

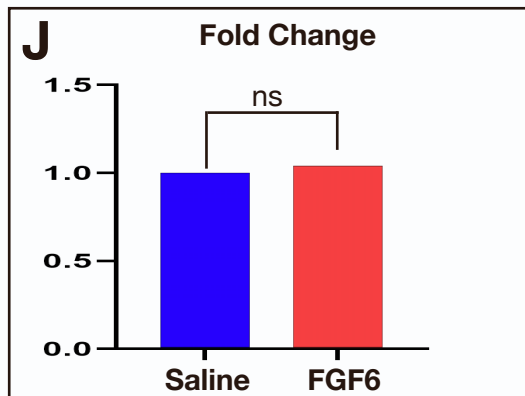
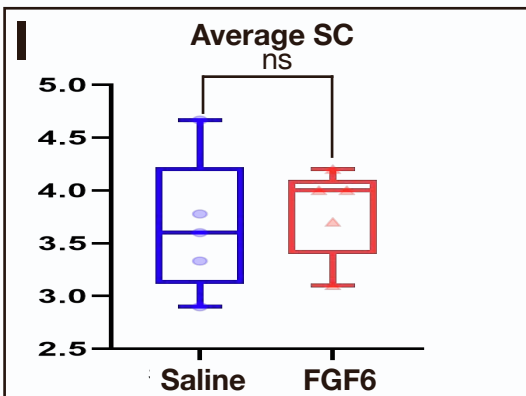
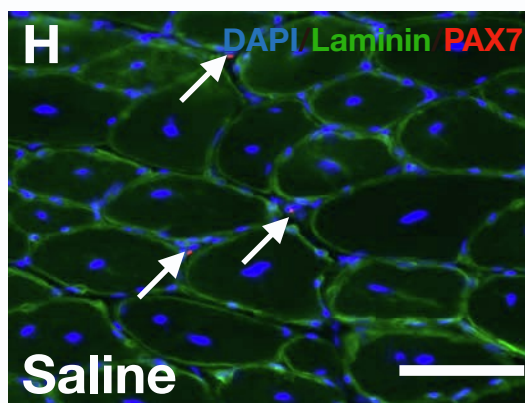
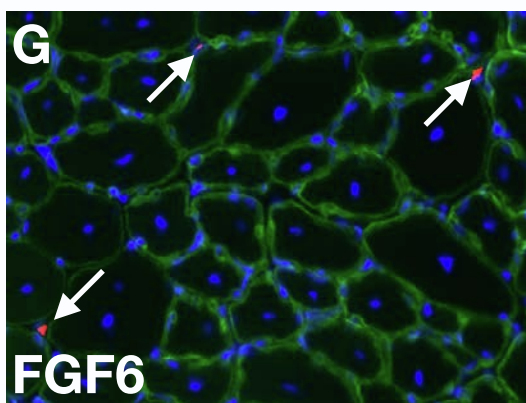
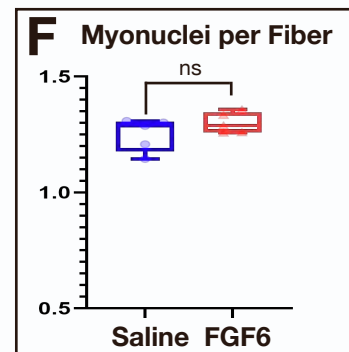
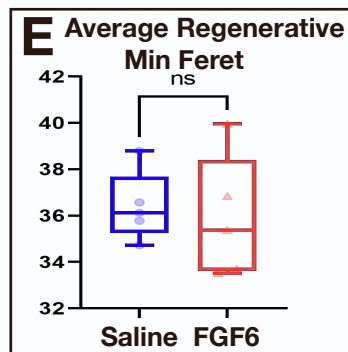
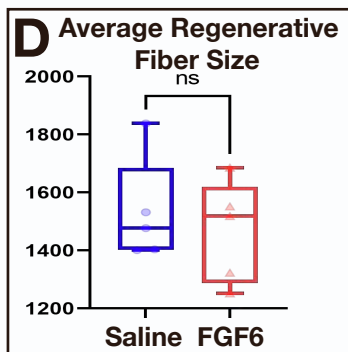
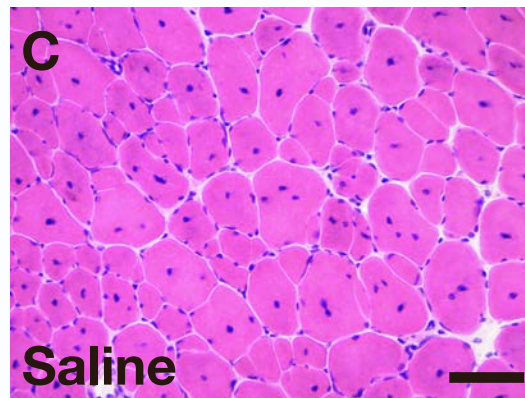
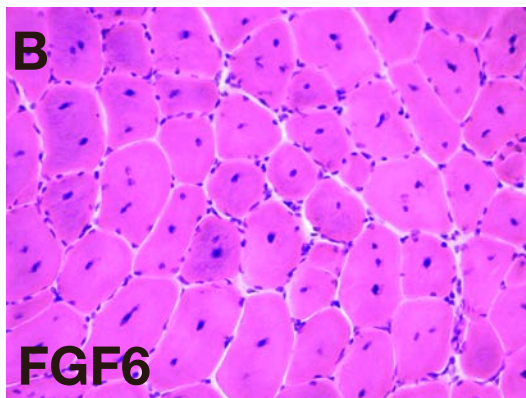
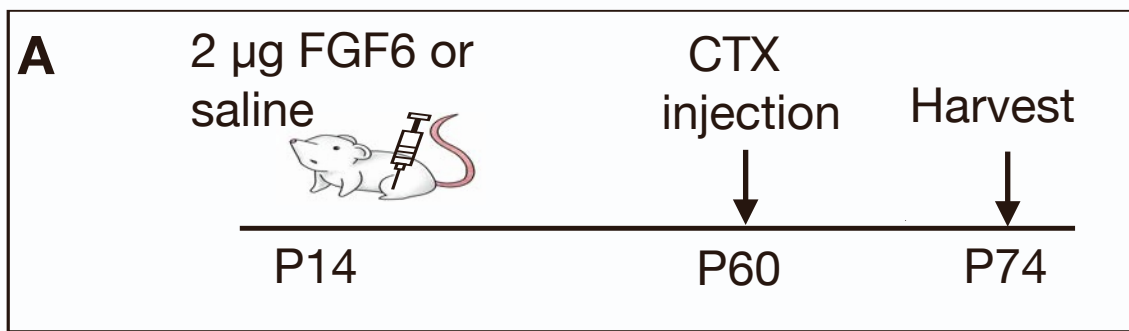
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Supplemental Information

