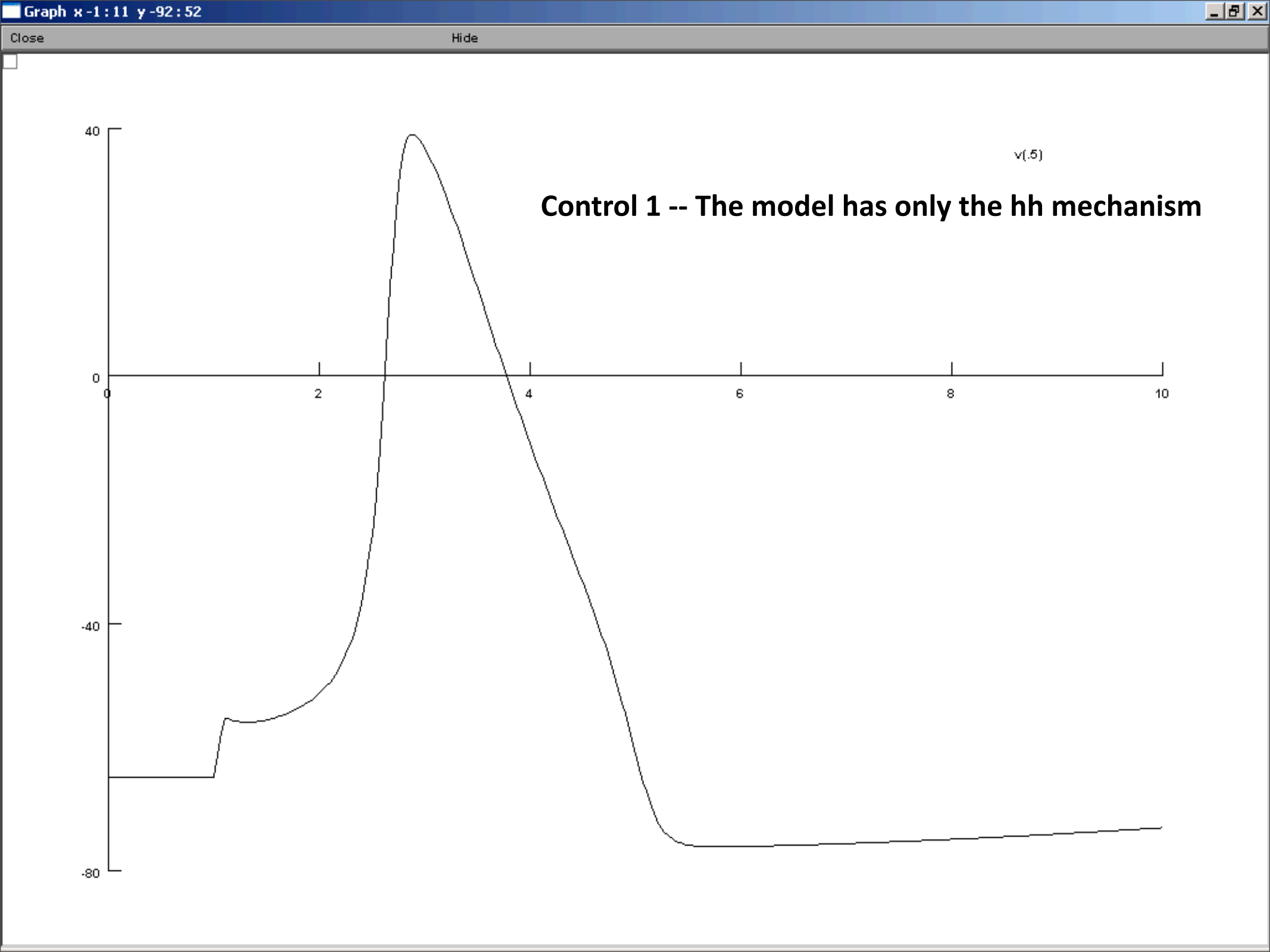
