

Scientific Poster Presentation



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Creating a scientific poster in Adobe Illustrator or Microsoft PowerPoint

This is the title of my poster for this exercise
H. Adam Steinberg¹, Jean-Yves Sgro², Marchel Hill², and Ann C. Palmenberg^{1,2}
¹Departments of Biochemistry and ²Molecular Virology, University of Wisconsin, Madison, WI 53706 USA

Introduction

A large rectangular box for the Introduction section of the poster template.

Methods

A rectangular box for the first part of the Methods section.

1

A rectangular box for the second part of the Methods section.

2

A rectangular box for the third part of the Methods section.

3

4

A rectangular box for the fourth part of the Methods section.

Conclusion

A rectangular box for the Conclusion section of the poster template.

Hands-on instruction

Files require to complete this tutorial

Can be downloaded at the following URL:

artforscience.com/artforscience/Tutorials_files/samples_folder.zip

Poster templates for both Adobe Illustrator and Microsoft PowerPoint

Can be downloaded at the following URL:

artforscience.com/artforscience/Tutorials_files/templates.zip

Shortest title possible, keep it simple!
First and Last name of author(s), spell out first author's first name
Author affiliation(s) i.e., University of Wisconsin—Madison

Best titles practices:
Use only first and last names
Do not use initials
Do not use titles or degrees (Dr., MR., MRS., MS., M.D., etc.)
Do not use honorifics (Mr., Mrs., etc.)
Do not use titles or degrees (Dr., MR., MRS., MS., M.D., etc.)
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Introduction
Write your introduction in your poster. Include the background, the objectives of your study, the methods you used, the results you obtained, and the conclusions you drew. The introduction should be concise and to the point. It should be written in a clear and concise manner. It should be written in a clear and concise manner. It should be written in a clear and concise manner.

Results (heading text should be 50-30pts)
1
Fig. 1. This is the legend.
2
Fig. 2. This is the legend.
3
Fig. 3. This is the legend.
4
Fig. 4. This is the legend.
5
Fig. 5. This is the legend.
6
Fig. 6. This is the legend.

Conclusion(s)
Please describe your key findings. What is the most important result of your study? What is the most important result of your study? What is the most important result of your study?

Reference(s)

Acknowledgements
Thank the people and funding sources that supported your project.
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Results Panel 1 (heading text should be 50-30pts)
1
Fig. 1. This is the legend.
2
Fig. 2. This is the legend.
3
Fig. 3. This is the legend.

Results Panel 2 (heading text should be 50-30pts)
1
Fig. 1. This is the legend.
2
Fig. 2. This is the legend.
3
Fig. 3. This is the legend.

Results Panel 3 (heading text should be 50-30pts)
1
Fig. 1. This is the legend.
2
Fig. 2. This is the legend.
3
Fig. 3. This is the legend.

Conclusion(s)
Please describe your key findings. What is the most important result of your study? What is the most important result of your study? What is the most important result of your study?

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Results
3
Heading text should be 50-30pts
Fig. 1. This is the legend.
4
Fig. 2. This is the legend.

Conclusion
Please describe your key findings. What is the most important result of your study? What is the most important result of your study? What is the most important result of your study?

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Methods

Results
1
Fig. 1. This is the legend.
2
Fig. 2. This is the legend.

Results
3
Heading text should be 50-30pts
Fig. 1. This is the legend.
4
Fig. 2. This is the legend.

Conclusion
Please describe your key findings. What is the most important result of your study? What is the most important result of your study? What is the most important result of your study?

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Creating a scientific poster

This tutorial will teach you the basics that will help you create an effective scientific poster in either Adobe Illustrator and/or Microsoft PowerPoint. It will teach you how to use two hands at the same time to control both the keyboard and the mouse, essential shortcuts, special function keys, and other items that are listed below.

In this tutorial you will learn the following:

| | |
|---|-----------|
| Basic Adobe Illustrator | 3 |
| Open, Place, Zoom, Text, Shift-Option, Arrow keys, Selection tools, Rectangles, Fill & Stroke | |
| Adobe Illustrator - Graphing | 9 |
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| Slide Masters, Arranging multiple Windows | |

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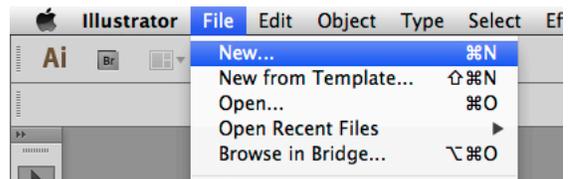
Basic Adobe Illustrator

You will learn the following:

- | | |
|-------------------------|------------------------------------|
| Open a new document | Constrain and copy shortcuts |
| Placing images or text | Transform and Duplication |
| Zoom tool and View menu | Moving objects with the Arrow keys |
| Character palette | Black vs. White selection tools |
| Paragraph palette | Marquee tool |
| Text tool | Fill and Stroke |

Opening a new document

1. Open **Adobe Illustrator** on the Mac from the Dock.
2. Choose **New** from the **File** menu (shown at right).

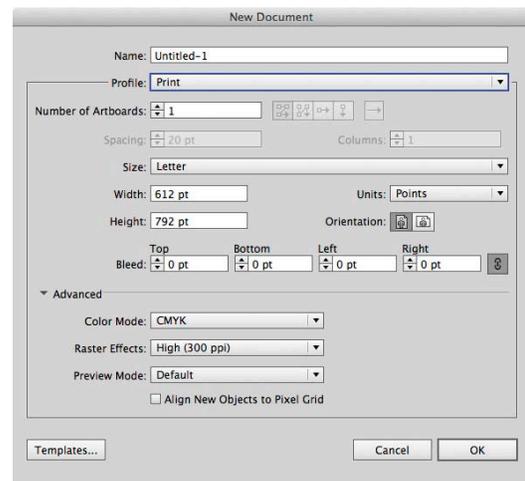


You will be presented with the **New Document** dialog box that is shown at the right.

Under the **Profile:** drop down menu, choose **Print** for files that will be used for journal illustrations and posters, choose **Basic RGB** for files that will be used in presentations.

Under **Size** choose **Letter**. Illustrations for journal figures and presentations are created at letter size, for posters, type in the **Width** and **Height** of your poster into the size boxes.

3. Click **OK**.

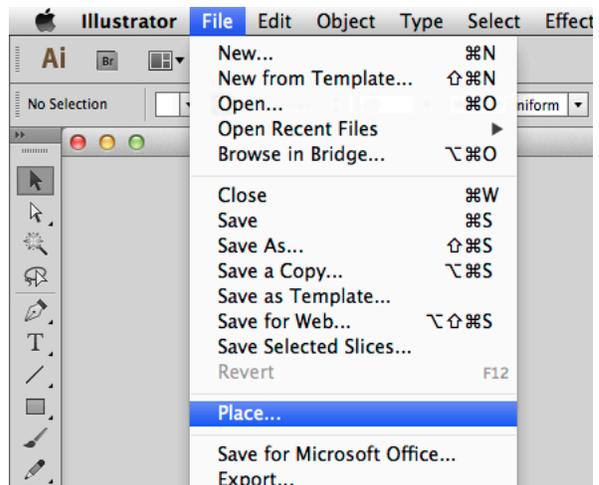


Place command

4. From the **File** menu choose **Place**.

NOTE: Use the **Place** command to insert **text** (from Microsoft Word), or **Bitmap** images, such as TIF, JPEG, GIF, PSD, EPS, etc., directly into Adobe Illustrator. Do not use the **Place** command to insert **Vector** image files such as AI, SVG, EPS, PDF, and TXT (ASCII or binary) that are created by programs such as Adobe Illustrator, Macromedia Freehand, Deneba Canvas, CorelDraw, or from "Print to File" or "print to PDF" commands. Simply choose **Open** from the **File** menu for **Vector** illustrations and images. See page 14 to learn more about the differences between **Bitmap** images and **Vector** illustrations and images.

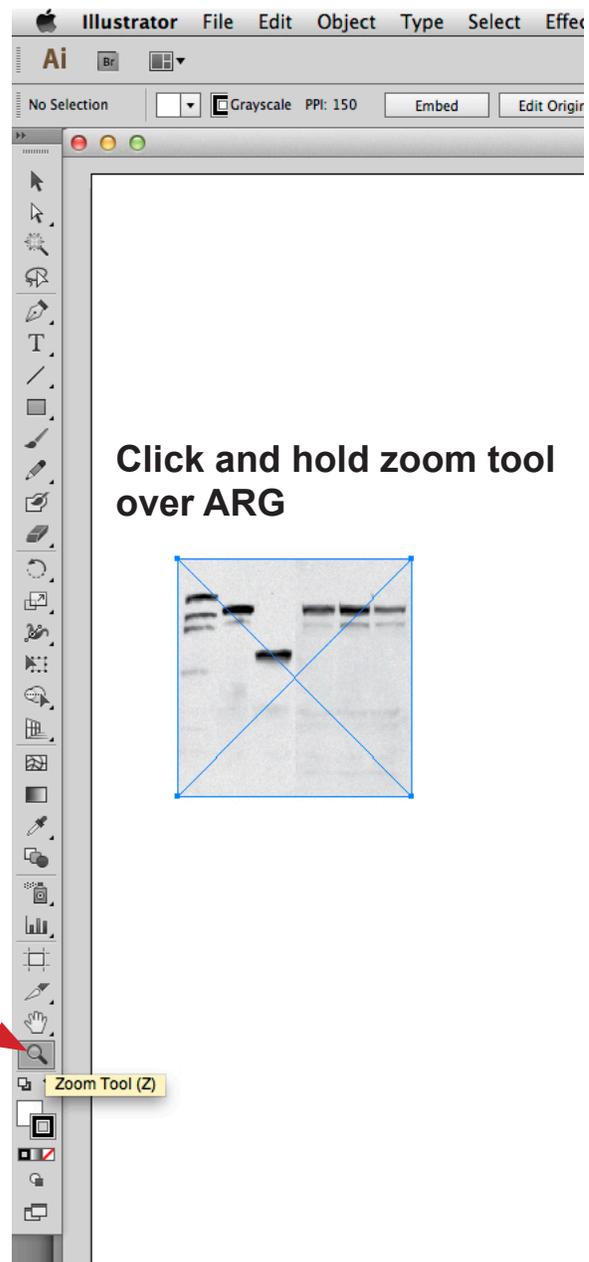
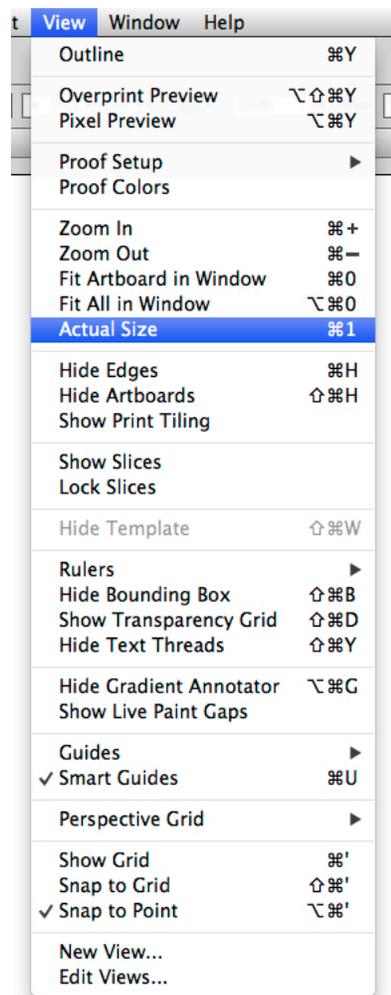
5. In the directory window that opens from the **Place** command, choose the file **ARGs1.tif** from the samples folder you downloaded earlier.



Zoom tool and View Menu

- Click on the **zoom tool** (shown on the right). The zoom tool works in three different ways:
 - You can click on an image and zoom in.
 - You can hold down the option or alt key and click to zoom out. Notice when you do this the plus sign in the middle of the magnifying lens turns to a minus sign (to show you zoom out).
 - You can click and hold down the mouse button on an item and it will zoom into exactly that space.

Take minute or two and try all three zoom options listed above. You can also Zoom in an out of an Illustrator window by using the options in the **View** menu (shown below left). Try **Zoom In**, **Zoom Out**, **Fit in Window**, and **Actual Size** from the View menu. When you are finished, choose **Actual Size** from the View Menu and then click and hold the **zoom tool** over the placed ARG until it nearly fills the screen (as shown in the example at right).

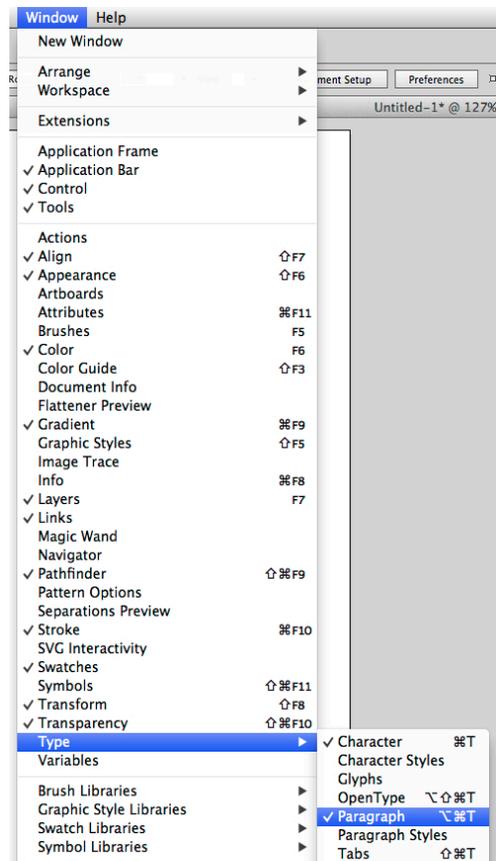
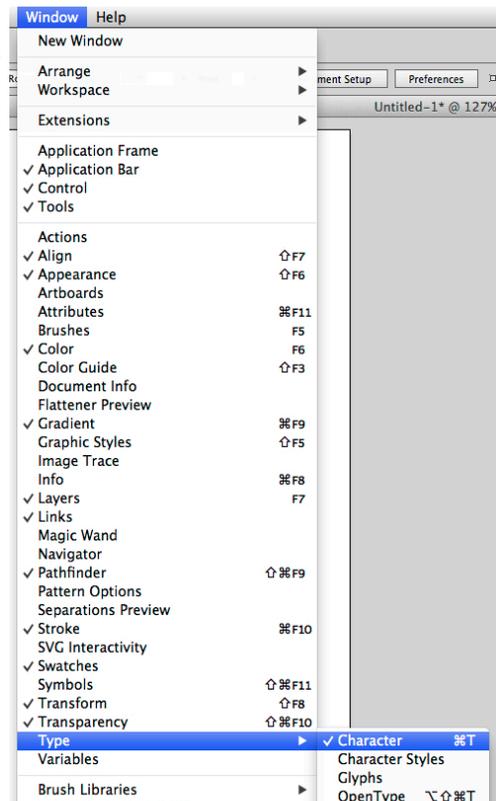
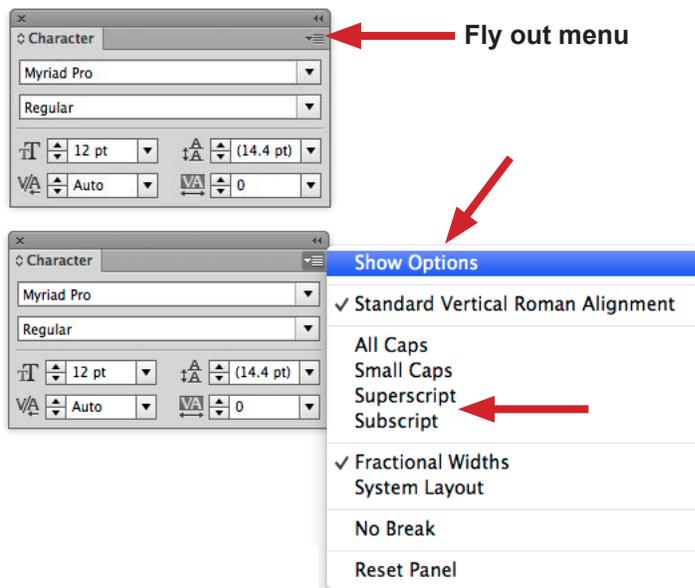


Basic labeling with Adobe Illustrator

Character palette

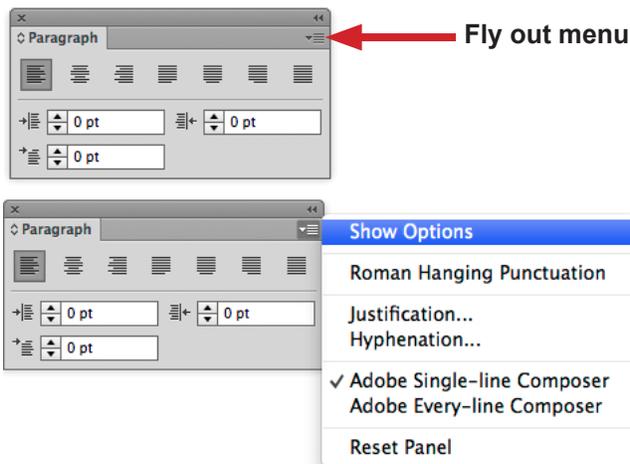
7. From the **Window** menu, choose **Type**, then **Character** (image right). The **Character** Palette will open.

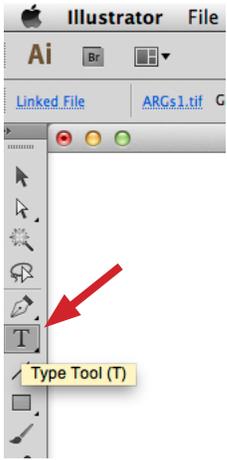
NOTE: If the Character palette is already open, the word **Character** will have a check mark next to its name in the window menu. If this is the case, you only need to find the palette on your desktop. Click on the **fly out menu** (set of four bars in the upper right corner of the palette) and choose **Show Options**. Also notice the options for **Superscript** and **Subscript** hidden here! You will use these later in your example poster title.



Paragraph palette

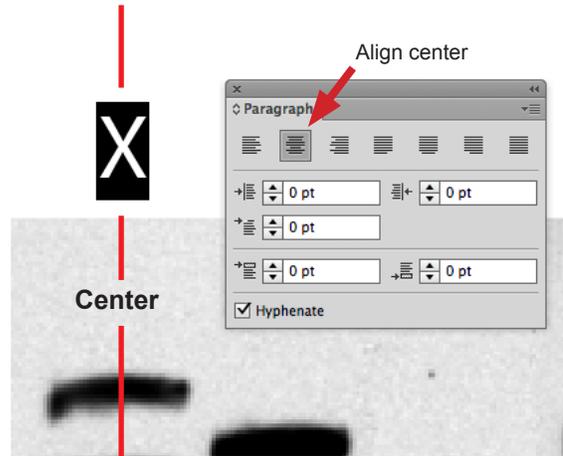
8. From the **Window** menu choose **Type** and then **Paragraph** (image right). The Paragraph Palette will open. Click on the **fly out menu** (set of four bars in the upper right corner of the palette) and choose **Show Options**.



