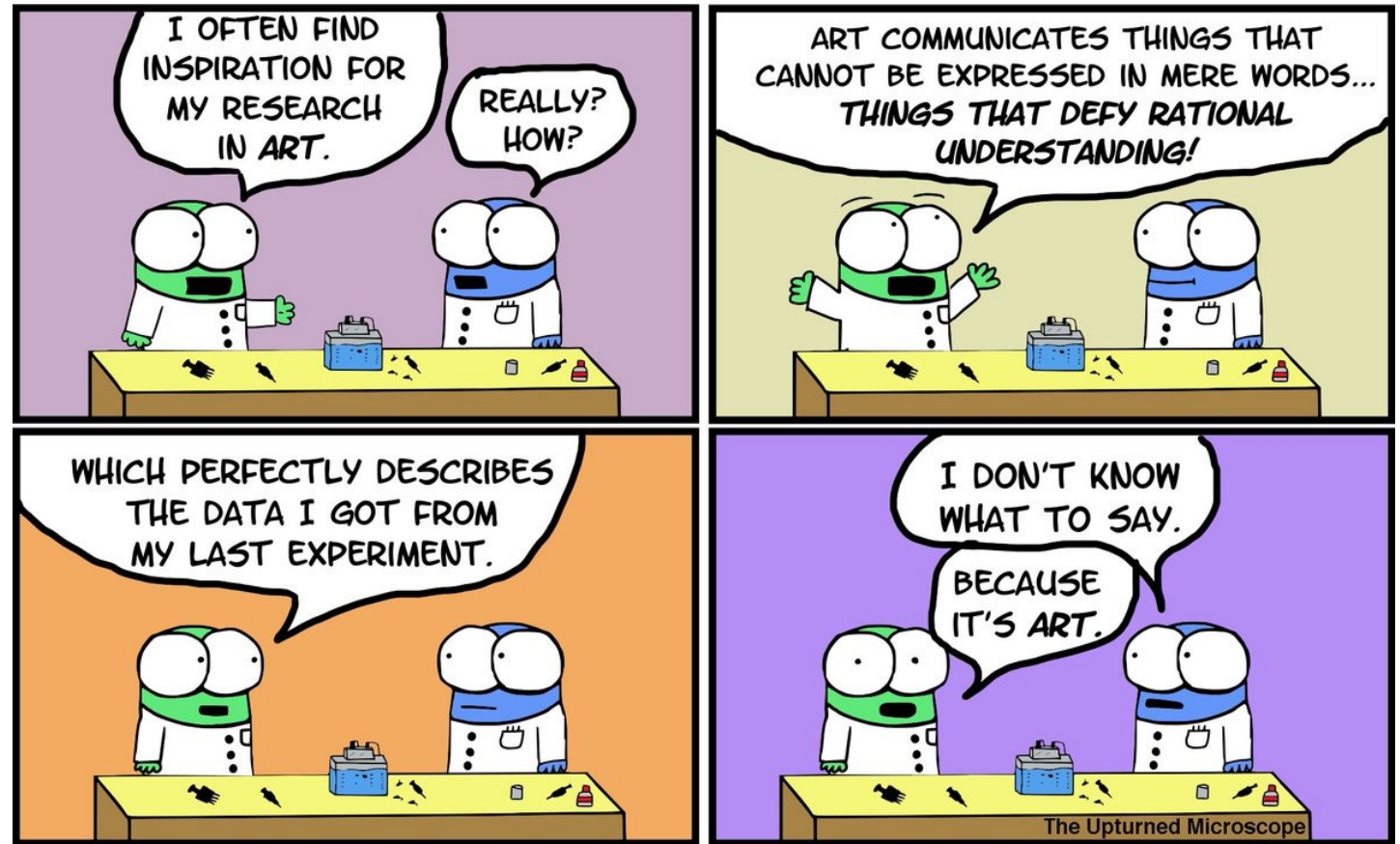


M2D6: Complete data analysis for secondary assay

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



Results set up

The image displays a series of overlapping screenshots of a file explorer interface, showing a hierarchical structure of folders and files. Each window has a title bar and a toolbar with icons for view, settings, and navigation.

