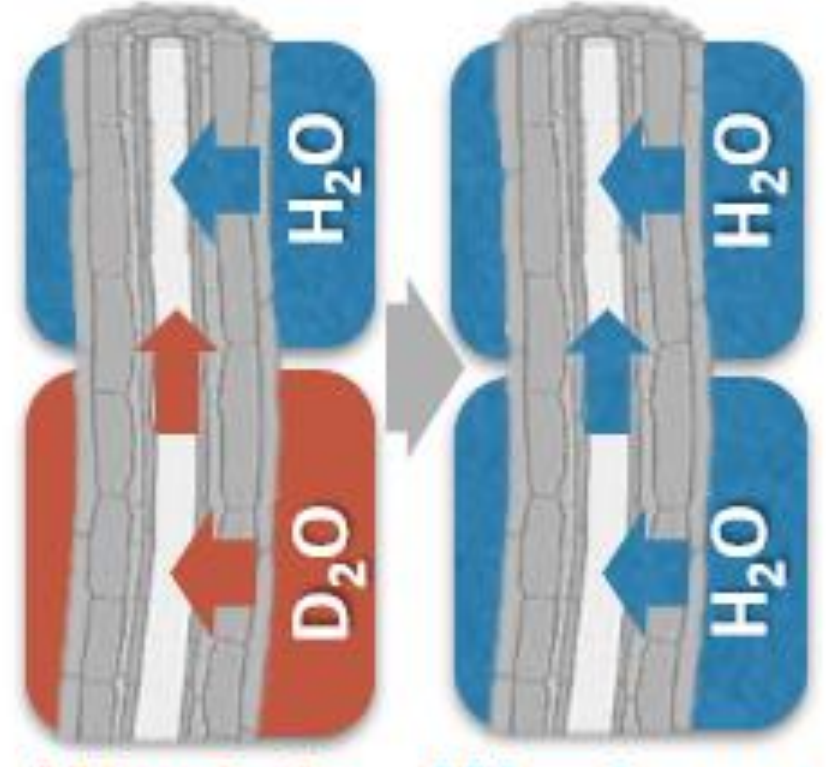
environment

Root

anatomy

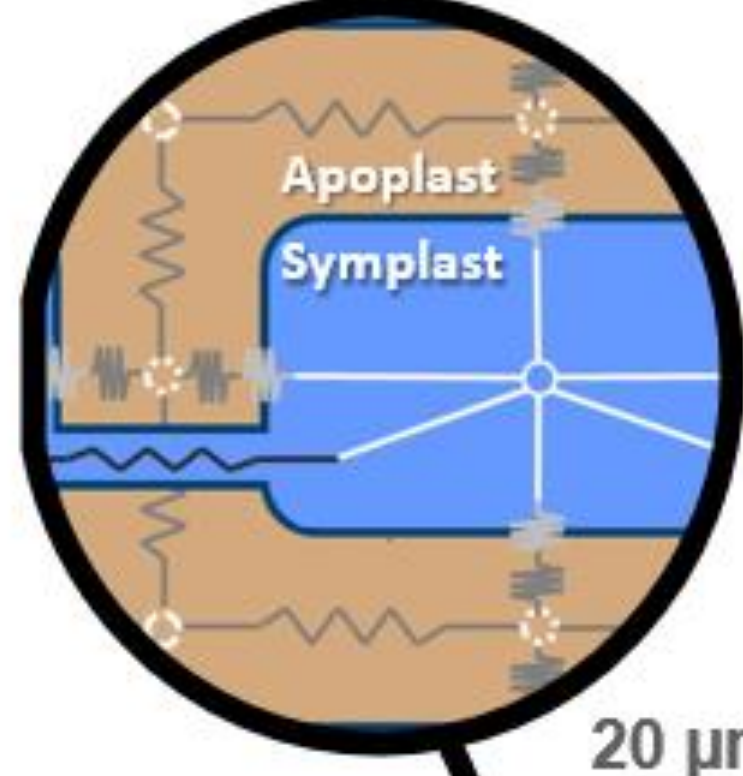