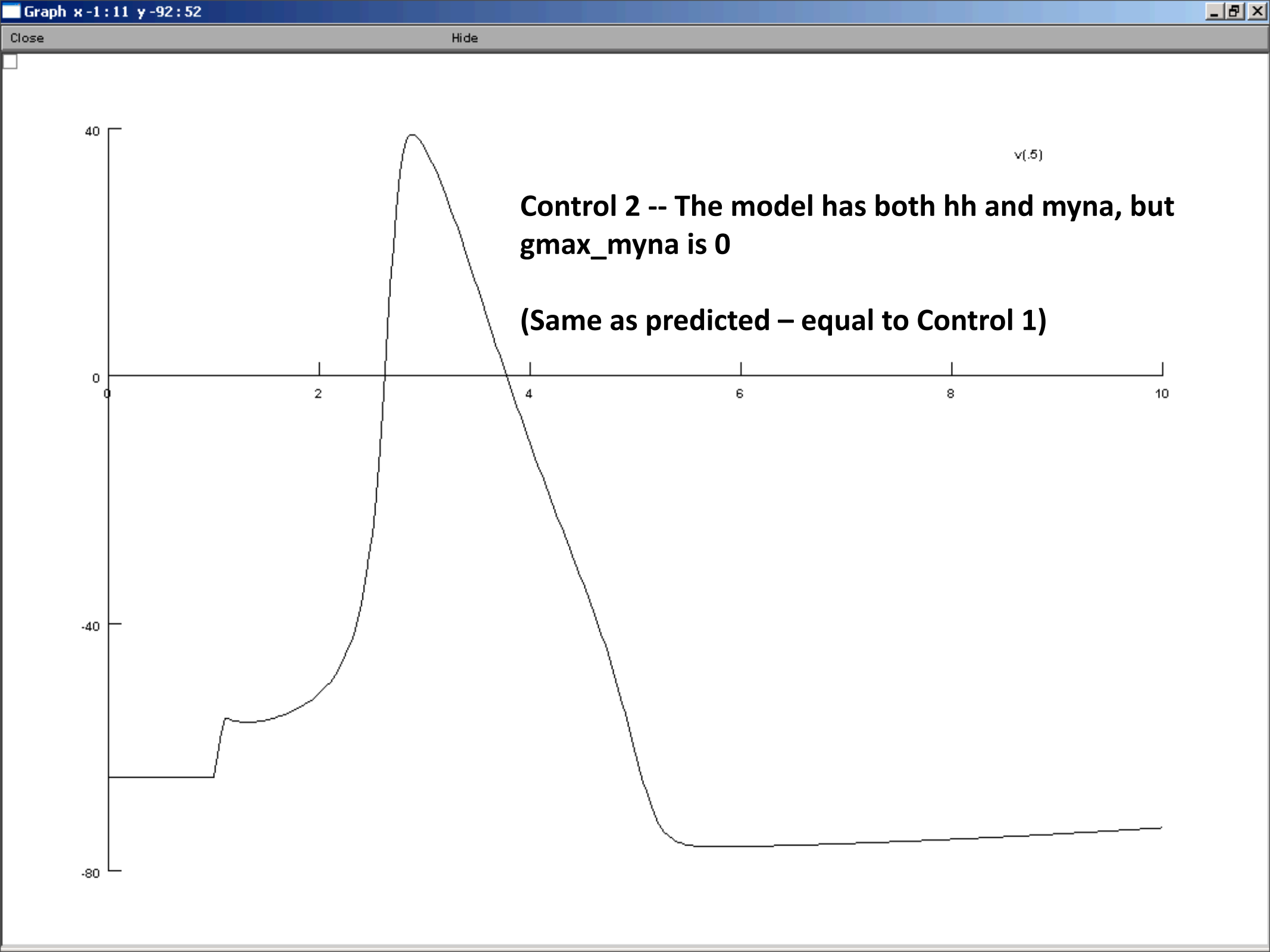
Lab U

