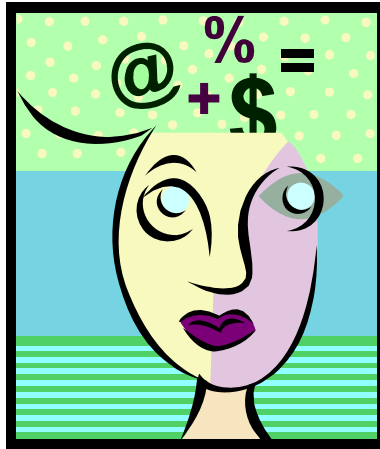
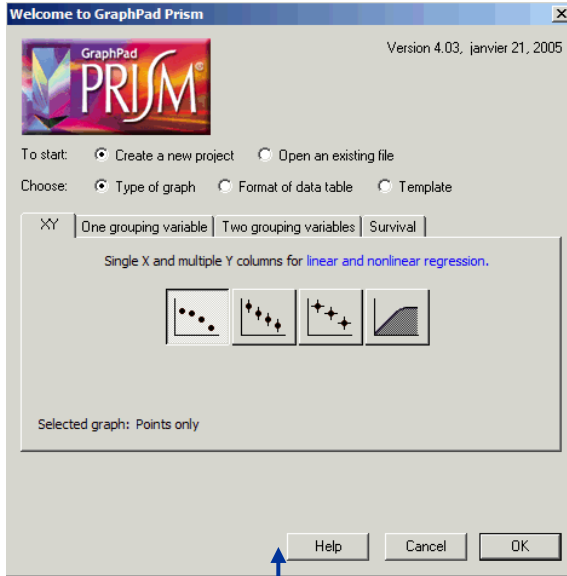


# Graph Pad: des graphiques faciles et informatifs

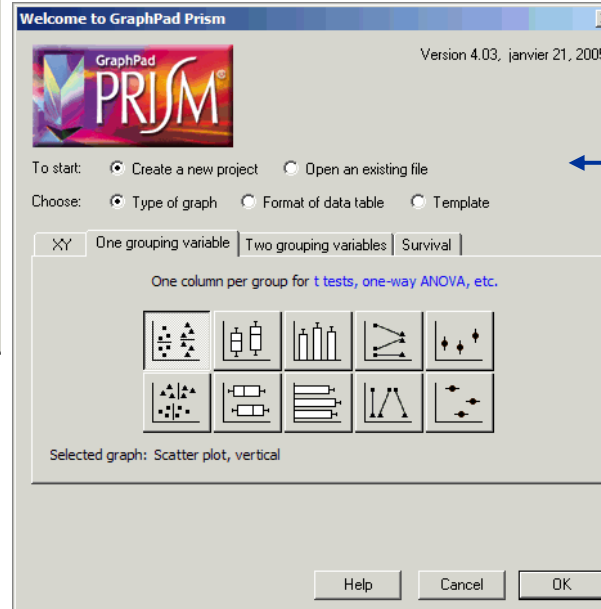


# Choisir le type de graphique



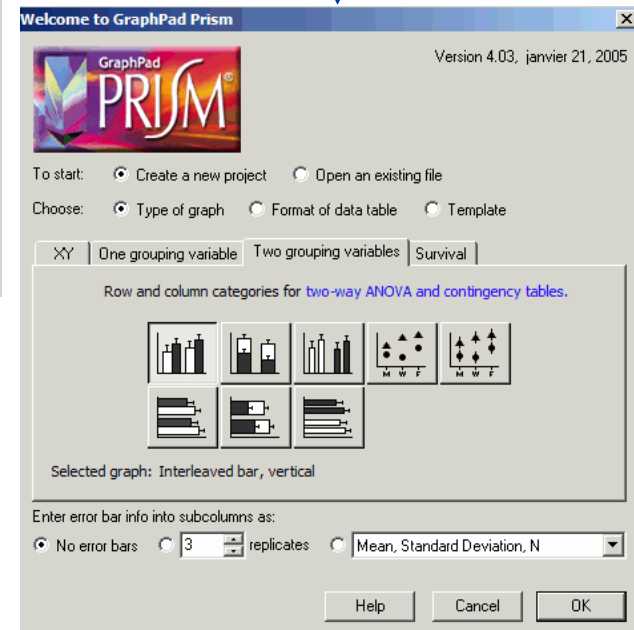
**Grappe XY:  
variables continues**

**Influence du  
temps ou de la  
conc. sur l'activité**

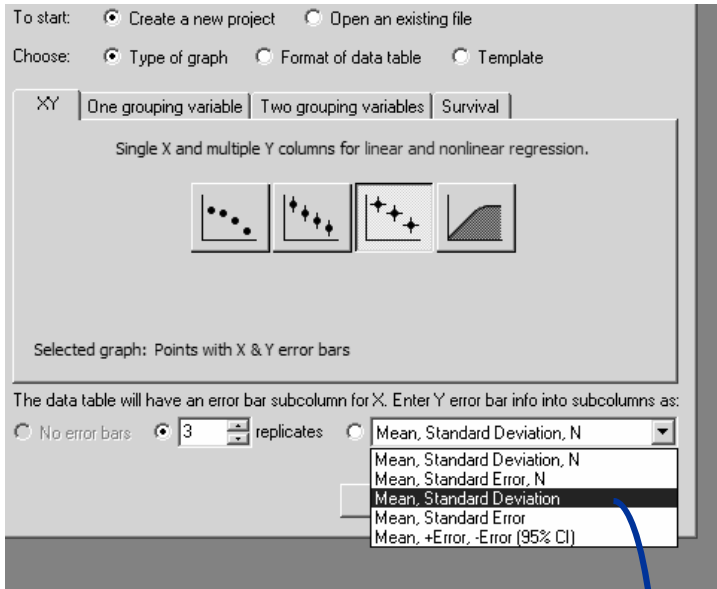


**Influence de  
divers inhibiteurs  
sur la capture**

**Grappe en barres :  
variables discontinues**

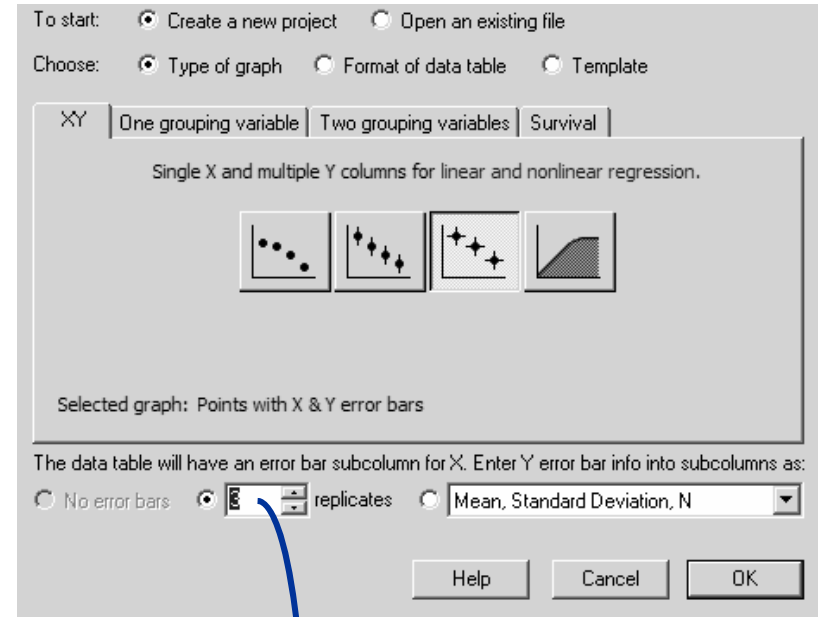


# Choisir le format des données



**Moyenne et SD**  
(copy-paste depuis excel)

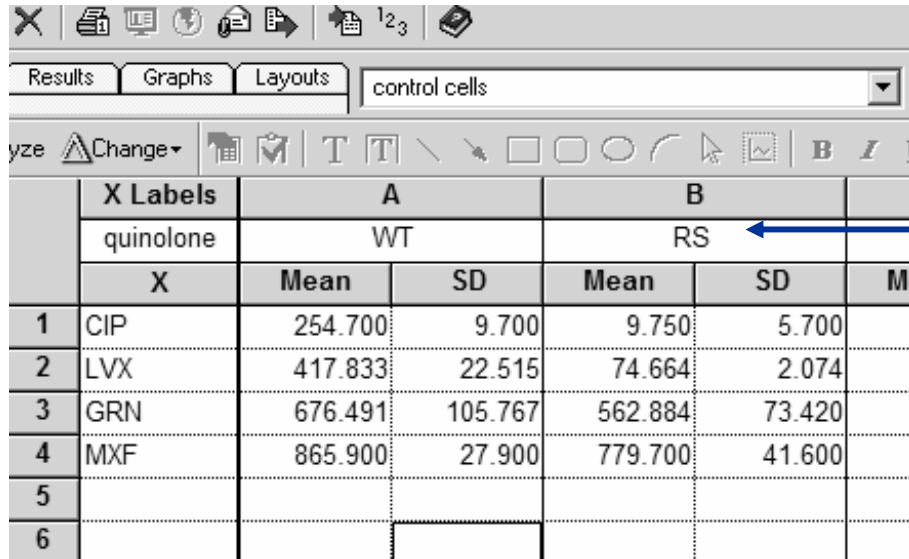
X Values	A		B	
X Title	Title		Title	
X	Mean	SD	Mean	SD



**Valeurs individuelles**

X Values	A			B		
X Title	Title			Title		
X	A:Y1	A:Y2	A:Y3	B:Y1	B:Y2	B:Y3

# Remplir la feuille de données

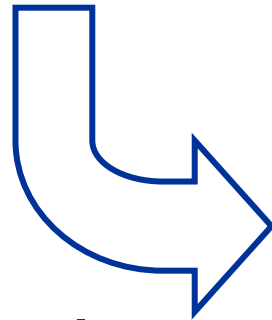
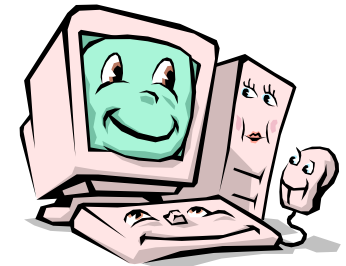


The screenshot shows the GraphPad Prism software interface. The 'control cells' window is active, displaying a data table. The table has columns for 'X Labels', 'A' (WT), and 'B' (RS). The rows represent different quinolone treatments: CIP, LVX, GRN, and MXF. The table includes columns for Mean and SD for each treatment group.

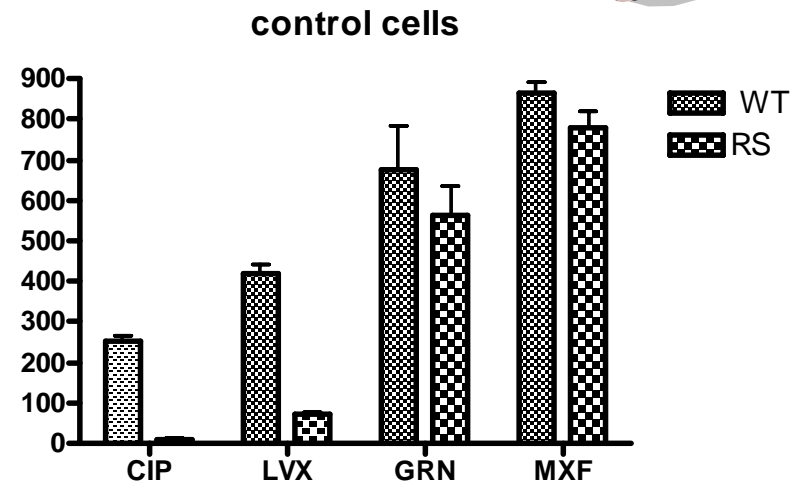
	X Labels	A		B	
		Mean	SD	Mean	SD
1	CIP	254.700	9.700	9.750	5.700
2	LVX	417.833	22.515	74.664	2.074
3	GRN	676.491	105.767	562.884	73.420
4	MXF	865.900	27.900	779.700	41.600
5					
6					

