



**Supplementary Figure 2: Correlation of  $\text{Repol}_{\max}$  with  $T_{\text{peak}}$ .** A) Heatmap showing the first derivative ( $dV/dt$ ) of the AP waveforms in the cable. Timescale is adjusted such that time = 0 corresponds to 100 ms post-stimulus (i.e. the depolarisation phase is not shown for clarity). B) The sum of the repolarisation rates ( $\Sigma(dV/dt)$ ) across the cable at each timepoint. The time at which the total repolarisation rate across the cable was greatest ( $\text{Repol}_{\max}$ ) was identified as the minimum in  $\Sigma dV/dt$ . C) ECG from the same cable shown in A and B. The vertical dashed line shows alignment of  $\text{Repol}_{\max}$  and  $T_{\text{peak}}$ . D) Correlation of the interval from Q to  $T_{\text{peak}}$  (from ECG) with the time from  $t_{\text{stim}}$  to  $\text{Repol}_{\max}$  in the cable. The strong correlation confirms that  $\text{Repol}_{\max}$  defines  $T_{\text{peak}}$ .