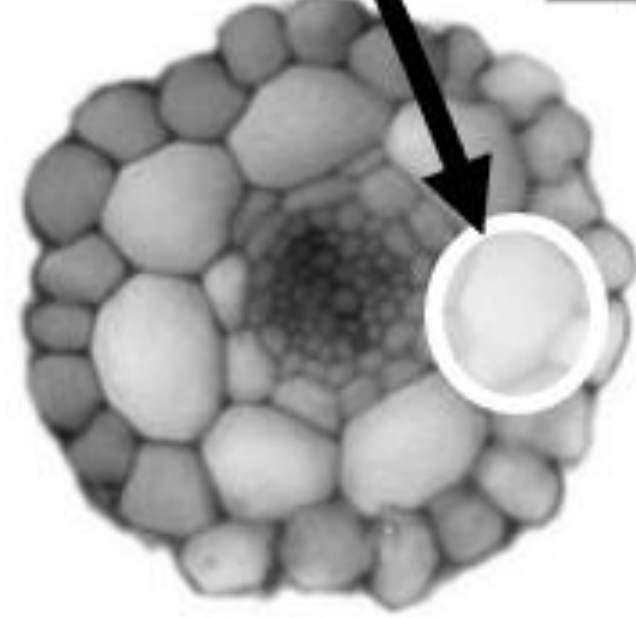
Cell

hydraulic properties

