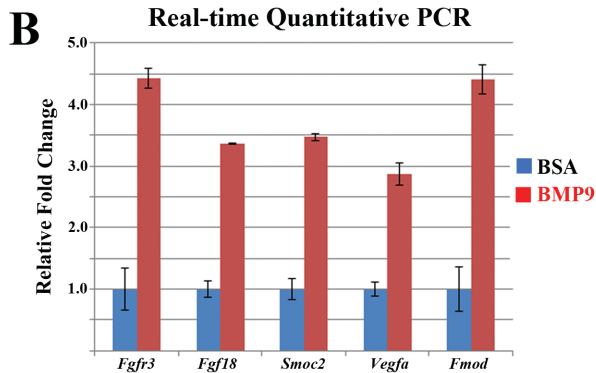
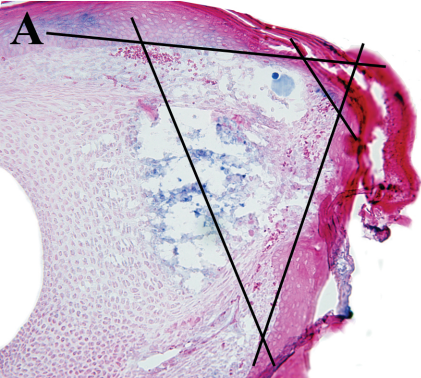


Supplemental Figure 1 – Regeneration is inhibited following VEGF or BMP9 treatment. A) PEDF treatment does not inhibit the regenerative response. B) VEGF treated digits exhibit an inhibition of regeneration 6 weeks after treatment. Microcarrier bead associated with the treatment is indicated with an * in A and B. C) VEGF inhibits regeneration in a dose-dependent manner. All digits regenerated when treated with VEGF at 10 ng/ μ l, 77% regenerated following treatment with 50 ng/ μ l and only 17% of digits regenerated when treated with 100 ng/ μ l. D) BMP9 inhibits regeneration in a dose-dependent manner. All digits regenerated when treated with BMP9 at 10 ng/ μ l whereas digit regeneration was completely inhibited after treatment with 50 or 100 ng/ μ l.



Supplemental Figure 2 – Microarray analysis and real-time quantitative PCR validation of digit regeneration. A) To illustrate how tissue was collected for microarray analysis, an in situ hybridization section stained for *Vegfa* transcripts 24 hours after BMP9 bead implantation is shown. Digits were snap frozen and embedded in OCT. 50 μ m cryosections were cut parallel to the proximal-distal axis of the digit and central sections were collected. Using a scalpel the epidermis was trimmed following cut lines shown and the distal region of the regenerate was isolated with a proximal cut. Tissue was collected from 8-10 regenerates for each BSA or BMP9 treated microarray. B) To validate the microarray data, 5 genes that were up-regulated were selected for further analysis using real-time quantitative PCR. All five genes were found to be up-regulated by comparison to BSA controls.