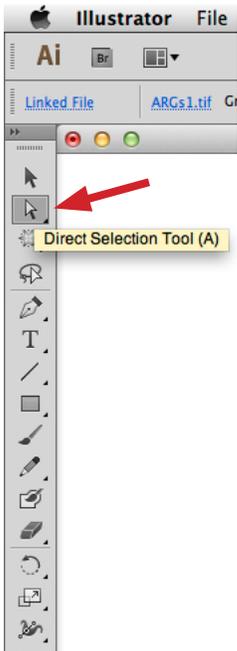


Type tool

9. Click on the **Type tool** (shown left).
10. Click (**DO NOT DRAG**) the **Type tool** right above the middle of the first lane of the ARG (as shown right). **Type** the capital letter “X”. **Select** (block) the letter “X” (again as shown right). Change the “X” to center text by clicking on the **Align center** image in the paragraph palette you opened in the last step.

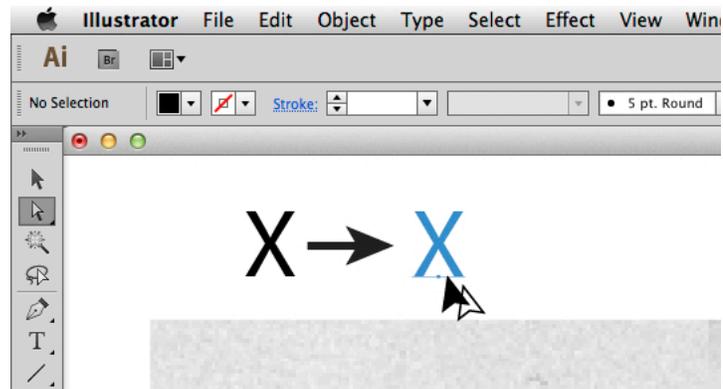


Constrain and copy shortcuts



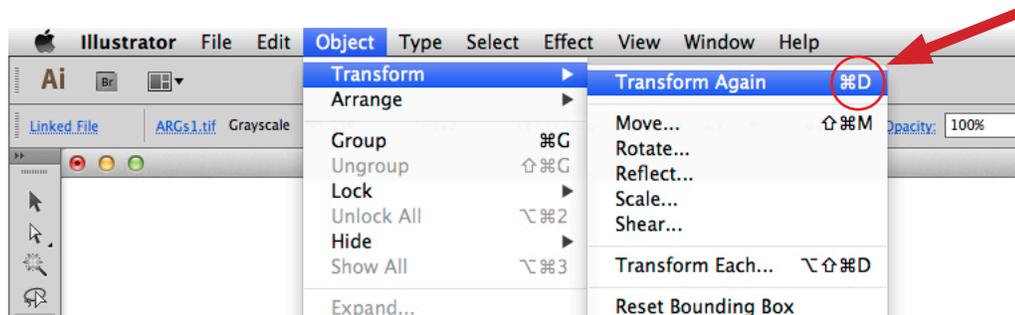
11. Click on the white arrow tool, the **Direct Selection tool** (shown left).

12. Click on the letter “X”, and then with your left thumb and fore finger, **hold down the shift and the option** (or alt) keys on the left side of the keyboard **while you drag the “X” to the right with the mouse**, placing it over the second lane of the ARG. **You must let go of the mouse button first and then the shift and option or alt keys second.** Notice that the cursor changes to two triangles, one black and one white (as shown above right) whenever you hold down the option or alt key and drag an object with the white arrow tool. This is Illustrator's way of telling you that it is duplicating the object. **You hold the option or alt key and drag to duplicate the object. You hold down the shift key to constrain the movement of the cursor to a perfectly horizontal line.** Holding down the shift key will constrain the movement of the cursor up, down, left, right and also to 45 degrees in any direction. This "constraining" shortcut is adjustable in the preference panel and works in all Adobe and Microsoft programs since it is a function of the operating system.

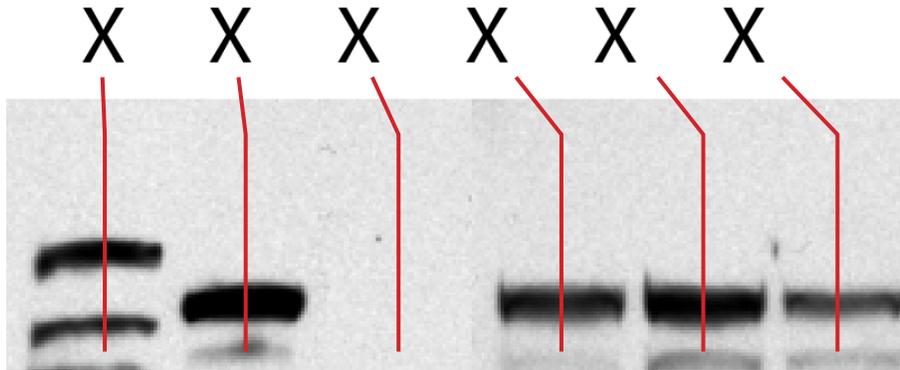


Transform and Duplication

13. Choose **Object–Transform–Transform Again** – four times (or you could hold down the Command key and hit the D key, which is the shortcut for this action, circled below).



The letter X will move to the right and duplicate itself four times! By duplicating your text this way you will get the same size and style font for all of your text. You may notice that you didn't exactly duplicate the text over the second lane of the ARG when you option (or alt) dragged it, so when you duplicated the text three more times it didn't exactly line up with the other lanes of the gel. In the next step we will fix the alignment!



Move objects via the Arrow keys

14. Take the **Direct Selection tool** (white arrow tool) and **click on one of the misaligned "X's"** to select it. Notice that clicking **the arrow keys** moves the object that is selected a small distance to the left or the right. If you hold down the shift key and then click on the arrow keys on the keyboard the text will move ten times as far, try it. Use the arrow keys on the keyboard to get your "X's" in visual alignment with the lanes of the ARG. This arrow movement distance is adjustable in the preference panel and works in all Adobe and Microsoft programs.

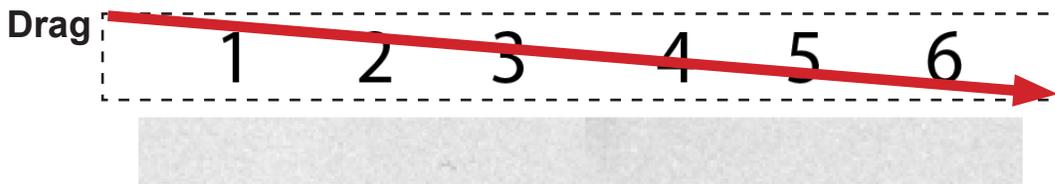


15. With the **type tool** change the "X's" to "1", "2", "3", though "6".

Black vs. White selection tools

16. With the **Direct Selection tool** (white arrow tool) **drag a box over all the lane numbers EXACTLY** as you see below.

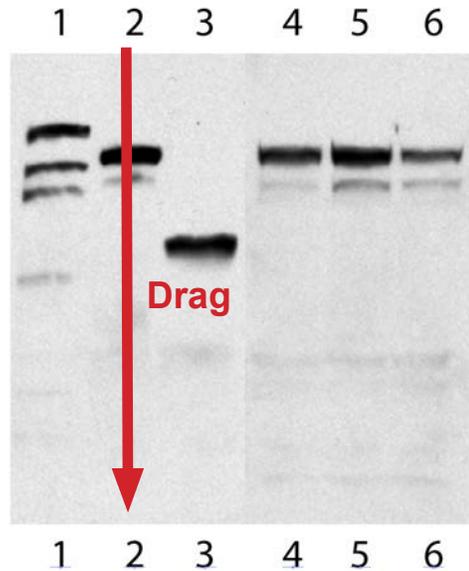
NOTE: Do not include any of the ARG image below the numbers.



NOTE: all of the numbers will be selected. The **Direct Selection tool** selects parts of objects in three different ways.

- 1). If you click on any part of an object, that part will be selected.
- 2). If you option (or alt) click on any part of an object the entire object will be selected.
- 3). If you drag a box over any part(s) of an object that/those part(s) will be selected. The **Selection tool** (black arrow tool), selects whole objects in the same way. The **Selection tool** (black arrow tool) will also allow you to rotate and scale selections while the **Direct Selection tool** will not.

17. While you have all of the numbers selected, click and drag on one of them, dragging them to the bottom of the ARG lanes while you hold the option and the shift keys (duplicating and constraining them).



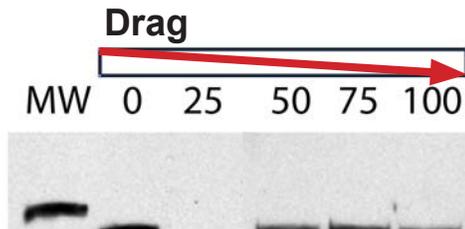
MW 0 25 50 75 100

18. Label the top of the ARG with percentage points. Change the top "1" to "MW", the top "2" to "0", the "3" to "25", the "4" to "50", the "5" to "75" and the "6" to "100"



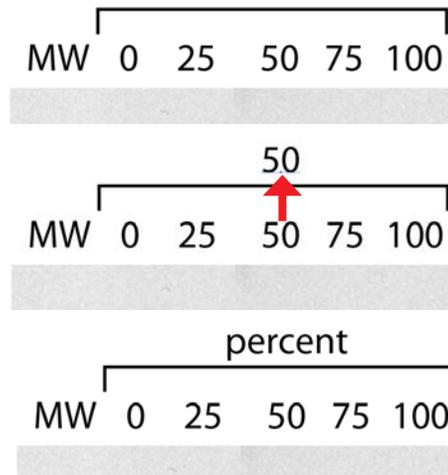
Rectangle tool

19. Click on the **Rectangle tool** (shown left).
20. **Drag a box** from between the "MW" lane and the "0" lane to the right of the "100" lane. (Follow the image shown right.)

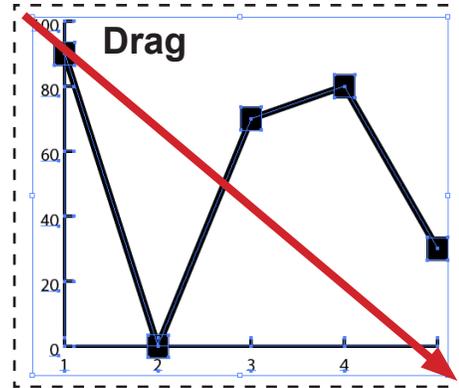


Fill and Stroke

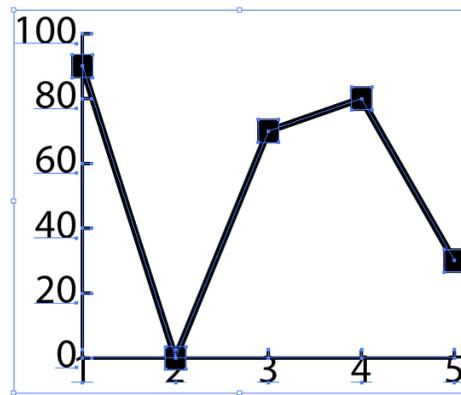
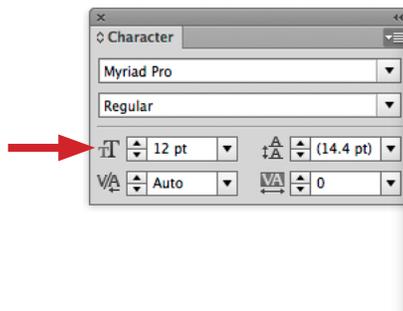
21. Change the black fill to none by clicking on the **Fill** box, then by clicking on the **small box with the red slash through it** (labeled **None** right) located below the Fill and Stroke boxes. Change the stroke to black by clicking on the **Stroke** box and then by clicking on the small **Color** box below it (see example at right).
22. Click the **Direct selection tool** and then click on a **blank area of the desktop** to deselect the box you just drew.
23. **Click once on the bottom line of the box** (this will select just the bottom part of the line) and click the **delete key** on the keyboard.
24. With the **Direct selection tool** click on the "50".
25. **Move the "50" up** above the box while holding down the **shift and option key** to constrain and duplicate it.
26. **Change the "50" to the word "percent"**.
27. In the **View** menu, choose **Fit in Window**.



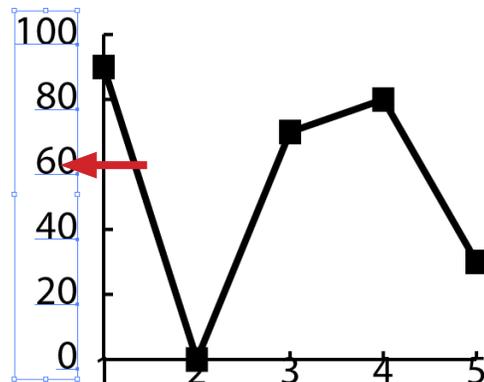
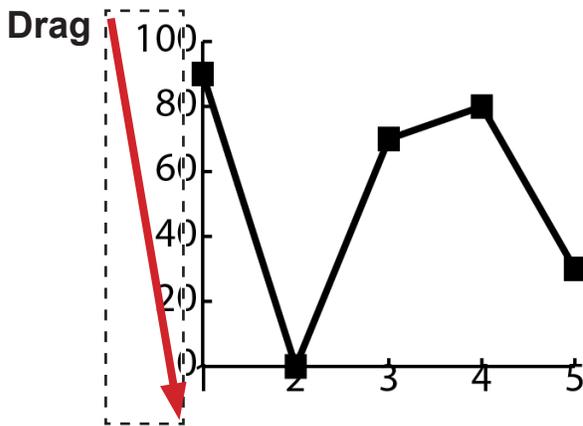
31. Notice that the fonts on the graph are too small and the X and Y tick marks are inside the graph area. Using the **Direct selection tool** drag a selection box over the entire graph.



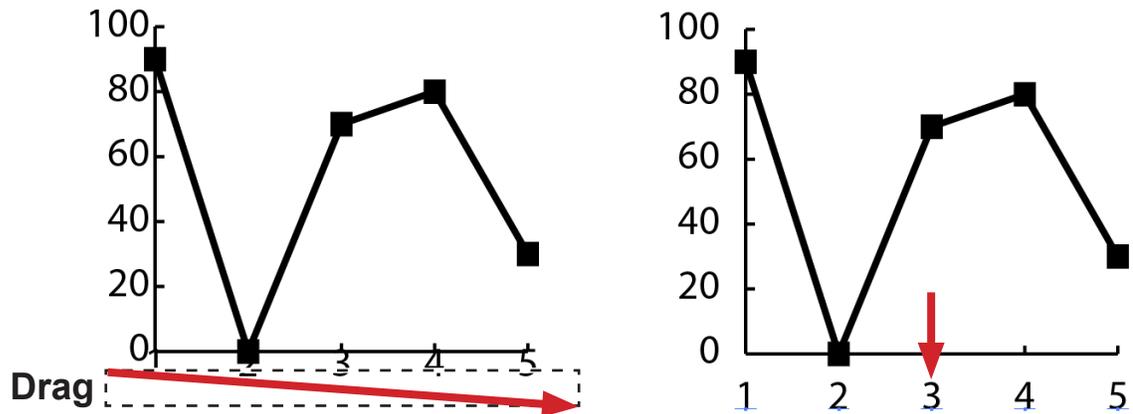
32. In the **Character palette** change the type to **12 points**. Notice that if you **click** on the "TT" in the Character palette that Illustrator will select the information in the TT box for you, making it easier to enter text. All Adobe palettes work this way.



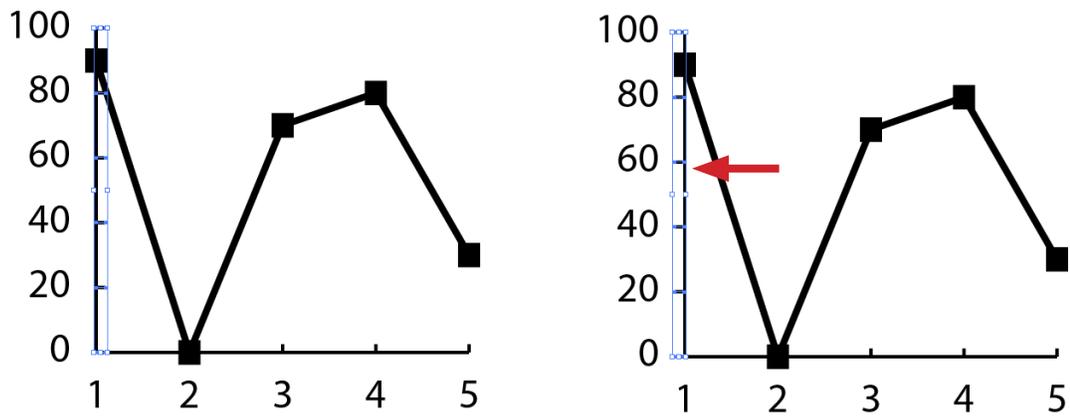
33. Using the **Direct selection tool** click on a **blank part** of the illustration to **deselect** everything. **Drag** a selection box over the **Y axis numbers**, just as it is pictured below (left). **Do not allow any of the dotted selection box to touch any part of the graph!** **Arrow** the Y axis values left with the keyboard arrow keys or the Shift + Arrow keys.



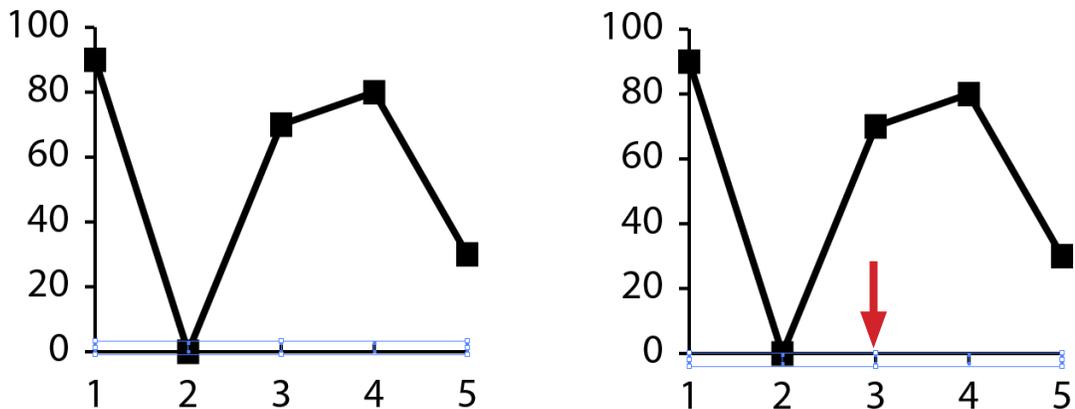
34. Do the same thing for the X axis. Notice that the selection box does not touch any part of the graph.



