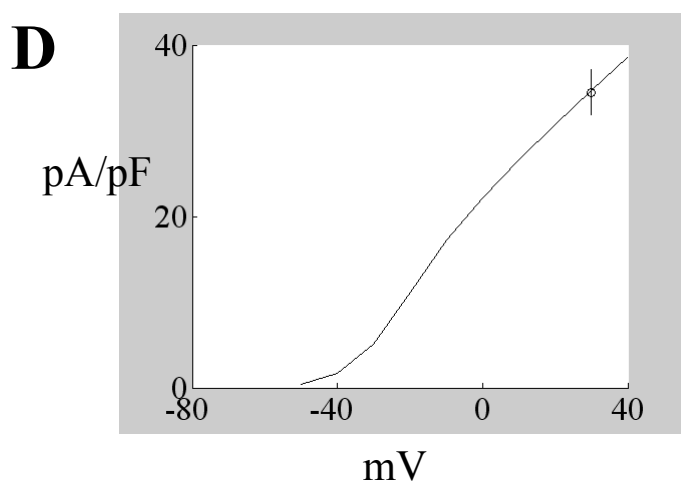
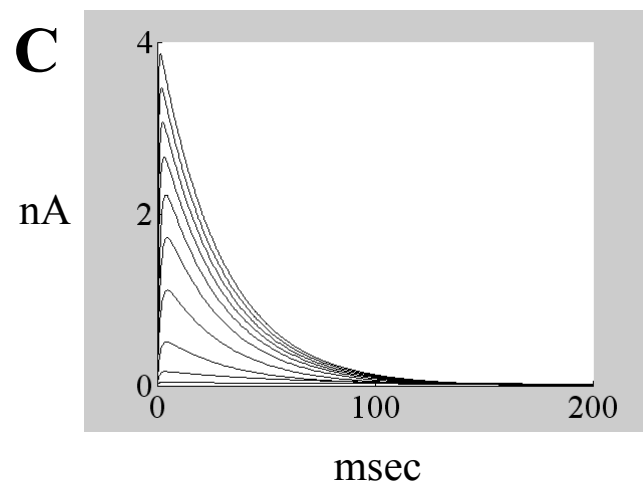
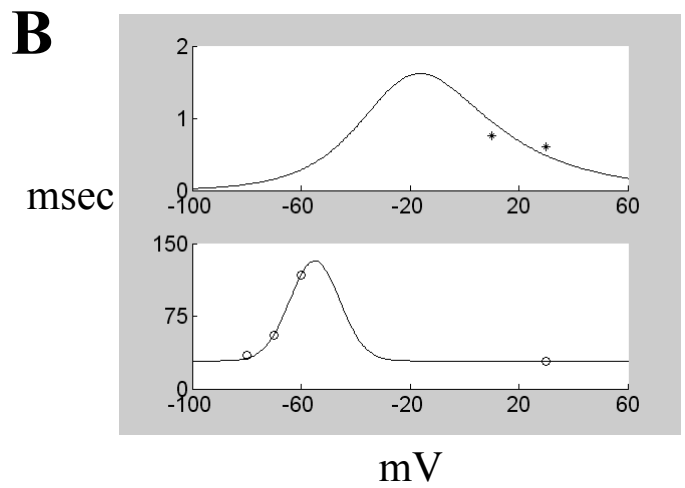
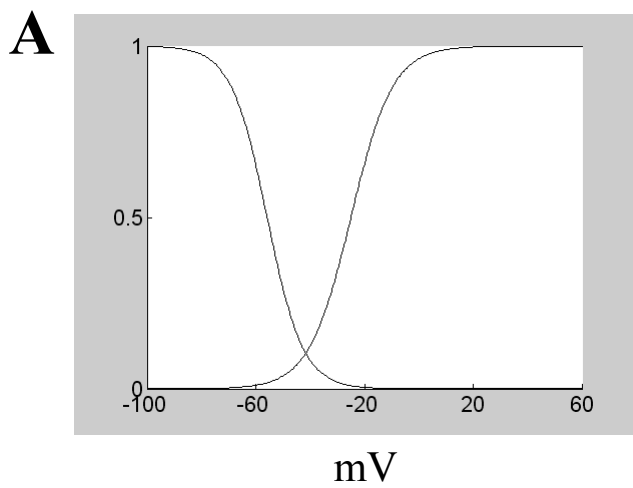


Figure 1

I_{to} (At 22 °C)



I_{to} (At 37 °C)

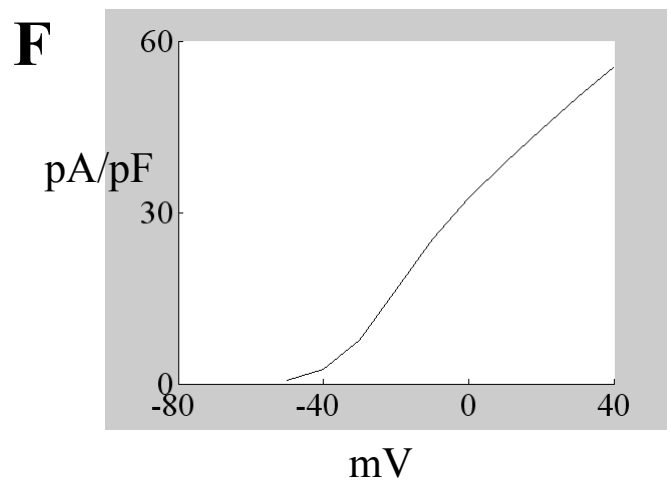
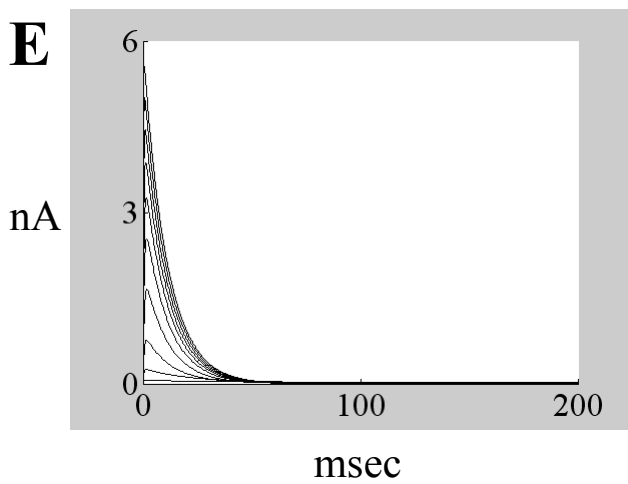
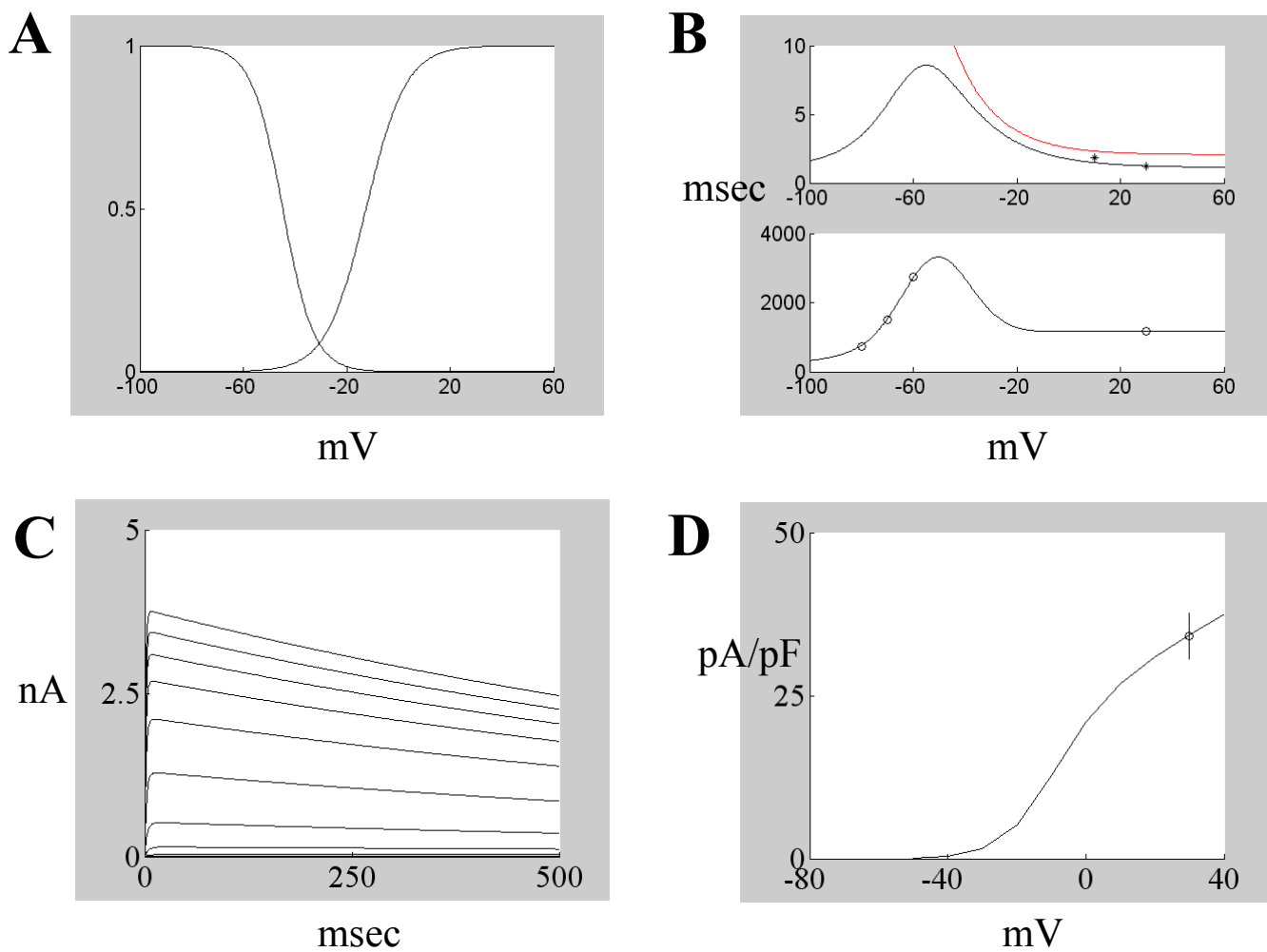


