

## 'Technology Enhanced Learning' in Haematology 2014

### Core haematology & morphology

- [http://www.bcsghguidelines.com/4\\_HAEMATOLOGY\\_GUIDELINES.html](http://www.bcsghguidelines.com/4_HAEMATOLOGY_GUIDELINES.html) (google: BCSH guide)

Provides you with comprehensive UK guidelines on the 4 areas of haematology; haemato-oncology, general, haemostasis & thrombosis, transfusion.

- [http://www.b-s-h.org.uk/36\\_Links.html](http://www.b-s-h.org.uk/36_Links.html) (google: brit soc haem)

Click on the 'Links' tab of the British Society for Haematology (BSH) website to find hyperlinks to online learning resources (if you find more please drop Katy an email) and organisations associated with haematology.

- <http://www.bloodmed.com/home/> (google: Bloodmed)

A free on-line learning hub funded jointly by BSH and Wiley, that provides everything from practice exam questions, to a slide atlas, to online text books and video highlight of recent conferences.

- <http://teachingcases.hematology.org/> (google: teaching cases ASH)

The American Society of Hematology publishes the journal *Blood*. Its website has an extensive focus on education. There are teaching cases with formative assessment built in, which are free and great for learning. There is also an ASH image bank of morphology slides. Some of the other resources you need to pay for.

- <http://www.haematologyetc.org/> (google: haematologyetc)

Haematology Education Training Competence was set up by Dr John Burthem. Great interactive digital slides and education on malaria diagnosis in addition to classical interactive digital morphology of PBFs to support the International Council for Standardisation in Haematology.

- <http://www.ehaweb.org/congress-and-events/19th-congress/previous-congresses-2/education-book/> (google: europ haem assoc)

The European Haematology Association provides pdf copies of its education book for free in addition to other learning resources.

- <http://www.leukemia-net.org/content/diagnostics> (google: ELN diagnostics morphology)

The European LeukaemiaNet is connected to the EHA and provides information for physicians and patients on leukaemia diagnosis and current trials and a morphology atlas.

- <http://www.bloodline.net/image-atlas-resources-46> (google: Bloodline atlas)

An American site hosting a huge catalogue of digital morphology slides logically divided into cell lines with examples, plus a wealth of other educational material.

- [www.cellcountr.com](http://www.cellcountr.com) (google: cellcountr)

Perform a bone marrow differential on any computer with this handy on line counting tool. Even has a facility to flash up a picture of each cell type (v helpful when you're just starting out in the lab).

### Haemostasis & Thrombosis

- [http://practical-haemostasis.com/site\\_map.html](http://practical-haemostasis.com/site_map.html) (google: practical haemostasis)

Originating from Cambridge, this site clearly sets out the theory and practice behind laboratory clotting tests in an easily understandable and practical way. Includes a section on data interpretation to test your understanding.

- <http://www.ukhcdo.org/UKHCDOguidelines.htm> (google: ukhcdo guidelines)

United Kingdom haemophilia centre doctors' organisation providing information and guidance on the management of patients with haemophilia and inherited bleeding disorders.

- <http://www.wfh.org/en/page.aspx?pid=645> (google: world fed hemo)

Click on the 'about bleeding disorders' tab, then 'bleeding disorders' to get a huge wealth of information relevant to clinicians and patients of different ages.

- <http://www.nice.org.uk/CG144> (google: NICE CG144)

NICE guidance on VTE diagnosis and thrombophilia testing.

- <https://www.evidence.nhs.uk/medicine/rivaroxaban> (google: NHS evidence)

Use the NICE supported, evidence based, search engine to obtain links to the BNF, SPC and relevant NICE guidance for any chosen drug (or disease). Particularly useful for the new oral anticoagulants (NOACs).

### Transfusion

- <http://www.blood.co.uk/about-blood/information-for-patients/blood-transfusion/> (google: give blood transfusion info)

NHS Blood & Transplant site offering transfusion information for patients. Also includes information on being a blood donor. Patient information leaflets also obtainable via the NHSBT hospitals & science website site (google: NHSBT patient info).

- [http://hospital.blood.co.uk/library/request\\_forms/](http://hospital.blood.co.uk/library/request_forms/) (google: NHSBT HLA request)

Use this to access the forms you need to request things like HLA matched platelets.

