Dear Sir

The correspondence from Driman and Schick (Histopathology 2017, 70, 840) provides useful guidance to contributors on how to optimise the quality of images in publications. As these authors note, care must be taken to avoid misrepresentation of the information provided in the image. Ethical guidance on the appropriate use and manipulation of digital images is available – see table (Cromey, 2010) and has been adopted by various print and online publications. Given the importance of images to histopathologists, I would like to suggest that this is used by contributors to Histopathology. In particular, to protect both contributors and the journal, contributors should ensure that an unprocessed image is retained for review (on request), and that details of any image processing are documented, perhaps as supplementary online information. With the increasing use of whole slide imaging, I suggest that details of the scanning system used are included, as an element of image processing is inherent in the technology.

Reference

Cromey, DW. Avoiding twisted pixels: ethical guidelines for the appropriate use and manipulation of scientific digital images. Sci Eng Ethics 2010; 16: 639–667.

Table. Ethical guidelines for the appropriate use and manipulation of scientific digital images (from Cromey 2010)

1. Scientific digital images are data that can be compromised by inappropriate manipulations.
2. Manipulation of digital images should only be performed on a copy of the unprocessed image data file Always keep the original data file safe and unchanged.
3. Simple adjustments to the entire image are usually acceptable.
4. Cropping an image is usually acceptable.
5. Digital images that will be compared to one another should be acquired under identical conditions, and any post-acquisition image processing should also be identical.
6. Manipulations that are specific to one area of an image and are not performed on other areas are questionable.
7. Use of software filters to improve image quality is usually not recommended for biological images.
8. Cloning or copying objects into a digital image, from other parts of the same image or from a different image, is very questionable.
9. Intensity measurements should be performed on uniformly processed image data, and the data should be calibrated to a known standard.
10. Avoid the use of lossy compression.
11. Magnification and resolution are important.
12. Be careful when changing the size (in pixels) of a digital image.