

Supplementary figure S1

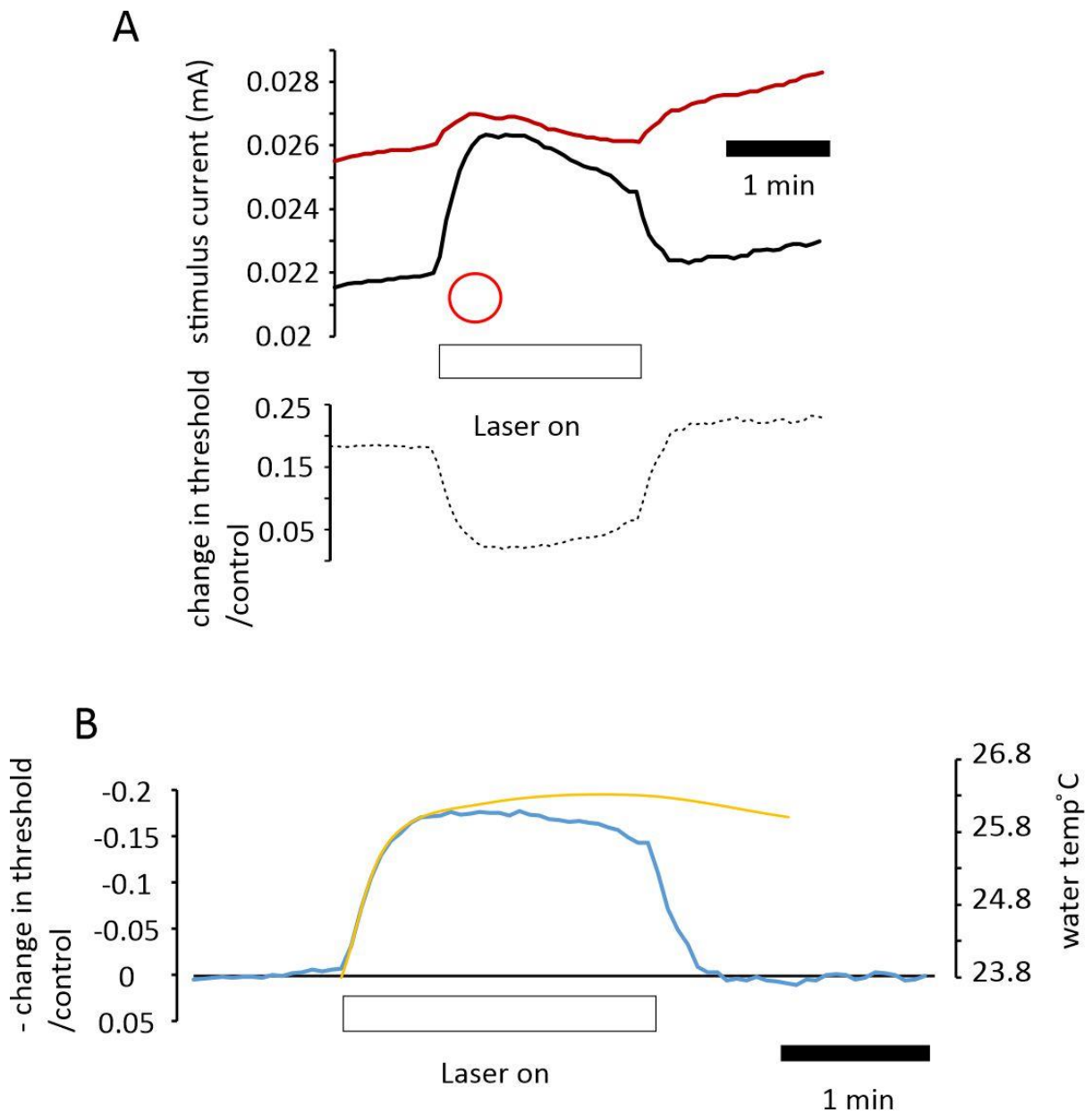


Figure S1. **The rapid effect of the laser increases threshold for F-fibre responses in the control, and also after a conditioning stimulus at 4 ms, with 200  $\mu$ M 4-AP throughout.** A, upper panel, control threshold (black-trace) shows the rapid effect of the laser (400 mA driving current, approximate timing indicated by red circle) with an increase too large to be accommodated by the already reported threshold/temperature relation. The increase in threshold is also seen in the refractory condition (red trace), where an increase in temperature or membrane potential might be expected to cause a fall in refractoriness. The rapid effect on control-threshold appears to wane, leaving a sustained raised threshold at 2 mins. Lower panel, refractoriness at 4 ms expressed as a fractional change in threshold, relative to the control. The data reveal a fall in refractoriness at the same time as threshold increases with laser light application. B, The relative change in refractoriness (blue, laser for 2 mins) has a very similar trajectory as the temperature change measured at the end of the light guide in 2 mls distilled water (orange), following light application (3 mins).