10. PLATE PREPARATION FOR PUBLICATION (3-6 micrographs/plate - 2 plates) *(100 pts)*
- Digital Plate production: for each plate, scan in 3-6 negatives and digitally prepare and print a plate for publication of three to six related micrographs. Each plate should detail a single concept (i.e. comparison of organelles, or preparation techniques, or preparational artifacts, etc.). Use labels (letters, arrows, etc.) to indicate specific structures or regions of interest in the micrographs. Include a (concise) figure legend describing the content of the plate with: (1) a summary statement, (2) description for each micrograph, and (3) all labels used in the micrographs. Include magnification bars on the images.

Preparation of two sets of photographic plates designed to meet the specific requirements for a relevant journal in the student’s area of study (Please provide a copy of the journal’s “Instructions To Authors”). Each figure must be individually numbered. Plates must include an appropriate figure legend and magnification. At least one plate covering your own samples.

 فلا يمكنك الحصول على نسخة من “التعليمات للأعمال” للصور / صفحات الأشرطة واستلمونا أيضًا صفحة نموذجية من المجلة.

One figure plate MUST BE of your own research material. For the second figure plate, if you have enough data from your own research materials for a second please go ahead and make a second research figure plate. However, if you do NOT have enough data from your research project then make a second plate using work from the assignments. (Note: yes, you may use the same micrographs for both a figure plate and another assignment including the required 6 research project micrographs, i.e. assignment 10).

Each figure plate when taken as a whole should have some cohesive concept (i.e. TEM artifacts, observations on your specimen, or different TEM imaging modes, etc.). Use letters, arrows, and symbols to designate specific features in each figure. Figures need to be at an appropriate magnification to show these features and details you describe in the legend. Each figure must be of photographically very good quality (something you’d be willingly to submit for international publication); i.e. good contrast and brightness. The figures on any one plate need to be balanced with each other - i.e. of very similar contrast and brightness. You may use color if appropriate.

Warning: I recommend against assembling plates that rely on critical contrast and/or brightness comparisons; i.e. the objective aperture assignment or staining comparisons. It is very difficult (challenging) to scan and digitally create images that are not simply optimized in terms of contrast and brightness but are true representations of what was seen in the TEM.

When writing your figure legends, justify EACH figure you have used. Do not simply reiterate the same basic figure legend over and over.