Fig. 2

I_{Kslow} (At 22 °C)



I_{Kslow} (At 37 °C)

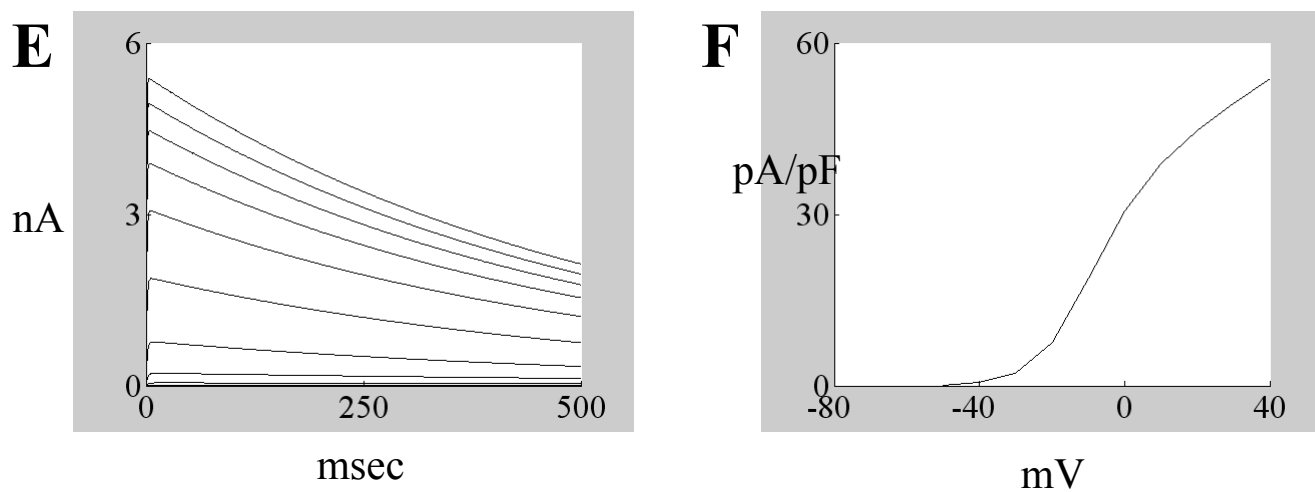
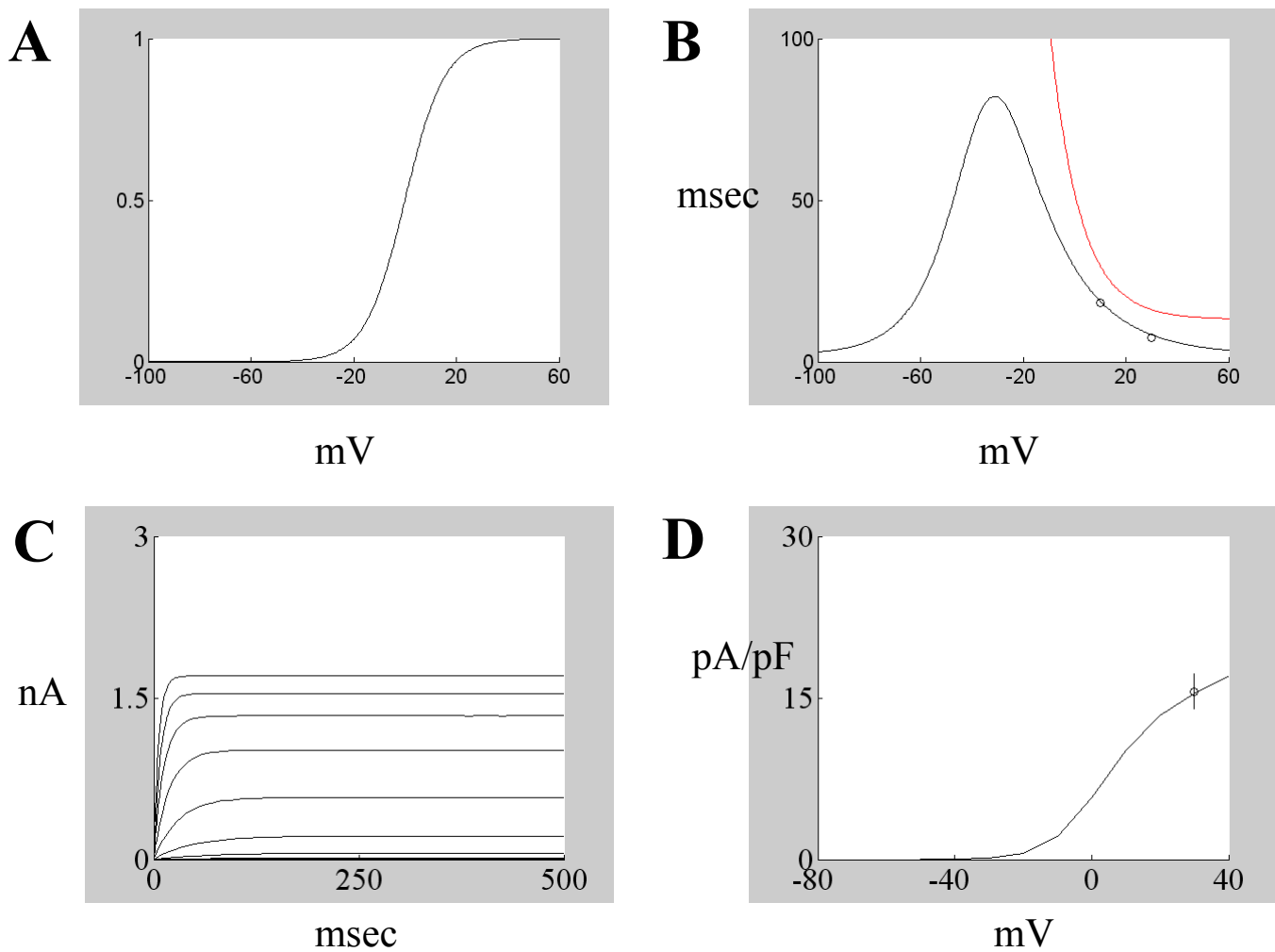


Fig. 3

I_{ss} (At 22 °C)



I_{ss} (At 37 °C)

