The Art of Making a Scientific Presentation

TIPS FOR PRESENTING

ARRIVE 10 MINUTES EARLY

CHECK THE MICROPHONE PRIOR TO STARTING

- **Check the sound (listen)**
- **Check for audience reception**

CHECK THE AV EQUIPMENT PRIOR TO STARTING

TIPS FOR PRESENTING

NO UHS, PAUSE

LOOK AT YOUR AUDIENCE
DESCRIBE YOUR SLIDES-the title, the x and y axes

LOOK AT YOUR SLIDES, POINT TO YOUR DATA
AND WHAT YOU ARE REFERING TO-
DON'T MAKE THE LISTENER TRY TO FIGURE OUT WHAT YOU ARE REFERING TO.

AVOID COMPLICATED SLIDES.

TIPS FOR PRESENTING

KEEP THE WORD SLIDES TO A MINIMUM OF WORDS.

A 60 MINUTE TALK SHOULD LAST FOR NO MORE THAN 50 MINUTES.

A 10 MINUTE TALK IS A 10 MINUTE TALK.

LEAVE TIME FOR QUESTIONS.

THANK YOUR AUDIENCE AND ASK FOR QUESTIONS.

Practice

Practice

Practice

Practice

TIPS FOR PRESENTING

The pros and cons of Powerpoint

Pros;

- **Can make very colorful and fancy slides**
- **Can animate slides**
- **Can wait till the very last minute to make slides**
- **Can spell check.**

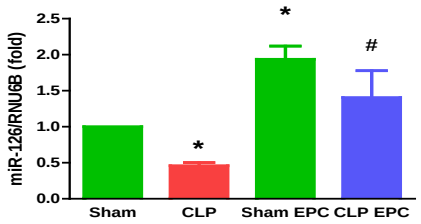
Cons:

- **Can make very colorful and fancy slides**
- **Can animate slides**
- **Can wait till the very last minute to make slides**

Fill the slide with the figure/graph

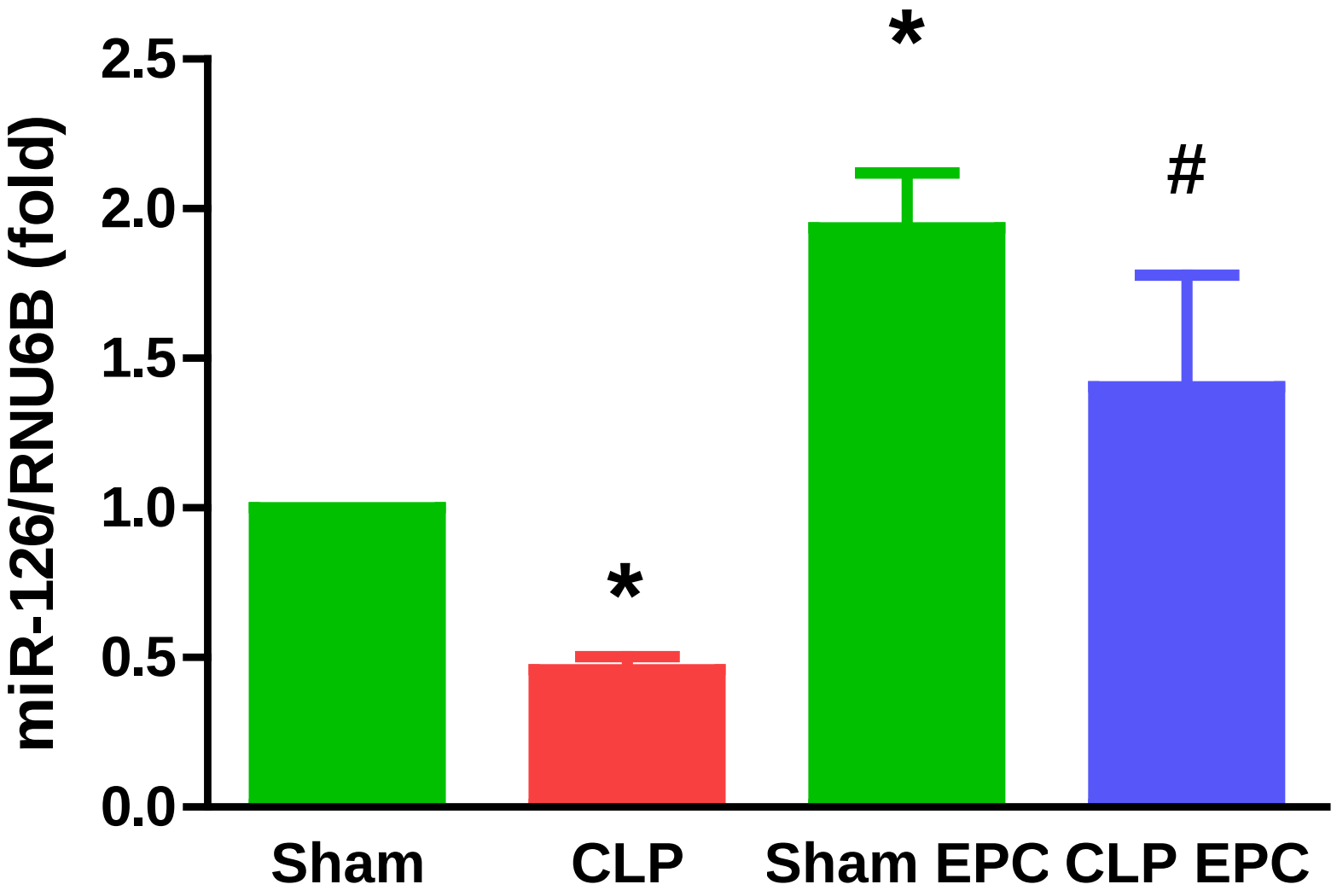
Sit in the back of the auditorium and go through your slides.

