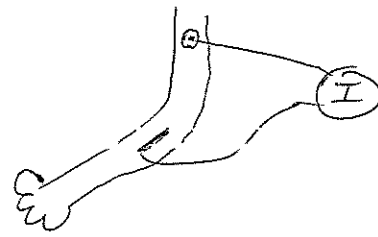


POC Meeting



* Will DC work?

↳ Should be fine — Chris

* DC with PWM potentially

Goal

↳ See if we can sense voltage drop with tissuing?

A		V	e2: 12 lead ECG electrode e3: Monitoring electrode
e1	10 μ A	5.6V	560k Ω → dry electrode
e2	10 μ A	800mV	80k Ω
e2	10 μ A	1.08V	108k Ω
e3	50 μ A	4.4V	80k Ω
e3	100 μ A	7.25V	72.5k Ω
e3	100 μ A	7.45V	74.5k Ω
e3	100 μ A	7.7V → 7.4V <small>Start</small>	→ Removal

Dipping to
7.4V
varying by ± 0.1

→ Observed increase in Voltage when increasing saline flow rate

→ Voltage reading starts high and takes 10s to stabilise

* What's up with the beep from the power source

↳ Rush of fluid when moving roller.

* Fluctuation around $\pm 0.2V$

↳ Starting $7.77V$

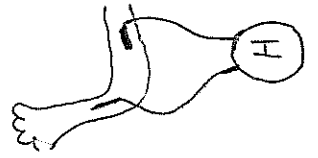
↳ End $7.6V$

* Expected increase in V , observed decrease.

* Impedance ~~to~~ patch

↳ Increase in impedance with ~~the~~ swelling caused by tissueing.

POC 2



↳ 2 skin piercing electrodes

* $A = 10\mu A$, $V = \cancel{1.5V} 2.0V$

~~Resistance~~ = ~~Resistance~~ $R = \frac{2}{0.00001} = 200K$

* Increased electrode distance by about 10-15cm from test 1.

* $A = \cancel{10\mu A} 50\mu A$, $V = 5V = \frac{5}{0.00005} = 100K$

* Δ resistance due to change in experimental setup.

Removing Canvlee

* Drop of 0.05V when tissueed
0.1V

* Increase by 0.2V

} fluctuation
likely caused
by movement
of needle.

BUSTED