**Nommer**

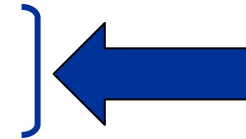
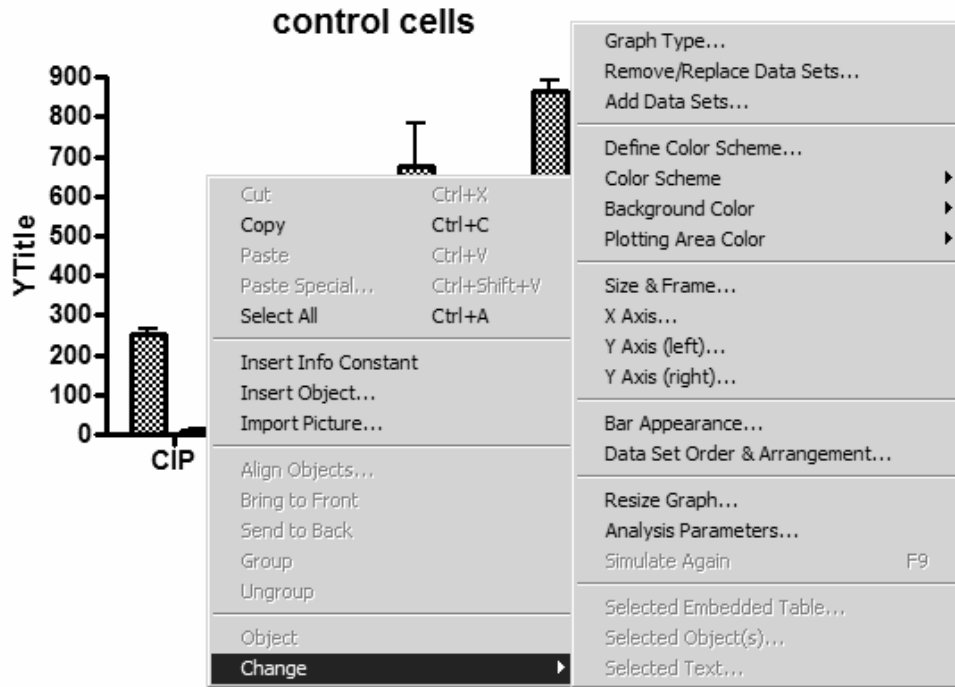
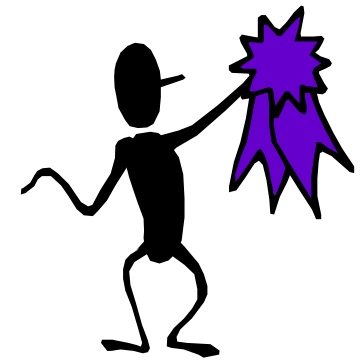
- la feuille
- les colonnes



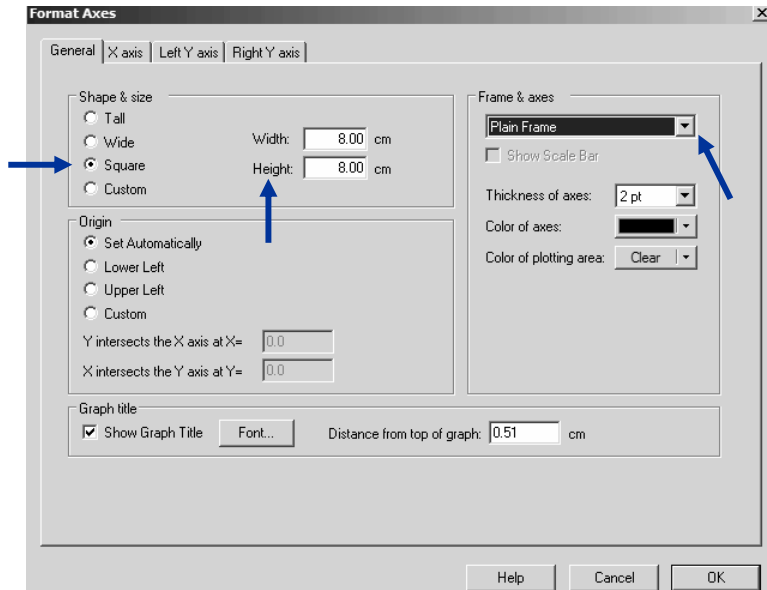
**Graphe automatique !**



# Améliorer le graphique ...

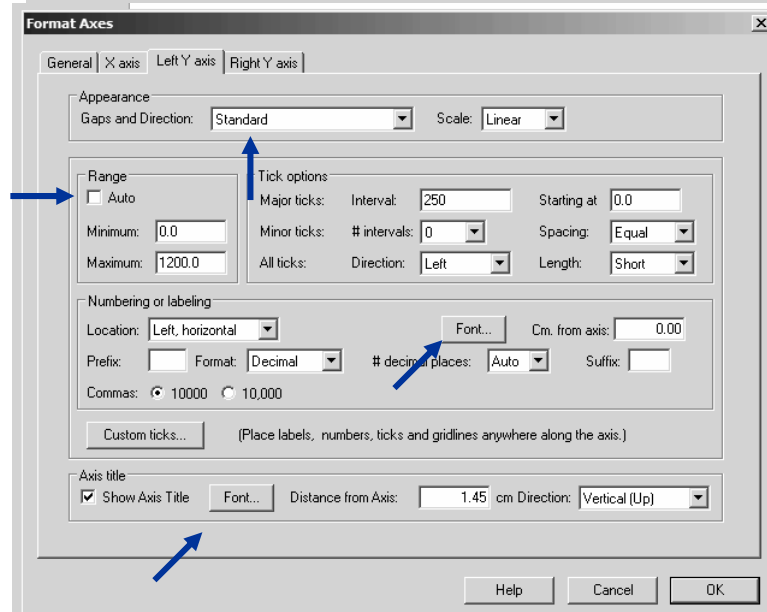


# Améliorer le graphique ...



## Graphe

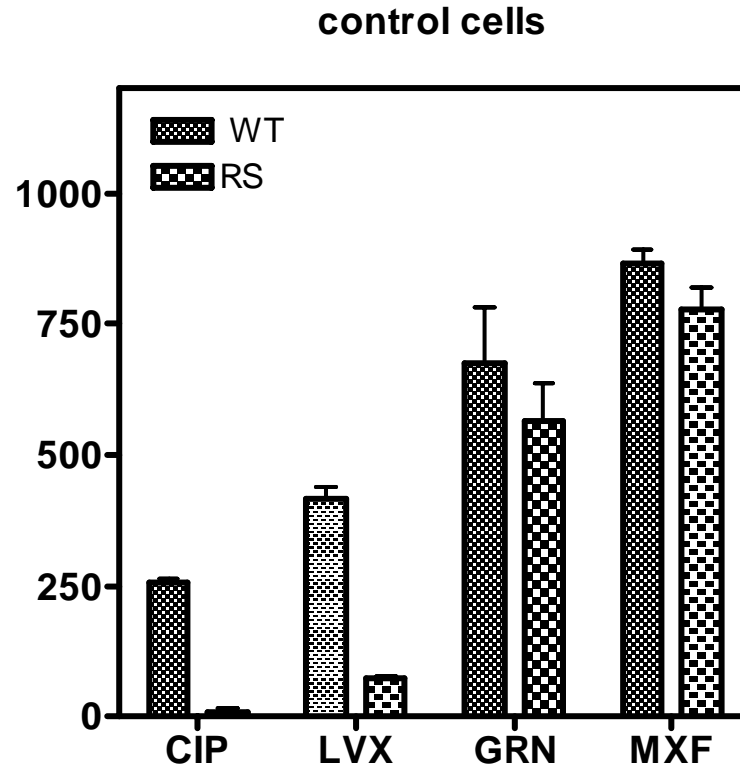
- carré, 8x 8 cm / 5 x 5 cm
- plain frame
- tickness of axes 2



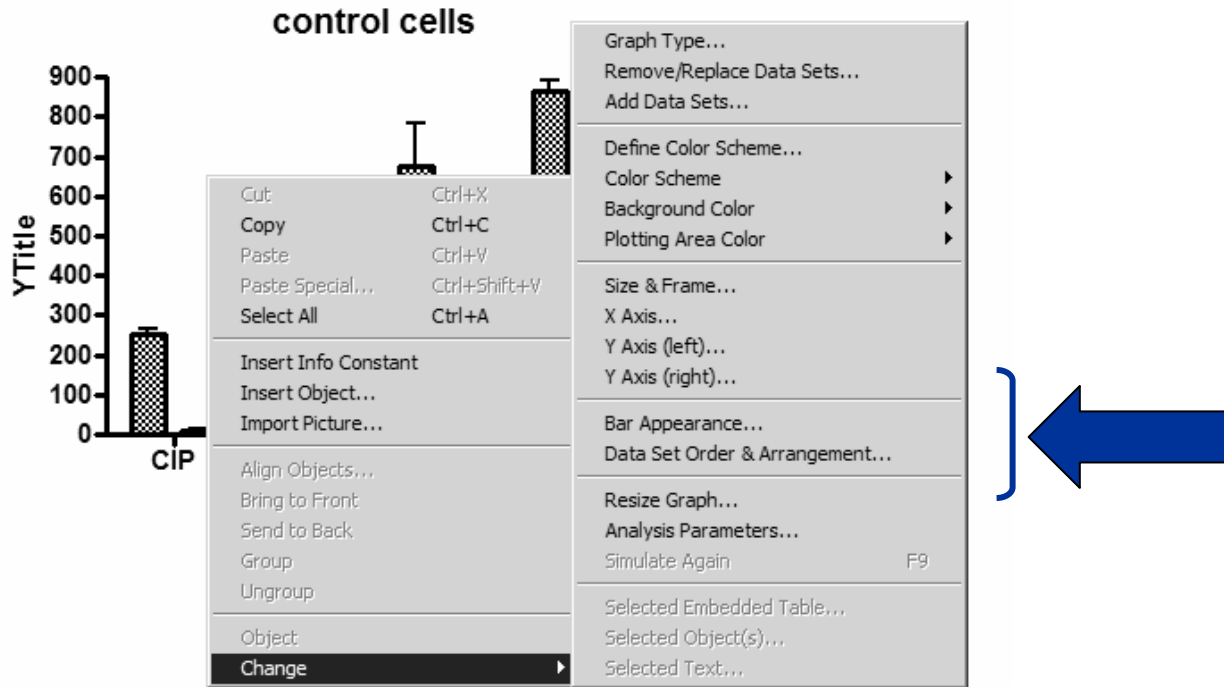
## Pour les axes:

- standard ou log
- choisir l'échelle et l'intervalle
- font : 14 pour l'échelle; 16 pour le titre de l'axe  
11 pour l'échelle; 12 pour le titre de l'axe

