working group in 1996 investigating the anatomy content in undergraduate medical training, have acted as guidelines for development of this easy to use, USMLE-friendly site. Despite areas still under construction, such as the gross anatomy section, it offers an extensive array of radiographic images and cadaveric cross-sections developed by the National Library of Medicine's (NLM) Visible Human ProjectRRR. Endorsed and awarded by *Scientific American* amongst others, the site is certainly worth viewing for its radiological and cross-sectional image bank rather than the lacking narrative.**

http://www.nlm.nih.gov/research/visible/visible_human.html

The Visible Human ProjectRRR was created by the NLM in 1986. Its aim was to develop accurate 3-dimensional representations of normal male and female anatomy using CT, MRI and cadavers. Acclaimed by a variety of institutions in the US, it is extensively used in many medical schools stateside and abroad. The internet has allowed access to the project's vast array of diagrams, cross-sectional anatomy, and videos which are displayed in an attractive 'TV screen' style format. These are best viewed on a system with good specifications and the usual movie players. For the anatomy enthusiast, the site has links to an on-line interactive chat facility for communicating with other viewers, and a 'Toolkit' for playing around with the images. Although this portal requires an expensive subscription, it is well worth it, especially if one can convince their affiliated institution to buy it! The site has a link to 'Volume 1: Head and Neck Anatomy' which gives a flavour for this well-organised, detailed and entertaining anatomical resource.****

<http://www.vh.org/adult/provider/anatomy/HumanAnatomy/CrossSectionAtlas.html>

This work provides a high-quality colour photographic and radiological atlas of cross-sectional anatomy. The creators claim this site represents a renaissance in cross-sectional anatomy due to modern advances in radiological techniques. There is an interesting section on the history of cross-sectional anatomy since the early 16th century, including the works of De Reimer, Dwight, McEwan, Eycleshymer and Schoemaker amongst others. Photographic images and corresponding cross-sectional radiology are presented with anatomical narrative cross-referenced with Morris's *Human Anatomy* and Gray's textbook. This is a great resource for the anatomist, surgeon and radiologist. Given its easy-to-use format and attractive photography it may also act as a good educational and diagnostic aid.***

<http://www.nlm.nih.gov/exhibition/dreamanatomy/>

This interesting site is another production by the NLM. Purely of anatomical and historical interest, it provides a great variety of images and works drawn from the NLM archive. Stating 'the anatomical body as our inner reality, a medium through which we imagine society, culture and the human condition', it aims to demonstrate anatomical imagination in some of its most astonishing incarnations, from 1500 to today. There are sections on the history

of anatomy, philosophy and a great gallery of prints, paintings, engravings and lithographs. If not for anatomical interest, it provides a great source of historical images for presentations.***

<http://www.anatomy.tv/default.aspx>

<http://www.primalpictures.com/>

Anatomy.tv was launched in April, 2001 and is the on-line version of software developed by Primal PicturesRRR team, established in 1991. Medically accurate, 3-D graphics are created from scans, and accompanied by animations, schematics, prosections, MRIs and surgical procedures. Easy-to-use tool-bars allow the user to control the view, add or remove layers, and investigate specific tissues in further detail. These are supplemented by clinical videos and text contributed by clinical specialists. The titles range from interactive 3-D anatomy and virtual procedures to orthopaedics and sports injuries titles, all endorsed by a variety of organisations, academic institutions and general practices. Although the online version does not have full access to the software series, it still provides a dynamic interactive means of learning anatomy. It is currently being re-engineered in an XML format which aims to house the whole database and enable interaction between students, educators and clinicians making this more than just an atlas. With plans to adapt this 'new learning media' to pathology and physiology, it is a thoroughly impressive portal.****

Back pain

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www.arc.org.uk

This website is the home of the Arthritis Research Campaign (ARC). The charity produces a broad selection of information leaflets for patients on conditions relating to arthritis, and these can be commonly found in orthopaedic departments. This website offers online access to the complete range of patient information leaflets that they currently produce. The back pain leaflet provides detailed, but concise, information about back pain in general. It is written in a question and answer format, covering all aspects of back pain, and includes advice on back exercises. Patients commonly have concerns or queries regarding analgesics and anti-inflammatories, and this site also offers information on the commonly prescribed arthritic medications. All booklets can be downloaded in PDF for printing. The site also has several links to other relevant UK-based sites dealing with arthritis, and pain management problems. In addition to patient education, the ARC also produce books and DVDs for professionals and students working with arthritis, which can be obtained free of charge via this site. A useful site with basic information for patients if you do not stock the leaflets in your department.***

