



International Federation for Emergency Medicine

LINKS TO USEFUL RESEARCH TRAINING URLs

GENERAL ONLINE RESOURCES

Free or very low cost online access to the major journals in biomedical and related social sciences to local, not-for-profit institutions in developing countries.

<http://www.who.int/hinari/training/en/>

National Network of Libraries of Medicine (NN/LM) Training Office tutorials on using PubMed

<https://nmlm.gov/classes/pml>

<http://www.medlib-ed.org/catalogs/nmlm-nlmcourses>

Introduction to the Principles and Practice of Clinical Research (IPPCR):

<http://www.cc.nih.gov/training/training/ippcr1.html>

Principles for planning and conducting comparative effectiveness research

<http://www.npcnow.org/publication/principles-planning-and-conducting-comparativeeffectiveness-research>

The Fogarty Center list of links and resources

<https://www.fic.nih.gov/Global/Pages/training-resources.aspx>

Research Methods Supercourse - six modules on epidemiology aimed at international researchers.

<http://www.pitt.edu/~super1/ResearchMethods/index4.htm>

Ohio State University School of Public Health online modules on Comparative Effectiveness Research; 19 recorded webinars

<https://cph.osu.edu/hopes/online-training-modules>

Research methods: Beyond the clinical trial.

<https://www.ncbi.nlm.nih.gov/pubmed/12827124>

Optimal search strategies for retrieving systematic reviews from Medline: analytical survey.

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC543864/>

ETHICS

Training modules on international research training ethical issues and regulation

<http://elearning.trree.org/>

Available in English, French, German, Polish and Portuguese:

<http://www.eurecnet.org/materials/index.html>

International Ethical Guidelines for Biomedical Research Involving Human Subjects

[http://www.fercap-sidcer.org/publications/pdf/201202/FERCAP-18 CIOMS%20Ethical%20Guidelines.pdf](http://www.fercap-sidcer.org/publications/pdf/201202/FERCAP-18%20CIOMS%20Ethical%20Guidelines.pdf)

International Ethical Guidelines for Health-related Research Involving Humans

<https://cioms.ch/wp-content/uploads/2017/01/WEB-CIOMS-EthicalGuidelines.pdf>

Ethical Complexities of Conducting Research in Developing Countries

<http://www.nejm.org/doi/full/10.1056/NEJM199710023371411>

<http://www.nejm.org/doi/pdf/10.1056/NEJM199710023371411>

The Ethics of Placebo-Controlled Trials--A Middle Ground.

http://www.or.org/files/Placebo_Ethics.pdf

National Statement on Ethical Conduct in Human Research (Aust)

<https://www.nhmrc.gov.au/guidelines-publications/e72>

World Medical Association Declaration Of Helsinki (Ethics)

<https://www.wma.net/wp-content/uploads/2016/11/DoH-Oct2013-JAMA.pdf>

CLINICAL TRIALS

Standard Protocol Items: Recommendations for Interventional Trials

<http://www.spirit-statement.org/spirit-statement/>

The "Best Proven Therapeutic Method" Standard in Clinical Trials in Technologically Developing Countries

<http://www.jstor.org/stable/3564021>

Managing conflicts of interest in the conduct of clinical trials

<http://plaza.ufl.edu/rmelk/BestofBME/Publications/COIresearch.pdf>

CASE CONTROL STUDIES

Case-control studies: Research in reverse

<http://fhs.mcmaster.ca/surgery/documents/HandoutSchulzforResearch2of07Oct2009.pdf>

Compared to what? Finding controls for case-control studies

<https://www.ncbi.nlm.nih.gov/pubmed/15836892>

COHORT STUDIES

Cohort studies: marching towards outcomes

<https://docs.google.com/file/d/0B6yPWTdUUHYAYWIybzInc0p6MFk/edit>

Reader's guide to critical appraisal of cohort studies: 1. Role and design.

DOI: [10.1136/bmj.330.7496.895](https://doi.org/10.1136/bmj.330.7496.895)

<http://www.bmj.com/content/330/7496/895>

CHART REVIEWS

Chart reviews in emergency medicine research: Where are the methods?

<https://www.ncbi.nlm.nih.gov/pubmed/8599488>

Looking through the retrospectroscope: reducing bias in emergency medicine chart review studies.

