Since the OMNI Project began in May 1995, the Internet has developed and expanded rapidly. Far from being a sleepy academic backwater, it is now alive with activity from other sectors. Once there were only a handful of search services describing the Web, now there are thousands to choose from. Web pages that used to be textual have come alive with Java and other technologies.

The World Wide Web has much to offer the bioscience researcher, health practitioner or medical student. This booklet aims to prove it by listing more than 50 sites worth visiting in the UK and further afield. The sites listed here are not the ‘top 50’, nor is it our intention to imply an order of merit. Instead, we mean to simply list a handful of resources for a new Internet user to visit, which will give a flavour of the millions of resources available. The sources listed here range from servers to individual documents and are published by companies, academic institutions, charities and individuals.

The OMNI Gateway will be three years old in November. If you would like to be involved in its continuing development, please join the OMNI User Group (see http://omni.ac.uk/oug for more details).

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Many more resources can be found in the OMNI Gateway at http://omni.ac.uk
ONLINE EDUCATION AND TEACHING MATERIALS

The Internet, and especially the World Wide Web, is now awash with educational material. Some of it is commercial, providing accredited continuing professional education for a fee, and some is published by universities and other educational establishments for the benefit of the community.

WORLDWIDE RESOURCES

Professor R L Huckstep’s Q and A Quiz
http://www.worldortho.com/database/quiz/quiz.html
A database of 170 images of orthopaedic and trauma cases, with related questions and answers. Professor Huckstep is Professor of Orthopaedic and Traumatic Surgery at the Universities of Sydney and New South Wales, Australia.

Spinghouse CE Connection
http://www.springnet.com/ce.htm
Spinghouse Corporation offers online continuing education from accredited providers, aimed at US nurses. Each module is in the form of a structured essay.

Dermatology Online Atlas
http://www.derma.med.uni-erlangen.de/bilddb/index_e.htm
The Dermatology Online Atlas is a dermatological image database that offers more than 2000 images of more than 500 conditions. This project is based on an image database developed at the Friedrich Alexander University, Erlanger, Germany.

Supercourse: Epidemiology, the Internet and Global Health
http://www.pitt.edu/~super1/
A set of 27 lectures in the form of slides with commentary, covering topics related to epidemiology and world health, from the University of Pittsburgh.

EduNet
http://www.edunetprograms.com/courses/
A collection of online courses in gastroenterology, published by EduNet with material supplied by McMaster University.

UK RESOURCES

MedWeb Multiple Choice Question Database
http://medweb.bham.ac.uk/http/caa/newdb/
The MedWeb automated assessment service (MAAS) is a searchable database of MCQs, which allows you to set up your own quiz and then marks your answers. Designed by MedWeb, at the University of Birmingham Medical School.
ONLINE EDUCATION AND TEACHING MATERIALS – cont.

**Right: From Beginners’ Guide to Molecular Biology**

Beginners’ Guide to Molecular Biology  
**http://www.res.bbsrc.ac.uk/molbio/guide/**  
A resource for beginners, introducing molecular biology concepts, intended for the public and students. Published by the Department of Bioinformatics of IACR Rothamsted, it covers ten topics of increasing complexity, from a definition of life to molecular engineering.

**How to Read a Paper: Getting your bearings**  
**http://194.216.217.166/reg/archive/7102/7102ed.htm**  
One of a series of articles published in the *British Medical Journal*, introducing non-experts to finding medical articles and assessing their value. It provides an overview of the general principles behind critical appraisal, RCTs, cohort studies, case-control studies, cross-sectional surveys, case reports and the hierarchy of evidence.

**HELP**  
**http://www.dundee.ac.uk/MedEd/help/welcome.htm**  
Helpful Essential Links to Palliative Care is a simple but effective guide to common problems in palliative care for health workers. It uses simple hypertext links and text documents only. Produced by the Centre for Medical Education, University of Dundee, in collaboration with the Cancer Relief Macmillan Fund.
The Internet is an ideal place to make large collections of factual data available to all. This section lists databases containing non-bibliographic information, including reference sources such as dictionaries.

**WORLD RESOURCES**

**Rare Diseases Clinical Research Database**  
A database of research into rare diseases that can be searched by keyword. An ideal place to find out about clinical trials and other studies underway in the USA.

**Glossary of Physiotherapy**  
An alphabetical glossary giving short definitions of terms used in physiotherapy and musculoskeletal management. Compiled by Charlie Kronberg, an Australian physiotherapist.

**Tumour Board**  
http://www.tumorboard.com  
A collaborative effort to produce a large, online collection of copyright-free digital pathology images.

**Online Mendelian Inheritance in Man**  
OMIM is a famous database of information about human genetic disorders.

**Online Mendelian Inheritance in Animals**  
A slightly less famous database of inherited traits in animals, modelled on OMIM and produced by a group of experts at the University of Sydney, Australia.

