

Photographs in teaching and learning

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Why are you using images?







One image: What is its role in the lecture?





One image: What is its role in the lecture?



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One image: What choice do you have?





One image: Basic text or title are essential for understanding





Two images: Comparing human and bovine bone





Image choice relates to its purpose





or change with time





Four images: Are they visible? Multiple images on a screen may not be visible at the back in a large lecture theatre. A plus for online delivery



Scott reagent



Multiple images: Need to think about the purpose and arrangement may need to use InDesign or other photo editing programmes to organise and label images



Marquis Test



Multiple images: Individual images aren't as important as the overall concept.



Roles of photographs in supporting laboratory work





Quizzes and Surveys in Polleverywhere



Which shape is your auricular tubercle?



Quizzes and Surveys in Polleverywhere





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Space around images for labelling, arrows or drag and drop





Scatter games in Quizlet https://quizlet.com/



Maggot Crop Extraction by Bente Roloff

These photographs demonstrate maggot crop extraction. The maggot used was Calliphora vomitoria in its third instar. As the crop is at its maximum at the third instar. The maggot was killed by submerging in hot, almost boiling water for 15-20 seconds and then dissected. Once a crop is extracted it can be used for Human DNA analysis as when a maggot feeds on a human corpse, it preserves the Human DNA in its crop.



Linville, J.G., Hayes, J. and Wells, J.D., (2004) Mitochondrial DNA and STR Analyses of Maggot Crop Contents: Effect of Specimen Preservation. J Forensic Sci, 49(2).

Practical and laboratory guides





Wall charts





Wall charts



Embryonic development of Pseudomogoplistes vicentae

No embryonic development and still at the yolk blocking stage.



Embryo in Mesentrepsis. In the mid-dorsal region can see through area compared to the yellow colouration of the egg.



This embryo is at the end of Mesentrepsis and is beginning Catatrepsis

This embryo has completed Catatrepsis recently and is undergoing Dorsal closure

Embryo showing the completion of Dorsal closure

The embryo has completed dorsal closure and is near completion of embryonic development

Independent study project: Sebastian Dixon, Photography: David Bryson.



Sequences: Left useful as a handout/poster, Right images for lecture to be used in turn with explanations



Use of images in PowerPoint / Keynote / Google slides







Avoid distortion



Make images accessible





Avoid white backgrounds: The pupil of the eye closes down due to the bright background so the details in the image are not as visible.





Neutral or black backgrounds work best for photographs



Avoiding Powerpoint Bloat



How does PowerPoint store images

- For every image we use PowerPoint increases in size!
- If I use 10 images at 1Mb each that gives a 10Mb ppt file, 20 images 20Mb and so on.
- A full sized tiff file from a digital camera may be 35Mb in size put 10 of these into a PowerPoint and not only is the file a massive 350Mb.
- Ever had to wait for PowerPoint to show a slide that is due to the file sizes being too large!



File size by pixels

File type	Jpg	Tiffs
Full-size	2.2Mb	34.7 Mb
1024 pixels	132Kb	4Mb
640 pixels	80Kb	1.6Mb







1024 pixels wide

640 pixels wide

Which is the larger picture?



Basic rules for working with images

- Use jpgs or png
- Change pixel width to 1024 for pictures that are to be shown as the whole slide.
- For smaller images or two (or more) to a slide maximum pixel width 640 pixels.
- Before loading into BlackBoard check file size and consider reducing size
- File>Compress Pictures on Mac





Photographs as movies

Image sequences and time-lapse





Simple sequence of images presented as a gif animation





Mushrooms fresh from the farm



Blood drying: Close-up and photomicroscopy

Blood drying video



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https://photolibrary.cladonia.co.uk/

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