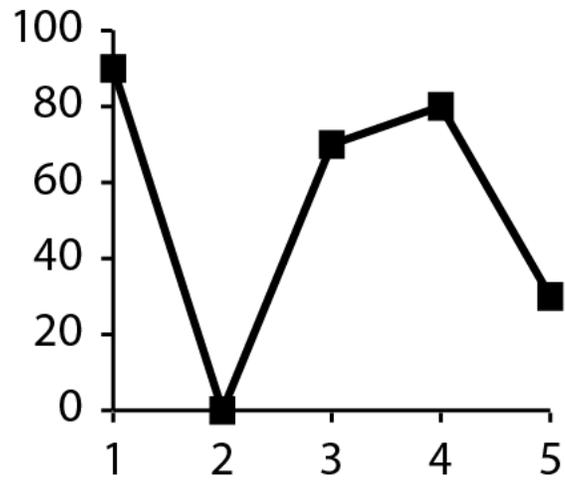
35. Using the **Direct selection tool**, option double-click on the Y axis tick marks, this will select all of them as a group. Arrow them left with the keyboard arrows or the Shift + Arrow keys.



36. Do the same for the X value tick marks.

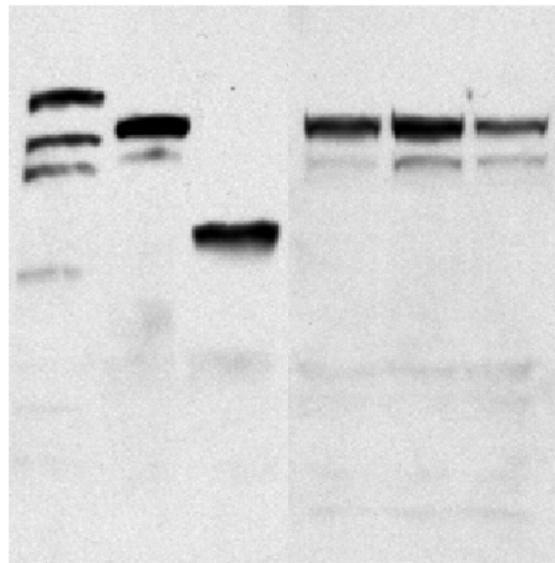


When you are finished, your labeled ARG should look similar to this one.



percent

MW 0 25 50 75 100



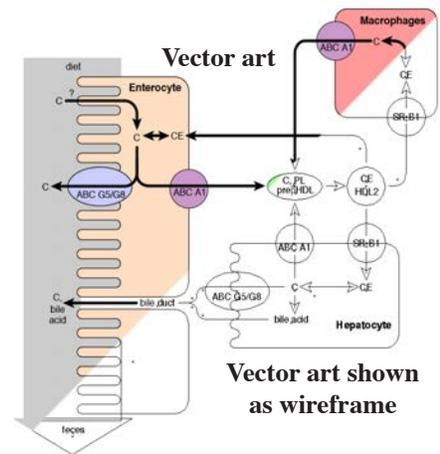
1 2 3 4 5 6

There are two kinds of Images – Vector & Bitmap

Take a few minutes to review the following two types of images that can be made into PDF files. Make sure to read all listed details about them. You will learn more about the difference between these two types of images in the next section, **Getting Images from PDF files**.

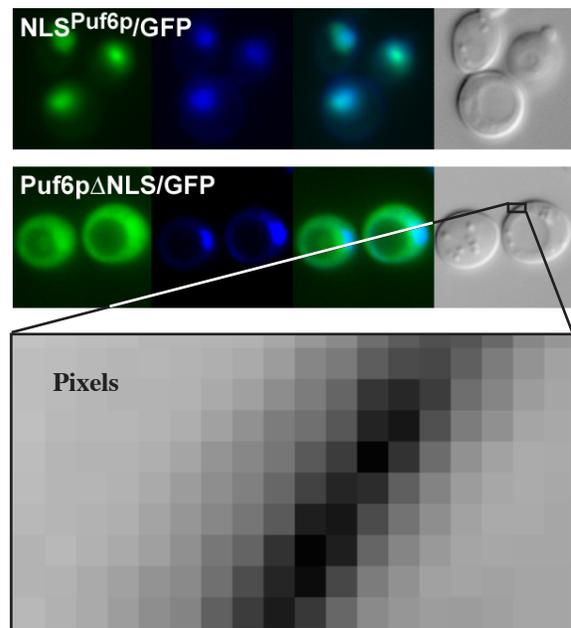
Vector (Postscript)

- Computer files that are created from lines, fills and text
- Written in postscript language (PDFs are postscript)
- Files created by Adobe Illustrator, Deneba Canvas, CorelDraw, ClarisWorks, etc.
- Can be scaled up to any dimension and still look good
- Sometimes the files are large, usually have poor compression
- May contain Bitmap information (below)
- File formats: AI, SVG, PS, EPS, PDF, and TXT (may be ASCII or binary)



Bitmap

- Scanned images
- Files created in Adobe Photoshop, Adobe Elements, CorelDraw, etc.
- Made of pixels that represent an image
- Pixels are always shades of gray
- Color images are layered grayscale files
 - Three grayscale layers (channels) in a RGB file
 - Four grayscale layers (channels) in a CMYK file
- Bitmap files are resolution (dpi or ppi) specific
- Should not be scaled up, pixels may become visible
- Can be scaled down via interpolation but resampling will occur
- Generally do not contain vector information (PDS, Photoshop native files may contain vector information), may be saved as postscript files
- Some Bitmap images can be heavily compressed
- File formats are: PS, EPS, PDF, TXT, TIFF, BMP, PCX, and PICT
- Web file formats are: JPEG, JPEG2000, GIF, PNG



Getting Images from PDF files

You will learn the following:

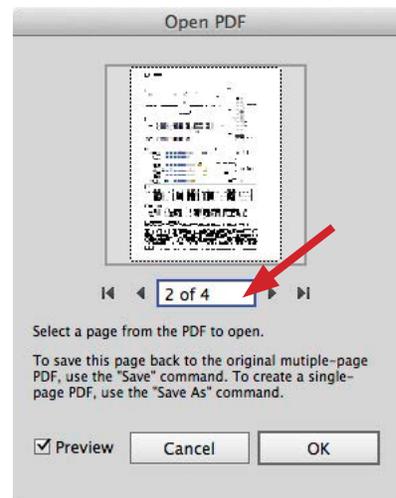
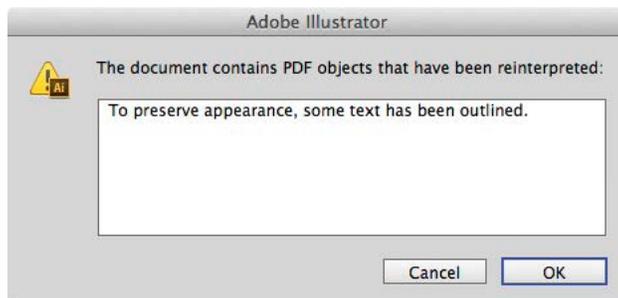
Understanding that images in PDF files can be either vector or Bitmap illustrations

Opening PDF files

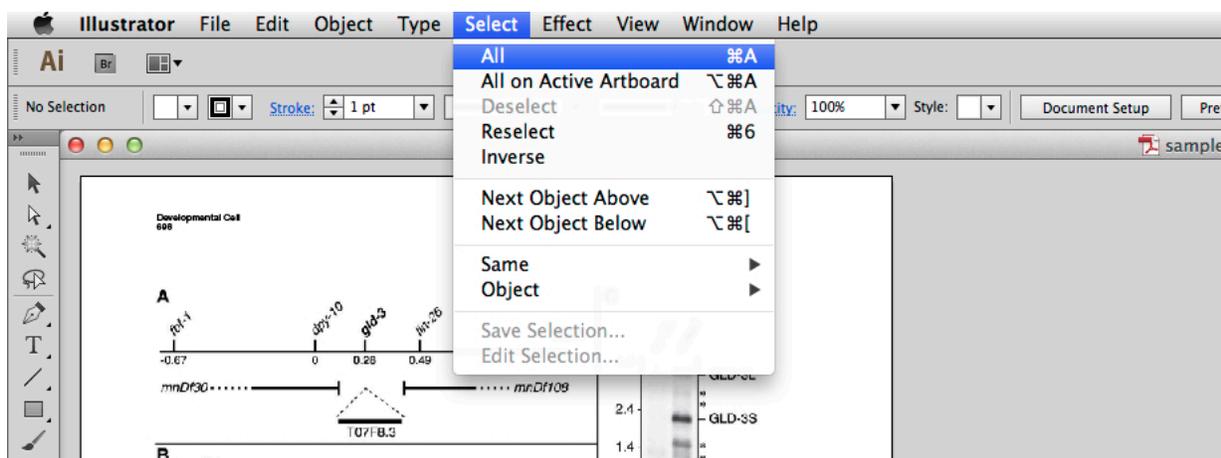
PDFs are a universal text and image file format that works on any computer platform: Windows, Macintosh, Linux, etc. They are small files and may contain either vector, or Bitmap images, or both. They can be opened in Adobe Acrobat (the full version), Adobe Acrobat reader (limited FREE version), and all Adobe programs including Illustrator and Photoshop. PDF files can be created from any program on any computer platform with the full version of Adobe Acrobat installed or from the print dialog box.

1. **Open** the **Adobe Illustrator** program. Choose **File Open** and choose **sample 1.pdf** from Samples folder you downloaded in the open dialog box.
2. When you open a PDF in an Adobe program **NOTE, it will only allow you to edit one page at a time. Pick page 2** in the Open PDF dialog box (see image right).

When you open that PDF you will get a Illustrator PDF Warning dialog box, noting that the Helvetica font is missing. **Click OK** and proceed to the next step.



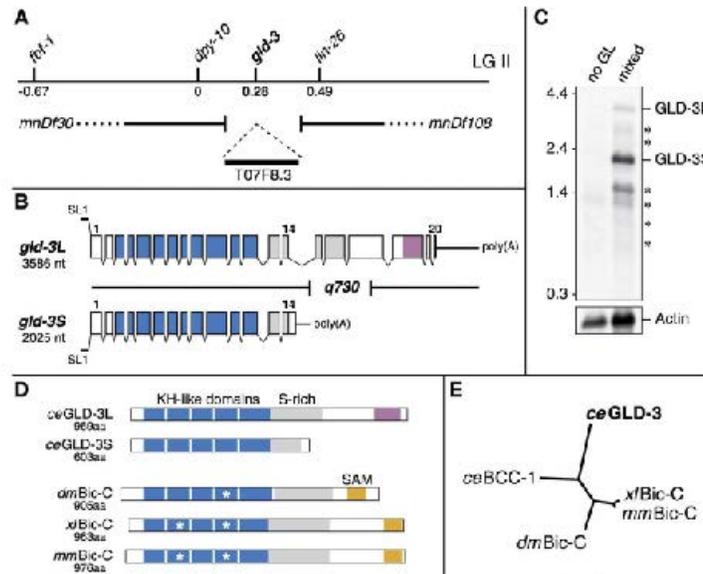
3. Once the file opens, choose **Select All**.



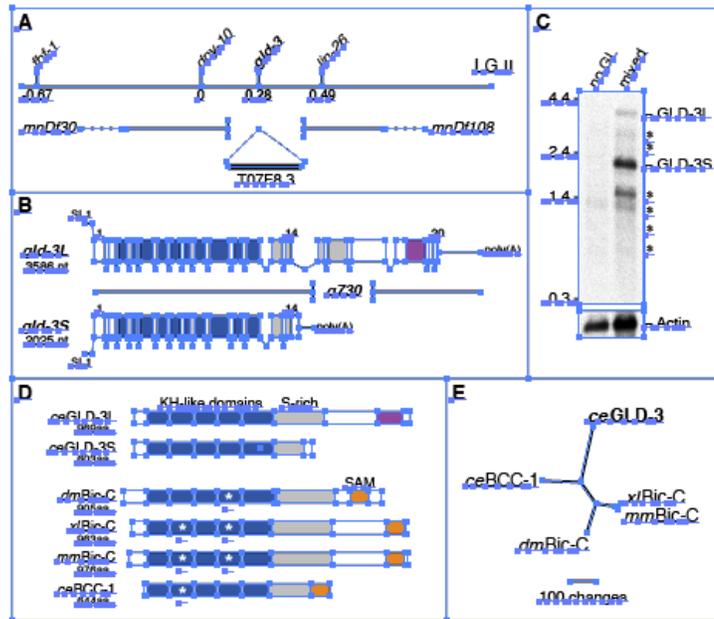
There are two ways that one can save vector images into a PDF file. Notice in the top image below (**sample 1.pdf**), that the image parts are all in one box. This vector image was converted to a Bitmap image when it was saved as a PDF file. You could open this PDF file in Adobe Photoshop and crop the Bitmap image out to use it in a poster or PPT talk, however the image will be this current resolution and may result in a poor quality print.

- Choose File **Open** and choose **sample 2.pdf** from the directory window. **Pick page 2** in the Open PDF dialog box. Choose **Select All**. Notice that the vector image parts are all highlighted and can be edited in this PDF file (shown below at the bottom of the page). This vector image was retained as vector art in the PDF file. You can resize and resave this image to use in a Poster or PPT talk to any resolution. This illustration is resolution independent.

Bitmap image



Vector image



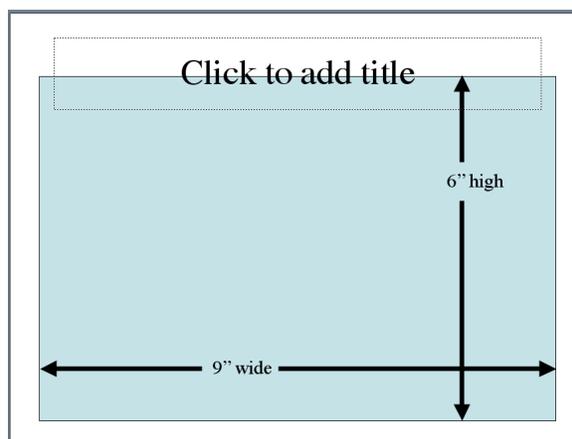
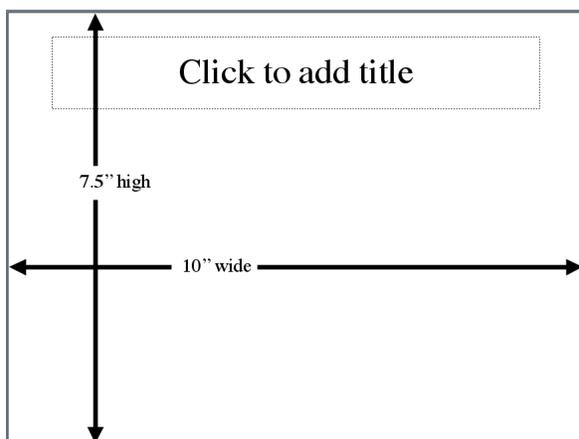
Images into PowerPoint

You will learn the following:

Correct image file formats for PowerPoint talks and posters
How to create PNG files from Adobe Illustrator files

Notes

- All portable and fixed projectors for presentations are based on a screen resolution of 72 dpi, therefore all image files inserted into a PowerPoint slide should be 72 dpi, or for even better looking presentations, double that amount (150 dpi). They should not however, be 300 or 600 dpi!
- Though all poster printers can print posters at various higher resolutions, for efficiency of speed, print shops generally print at 180 dpi. Therefore, all image files inserted into a poster should be 180 dpi, or for even better looking posters, approximately double that amount (300 dpi). They should not however, be 600 or 1200 dpi!
- The PNG file format works best, but other file formats will also work but may cause problems when switching between operating systems.
- For best results, PNG files should be 200% the final size you want, and then scaled to 50% in PowerPoint.
- All slides in a PowerPoint Presentation are 7.5" high and 10" wide, for 1024 projectors.
- When making a slide one should leave space for a title and a comfortable margin for the eye to rest in on all four sides. Therefore, 6" x 9", or less, is generally the maximum area for images on PowerPoint slides.

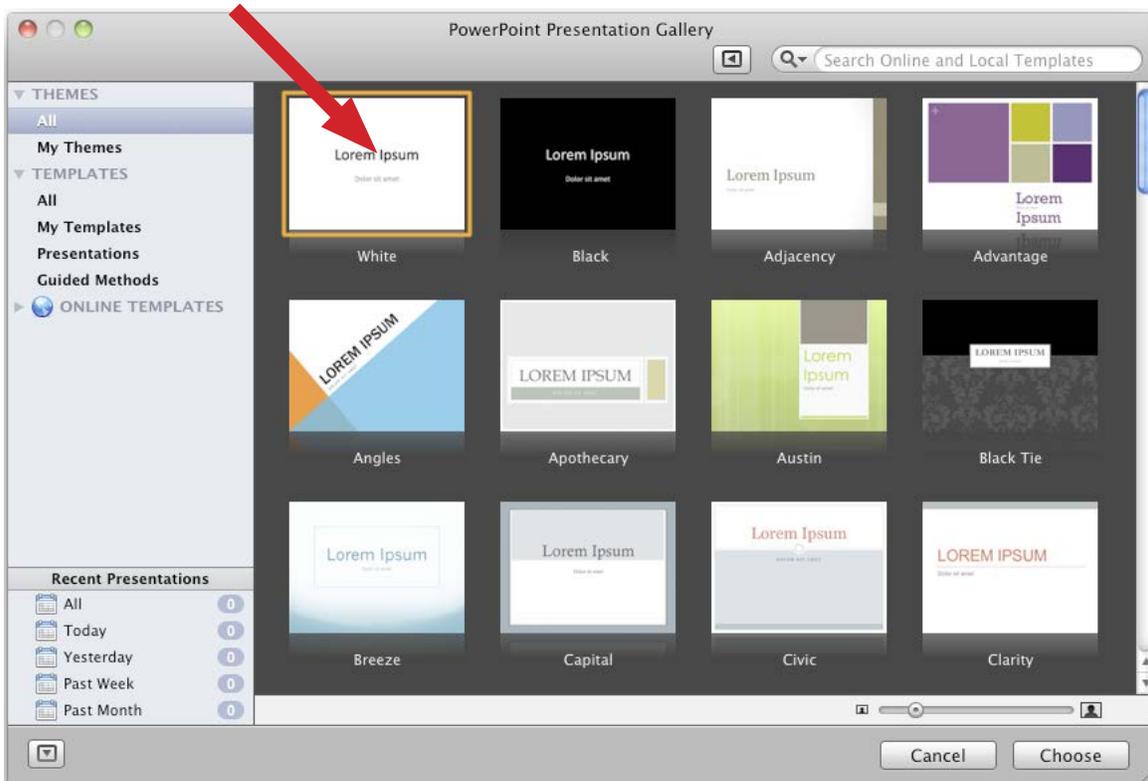


The PNG file format

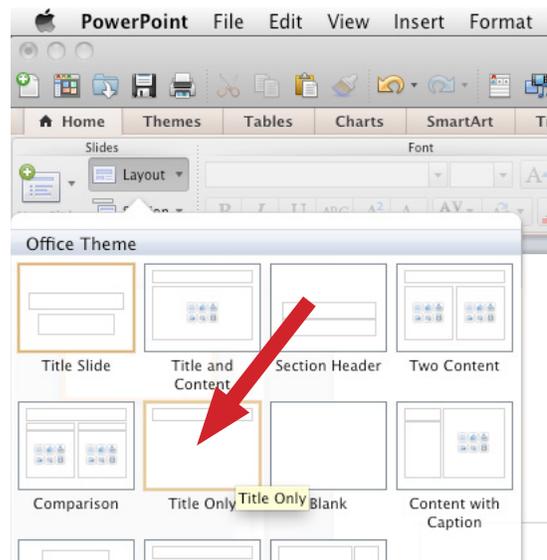
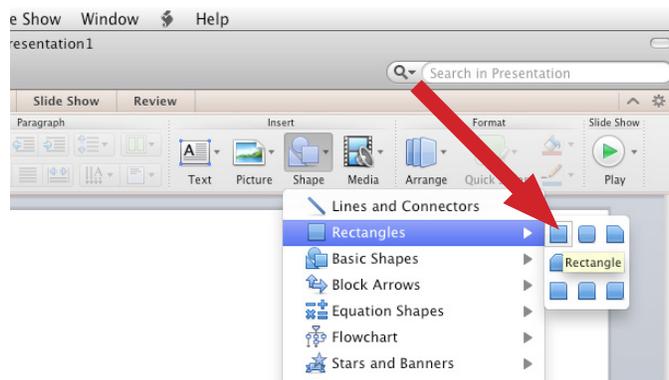
Microsoft Office recommends using the PNG file format for all images inserted into its Office products. In this section you will learn how to properly create PNG files from Adobe Illustrator vector files.