Effects of EPCs on CLP-induced Plasma miR-126 Expression



**** p<0.05 compared to sham group. # P<0.05 compared to CLP group. N=3-6 mice/group.***

Effects of EPCs on CLP-induced Plasma miR-126 Expression



** p<0.05 compared to sham group. # P<0.05 compared to CLP group. N=3-6 mice/group.*

TIPS FOR PRESENTING

CHOOSE YOUR FONT SIZE AND COLORS CAREFULLY

SIT IN THE BACK OF THE AUDITORIUM AND MAKE SURE THAT YOU CAN SEE THE WORDS

MAKING A SCIENTIFIC PRESENTATION TIMES -24

MAKING A SCIENTIFIC PRESENTATION HELVETICA-24

MAKING A SCIENTIFIC PRESENTATION HELVETICA
MAKING A SCIENTIFIC PRESENTATION TIMES BOLD-24

MAKING A SCIENTIFIC PRESENTATION-24

Making a scientific presentation -12

MAKING A SCIENTIFIC PRESENTATION TIMES

MAKING A SCIENTIFIC PRESENTATION TIMES

MAKING A SCIENTIFIC PRESENTATION HELVETICA

MAKING A SCIENTIFIC PRESENTATION HELVETICA BOLD

MAKING A SCIENTIFIC PRESENTATION TIMES BOLD

MAKING A SCIENTIFIC PRESENTATION HELVETICA BOLD

MAKING A SCIENTIFIC PRESENTATION TIMES

MAKING A SCIENTIFIC PRESENTATION TIMES

MAKING A SCIENTIFIC PRESENTATION HELVETICA

MAKING A SCIENTIFIC PRESENTATION HELVETICA BOLD

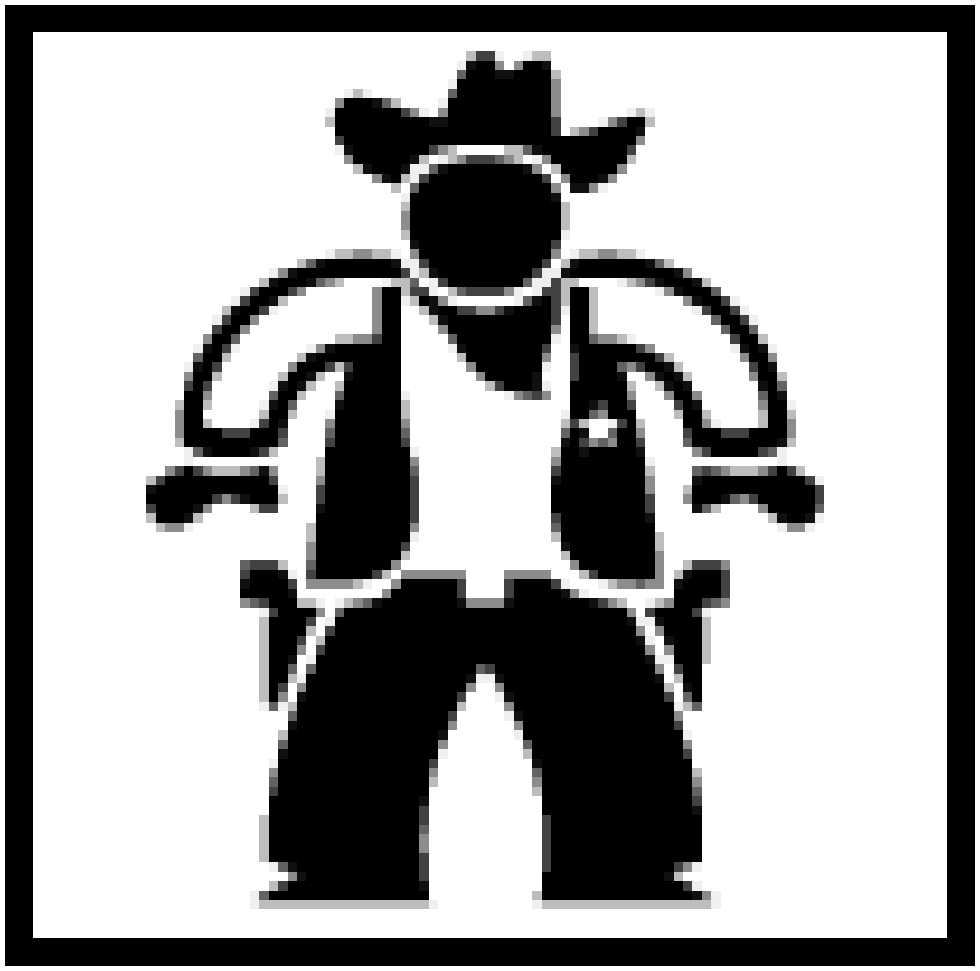
MAKING A SCIENTIFIC PRESENTATION TIMES BOLD