Channel Builder


Graph x -1 : 11 y -92 : 52
Close
Hide
v(.5)
Control 1 -- The model has only the hh mechanism
40
0
-40
-80
0
2
4
6
8
10

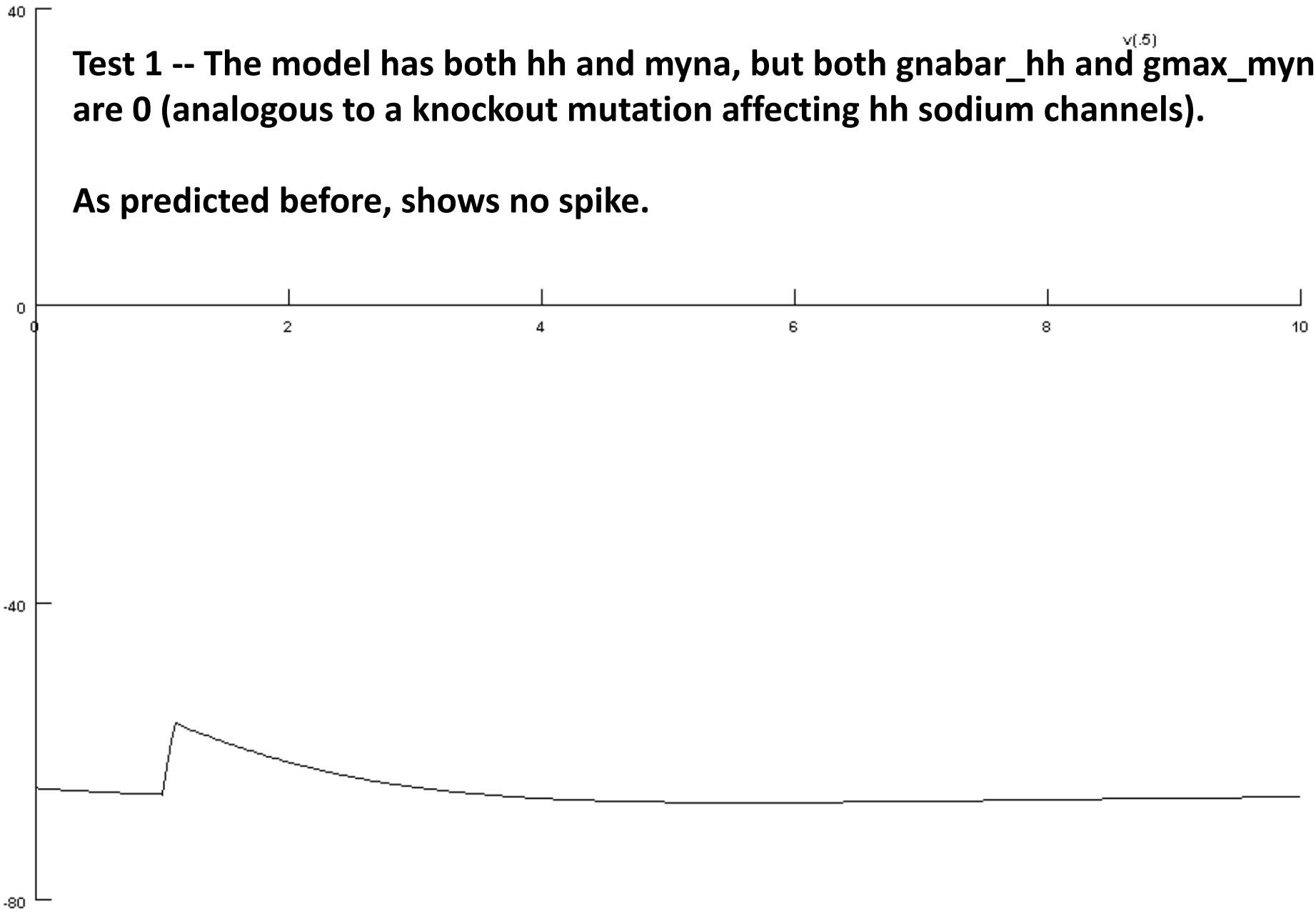

Graph x -1 : 11 y -92 : 52
Close
Hide
v(.5)
40
0
-40
-80
0
2
4
6
8
10
Control 2 -- The model has both hh and myna, but gmax_myna is 0
(Same as predicted – equal to Control 1)