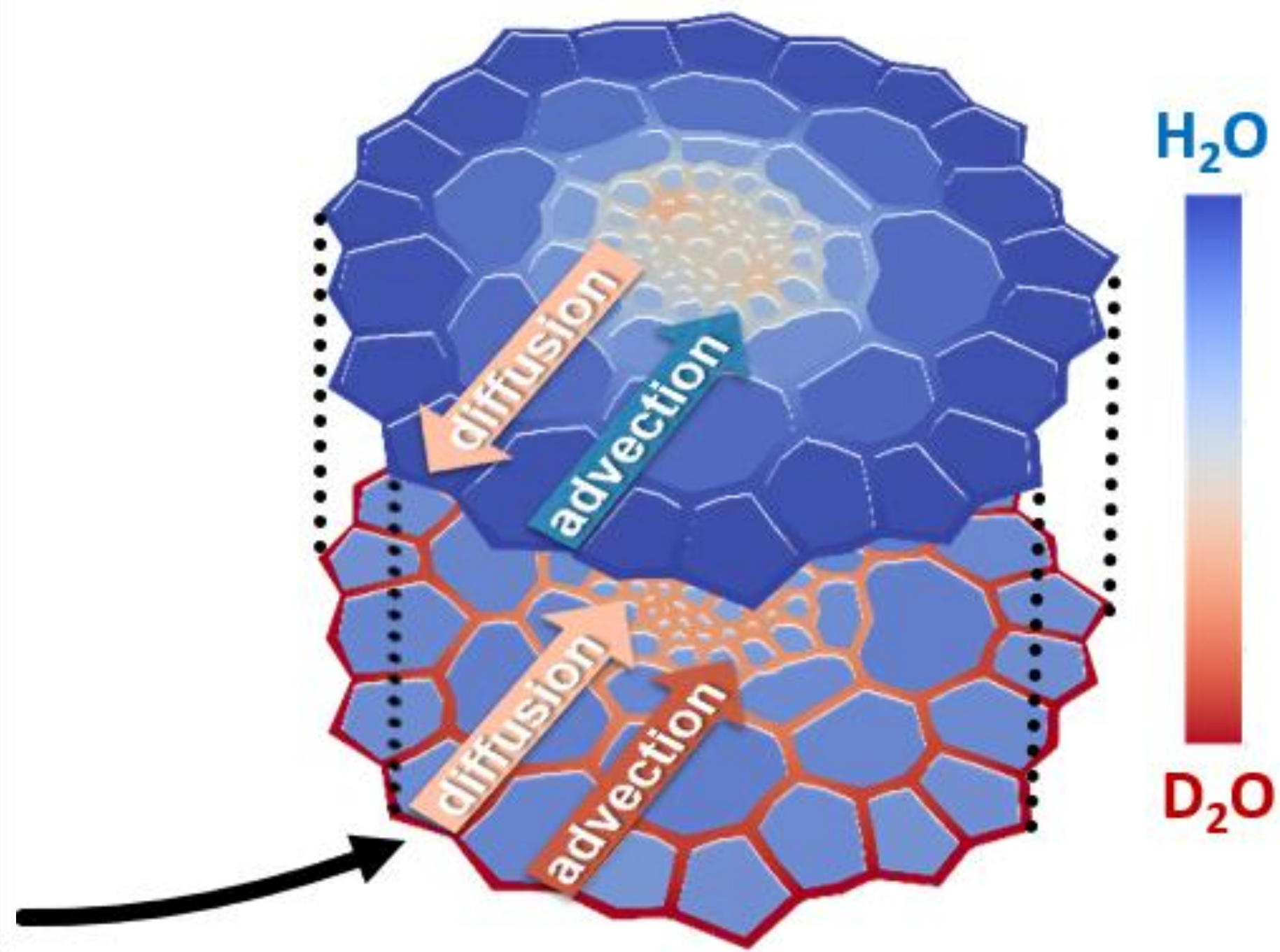
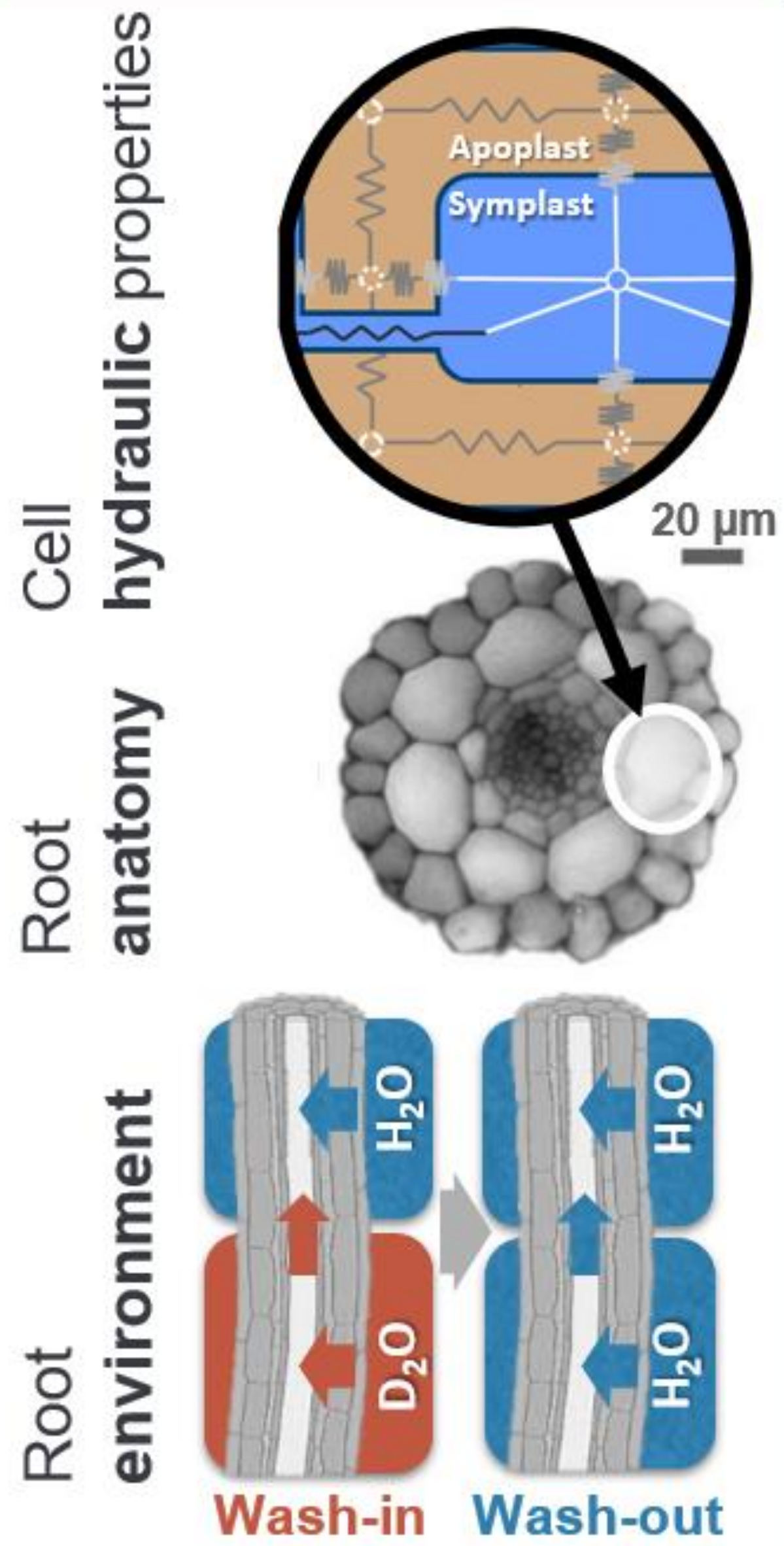


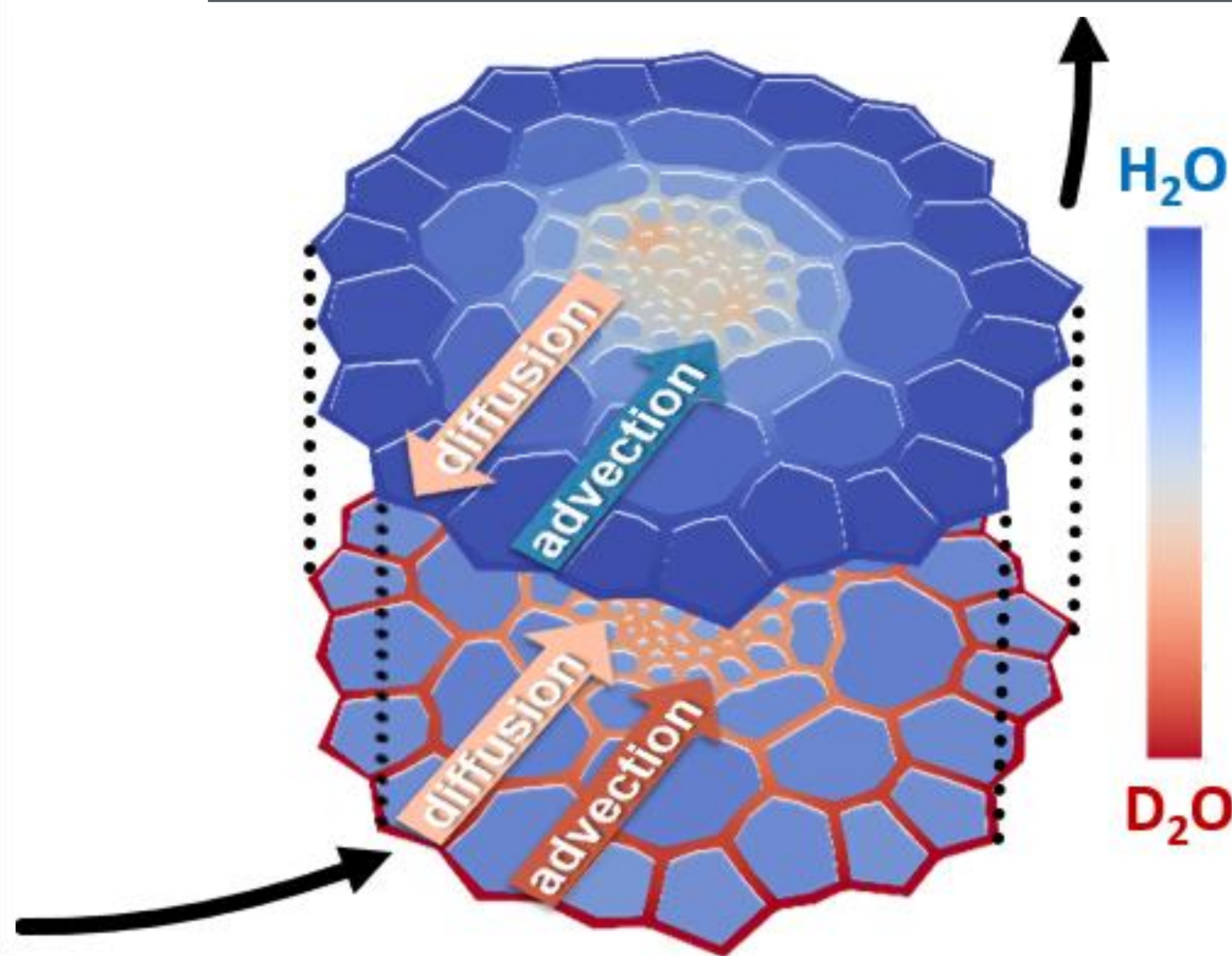