# Améliorer le graphique ...

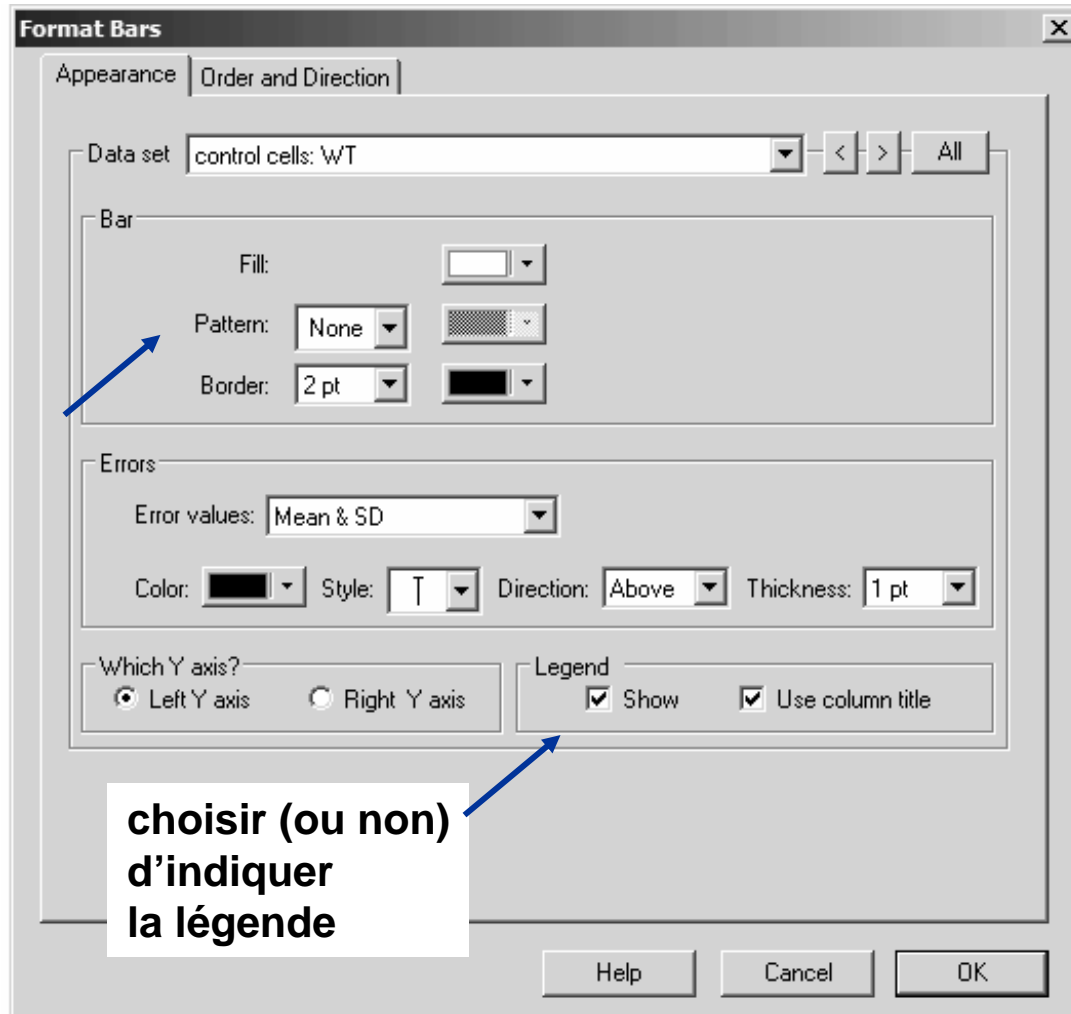


# Améliorer le graphique ...





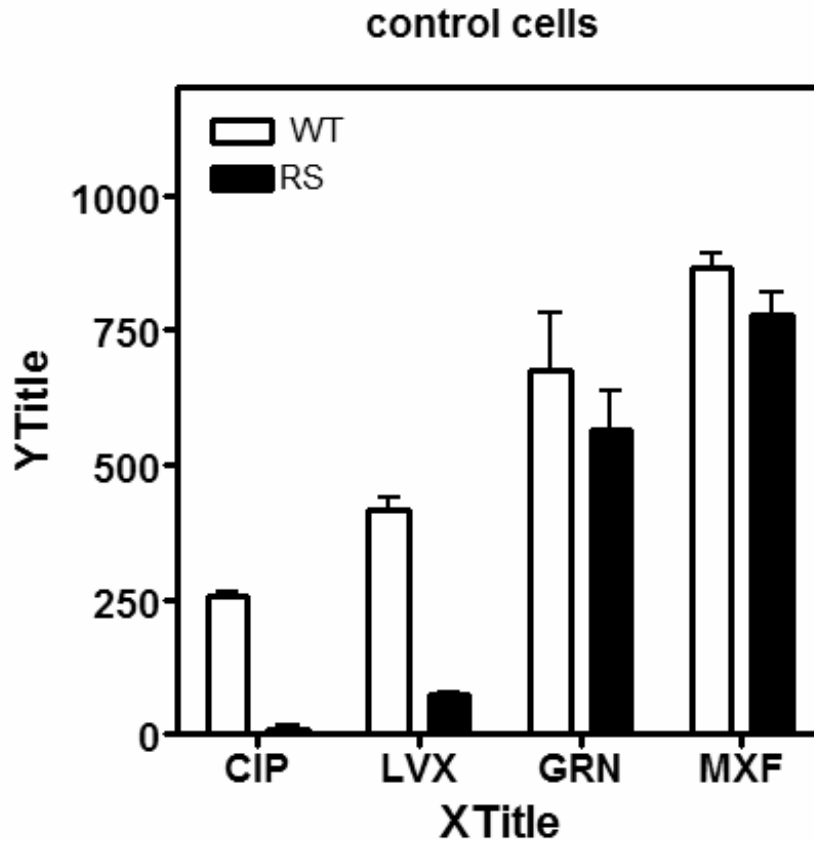
# Améliorer le graphique ...



choisir l'apparence  
et la couleur  
des barres

choisir (ou non)  
d'indiquer  
la légende

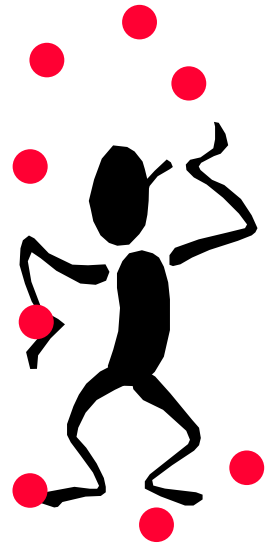
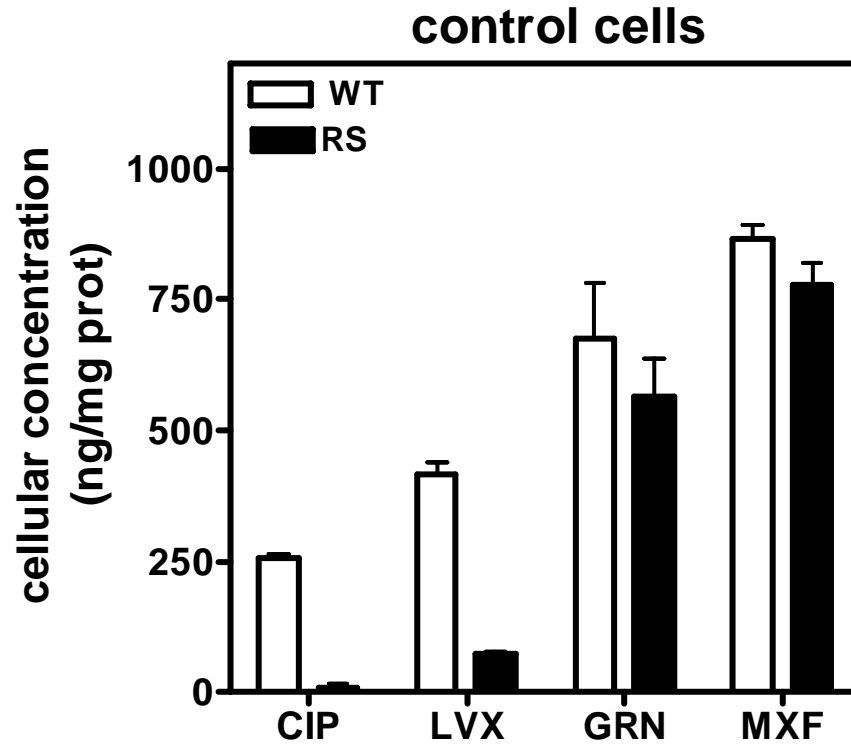
# Améliorer le graphique ...



Cliquer sur le texte  
pour indiquer  
le titre exact de l'axe



# Améliorer le graphique ...



# Faire d'autres graphes identiques ...

The screenshot shows the GraphPad Prism interface. The 'Data' tab is active, and the 'control cells' sheet is selected. A menu is open over the data table, with 'Duplicate Sheet with Family...' highlighted. The data table contains the following values:

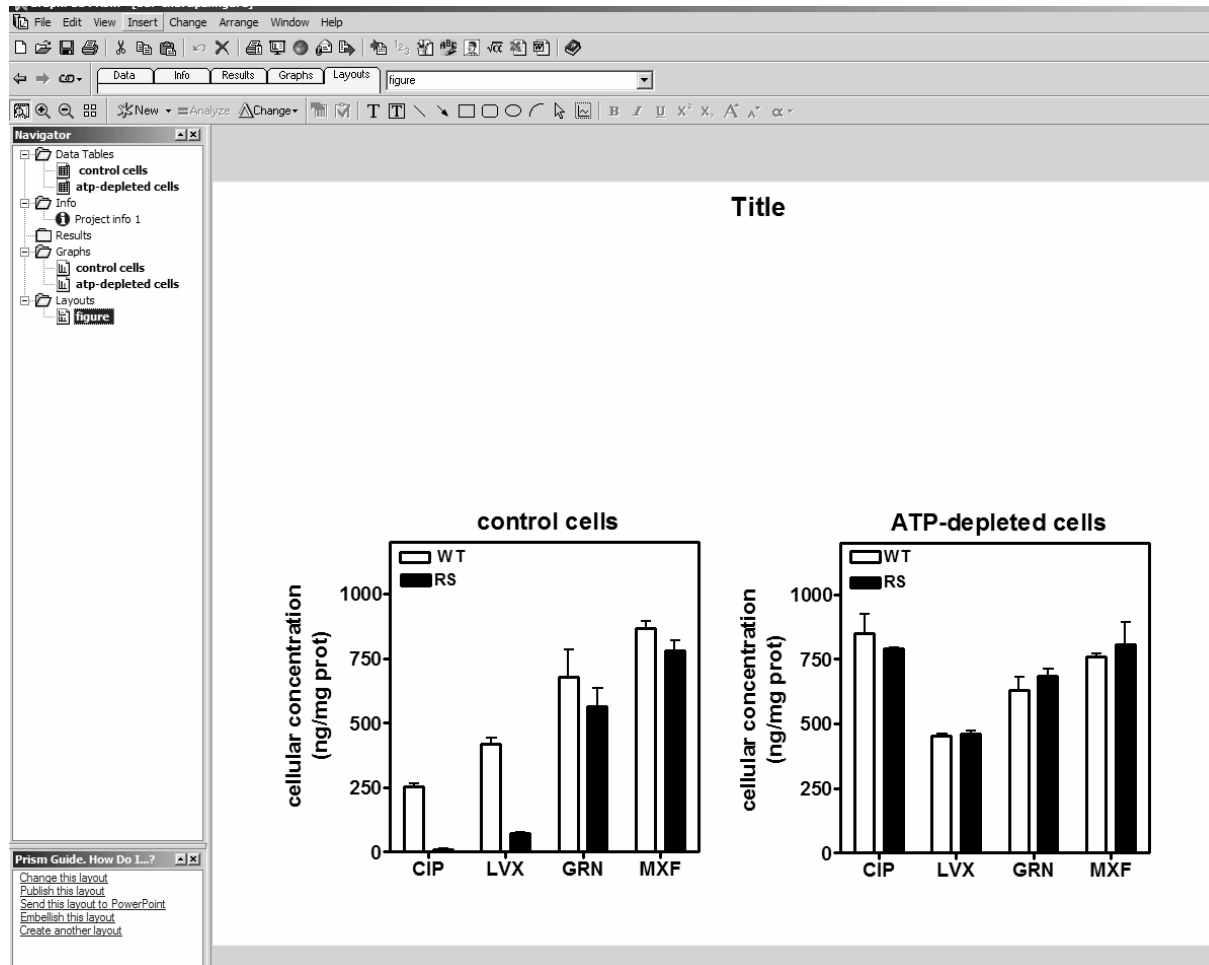
	A		B		
one	WT		RS		
	Mean	SD	Mean	SD	Mean
	254.700	9.700	9.750	5.700	
	417.833	22.515	74.664	2.074	
	676.491	105.767	562.884	73.420	
	865.900	27.900	779.700	41.600	

**Crée un nouveau tableau de données et un graphique identique au précédent, Il suffit de**

- renommer la nouvelle feuille
- changer les valeurs dans le tableau

**pour obtenir un nouveau graphe exactement semblable au premier ...**

# Faire d'autres graphes identiques ...

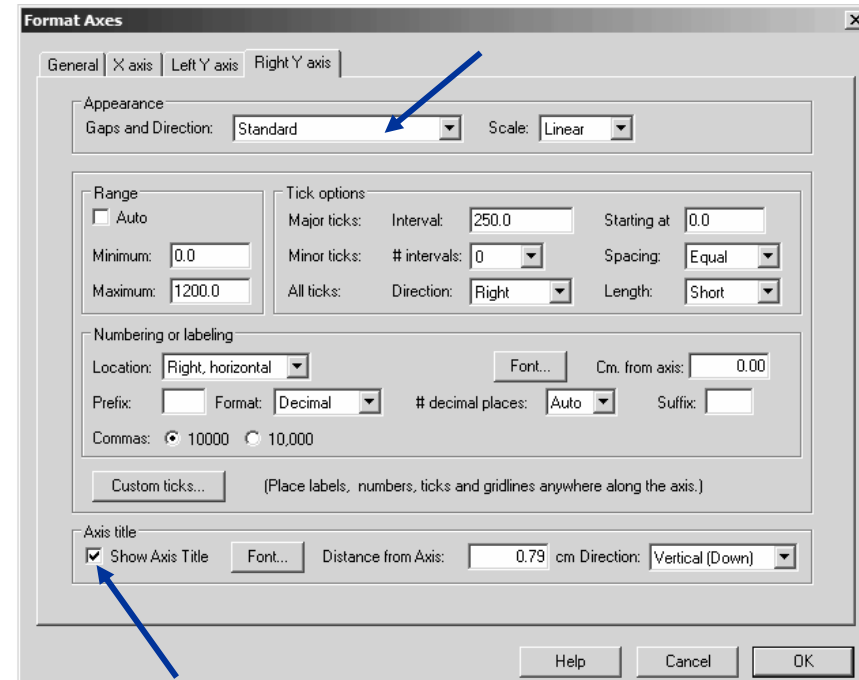
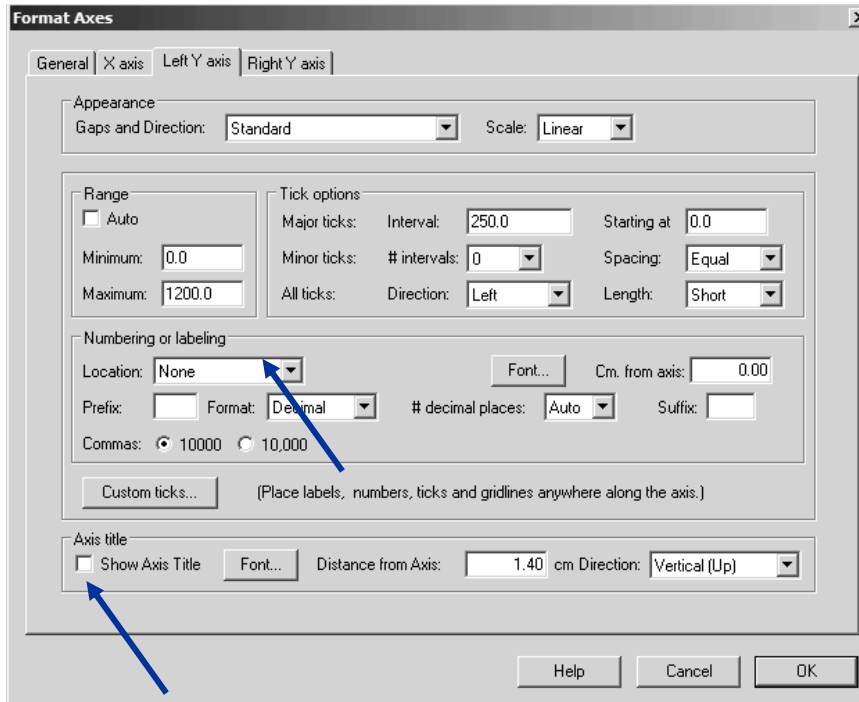


Idéal pour préparer des figures à panneaux multiples ....



