Statistica al lavoro

"He uses statistics as a drunken man
uses lampposts - for support
rather than illumination"
Andrew Lang

online-behavior


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	A(Y)	B(Y)
Long Name		
Units	sec	sec
Comments	CTL	Ozone
1	3.6	5.2
2	5.7	6.5
3	3.2	5.3
4	3.1	6.1
5	5.3	5.0
6	5.0	6.4
7	3.9	6.0
8	3.4	5.5
9	5.0	5.1
10	5.5	4.8

Notes

X-Function	Paired Sample t Test
User Name	Otto
Time	02/11/2016 17:26:29

Input Data

	Data	Range
1st Data Range	[Book2]Sheet1!A	[1*:10*]
2nd Data Range	[Book2]Sheet1!B	[1*:10*]

Descriptive Statistics

	N	Mean	SD	SEM
A	10	4.38041	1.02759	0.32495
B	10	5.59235	0.62191	0.19667
Difference		-1.21194		

Test Statistics

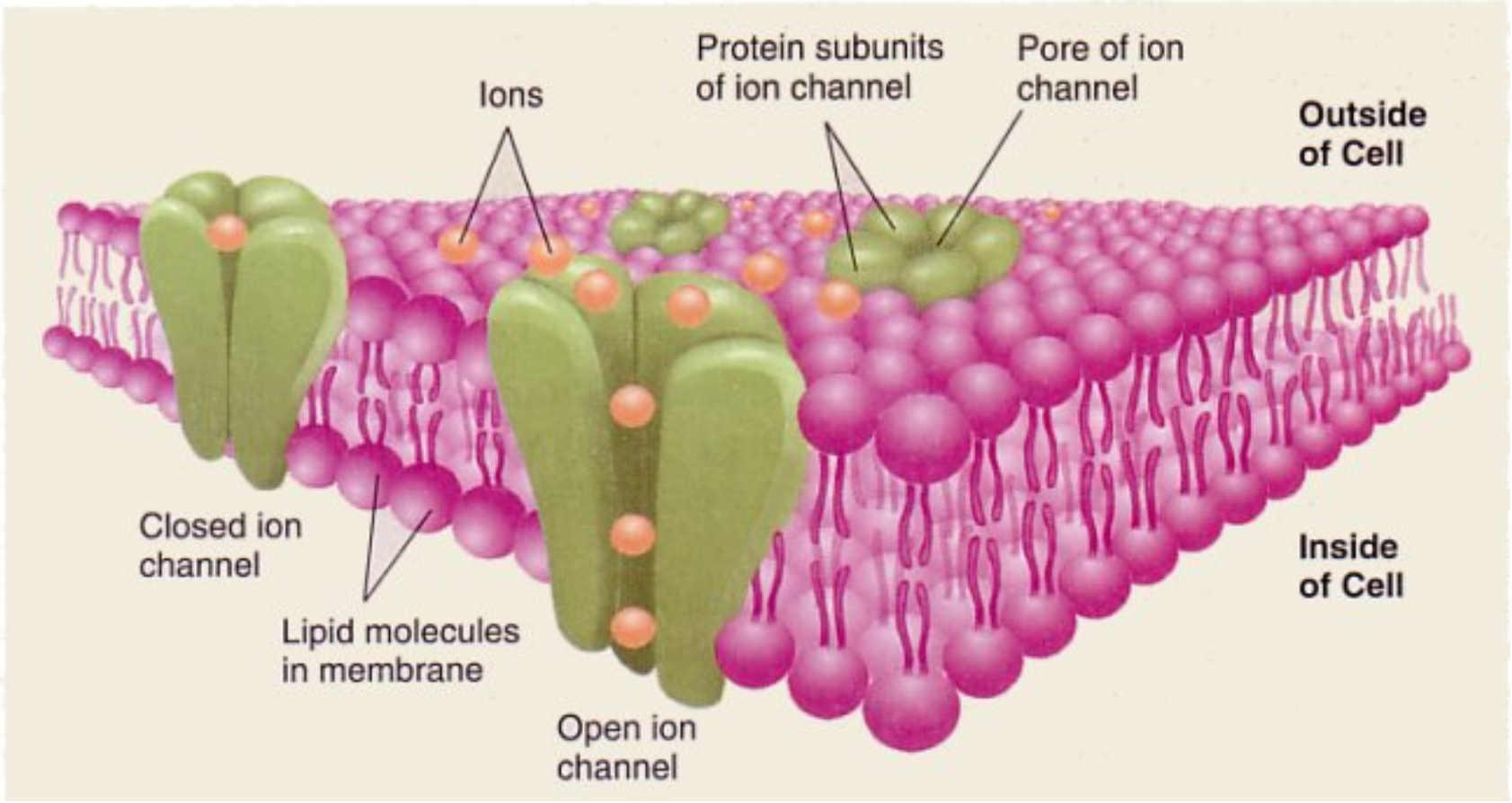
	t Statistic	DF	Prob>|t|
	-3.11342	9	0.01245