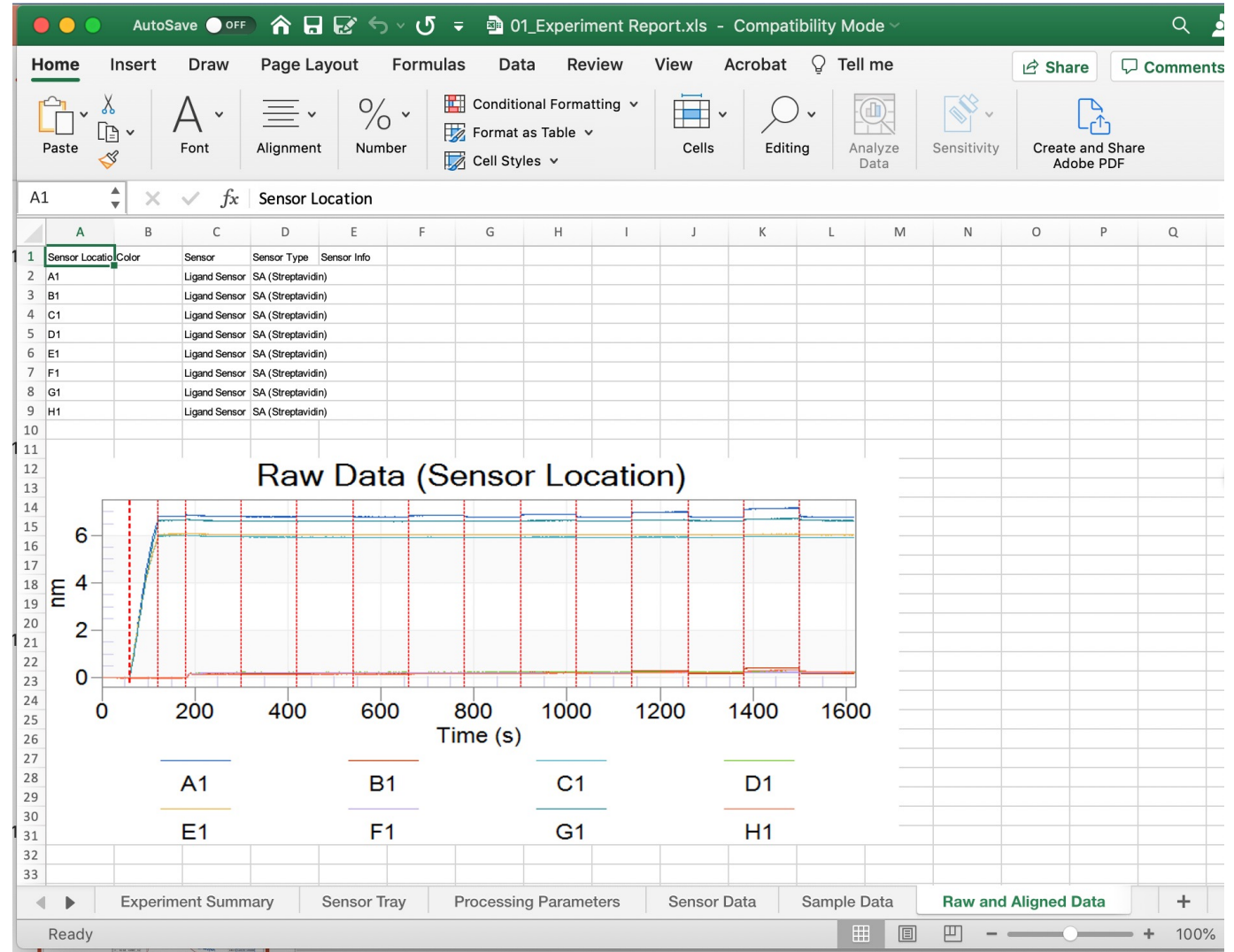
- Top Window:** Titled "Student Data", showing two folders: "01_By Team" and "02_By Compound".
- Second Window:** Titled "01_By Team", showing seven sub-folders: "Team 1_Plate 1_Compound 1", "Team 2_Plate 1_Compound 2", "Team 3_Plate 2_Compound 3", "Team 4_Plate 2_Compound 4", "Team 5_Plate 3_Compound 1", "Team 6_Plate 3_Compound 2", and "Team 7_Plate 3_Compound 3".
- Third Window:** Titled "Team 1_Plate 1_Compound 1", showing five folders: "01_Positive Control 1", "02_Positive Control 2", "03_Negative Control", "04_Test Compound 1", and "05_All Compou... Team 1)".
- Bottom Window:** Titled "04_Test Compound 3", showing four files: "01_Experiment Report.xls", "02_Processed without...tion.xlsxm", "03_Processed Subtrat...l 1to1.xlsx", and "04_kineticanalysis stablere...bal.xlsxm".

Each folder and file icon includes a green checkmark, indicating successful setup or completion. The bottom window also shows a preview of the "04_kineticanalysis stablere...bal.xlsxm" file, which contains a table with columns for "Include" and "Color".

