JHC

DIGITAL ART GUIDELINES

These guidelines are intended to aid authors in providing figures that will reproduce well in both print and online media. Submitting digital image files that conform to these guidelines will prevent delays in the review and publication processes and maximize the published quality of your figures.

GENERAL
Figures intended for color are saved in RGB
Figures intended for grayscale or black and white are saved in Grayscale format
Figures and panels intended as single composites are supplied as a single file

Sizing
Figures are no wider than 6.75" (17.1 cm) and no taller than 8.75" (22.2 cm)

Layout
Spacing (routing) between panels in each figure is uniform, ~1-2mm wide, and white in color
Figures are laid out in Portrait (8.5 x 11) orientation

Labeling
Figures have been numbered sequentially in Arabic numerals (1, 2, 3, etc.)
Figure panels have been labeled in upper-case letters only
Panel labels are in the same position throughout set
Fonts used in labeling are Times, Times New Roman, Arial, Sabon, or Frutiger

Scale Bars (required)
Please include scale bars in the lower or upper right corner of a panel. If the bar size is the same for all panels in a composite, only one bar is needed for the set. (Scale bar sizes should be indicated in the last sentence of each figure legend when applicable, rather than directly on the image/figure.)

Color
Figures are in RGB format and have an ICC color profile embedded. Authors have examined color
View figures in CMYK to ensure color loss from RGB to CMYK conversion does not compromise the figure content (Print version is in CMYK; Online version is in RGB)

FIGURE TYPES

1) Half-tone *(photographic, continuous tone)* Figures:
- If in a rasterized file format (TIFF, Bitmap, etc…)
    Resolution minimum is **300dpi**
    Size as intended for production
- If in a presentation, line-art, or vector graphics format (Illustrator, PowerPoint)…
    Continuous tone images and scans were embedded with at least 300 DPI
    Fonts used were Times, Times New Roman, Arial, Sabon, or Frutiger
    Supported file format was used

2) Line-Art *(vector graphics, schematics, graphs)* Figures:
- If in a rasterized file format (TIFF, Bitmap, etc…)
    Resolution minimum is **800dpi**
    Size as intended for production
- If in a presentation, line-art, or vector graphics format (Illustrator, PowerPoint)…
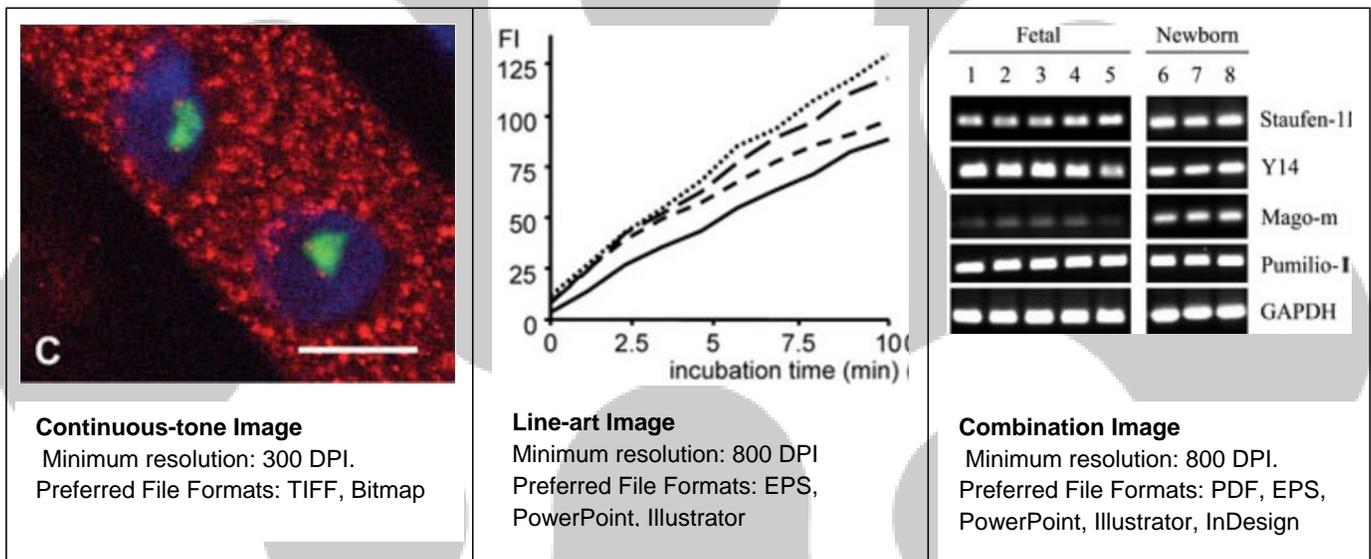   Fonts used were Times, Times New Roman, Arial, Sabon, or Frutiger
    Supported file format was used
    Graphs, line-drawings, and schematics were not scanned and embedded
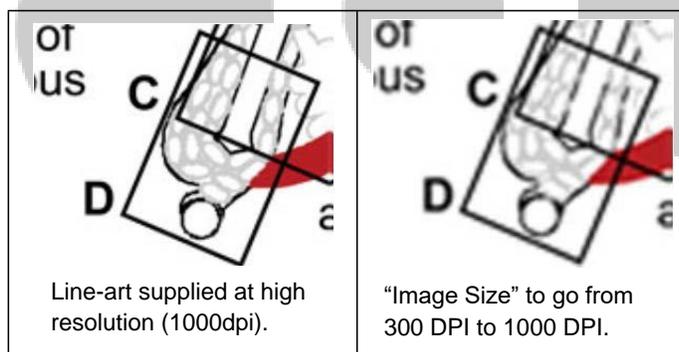
3) Combination Figures:
- If in a rasterized file format (TIFF, Bitmap, etc….)
  - Resolution minimum is **800dpi**
  - Size as intended for production
- If in a presentation, line-art, or vector graphics format (Illustrator, PowerPoint)…
  - Continuous tone images and scans were embedded with at least 300 DPI
  - Fonts used were Times, Times New Roman, Arial, Sabon, or Frutiger
  - Supported file format was used