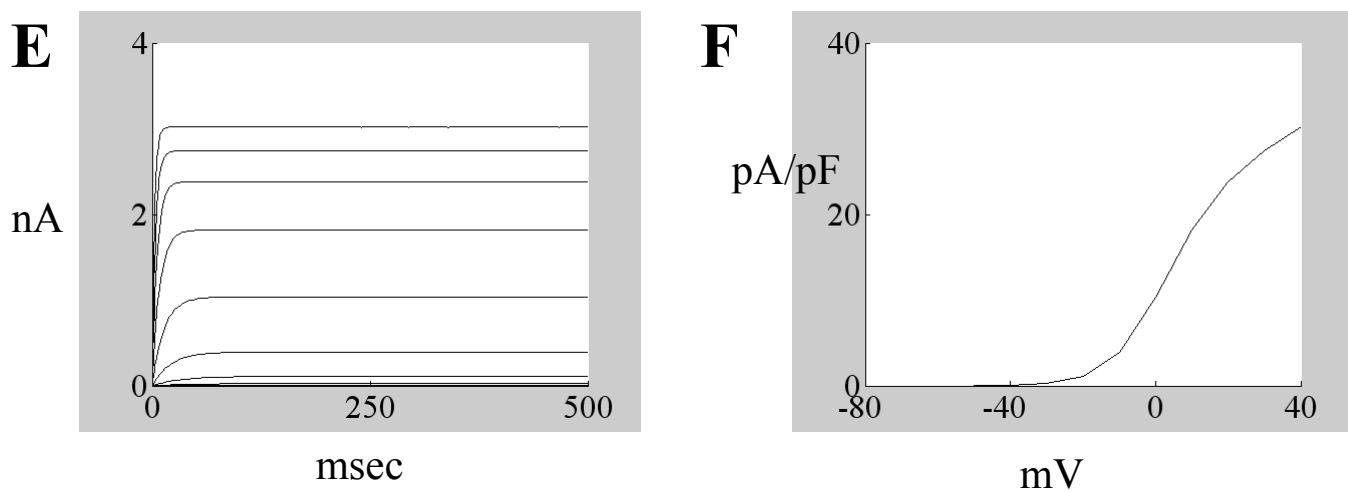


Fig. 4

I_{K1} (At 37 °C) in model

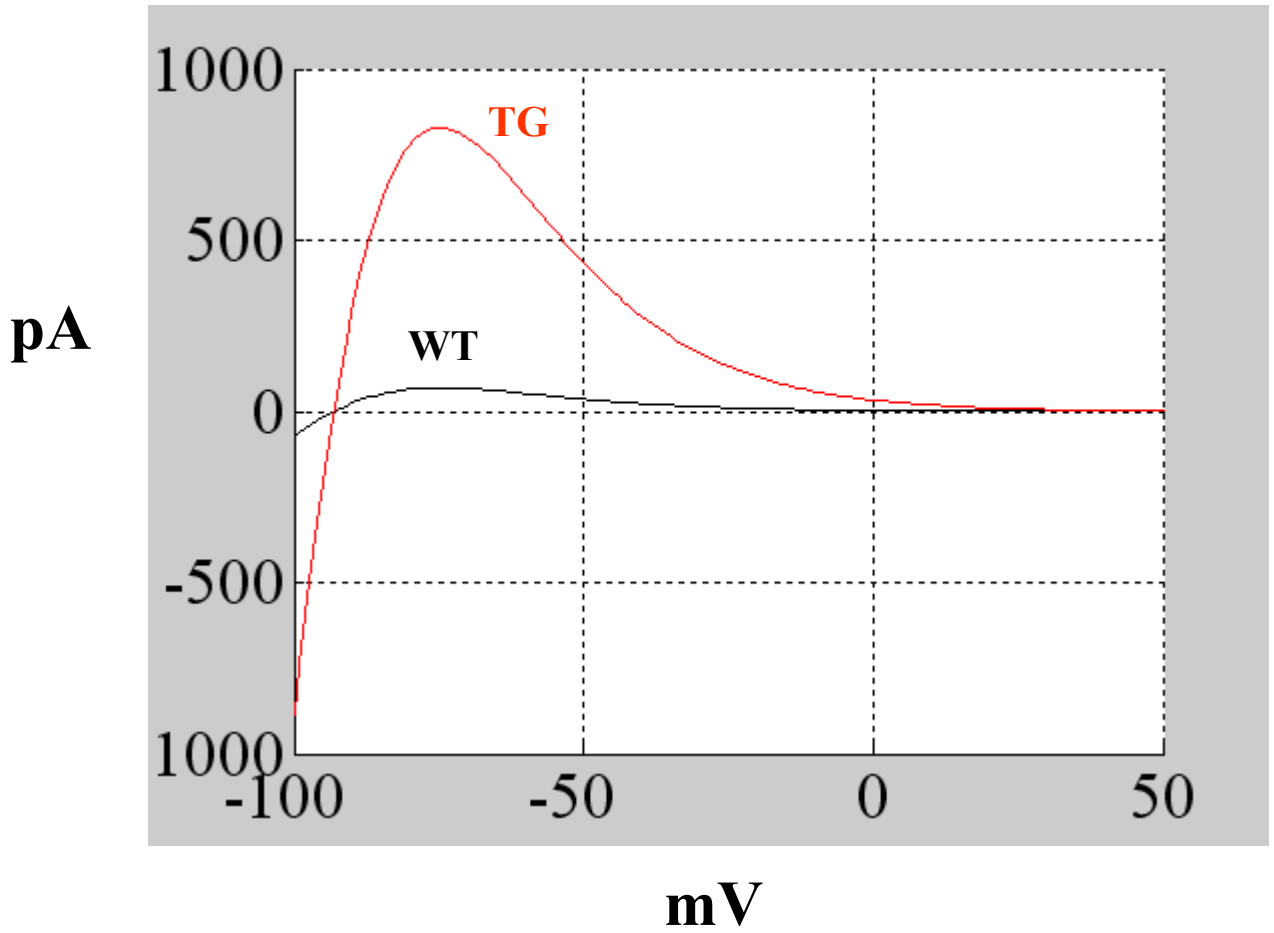


Fig. 5

Control Action Potential

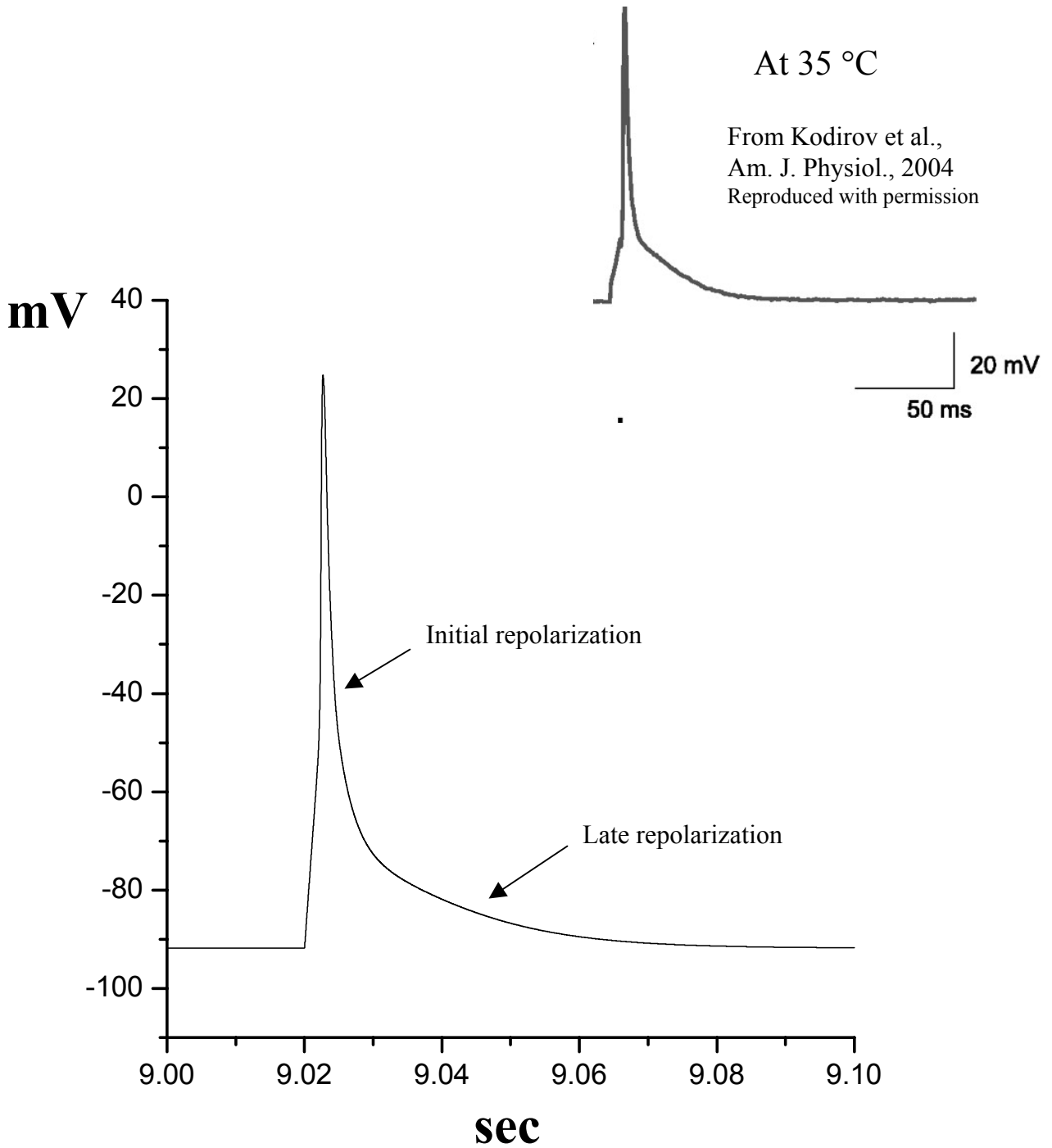


Fig. 6

Currents underlying control action potential

— I_B — I_{NaK}
— I_{K1} — I_{NaCa}

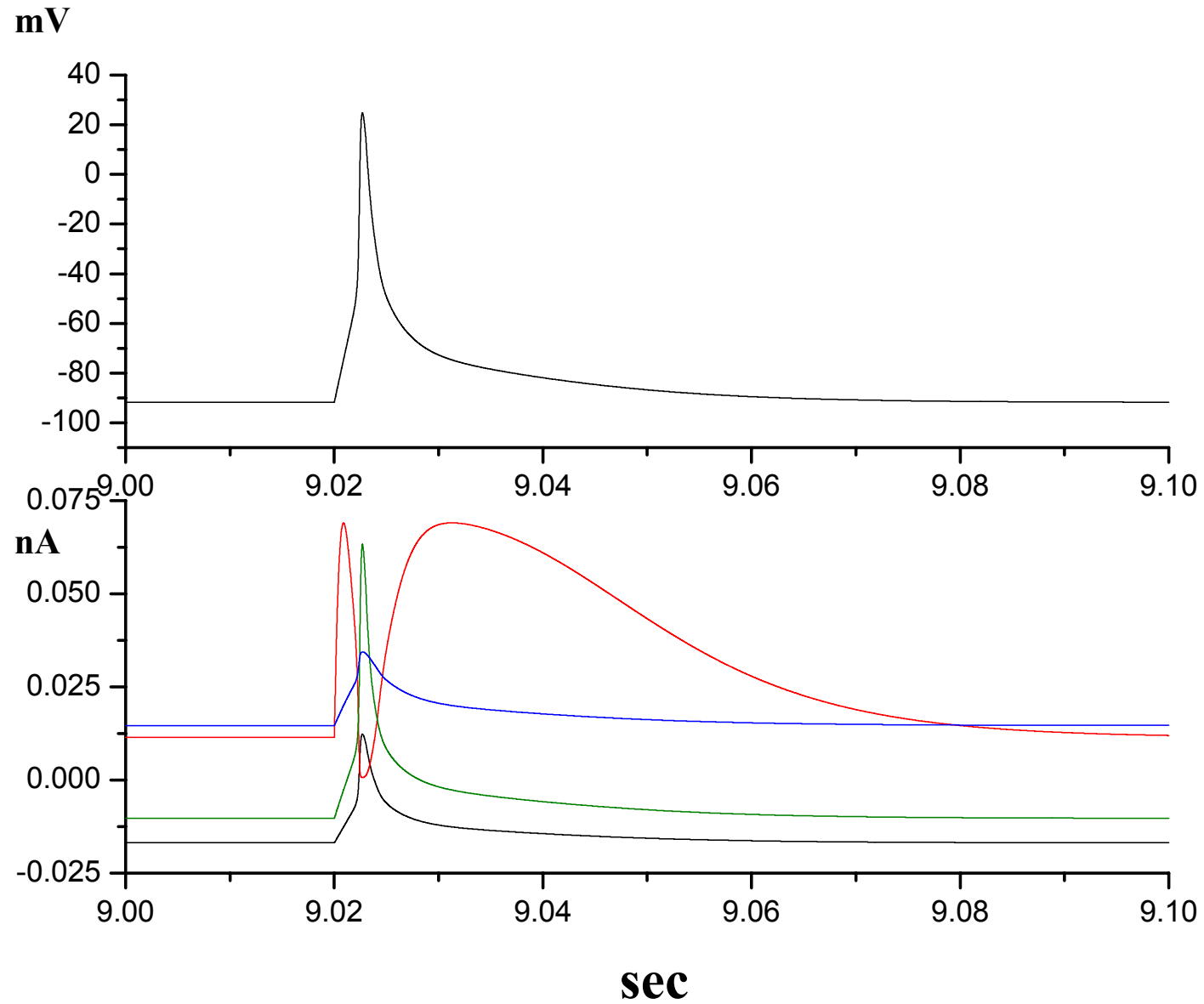
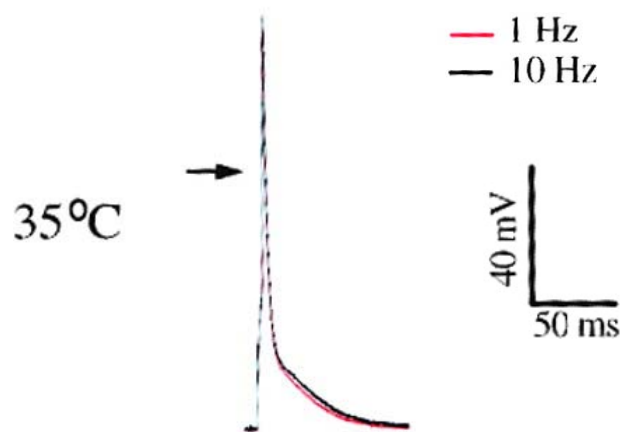


