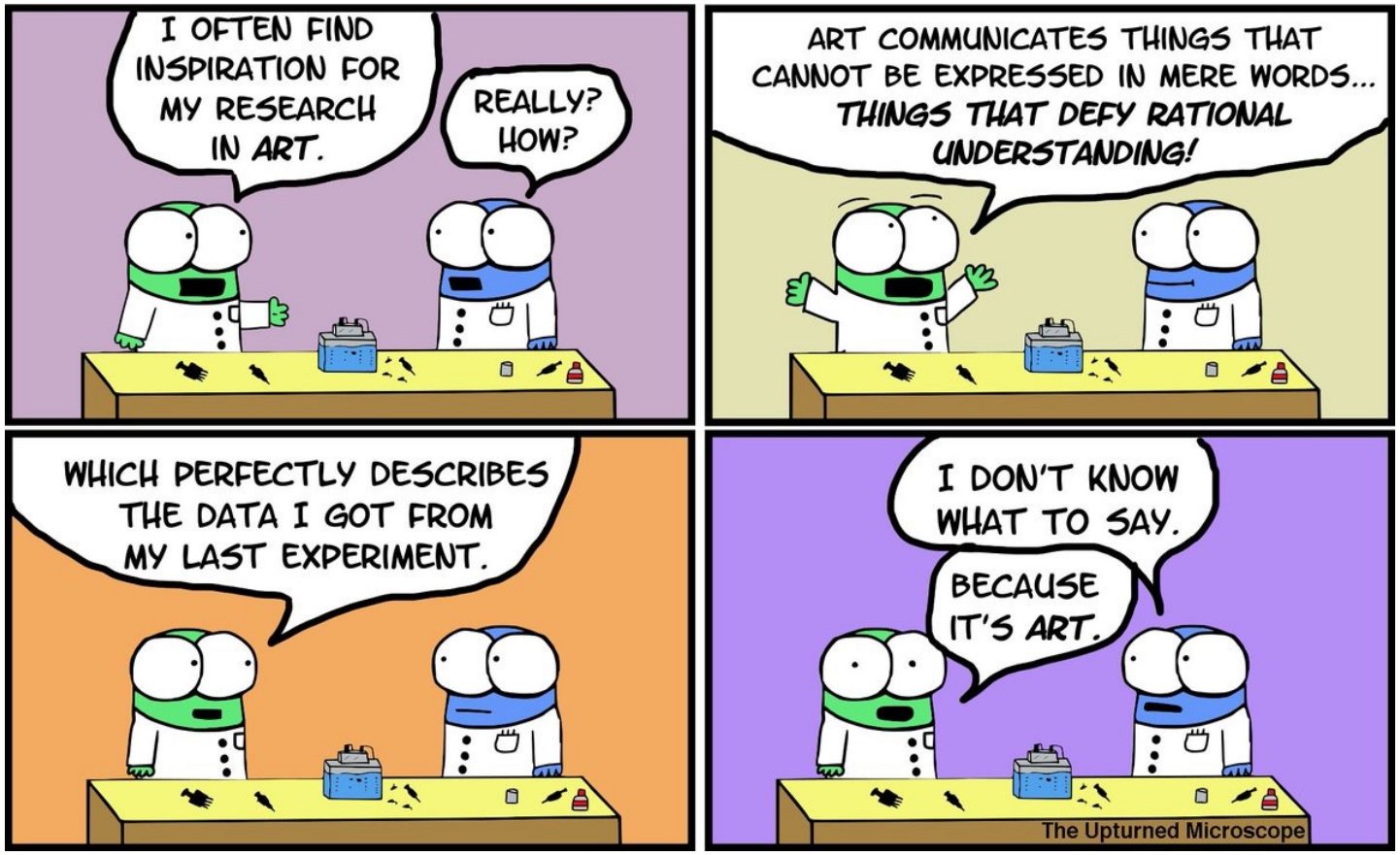
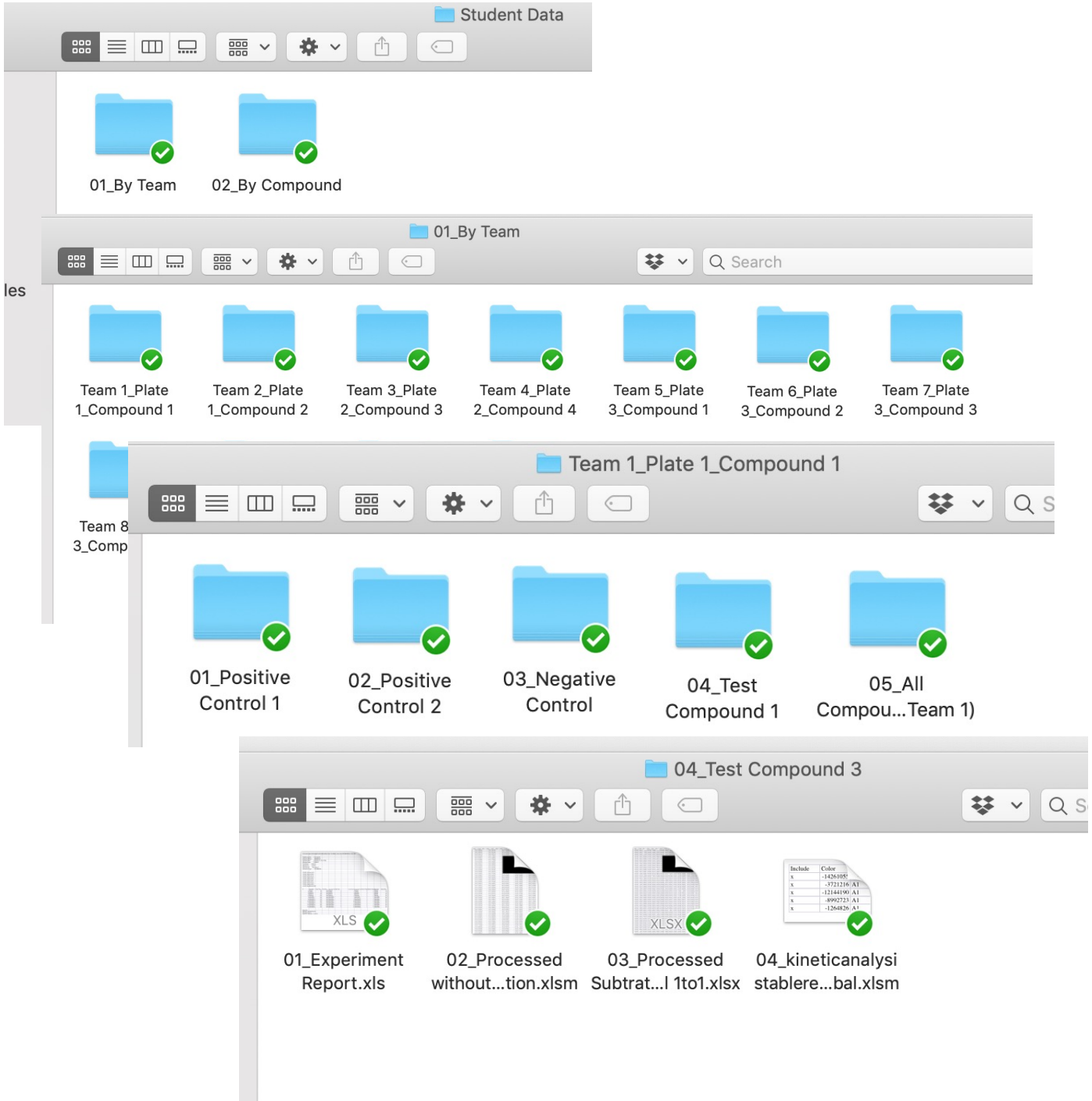
M2D6: Complete data analysis for secondary assay