JHC figures fall into one of three categories: **Continuous-tone images**, **Line-art images**, and **Combination images.** Each image type has specific requirements in terms of the resolution needed for publication, and the file types best suited for the figure. See the following panels for examples and requirements.

Continuous-tone Image
 Minimum resolution: 300 DPI.
Preferred File Formats: TIFF, Bitmap

Line-art Image
Minimum resolution: 800 DPI
Preferred File Formats: EPS,
PowerPoint, Illustrator

Combination Image
 Minimum resolution: 800 DPI.
 Preferred File Formats: PDF, EPS,
PowerPoint, Illustrator, InDesign

Resolution

In order for a figure to be used in publication, its Digital Image File must have the required resolution when it is created. The resolution cannot be raised after the original image is made. Attempting to do so (for example, with Adobe Photoshop's© "Image Size" command) results in the addition of artificial pixels that distort the image and lower its sharpness. The figures on the right show an example of this reduced sharpness.

Line-art supplied at high
resolution (1000dpi).

"Image Size" to go from
300 DPI to 1000 DPI.

Fonts

Limit fonts used in any figure to Times, Times New Roman, Arial, Frutiger, and Sabon. Other fonts cannot be guaranteed to reproduce properly.

Sizing

JHC publishes figures in Portrait orientation (long edge vertical). The maximum size possible for any single figure is 6.75" (17.1cm) wide by 8.75" (22.1cm) tall. Any figures larger than this will be reduced to fit in these dimensions.
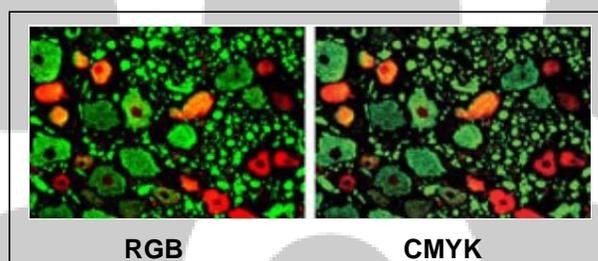
Supported Software

JHC can process Digital Art created with the following programs:

- Microsoft PowerPoint and Publisher (all versions)
- Adobe Photoshop and Illustrator (all versions)

If a program is not listed here, then JHC does not support figures saved in its format. For unsupported software such as InDesign, Corel Draw or Macromedia Freehand, etc.., the figure(s) must be saved in a non-proprietary format (TIFF, Bitmap, JPEG, EPS).

RGB and CMYK Color

CMYK color is still used when producing the print edition of JHC, but *figures in the online Journal are produced in RGB color*. You must submit your figures in RGB format to obtain the highest level of detail and image quality in the online Journal, and we encourage you to supply digital image files containing color profiles if your image-editing software supports them. Because CMYK contains fewer colors than RGB, some detail and information can be lost when the figures are converted for print publication. The figures at the right show an example of what an RGB to CMYK conversion can look like.

RGB   CMYK

References

- Half-tone Image example: Torgan CE and Daniels MP (In Press) JHC ex*PRESS* Sep 22, 2005. DOI:10.1369/jhc.5A6769.2005
- Line-art Image example: Frederiks WM et al. (In Press) JHC ex*PRESS* Jul 26, 2005. DOI:10.1369/jhc.5A6663.2005
- Combination Image example: Islam S et al. (2005) JHC 53 (12) DOI:10.1369/jhc.5A6655.2005
- Image Resolution example: Peters EMJ et al. (In Press) JHC ex*PRESS* Jul 11, 2005. DOI:10.1369/jhc.4A6585.2005
- Color conversion example: Ruan H-Z et al. (2005) JHC 53 (10) pp. 1273-1282 DOI:10.1369/jhc.4A6556.2005