Creating PNG files

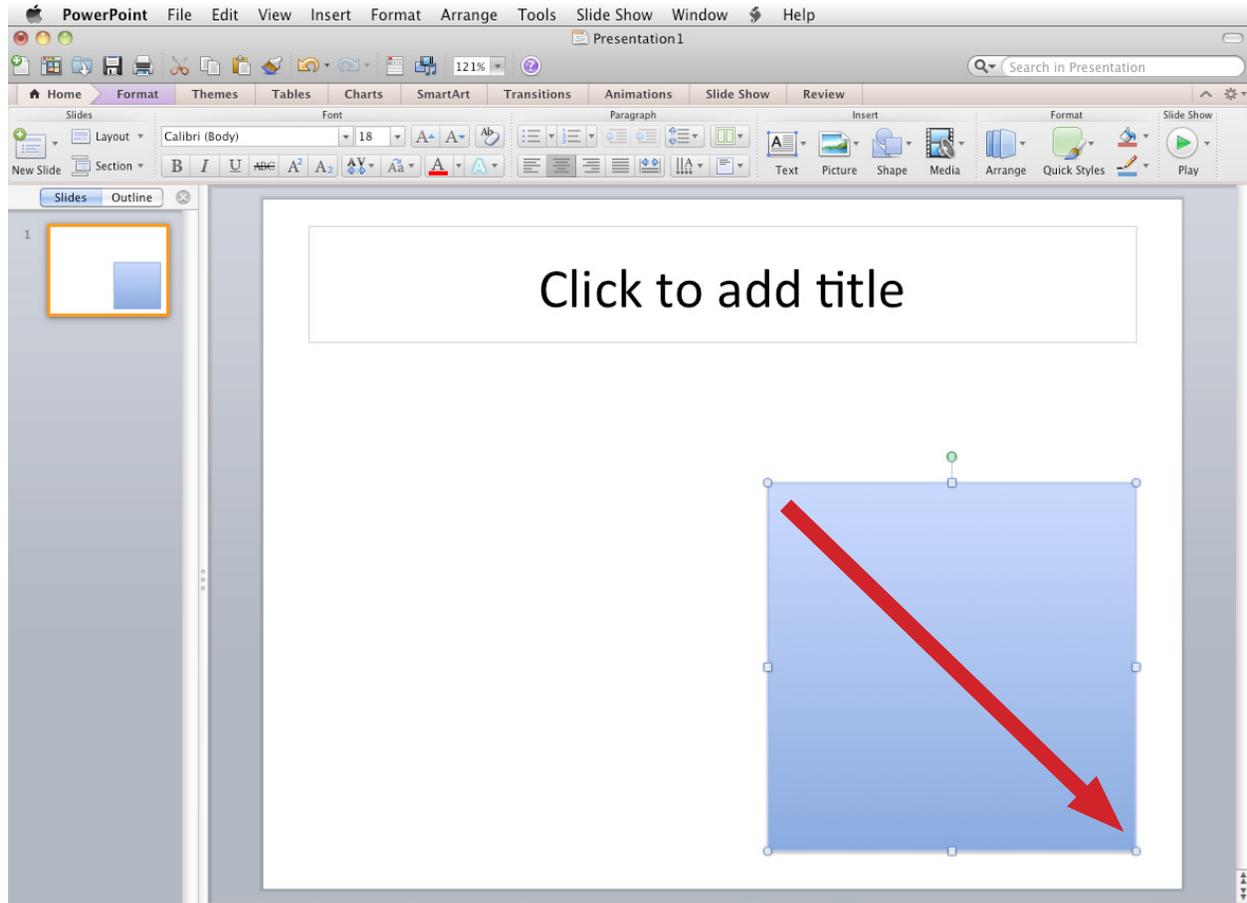
1. Open **Microsoft PowerPoint**. From the PowerPoint Presentation Gallery choose the simple **White** theme.



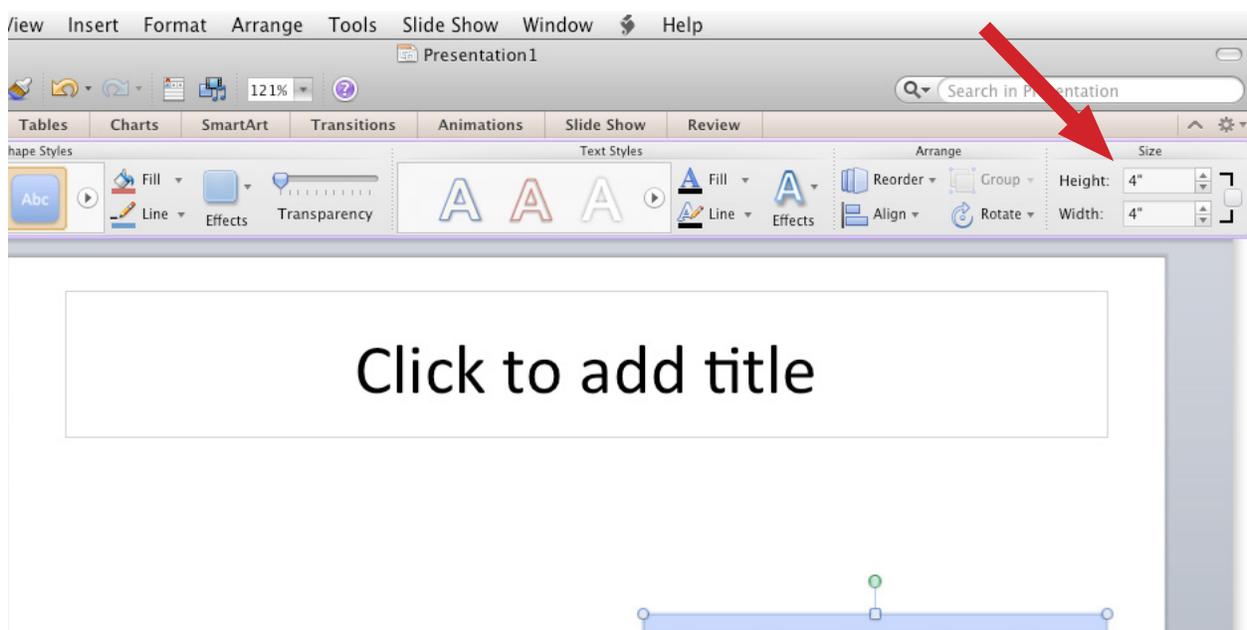
2. From the **Layout** drop down menu under the **Home** tab, choose **Title Only** slide.
3. From the **Shape** pull out menu Choose **Rectangles** and then choose the first rectangle in the upper left.



4. **Draw a box** (for this exercise draw it as it is shown below) to the approximate size and shape you want your inserted image to be.



5. **Double click on the box** and the **Format Shape** options will open at the top of the page. In the **size boxes**, **change both the width and height to 4"**.

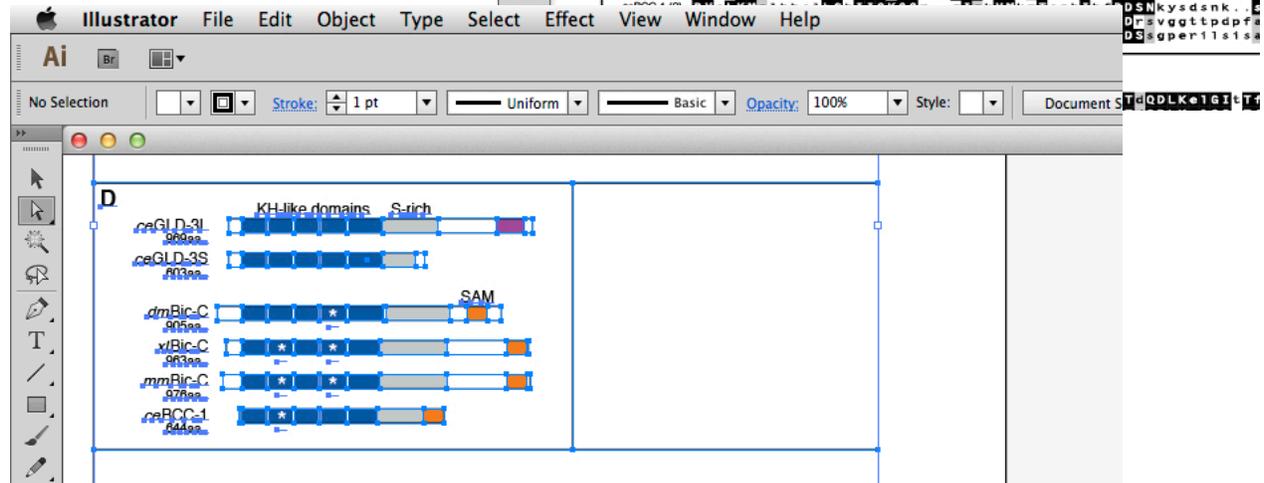
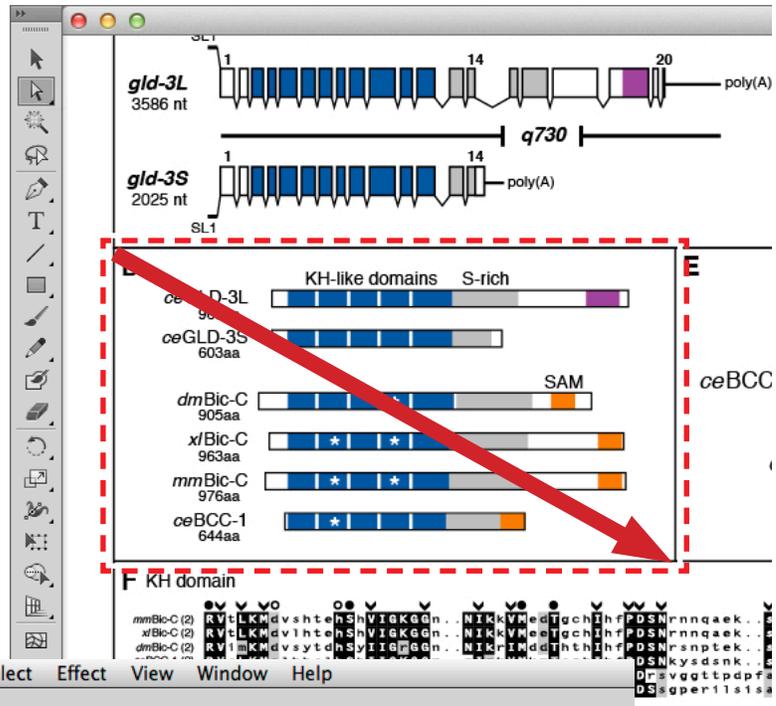


6. Open **Adobe Illustrator**. Choose **Open** from the **File** menu and then choose **sample 2.pdf** from the samples folder you downloaded earlier. **Open page 2**. (See page 15, steps 1 and 2.)

7. Using the **Direct selection tool** click and **drag a selection box** over “**section D**”.

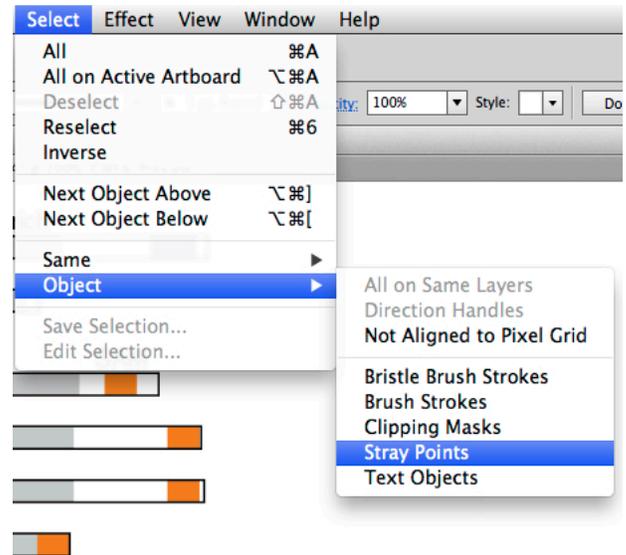
NOTE: Drag the selection box as close as possible to the example shown right!

8. **Copy** and **paste** the image into a new file by choosing **Edit**, then **Copy**. **File**, then **New**. **Edit**, then **Paste**. Your image should look something like the example below.



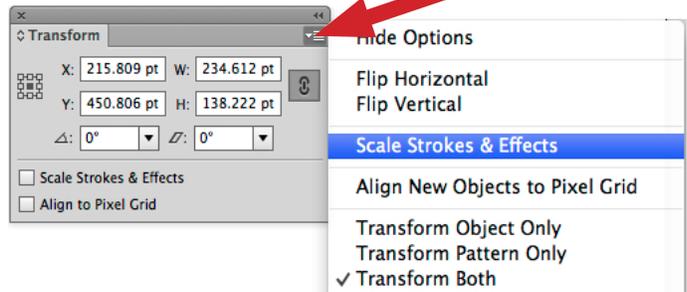
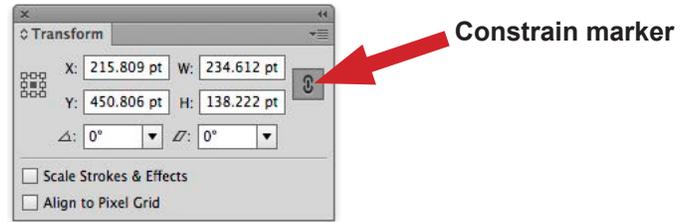
9. **Delete** the extra **lines** around the figure, and also the letter **D** and **E** (if you have them), by clicking on them with the **direct selection tool**. First, **click** on the white space around the figure to **deselect** everything, then **click** on a **line** or a **letter** and hit the **delete** key. **If you are deleting a line you need to hit the delete key twice**, once to delete the line and once to delete the endpoints of the line.

NOTE: You may have created stray points making the above deletions. Stray points are the endpoints of lines or text anchors that do not contain lines or text. **Zoom out** to full screen by choosing **Actual Size** from the **View** menu. Choose **Select**, then **All**. Notice if there are any blue highlighted dots around the figure. To remove these stray points, you must **deselect** (**click** on the white space around the figure to **deselect** everything), then choose **Select**, then **Object**, then **Stray Points** (as shown right) and then hit the **delete** key.

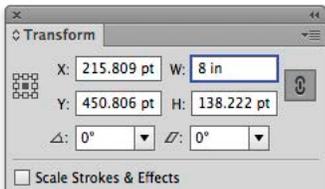


10. From the **Select** menu choose **All**.
11. From the **Window** menu choose **Transform** and the **Transform** palette will open (remember, if the transform palette is already open it will have a check mark next to it's name in the menu). Make sure the "**Constrain Width and Height Proportions marker**" is on.
12. Click on the **flyout menu** in the upper right of the transform palette and from the fly out menu choose "**Scale Strokes and Effects**".

NOTE: If you turn on **Show Options** in the **flyout menu** you will get the **Scale Strokes & Effects checkbox** in the **Transform** palette as shown by the red arrow at the right.

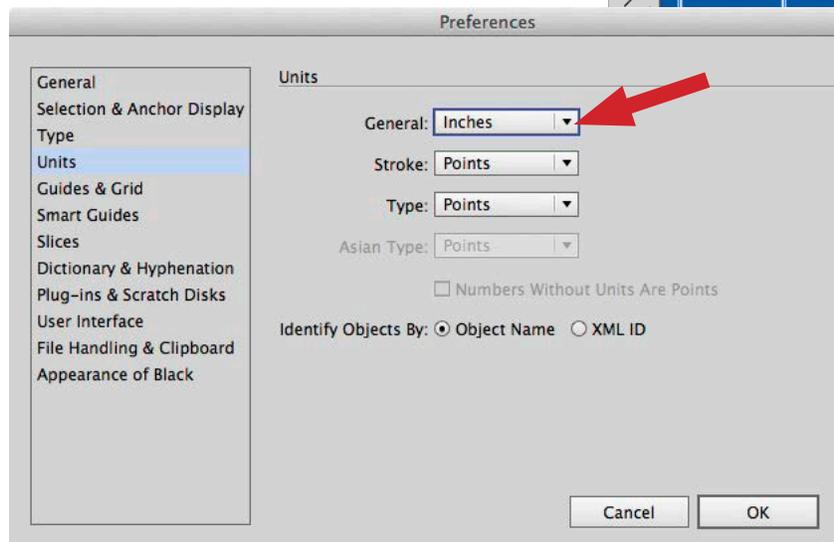
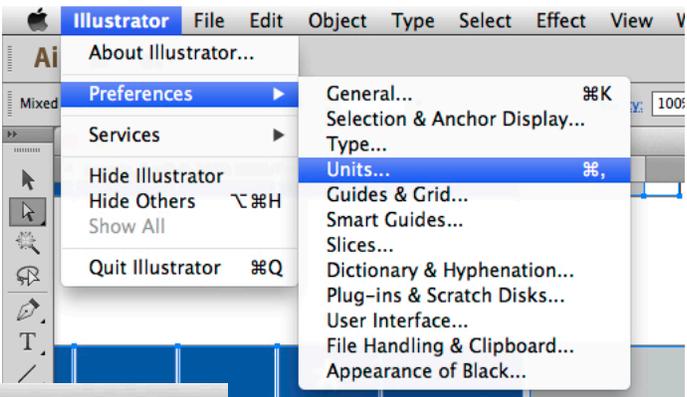


13. The Transform palette allows one to move, resize, rotate and skew images on the artboard in Adobe Illustrator. In the "W:" box type twice the width, **OR** in the "H:" box type twice the height you noted for the size of the box you drew in PowerPoint (see **NOTE** below about units) and then hit the return or **enter** key.