**First Data Drug Database**  
A database of drug information, published on the Web by Medscape. This service allows users to search by generic name, brand name or disease. A typical record gives information on indications, side-effects and precautions.
UK RESOURCES

UK Life Sciences Committee Meetings Database
http://www.lifesci.org/meetdb/default.htm
Several UK life sciences organizations are collaborating to provide a database of meetings. The database can be browsed by date, or searched by keyword.

Dictionary of Epidemiology
http://epidem13.plantsci.cam.ac.uk/~js/glossary/gloss98.html
Published by the Wellcome Centre for the Epidemiology of Infectious Diseases, Oxford. This dictionary is used in courses run by the Centre but is freely available to all.

European Bioinformatics Institute
http://www.ebi.ac.uk/
The European Bioinformatics Institute (EBI) is an outstation of EMBL (European Molecular Biology Laboratory). It provides access to many sequencing databases for the UK research community.

UK Nutrient Databank
http://beta.bids.ac.uk/rsc.html
Produced by the Royal Society of Chemistry, the UK Nutrient Databank is a database of UK food tables used by dieticians and nutritionists. Hosted at BIDS, the database is accessible to subscribers only, at academic institutions in higher or further education.

Biomedical Research Vacancies
http://wisdom.wellcome.ac.uk/wisdom/jobshome.html
A database of details of vacancies for research assistants offered at academic institutions in the UK. This service is provided by the Wellcome Trust.

AIDS Reagent Project
http://www.nibsc.ac.uk/aids_reagent/jan97/catalog.htm
A searchable catalogue of reagents for AIDS researchers, funded by the UK Medical Research Council.

Royal College of Physicians Database of CME Events
http://omni.ac.uk/cme/
A database of educational meetings for medical professionals, that have been accredited by the Royal College of Physicians.
WORLD RESOURCES

ToxLine
http://www.medscape.com/misc/FormToxlineInfLive.html
ToxLine is a bibliographic database covering journal articles on toxicology. Produced by the National Library of Medicine, and hosted by Medscape, the service is free of charge after initial registration.

Global ChildNet
http://edie.cprost.sfu.ca/gcnet/bib-sear.html
A database of citations to articles on child health topics. Global ChildNet is a division of the Global Child Health Society, a non-profit advocacy organization based in Vancouver.

UK RESOURCES

TRIP
http://www.gwent.nhs.gov.uk/trip/
TRIP (Turning Research into Practice) is a database of resources compiled by hand from 14 key evidence-based practice sources on the Internet. TRIP is produced by the primary care clinical effectiveness team for Gwent Health Authority.

BOPCAS Health Publications
http://www.soton.ac.uk/~bopcas/data/subject/health/by_month.htm
A directory of UK Official Publications on health that have been published since July 1995. This listing is a segment of BOPCAS (British Official Publications Current Awareness Service) based at the University of Southampton.

DARE
http://nhscrd.york.ac.uk/
DARE (Database of Abstracts of Reviews of Effectiveness) is a searchable database of structured abstracts of systematic reviews identified from a variety of sources and assessed for quality. The DARE database is produced by the NHS Centre for Reviews and Dissemination.

Wellcome Trust Medical Film and Video Library Catalogue
http://wisdom.wellcome.ac.uk/wisdom/mfvlhome.html
Details of audiovisual materials held at the Wellcome Trust Medical Film and Video Library. The library holds material in a range of subject areas, from biotechnology to the history of medicine.
ACCESSING THE MEDLINE DATABASE

PubMed
PubMed is the National Library of Medicine’s own free MEDLINE service. In addition to standard MEDLINE search features, PubMed offers extra help to clinicians in the form of filters called Clinical Queries, which focus on aetiology, prognosis, diagnosis and treatment aspects of disease.

BIOMED
http://biomed.niss.ac.uk/
Available to registered users only, BIOMED is the UK higher education and research community’s MEDLINE service (which also offers access to CINAHL and OVID Full Text).

BioMedNet Evaluated MEDLINE
http://biomednet.com/db/medline
Free access to MEDLINE for registered members of BioMedNet. Evaluated MEDLINE includes added annotations from subject experts for selected articles.

OTHER RESOURCES

How to Read a Paper: The MEDLINE Database
http://194.216.217.166/reg/archive/7101/7101ed.htm
This article is part of a series published in the British Medical Journal introducing the non-expert to searching the medical literature and assessing the value of medical articles. It explains how to find a known paper, how to answer a specific question, how to find general information quickly about a well-defined topic and a range of other questions relating to the searching of the MEDLINE database.

