2/20/2014

# Highlighted items refer to items that need to be addressed before we send it to the TA's/professors

When I click "Try an Experiment", I can still see all of the assignments. Done

## **Assignments page**

The name of the assignment should be changed from "Quiz 3" to "StarCellBio Problem 1"

The assignment wording is not up-to-date. Look at the "StarCellBio Signal Transduction Quiz Ver4\_For StarCellBio-production" document for the most up-to-date wording. Update the assignment wording with "StarCellBio Signal Transduction Quiz Ver5\_For StarCellBio-production" - track changes indicate where the changes are located.

For all assignment wording there should be a space between different paragraphs.

Add in the "1" and "2" in circles at the top of the Question 1 and Question 2 pages, respectively. Move the "1" circle down a little bit so that the top of the circle aligns with the top of the text. The Question 2 circle looks a little strange with the part A, Part B, etc though. Done

Spelling mistake in the table of antibodies: It should be anti-GAPDH (loading control), not "anti-GAPPH"

### Set-up page

Within the "Add samples" window, the cell lines should be listed in the same order as they are listed within the "StarCellBio Problem Coding Ver. 3" document.

Make the "Add samples window wider so that the cell line names all fit in one line and so that there some space between the "Strains" column and the "Growth media only" column.

Center the "Select all" buttons underneath each column of checkboxes

Center the labels of each column in the Add Samples window. Can you make each column wider so that the label can fit on one line - except for maybe the last column?

This is hard to read now. Can you either add more space between the columns (and maybe put the titles back onto two lines) or (less preferable) add in vertical dividing lines between the columns Done Can you center the labels for each of these columns again now that they're back on two lines? Done

If you click "cancel" in the "add samples" window, it should close the window, but not take you back to having to click "Create new set-up"

There's no need to display the treatment concentration/dose, treatment start time, and collection time point columns.

Move the "Add Samples" and "Cancel" buttons to the bottom right corner of the "Add Samples" window. Done I only see the "Add Samples button moved, but not the cancel button too. Done

Bug: the copy button isn't working. Once I click Copy the first time, then if I click copy on any other sample, then it changes the sample to what I just copied, and produces another copy of what I just copied. I don't think we need the copy button though....

If you have a lot of samples, and click "Add samples" the window opens at the very top of the screen (have to scroll up to see it). Center the window It should be centered now, but the window is also draggable, so it can be moved if needed.

### **Western Blotting pages**

Within the "Sample prep page", "Whole Cell" label is not left aligned with the title of the column "Lysate Type"

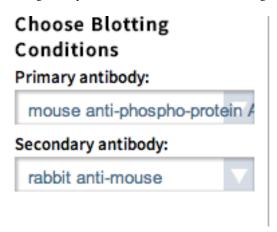
Add tool tips to see the complete sample name in the Samples window. This applies to the sample window on the Load/Prepare gel, but also for the blot and develop steps as well. Can you add in tool tips for those pages too? Done Not a priority for the 7.06 launch next week, but can you change the cursor to an arrow instead of a text cursor when hovering over the Samples list? Done

this does not need to be changed for the 7.06 launch next week, but when I navigate to the Sample prep page of western blotting, the samples window will be scrolled all the way to the bottom.

Remove (loading control) in the name of the primary antibody for rabbit anti-GAPDH so that it fits with the reduced font size (8 point)

Within the "Blotting page" the primary antibodies should be listed in the same order as provided within the "StarCellBio Problem Coding Ver. 3" document.

The name of the antibody should not be shown in front of the drop down menu if it is too long like here. Change to 8 point font. Can reduce the left margin slightly if needed.



Did the font size of the labels for the drop down menus "Primary Antibody" and "Secondary Antibody" also decrease in size? Done

Within the "Re-probe Pages" the labels on the tabs should correspond to what they are detecting: "Protein A" should be "Phospho-Protein A", "Protein "B = should be "Phospho-Protein B" and so on. The only one that does not have the title "Phospho" in front of the protein is GAPDH which should just be labeled "GAPDH". This needs to be P-Protein A, etc so that the titles fit in the tab

BUG: For detecting Phospho-Protein B —> there should not be a band for "Growth media only" and "Growth media + inhibitor". For this, I only checked with the WT-GFP cell line but please check that this is the case with the other cell lines as well.

BUG: For detecting Phospho-Protein D —> there should only be a band for "Growth media + ligand". For this, I only checked with the WT-GFP cell line but please check that this is the case with the other cell lines as well.

BUG: For detecting Phospho-Kinase X —> here should not be a band for "Growth media only" and "Growth media + inhibitor". For this, I only checked with the WT-GFP cell line but please check that this is the case with the other cell lines as well.