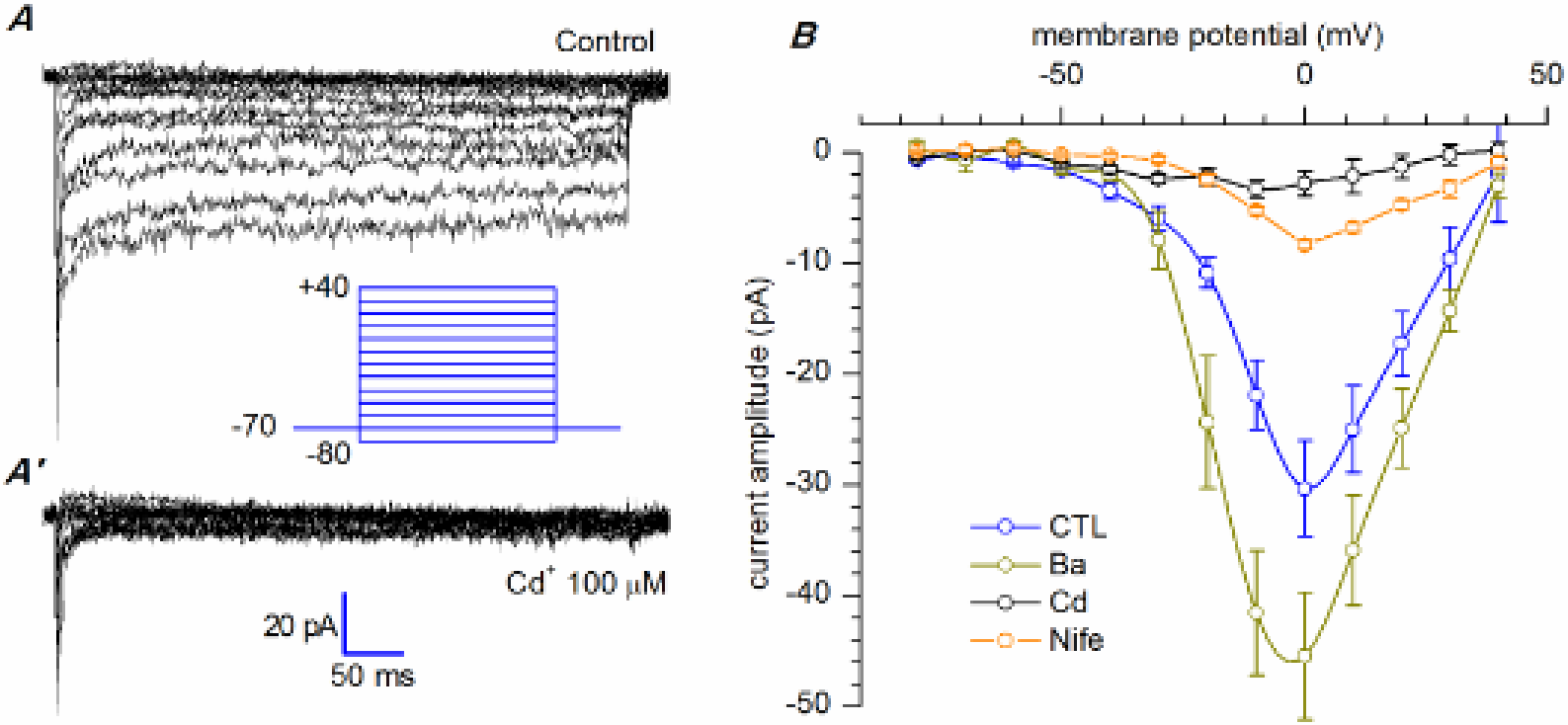
Null Hypothesis: mean1-mean2 = 0

Alternative Hypothesis: mean1-mean2 <> 0

At the 0.05 level, the difference of the population means is significantly different with the test difference(0)

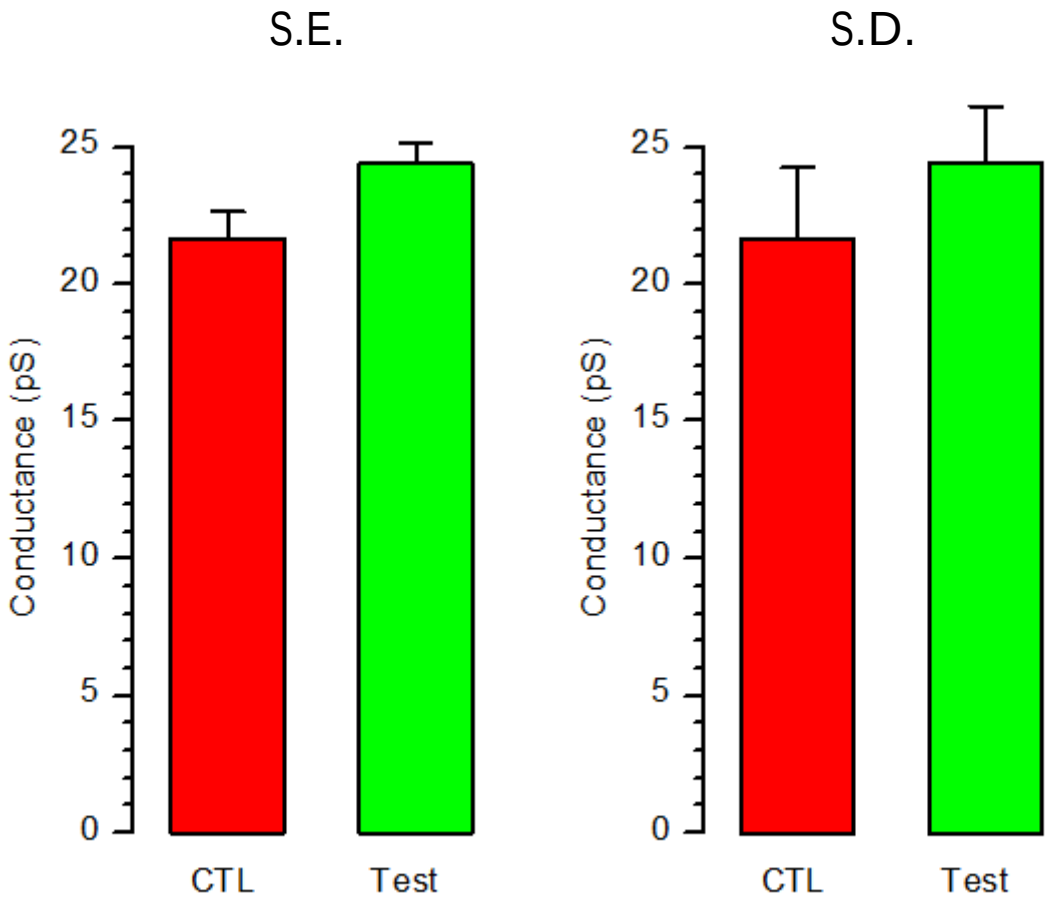
Ion channels. When they are open, ions can pass through them, entering or leaving the cell.

