Publication Images: The Good, the Bad and the Impossible
Norris D. Flagler¹, Eli Ney¹, Beth W. Mahler² and Robert R. Maronpot¹
¹Laboratory of Experimental Pathology, National Institute of Environmental Health Sciences, Research Triangle Park, North Carolina 27709,
and ²Experimental Pathology Laboratories Inc., Research Triangle Park, North Carolina 27709

Abstract
Photomicrographic images that are submitted to Toxicologic Pathology for the purpose of documenting scientific findings range in quality from the good and the bad, to the impossible. Some of the most common problems with manuscripts submitted to Toxicologic Pathology are uneven illumination, out of focus photomicrographs, overexposed immunohistochemistry and inappropriate labeling. Examples of various common errors in submissions will be presented along with possible solutions achieved by the utilization of an image-processing program, such as Photoshop®. Some worst-case scenarios of “impossible” images will also be examined.

Kohler Illumination
Aligns the optics in a microscope to provide even illumination throughout the view field, cutting out reflections and glare on the specimen by adjusting the sub stage condenser, the field diaphragm, and the condenser centering screws.

Examples of The Possible and The Impossible
The following images are representative of some of the photomicrographs that have been submitted to Toxicologic Pathology over the years.

Worse Than Impossible
The following images are representative of some of the photomicrographs that have been submitted to Toxicologic Pathology over the years. Figures 11a and 11b represent low light issues. Figures 12a and 12b were captured out-of-focus. Figures 13a and 13b were from poor flattened scanning techniques. These images cannot be adjusted in Photoshop® and are NOT acceptable for submission to Toxicologic Pathology.