

## **Making HI-Resolution Figures in PowerPoint for Publication**

Most journals want high-resolution (>200 dpi) figures in TIFF or PDF format submitted for publication. Also the figures should be in CMYK format (if color) or grayscale format (if black and white), which is usually a requirement of the journal. You can make these hi-res figures in these formats in Photoshop, but the program is kind of complicated. You can also make them in PowerPoint which is simpler. Unfortunately PowerPoint saves the files as low-res (72-dpi) and RGB, but we can take them through a series of conversions to the final hi-res/CMYK PDF format. To do this, first make all your figures that you are submitting as a PowerPoint presentation (one file, several slides). Then:

### **Convert the slides to hi-res PNG (portable network graphics) files.**

- 1) In the pull-down “File” menu in PowerPoint select “save as”
- 2) In the “format” pull-down choose “PNG” (resist the urge to save it as a TIFF at this point, there is a bug in the program that prevents saving TIFF files at high-res, they are always 72-dpi)
- 3) then in the same window, click the “options” button
- 4) in the new window that pops up, increase the dots per inch (dpi) to 300 and keep the “size the same. click “ok”
- 5) back in the “save as” window click “save” and the slides will be saved as separate PNG files (i.e. slide1.png, slide2.png etc....) in the same folder

### **Convert the PNG files to gray scale (if black and white) or CMYK (if color) in Photoshop**

- 1) Open one of the png slides in Photoshop
- 2) In the “image” pull-down menu, select image size to confirm the resolution is 300 dpi.
- 3) In the “image” pull-down, select mode→convert to profile
- 4) convert the destination space working profile from RGB to generic CMYK profile if the figure has color, or generic gray profile if it is black and white, then click OK
- 5) confirm the change by selecting “mode” from the “image” pull-down menu and save the file in TIFF format... the file is pretty huge, especially if it is color.

### **Convert the huge (>20 MB) TIFF image to the small (<1 MB) PDF image**

- 1) In the TIFF image in Photoshop, select “print” from the “File” pull-down
- 2) In the printers pull-down select “Adobe PDF” then click the “print” button (it doesn’t actually print it, but it saves it as a PDF file)  
that’s it....