The box I drew in PowerPoint was 4" x 4" so I entered 8" (8 in) in the W: field.

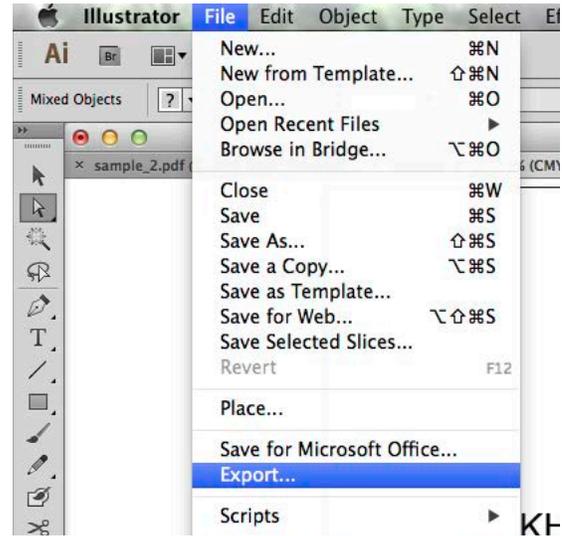
NOTE: The default ruler units for Adobe Illustrator is Picas (p) and Points (pt), a standard unit of measure in the publishing world. You can change the ruler units to a more familiar standard (inches) or metric (centimeters) in the Preferences, **Units** (as shown right). Or... you can just leave them as pts. and type the unit symbol in any of the dialog boxes, "in" for inches, "cm" for centimeters, "mm" for millimeters, "px" for pixels, etc. Illustrator is programmed to figure out what you mean!



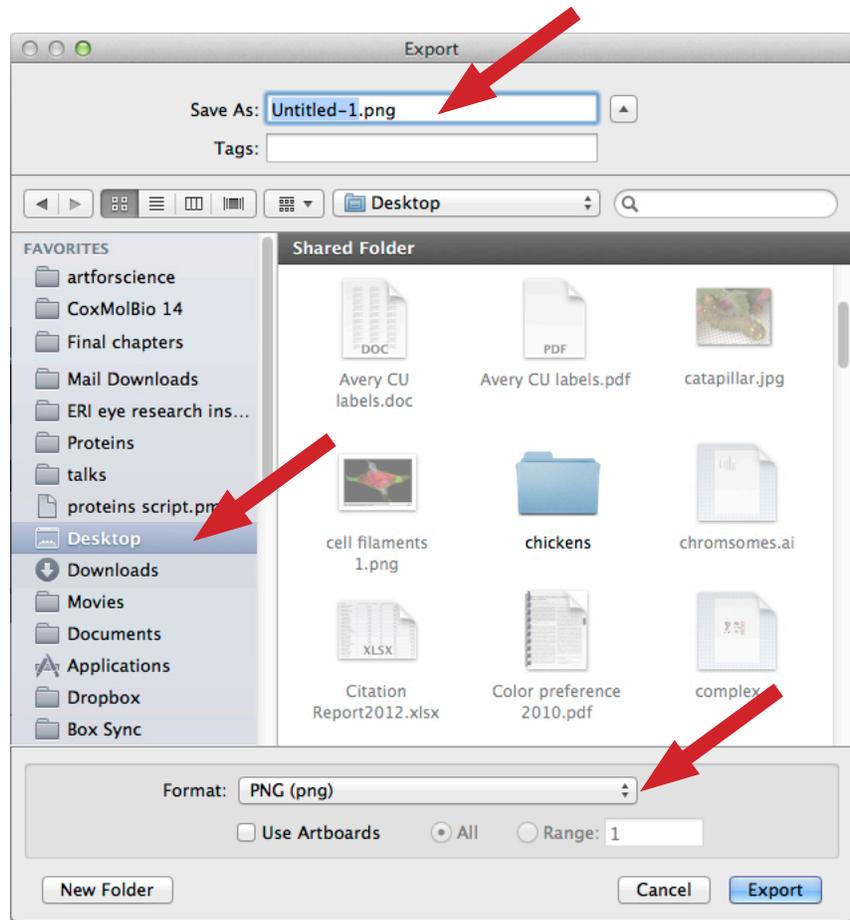
14. Next we will take the image into PowerPoint.

From the **File** menu choose **Export...**

The **Export** dialog box will open
(as shown below).

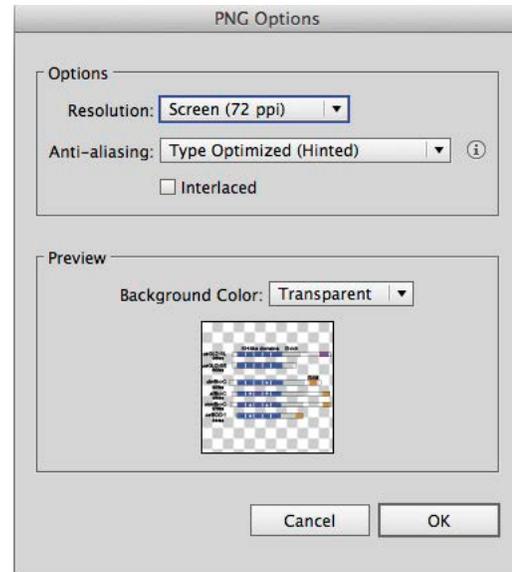


15. Name your file in the **Save As:** box,
choose **Desktop** for the file location on the left side, and
choose **Format: PNG (png)** from the dropdown menu at the bottom of the dialog box.



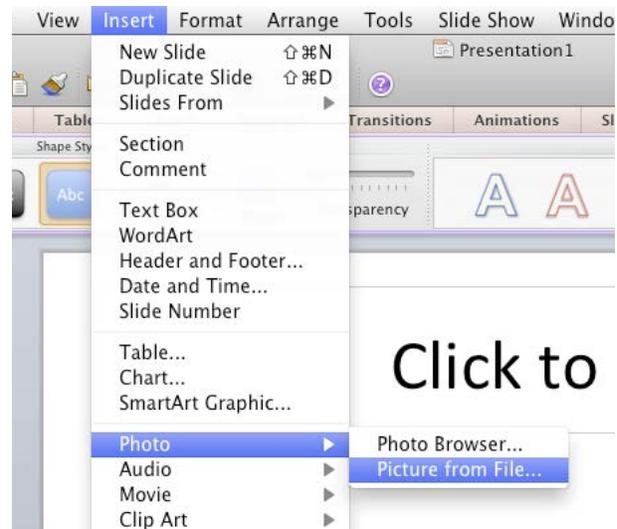
16. A PNG Options dialog box will open.
Choose **Resolution: Medium (72ppi)** and click **OK**.

NOTE: Transparent is chosen as a default. This will allow you to place your PNG file over a colored background and have that background show through.



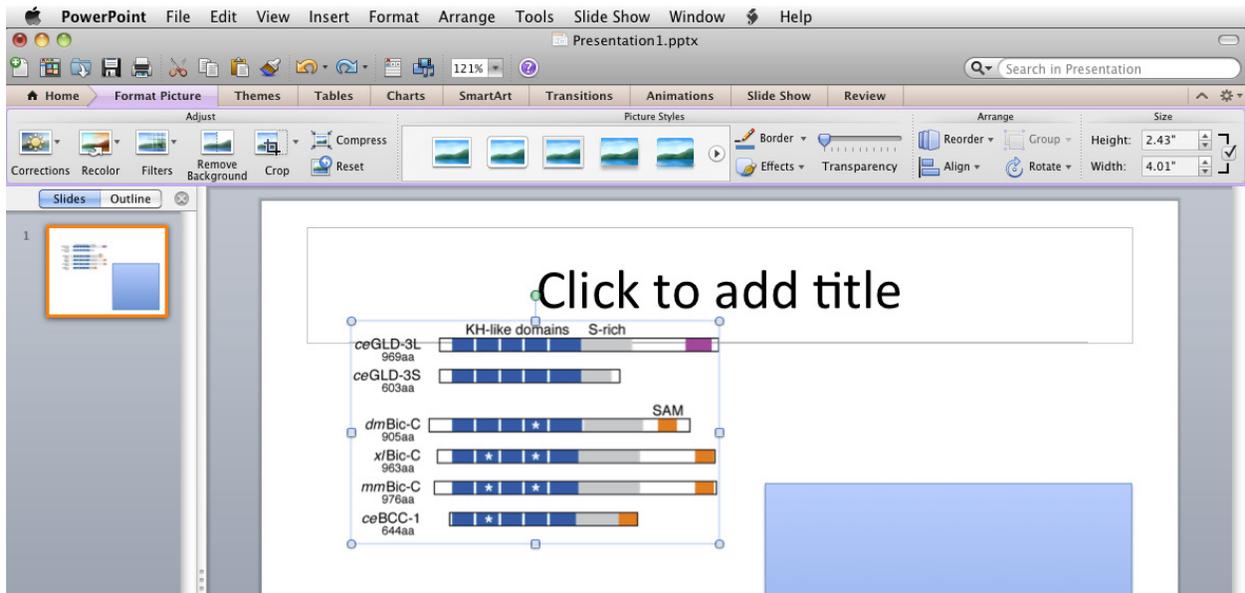
17. Switch back to Microsoft **PowerPoint**.

18. From the **Insert** menu choose **Photo**, then **Picture From file**. Choose the file you just saved from Illustrator in the directory window that comes up.



19. In the **Size** boxes at the top change the **width** of your image to **4.01"**.

NOTE: We always want to pick 50%... not 48%, not 53% or any other percent! The reason we pick EXACTLY 50% is because the screen is 72 ppi (pixels/inch) and the file we just exported from Adobe Illustrator is 150 ppi. By choosing exactly 50% we are perfectly aligning the image pixels with the screen pixels. In a pinch it is fine to choose a percent slightly to one side or the other of 50% but the image quality will be slightly degraded. The further you deviate from 50% the more the image quality will degrade.

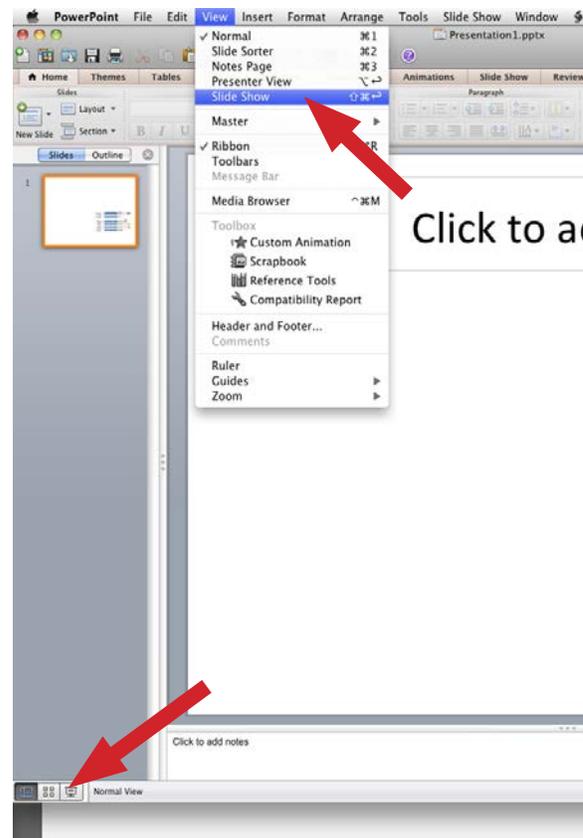


20. **Move** the inserted picture **over the blue box** we drew earlier.

21. **Click** on the **blue box** and then hit the **Delete** key.

You now have a perfectly sized image on your slide. Choose view **Slide Show** from one of the three locations shown below and look at your image on screen.

Yes, you could have transformed the size of your image to 4" and exported it as a 150 dpi PNG file. But, I needed you to understand how the Transform palette works, and also how the pixel resolution of the image relates to the pixel resolution of the screen...



Creating a poster using Adobe Illustrator

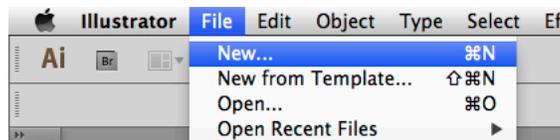
You will learn the following:

| | |
|-----------------------------------|--------------------------------|
| Setting up a poster file | Switching between open files |
| Changing the Unit preferences | Placing images |
| Formatting and layout of a poster | Five general rules for posters |
| Titles, identity and location | Examples |
| The abstract | Printing |
| Text boxes and leading | |

Setting up the poster file

NOTE: Before you try to create a poster, please complete the basic Adobe Illustrator tutorial starting on page 3.

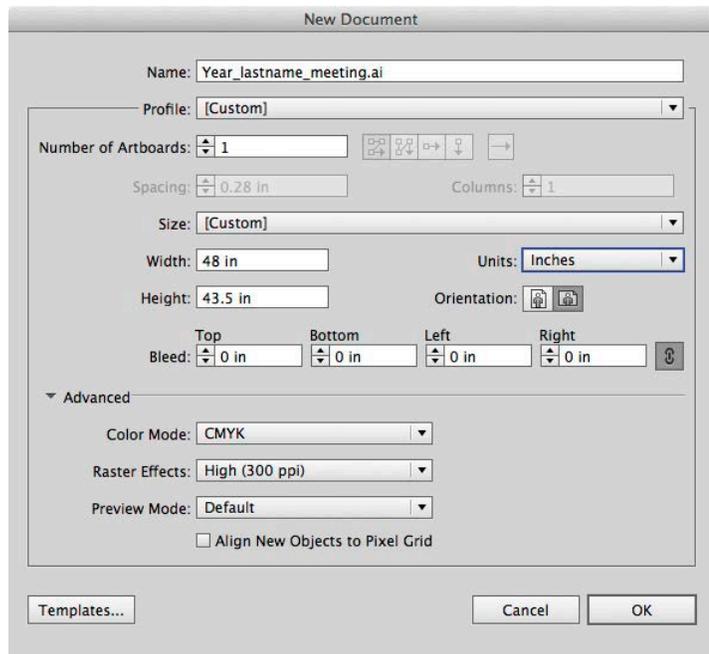
1. **Open** Adobe Illustrator.
2. Choose **File–New**.



You will be presented with a **New Document** dialog box.

In the **Name** field it is a good idea to **name your poster** in the following format: Year_Lastname_Meeting.ai. This will help you and everyone else keep track of your poster during reviewing, sharing and printing.

Under the **Color Mode** drop down menu at the bottom, make sure it says: **CMYK** when creating a poster. Under **Size** type the **Width** and **Height** of your poster in the dialog boxes. Since the maximum paper size the poster printer can print is 44", keep either the width OR the height to a maximum of 43.5", the other dimension can be up to 227.54" (19'). **Click OK**.



NOTE: All meetings specify what size your poster should be, please check the web site of your particular meeting. Common sizes are 24" x 36", 48" x 48", 48" x 60" and 48" x 72".

3. Choose **View**, then **Fit in window**.
4. Choose **File** and then **Save**.

Formatting and layout of your Poster

Where does one start !?! ---

Posters are used to communicate information, therefore you should be thinking about what information you want to communicate. A great poster is one that presents its information clearly, and succinctly. Think of your poster as a talk, not as a paper. It should be ONE thought, ONE process, or ONE idea – NOT MANY!!! It should be as simple as possible, with supporting images and short blocks of text that describe those images, most importantly... all images must relate to your message and you should minimize the use of text to only the barest essentials! No abstracts, no wordy titles, backgrounds/introductions, conclusions, and no long reference section.

Title, identity, and location ---

100 pt font →

This is the title of my poster for this exercise

75 pt font →

H. Adam Steinberg¹, Jean-Yves Sgro², Marchel Hill², and Ann C. Palmenberg^{1,2}

55 pt font →

¹Departments of Biochemistry and ²Molecular Virology, University of Wisconsin, Madison, WI 53706 USA

The title should sum up the entire poster in as few a words as possible. The title is generally centered but can also be aligned left. It is usually in a 100 point, sans-serif, **BOLD**, font (**Arial, Myriad, Verdana**, etc.).

On the next line add your first name (do not use initials for your name, any additional first names can use initials), last name, and the name(s) of any other **major** contributors to the work represented in the poster. The presenting author's name is always first and the major professor's name is always last. This line is also usually centered and is usually 75 pts.

Add the location of the presented work, including department(s), university affiliation(s), state, zip and country. This line is also centered and is usually 55 pts.

Note: All of these fonts and sizes are adjustable, as is the vertical space (leading) between the lines of text. We are giving you what we have found to work best over the years. Use whatever you feel is appropriate!

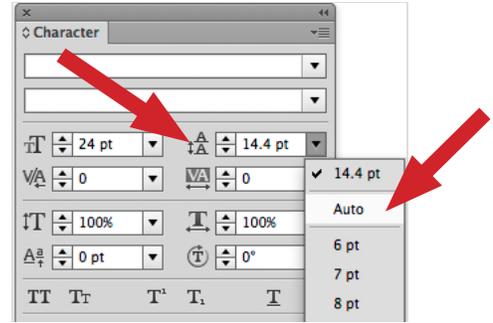
The abstract ---

Posters used to start with an abstract, but the abstract is just an outline of the information that is on the poster. Therefore, **there is no need to put a copy of the abstract on your poster**, since your poster is the abstract! A better idea would be to start your poster with an Introduction. One that includes enough background to allow the viewer of your poster to understand the presented data. Also make sure you include the following information on your poster:

- why is the presented information important?
- how does the presented information further the current body of knowledge.
- a brief explanation of the methods.
- a succinct statement of the results, conclusions or summary.
- references, **DO NOT leave off the references!**

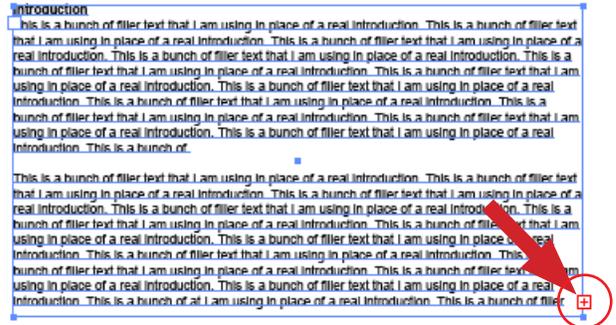
Remember: Posters should help you engage your colleagues in dialog while you are standing in front of it. They should help you get your point across to as many people as possible.

In the **Character Palette** change the **leading** to **"Auto"** from the **leading** pop-up menu.



