

Electronic Resources for Research

Compiled by Dr Karen A Eley, ACF Cambridge

E-LFH

e-learning for healthcare (www.e-lfh.org.uk) contains extensive online resources for various aspects of research training. Relevant modules can be located within the following Programmes:

1. "Radiology" – 8c Professional skills:
 - a. Research for radiology SpRs
2. "Research & Audit":
 - a. Epidemiology: Basic Principles
 - b. Meta-analysis and Evidence based medicine
 - c. Audit: Basic principles
 - d. Searching the journal literature and locating papers
 - e. How to review a paper
 - f. Formulating and writing a research proposal
 - g. The regulatory environment for conducting research within the NHS – Research governance and ethics
 - h. Designing a randomised controlled trial: basic principles
 - i. Clinical Studies Part One: Cohort studies and measures of association
 - j. Clinical Studies Part Two: Study design
 - k. Systematic reviews
 - l. Qualitative Research: Basic Principles
3. "Foundation 2012" – Module 06: Maintaining Good Medical Practice – Research:
 - a. Searching the literature and locating papers
 - b. How to review a paper
 - c. Common study designs in clinical practice
4. "Anaesthesia" – Module 07d: Physics & Statistics:
 - a. Probability & Statistics:
 - i. Random processes
 - ii. Estimation and decision-making
 - iii. Hypothesis testing
 - iv. Confidence
 - v. Samples of unknown mean and variance
 - vi. Related variables
 - vii. Categorical variables
 - viii. Non-parametric data
 - ix. Diagnostic testing
5. "Dentistry" – Module 12 – Management and leadership:
 - a. Professional practice:
 - i. Research skills
6. "Oral & Maxillofacial Surgery" – Module 8: Research
 - a. The regulatory environment for conducting research within the NHS – research governance and ethics
 - b. Communication with patients
 - c. Communication: use of language to explain procedures
 - d. Communication: opportunities to empathise with the patient during the consultation/procedure
 - e. Communication: giving results to patients
 - f. Partnerships with colleagues
 - g. Leading a team
 - h. Nurturing safety
 - i. Reporting errors
 - j. Formulating and writing a research proposal

- k. Estimation and decision making
 - l. Hypothesis testing
 - m. Confidence
 - n. Samples of unknown mean and variance
 - o. Related variables
 - p. Categorical variables
 - q. Non-parametric data
 - r. Diagnostic testing
 - s. The display of statistical data
 - t. Meta-analysis and evidence-based medicine
 - u. Choice of test
 - v. Qualitative research: basic principles
 - w. Clinical studies part one: cohort studies and measures of association
 - x. Clinical studies part two: study design
7. "Plastic, reconstructive and aesthetic surgery" 0 1 – Essentials: Professional matters in plastic surgery
- a. The role of research in plastic surgery
 - b. Critical appraisal skills

External Resources:

Other useful external e-learning research resources which are free of charge include:

Statistics:

1. Centre for Statistics in Medicine: Statistical information to assist and guide through conducting a clinical trial.
<http://www.csm-oxford.org.uk/statistical-resources/>
2. Yale Center for Clinical Investigation: Introduction to biostatistics online lectures
<http://ycci.yale.edu/education/onlinecourses/biostatistics.aspx>
3. Harvard University: Statistics & R for the life sciences
[http://online-learning.harvard.edu/course/statistics-and-r-life-sciences?category\[\]=10&sort_by=date_added&cost\[\]=free#](http://online-learning.harvard.edu/course/statistics-and-r-life-sciences?category[]=10&sort_by=date_added&cost[]=free#)
4. Open University: Getting started with SPSS
<http://www.open.edu/openlearn/society/politics-policy-people/sociology/getting-started-spss/content-section-0>
5. Central Michigan University: SPSS On-line training
<http://calcnet.mth.cmich.edu/org/spss/toc.htm>

Ethics

1. NIHR: Good Clinical Practice Training
<http://www.crn.nihr.ac.uk/learning-development/good-clinical-practice/>

Literature review

1. NCBI Web tutorials on MeSH and Pubmed Advanced searching
<http://www.ncbi.nlm.nih.gov/education/tutorials/>

Writing Skills

1. Stanford University: Writing in the Sciences
<https://class.stanford.edu/courses/Medicine/Sci-Write/Fall2014/about>

Critical Appraisal

1. SIGN: Critical appraisal of the medical literature
<http://www.sign.ac.uk/methodology/tutorials.html>

Commercialising Research in the Health Sector:

1. European Commission
<https://www.iprhelpdesk.eu/node/2259>