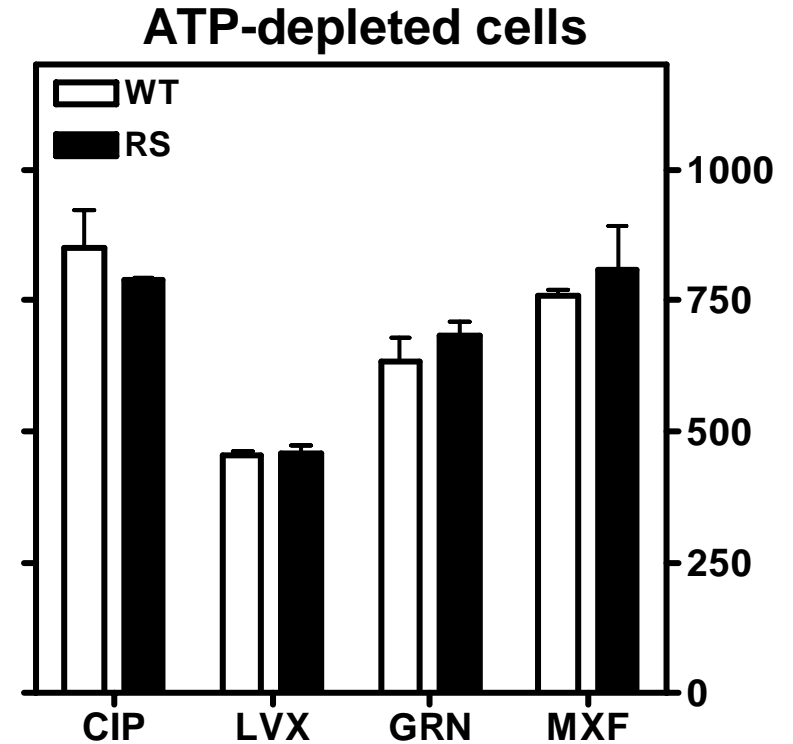
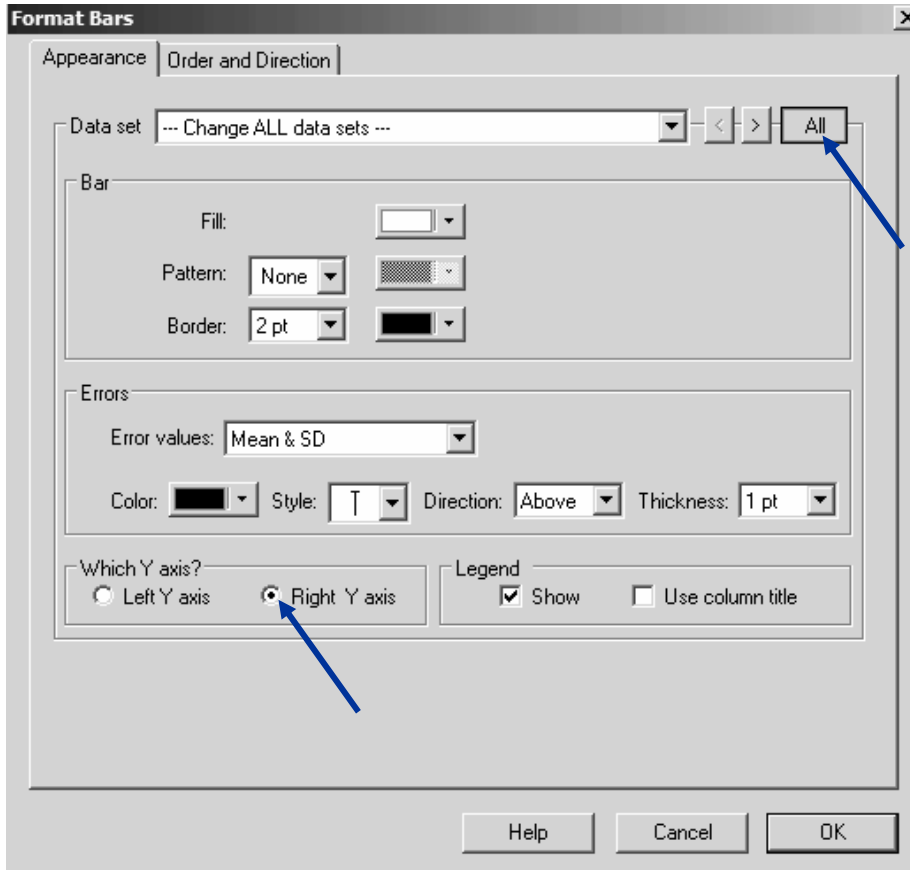
# Faire d'autres graphes identiques ...

Activer l'axe de droite pour le panneau de droite  
Désactiver l'axe de gauche



# Faire d'autres graphes identiques ...

## Plotter les données sur l'axe de droite



# Faire une page à graphiques multiples

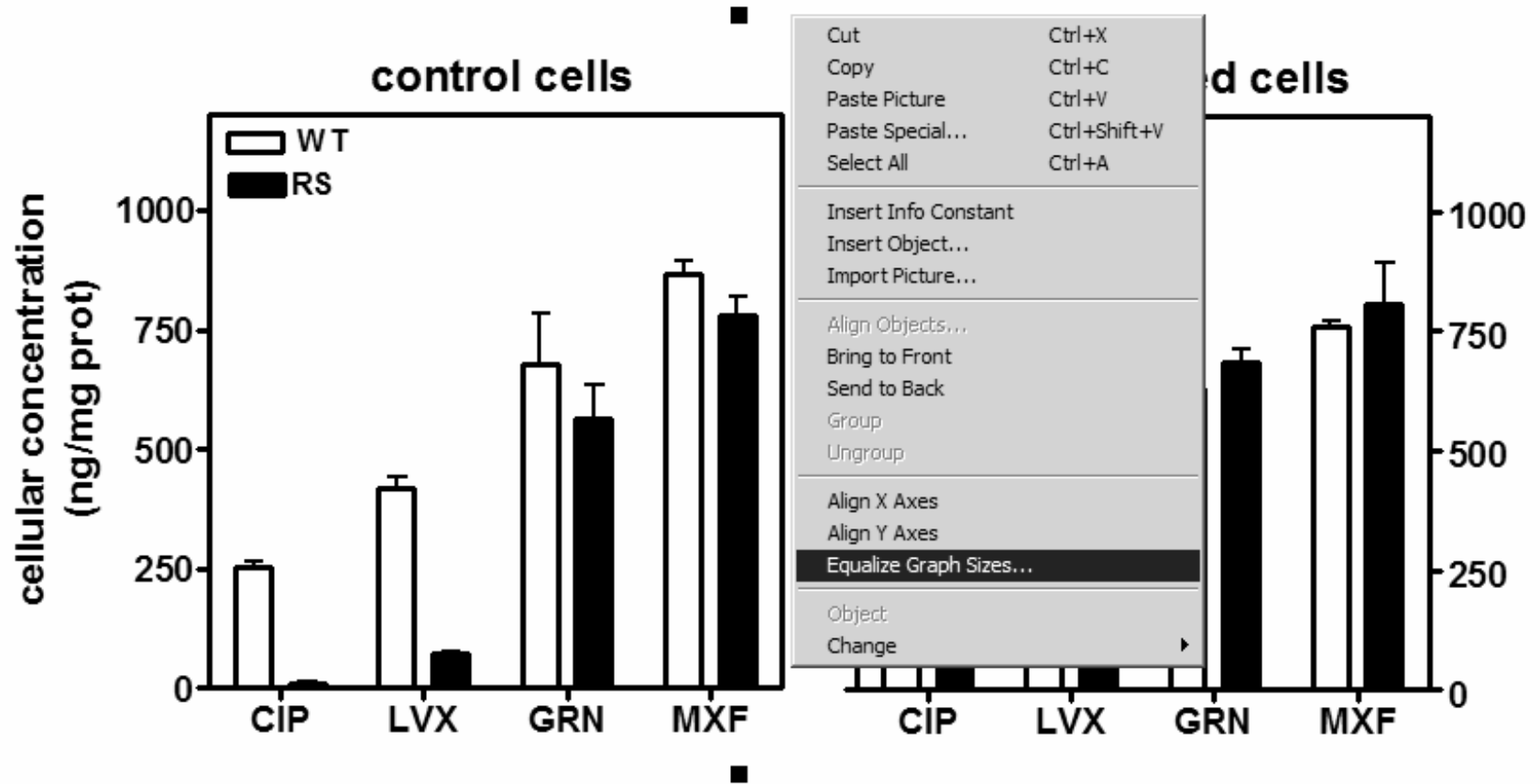
The screenshot shows the GraphPad Prism interface. The 'Create New Layout' dialog box is open, showing various grid arrangements. A blue box with the text 'New layout' and an arrow points to the 'figure' item in the Navigator pane. Below the dialog, two bar charts are displayed side-by-side. The left chart is titled 'control cells' and the right chart is titled 'ATP-depleted cells'. Both charts show 'cellular concentration (ng/mg prot)' on the y-axis (0 to 1000) and four treatments on the x-axis: CIP, LVX, GRN, and MXF. Each treatment has two bars: a white bar for WT and a black bar for RS. Error bars are present for all data points.

Cell Type	Treatment	WT (ng/mg prot)	RS (ng/mg prot)
control cells	CIP	~250	~10
	LVX	~400	~100
	GRN	~650	~550
	MXF	~850	~750
ATP-depleted cells	CIP	~850	~750
	LVX	~450	~450
	GRN	~600	~650
	MXF	~750	~800

New layout



# Faire d'autres graphes identiques ...

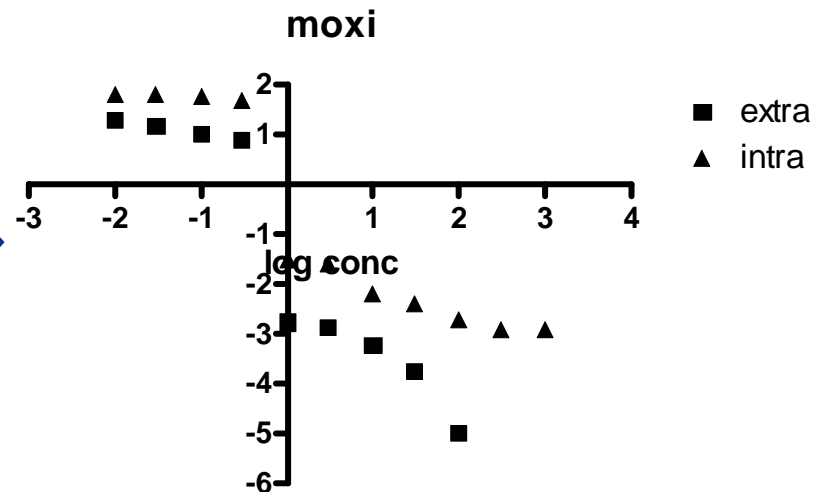


# Faire un graphe x-y

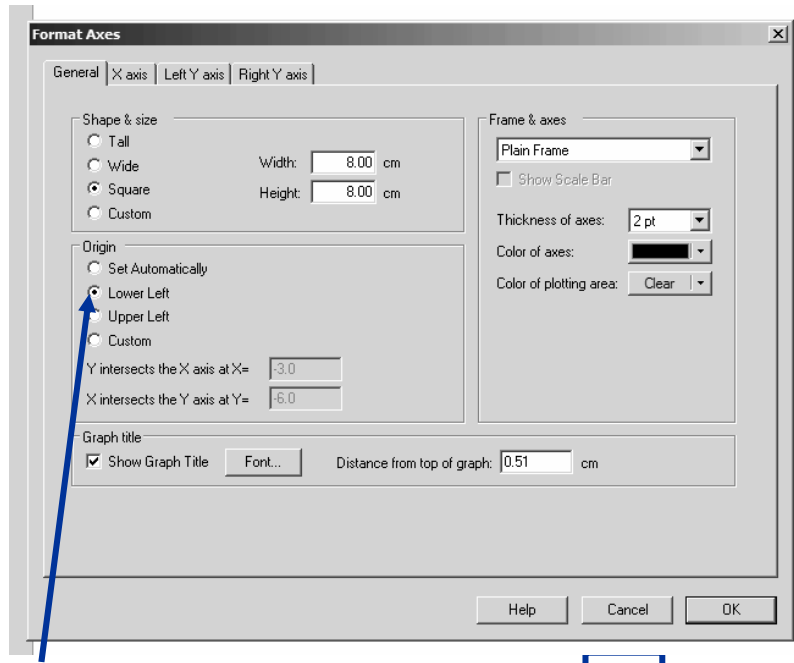
X Values	A		B		
log conc	extra		intra		
X	Mean	SD	Mean	SD	
-2.00	1.30	0.03	1.80	0.03	
-1.52	1.18	0.03	1.80	0.03	
-1.00	1.02	0.03	1.77	0.04	
-0.52	0.89	0.05	1.70	0.09	
0.00	-2.77	0.06	-1.50	0.01	
0.48	-2.88	0.07	-1.60	0.04	
1.00	-3.24	0.12	-2.18	0.03	
1.48	-3.75	0.10	-2.40	0.04	
2.00	-5.00		-2.70	0.07	
2.48			-2.90	0.06	
3.00			-2.93	0.03	