Fig. 7

Rate Dependence of Action Potential



From Guo et al.,
Circ. Res., 2000
Reproduced with permission

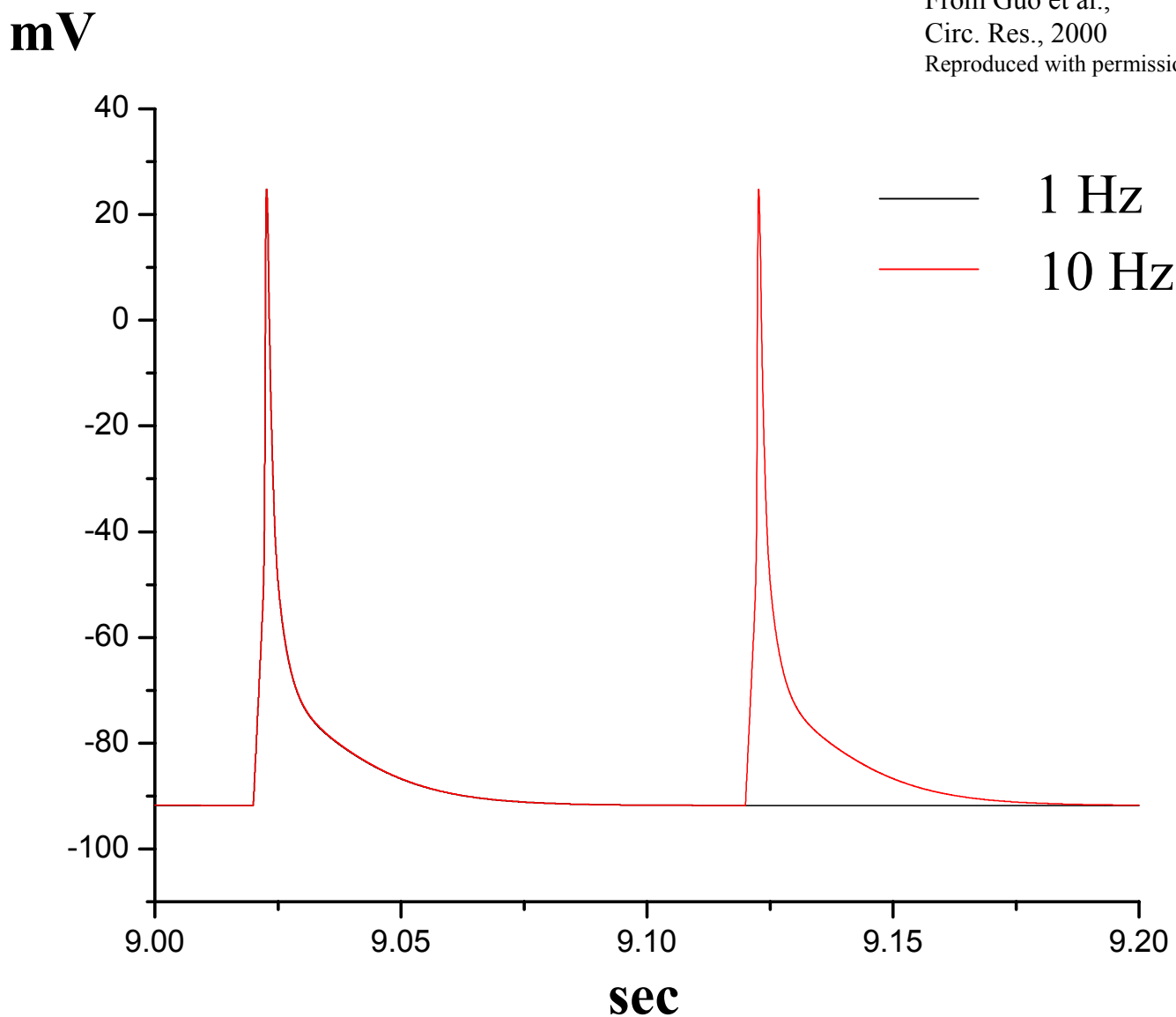


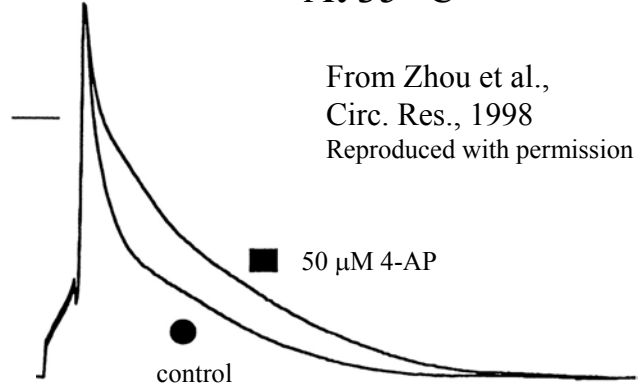
Fig. 8

Effect of 50 μM 4-AP

At 35 °C

From Zhou et al.,