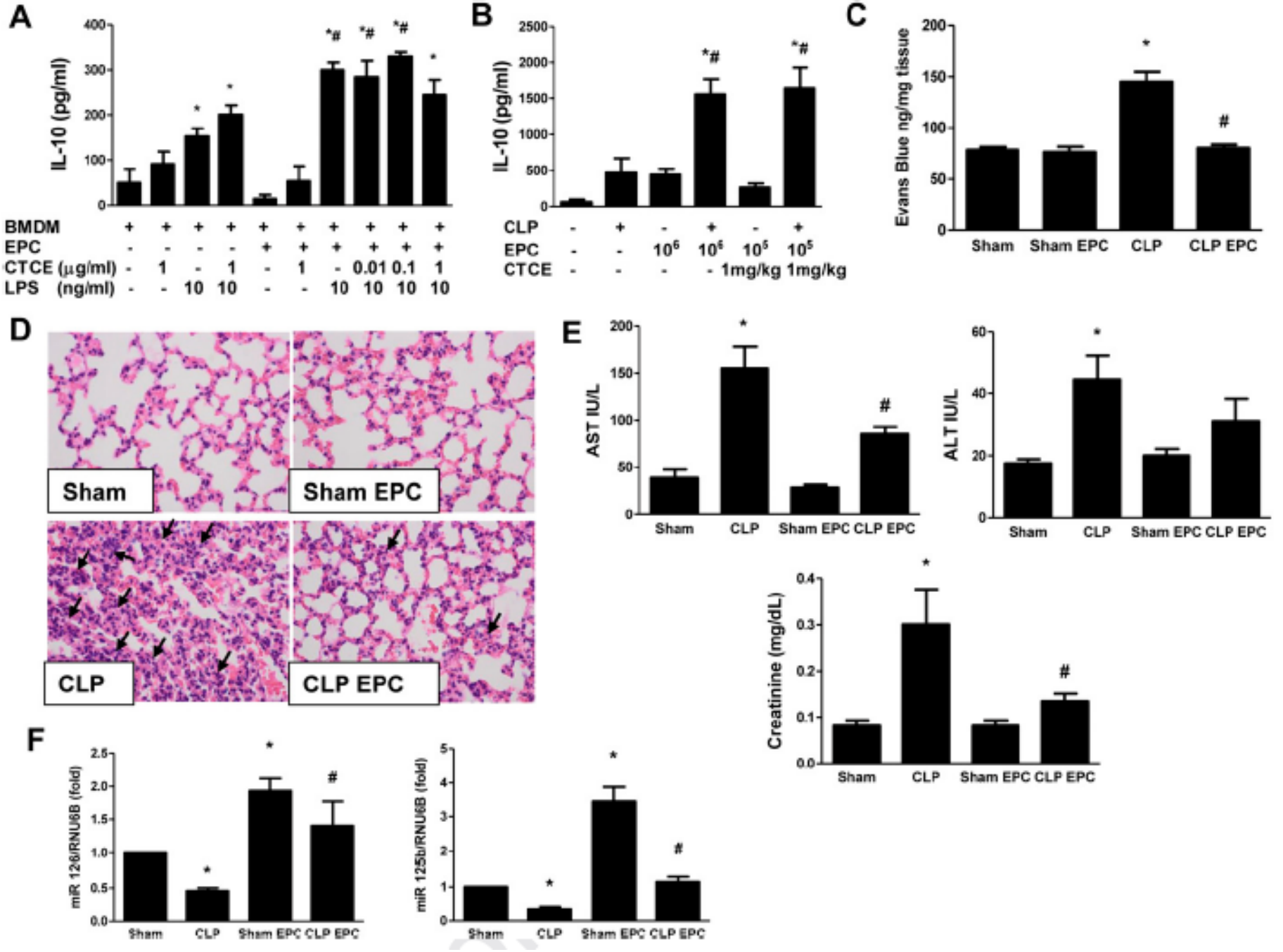
MAKING A SCIENTIFIC PRESENTATION HELVETICA BOLD

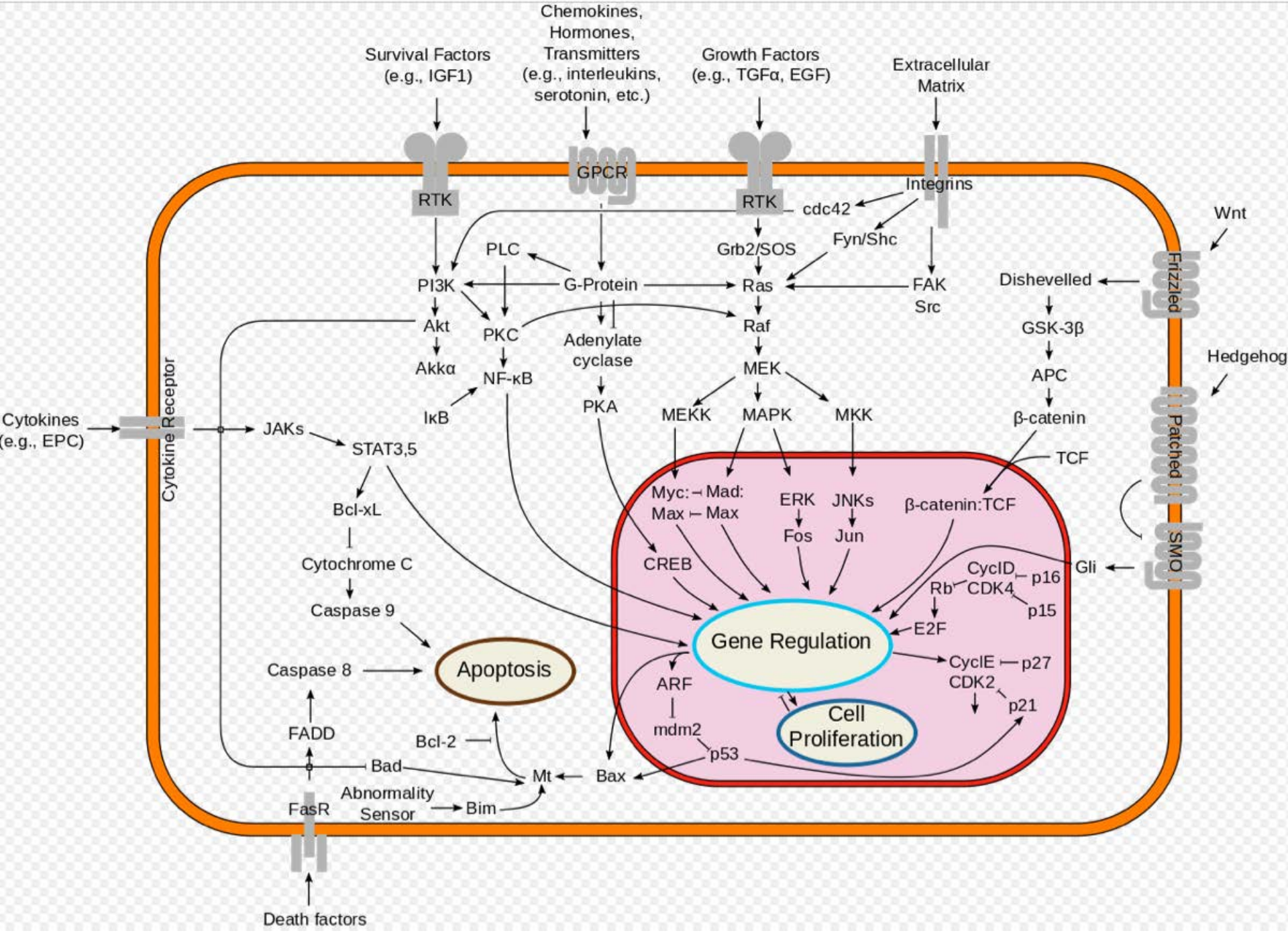
MAKING A SCIENTIFIC PRESENTATION HELVETICA BOLD