Fibroblast growth factor 6 regulates sizing of the muscle stem cell pool

William Zofkie, Sheryl M. Southard, Thomas Braun, and Christoph Lepper

Figure S1: Additional data, related to Figure 7



1 **Supplemental Figure 1: A single injury-induced regeneration bout ‘re-scales’ SCs in**
2 **perinatally FGF6 injected TA muscles**

3 (A) Schematic for experimental design: 2 μ g recombinant FGF6 was delivered via injection into
4 the right TA, while the left TA received normal saline as control at P14; TA muscles were injured
5 via intra-muscular cardiotoxin (CTX) injection at 2 months and harvested two weeks later (P74).

6 (B-C) Representative images of Haematoxylin and Eosin stained 10 μ m cryosections from FGF6
7 (B) and saline (C) perinatally injected TA muscles two weeks post injury at 20X magnification;
8 scale bar in (C): 50 μ m. (D) Average regenerative muscle fiber sizes in μ m² for TA muscles from

9 FGF6 and saline perinatally injected TA muscles two weeks post injury; n=5 mice for each
10 condition; paired 2-tailed Student t-test: not significant (ns), p>0.05. (E) Average regenerative

11 fiber minimum ferret diameter in μ m for TA muscles from FGF6 and saline perinatally injected
12 TA muscles two weeks post injury; n=5 mice for each condition; paired 2-tailed Student t-test: not
13 significant (ns), p>0.05. (F) Myonuclei count normalized to muscle fibers for saline and FGF6

14 perinatally injected regenerative TA muscles; n=5 mice for each condition; paired 2-tailed Student
15 t-test: not significant (ns), p>0.05. (G-H) Representative dual anti-PAX7/anti-Laminin IF
16 stainings on 10 μ m cryosections from FGF6 (G) and saline control (H) injected TA muscles at 20x

17 magnification; arrows indicate PAX7 (red) positive nuclei (blue) within the basal lamina (green);
18 scale bar in (H) = 50 μ m. (I-J) Quantification of average SC numbers per 0.155 mm² area of 10
19 μ m cryosections (I) and normalized as fold change (J) from saline and FGF6 perinatally injected

20 TA muscles; n=5 mice for each group tested; paired 2-tailed Student t-test: not significant (ns),
21 p>0.05.

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