Second harmonic generation microscopy of collagen organization in tunable, environmentally responsive alginate hydrogels

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**Supplementary Figure 1:** (A) Schematic of methacrylation of medium viscosity alginic acid (B) $^1$H NMR spectra of alginate and methacrylated alginate. Methacrylation of the alginate confirmed by peaks from methylene groups at $\delta = 5.6$ and $\delta = 6.0$ ppm.
Supplementary Figure 2: Normalized collagen levels plotted against the Young’s modulus of the different ALGMA hydrogels, as measured on day 7 (A) and day 10 (B). Data represents the mean ± SD. n = 3.
Supplementary Figure 3: Histograms of collagen organization obtained for collagen secreted by NIH 3T3 fibroblasts encapsulated in the ALGMA hydrogels. The bars represent experimentally acquired data. The red line is the Gaussian fit to the data.