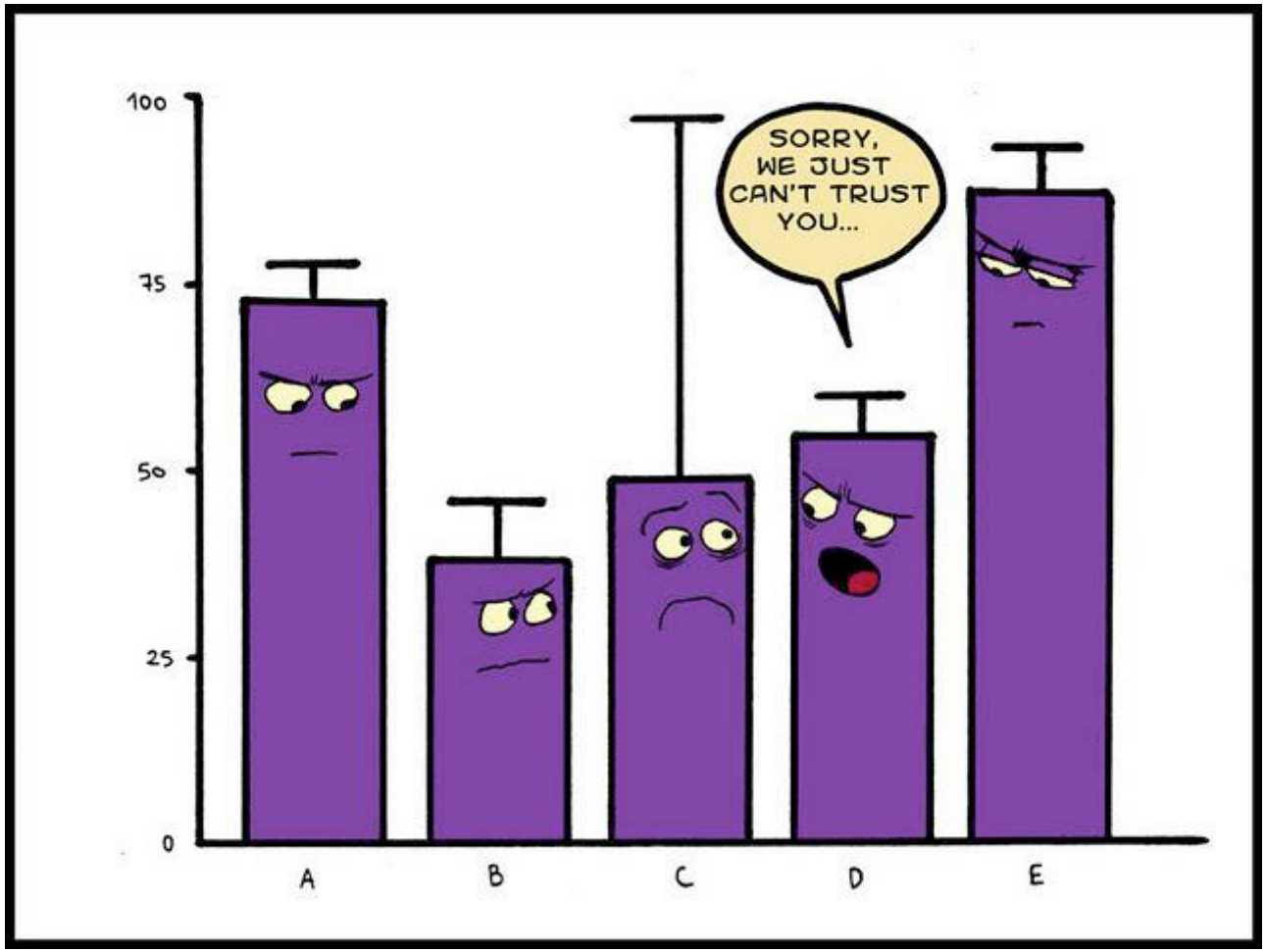



A
Control
+40
-70
-80
A'
Cd+ 100 μM
20 pA
50 ms
B
membrane potential (mV)
-50
0
50
0
-10
-20
-30
-40
-50
current amplitude (pA)
CTL
Ba
Cd
Nife

Dati di partenza (n=7)

	CTL(Y)	Test(Y)
Long Name		
Units		
Comments		
1	24.20312	20.35988
2	22.75639	27.40887
3	18.65462	23.71365
4	20.47086	24.91592
5	25.82372	25.46819
6	19.35893	24.38955
7	20.00294	26.14283


S.E.
S.D.
Conductance (pS)
25
20
15
10
5
0
CTL
Test
Conductance (pS)
25
20
15
10
5
0
CTL
Test


100
75
50
25
0
A
B
C
D
E
SORRY, WE JUST CAN'T TRUST YOU...

Paired Sample t Test (01/11/2016 21:12:49)

Notes

X-Function	Paired Sample t Test
User Name	Otto
Time	01/11/2016 21:12:49

Input Data

	Data	Range
1st Data Range	[Book1]Sheet1!CT	[1*:7*]
2nd Data Range	[Book1]Sheet1!Te	[1*:7*]

Descriptive Statistics

	N	Mean	SD	SEM
B	7	21.66057	2.5901	0.97897
C	7	24.39536	2.06876	0.78192
Difference		-2.73479		

Test Statistics

	t Statistic	DF	Prob>|t|
	-2.23266	6	0.06702

Null Hypothesis: mean1-mean2 = 0

Alternative Hypothesis: mean1-mean2 <> 0

At the 0.05 level, the difference of the population means is NOT significantly different with the test difference(0)

Dati di partenza (n=11)

	CTL(Y)	Test(Y)
Long Name		
Units		
Comments		
1	24.20312	20.35988
2	22.75639	27.40887
3	18.65462	23.71365
4	20.47086	24.91592
5	25.82372	25.46819
6	19.35893	24.38955
7	20.00294	26.14283
8	18.50387	27.18224
9	22.71913	19.92831
10	20.16058	25.81272
11	22.31848	23.66464

Paired Sample t Test (02/11/2016 14:08:26)

Notes

X-Function	Paired Sample t Test
User Name	Otto
Time	02/11/2016 14:08:26

Input Data

	Data	Range
1st Data Range	[Book1]Sheet1!CTL	[1*:11*]
2nd Data Range	[Book1]Sheet1!Test	[1*:11*]

Descriptive Statistics

	N	Mean	SD	SEM
CTL	11	21.36115	2.37225	0.71526
Test	11	24.45335	2.46036	0.74183
Difference		-3.0922		