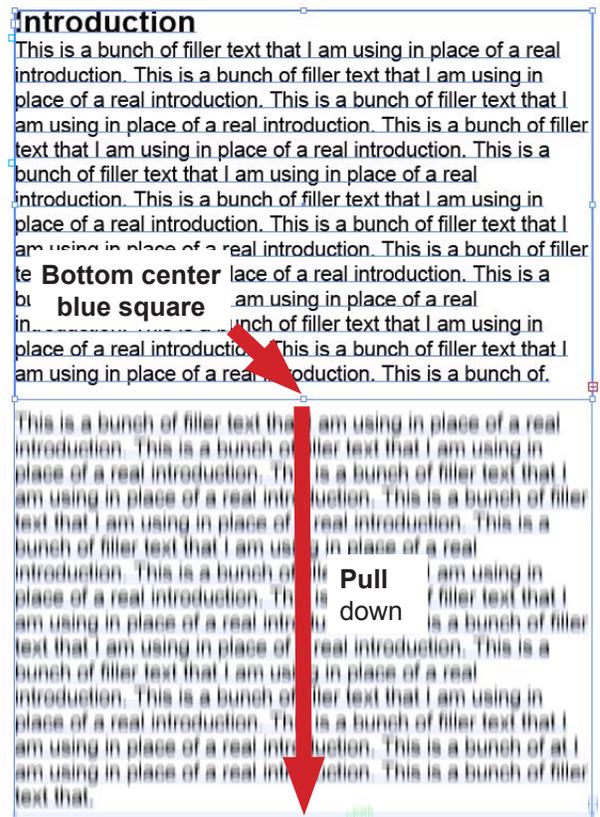
Note: If you drew your text box too small to hold all of the type you are importing, Illustrator will display a small, red, boxed, plus sign in the lower right of your text box (as shown right).

Take the **Selection tool** (black arrow tool) and **click** on the **text box**. You will see little blue squares in the corners and in the middle along the edges of the text box. Clicking and dragging any one of these little blue squares will re-size your text box.

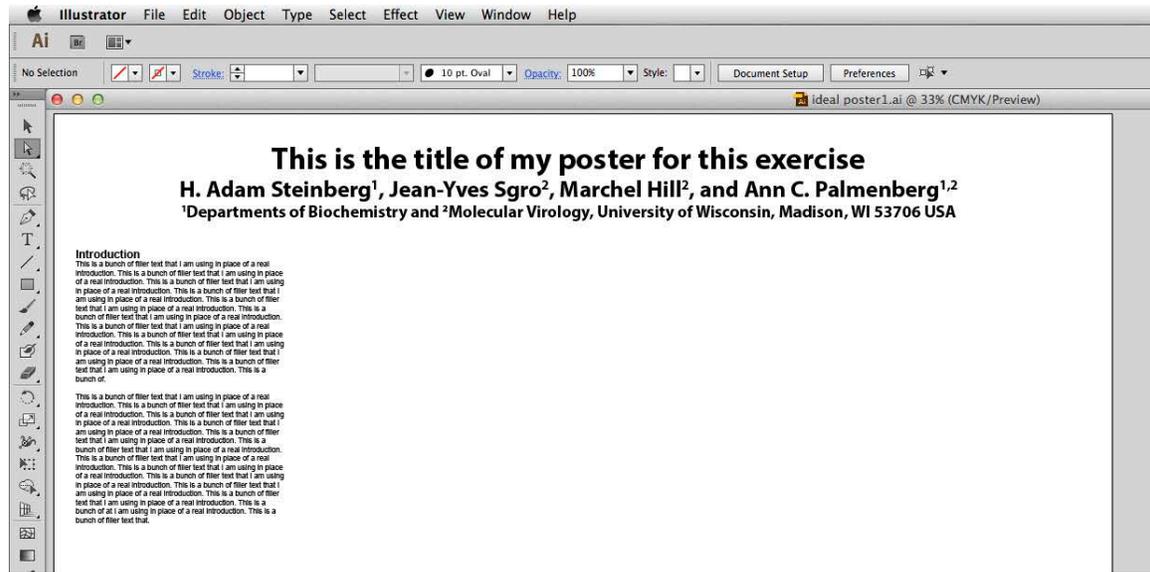


Click and drag down the little **blue square** that you see along the middle of the **bottom edge** of your **text box**, until you can see all of the text in your text box.

10. **Highlight** just the first line of the text **with the Text tool**, "Introduction", and **change** it to **36 pts** in the **Character Palette**. This is the best size to use for headline text. **down** the little **blue square** that you see along the middle of the **bottom edge** of your **text box**, until you can see all of the text in your text box.

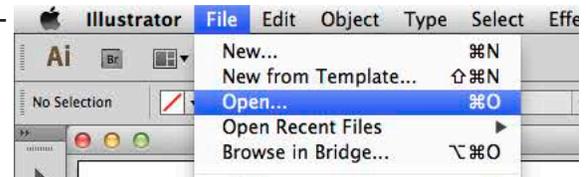


Your poster should now look something like the example shown below.

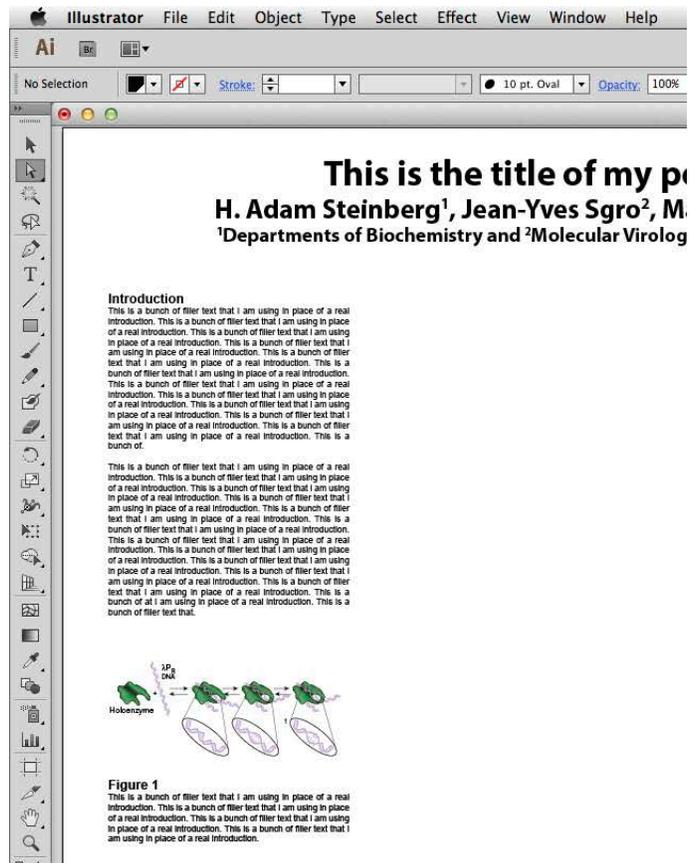


Placing images

11. Choose **File**, **Open** and then open **figure 1.ai** from the Samples folder you downloaded earlier in the **Open** dialog box.
12. Choose **Select**, and then **Select All**.
13. Choose **Edit**, and then **Copy**.
14. Go to the **Window** menu and **choose your poster file** from the list of open files at the bottom of the **window** menu.
15. Choose **Edit**, then **Paste**, and **paste in figure 1**. Then select the **Selection tool** and **move figure 1** below your introduction.



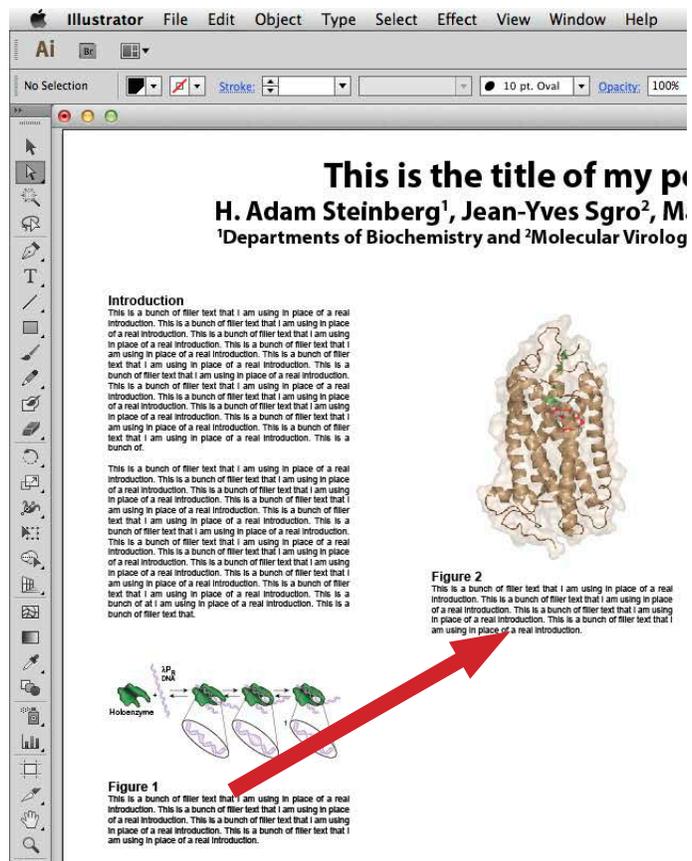
- Using the **text tool** and **drag out a text box** under the figure, so you can add a caption. Use **24 pt. font**. Write a "dummy" caption of your own (see sample right).



- Choose **File** and then **Place**. Open the sample file called **Rhodopsin.jpg**. **Drag** this image so it is to the right of the abstract. It will be the start of our second column.

NOTE: Bitmap images placed into Illustrator for a poster need to only be 180 dpi if they are going to be used without any scaling. Just like in the Illustrator to PowerPoint tutorial that starts of on page 17, all images you create for your poster should be created at the size you are going to use them at in the poster. You may use files with higher dpi but the extra dpi will not be used by the poster printer and will only slow it down. If you already have files scanned at higher dpi for use in other documents don't bother resizing them down to 180 dpi unless they are at dpi's higher than 600.

- Create a figure caption for the rhodopsin molecule by **Option - Dragging** the figure 1 caption with the **Selection tool**, just like we did in step number 12 on page 6 (see example shown at right.)



This is the title of my poster for this exercise
H. Adam Steinberg¹, Jean-Yves Sgro², Marchel Hill², and Ann C. Palmenberg^{1,2}
¹Departments of Biochemistry and ²Molecular Virology, University of Wisconsin, Madison, WI 53706 USA

| | | |
|--|--|---|
| <p>Introduction</p> <div style="background-color: #e0e0e0; width: 100%; height: 60px; margin-bottom: 10px;"></div> <div style="width: 100%; height: 60px; margin-bottom: 10px;"></div> <div style="background-color: #e0e0e0; width: 100%; height: 20px; margin-bottom: 10px;"></div> <div style="background-color: #e0e0e0; width: 100%; height: 80px;"></div> | <p>Methods</p> <div style="width: 100%; height: 40px; margin-bottom: 10px;"></div> <div style="background-color: #e0e0e0; width: 100%; height: 20px; margin-bottom: 10px; text-align: center;">1</div> <div style="width: 100%; height: 60px; margin-bottom: 10px;"></div> <div style="background-color: #e0e0e0; width: 100%; height: 20px; margin-bottom: 10px; text-align: center;">2</div> <div style="width: 100%; height: 50px; margin-bottom: 10px;"></div> <div style="background-color: #e0e0e0; width: 100%; height: 20px; margin-bottom: 10px; text-align: center;">3</div> | <div style="width: 100%; height: 60px; margin-bottom: 10px;"></div> <div style="background-color: #e0e0e0; width: 100%; height: 20px; margin-bottom: 10px; text-align: center;">4</div> <div style="background-color: #e0e0e0; width: 100%; height: 40px; margin-bottom: 10px; text-align: center;">Conclusion(s)</div> <div style="background-color: #e0e0e0; width: 100%; height: 40px; margin-bottom: 10px;"></div> <div style="background-color: #e0e0e0; width: 100%; height: 40px; text-align: center;">Reference(s)</div> |
|--|--|---|

Idealized poster features

Let's take a moment to review the minimum features of poster, then we'll continue and learn how to add color.

Author Identification – Make sure you use your first and last name. This allows colleagues at the meeting to converse with you on a first name basis. It is also a good idea to include your complete address, email and phone number somewhere on the poster in case someone at the meeting would like to contact you.

Make your research objectives clear – Use large **BOLD** headings (36 pts.) that state the following: Introduction or Background, Methods (or similar), Summary, Results or Conclusions, References, and Contact.

Traffic flow – When laying out your poster remember that you are trying facilitate the movement of people past your poster. In general, present your poster in columns from left to right. This allows participants to read your poster and move out of the way when the next participant starts to read your poster. Columns do not need to all be the same size but in general, equally sized columns have a familiar symmetry.

Appearance – Make your poster pleasant to look at! There should be a pleasing use of text and graphics. It should not be cluttered or sloppy! Make it easy for the participants to follow the information in your poster by using large figure numbers. Make your poster text easy to read (24 pts.). Leave white space on all four sides and in between the columns and title of your poster. This allows the reader to rest as they proceed through your poster.

Balance between graphics and text – Cut your text and title to the bare minimum. Repeat this mantra over and over in your head, "SHORT AND SUCCINCT"! There should be enough text to explain the graphics, and just enough graphics to clarify the text! Just because the symposium gives you a 4' x 4' poster, that doesn't mean you have to use all of that space.

Layout – Use a black bar, fat line, or white space to separate the title, author, and location information from the rest of the poster.

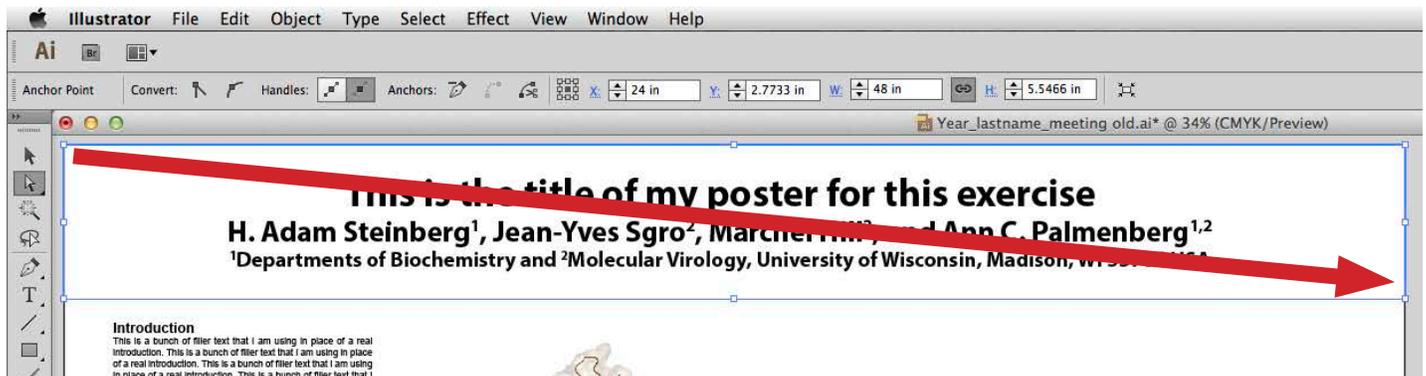
Color – Minimal use of color to separate the top from the bottom. Separate the introduction or Background from the introduction, data, conclusion and references. Please use colors that are pleasing to the eye, and help emphasis your data.

Highlight – Minimal use of color to highlight the conclusions.



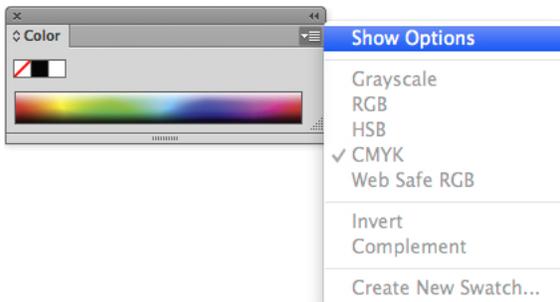
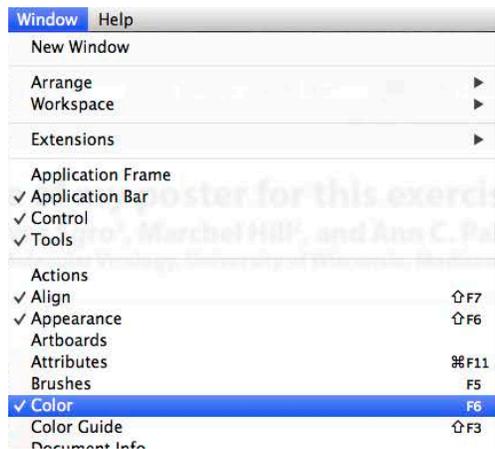
- Using the **Rectangle tool**, **click and drag** a box out from the **upper left corner of the poster** – **over to the right edge of the poster** – making sure you include all of the title, names, and the location information in this box (see example below).

NOTE: When you put the rectangle tool over the upper left corner, a green set of lines will appear, and the word "intersect", in green, will appear. When you see this start your click and drag.

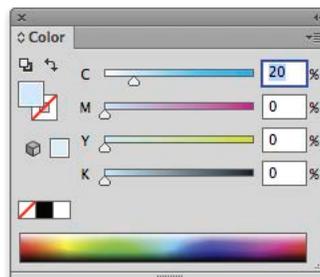


- While that rectangle is still selected, Click on the **Window** menu and choose **Color** (shown at right).

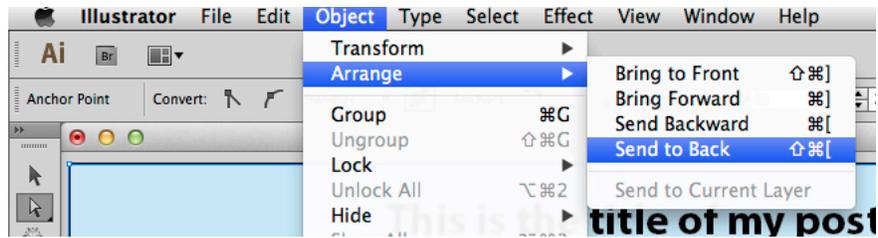
- In the **color** palette that appears, choose **Show Options** from the flyout menu in the upper right of the palette. If the CMYK color option does not show, go back into the fly out menu and choose CMYK.



- In the Color palette, **Change type 20(%) in the box labeled "C"** (C=cyan, M=magenta, Y=yellow, K=black).

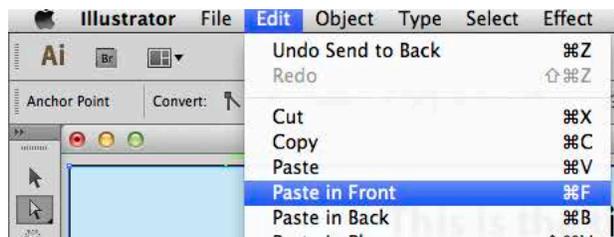


21. While that 20% Cyan title rectangle is still selected, go to the **Object** menu, choose **Arrange**, then **Send to Back**. This will place the cyan title rectangle behind your title text

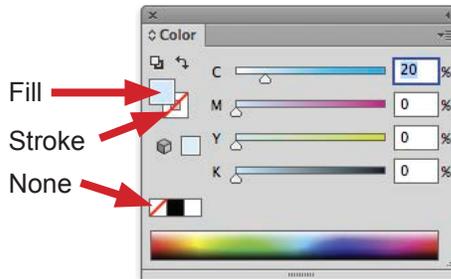


22. Using the **Direct selection tool**, click on a **blank place** of the poster to **deselect** everything.
23. Using the **Direct selection tool**, click once on just the **bottom line** of the 20% Cyan title rectangle. This will select just the bottom line of the rectangle.
24. Choose **Edit**, then **Copy**.

