# INDIAN COUNCIL OF MEDICAL RESEARCH

## ICMR Library Bulletin

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## Contents

# INFORMATION REPOSITORIES

## 1. Introduction:

This is an age of information explosion. Its impact on library and information centers is profound. With the growing number of e-resources, it has become imperative for information professional to redefine their role in disseminating information to the users. Institutions use modern information and communication technologies for information management and dissemination. The institutions converting their assets into digital format for creating digital collection for the last few years. Institutional Repository is a new concept for collecting, managing, disseminating and preserving scholarly works created in digital form by faculty and students in individual organizations, universities and colleges. It may also include many of the digital assets generated by an institution such as working papers, lectures, conference proceedings, learning objects, administrative documents, course notes, etc. The learning objects may include study materials, assignments, question papers, audio-video materials and multimedia presentations.

## 2. Information Repository

In simplest terms, a information repository is where digital content, assets, are stored and can be searched and retrieved for use later. A repository supports mechanisms and workflows to import, export, identify, store and retrieve digital assets. Putting digital content into a repository enables staff and institutions to then manage and preserve it, and therefore derive maximum value from it. Digital repositories may include whole courses, e-learning objects and teaching materials, images or data.

An information repository is an easy way to deploy secondary tier of data storage that can comprise multiple, networked data storage technologies running on diverse operating systems, where data that no longer needs to be in primary storage is protected, classified according to captured metadata, processed, de-duplicated, and then purged, automatically, based on data service level objectives and requirements. In information repositories, data storage resources are virtualized as composite storage sets and operate as a federated environment.

Information repositories were developed to mitigate problems arising from data proliferation and eliminate the need for separately deployed data storage solutions because of the concurrent deployment of diverse storage technologies running diverse operating systems.

## 3. Viability and sustainability

If repositories are to support institutions, and their staff and students, in achieving their various objectives, then they must be able to interoperate with other systems (administrative systems, portals, other repositories), and they must not lock their content into systems from which it is difficult and expensive to extract. The key to this is to ensure that repositories comply with 'open standards', so that they declare publicly how the information is stored and made available. If they do this, then institutional repositories have the potential to become embedded as a core element in an institution's information management fabric, enabling institutions to both compete and collaborate more effective.

## 4. Importance

The building of an Institutional Repository for any organization is needed in the present scenario of digital world because of the following certain changes:

- Technological changes;

- Significant increase in the overall volume of research;

- Increasing need of archival and access to unpublished information bearing objects;

- Increasing demand to access knowledge objects from anywhere at anytime;

- Increase uncertainty over who will handle the preservation archiving of digital scholarly research materials.

## 5. Benefits

### 5.1 For the contributor

- Greater citation: Studies have shown that articles freely available on the Internet are cited more often than their paper counterparts.

- Speed: Faculty members can self-publish their preprints immediately, with the possibility of receiving immediate feedback.

- Organization: An institutional repository can contain all of the scholarly work by one faculty member, including material such as preprints, post-prints, presentations, and classroom materials (dependent on copyright restrictions). Instead of being scattered about in different databases, servers, or computer hard drives, this material can be browsed easily in one place by the user, and reused easily by the contributor.

- Preservation: In order to ensure continued access, digital files need to be refreshed and migrated. Ten years from now, will you be able to open a Microsoft Word file you've created today? Depositing a file into an opened is placed institutional repository means that the burden of ensuring the file can be on the curator of the institutional repository, and not on the owner.

- Ease of use: Although self-submission is possible in our institutional repository, it's much more likely that all uploading will be done by the library. All that is needed are files to upload and permission to upload it.

- Permanent place: Depositing an item into an institutional repository means that it stays in one place and maintains the same URL.

## 5.2 For the institution

- The scholarly material produced by the university is available in one place, reflecting the intellectual achievements of the institution, and serving as a valuable marketing tool.

- Documents reflecting the institutional history of the university, both scholarly and nonscholarly, are preserved for future use, much like a traditional archive preserves paper material.

- Material that is not traditionally published is included in the repository, including drafts of unpublished articles or book chapters, unpublished research, student works, learning objects, and creative works.

## 5.3  For the user

- Material in an institutional repository can be found through a search engine. There is no charge to access this material, and there are no subscription fees. Our repository contains material that is best displayed in its original digital format, such as audio files, video files, animations, and data sets.

- Gray literature, material not easily found through conventional means, will be actively recruited for the repository. This can include material such as working papers, pre-prints, white papers, conference presentations.