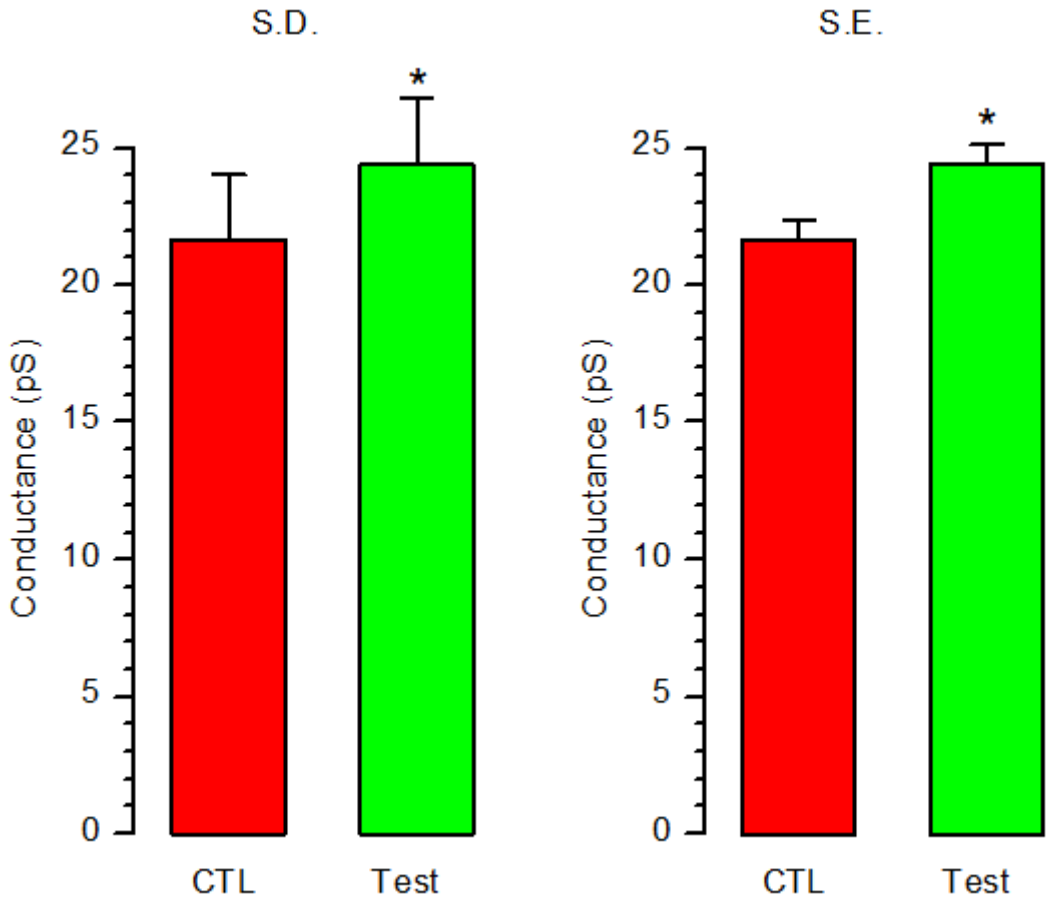
Test Statistics

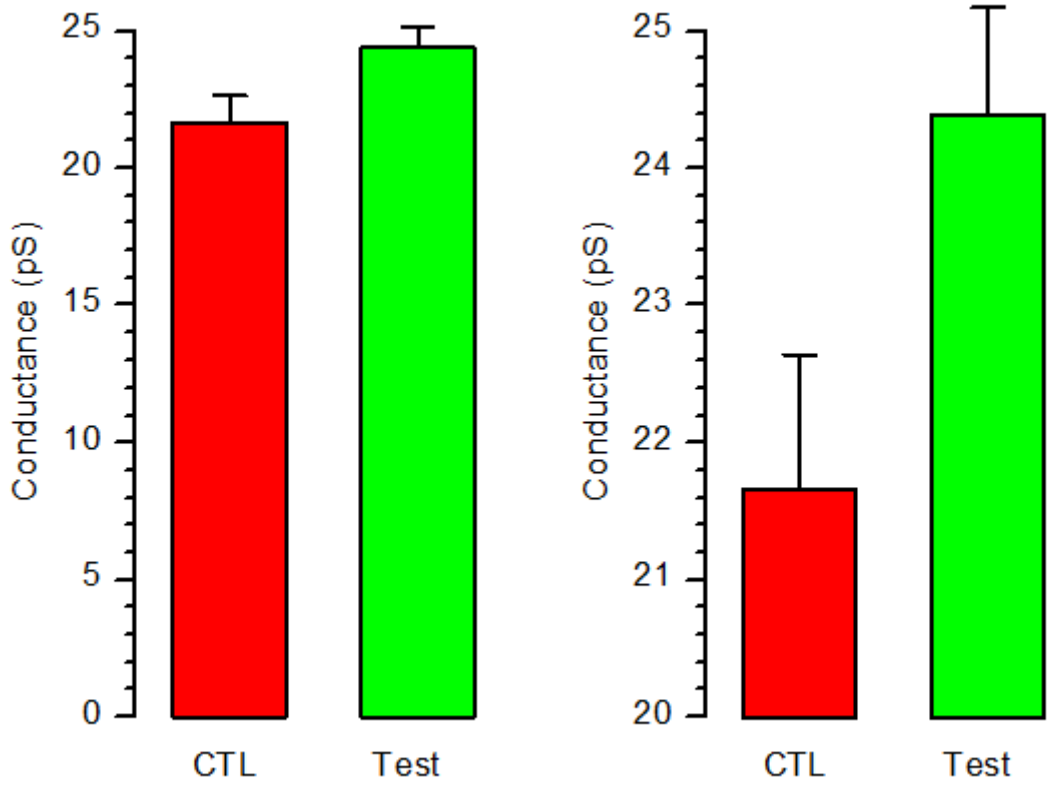
t Statistic	DF	Prob>|t|
-2.59174	10	0.02687

