Figure 1:

## Lane Samples

100bp 1:1 1:5 1:1 1:5 100bp Coll I Coll II Coll II

Kilobases GAPDH →

RT-PCR of RNA extracted from Cells on Alginate Bead Culture for Comparison of Collagen II:I Ratios and Evaluation of Cell Type. Collagen I was present in both the 1:1 and 1:5 Collagen II and TGF-b stimulated MES cells, which can been seen by the two bands above the GAPDH band in the first two wells. This demonstrates the presence of undifferentiated MES cells as they naturally produce Collagen I. There was Collagen II present in the 1:1 sample (lane 3), demonstrating presence of Collagen II and differentiation into chondrocytes, as previously demonstrated by the Bosnakovski el al. paper, The 1:5 lane shows little to no Collagen II, and consequentially little to no differentiation. These observations were further quantified through ImageJ analysis.