## 6. Information Repository Software's:

There are various types of Digital Library software's are available e.g.,
- DSpace (Digital Space),
- GSDL (Green Stone Digital Library),
- e-print Archive,
- Fedora: An Open Source Digital Repository Management (Fedora Itore),
- Ages Digital Libraries Software (My Ages),
- AGES Software,
- CDSware: The CERN Document Server Software,
- Dienst,
- FirstSearch,
- Ganesha Digital Library version 3.1 (GDL),
- Libronix Digital Library System,
- ETD-db (Electronic Theses and Dissertations database),
- LOCKSS (Lots of Copies Keep Stuff Safe),
- CLOCKSS.

## 7. Types of Information Repository

### 7.1. Institutional Repository

Wikipedia states that: "An Institutional Repository is an online locus for collecting, preserving, and disseminating, in digital form, the intellectual output of an institution, particularly a research institution.For a university, this would include materials such as research journal articles, before (preprints) and after (postprints) undergoing peer review, and digital versions of theses and dissertations, but it might also include other digital assets generated by normal academic life, such as administrative documents, course notes, or learning objects.

#### *Examples of Institutional Repository*

- Indian Institute of Astrophysics - http://www.iiap.res.in/
- Information and Library Network Center  - http://www.inflibnet.ac.in/
- University of Delhi http://www.du.ac.in/
- University of Cambridge (UK)
- Harvard University

### 7.2. Subject based Repository

Subject-based repositories (commercial and non-commercial, single and federated) usually have been set up by community members and are adopted by the wider community. Spontaneous self-archiving is prevalent as the repository is of intrinsic value to scholars." As such, subject-based repositories are thematically well defined and alert services and usage statistics are meaningful for community users.

#### *Examples of Subject based Repository*

- SSRN, Social Sciences Research Network (http://www.ssrn.com/)
- RePEc, Research Papers in Economics (http://repec.org/)
- PMC, PubMed Central (http://www.ncbi.nlm.nih.gov/pmc/),
- ADS, the NASA Astrophysical Data System http://adswww.harvard.edu/)

### 7.3. Learning Object repository

A learning object is a resource, usually digital and web-based, that can be used Learning Object and re-used to support learning. Learning objects offer a new conceptualization of the learning process: rather than the traditional "several hour chunk", they provide smaller, self-contained, re-usable units of learning.

#### *Examples of Repository*
- Learning Object Repository for Edinburgh University (LORE)
- Curriculum Online
- JORUM
- High Level Skills for Industry Project (HLSI)

## 7.4. National and International Repository

National repository systems require coordination - more for a federated system, less for a unified system. National systems are designed to capture scholarly output more generally and not just with a view to preserving a record of scholarship, but also to support, for example, teaching and learning in higher education. Indeed, only a national purpose will justify the national investment. Such systems are likely to display scholarly outputs in the national language, highlight the publications of prominent scholars and develop a system for recording dissertations. One could conceive of such a national system as part of a national research library that serves scholarly communication in the national language, is an international showcase of national output and supports public policy, e.g. higher education and public access to knowledge.

Examples of National & International Repository

- National Archives
- NERC Data Centres
- National Digital Archive of Datasets
- Digital Academic Repositories (DARE)
- National Digital Information Infrastructure & Preservation Program (NDII)

## 8. DOAR- Directory of Open Access Repository
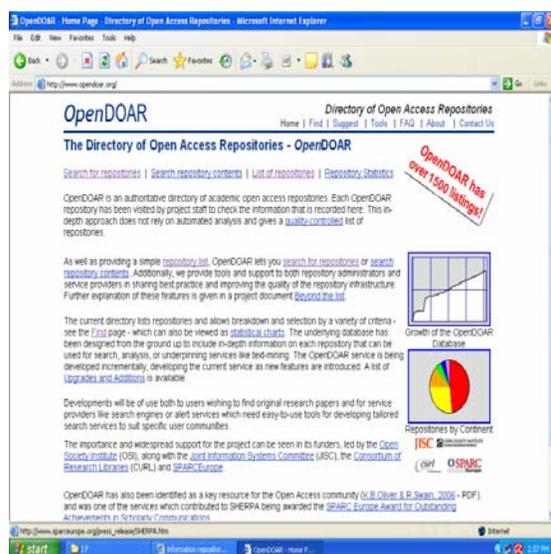


DOAR provides a quality-assured listing of open access repositories around the world. *Open*DOAR staff harvest and assign metadata to allow categorization and analysis to assist the wider use and exploitation of repositories. Each of the repositories has been visited by *Open*DOAR staff to ensure a high degree of quality and consistency in the information provided: *Open*DOAR is maintained by SHERPA. The work of the OpenDOAR team at Nottingham University in UK is funded by a number of organizations including the OSI, the JISC, the Consortium of Research Libraries (CURL) and SPARC Europe.