OMNI’s MEDLINE Resource Centre
http://omni.ac.uk/general-info/internet_medline.html
OMNI’s guide to the various flavours of Internet MEDLINE, with links to free and commercial services, reviews, search filters and other sources of information.

Evaluation criteria for different versions of the same database
http://omni.ac.uk/agec/iolim97/
Originally presented at Online Information ’97, this paper compares a number of versions of the MEDLINE database in order to devise evaluation criteria.
ELECTRONIC JOURNALS AND OTHER FULL-TEXT SERVICES

WORLDWIDE RESOURCES

eBMJ
http://www.bmj.com/
The British Medical Journal is available freely, in full, online from the eBMJ Web site. eBMJ also offers additional services such as Customised @lerts, which will e-mail you when articles in your chosen topic area are published.

CNN – Health
http://www.cnn.com/HEALTH/
Summaries and full text of news items on health and medicine from CNN (the US cable news provider). The service is frequently updated, and there is a keyword search facility, but coverage is inevitably US biased and has a popular tone.

AIDS Knowledge Base
http://hivinsite.ucsf.edu/akb/1997/
The third edition of the AIDS KnowledgeBase, a textbook on HIV and AIDS produced by the University of California and the San Francisco General Hospital. It contains sections on epidemiology and transmission, testing, basic science, clinical manifestations; associated infections and prevention and education.

Basics of MRI
http://www.cis.rit.edu/htbooks/mri/
A textbook on magnetic resonance imaging, intended as an introduction for the medical student or professional.

Olive Oil Medical Information Library
http://europa.eu.int/en/dg06/prom/olive/medinfo/
A European Community-sponsored Web site promoting the benefits of olive oil and the Mediterranean diet. This site includes a collection of scientific articles on the effects of olive oil, which have been verified by the Institute of Atherosclerosis Research at the University of Munster, Germany.

UK RESOURCES

COIN: Circulars on the Internet
http://www.open.gov.uk/doh/coinh.htm
The Department of Health’s new Internet service providing access to bibliographic details and the text of departmental circulars, including Executive Letters since 1997. To read or print the documents you will need to use Adobe Acrobat viewer.
NHS White Paper: The new NHS
http://www.official-documents.co.uk/document/doh/newnhs/newnhs.htm

Bandolier
http://www.jr2.ox.ac.uk:80/Bandolier
A monthly journal containing “bullet points of evidence-based medicine”, produced in Oxford for the NHS R&D Directorate.

World Health
http://www.warwick.ac.uk/fac/sci/Medical/World_Health/contents.html
An online, full-text book on world health, covering the history of healthcare, background issues to health (such as climate, family life, population etc.), the developing world, health infrastructure and information on health statistics.

Financial Times Healthcare News
This section lists directories of people and organizations, large and small, available freely through the Internet.

WORLDWIDE RESOURCES

EFAnet
http://www.efanet.org/
The European Federation of Asthma and Allergy Associations (EFA) is an alliance of 27 associations in 14 European countries. This site provides a variety of asthma-related information, including a directory of member associations.

WHO/Europe
http://www.who.dk/
Information on the activities of the World Health Organization Regional Office for Europe, including a directory of central and local offices and staff.

UK RESOURCES

General Dental Council
http://www.gdc-uk.org/
The General Dental Council is the regulatory body of the dental profession in the UK. As such, it maintains a register of practising, qualified dentists, dental hygienists and dental therapists, and this database can be searched by registration number, surname, town and postcode.

Medwork-NHS Organisation Listings
http://www.medwork.co.uk/db/index.htm
A directory of UK NHS hospitals, Trusts, Regional Health Authorities, District Health Authorities, Family Health Service Authorities and Health Units.
Discussion lists and newsgroups enable like-minded people around the globe to connect to share news, ask questions and make contacts.

WORLDWIDE RESOURCES

Liszt Select: Health
http://www.liszt.com/select/Health/
The Liszt service describes mailing lists on all topics, but here you can browse through lists discussing health topics only.

Deja News Health and Medicine
http://www.dejanews.com/categories/med.shtml
Similarly, Deja News indexes thousands of postings from all kinds of newsgroups, but you can restrict your search to those in the health area.

UK RESOURCES

Mailbase Medicine and Dentistry lists
http://www.mailbase.ac.uk/category/A.html
Web access to information about the medicine/dentistry-related lists run at Mailbase, the UK’s academic electronic mailing list service.
CHiQ: Topic Bulletin 2
http://www.centreforhiq.demon.co.uk/tb2.htm
Advice for consumers on illnesses and treatments is easy to locate on the Internet. The quality of the data supplied is very variable, however. The UK’s Centre for Health Information Quality, which supports the development of high-quality, evidence-based patient information, has recently published this Topic Bulletin dealing with the quality of Internet resources aimed at patients.

