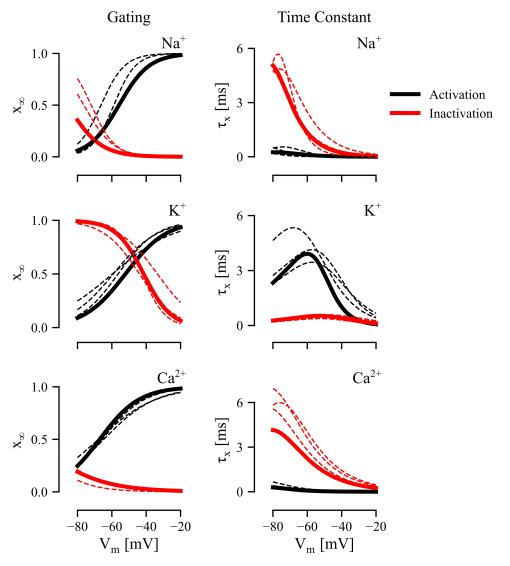
## **Supplementary Figure**

Aaron R. Shifman $^{1,2,3*}$ , Yiren Sun $^{1,2,3}$ , Chloé M. Benoit $^{1,2,3}$ , and John E. Lewis $^{1,2,3}$ 



**Figure S1.** Voltage-dependence functions for each model current across all model fits. Thick lines represent canonical model in figure 1C(i) and dashed lines represent models in figure 1C(ii-iv). Gating functions (left) and time constant functions (right) with rows representing functions for sodium, potassium, and calcium descending.

<sup>&</sup>lt;sup>1</sup> Department of Biology, University of Ottawa, Ottawa, Ontario, Canada K1N 6N5

<sup>&</sup>lt;sup>2</sup> Center for Neural Dynamics, University of Ottawa, Ottawa, Ontario, Canada K1N 6N5

<sup>&</sup>lt;sup>3</sup>uOttawa Brain and Mind Research Institute, Ottawa, Ontario, Canada K1H 8M5

<sup>\*</sup>ashifman@uottawa.ca