Circ. Res., 1998
Reproduced with permission

20 mV
10 ms



mV

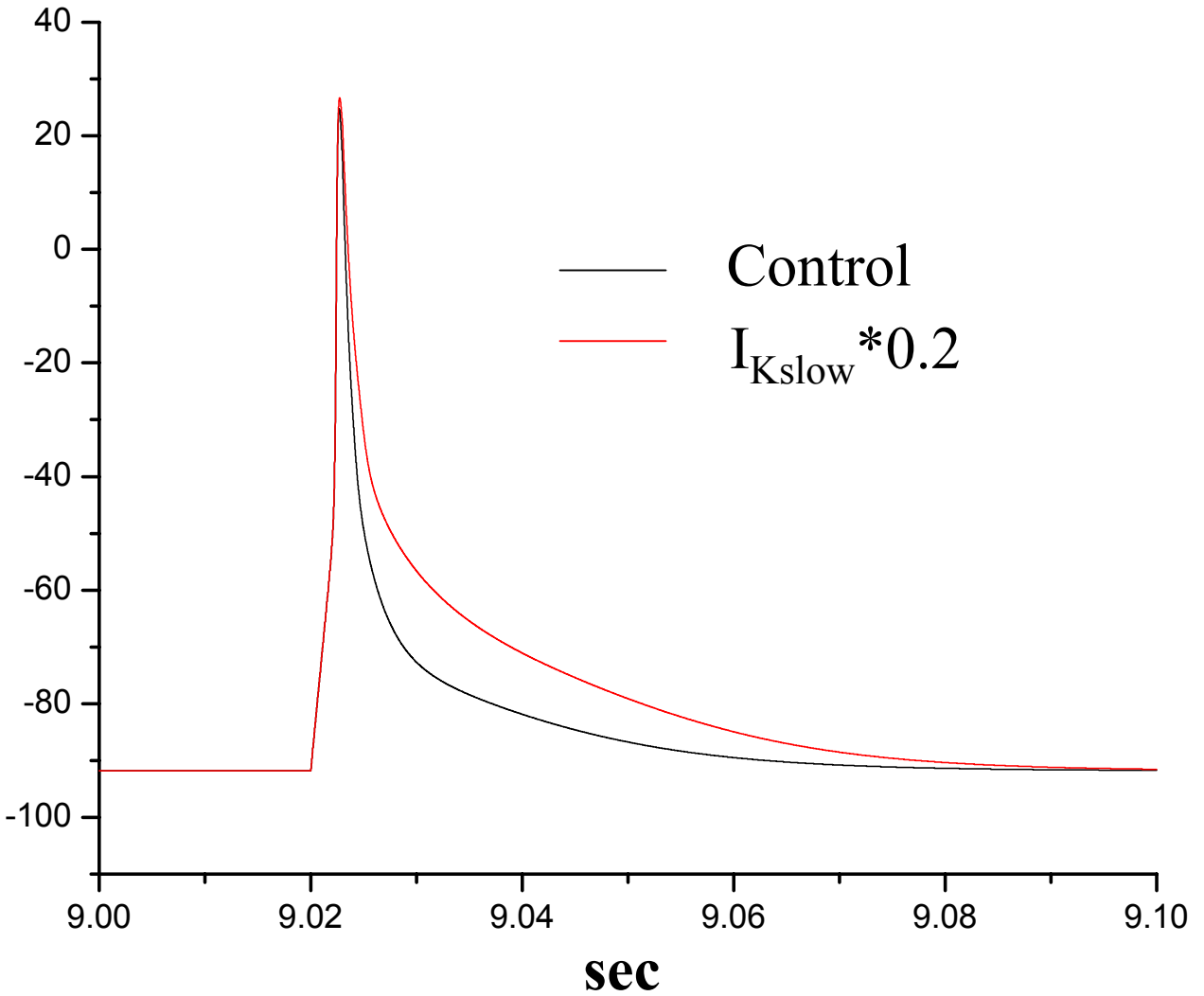


Fig. 9

Effect of I_{to} Knock-out

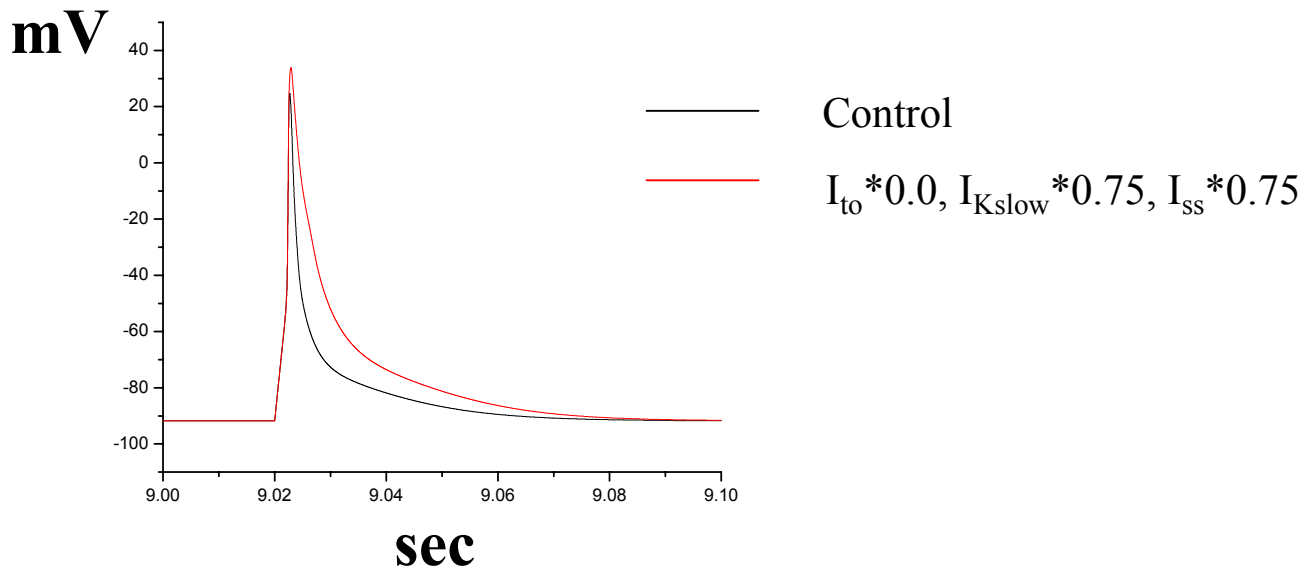
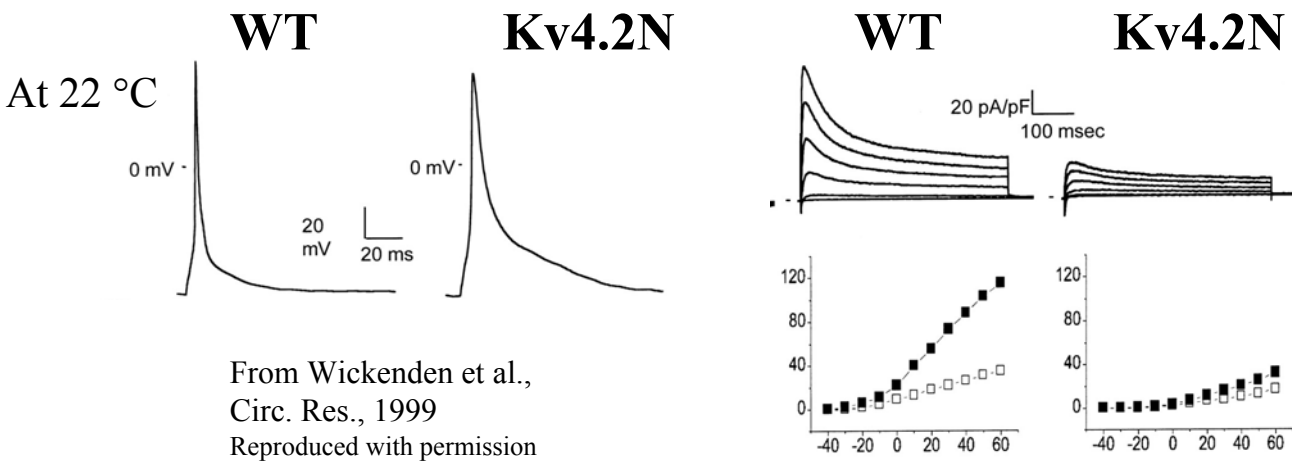
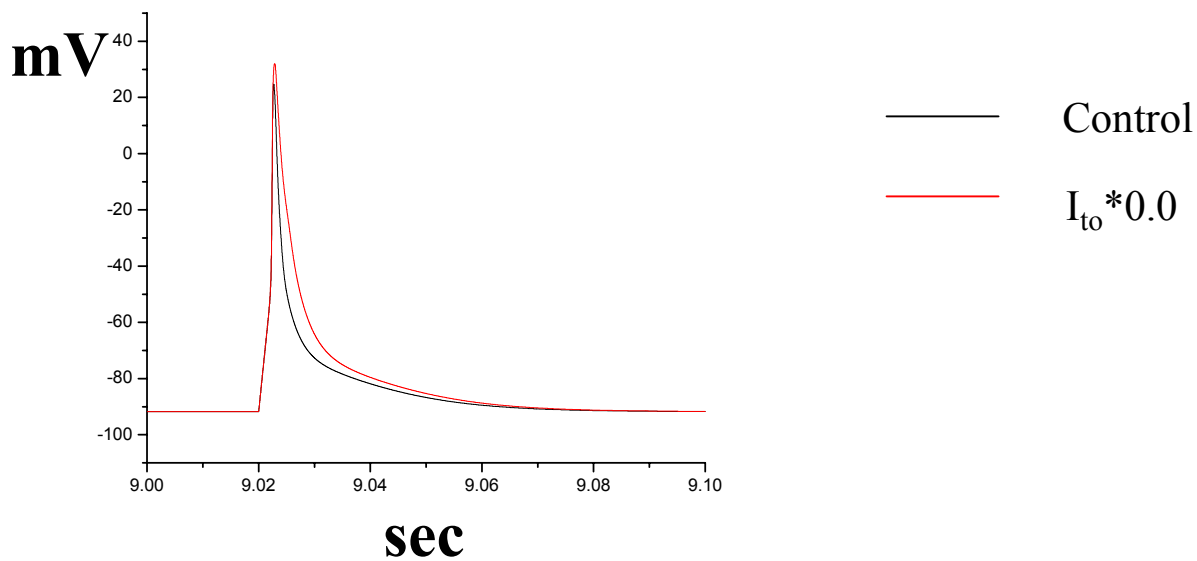


