Electronic Supplementary Material (ESI) for Soft Matter.

Supplementary images

Free-standing three-dimensional hollow bacterial cellulose structures with controlled geometry via patterned superhydrophobic-hydrophilic surfaces

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Figure S1. A) Sphere with iodapamidol contrast agent. B) after 41min the iopamidol has been released in the solution and the sphere structure can not be detected. c) Video of the representation of the hollow spherical structure by micro-ct tomography.

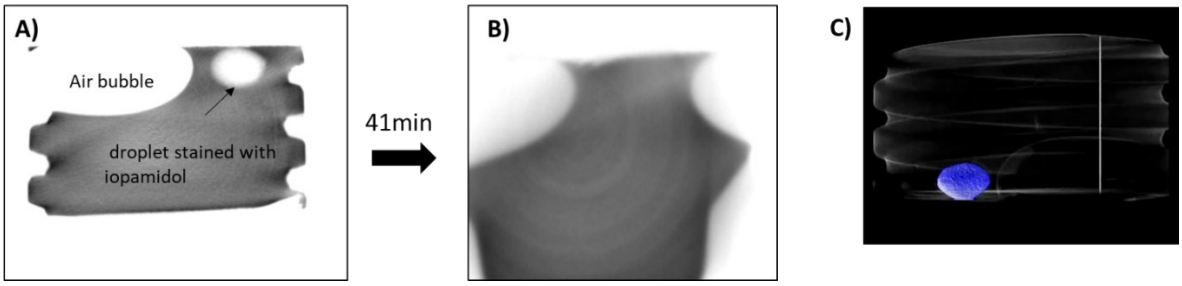


Figure S2. The diameter and height computed for BC spheres of 2, 5 and 10 µL volume and cultured for 3 and 6 days by optical images. Lines indicate the ideal diameter if we would have a full sphere.

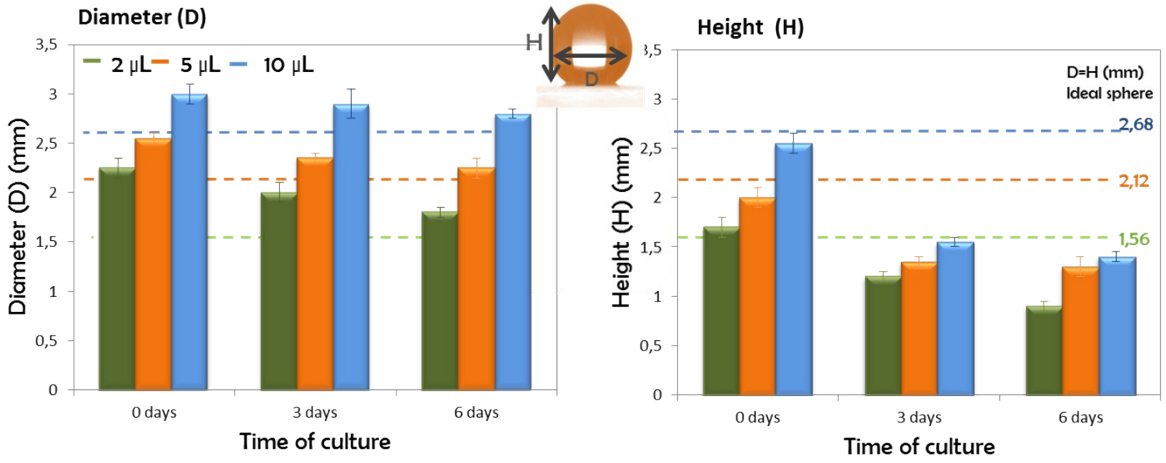
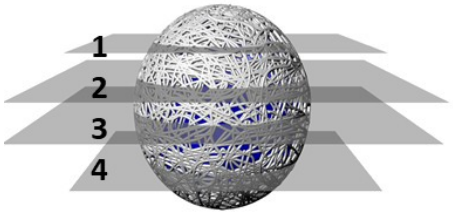


Figure S3. Confocal images of two 3D BC spheres cultures at different days, where we can detect the increase of the BC wall thickness.



Wall thickness (μm)	3 days drop	6 days drop
Section 1	31	34
Section 2	28	33
Section 3	20	28
Section 4	16	15
Mean	24±7	28±9

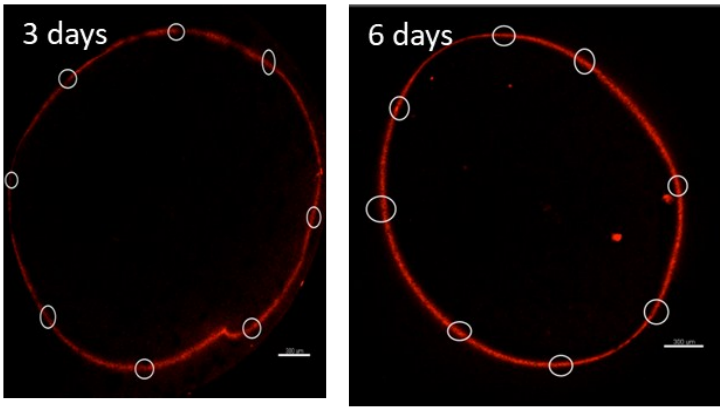


Figure S4. SEM image of the porous network formed on the cellulose wall of the spheres.

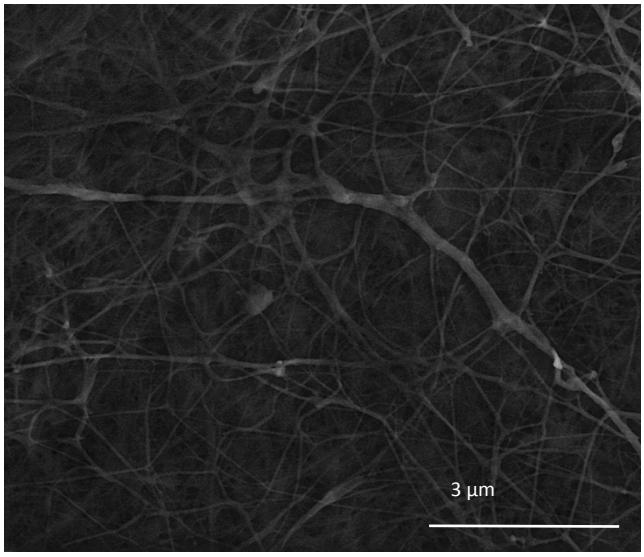


Figure S5. Culture of mESC outside of BC spheres showing attachment of mESC to sphere surface. B) 3D reconstruction of confocal images (Overlay) showing mESC growing outside the structure after two days of culture. Scale bar 100 µm. Red color: Safranin O, BC sphere; Green color: GFP, mESC Oct4-eGFP.