Electronic Supplementary Material (ESI) for RSC Advances.

A 3D cell culture platform to study the effect of Ubiquitin specific peptidase (USP37) in microscaffold encapsulated cells and its effect on EMT.

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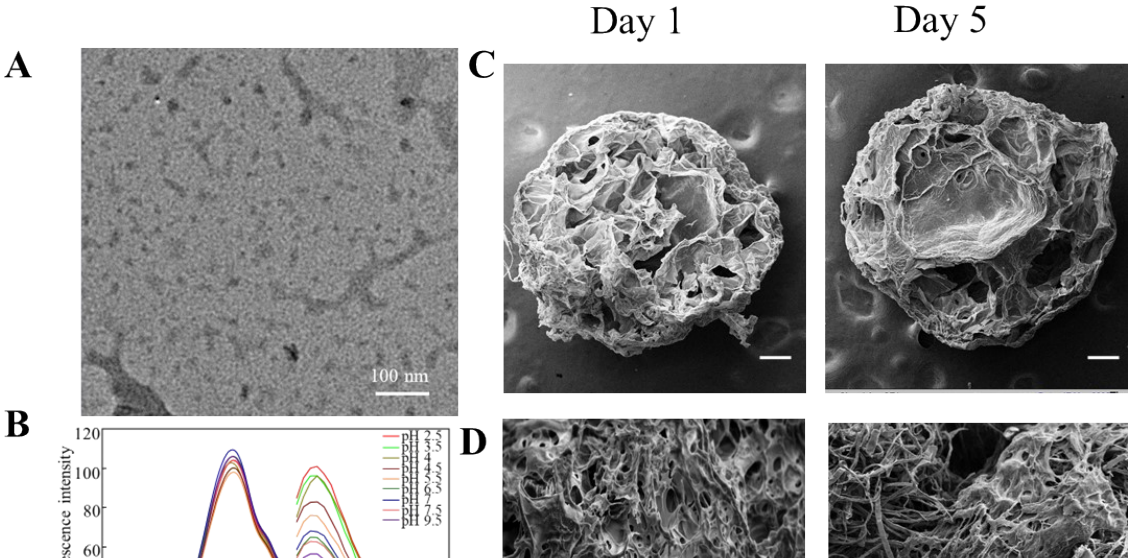
GENE NAME		Primer Sequence (5'-3')	Sequence Length
N-cadherin	Forward	GAT GCT GAC GAT CCC AAT GCC	21
	Reverse	GAT CAA GTC CAG CTG CCA CTG	21
E-cadherin	Forward	GGA GTC ATC AGT GTG GTC ACC	21
	Reverse	CGT GGT GGG ATT GAA GAT CGG	21
GAPDH	Forward	CTG CAC CAC CAA CTG CTT AGC	21
	Reverse	GGC ATG GAC TGT GGT CAT GAG	21
USP37	Forward	TGG CTC TCT CGC TTA ACA	18
	Reverse	TGC ACT CCA ACC AAG GGT AA	20
SNAIL	Forward	CTG GCT GCT ACA AGG CCA TG	20
	Reverse	ACG CCT GGC ACT GGT ACT TC	20
TWIST	Forward	GGG AGT CCG CAG TCT TAC GA	20
	Reverse	CAG CGT GGG GAT GAT CTT CC	20
β-actin	Forward	CTG CCG TTT TCC GTA GGA CT	20
	Reverse	ACC TAC ACC CAC AAC ACT GTC	21

Table 1: List of all the primers used in the manuscript



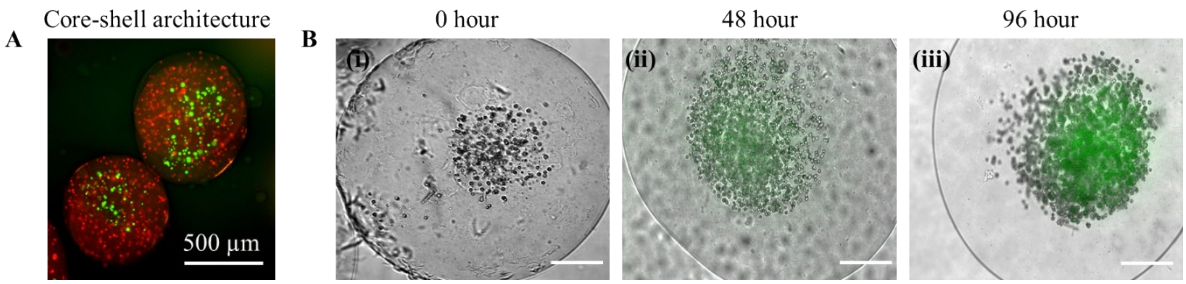


Figure S2: A. Microscopic fluorescent imaging of the encapsulated labeled cells (MG63) at 2.5X magnification; show the spatial arrangement of the cells in the microsphere (Green- CMFDA dye; Red-CM-Dil). B. Green fluorescence observed due to the fluorogenic dye, Hypoxia-IT, due to hypoxic regions in the micro-scaffold (imaged by bright field) at (i) 0 hours (ii) 48 hours and (iii) 96 hours at 4x magnification. (Scale bar: 200µm)

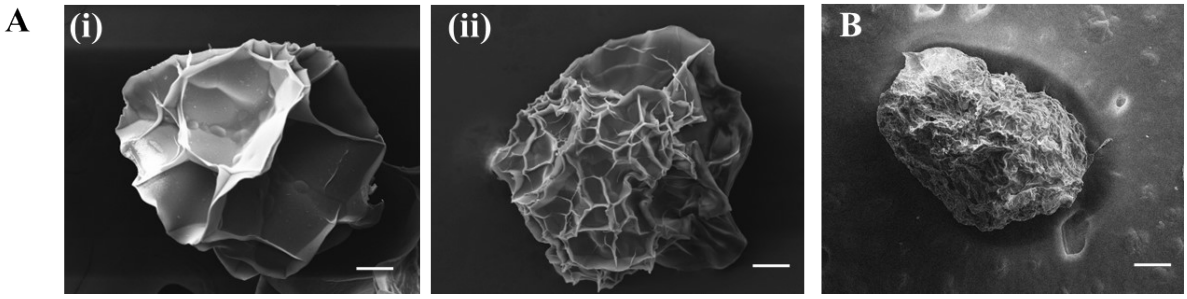


Figure S3: A.(i-ii) SEM micrographs showing of cross-linking density and the pore size variation (PEGDA: 3% and 8% in shell). (Scale bar for SEM images: 200µm). B. SEM micrographs for the micro-scaffolds with altered matrix composition by adding collagen in the mixture. (Scale bar for SEM images: 500µm)