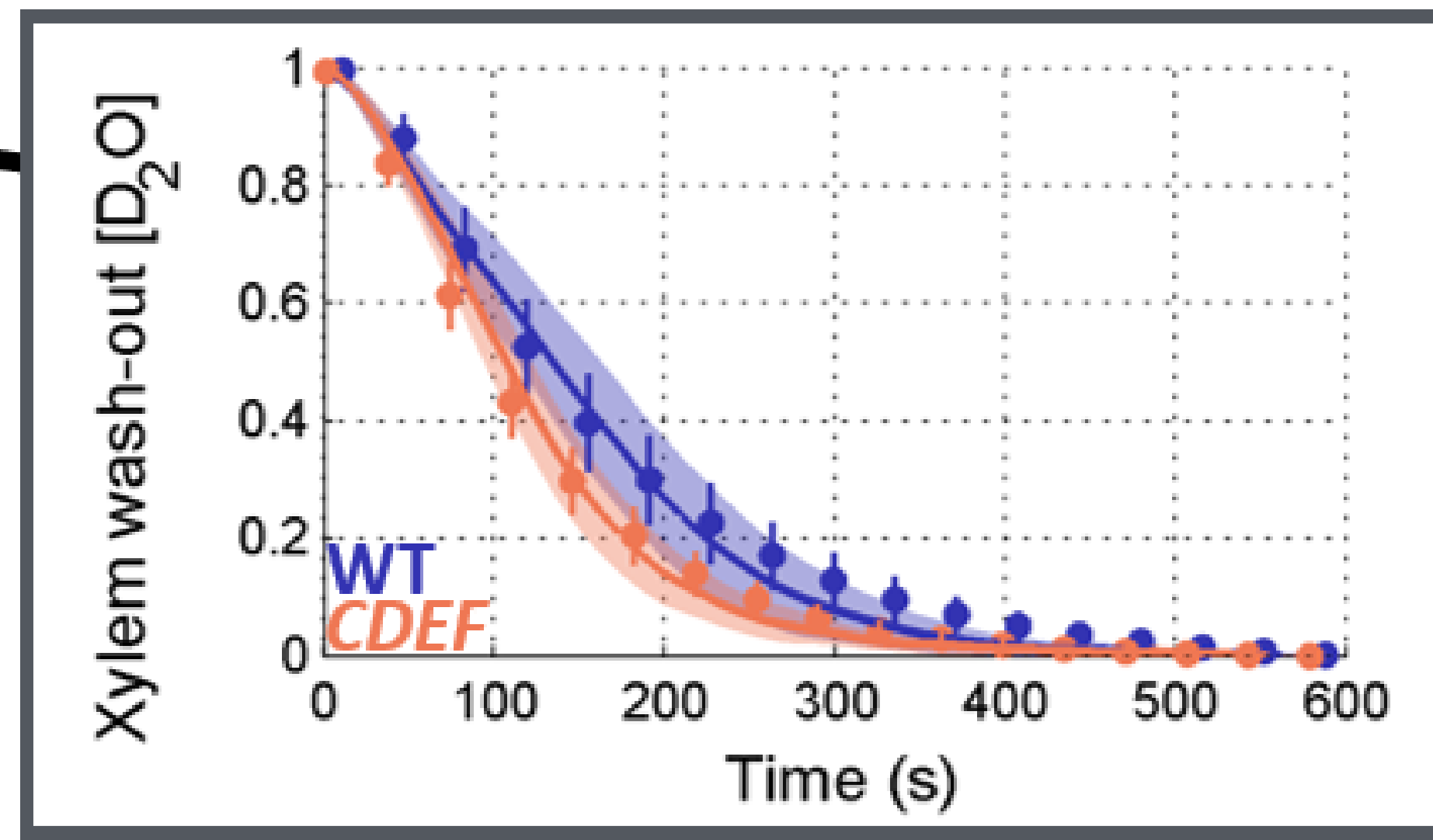
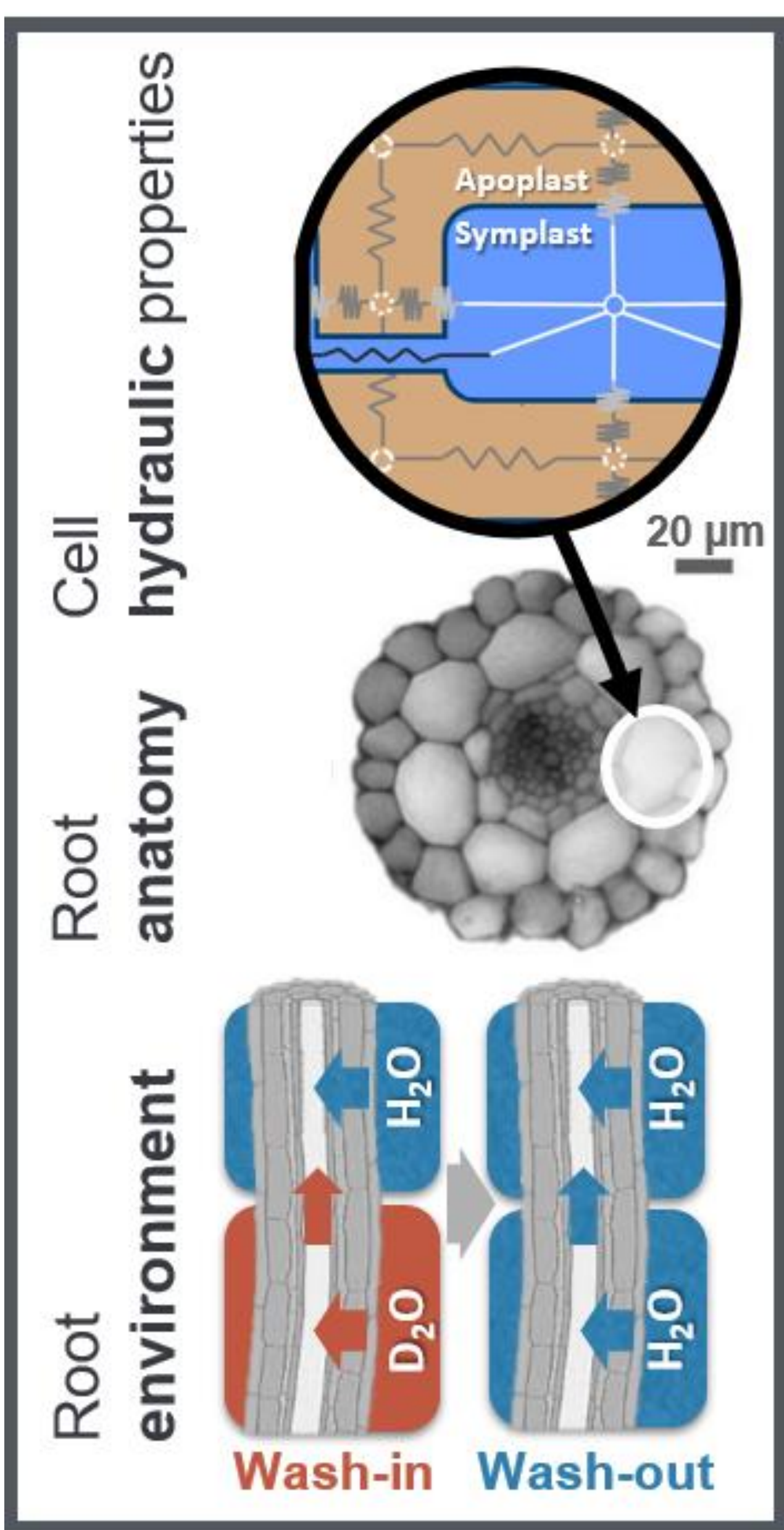
Wash-in