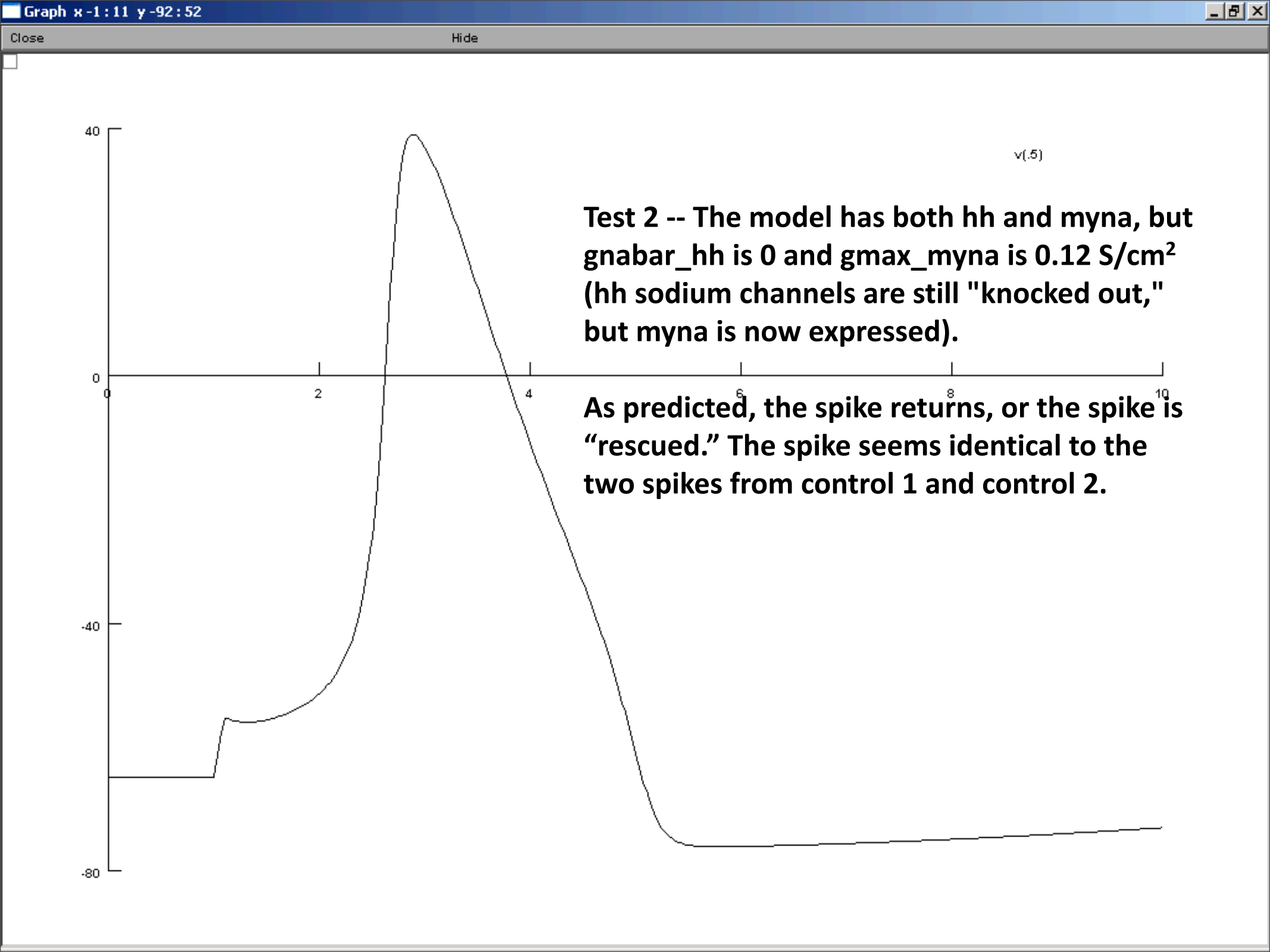
Graph x -1 : 11 y -92 : 52

Close Hide

Test 1 -- The model has both hh and myna, but both gnabar_hh and gmax_myna are 0 (analogous to a knockout mutation affecting hh sodium channels).

As predicted before, shows no spike.




Graph x -1 : 11 y -92 : 52
Close
Hide
v(.5)
40
0
-40
-80
0
2
4
6
8
10
Test 2 -- The model has both hh and myna, but gnabar_hh is 0 and gmax_myna is 0.12 S/cm²
(hh sodium channels are still "knocked out," but myna is now expressed).
As predicted, the spike returns, or the spike is “rescued.” The spike seems identical to the two spikes from control 1 and control 2.