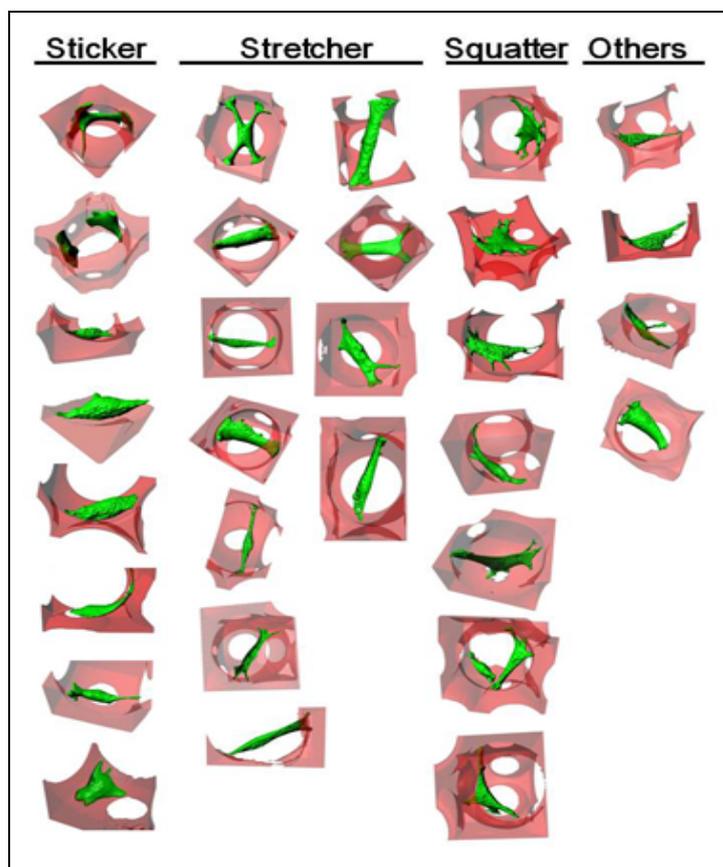
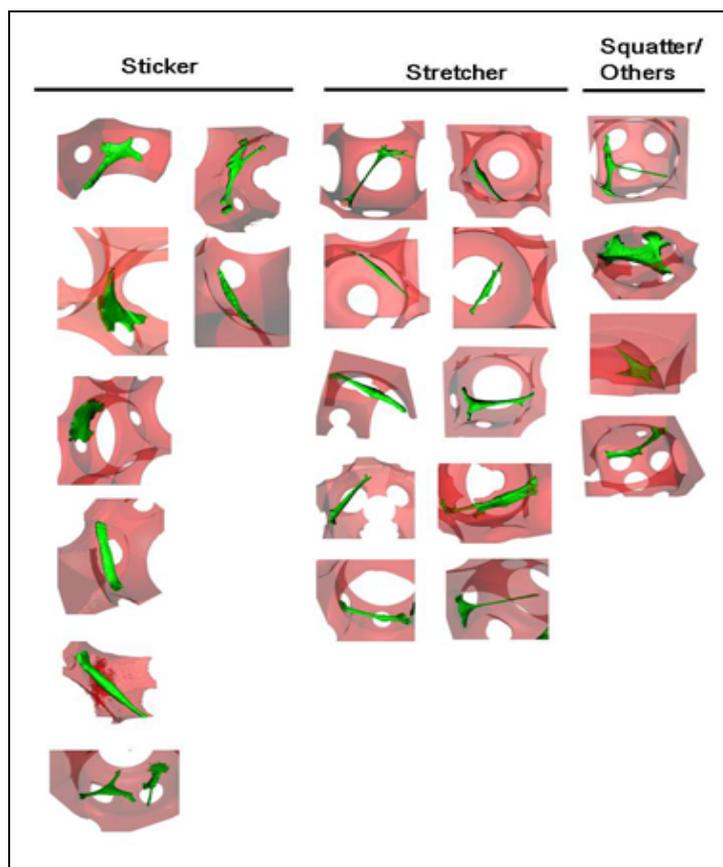


**Descriptions of Supplementary Material for “Morphology and Organization of
Tissue Cells in 3D Monodisperse Foam Scaffolds” (Manuscript ID
SM-ART-03-2011-005371).**

Supplementary Figures



Supplementary Fig. S1. Fibroblast morphologies adopted after one day of culture in gelatin scaffolds with 60- μm pores.



Supplementary Fig. S2. Fibroblast morphologies adopted after one day of culture in gelatin scaffolds with 120- μm pores.

Supplementary Movies

Supplementary Movie S1. Monodisperse bubbles are generated in a flow-focusing microfluidic device and self-organize into an ordered array of flowing lattice.

Supplementary Movie S2. A z-scan of polarized MDCK cells in a scaffold with pores of 70 μm by confocal microscopy.

Supplementary Movie S3. Rendering movie (360°) of a sticker fibroblast spread across the wall of the spherical pore. This cell also appears in Fig. 5A.

Supplementary Movie S4. Rendering movie (360°) of a stretcher fibroblast straddling a scaffold pore. This cell also appears in Fig. 5B.

Supplementary Movie S5. Rendering movie (360°) of a squatter fibroblast lifting its body away from the pore wall by short pseudopodia. This cell also appears in Fig. 5C.

Supplementary Movie S6. A z-scan of the aster pattern constructed by C2C12 cells in a scaffold by confocal microscopy.