



**Figure** Conductance-based adapting LIF model: Single-neuron Input-Output relation without adaptation. **A:** F-I Curve, membrane potential distribution, and adaptation distribution as a function on input magnitude. In the noise-free case (left) and with noise (right). **B:** F-I curve with increasing noise. **C:** Example simulated voltage traces with increasing current input, noiseless (top) and with noise (bottom).