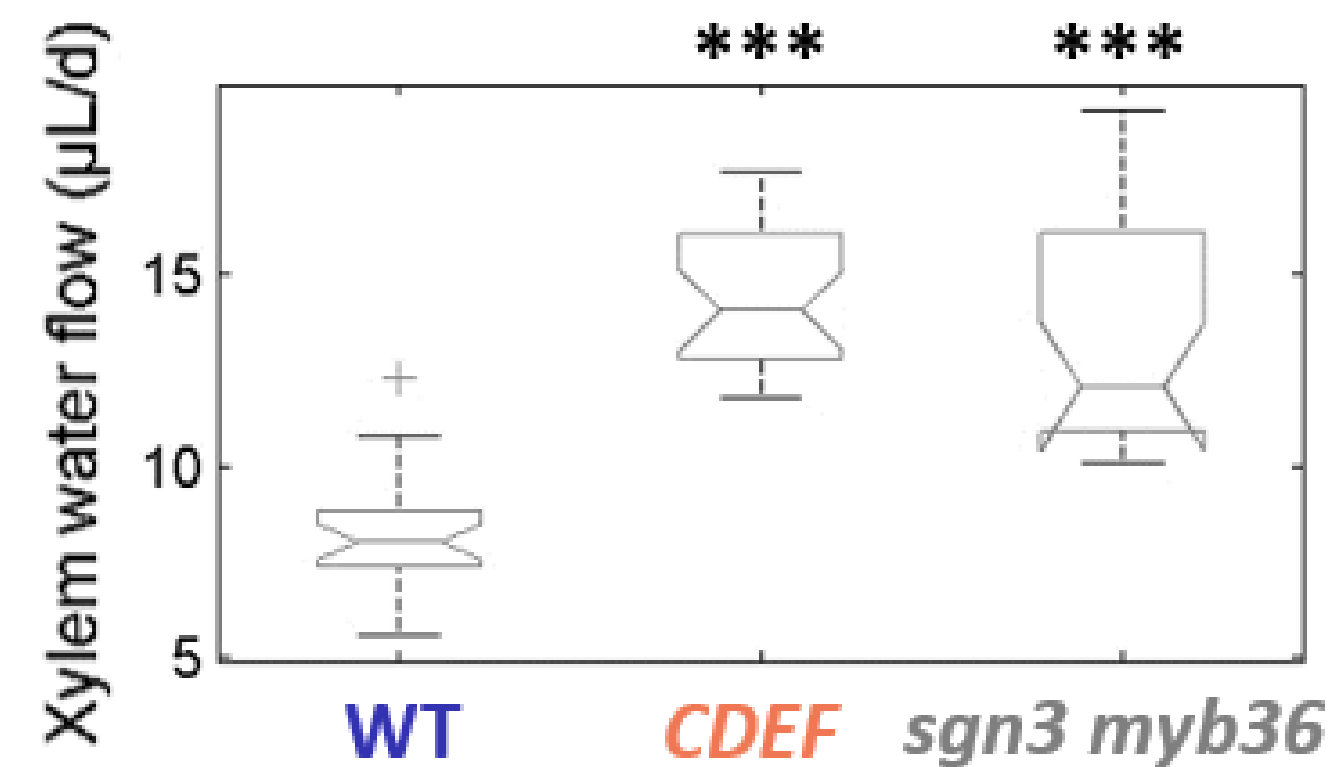
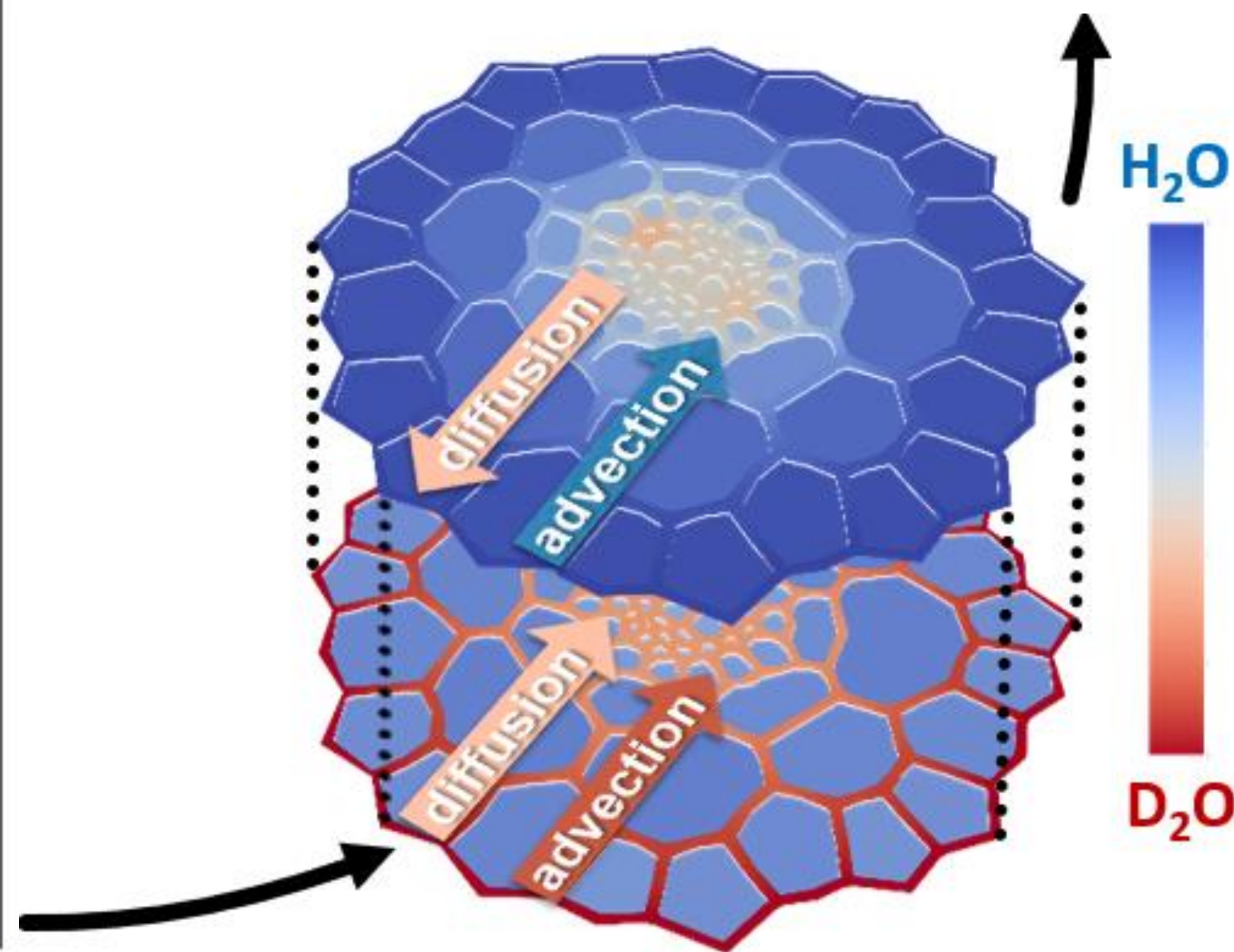