DO NOTS

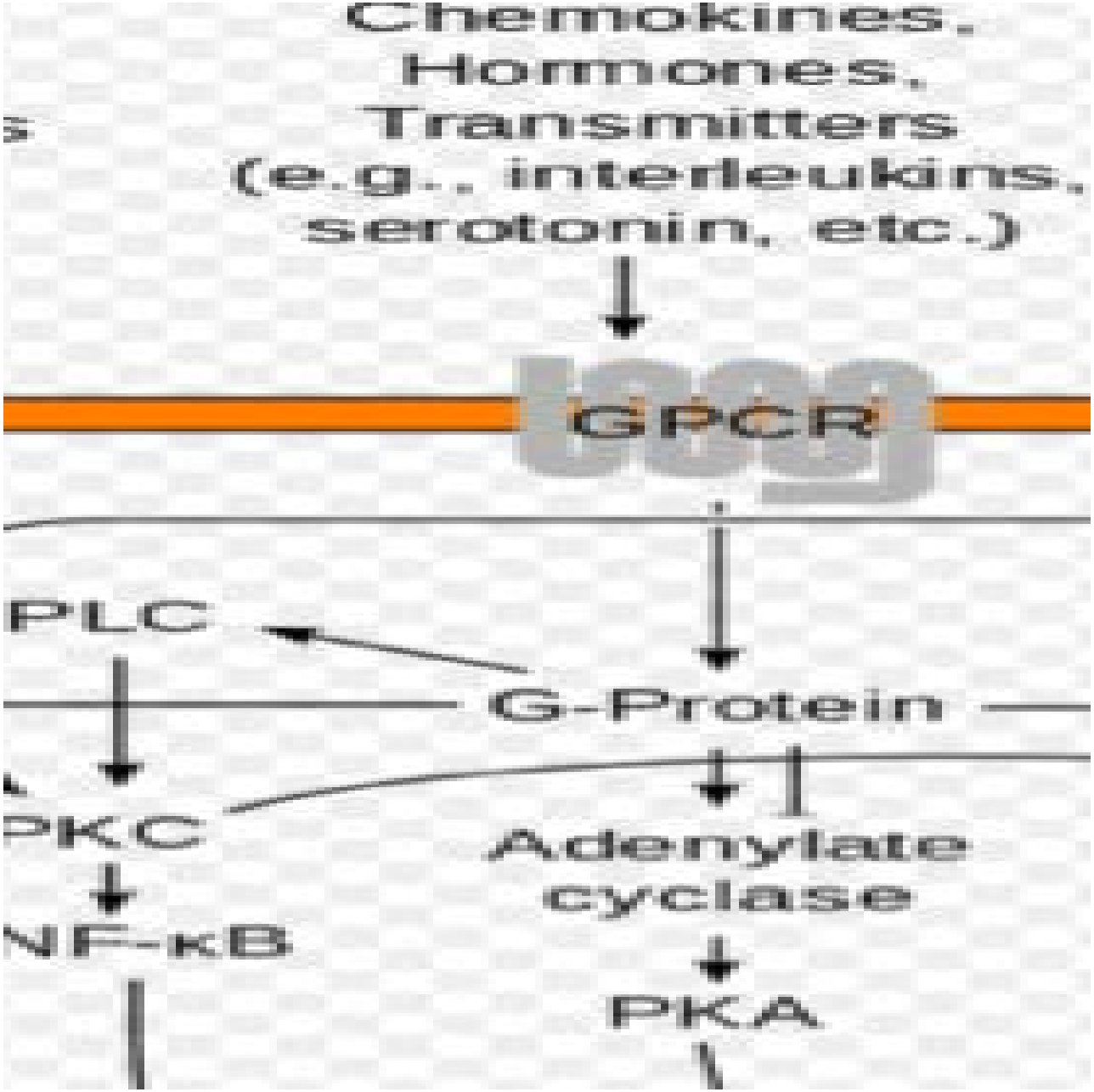
You are not cowboys and cowgirls!