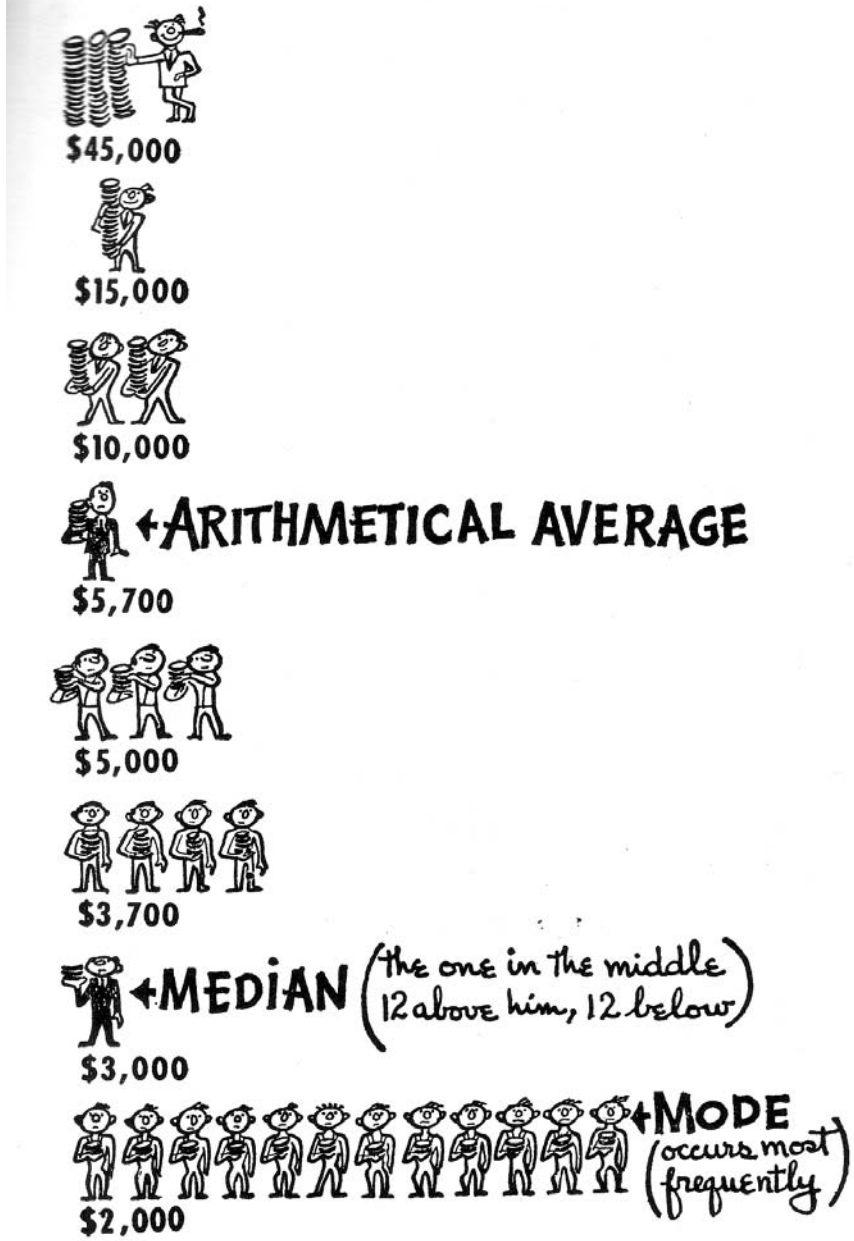
Null Hypothesis: mean1-mean2 = 0

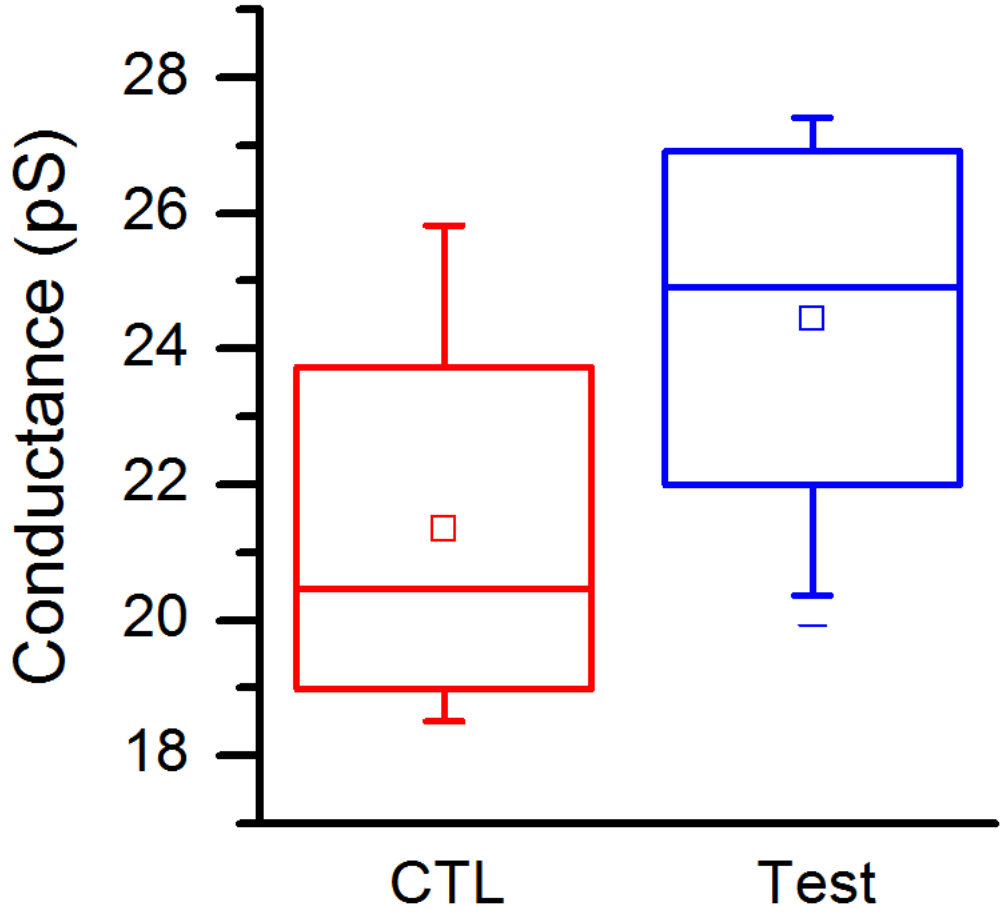
Alternative Hypothesis: mean1-mean2 <> 0

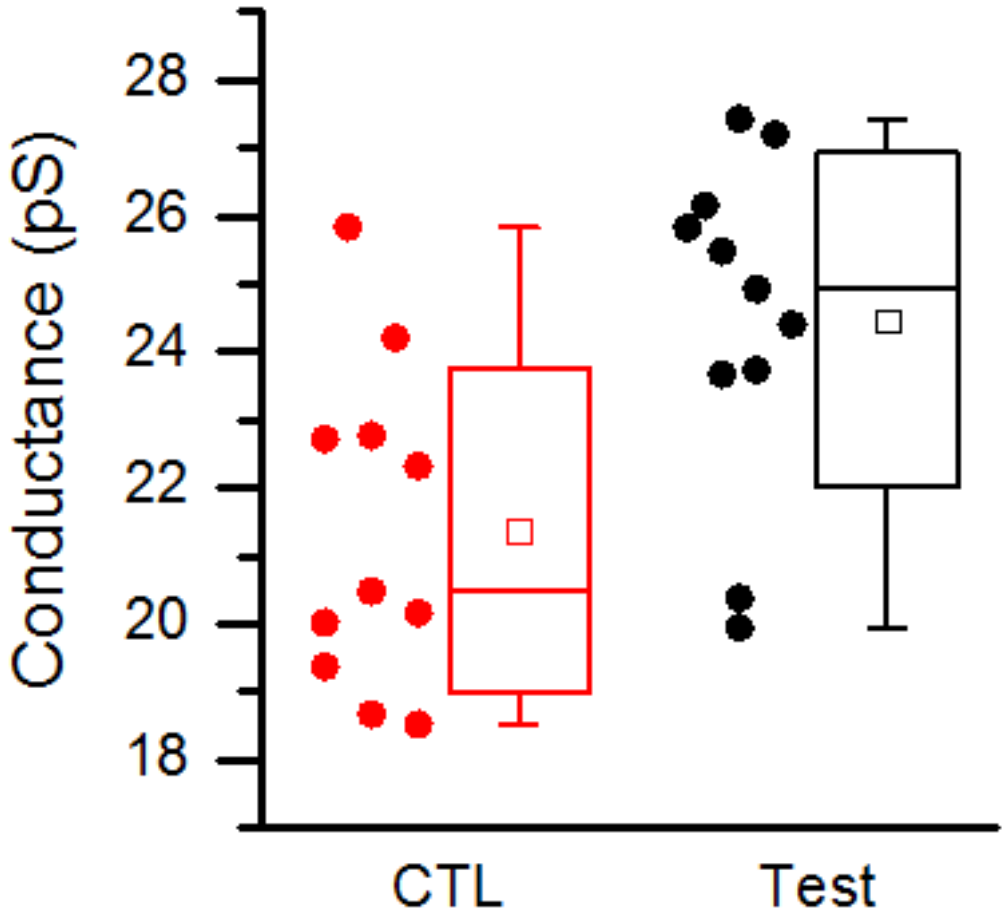
At the 0.05 level, the difference of the population means is significantly different with the test difference(0)