WORLDWIDE RESOURCES
Patient Information on Nutrition and Obesity
http://www.niddk.nih.gov/health/nutrit/nutrit.htm
A selection of documents on nutrition and obesity. This information is provided by the National Institute of Diabetes and Digestive and Kidney Disease (NIDDK) of the National Institutes of Health in the USA.

Facts for Families
http://www.aacap.org/web/aacap/factsFam/
Facts for Families is a collection of documents on many psychiatric disorders affecting children and adolescents, aimed at parents or the patients themselves. Published by the American Association of Child and Adolescent Psychiatry.

UK RESOURCES
Libra Project
http://www.brookes.ac.uk/health/libra/index.html
Libra is an independent community information project that aims to discourage drug misuse by keeping the public informed. This site gives information on class A drugs, class B drugs and other substances such as alcohol and solvents.

Information from the Patients’ Liaison Group, RCGP
http://www.rcgp.org.uk/special/plg/index.htm
The Patients’ Liaison Group of the Royal College of General Practitioners has provided this series of leaflets designed to help the lay person understand how the family doctor system works and enable them to get the best healthcare from their GP.
Many professional societies, government organizations and lobbying groups are using the Internet as a key tool for dissemination of practice guidelines. The resources below are all published by UK organizations.

**Molecular Genetics Service Guidelines**  
http://www.molgenqa.demon.co.uk/1sted.htm  
A collection of guidelines for laboratories performing genetic tests compiled by the UK Molecular Genetics NEQAS Steering Committee.

**CancerBACUP Guidelines for Doctors**  
http://www.cancerbacup.org.uk/guidelines/ukindex.shtml  
A browsable collection of cancer treatment guidelines, organized by the charity CancerBACUP.

**National Low Back Pain Clinical Guidelines**  
Brief clinical guidelines on the management of acute back pain, intended for a wide range of medical professionals. These guidelines are published on the Web by the Royal College of General Practitioners.

**BSRD Guidelines for Crowns and Bridgework**  
http://www.derweb.ac.uk/bsrd/bsrdgde.html  
This document, produced by the British Society for Restorative Dentistry, is intended to act as a stimulus to better-quality practice in crown and bridgework.

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*Footnote: Finding medical resources on the web*  
The OMNI Gateway includes descriptions of all the resources listed in this booklet plus 3500 more. We update our service weekly and add approximately 150 resources to our databases each month.

However, OMNI is not the only tool available for searching the Internet for medical resources. A launchpad to more than 20 other services can be found on the OMNI server at [http://omni.ac.uk/other-search/](http://omni.ac.uk/other-search/)
OMNI: ORGANISING MEDICAL NETWORKED INFORMATION

OMNI’s aim is to enhance the use of biomedical Internet resources for academics, medicine, allied health, bioscience and related topics. We cover UK material in depth, and include the best resources from around the world. By a process of selection, evaluation and description, we are constantly expanding our collection.

Search or browse the OMNI Gateway from http://omni.ac.uk/. There is no charge for this service and it is not necessary to register.

OMNI offers training in using the Internet effectively, tailored to the needs of the biomedical community. For information about courses (including hosting a workshop at your own institution), training publications and free downloads of OMNI presentations and other materials, visit the OMNI Training Centre at: http://omni.ac.uk/training-centre/.

CONTACTING US

Post:   OMNI
        Greenfield Medical Library
        Queen’s Medical Centre
        Nottingham NG7 2UH

E-mail:  help@omni.ac.uk

The OMNI list at Mailbase has been set up for discussion about the OMNI service, and for those wishing to hear regular news about the Project. To join the list send a message to: mailbase@mailbase.ac.uk saying “join omni your-first-name your-last-name”.

OMNI is funded by the Joint Information Systems Committee (JISC), of the Higher Education Funding Councils, via the Electronic Libraries Programme (eLib).

Published by OMNI, June 1998
Internet Resources for Medicine and Bioscience, 4th edition.

ISBN 1 869835 72 7
Published by the Royal Society of Medicine in association with the Wellcome Trust, this bi-monthly newsletter has been launched to meet the growing demand from health professionals for information about health resources available on the Internet.

Edited by Robert Kiley, this newsletter contains a range of contributed articles and regular features.

Bookmarks – An annotated review section drawing attention to the most useful health sites on the Internet.

What’s new? – A brief overview of new health/medical Web sites, discussion lists and newsgroups.

A view from the frontline – Explores the range of issues facing a working doctor trying to use the Internet.

The Internet consultation – Invited clinicians describe in detail how they use the Internet, including their perceptions of its strengths and weaknesses.

Current literature – Update on current literature on the use of the Internet in medical and health settings, compiled from the Medline, Science Citation Index and Embase databases.

For subscription details, archived issues and information about the newsletter point your Web browser at: www.wellcome.ac.uk/healthinfo