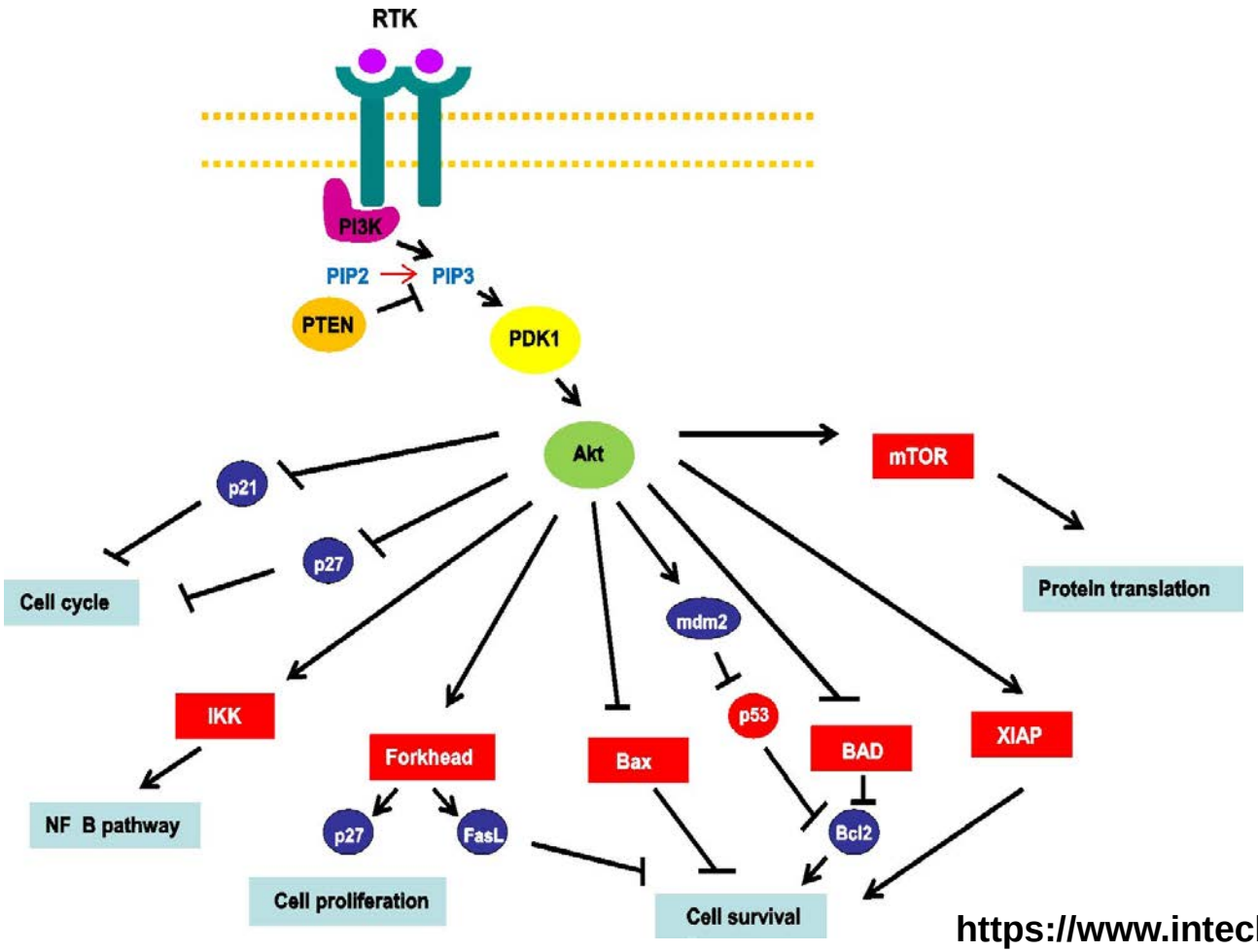

A
IL-10 (pg/ml)
400
300
200
100
0
*
*
*#
*#
*#
*
BMDM + + + + + + + + + +
EPC - - - - + + + + + +
CTCE (μg/ml) - 1 - 1 - 1 - 0.01 0.1 1
LPS (ng/ml) - - 10 10 - - 10 10 10 10
B
IL-10 (pg/ml)
2500
2000
1500
1000
500
0
*#
*#
CLP - + - + - +
EPC - - 10^6 10^6 10^5 10^5
CTCE - - - - 1mg/kg 1mg/kg
C
Evans Blue ng/mg tissue
200
150
100
50
0
*
#
Sham
Sham EPC
CLP
CLP EPC
D
Sham
Sham EPC
CLP
CLP EPC
E
AST IU/L
200
150
100
50
0
*
#
Sham
CLP
Sham EPC
CLP EPC
ALT IU/L
60
40
20
0
*
Sham
CLP
Sham EPC
CLP EPC
Creatinine (mg/dL)
0.4
0.3
0.2
0.1
0.0
*
#
Sham
CLP
Sham EPC
CLP EPC
F
miR 126/RNU6B (fold)
2.5
2.0
1.5
1.0
0.5
0.0
*
*
#
Sham
CLP
Sham EPC
CLP EPC
miR 125b/RNU6B (fold)
5
4
3
2
1
0
*
*
#
Sham
CLP
Sham EPC
CLP EPC