Fig. 10

Comparing control and Transgenic action potentials

MAP Recording

From Li et al.,
Am. J. Physiol., 2004
Reproduced with permission

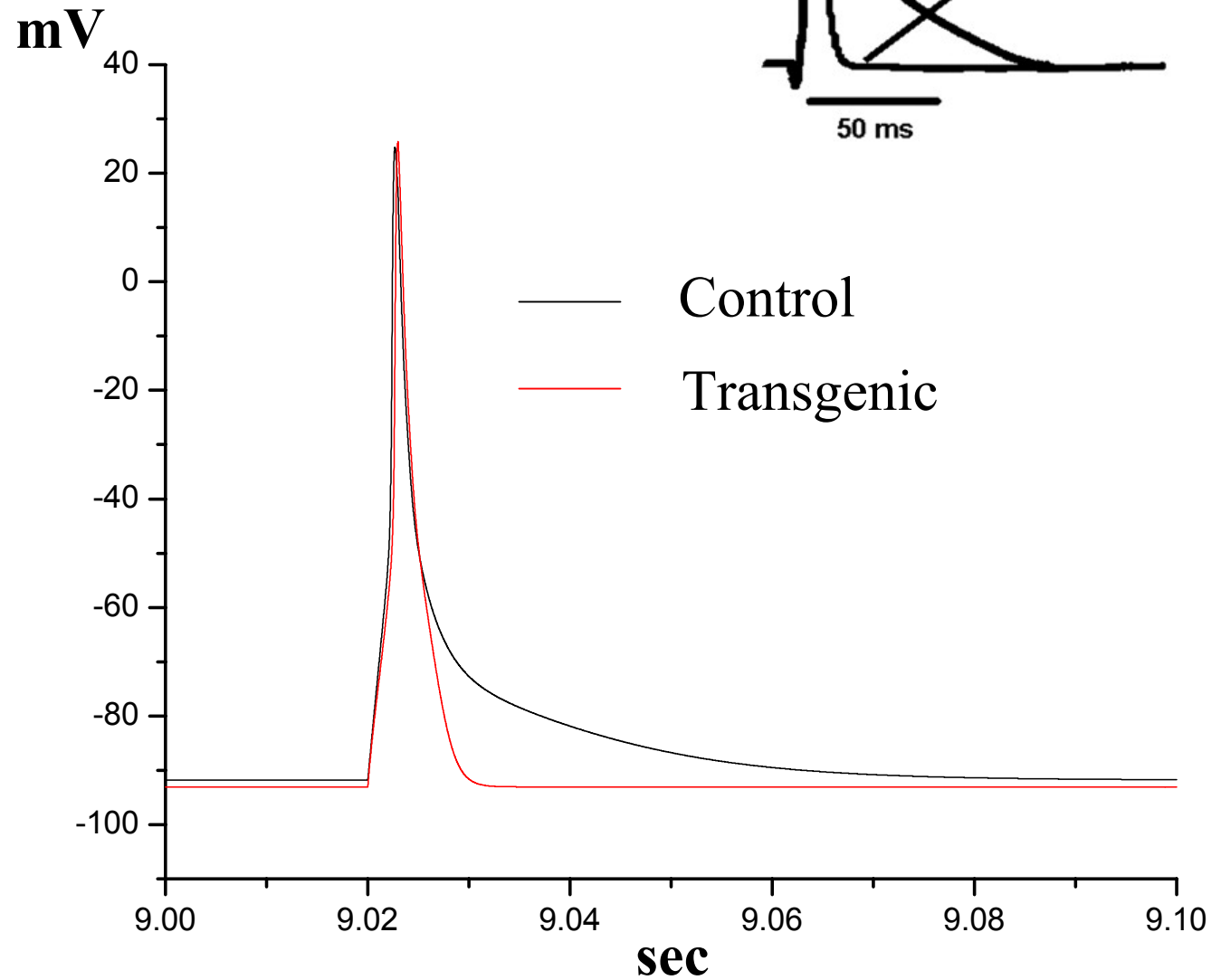
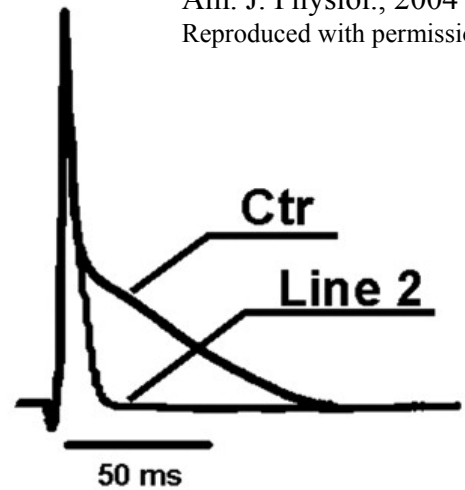


Fig. 11

Effect of complete block of I_{ss}

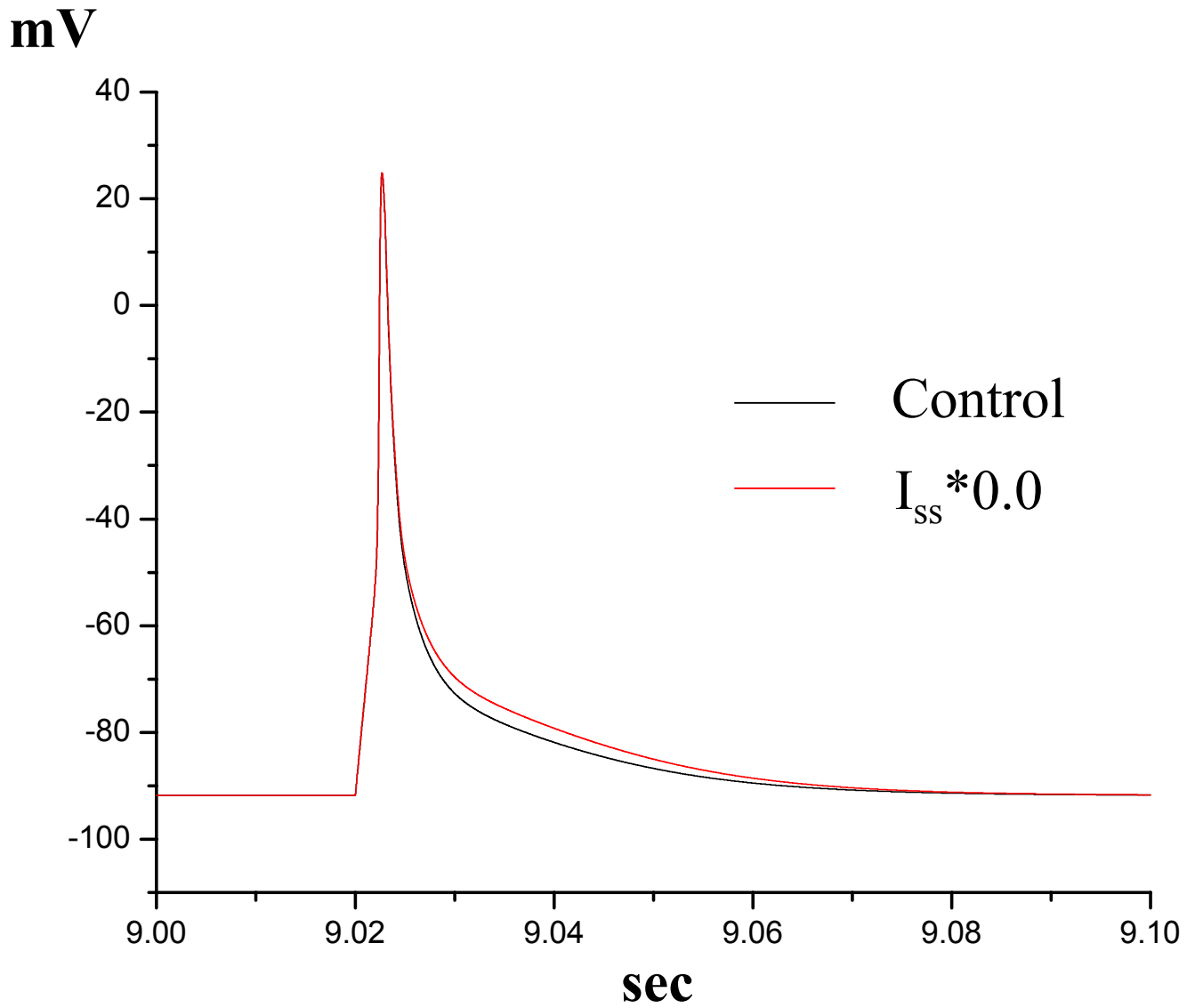
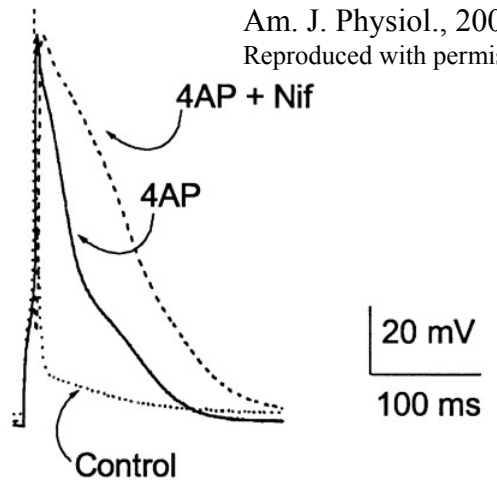