www.spine-health.com

An American website offering access to a large collection of articles and information relating to back pain. As with many American sites it also

includes the mandatory advertising links, although these are small and hence not too dominating. The site is generally aimed at patient education; however, many of the articles are very detailed and contain information more suitable for junior health professionals. As a result of the amount of information available, navigating to the most appropriate article can sometimes be difficult. If, however, you are prepared to spend some time on the site, an answer can be found to most questions relating to the spine. Information provided covers a broad spectrum from anatomy, causes of back pain, through diagnosis and investigations, as well as providing detailed information on treatment options. A specific section for health professionals links to a series of animations, for patient education purposes, that cover common surgical procedures and back problems. A good site, although some patients might find it too detailed and confusing. However, for those patients that need to know everything this is the place to look.***

www.back.com

A simple web address, that patients will easily remember, leading again to an American website. However, unlike most other American sites, you are not overwhelmed with advertising. Navigation is extremely easy, with the main topics always visible to the left of the screen. The information provided on this site is informative, but concise, and clearly aimed at patients. Orthopaedic terminology is used but these words have direct links to the large glossary to help the visitor. The text is also supplemented by very clear and detailed illustrations. These could be very useful if you are planning on presenting a professional looking teaching session on backs. As with most sites, this one also offers advice on exercises for back problems. However, it is taken one step further by providing free video demonstrations of each exercise technique, which is certainly easier than following written instructions. In summary, this is an excellent site that will satisfy the needs of most patients, and the simple web address can be easily passed on during a consultation.****

www.backcare.org.uk

This is the site of the UK charity, National Back Pain Association. Until recently, this site offered access to a variety of information about back pain, and various aspects of back care. These were concise and supplemented with good illustrations. In fact, the homepage states that the site is 'designed to help you to understand more about back care and the issues surrounding back pain'. Unfortunately, free access to resources has now been withdrawn, and is only available by joining as a paying member, or by purchasing individual booklets from the online store at 95p each. Not much use if you want quick answers online.*

www.allaboutbackandneckpain.com

Another excellent American website owned and managed by DePuy Spine. As the web address suggests, this site offers detailed information on all aspects of back and neck pain. Despite the amount of information available, it remains concise and is written to a level appropriate for the lay person. There are good illustrations in some sections, but greater use of these would help complement the written material at times. The site layout is extremely good, and

navigation is very simple. This is aided by features such as the 'Topic Center', which lists the whole bank of available topics, and the 'Spine Wizard' that will suggest the appropriate pages to be read based on your current symptoms. The information is also supplemented by an 'Ask the Expert' section that contains an expansive list of commonly asked questions and answers. If after searching the whole site you still have a query, then submit your question, and this should be answered and added to the list. A simple yet very detailed website which does 'exactly what it says on the tin'.*****

Laparoscopic appendectomy

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<http://aboutplastic.surgery.uiowa.edu/surgery/phypubs/lapappendectomy.html>

Good website with a decent section on laparoscopic appendectomy comparing it with the open procedure. Very small section relevant to junior doctors and medical students who have very little knowledge of the procedure. Some photographs are on the website but not enough detail to be useful for a surgeon aiming to perform the procedure.*

www.laparoscopy.net/appy/appy.htm

An excellent, detailed website, very useful to the higher surgical trainee and a surgeon aiming to perform the procedure. It gives details on the peri-operative and postoperative management of these patients. It also shows details of operating room layout, the equipment required for the procedure and explains the procedure step-by-step for both the paediatric and adult patient. The pictures of the step-by-step part are diagrammatic and detailed, and of similar quality of an expensive surgical atlas. It also gives very good real-life pictures of a laparoscopic appendectomy being done. Highly recommended.***

http://www.umm.edu/general_surgery/lap_appendectomy.html

Very little information on this site for the medical professional. However, very good for a patient who wants to know what appendicitis is and what to expect during a laparoscopic appendectomy. It is similar to a patient information sheet given to patients in hospitals. The website lacks pictures or diagrams, and suffers as a result.*

http://www.jmmdhs.com/index.php/laparoscopic_appendix.html

This website is very useful to the uninformed patient who may be worried about the operation. Gives useful information on what the patient will go through in the peri-operative period as well as the advantage and disadvantages of the laparoscopic procedure. It is more informative than the previous website, but again lacks any pictorial displays.*