Survival Factors
(e.g., IGF1)
Chemokines,
Hormones,
Transmitters
(e.g., interleukins,
serotonin, etc.)
Growth Factors
(e.g., TGFα, EGF)
Extracellular
Matrix
RTK
GPCR
RTK
Integrins
cdc42
Fyn/Shc
Grb2/SOS
PLC
PI3K
G-Protein
Ras
FAK
Src
Wnt
Frizzled
Dishevelled
GSK-3β
APC
β-catenin
TCF
Hedgehog
Patched
SMO
Gli
Akt
PKC
Adenylate
cyclase
Raf
Akkα
NF-κB
MEK
IκB
PKA
MEKK
MAPK
MKK
Cytokines
(e.g., EPC)
Cytokine Receptor
JAKs
STAT3,5
Bcl-xL
Cytochrome C
Caspase 9
Caspase 8
Apoptosis
FADD
Bcl-2
Bad
Mt
Bax
FasR
Abnormality
Sensor
Bim
Death factors
Myc:
Max
Mad:
Max
ERK
Fos
JNKs
Jun
β-catenin:TCF
CREB
CycID
Rb
CDK4
p16
p15
E2F
Gene Regulation
CycIE
CDK2
p27
p21
ARF
mdm2
p53
Cell
Proliferation

GPCR signaling pathway



The PI3K/AKT pathway



https://www.intechopen.com/books/apoptosis-and-medicine/cell-death-and-cancer-novel-therapeutic-strategies

DON'T DO THIS

TP receptor	Stress fibers % positive
Wild-type	90% (389)
pcDNA3	10%* (132)
Wild-type+SQ29,548	39%* (128)
L222N	15%* (80)
L222A	33%* (51)
L222I	97% (34)
C223A	84% (163)
H227A	95% (41)
E240A	67%* (70)
E242A	64%* (119)
R235A	85% (40)
R237A	92% (39)
D238A	84% (51)
Δ323-343	84% (49)

Table 1. Stress fiber formation for wild-type and mutant TP receptors.

TIPS FOR PRESENTING

HOW MANY SLIDES SHOULD YOU HAVE FOR A TALK?

10 MINUTE TALK 10-12 DATA SLIDES

50 MINUTE TALK ~ 40 SLIDES

The KISS Principle

KEEP IT SIMPLE STUPID

TELL A STORY

TELL THEM WHAT YOU ARE GOING TO TELL THEM

INTRODUCTION AND BACKGROUND

TELL THEM

DATA

JUST ONE STORY

Develop a thread throughout-bridge the slides/data.

TELL THEM WHAT YOU TOLD THEM

SUMMARY AND CONCLUSIONS

INTRODUCTION/BACKGROUND

KEEP IT SUCCINCT AND TO THE POINT

OBJECTIVE/HYPOTHESIS

FOCUS THE LISTENER

METHODS

EXPLAIN THE EXPERIMENTAL PARADIGM

PRESENTING YOUR DATA

DATA SLIDES SHOULD HAVE THE FOLLOWING;

A TITLE- Describes the slide

X & Y AXES CLEARLY LABELLED FOR GRAPHS

MEAN AND SEM OR STANDARD DEVIATION
N
P VALUES

DESCRIBE YOUR SLIDES

BRIDGE THE PRESENTATION OF YOUR SLIDES!!
DON'T JUST SHOW THE SLIDES

Rigor and reproducibility

Mind your p’s and n’s.

Affinity and density of wild type TP receptors in HEK 293 cells

	K_d (nM)	B_{max} (pmoles/mg)
Wild type (n=26)	3.3 ± 0.2	13 ± 2

Affinity and density of wild type and mutant TP receptors in HEK 293 cells

	K_d (nM)	B_{max} (pmoles/mg)
Wild type (n=26)	3.3 ± 0.2	13 ± 2
L222N (n=5)	1.1 ± 0.4*	0.5 ± 0.1*
L222A (n=7)	1.8 ± 0.2*	2.5 ± 0.6*
L222I (n=6)	1.7 ± 0.2*	4.2 ± 0.9+