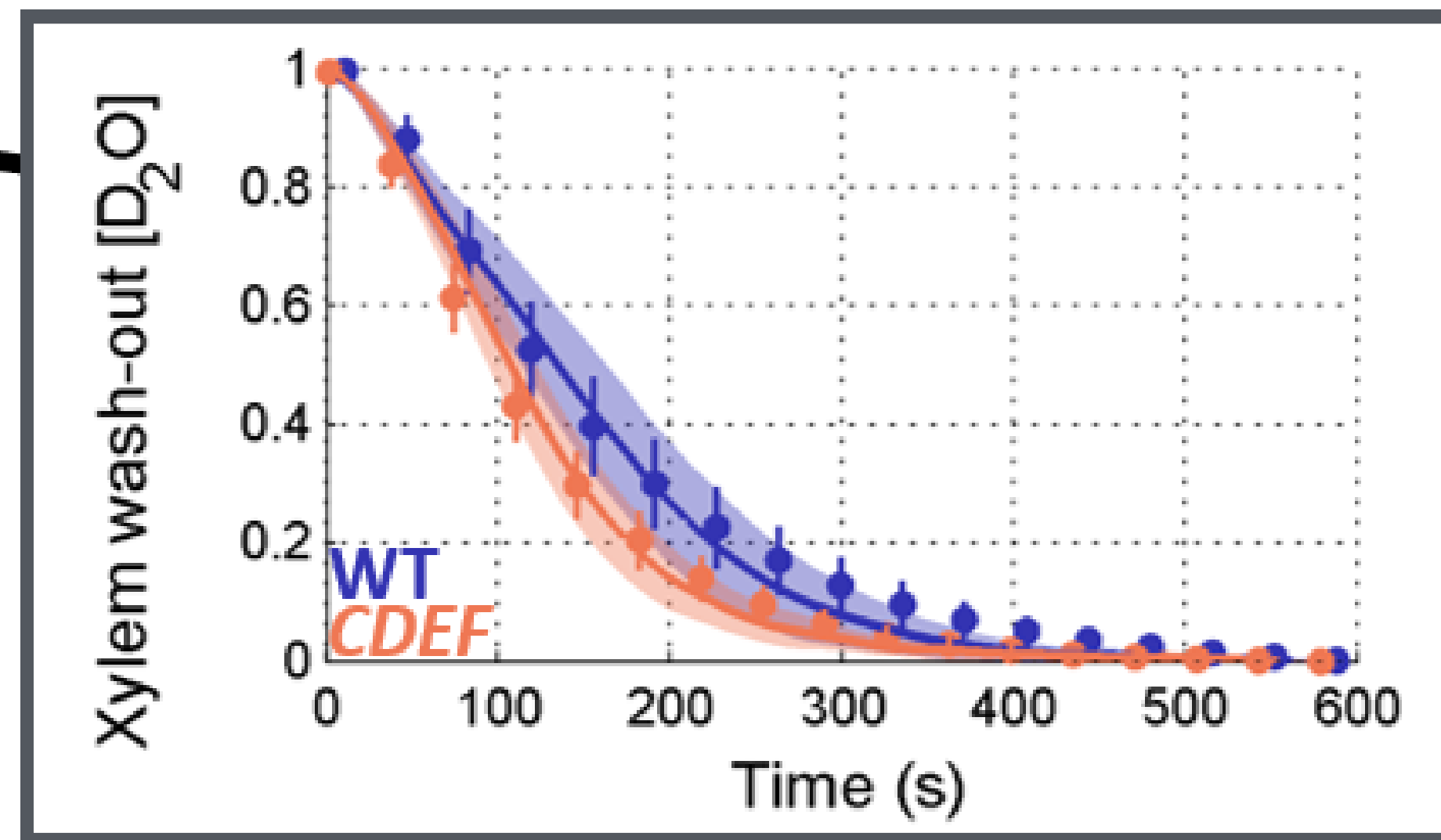
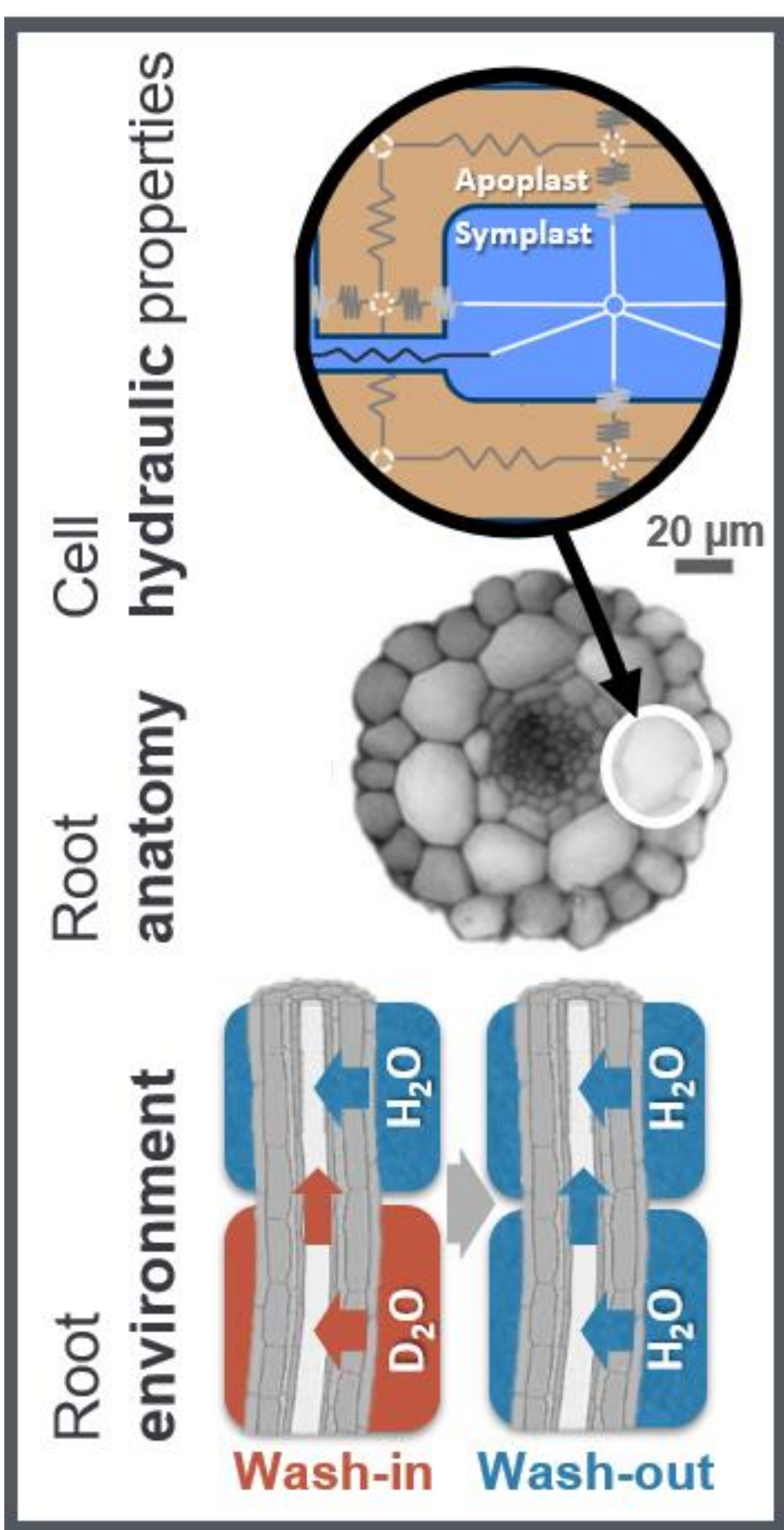
Wash-out



$20\ \mu m$