- Prelab discussion
- Analyze BLI data
- Discuss next step experiments

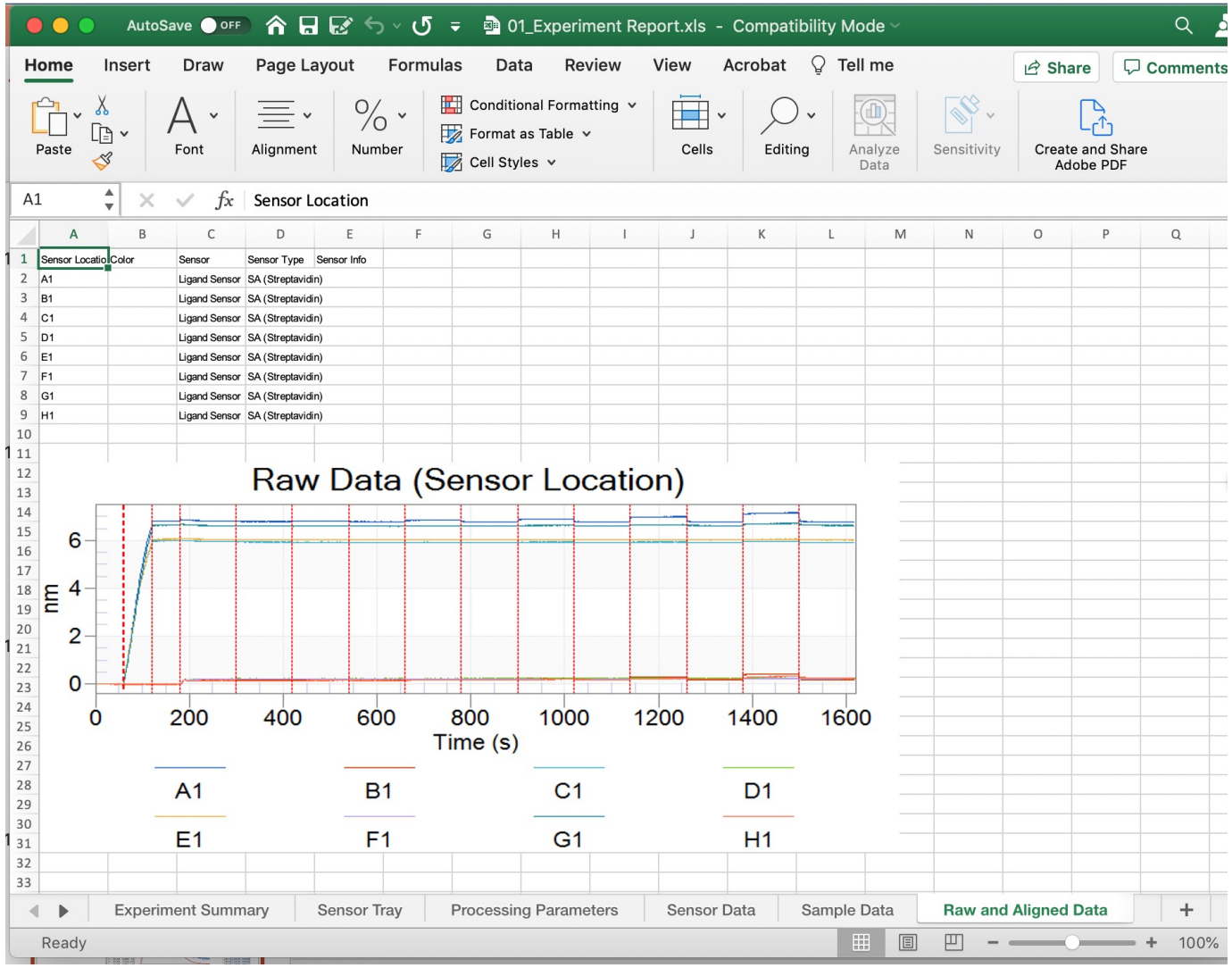


Results set up