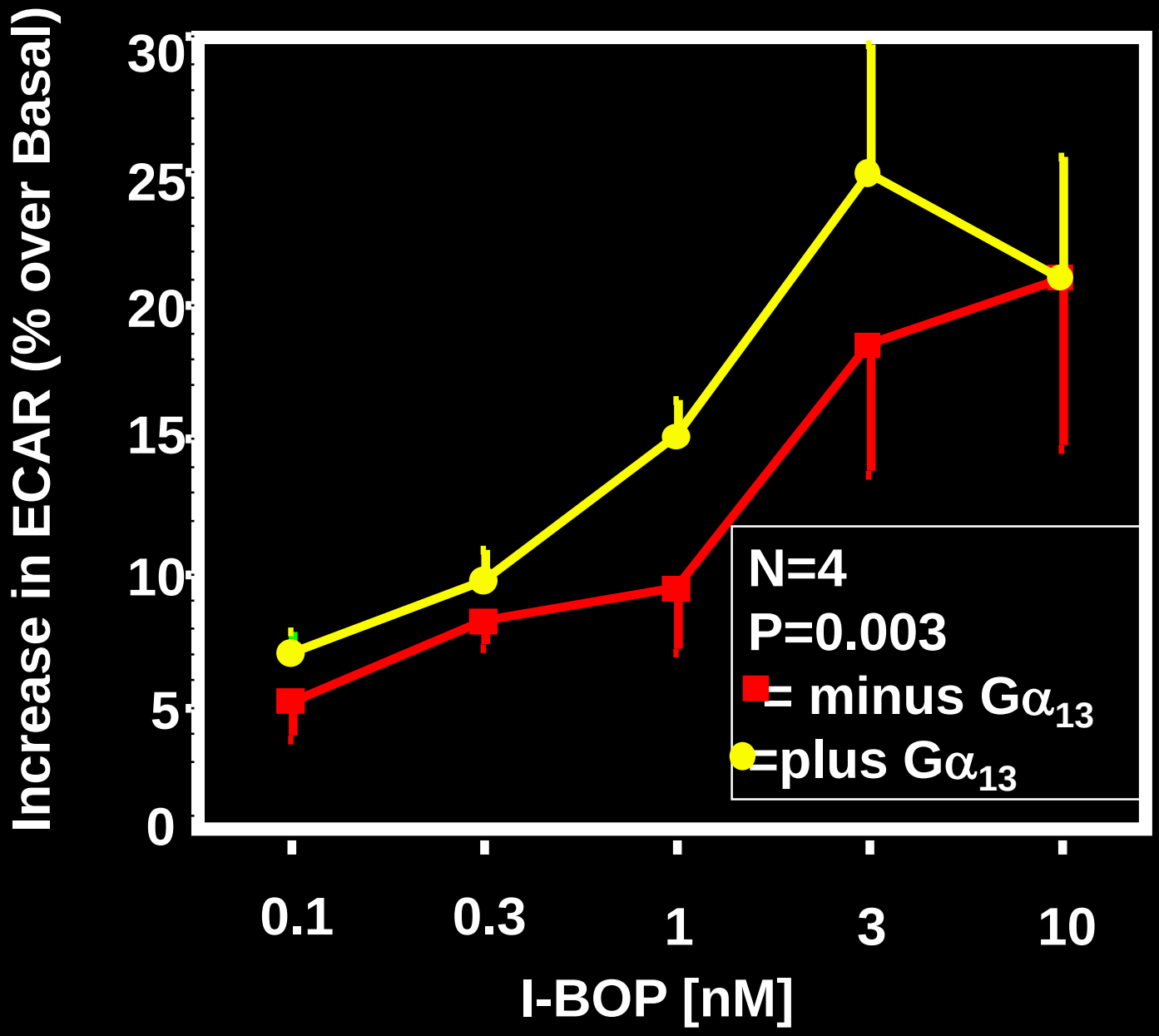
* Compared to WT, P<0.01
+ Compared to WT, P<0.05

Affinity and density of wild type and mutant TP receptors in HEK 293 cells

	K_d (nM)	B_{max} (pmoles/mg)
Wild type (n=26)	3.3 ± 0.2	13 ± 2
L222N (n=5)	1.1 ± 0.4*	0.5 ± 0.1*
L222A (n=7)	1.8 ± 0.2*	2.5 ± 0.6*
L222I (n=6)	1.7 ± 0.2*	4.2 ± 0.9+
C223A (n=3)	2.4 ± 0.1*	4.7 ± 2.3+
C223S (n=6)	2.0 ± 0.2*	2.8 ± 0.4 +

* Compared to WT, P<0.01
+ Compared to WT, P<0.05

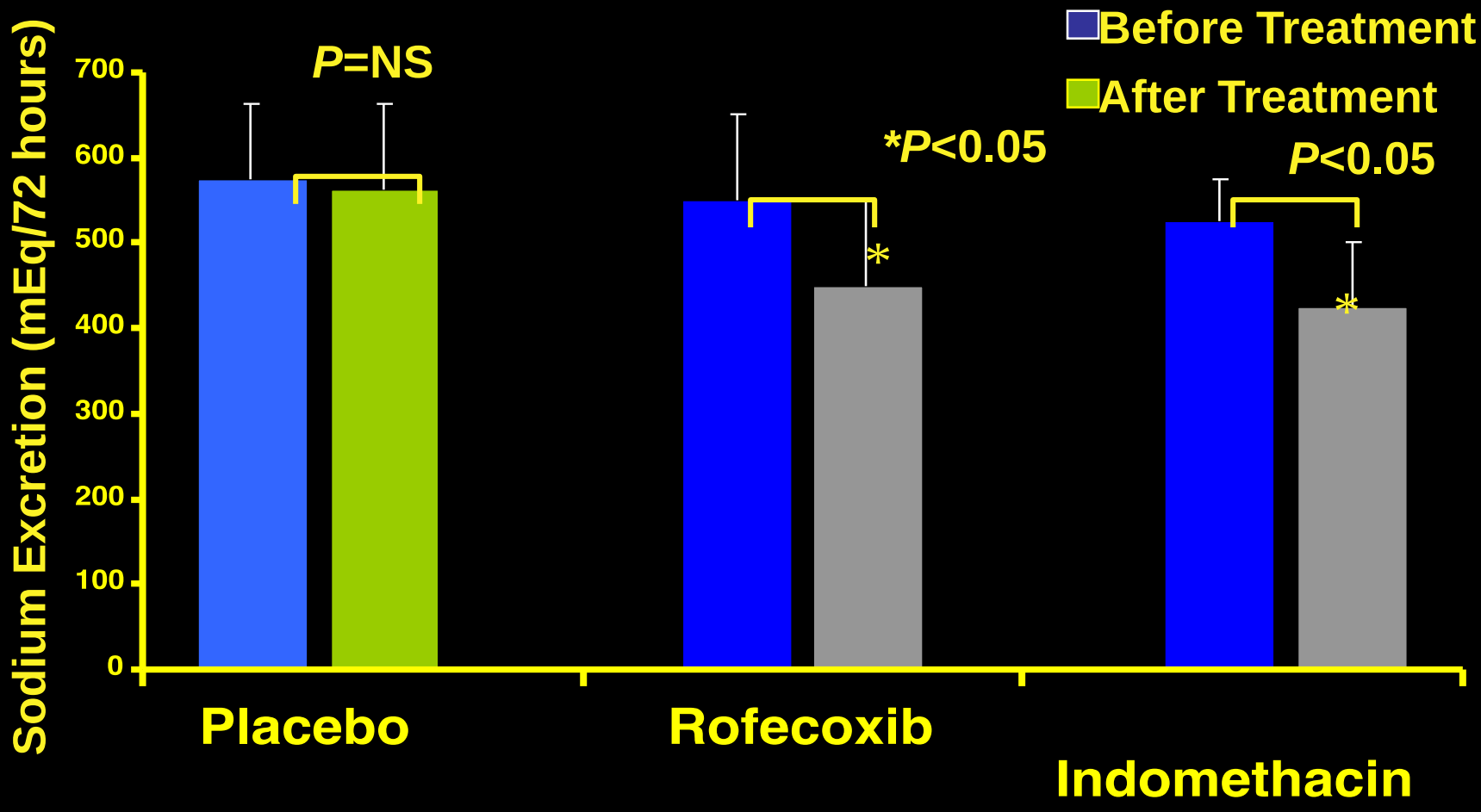
ECAR FOR ALPHA ISOFORM OF TXA_2 RECEPTOR