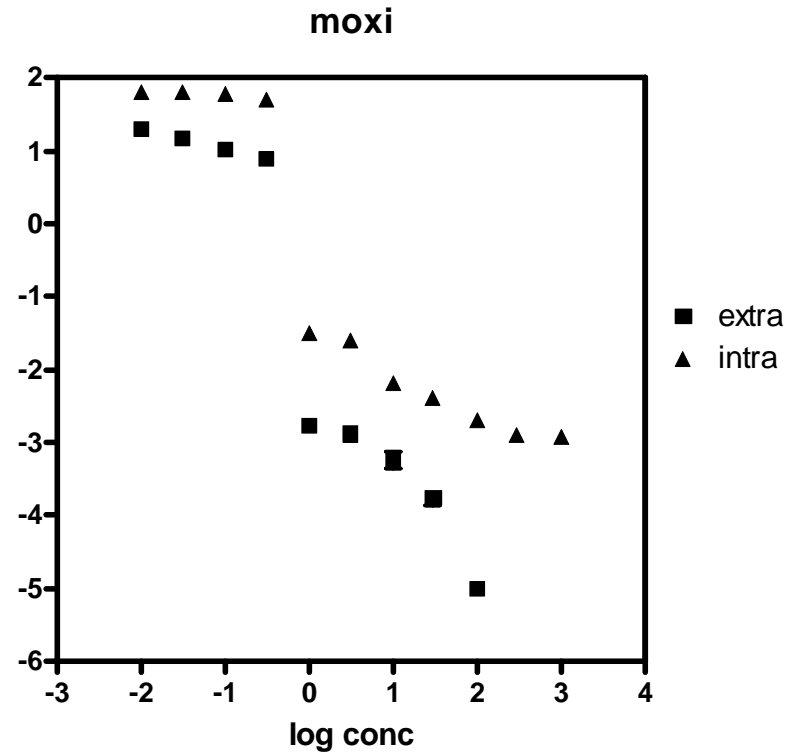
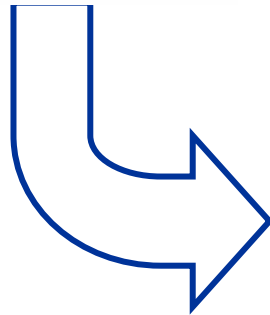
**Graphe automatique !**



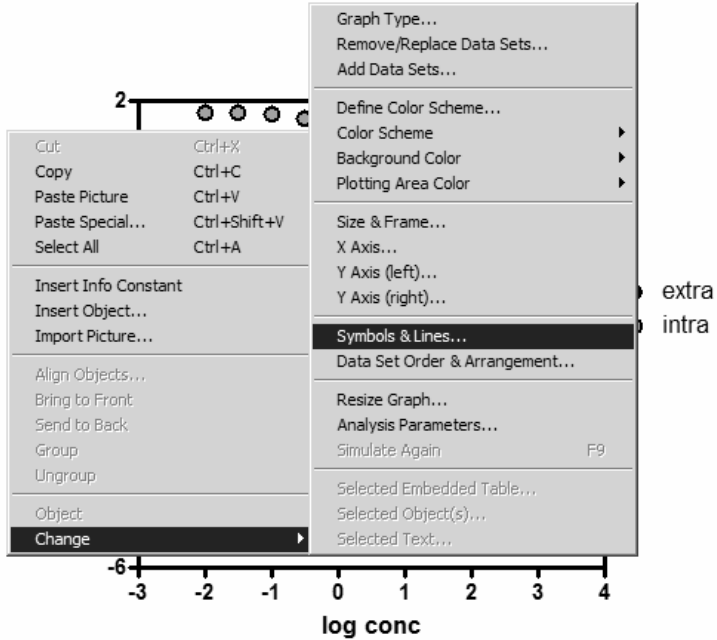
# Positionner les axes correctement



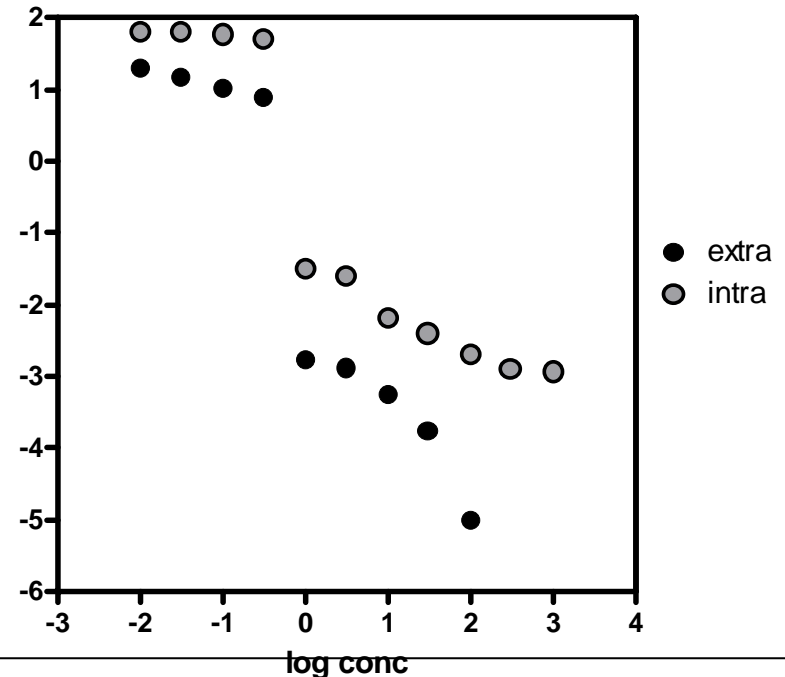
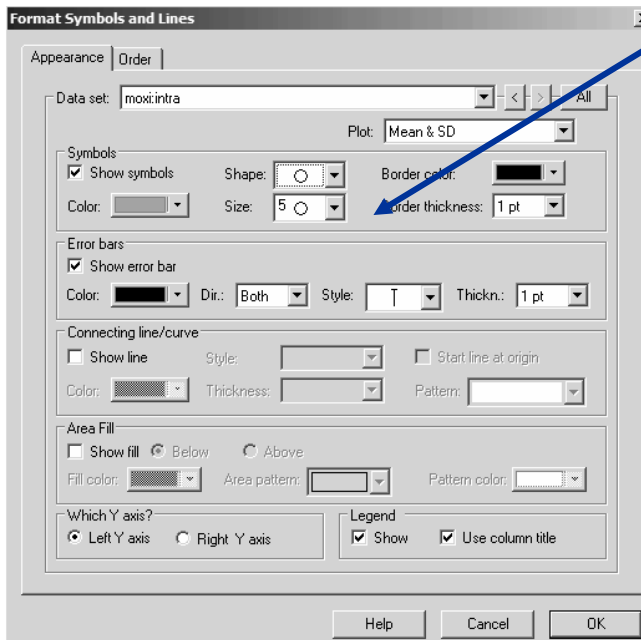
Définir  
l'intersection  
des axes



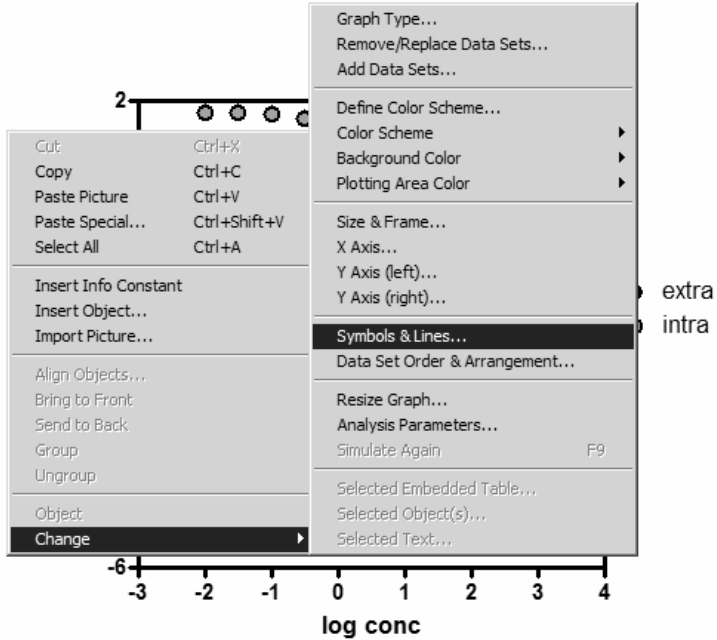
# Ajuster les symboles



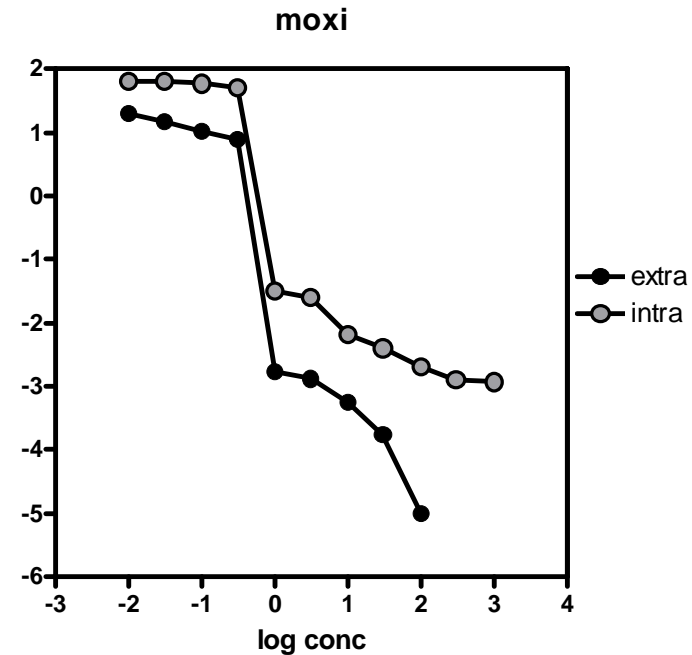
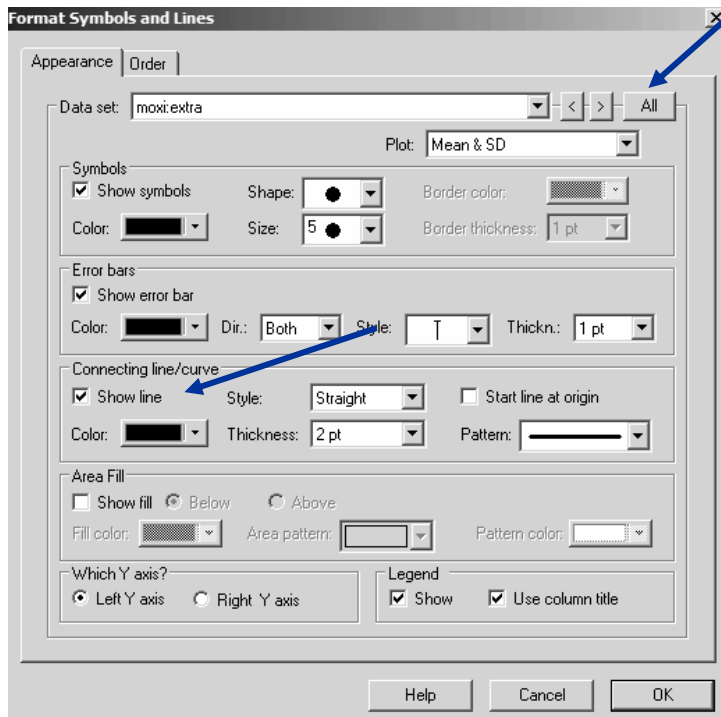
Taille 5 (min) / 6 (graphe 8x8) – 4 / 5 (graphe 5 x 5)  
moxi