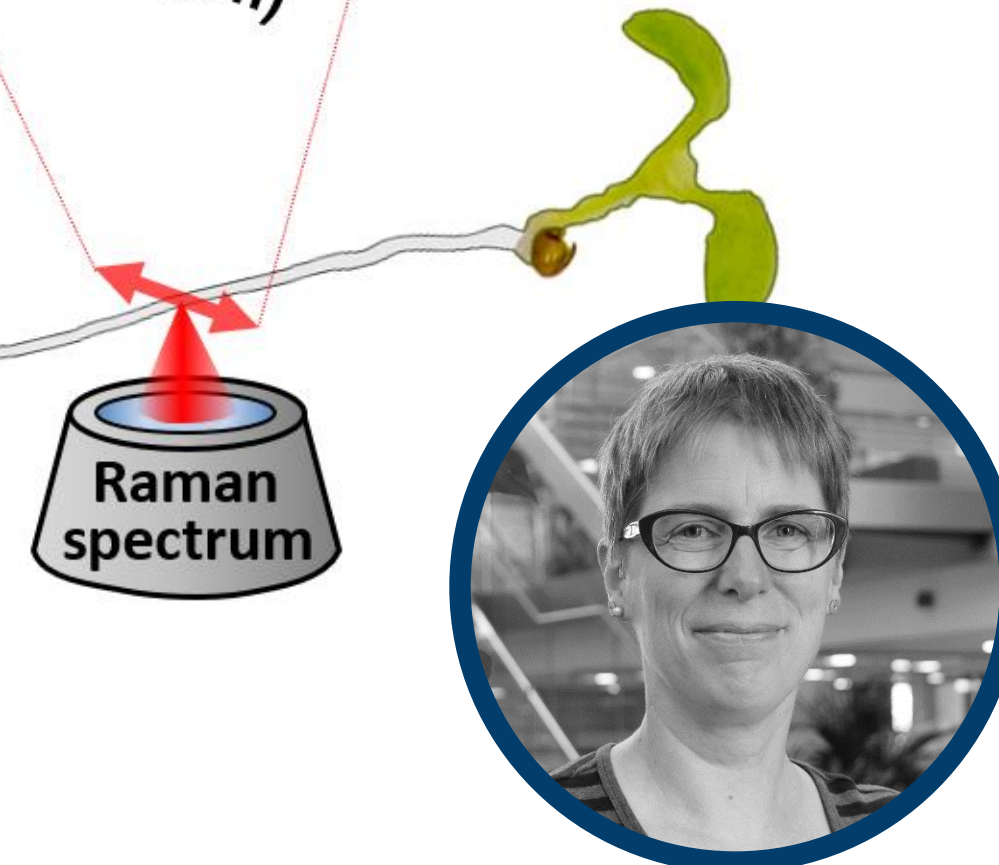
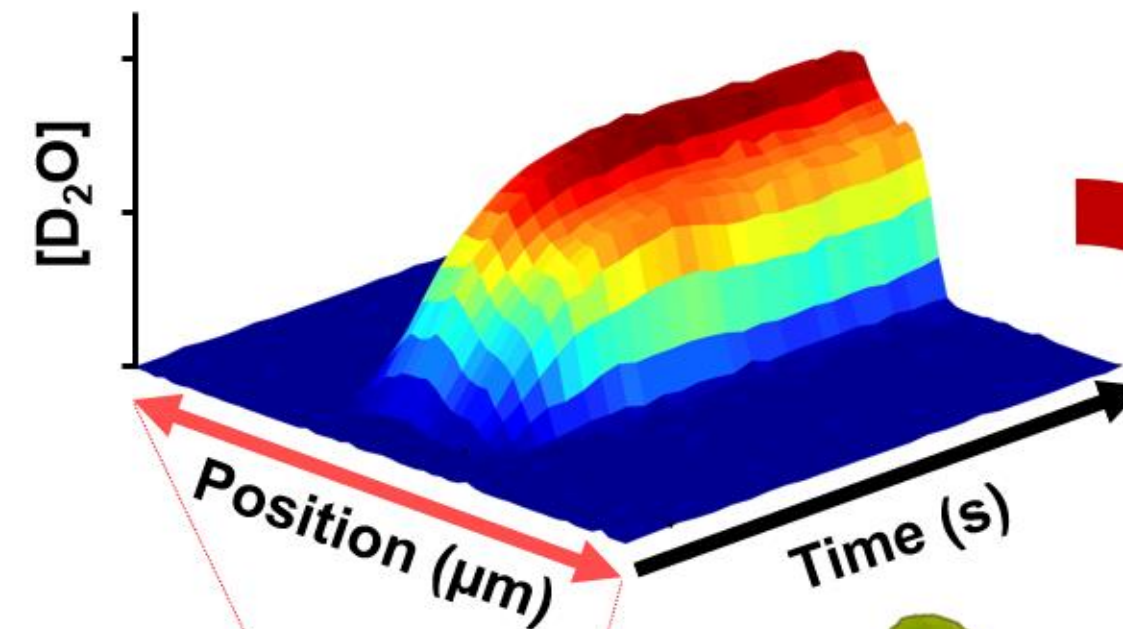
Funding

frns
LAURENCE DE CHENECHE

BBSRC
bioscience for the future



Watching plants drink



Raman spectrum