<https://www.ncbi.nlm.nih.gov/pubmed/24746846>

META-ANALYSIS AND SYSTEMATIC REVIEWS

Meta-analysis as Evidence. Building a Better Pyramid

<http://jama.jamanetwork.com/article.aspx?articleid=1895230>

PRISMA: Preferred Reporting Items for Systematic Reviews and Meta-analysis

<http://www.prisma-statement.org/Default.aspx>

Challenges in conducting systematic reviews

<http://annals.org/article.aspx?articleid=718511>

Systematic reviews and meta-analyses of randomized trials: principles and pitfalls

<http://eurheartj.oxfordjournals.org/content/ehj/35/47/3336.full.pdf>

PILOT STUDIES

Pilot Studies: A Critical but Potentially Misused Component of Interventional Research

<https://www.ncbi.nlm.nih.gov/pubmed/26501530>

QUALITATIVE RESEARCH

Validating scales and indexes

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1122519/>

RESEARCH EVALUATING DIAGNOSTIC ACCURACY

STARD 2015: An Updated List of Essential Items for Reporting Diagnostic Accuracy Studies

<http://www.equator-network.org/reporting-guidelines/stard/>

Evidence based diagnostics

<http://www.bmj.com/content/330/7493/724>

When is measuring sensitivity and specificity sufficient to evaluate a diagnostic test, and when do we need randomized trials?

<https://www.ncbi.nlm.nih.gov/pubmed/16754927>

STATISTICS

Short video clips, each addressing a topic in data and statistics

<http://biostatcourse.fiu.edu/>

Introductory statistics

<http://onlinestatbook.com/index.html>

USA National Library of Medicine course on Health Statistics

<https://www.nlm.nih.gov/nichsr/usestats/index.htm>

Confidence intervals assess both clinical significance and statistical significance.

<http://annals.org/article.aspx?articleid=704552>

The use of predicted confidence intervals when planning experiments and the misuse of power when interpreting results

<https://annals.org/aim/article-abstract/707593/use-predicted-confidence-intervals-when-planning-experiments-misuse-power-when?volume=121&issue=3&page=200>

Sample size calculations in randomised trials: mandatory and mystical

<https://www.ncbi.nlm.nih.gov/pubmed/15823387>

Advanced Statistics: The Propensity Score—A Method for Estimating Treatment Effect in Observational Research.

<https://www.ncbi.nlm.nih.gov/pubmed/15347546>

Multivariable analysis: a primer for readers of medical research

<http://annals.org/article.aspx?articleid=716349>

PUBLISHING

The Equator Network: a broad range of links and materials designed to help researchers write and publish, particularly guideline-relevant studies.

<https://www.equator-network.org/library/>

Writing Successful Covering Letters for Unsolicited Submissions to Academic Journals

<https://muse.jhu.edu/article/52261>

Authorship for research groups

ICMJE Recommendations

<https://www.ncbi.nlm.nih.gov/pubmed/12495400>

<http://www.icmje.org/recommendations/browse/roles-and-responsibilities/defining-the-role-of-authorsand-contributors.html>

GRANT WRITING

An evidence-based guide to writing grant proposals for clinical research.

<http://www.pubpdf.com/pub/15710960/An-evidence-based-guide-to-writing-grant-proposals-forclinical-research>

EMERGENCY MEDICINE ORGANISATIONS

American College of Emergency Physician's Research page includes a free download of a book: "Research: A Primer"

<https://www.acep.org/how-we-serve/sections/emergency-medicine-research>

Canadian Association of Emergency Physicians

<http://caep.ca/ResearchOverview>

<http://www.mcgill.ca/emergency/links/#ebm>

<http://www.academicemergencymedicine.net>

European Society for Emergency Medicine

<http://www.eusem.org/research/>

Society of Academic Emergency Medicine

<http://saem.org/research/lectures>

FUNDING BODIES

National Institute of Health (US)

<http://grants.nih.gov/grants/oer.htm>

National Health and Medical Research Council (Aust)

<https://www.nhmrc.gov.au/grants-funding>

LIBRARIES

National Library of Medicine (inc PUBMED)

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

Cochrane library

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

METHODS

CONSORT statement for RCTs

<http://www.consort-statement.org/>

STROBE statement for observational studies

<http://www.strobe-statement.org>