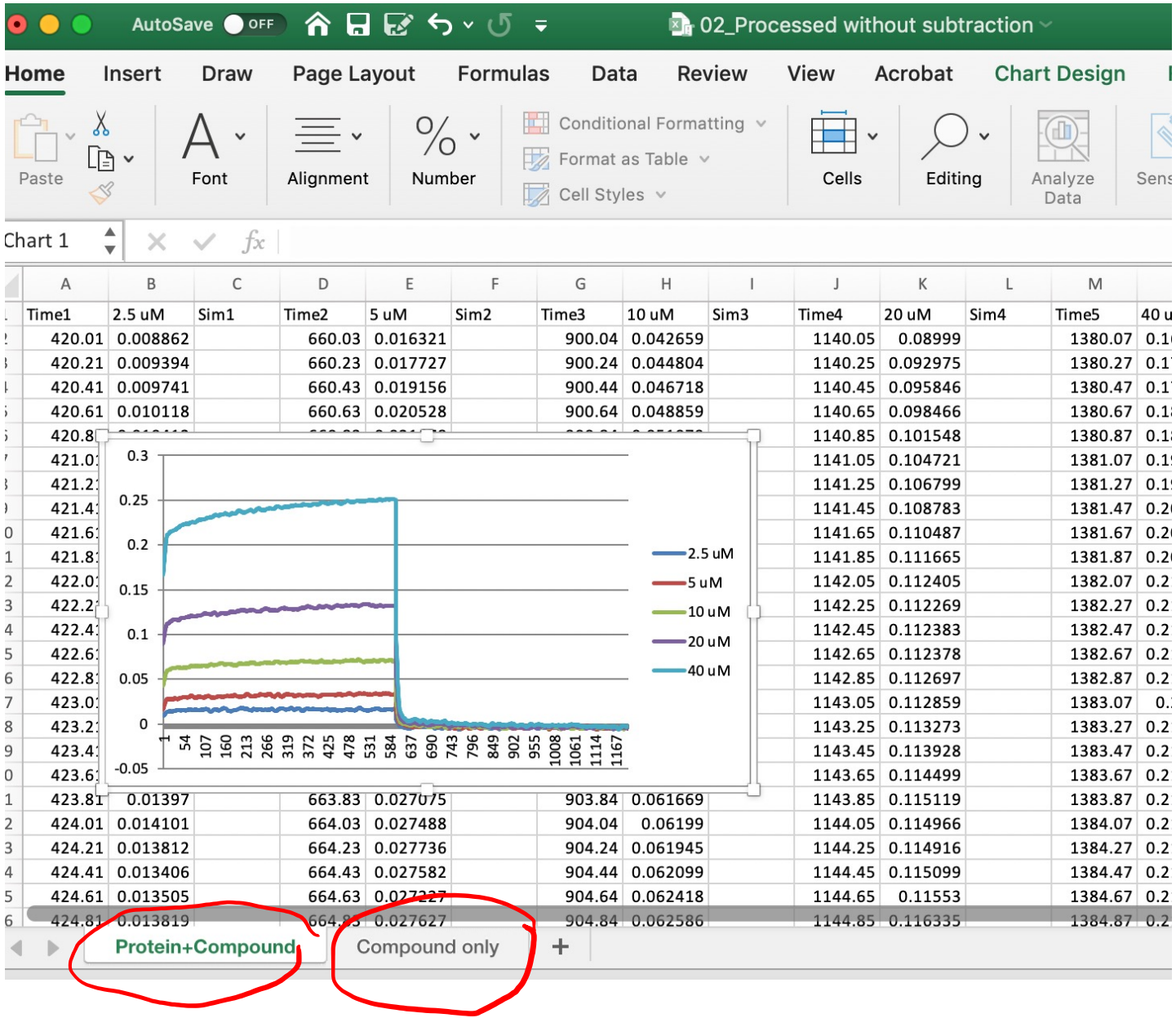
01_Experiment Report

- Follow the experimental steps
- Understand how the experiment was run and what the results look like