QUOTING OTHER SCIENTISTS' PUBLICATIONS

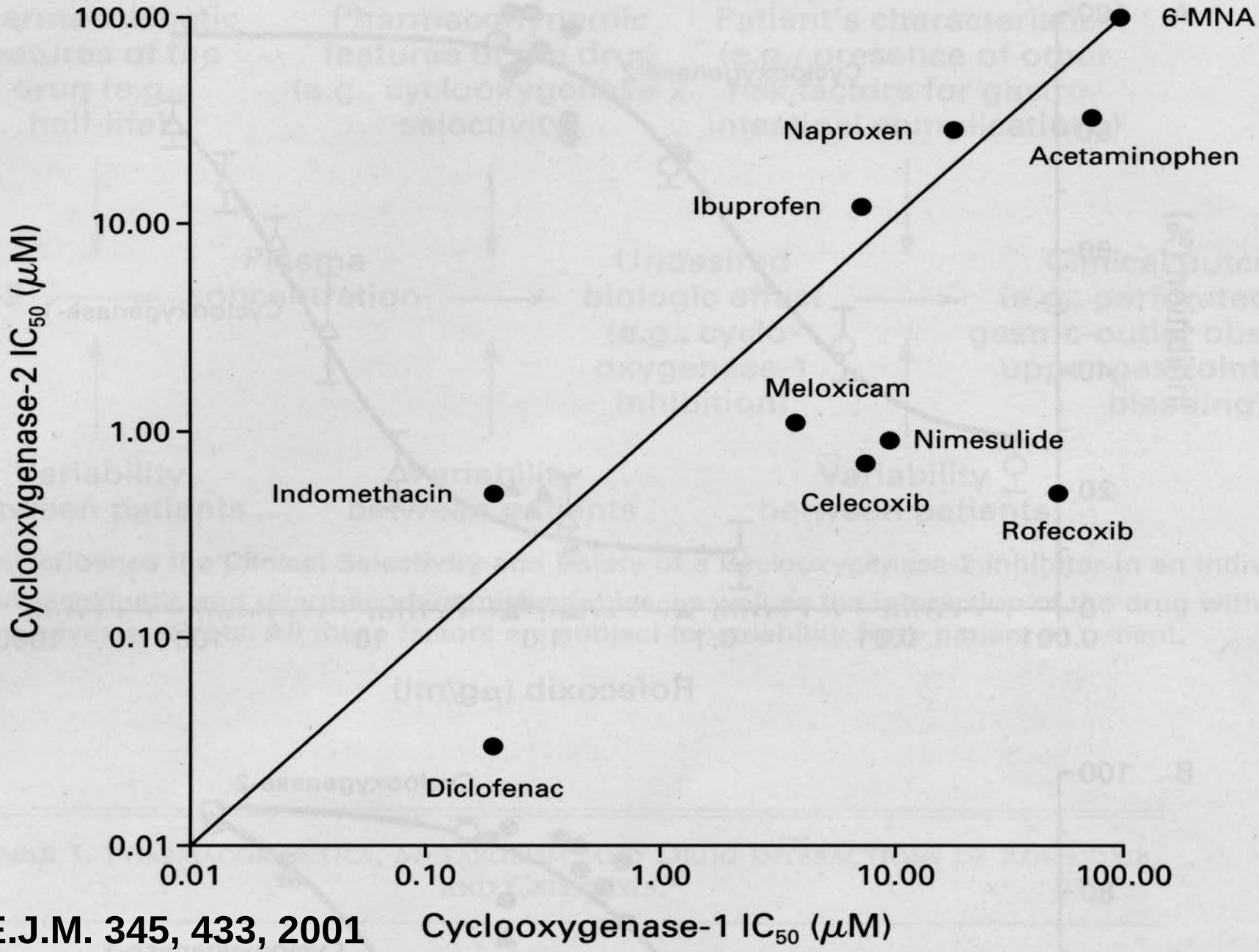
GIVE THE FULL REFERENCE AT THE BOTTOM OF THE SLIDE

Renal Effects of Rofecoxib: 72 Hour Sodium Excretion



Catella-Lawson et al. *J Pharmacol Exp Ther*. 1999;289:735-741.

Comparison of various drugs to inhibit COX-1 and COX-2



N.E.J.M. 345, 433, 2001

SUMMARY

LIST THE MOST IMPORTANT OBSERVATIONS

CONCLUSION

SPECULATION, SIGNIFICANCE OF THE OBSERVATIONS AND/OR FUTURE DIRECTIONS

ACKNOWLEDGEMENTS

DON’T FORGET TO THANK THE AUDIENCE

ASK IF THERE ARE ANY QUESTIONS