25. Choose **Edit**, then **Paste in Front** (shown right).



26. Change the **fill to none** and the **stroke to black** (100% K) using the **Color** palette.



27. From the **Window** menu, choose **Stroke** to open the stroke menu. **Change the Stroke to 15 pts.**



28. Again, using the **Rectangle tool**, click and drag a box out from the **lower left corner** of the **20% Cyan title rectangle** (you will see the green word "anchor" appear when you are in the correct location) – **over to the right edge of the first column of the poster** – **down to the bottom of the poster** (you will see the green word "page" appear when you reach the bottom).
29. In the **Color** palette, set the **Fill** of the rectangle to **30% Cyan** and **30% Yellow**.
30. Choose the **Object** menu, then **Arrange**, then **Send to Back**.
31. Remove the **stroke** by changing the **Stroke to 0 pt** or by setting the **Fill to none** with the **red slash** at the bottom of the tool bar.

There is a sample of what your poster should look like at this point, on the next page.

You now have enough knowledge on using Adobe Illustrator to finish your poster. Add more images, captions and text boxes for conclusions, references, etc.

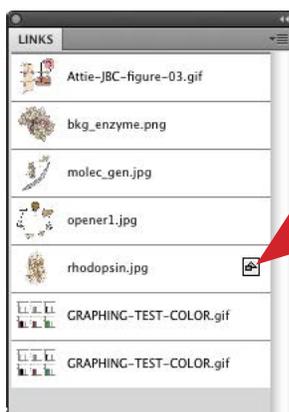
NOTE: You will need to embed all of your image files before you print your poster on the poster printer. See page 36 for instructions on printing a poster.

Printing

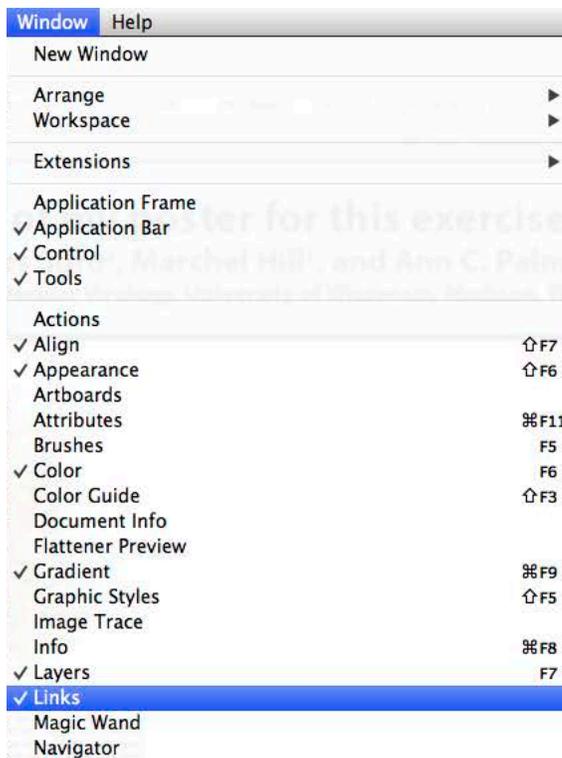
Once you have finished your poster you should **print** out a proof, show it to the following people, and weigh their advice carefully: Yourself (your poster will look different when you see it on paper!), your PI, your lab mates, and someone who doesn't understand the topic of the poster.

Embed your images before you submit your poster for printing.

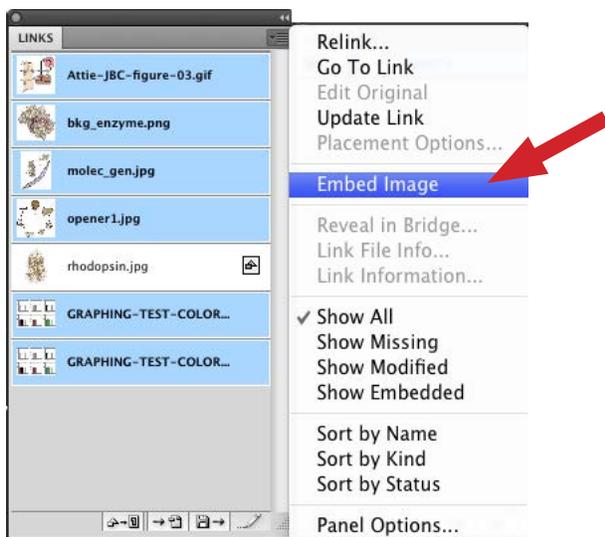
1. From the **Window** menu in Adobe Illustrator choose **Links** (shown right) to open the **Links** Palette (shown below). Notice only "rhodopsin.jpg" in this example has the little embedded image icon.



Embed icon

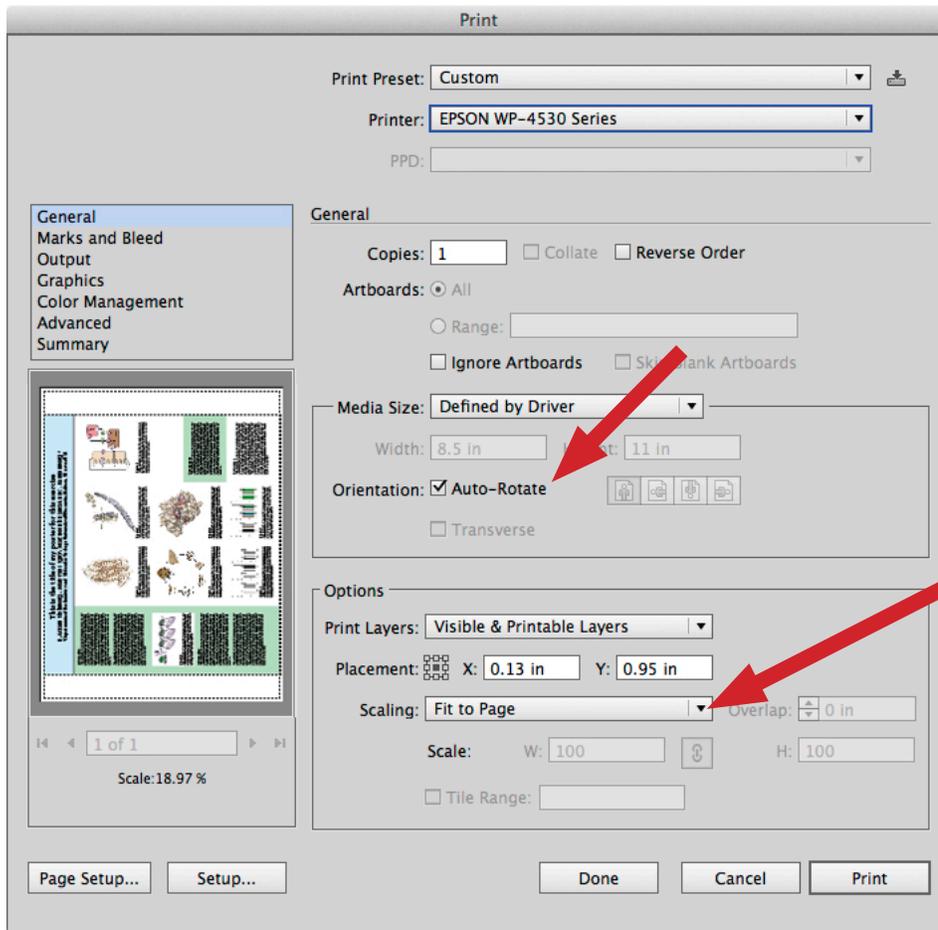


2. **Highlight** the images that are **not embedded** and from the flyout menu in the upper right corner of the palette choose **Embed Image** (as shown below).



Print an 8 1/2" x 11" proof on any printer:

Choose **File, Print** and then in the **Print** dialog box, make sure that under **Scaling: Fit to Page** is selected, then **click Print**. Also make sure the **Auto-Rotate** box is checked in the middle of the dialog box.



Creating a poster in Microsoft PowerPoint

Note:

PowerPoint **IS NOT** a program for creating posters.

Posters created in PowerPoint:

- Are limited to 56" in width by default.

- They are not widely accepted at printshops that print posters. Many places require you to convert them to PDF files first.

- Have longer processing and printing times.

- Tend to have problems when creating, editing and printing.

This tutorial builds on what was learned in the tutorials proceeding it. You will be referred back to them in specific locations of this tutorial.

You will learn the following:

- Setting up a poster file

- Slide layout

- Formatting palette

- Drawing toolbar

- Adding and formatting text

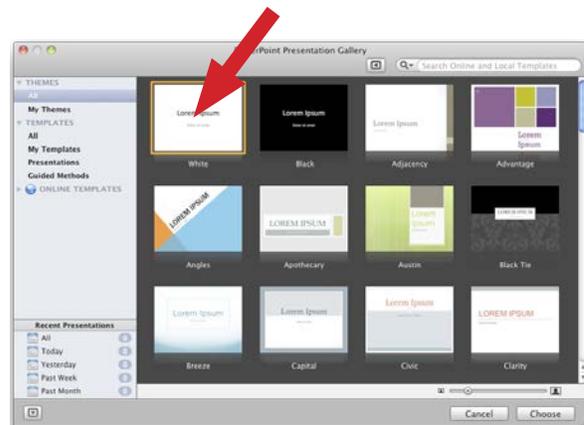
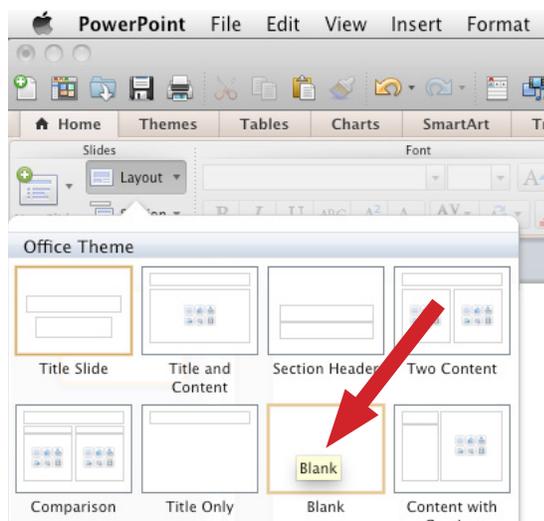
- Inserting Microsoft Word files

- Inserting pictures

- Printing your poster

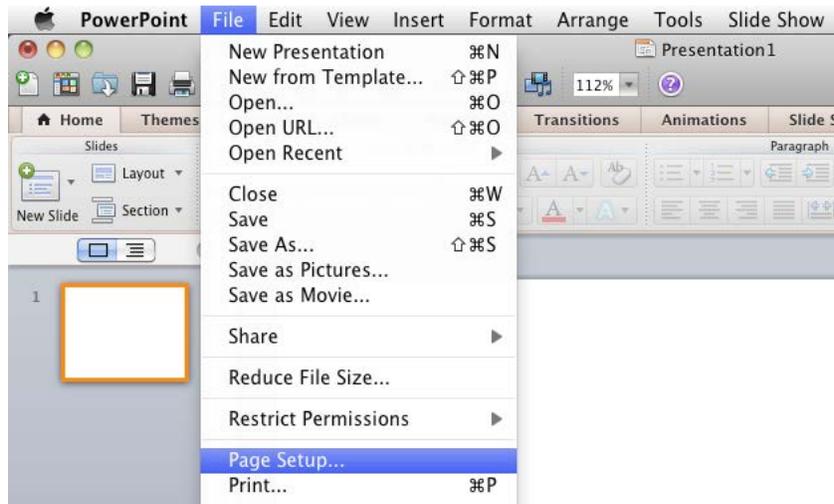
Setting up the poster file

1. Open **Microsoft PowerPoint**. From the PowerPoint Presentation Gallery choose the simple **White** theme (shown right).
2. From the **Layout** drop down menu under the **Home** tab choose **Blank** slide (shown below).

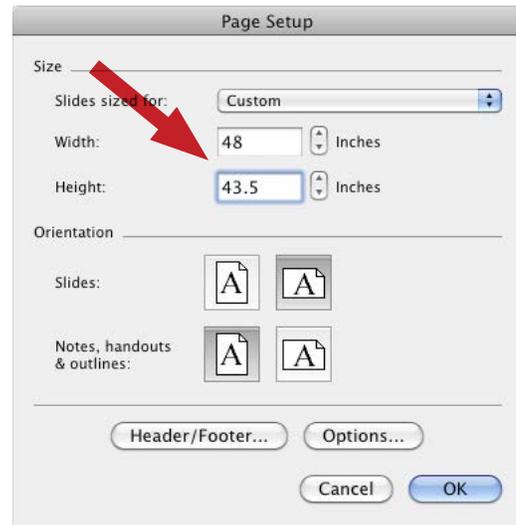
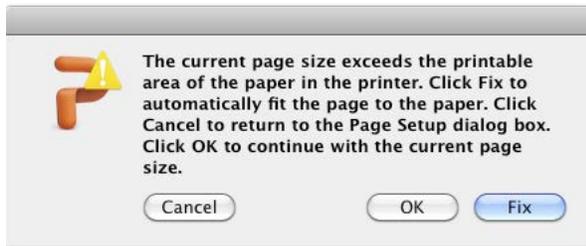


Setting up the poster board

3. Choose **File**, then **Page Setup** (as shown right).

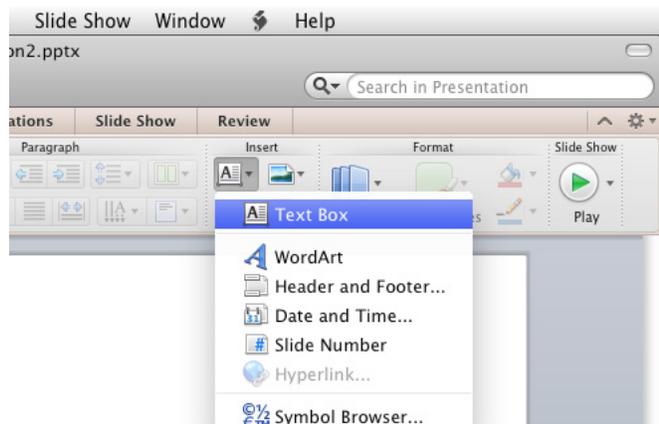


4. In the **Page setup** dialog box, **change the Width to 48"** and the **Height to 43.5"**. Remember, one dimension must be 43.5" (see page 25).
5. When you click **OK** PowerPoint will ask you if you want to format your poster (which is just an oversized slide) to your current printer's printable area. **Click Fix**.

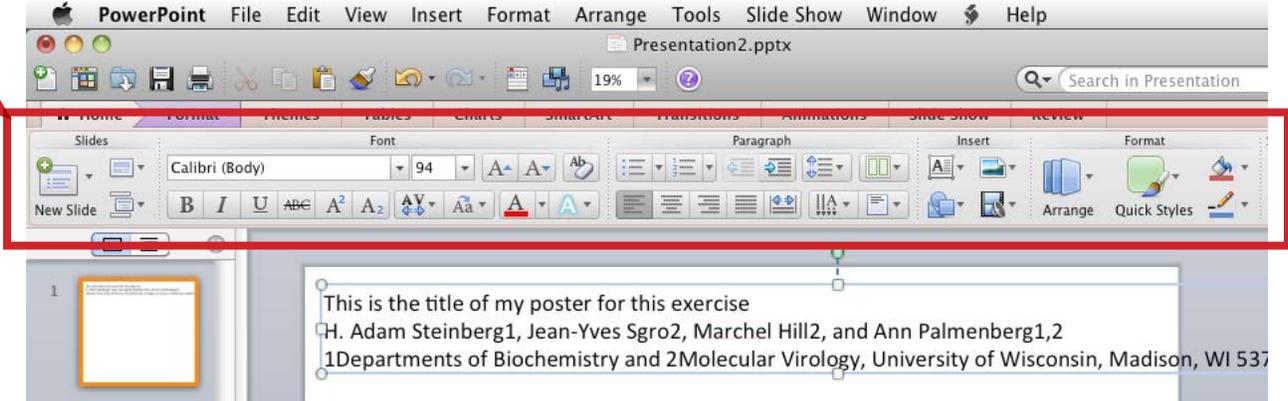


Text box

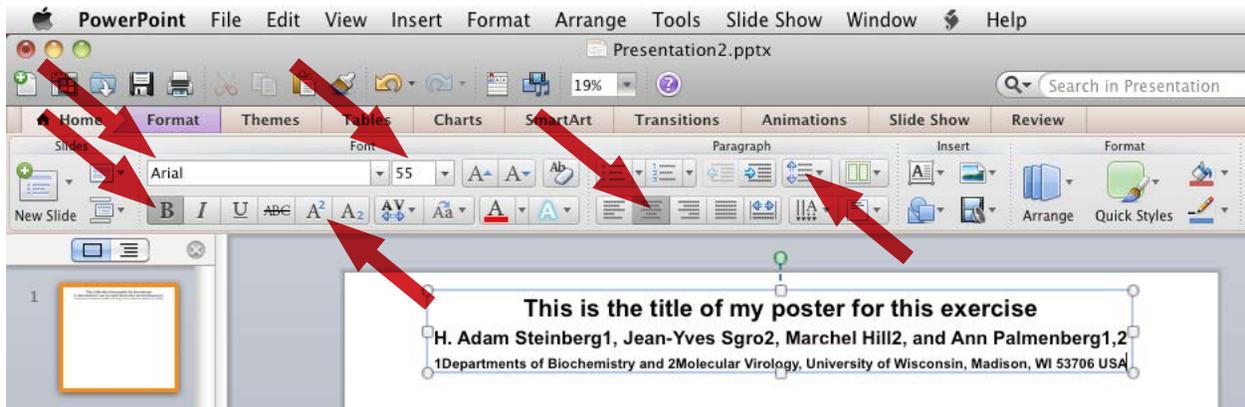
6. From the **format** bar at the top of the poster choose the **Text Box** tool and then **click** in the **middle top** of the poster so you can add a **title**. See the title box shown at the top and middle of the next page for an example.
7. **Type the title** into the text box following the guidelines on page 26. Again, see the title box shown at the top and middle of the next page for an example.



8. If you click on the **Home** tab while the text box is selected, you will be presented with the formatting that focuses on text (see example below).



9. Change the text to **centered**. Change the **font sizes** to match those on page 26. Change the font to **Arial** (or similar) and click the **Bold** button (all of these are indicated below by the four downward pointing arrows).