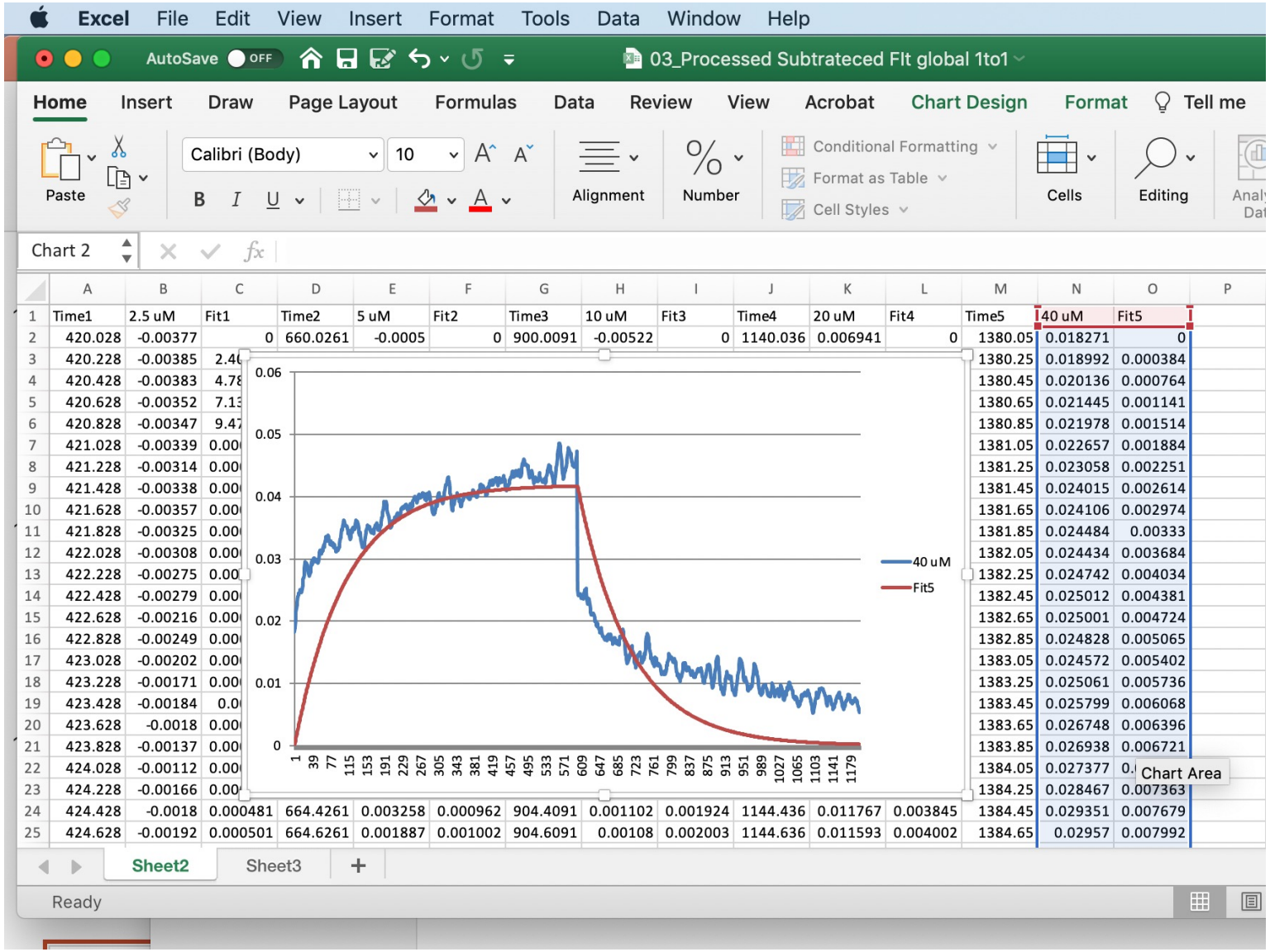
02_Processed without subtraction

- Shows binding for each concentration (with or without protein)
- You can manually subtract the compound alone from the compound + protein values for each data point