# Ajouter les lignes

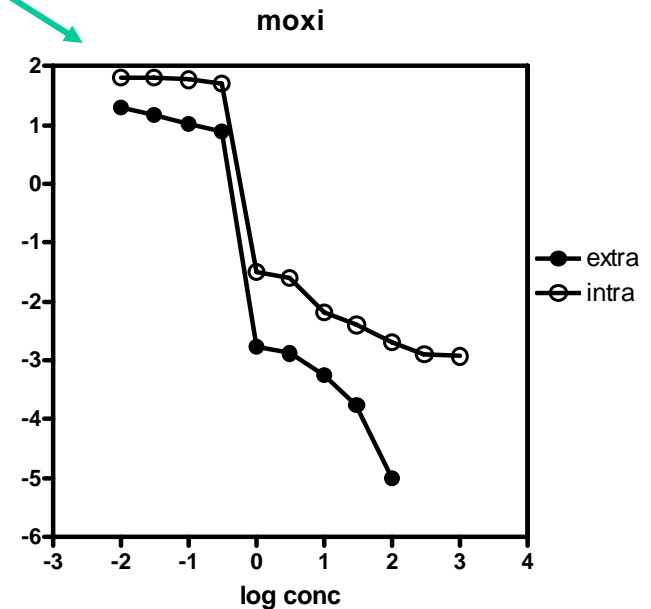
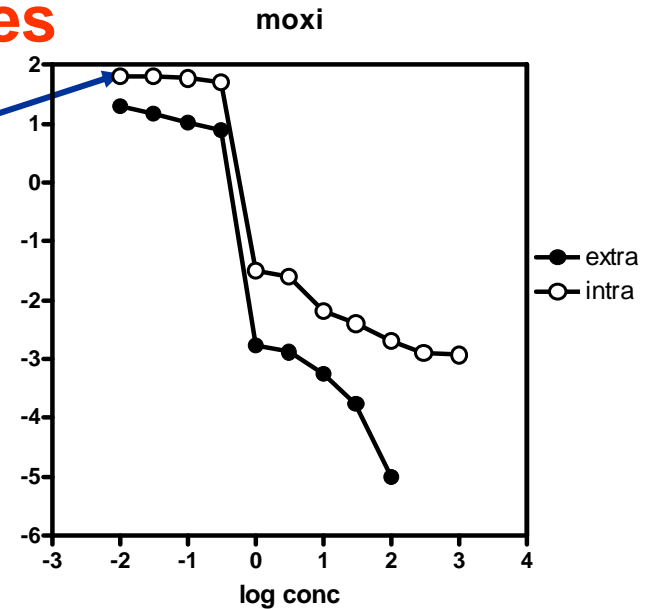
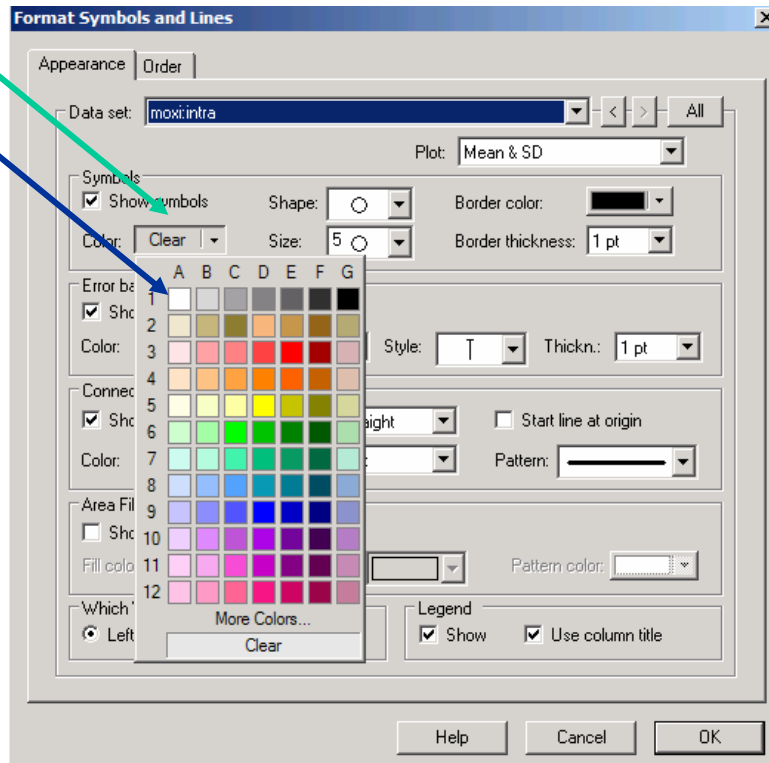


En cliquant sur « all »,  
la ligne liant les points  
s'ajoute  
à toutes les séries de données

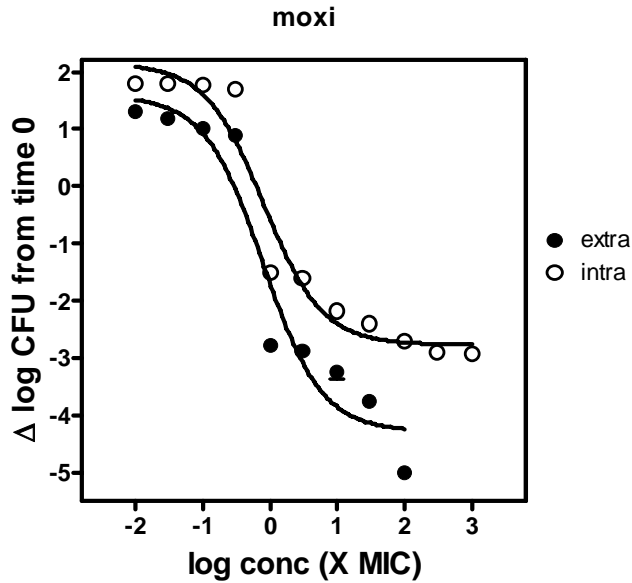


# Ajuster les symboles

Si vous choisissez des symboles blancs, préférez un remplissage blanc plutôt qu'un symbole vide



# Mais peut-être préférez-vous une relation mathématique ?



GraphPad Prism interface showing the 'Analyze Data' dialog box. The 'X Values' table is visible, and the 'Analyze Data' dialog is open, showing the 'Type' section with 'Nonlinear regression (curve fit)' selected.

X Values	A		B		C		D		
	log conc	extra	intra	Mean	SD	Mean	SD	Mean	SD
1	-2.00	1.30	0.03	1.80	0.03				
2	-1.52	1.18	0.03	1.80	0.03				
3	-1.00	1.02	0.03	1.77	0.04				
4	-0.52	0.89	0.05	1.70	0.09				
5	0.00	-2.77	0.06	-1.50	0.01				
6	0.48	-2.88	0.07	-1.60	0.04				
7	1.00	-3.24							
8	1.48	-3.75							
9	2.00	-5.00							
10	2.48								
11	3.00								
12									
13									
14									
15									
16									
17									
18									
19									
20									
21									
22									
23									
24									

**Analyze Data**

Analysis

- Built-in analysis.
- Use saved method.
- Method by example. Analyze and graph the same as another table in this project.

Type

- Curves & regression
- Statistical analyses
- Data manipulations
- Simulate and generate
- Clinical lab
- Recently used

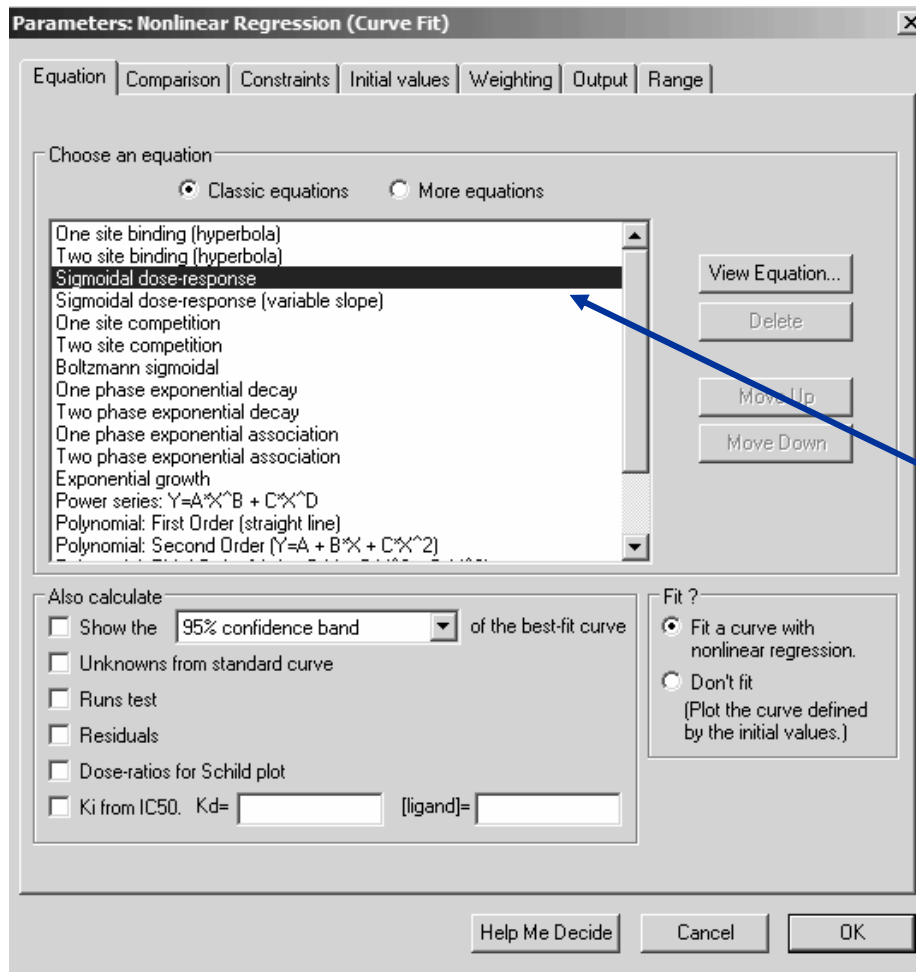
Linear regression  
Nonlinear regression (curve fit)

Data to analyze

- All data sets
- Selected data sets

Help Cancel OK

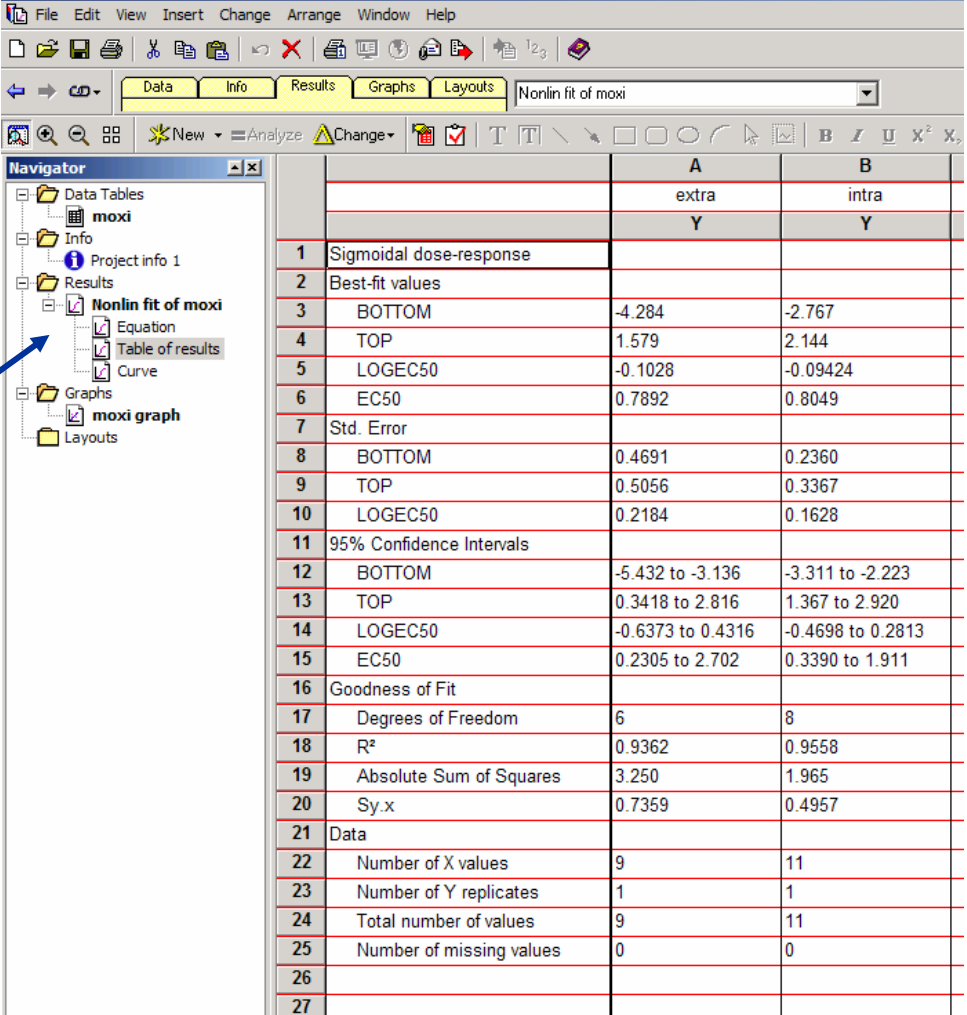
# Mais peut-être préférez-vous une relation mathématique ?