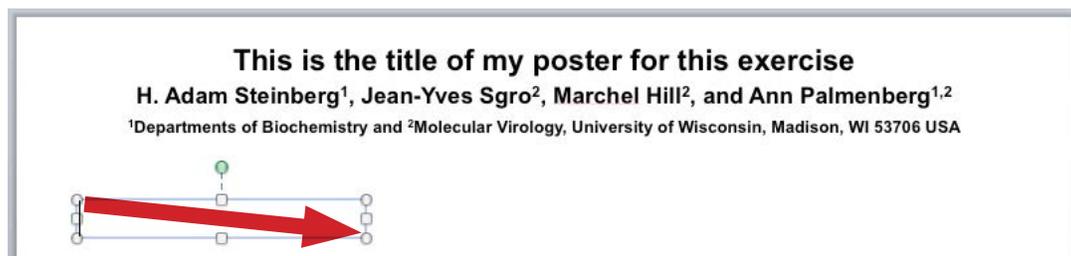


10. To change the **superscript** numbers, that indicate association of person to local, click the **superscript button** (indicated above by arrow pointing up on the left side). To change the **leading** (space between the lines of text) you change the **line spacing** (indicated above by arrow pointing up on the right side).

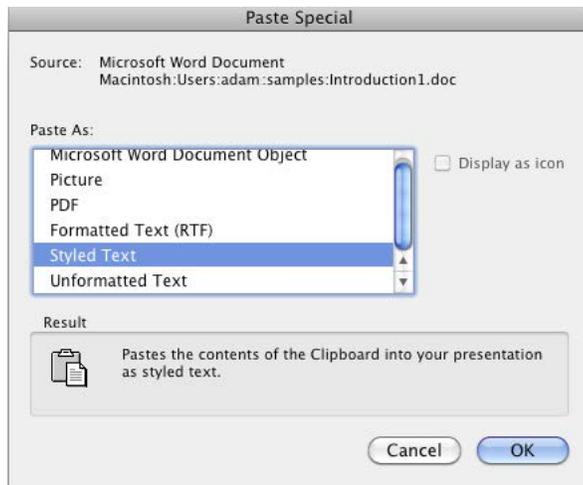
11. Save the file with the year, your last name and the title of the meeting. This will help everyone keep track of your poster when it comes time for reviewing, sharing and printing. *i.e.*, year_lastname_meeting.pptx.

Inserting Microsoft Word files into your poster

12. Open **Microsoft Word** by clicking on it in the **Dock**.
13. Choose **File**, then **Open** and open file **Introduction1.doc** from the sample folder you downloaded earlier.
14. Choose **Edit**, then **Select All** and choose **Edit**, then **Copy** to copy the text to the clipboard.
15. Switch back to **PowerPoint** by clicking on it in the **Dock**.
16. Pick the **Text Box** tool (page 40, step 6) and then **click and drag out a new text box** for your introduction.

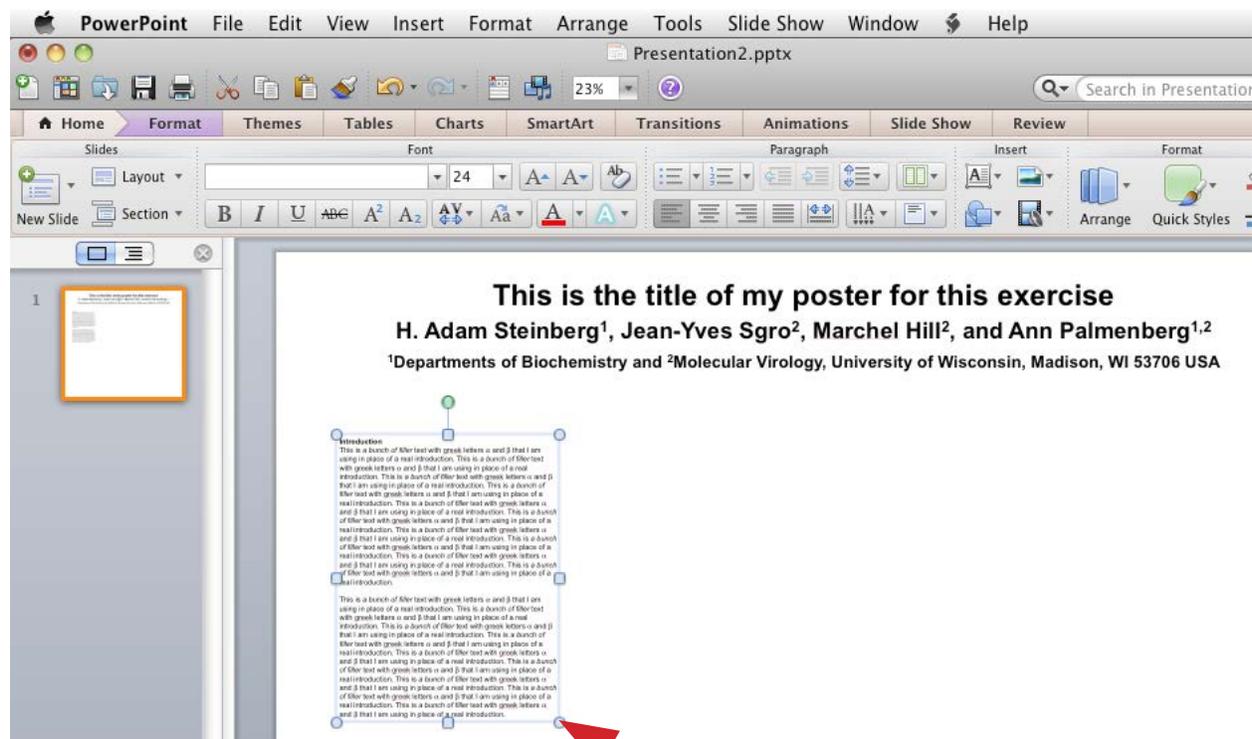


17. In the new text box, **change** the text to **Arial** and the **font size to 24** (page 47, step 9).
18. Choose **Edit**, then **Paste Special**.
19. In the **Paste special** dialog box, choose **Styled Text** and then click **OK**.



NOTE: DO NOT copy and paste text between Word and PowerPoint, you will loose the formatting of the italic, bold, and greek lettering! You must Paste Special it.

20. Click on the **Text box editing handles** and **drag** them to make the **Text box** longer and thinner. **Move** the **Text box** into place for the introduction.
21. **Select** and then **change** the word "**Introduction**" to **36 pts**.
22. Choose **Insert, Photo, Picture from File** and open **rhodopsin.jpg** from the samples folder you downloaded earlier (see example shown on page 29, step 18).



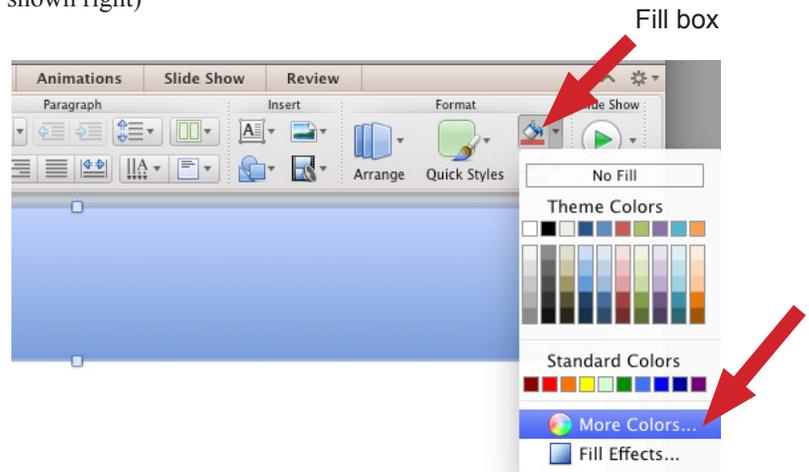
23. Click on the **Text tool** and **drag out a text box** for the rhodopsin **figure legend**. **Format** the font (**Arial 24pts**) and make the "**Figure 1**" heading **bold 36 pts**.
24. Go to page 37 and quickly review the idealized poster features. Just like on pages 38 and 39, let's **create a colored box** to go behind our title. From the **Shape** pull down menu in the **format** area choose the **rectangle** shape and **drag out a box** that will start in the **upper left** of our poster and go down to the **lower right** side of our title area.



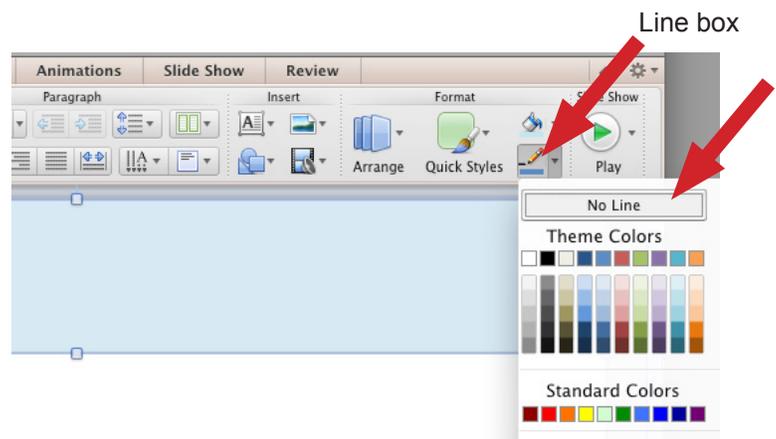
25. From the **Fill box** choose **More Colors...** (as shown right)

26. From the **Color palette** that opens up, **choose CMYK colors** and give the box a **20 % Cyan** fill, click **OK**.

27. From the **Line box** choose **No Line** (as shown right)

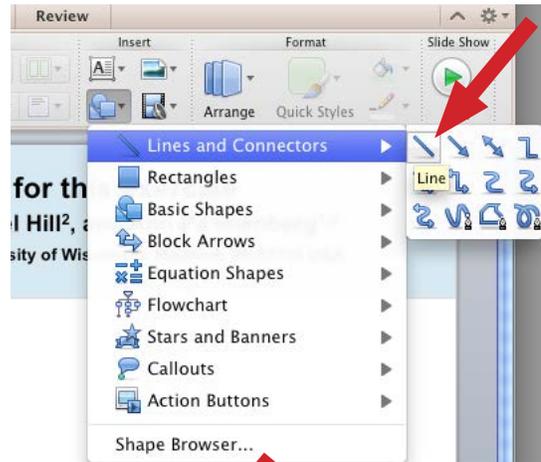


28. Add the green **rectangle** down the left side of the poster to separate off the Introduction (refer back to pages 33). Give it a **20% Cyan, 20% Yellow** fill with **no stroke**, and then **Arrange, Send to Back**.



31. To create the **black line that separates the title from the body** of the poster (see example at the top of the next page), choose the **Shape** tool, then **Line**. Then **draw** a line that follows right along the bottom of the blue box behind the title (as shown right, and at the top of the next page).

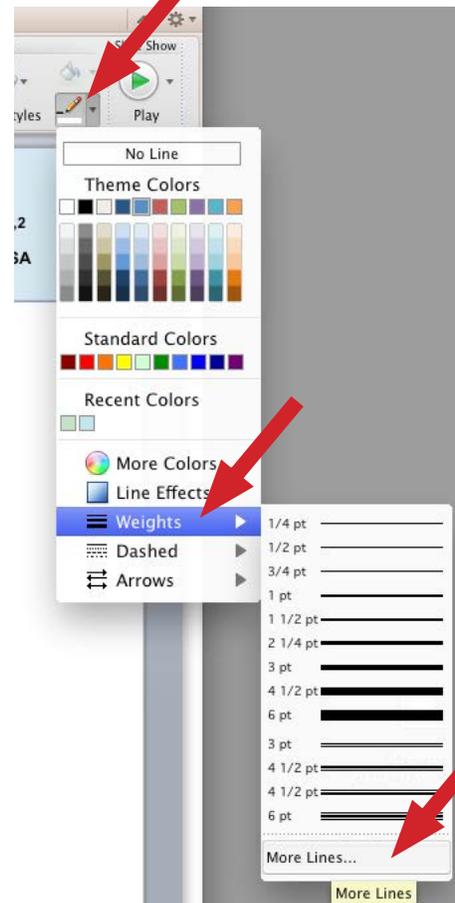
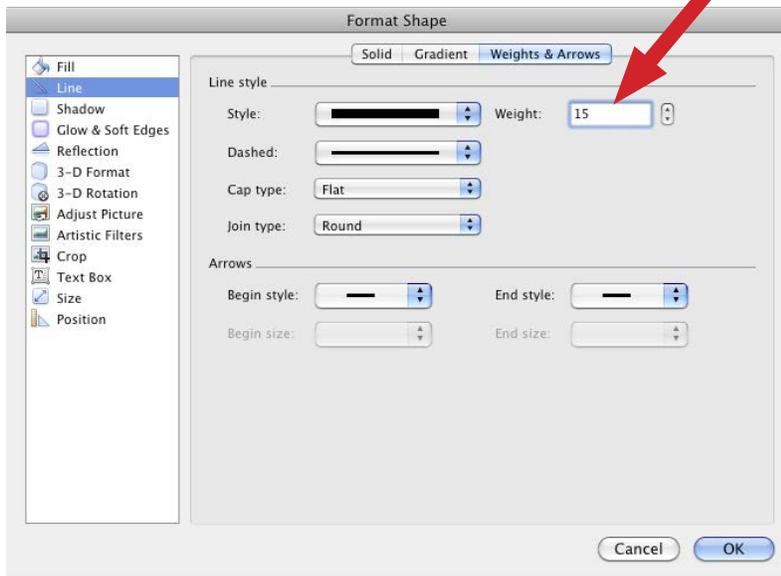
32. From the **Arrange** menu, choose **Bring to Front**. To make sure your line is on top of the boxes.



33. From the **Line tool** choose **Weights**, then **More Lines** (as pointed out by the arrows right).

In the **Format Shape** dialog box that appears, **change the Weight** of the line to **15 pts**. Click **OK**.

Your poster should look similar to the one shown at the top of the next page. You can now finish your poster by adding more images, captions and text boxes for conclusions, references, etc.



Converting a PowerPoint talk to a PowerPoint poster _____

You will learn the following:

Working with Slide masters

Viewing two PowerPoint files at the same time

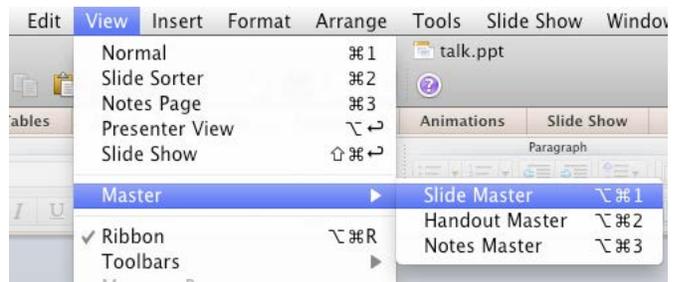
Copying and pasting between a PowerPoint talk and a poster

This tutorial builds on what was learned in the tutorials proceeding it.

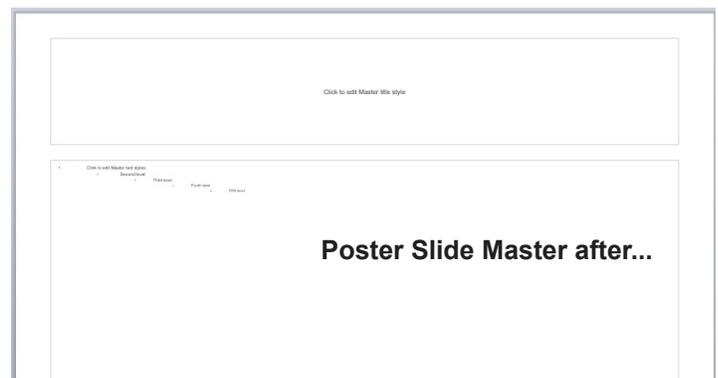
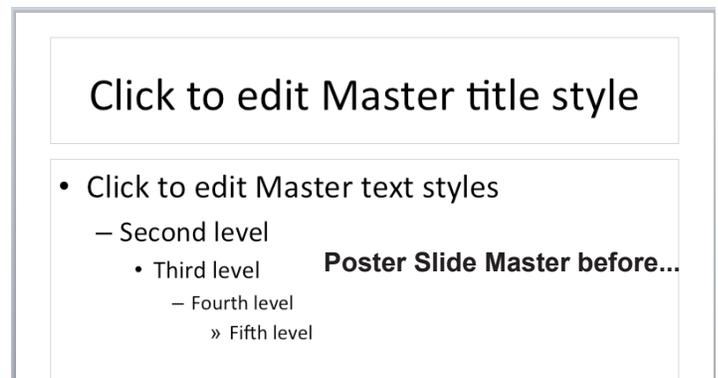
You will be referred back to them in specific locations of this tutorial.

Create the poster file _____

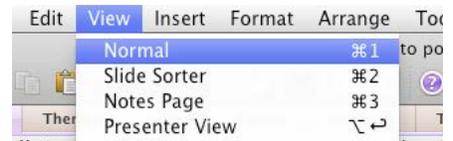
1. Please follow steps 1-11 on pages 39-41. This will properly create your poster file and poster title.
2. Choose **File**, then **Open**, and open the file **talk.ppt** from the sample folder you downloaded earlier.
3. From the **View** menu choose **Master**, then **Slide Master** (as shown right).



5. **Click** on the "Master title style" and note the **font**, **font size**, and **font style** (bold, italic, etc.). In our example it's Arial and 32 pts. Then **click** on the 1st bullet line of text and do the same (Arial 22 pt). Continue this with each line of bullet text.
6. Choose **Window** from the menus at the top of the screen and then **pick** your **poster file** from the list of open files you'll see there.
7. In the **poster file** choose **View**, then **Master**, **Slide Master** (as shown above right).
8. **Select all of the text in the Master title style** and change it to whatever it was in the talk.ppt file. In our example that was Arial 32 pts. **Select** the text of the **first bullet text** and do the same. Proceed through each of the other bullet text strings in the slide master until the Slide master of the talk and the Slide master of the poster are the same (see examples at right).



9. While still in the poster file choose View, then **Normal** (as shown right).



10. Choose **Window, Arrange All**.

11. Click on the **talk file** window (shown on the right side below) and choose **View**, then **Normal**. If your slide is too big **change** the size by sliding the **scale bar** in the lower right of the slide window (see arrow below).

12. In the **talk file**, Slide one, **Select All** and **Copy**. Click on the **poster file** and **Paste**.

13. **Switch back** to the **talk file** by clicking on it, and go to slide two. **Select All** and **Copy**. Click on to the **poster file** and **Paste**. **Repeat** for all slides in the talk (six in our example).

14. Once you have moved all of your slides over to the poster file, **close** the **talk file**. Make the poster file full screen by clicking on the little green dot in the upper left corner of the window. Complete your poster using the information on pages 41 step 12 through page 45.

NOTE: Little things may change when you copy from one file to the other. Remember to go in and check all the details!

