



**Figure 2 - Simulated ISI distributions with variable underlying neuronal characteristics.** Representative ISI histograms with all factors kept constant except total cluster firing rate (**A**), TP-FP covariance (**B**) and contaminant neuron count (**C**). Total simulation time was 10 minutes. Simulated firing rates were as indicated (**A**), 11 Hz (**B**), 10 Hz (**C**). Homogeneous firing assumed for the top and bottom rows. Blue corresponds to true positive (TP) spikes, and red corresponds to false positive (FP) spikes. FP firing rate traces (**B**) are schematics only.