**Choisir le type d'équation qui correspond à vos données**



# Mais peut-être préférez-vous une relation mathématique ?



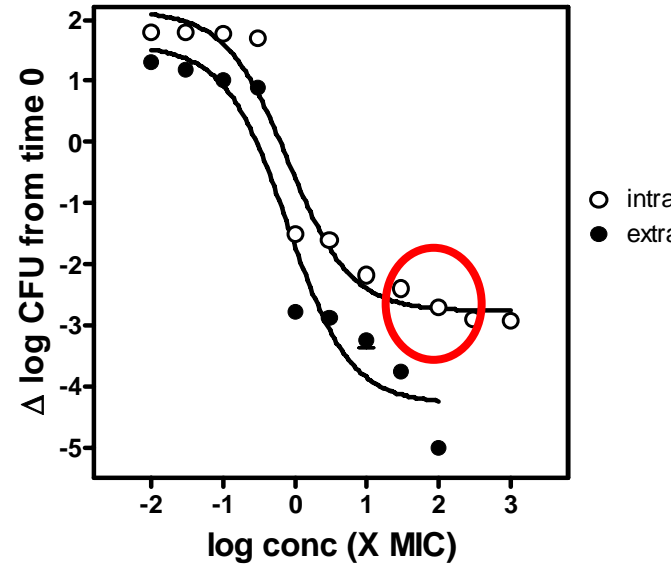
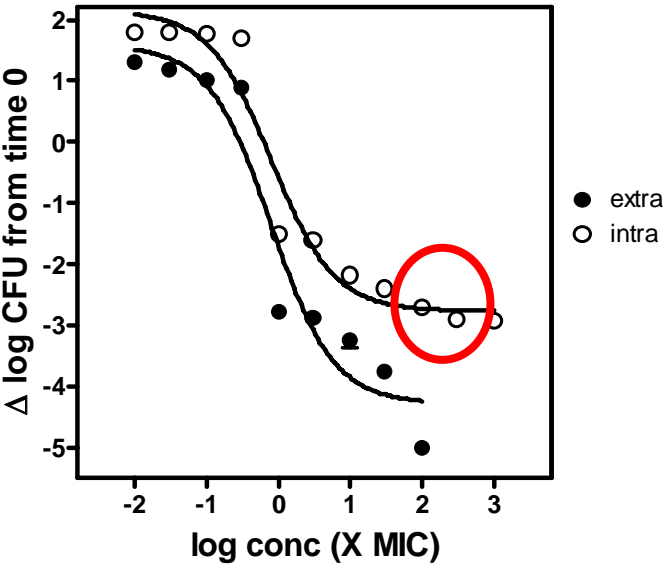
		A	B
		extra	intra
		Y	Y
1	Sigmoidal dose-response		
2	Best-fit values		
3	BOTTOM	-4.284	-2.767
4	TOP	1.579	2.144
5	LOGEC50	-0.1028	-0.09424
6	EC50	0.7892	0.8049
7	Std. Error		
8	BOTTOM	0.4691	0.2360
9	TOP	0.5056	0.3367
10	LOGEC50	0.2184	0.1628
11	95% Confidence Intervals		
12	BOTTOM	-5.432 to -3.136	-3.311 to -2.223
13	TOP	0.3418 to 2.816	1.367 to 2.920
14	LOGEC50	-0.6373 to 0.4316	-0.4698 to 0.2813
15	EC50	0.2305 to 2.702	0.3390 to 1.911
16	Goodness of Fit		
17	Degrees of Freedom	6	8
18	R <sup>2</sup>	0.9362	0.9558
19	Absolute Sum of Squares	3.250	1.965
20	Sy.x	0.7359	0.4957
21	Data		
22	Number of X values	9	11
23	Number of Y replicates	1	1
24	Total number of values	9	11
25	Number of missing values	0	0
26			
27			

- « Results » vous donne
- l'équation utilisée
  - les paramètres calculés
  - les points dessinant la courbe

# Améliorer encore le graphe ... moxi

moxi

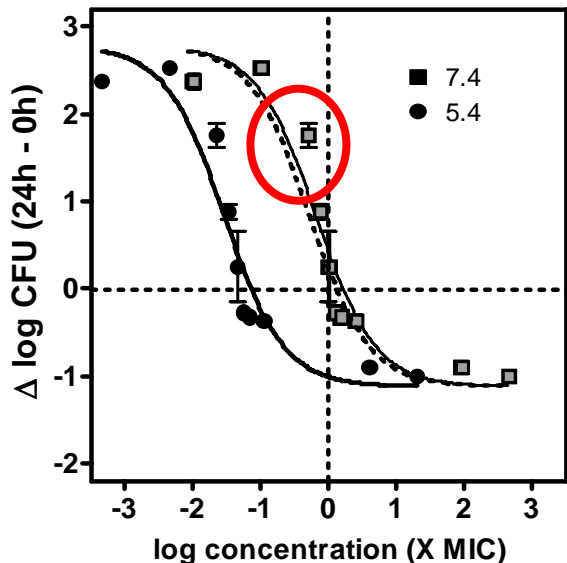
moxi



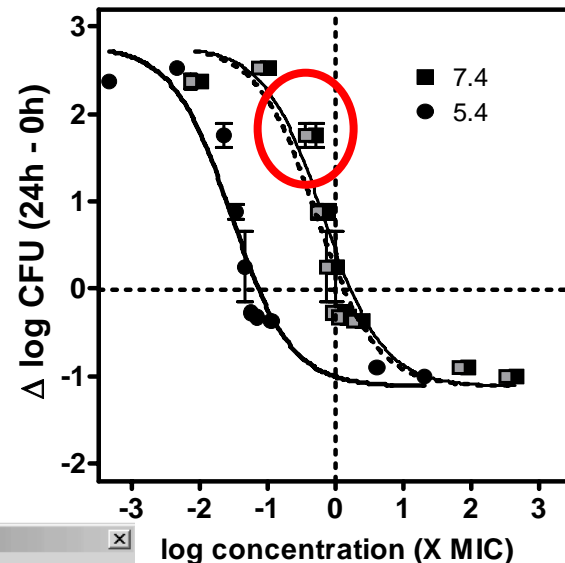
Mettre d'abord les données qui doivent figurer à l'arrière plan

# Améliorer encore le graphe ... gentamicin

gentamicin



Décaler les symboles qui se superposent



Format Symbols and Lines

Appearance Order

The order of data sets in this list determines what happens when two data points overlap. Data sets placed higher on this list will be graphed behind of data sets lower on the list.

Data sets plotted (back to front):

- log x CMI:7.4
- Nonlin fit of log x CMI:7.4
- log x CMI:5.4
- Nonlin fit of log x CMI:5.4
- log x CMI:5.4\* lysosomes
- Nonlin fit of log x CMI:5.4\* lysosomes

Nudge. To prevent overlap, move this data set.

Increment X by  Increment Y by  (data units)

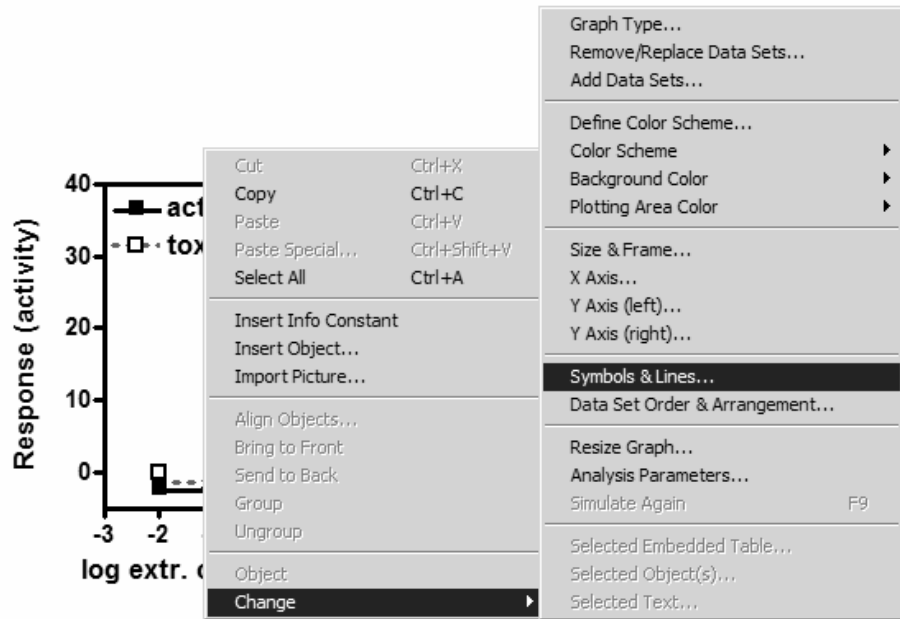
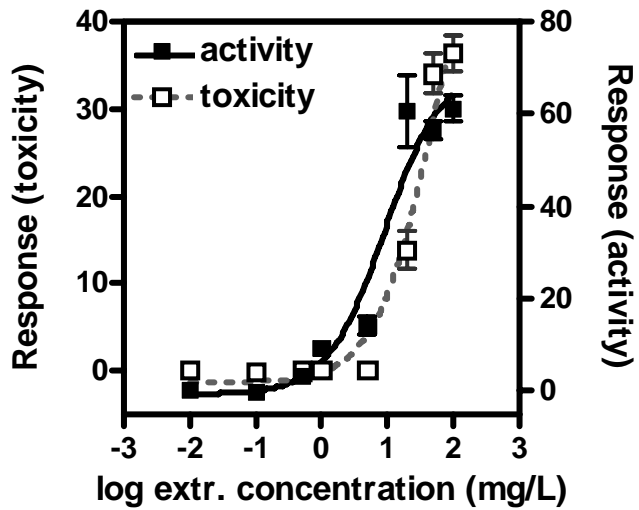
Buttons: Top, Up, Reverse, Down, Bottom, Help, Cancel, OK

Graph menu options:

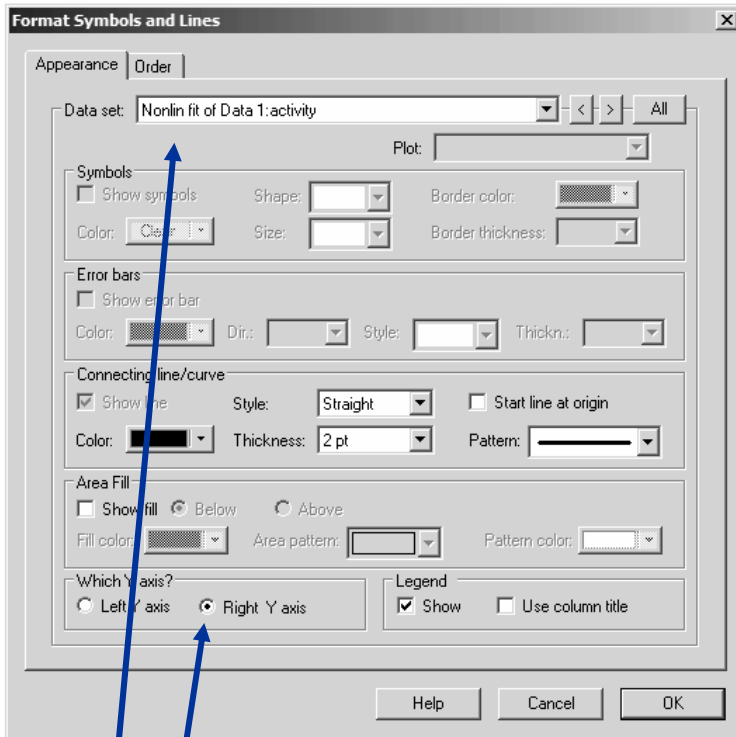
- Cut Ctrl+X
- Copy Ctrl+C
- Paste Ctrl+V
- Paste Special... Ctrl+Shift+V
- Select All Ctrl+A
- Insert Info Constant
- Insert Object...
- Import Picture...
- Align Objects...
- Bring to Front
- Send to Back
- Group
- Ungroup
- Object
- Change

Graph Type...  
 Remove/Replace Data Sets...  
 Add Data Sets...  
 Define Color Scheme...  
 Color Scheme  
 Background Color  
 Plotting Area Color  
 Size & Frame...  
 X Axis...  
 Y Axis (left)...  
 Y Axis (right)...  
 Symbols & Lines...  
**Data Set Order & Arrangement...**  
 Resize Graph...  
 Analysis Parameters...  
 Simulate Again F9  
 Selected Embedded Table...  
 Selected Object(s)...  
 Selected Text...

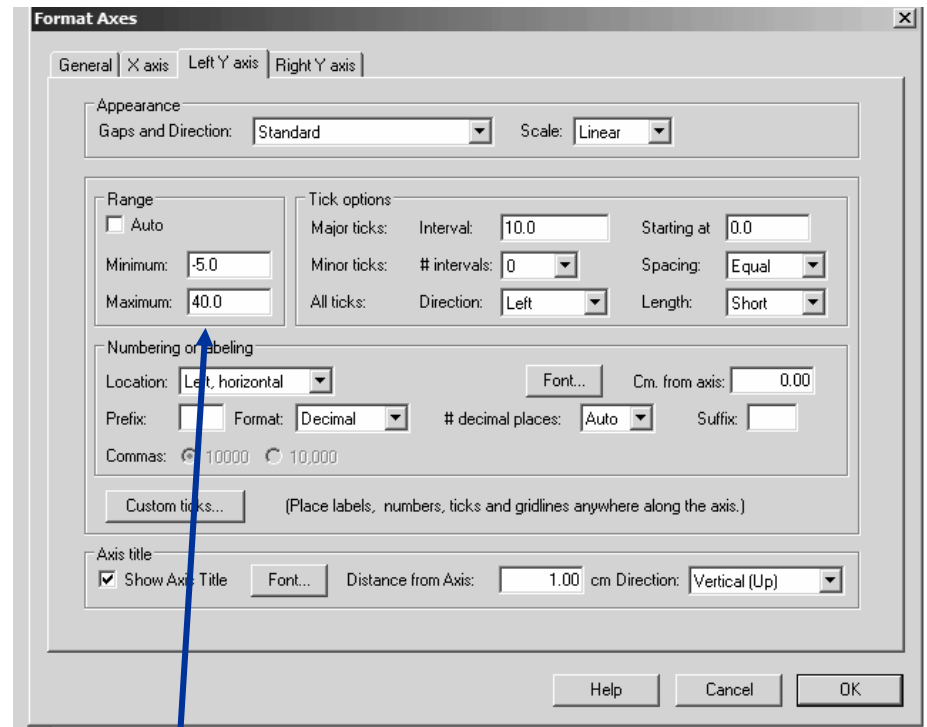
# Et un graphe à double échelle ? ...