Fig. 12

Effect of 5 mM 4-AP

From Xu et al.,
Am. J. Physiol., 2002
Reproduced with permission

At 22 °C



mV

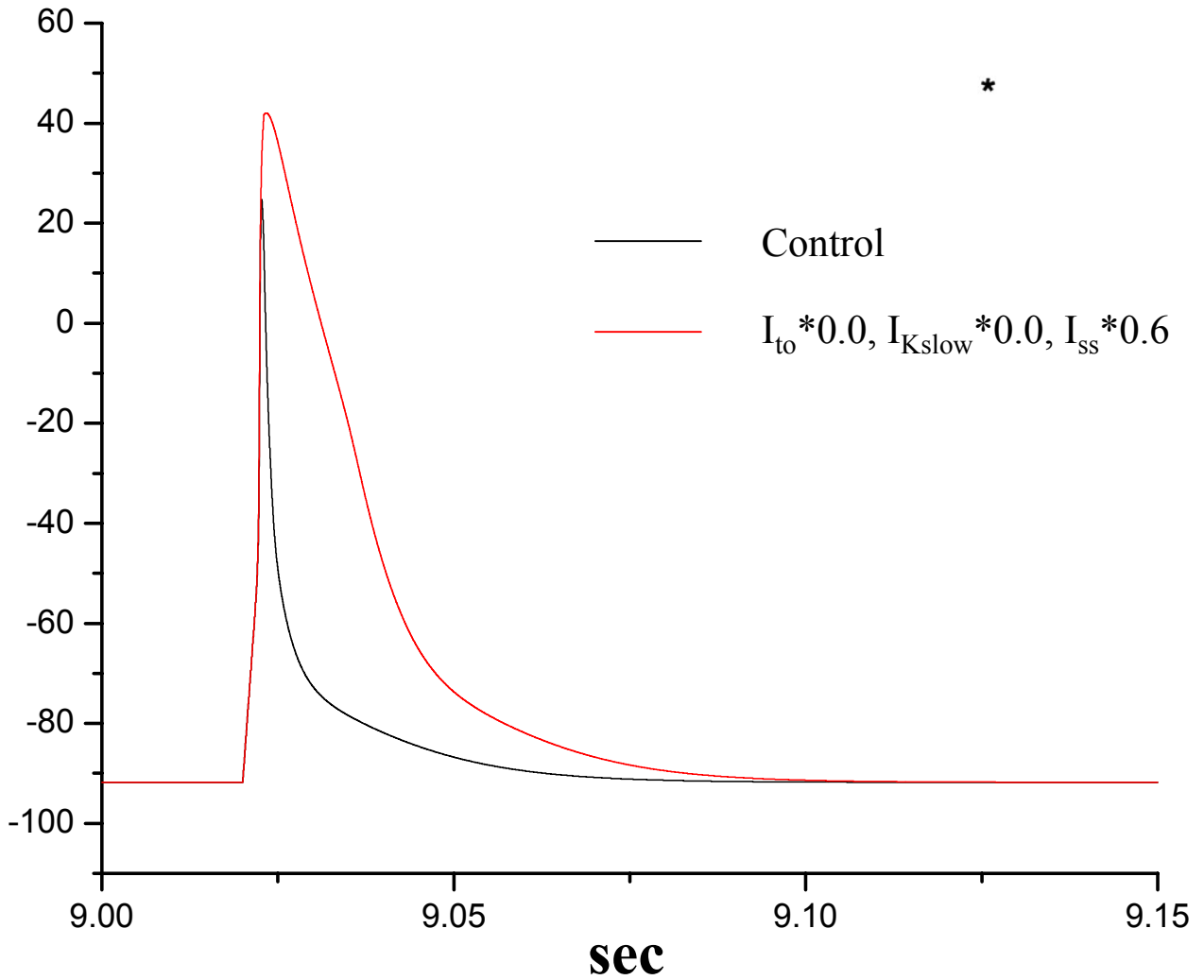
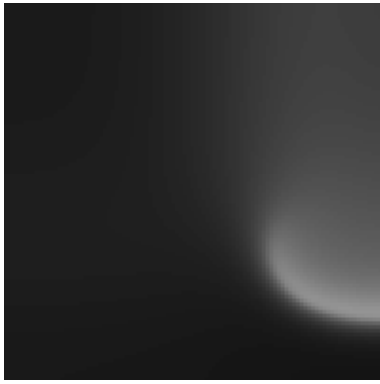
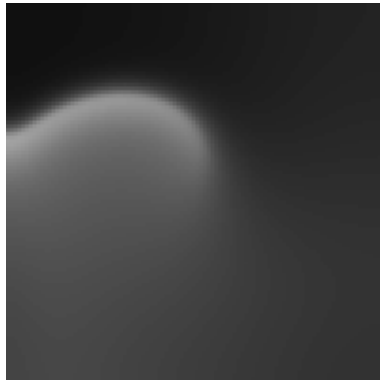


Fig. 13



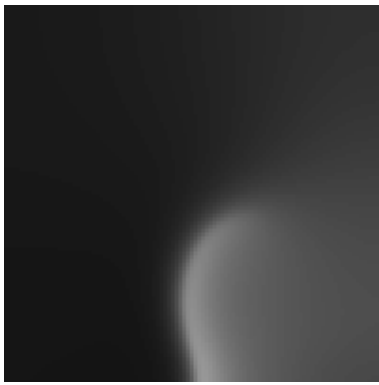
$t = 60 \text{ ms}$



$t = 80 \text{ ms}$



$t = 100 \text{ ms}$



$t = 120 \text{ ms}$



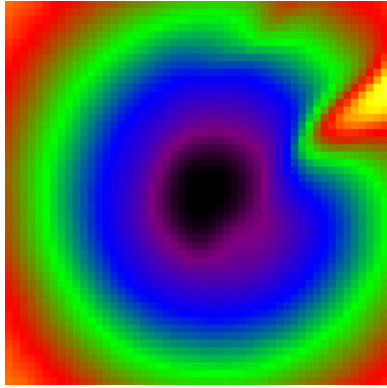
$t = 140 \text{ ms}$



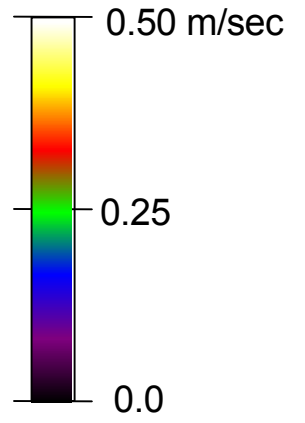
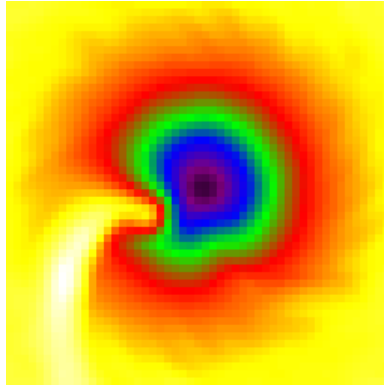
$t = 160 \text{ ms}$

Fig. 14

WT



TG

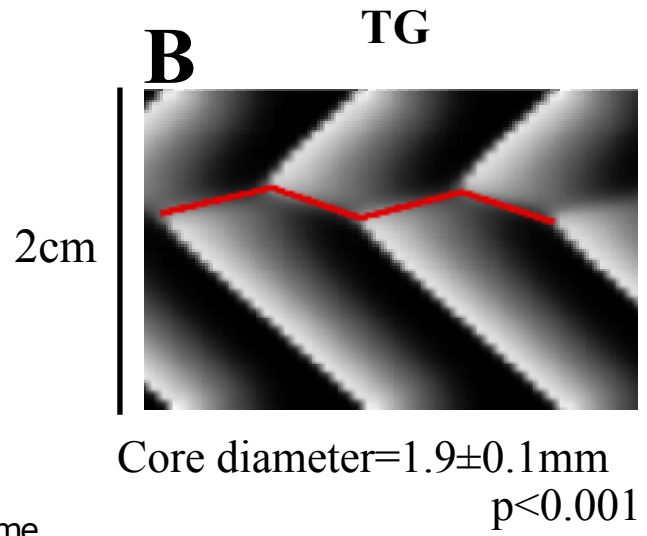
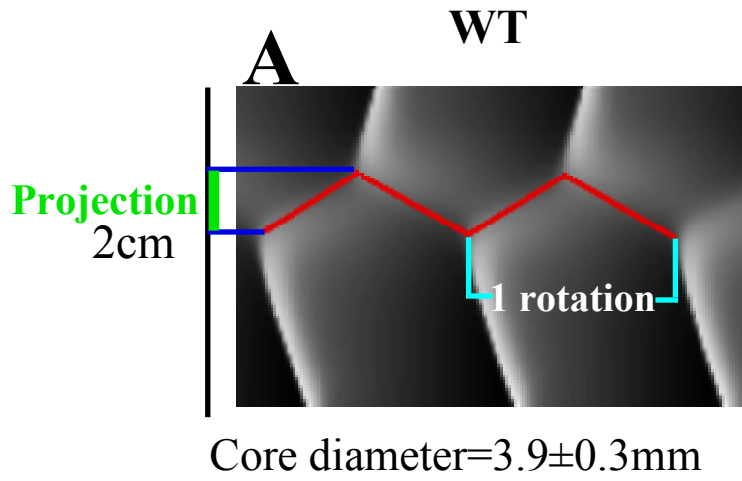


