## **Supplement Legends**

**Supplementary Video 1.** Mouse corneal nerve regeneration 1 day post-injury. Videos showing images from the surface nerve terminals to the stroma nerves in the mouse center cornea recorded at 1 day after injury.

**Supplementary Video 2.** Mouse corneal nerve regeneration 3 days post-injury. Videos showing images from the surface nerve terminals to the stroma nerves in the mouse center cornea recorded at 3 days after injury.

**Supplementary Video 3.** Mouse corneal nerve regeneration 3 weeks post-injury. Videos showing images from the surface nerve terminals to the stroma nerves in the mouse center cornea recorded at 3 weeks after injury.

**Supplementary Figure 1.** Representative images showing the nerve terminals in the mouse center cornea at different times after injury.