# Et un graphe à double échelle ? ...

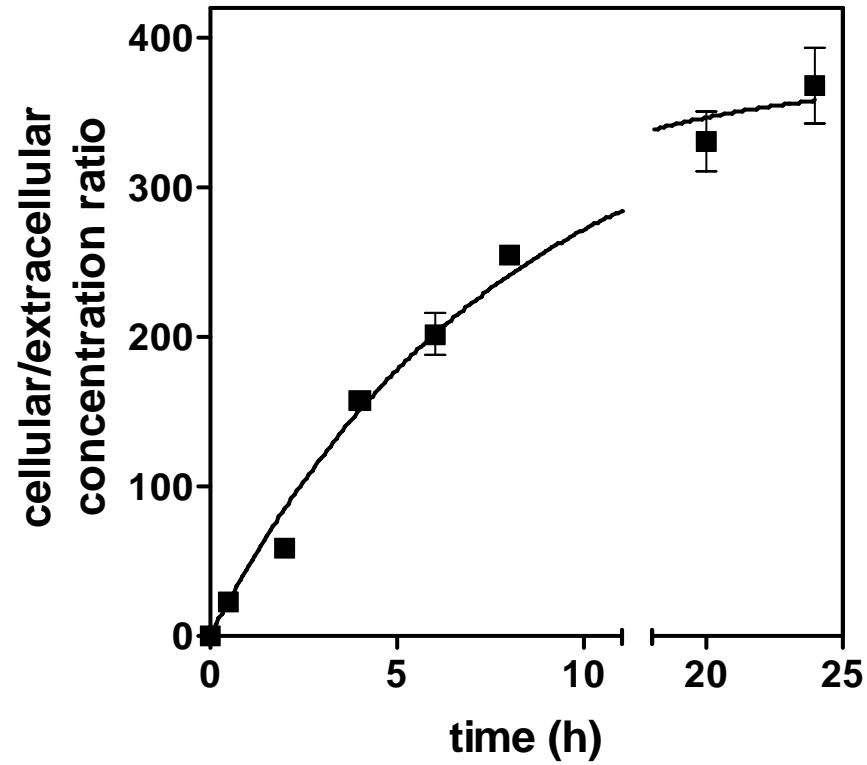


**Pour chaque donnée,  
indiquez sur quel axe  
elle est plottée**

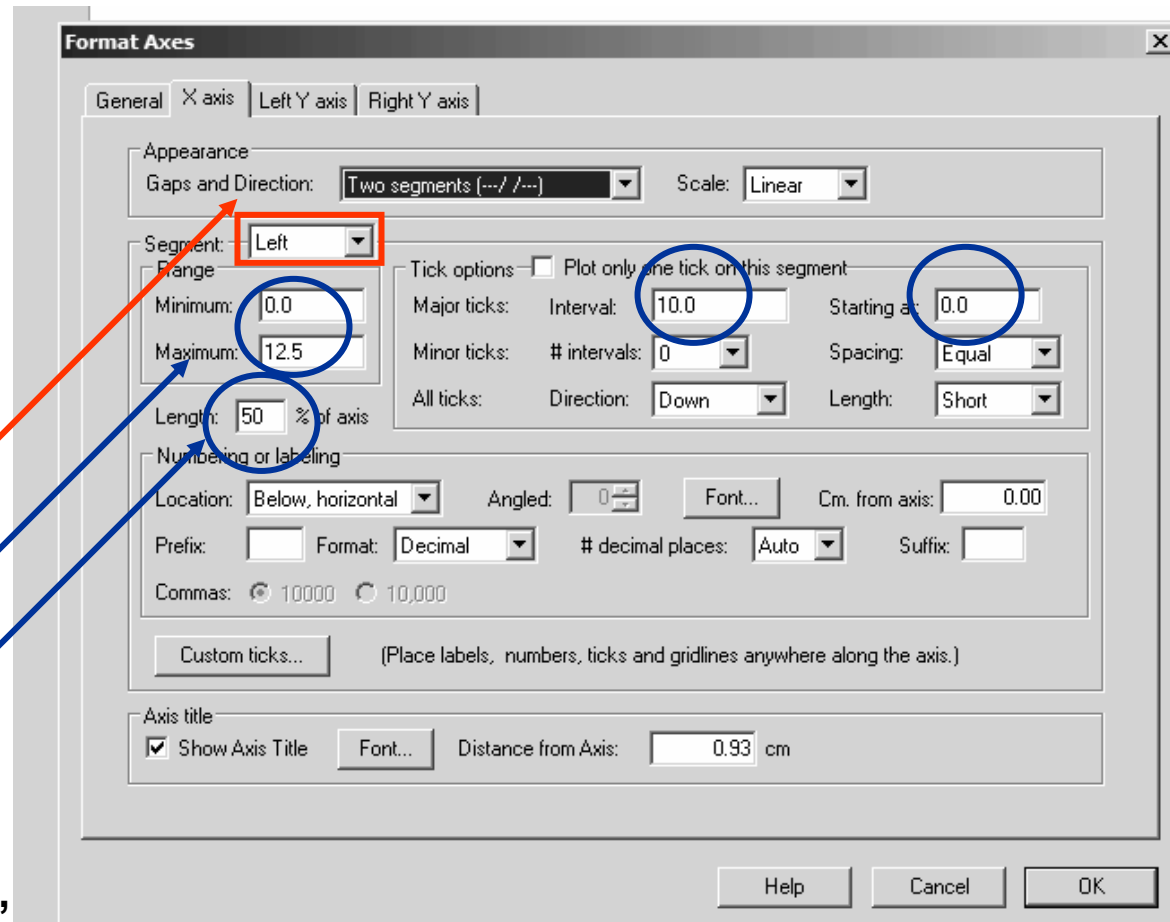


**Ajustez les échelles de vos axes  
pour que les données  
se superposent ...**

# Couper l'axe ?

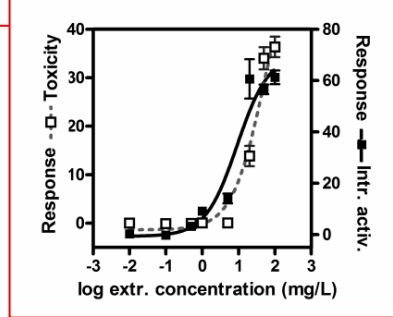
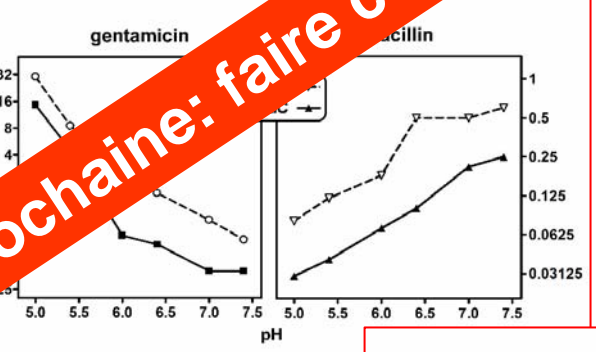
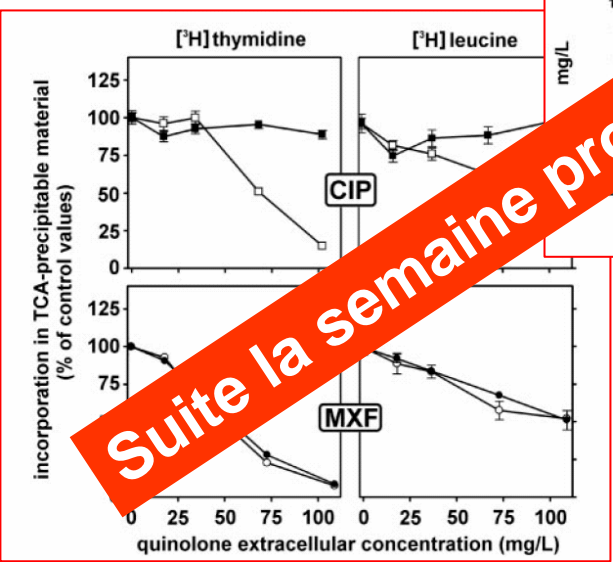
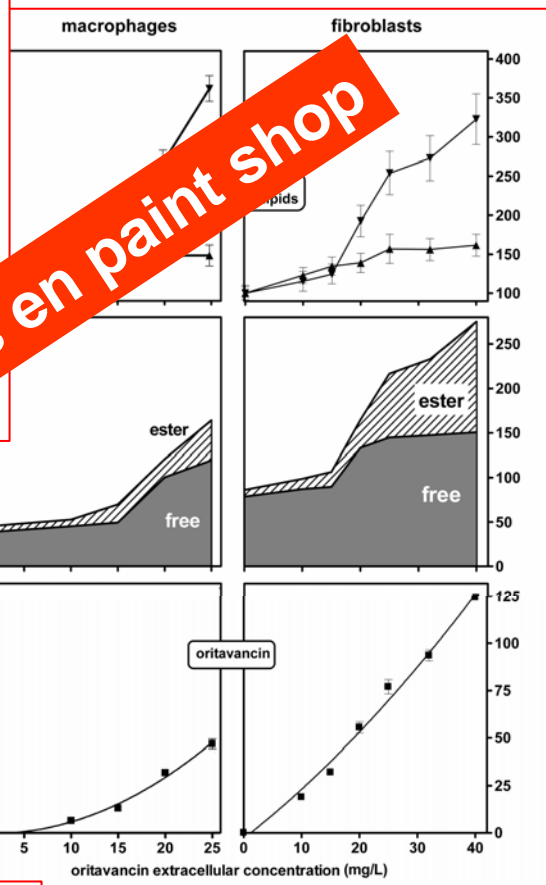
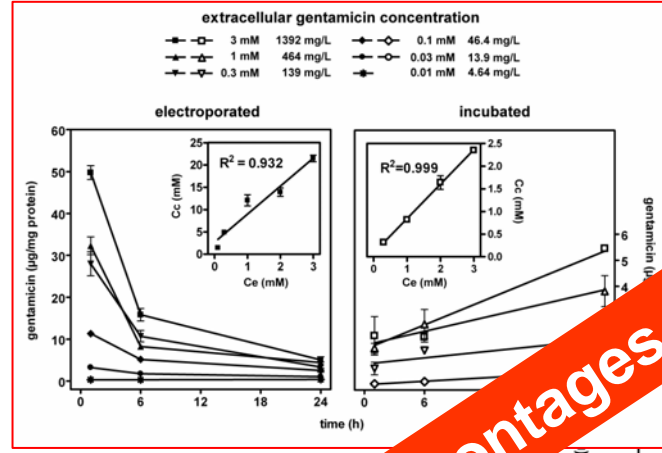
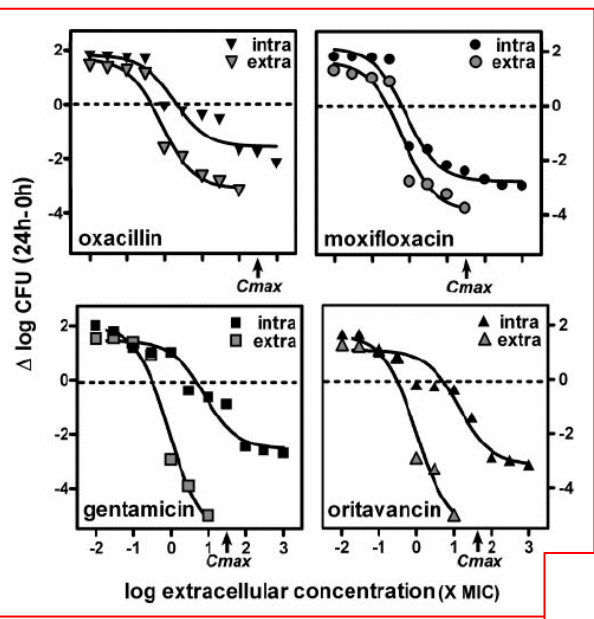


# Couper l'axe ?



**Pour chaque segment,  
Choisir l'échelle et la proportion que la partie d'échelle occupe sur le graphique**

# Pas si difficile de faire des beaux graphiques ...



**Suite la semaine prochaine: faire ces montages en paint shop**