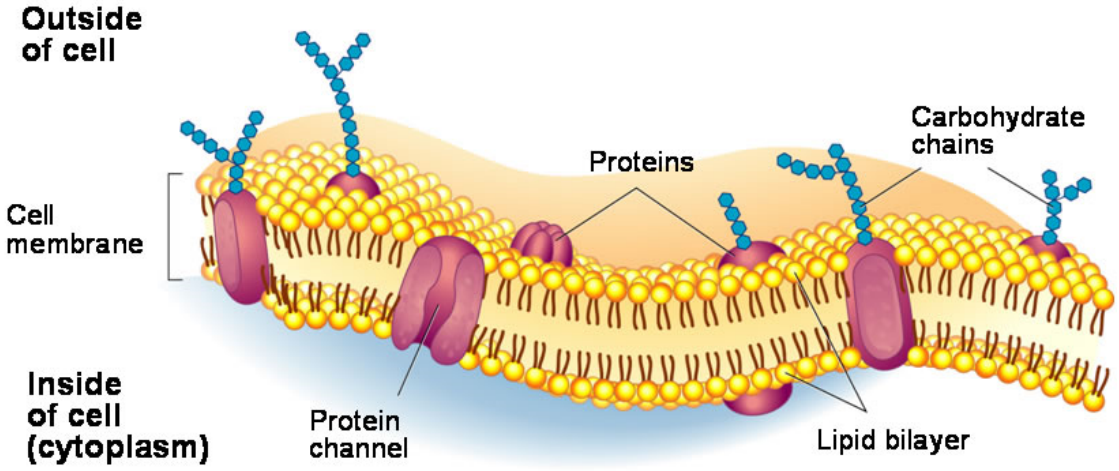

S.D.
S.E.
Conductance (pS)
25
20
15
10
5
0
*
CTL
Test

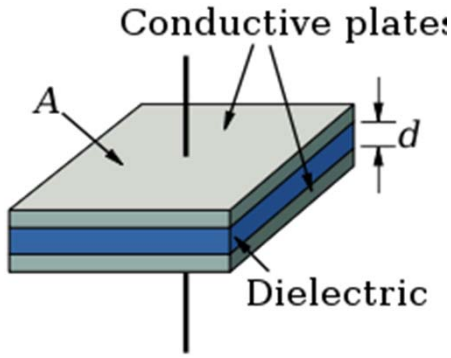

Conductance (pS)
25
20
15
10
5
0
CTL
Test
Conductance (pS)
25
24
23
22
21
20
CTL
Test


$45,000
$15,000
$10,000
←ARITHMETICAL AVERAGE
$5,700
$5,000
$3,700
←MEDIAN (the one in the middle 12 above him, 12 below)
$3,000
←MODE (occurs most frequently)
$2,000