## 9. ROAR- Registry of Open Access Repositories



ROAR is a parallel project to Open DOAR and runs at Southampton University in the UK. ROAR is to promote the development of open access by providing timely information about the growth and status of repositories throughout the world. Open access to research maximizes research access and thereby also research impact, making research more productive and effective.

The registry has two functions: (1) to monitor overall growth in the number of eprints archives and (2) to maintain a list of GNU EPrints sites (the software Southampton University has designed to facilitate self-archiving).

ROAR also keeps track of the archiving policies adopted by universities, funding bodies and so on with respect to authors depositing material in open access repositories.

## 10. JISC – Joint Information System Committee



The JISC is funded by the UK higher education (HE) and further education (FE) bodies to provide world class leadership in the innovative use of ICT to support education and research. This requires services and guidance to be provided to education institutions, across the range of their activities.The JISC repositories mailing list (JISC-REPOSITORIES@JISCMAIL.AC.UK) provides a lively discussion forum for those interested in the work of JISC and repositories.

**JISC has a number of funding programmes, as described below:**

- Focus on Access to Institutional Repositories (FAIR) 2002-05
- Digital Repositories Programme 2005-07
- Repositories and Preservation Programme 2007-09
- Repository Support Project (RSP)

## 11. Conclusion:

More work need to be done to identify, specify and map the repository landscape. The framework should include not only technical issues but also processes and functions. This work should include workflows and business processes, and the relationship between national and local, subject and other types of repository.

In India, some elite educational and research institutes (such as Indian Statistical Institute, some CSIR Laboratories, IITs, IIMs etc.) already started their initiatives in building institutional repositories including a few Universities (such as Central University of Hyderabad, University of Delhi).University Grants Commission already developed a policy document on building University level Institutional Digital Repository (http://www.ugc.ac.in) in India. Almost all of these initiatives are experimental in nature (except a few such as Librarian's Digital Library (LDL) of DRTC, ISI, Bangalore) and are not based on research data as far as policy issues, institute-specific requirements, workflow pattern, metadata and other related standards for different kinds of digital documents, multi-lingual and multi-script documents processing, search and retrieval requirements and user interfaces at various level are concerned.

## References:

1. Rajveen, Dhiensa and Zuccala, Alesia (2008)., "Managing and evaluating Digital repositories" Information Research 13(1) Available at http://informationr.net/ir/13-1/infres131.html

2. Kamila, Kanchan (2009), "Institutional Repository Projects in India", CALIBER 2009, p. 128-132. http://www.inflibnet.ac.in/caliber2009/CaliberPDF/17.pdf

3. Tedd, Lucy. A (2009), "Open Access Publishing and Institutional Repository: An Overview, CALIBER 2009, p. 572-584. http://www.inflibnet.ac.in/caliber2009/CaliberPDF/71.pdf

4. Heery, Rachel (2005), "Digital Repositories Review", Arts and Humanities Data Service, 2005. http://www.jisc.ac.uk/uploaded_documents/digital-repositories-review-2005.pdf

5. http://en.wikipedia.org/wiki/Information_repository

6. http://www.opendoar.org/

7. http://roar.eprints.org/

*New Arrivals*

# Contents

**Biometrics: Enhancing security or invading privacy. -- Dublin: Irish Council of Bioethics, 2009.**
**174.2 P9**          **C2693**