The labels of the small tabbed windows are slightly too long for the 'lx' to fit in the tab. It is appearing as a second line. I'm still seeing the names go onto 2 or 3 lines. See the notes below and above about changing the names. The names are going onto two lines if you do more than one blot for each primary antibody. It seems like there is enough room if you move the title over to the left a little bit. Otherwise we will need to decrease the font size. Done



The labels in the small tabbed windows are "anti-GAPDH" but all of the rest just say "protein A", "protein B" etc. Remove "anti" in the GAPDH label. With the previous change to add phospho to the front of tabs, that will make them very long. Unless you make the font small, it will always go over the tab length. Instead of "phospho-protein A" lets use "P-Protein A". Then adjust the font size as necessary so that the name fits in the tab. Done

### **Microscopy**

Within the "Microscopy Prep" the "Microscopy Analysis" option should read "Fluorescence" and the "Condition" should be automatically selected to "GFP(green)"

On the sample prep page, GFP (green) should be in gray (in the Conditions column) until the sample is selected - just like Fluorescence in the microscopy column. This change works when you first open a microscopy experiment. But if you select and then unselect a sample, "fluorescence" will return to gray, but "GFP (green)" stays in black Done

Left align "Fluorescence" with Microscopy Analysis Done Left align the radio button for GFP (green) with "Conditions" Done

Change the instructions in the second bullet point on the Load/Analyze page to say:

 Once you have manipulated the microscope controls, they will be automatically saved when navigating away from the image.

Change the instructions in the second bullet point on the Sample prep page to say:

 Select the type of microscopy analysis you would like to perform by selecting the appropriate Microscopy Analysis and Conditions, when appropriate.

Within "Microscopy Prep"in the "Microscopy Analysis" —> I do not think we should automatically provide another drop down menu if there is only one type of microscopy analysis to select. It add a lot of length to the list and it is a bit cumbersome. Alison's note - We have discussed this before but thought we should be consistent amongst all samples if some samples have varying numbers of possible analyses. However, in this case, there is only ever one choice of microscopy analysis for all samples so we don't need a second drop down menu to appear. And the only choice (Fluorescence) should be automatically selected for them once they click the checkbox.

Within the "Microscope Page" the label for each small tabbed window should just read "Fluorescence". Alison's note: Should it read: "Fluorescence: GFP"? Would that fit? Even when I scroll to all the way to the right within the "Samples" window, I cannot see the full label for those samples that are long. - Alison's note: The full name should appear in a tool tip when hovering over the name. The left/right slider should not be present, if possible.

#### Samples

- WT-GFP-Kinase, Growth media + inhibitor
- WT-GFP-Kinase, Growth media + ligand + ...
- 3. WT-GFP-Histone H2B, Growth media only
- WT-GFP-Histone H2B, Growth media + lig...
- WT-GFP-Histone H2B, Growth media + inh...
- WT-GFP-Histone H2B, Growth media + lig...
- WT-GFP-Protein D, Growth media only
- WT-GFP-Protein D, Growth media + ligand
- WT-GFP-Protein D, Growth media + inhibi...
- WT-GFP-Protein D, Growth media + liga...
- 11. WT-GFP-p100, Growth media only
- 12. WT-GFP-p100, Growth media + ligand

It always seems like the location for the microscope objective within the image is the same whenever you load the images and first look at them. It should be randomized.

Can you force a scroll bar to appear in the Samples window on the Load/Analyze pages - just like on western blotting pages? Done I can see the forced scroll bar, but then I see another one appear when I scroll down in this window. Done

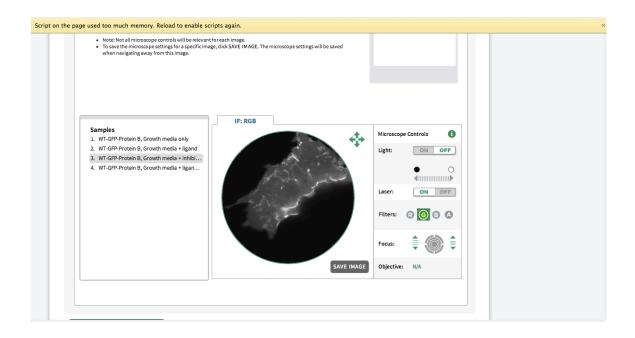
Sample window should not reset (jump up) whenever I click on a different sample. If I click on a sample that I have to scroll down to see (ex: one after sample 13), then it moves me back up to the top of the Samples window and I can no longer see the sample selected without scrolling back down. Done Not for implementation next Friday, but we should force the students to clear the message that appears over the lens once they click "Load"

I didn't have time to read the message that comes up over the lens and then I must have hovered my cursor over it and it faded away. Fixed with close box

BUG: I tried to add a second microscopy experiment and I was not able to "load" the new samples onto the microscope. It showed the last image that I had from a previous experiment. fixed by Ivan BUG: The "Save" button is causing two different bugs:

- If I save the image for Sample 1 and then I click on Sample 2, it is not until I start moving the objective around the slide that I get a different image from the saved on from Sample 1. fixed by Ivan
- If I save the image for Sample 1 and then I click on Sample 2, it will sometimes causes the sample image to be black and it will freeze the current page so that I am not able to switch to a different sample. This bug is resolved if I click on a different miscrocopy technique tab. fixed by Ivan

BUG: Conducting multiple microscopy experiments caused the program to crash (I did 7 experiments with only 4 samples each to look at each individual cell line separately under the four different treatments. I did save most if not all images for each microscopy technique) fixed by Ivan



The "Your slide has been loaded" message should have a check box with the option to not see this message again. When does this message appear? I don't see it.

It seems that it is saving the image state when I go from slide to the next without clicking "Save Image" is this correct? If so, do we still need the "Save Image" button? No, not really. Right now, it really doesn't do anything when you click it, because everything is automatically saved. So, we really don't need it. Should I remove it?