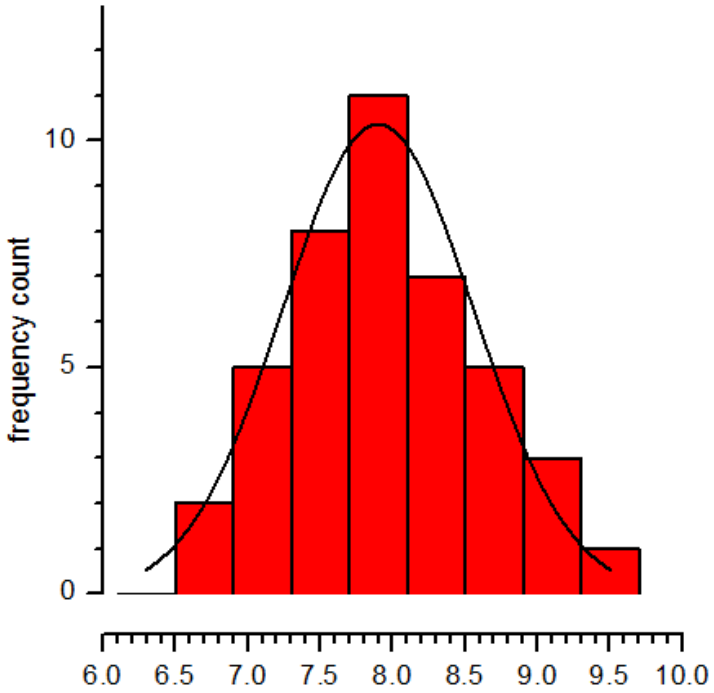

Conductance (pS)
28
26
24
22
20
18
CTL
Test


Conductance (pS)
28
26
24
22
20
18
CTL
Test

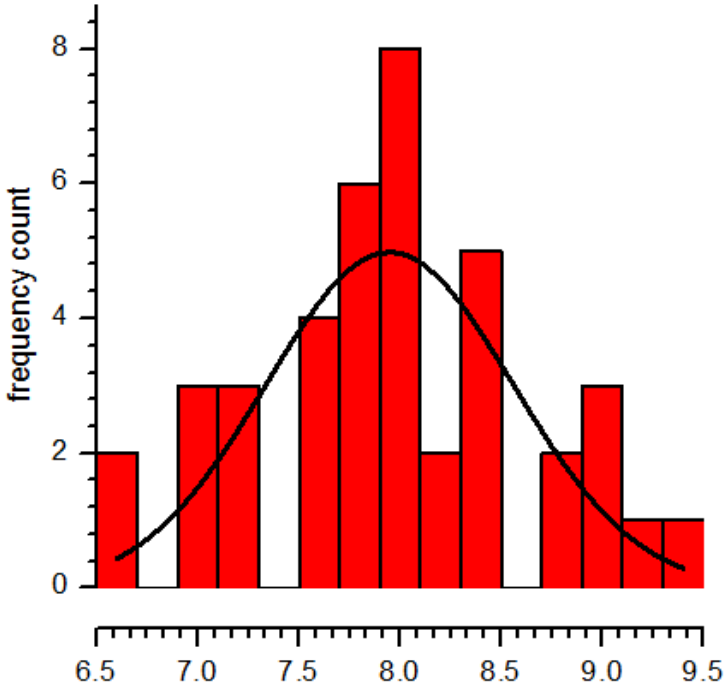




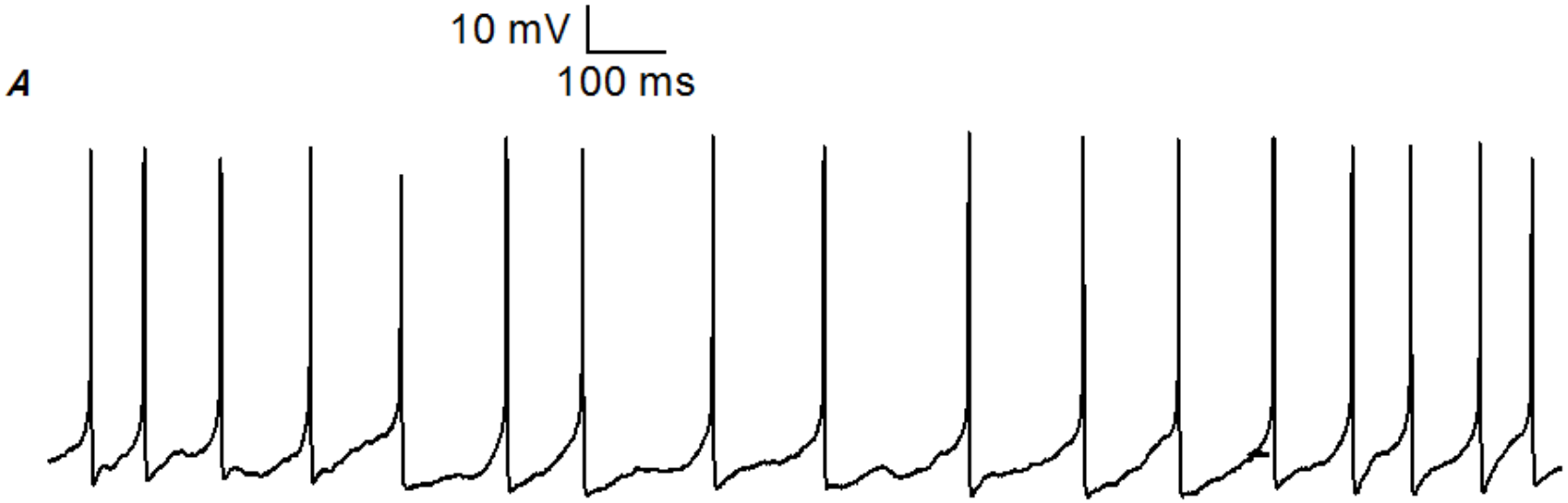
	B(Y)
Long Name	
Units	pF
Comments	
1	8.02
2	8.18
3	8.01
4	7.18
5	7.74
6	7.75
7	6.58
8	9.04
9	7.22
10	8.34
11	7.54
12	7.90
13	7.59
14	8.15
15	6.94
16	7.00
17	7.74
18	8.09
19	9.32
20	8.42



Model	Gauss		
Equation	y=y0 + (A/(w*sqrt(PI/2)))*exp(-2*((x-xc)/w)^2)		
Reduced Chi-Sqr	1.20751		
Adj. R-Square	0.9164		
		Value	Standard Error
D	y0	0	0
D	xc	7.89867	0.05785
D	w	1.31793	0.11625
D	A	17.12279	1.30386
D	sigma	0.65897	
D	FWHM	1.55175	
D	Height	10.36624	

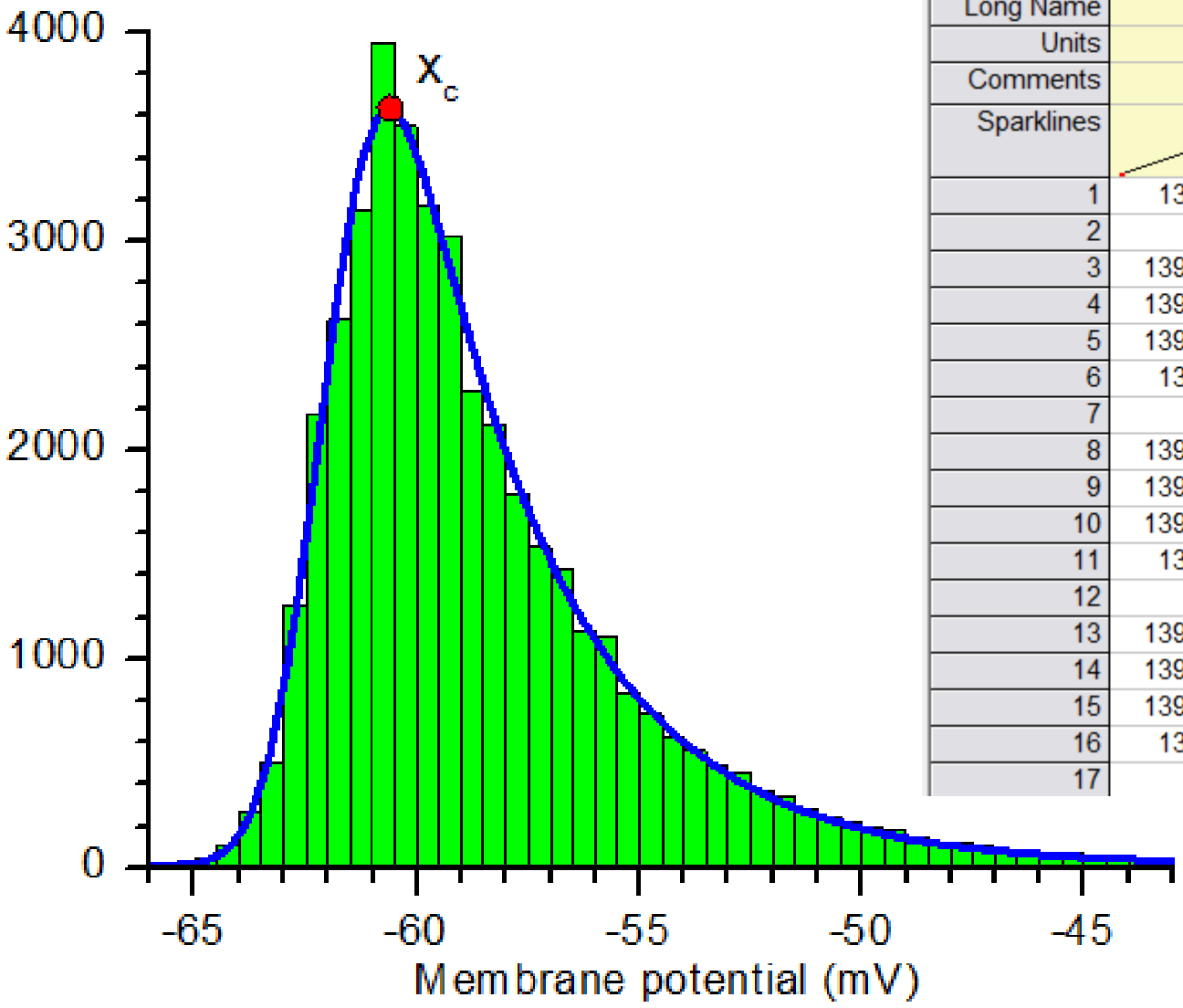


Model	Gauss		
Equation	y=y0 + (A/(w*sqrt(PI/2)))*exp(-2*((x-xc)/w)^2)		
Reduced Chi-Sqr	3.98155		
Adj. R-Square	0.26007		
		Value	Standard Error
Count	y0	0	0
Count	xc	7.94739	0.1492
Count	w	1.22106	0.30403
Count	A	7.62414	1.62389
Count	sigma	0.61053	
Count	FWHM	1.43769	
Count	Height	4.98189	