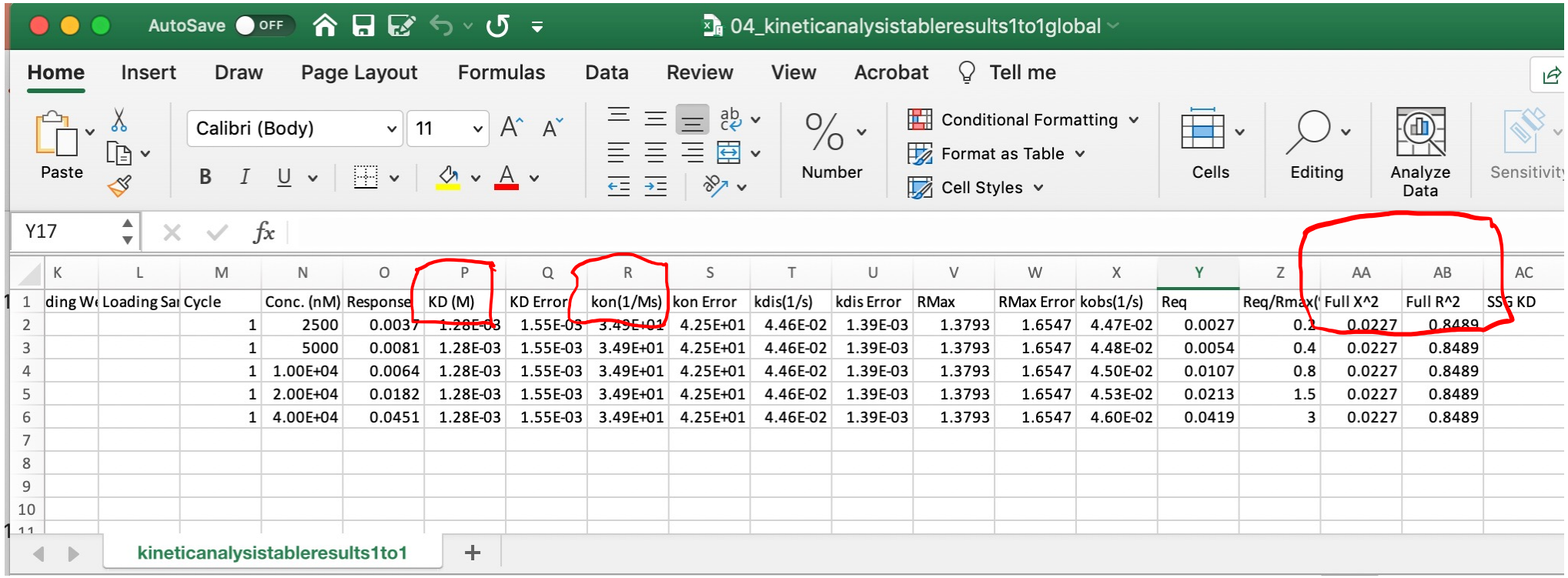


03_Processed Subtracted Fit Global 1 to 1

- Generate fitting curves from the data and check if the the fitting is good for each concentration.



04_Kinetic analysis table results 1 to 1 global



	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC
1	ding W	Loading Sa	Cycle	Conc. (nM)	Response	KD (M)	KD Error	kon(1/Ms)	kon Error	kdis(1/s)	kdis Error	RMax	RMax Error	kobs(1/s)	Req	Req/Rmax(	Full X^2	Full R^2	SSG KD
2			1	2500	0.0037	1.28E-03	1.55E-03	3.49E+01	4.25E+01	4.46E-02	1.39E-03	1.3793	1.6547	4.47E-02	0.0027	0.2	0.0227	0.8489	
3			1	5000	0.0081	1.28E-03	1.55E-03	3.49E+01	4.25E+01	4.46E-02	1.39E-03	1.3793	1.6547	4.48E-02	0.0054	0.4	0.0227	0.8489	
4			1	1.00E+04	0.0064	1.28E-03	1.55E-03	3.49E+01	4.25E+01	4.46E-02	1.39E-03	1.3793	1.6547	4.50E-02	0.0107	0.8	0.0227	0.8489	
5			1	2.00E+04	0.0182	1.28E-03	1.55E-03	3.49E+01	4.25E+01	4.46E-02	1.39E-03	1.3793	1.6547	4.53E-02	0.0213	1.5	0.0227	0.8489	
6			1	4.00E+04	0.0451	1.28E-03	1.55E-03	3.49E+01	4.25E+01	4.46E-02	1.39E-03	1.3793	1.6547	4.60E-02	0.0419	3	0.0227	0.8489	
7																			
8																			
9																			
10																			

When given the data for all the compounds you will compare the kinetic results and rank compounds according to the best binders.

Schedule for today

With Khan in BIF facility:

- 1:20-1:40 **Yellow Team**
- 1:40-2:00 **Blue Team**
- 2:00-2:20 **Purple Team**

For Today

- Analyze/collect your data with Khan at your scheduled time
- Using the paper linked on the wiki, discuss appropriate next steps following a drug screen with your lab partner
  - practice for your proposal of next steps in the Research Article discussion

For M2D7

- Prepare a figure showing the SDS-PAGE gel and discussing the purity and purification data
  - BCA was emailed to you when it was performed
  - SDS-PAGE data is in class data Dropbox
    - Link to that data is on Wiki under homework section for next time

M2D7 HW

- Create a figure of the purity and concentration data
  - Must show SDS-PAGE gel, but BCA graph isn't necessary

Can e from BCA must be reported

- Write associated results and discussion **paragraphs**
  - Explain ALL results (i.e. all the lanes on the gel)
  - **Research article results text <u>will not</u> include interpretation**
  - <u>Separate</u> discussion section associated with figure with interpretation
  - Results= What did we see? Discussion= What does it mean?

- Review guidelines on the wiki Homework tab and descriptions on the Research Article tab