

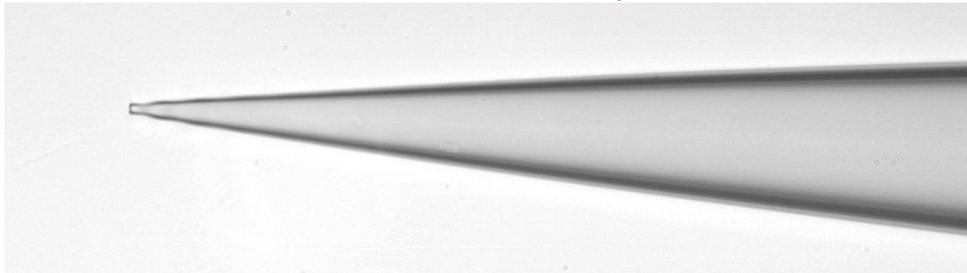
# LARGE PATCH PIPETTES

## 3–5 micron ID Tips for Patch Recording

1.65mm OD x 1.20mm ID  
(Sutter Glass BF165-120-10)

Heat = Ramp    Pull = 0    Vel = 45    Time = 250    Pressure = 500

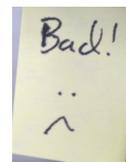
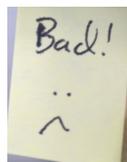
GOAL = 3 to 4 Loops



Find the STABLE mid-point velocity  
(see page 31 in the Pipette Cookbook for further instructions)

<b>Velocity</b>	33	36	39	42	45	48	51	54	57
<b>Loops</b>	4	4	3	3	3	3	3	2	2

Threshold    (Mid-Point Velocity)    Threshold



For a SMALLER tip and HIGHER RESISTANCE:

Write out program into three lines and on the third line, increase the heat in 5 unit increments or the velocity in 3 unit increments to reduce the tip opening.

For a LARGER tip and LOWER RESISTANCE:

Write out program into three lines and on the third line, decrease the heat in 5 unit increments or the velocity in 3 unit increments to increase the tip opening...

OR

Find the mid-point velocity for looping 4 times, instead of 3 times, by using lower velocity settings and use a velocity value near the mid-point to write a stable program.