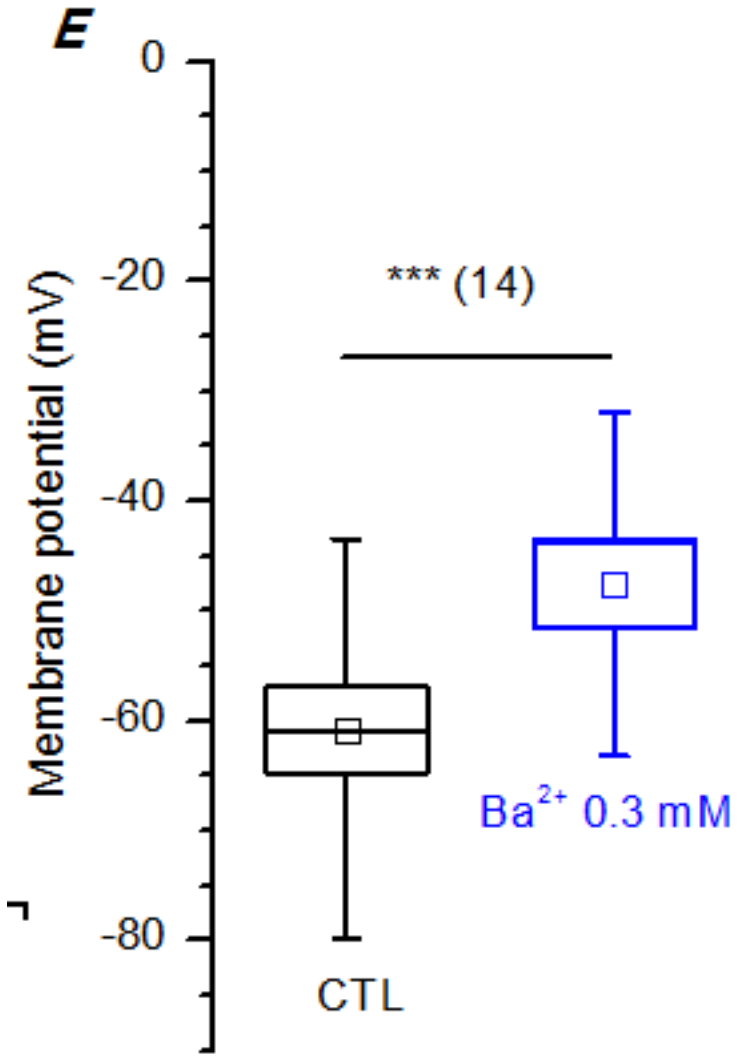


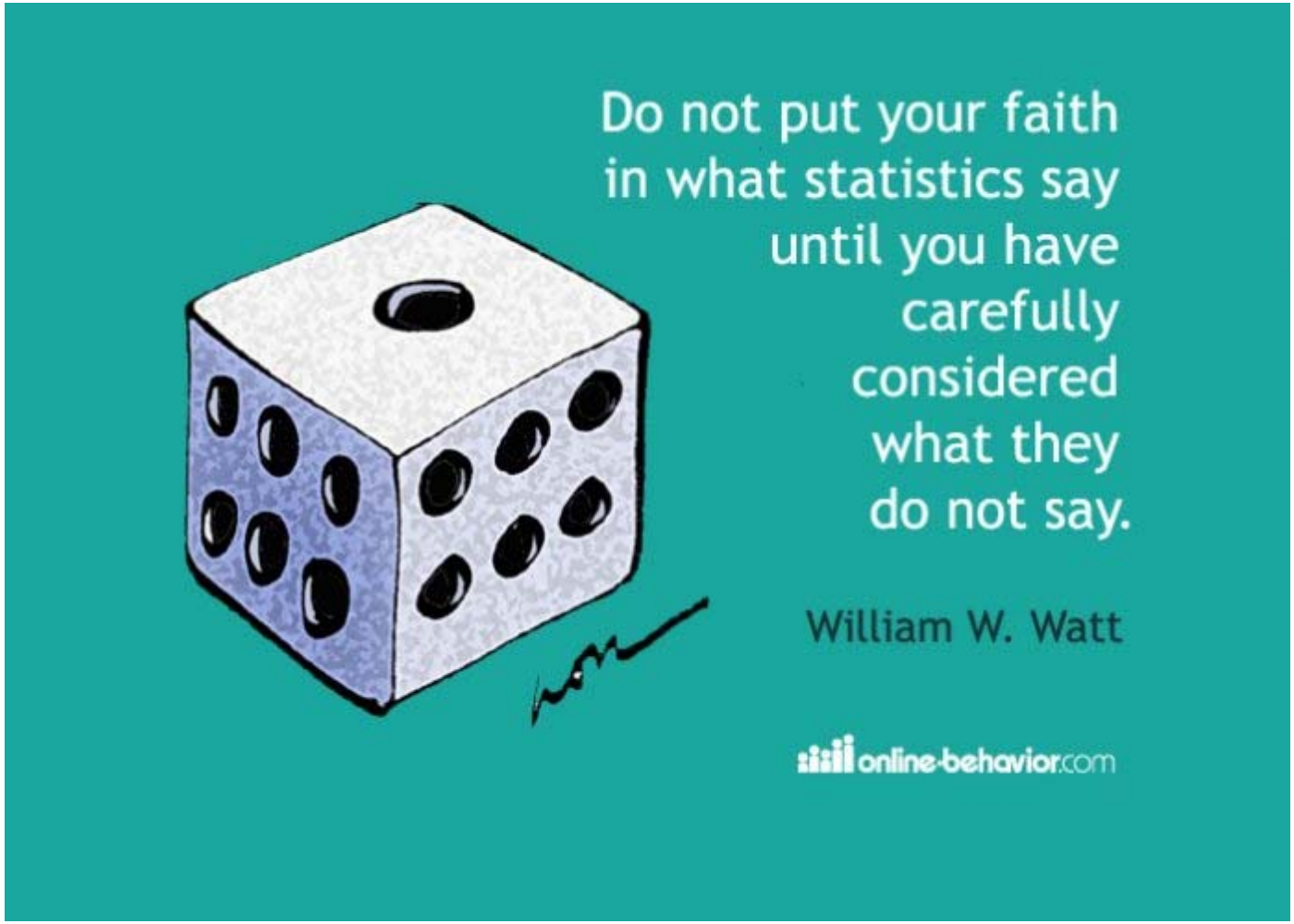
Sampling 5 KHz

60” = 300.000 punti



	Time(X1)	Ch0(Y#)
Long Name		Vmemb
Units	ms	mV
Comments		Vmemb
Sparklines		
1	139948.8125	-40.79712
2	139949	-40.7666
3	139949.20313	-40.9497
4	139949.40625	-40.70556
5	139949.60938	-40.64453
6	139949.8125	-40.61401
7	139950	-40.7666
8	139950.20313	-40.70556
9	139950.40625	-40.67505
10	139950.60938	-40.67505
11	139950.8125	-40.58349
12	139951	-40.55297
13	139951.20313	-40.64453
14	139951.40625	-40.61401
15	139951.60938	-40.52246
16	139951.8125	-40.52246
17	139952	-40.64453


E
0
-20
-40
-60
-80
Membrane potential (mV)
*** (14)
Ba2+ 0.3 mM
CTL


Do not put your faith
in what statistics say
until you have
carefully
considered
what they
do not say.
William W. Watt
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