Include	Color
x	-14261091
x	-5721216 AT
x	-12144190 AT
x	-8992723 AT
x	-126826 AT

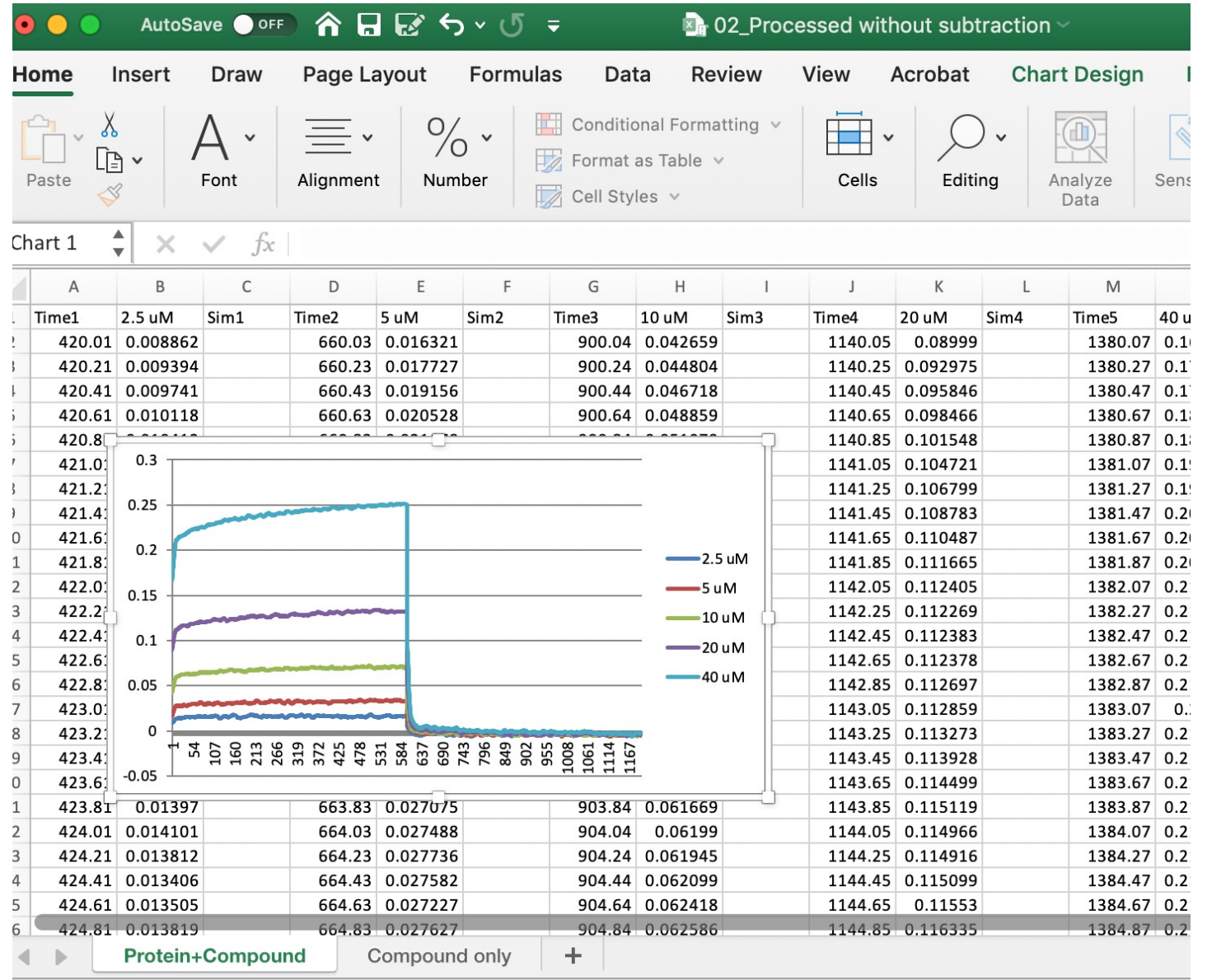
01_Experiment Report

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



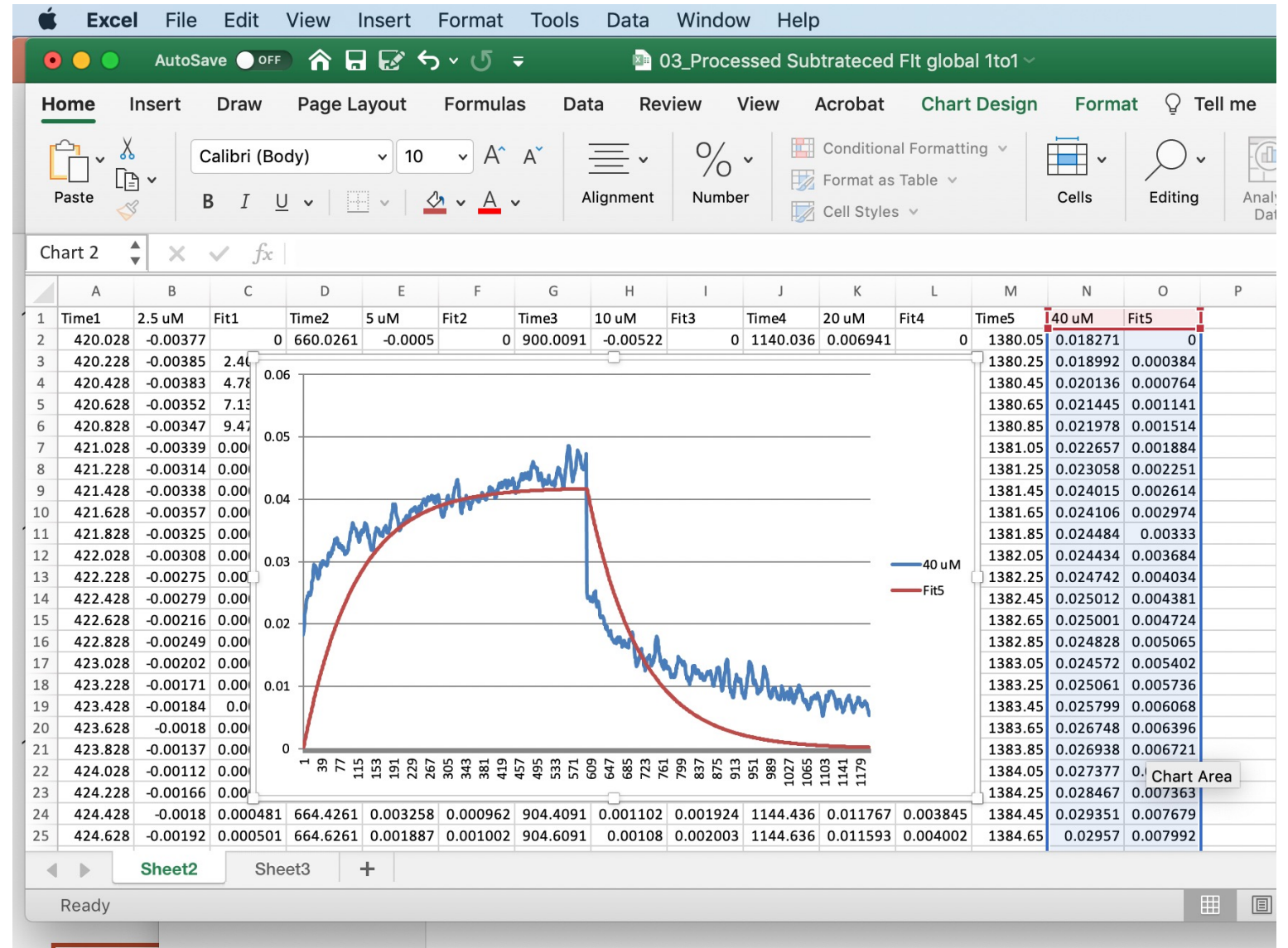
02_Processed without subtraction

- 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

The screenshot shows an Excel spreadsheet with the following data:

	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC
1	ding We	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																			
11																			

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

DAY 2: DATA ANALYSIS	
(Each team assigned a 20 minute slot)	
1:20 - 1:40 PM	Team Red
1:40 - 2:00 PM	Team Orange
2:00 - 2:20 PM	Team Yellow
2:20 - 2:40 PM	Break
2:40 - 3:00 PM	Team Gray
3:00 - 3:20 PM	Team Green
3:20 - 3:40 PM	Team Blue
3:40 - 4:00 PM	Break
4:00 - 4:20 PM	Team Pink
4:20 - 4:40 PM	Team Purple

With Jacquin in 56-302

- 2:40-3:05 **Pink / Purple / Blue**
- 3:05-3:30 **Red / Orange / Yellow**
- 3:30-3:55 **Green / Gray**

For Today

- Analyze/collect your data with Khan at your scheduled time
- Discuss binding kinetics with Jacquin 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
- Write associated results and discussion **paragraphs**
 - Explain ALL results (i.e. all the lanes on the gel)
 - Research article results text will not include interpretation of the
 - Separate 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