- [http://www.shotuk.org/wp-content/uploads/2012/07/SHOT-Summary\\_FinalWebVersion2012\\_06\\_261.pdf](http://www.shotuk.org/wp-content/uploads/2012/07/SHOT-Summary_FinalWebVersion2012_06_261.pdf) (google: SHOT summary)

The serious Hazards of Transfusion Summary reports make for great/informative reading. If you have time, then check out the full report for more details and useful teaching cases. There is also a 1 day SHOT symposium you might like to attend.

- <http://www.learnbloodtransfusion.org.uk/> (google: Learnbloodtransfusion)

Multiple modules provide interactive, flexible, e-learning covering the basics of transfusion practice in addition to more specialist areas. Also available through e-learning for healthcare (eLfH).

- <http://www.transfusionsguidelines.org.uk/index.aspx?publication=htm>

The Joint United Kingdom Blood Transfusion and Tissue Transplantation Services Professional Advisory Committee (JPAC) host this very informative transfusion site with links to the transfusion handbook (essential) and transfusion guidelines. Unfortunately not as user friendly as it used to be since its revamp but will have the information you are looking for (somewhere).

- [http://hospital.blood.co.uk/training/programmes/programme\\_diary/](http://hospital.blood.co.uk/training/programmes/programme_diary/) (google: NHSBT hospital)

To find the dates of the transfusion courses go to the NHSBT hospital web page and click on 'Training-education' tab, 'NHSBT programme' then programme diary. Scroll down until you reach 'Essential/Intermediate Transfusion Medicine'. Best to book early.

## Chemotherapy

- <http://www.londoncanceralliance.nhs.uk/information-for-healthcare-professionals/> (google: london cancer alliance lymphoma regimes)

Although each Trust will have its own haem-onc guidelines, you can find a useful summary of lymphoma chemo regimes, including dose modifications, here (although note most are written in 2008 and lack a review date).

- <http://www.macmillan.org.uk/Cancerinformation/Cancertreatment/Treatmenttypes/Chemotherapy/Chemotherapy.aspx> (google: macmillan RCHOP)

Macmillan support is great for patients and is also great for new haematologists. This website has lots of useful info on chemo and biological therapies. May be useful when consenting patients.

- <http://medicines.org.uk/emc/> (google: 'drug name' SPC)

The 'Standard product characteristics' are a must when prescribing any new drug or checking doses e.g. renal impairment.

## General

- <http://www.doctors.net.uk/journalwatch/ReviewsExpand.aspx?reviewid=4854#a14174> (google: doctors.net journal)

For those of you with a doctors.net email account, there is a monthly round up of the big haematology publications compiled by Raza Alikhan from Wales.

- <http://www.rcpath.org/examinations/past-and-sample-papers> (google: RCPATH past papers)

Details of the RCPATH exams, fees, regulations and past papers can be found on the college website.

- <http://www.jrcptb.org.uk/trainingandcert/ST3-SpR/Pages/Haematology.aspx> (google: JRCPTB haem)

The JRCPTB set and review curricula and standards for specialty training. They assess quality of training and make recommendations to the GMC for award of the certificate of completion of training (CCT) and CESR. The most up to date haem curriculum and ARCP decision aids can be accessed from this website, in addition to the transfusion and palliative care curricula.

- <https://twitter.com/TeamHaem> (google: twitter team haem)

Regular blood films and cases tweeted from Newcastle for our education and pleasure.

## Reports

- [http://webarchive.nationalarchives.gov.uk/20130107105354/http://www.dh.gov.uk/prod\\_consum\\_dh/groups/dh\\_digitalassets/@dh/@en/documents/digitalasset/dh\\_091984.pdf](http://webarchive.nationalarchives.gov.uk/20130107105354/http://www.dh.gov.uk/prod_consum_dh/groups/dh_digitalassets/@dh/@en/documents/digitalasset/dh_091984.pdf) (google: review of pathology carter 2008)

How to improve quality and efficiency in pathology service delivery.

- [http://www.shapeoftraining.co.uk/static/documents/content/Shape\\_of\\_training\\_FINAL\\_Report.pdf\\_53977887.pdf](http://www.shapeoftraining.co.uk/static/documents/content/Shape_of_training_FINAL_Report.pdf_53977887.pdf) (google: Greenaway report 2013)

How to improve quality and efficiency in the future medical work force.

## Coming soon

- iblood – a BSH sponsored, multi-media online haematology resource aimed at medical students
- Interactive transfusion cases for SpRs
- Digital/virtual microscopy
- NHS England Technology Enhanced Learning hub