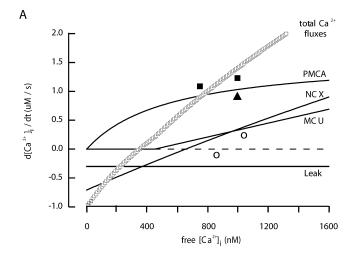
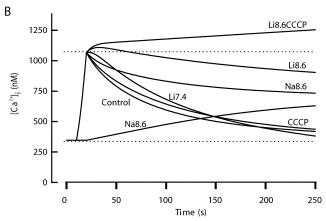
Wennemuth, G., D.F. Babcock, and B. Hille *The Journal of General Physiology*. Volume 122, No. 1, July 2003. 115–128.

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Due to a printing error, Figure 9 was not printed in its entirety. The corrected figure appears below.





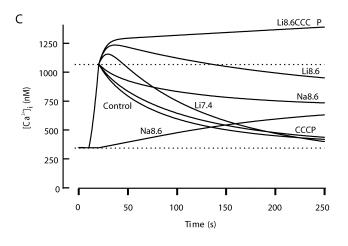


FIGURE 9. Calcium clearance calculated from a kinetic model that includes rate equations for PMCA, NCX, MCU, and Ca2+ leak. The assumed resting conditions include a resting membrane potential of -43 mV and a set point for  $[Na^+]_i$  of 16 mM. The equations are in the APPENDIX. (A) Dependence of flux rates on  $[Ca^{2+}]_i$  for each transport mechanism. Calculations assume resting levels of [Na<sup>+</sup>]<sub>i</sub>, control Na7.4 extracellular medium, and a normal resting potential. Rates would be different if any of these conditions are changed. These fluxes represent the number of micromoles of  $\mathrm{Ca^{2+}}$  transported per second from a liter of cell water (2.3  $\times$  10<sup>13</sup> sperm). The rate of change of free [Ca2+]i (Table I) would be given by the sum of these values (total) divided by the binding ratio for Ca2+. The symbols are values estimated in Table I from our experiments (filled squares, total flux; open triangle, PMCA flux; open circles, NCX flux). (B) Calculated time courses of intracellular free [Ca<sup>2+</sup>] before, during, and after a simulated 10-s alkaline K<sup>+</sup> depolarization. To mimic the test conditions shown in Figs. 2–7, recovery parameters were changed as follows: the maximum velocity of the PMCA was reduced to 21% (for Na8.6), or [Na<sup>+</sup>]<sub>o</sub> was set to zero (for Li7.4), or the MCU flux was turned off (for CCCP), or combinations of these changes were used. (C) The same calculation as in part B but with the velocity of the NCX increased threefold during each period in a Na<sup>+</sup>-free, Li<sup>+</sup> solution to mimic possible recovery from Na+-induced inactivation of the NCX.

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