0.5 cm

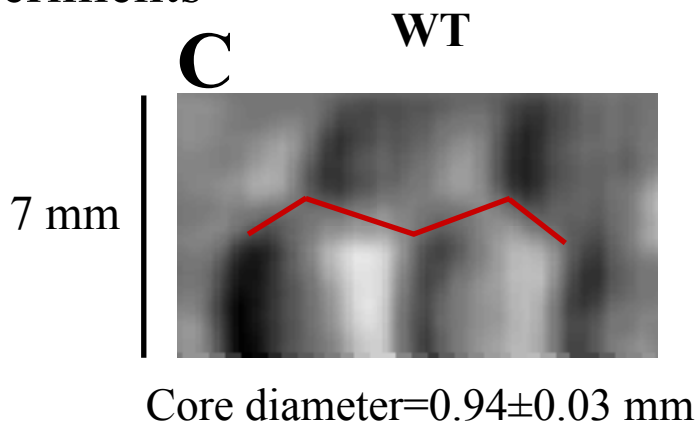


Fig. 15

Simulations



Experiments



Time →

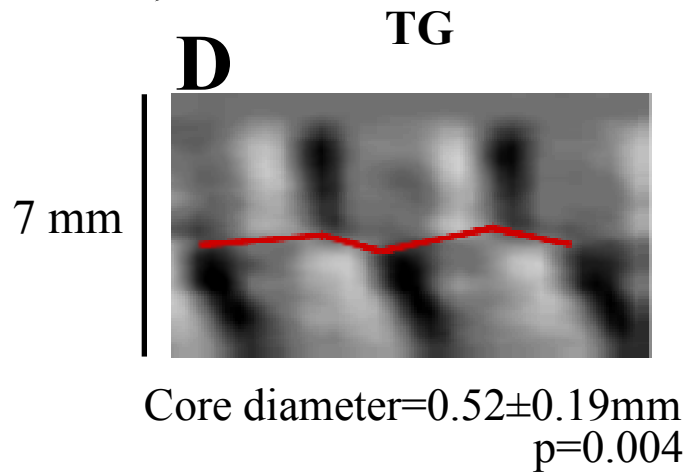
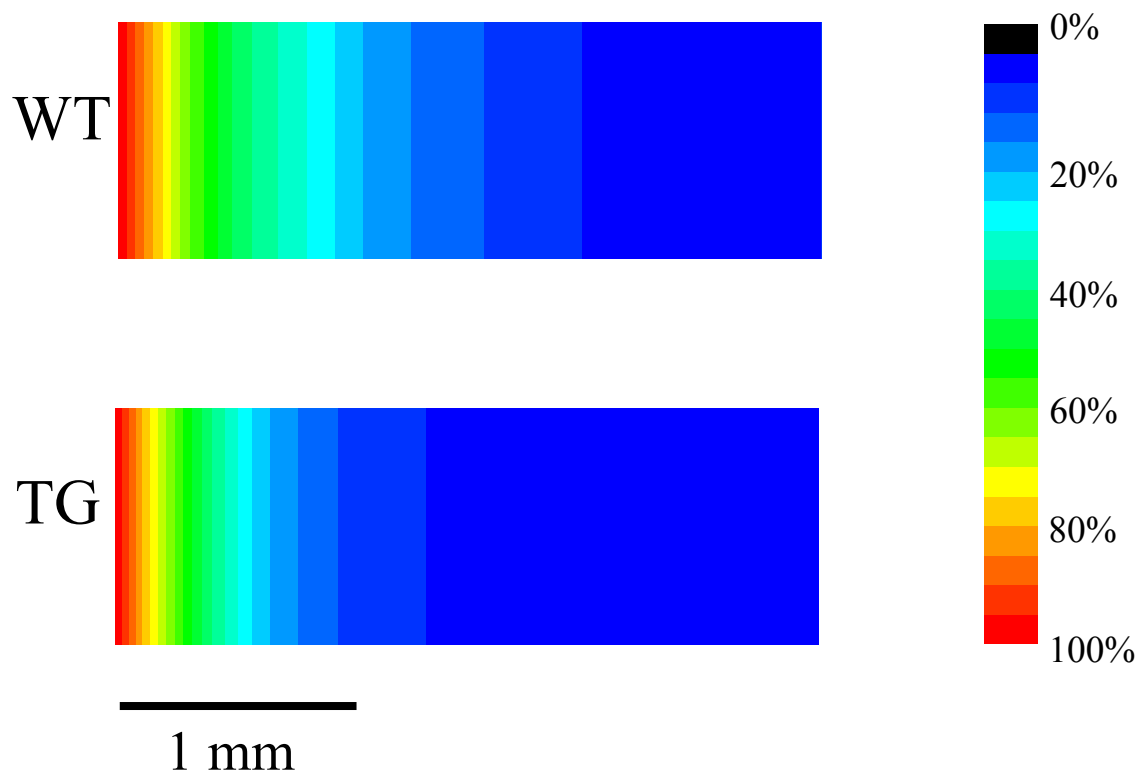
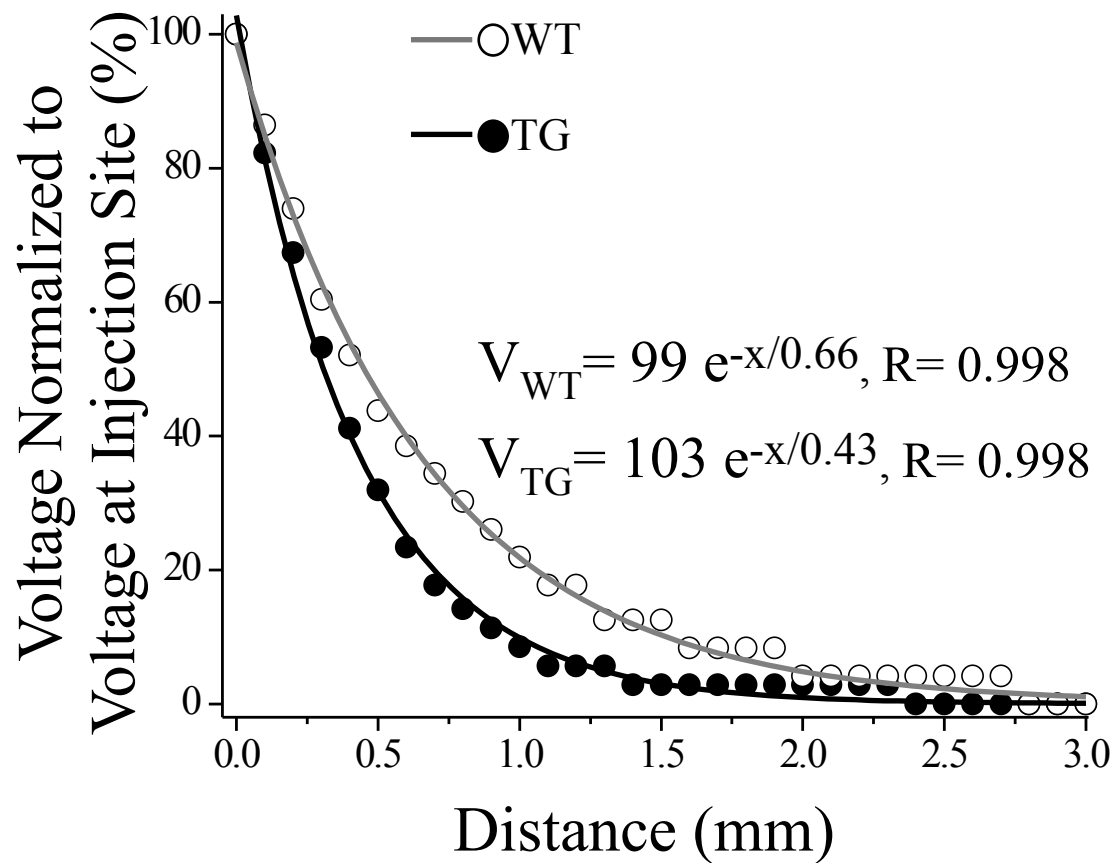


Figure 16

A**B****Figure 17**