**Abstract:**

It Provides biometrics technologies including iris, voice, finger prints and vein pattern recognition once the realm of science fiction and film are now becoming more of a daily reality. Also provide biometrics applications in many different situations. It provides a useful and informative resource for both policy makers and the general public and will also help to engender greater discussion and consideration of the issues pertaining to biometrics.
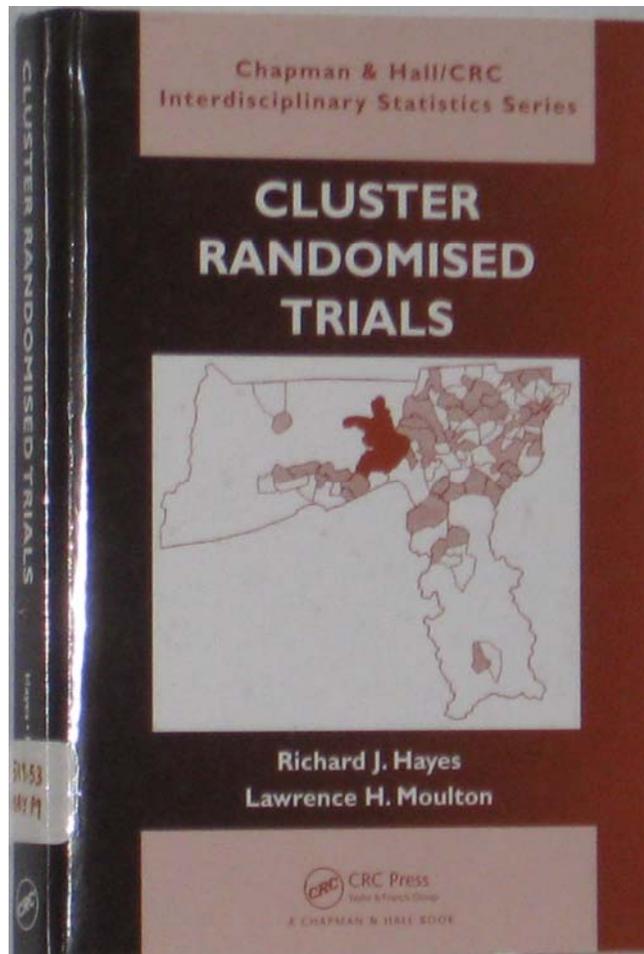**Key words: Bioethics; Biometric.**

# 519 STATISTICAL MATHEMATICS

**Hayes, R.J.**
   Cluster Randomized trials/R.J. Hayes and L.H. Moulton. -- London: CRC Press, 2009.315p. ISBN: 9781584888161.
**519.53 HAY P9          5446**



**Abstract:**

It aims to discuss the design, conduct and analysis of groups of in the different treatment arms. The book has grown out of the personal involvement of the authors in a wide range of cluster randomized trials, mostly in the field of international public health. Cluster randomization against infectious disease. And also provides useful practical resource for investigators carrying out such trials.
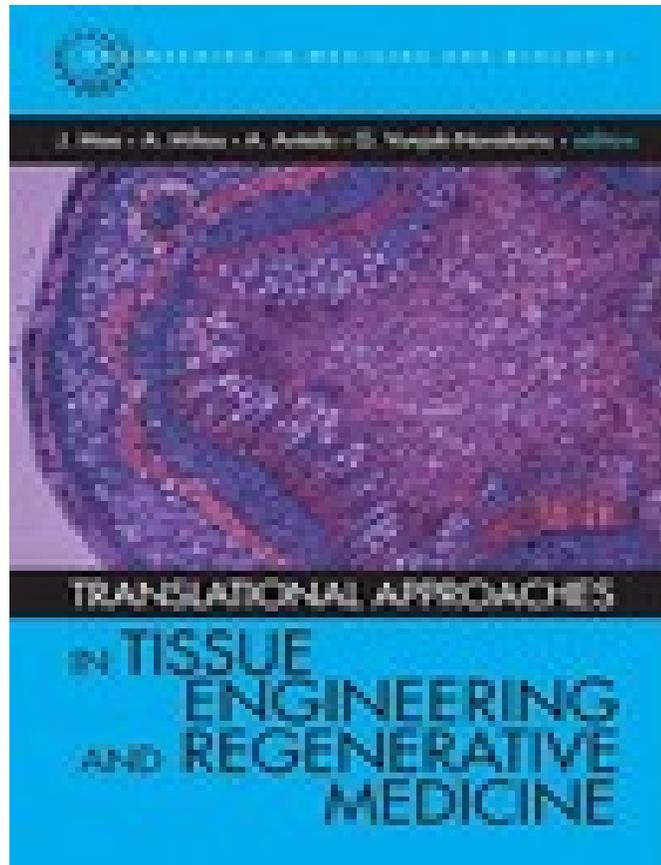**Keywords: Clinical Trials; Cluster Analysis.**

## 610  MEDICINE

**Translational Approaches in Tissue Engineering and regenerative medicine/Jeremy J Mao…[et.al].  --Boston: Artect House, 2008. ISBN: 9781596931114.**
   **610.28 MAO P8          5444**



**Abstract:**

It represents a collection of thought provoking, contributions and significant approaches of research and translation in the field of tissue engineering and regenerative medicine. It describes the individual approaches in the involvement officials and regulatory experts make this volume a unique blend of viewpoints that will serve as a catalyst for tissue engineering and regenerative medicine. Also provides an example of issues and strategies in stem cell biology or biomaterial design and bioengineered synovial joint or internal organs.
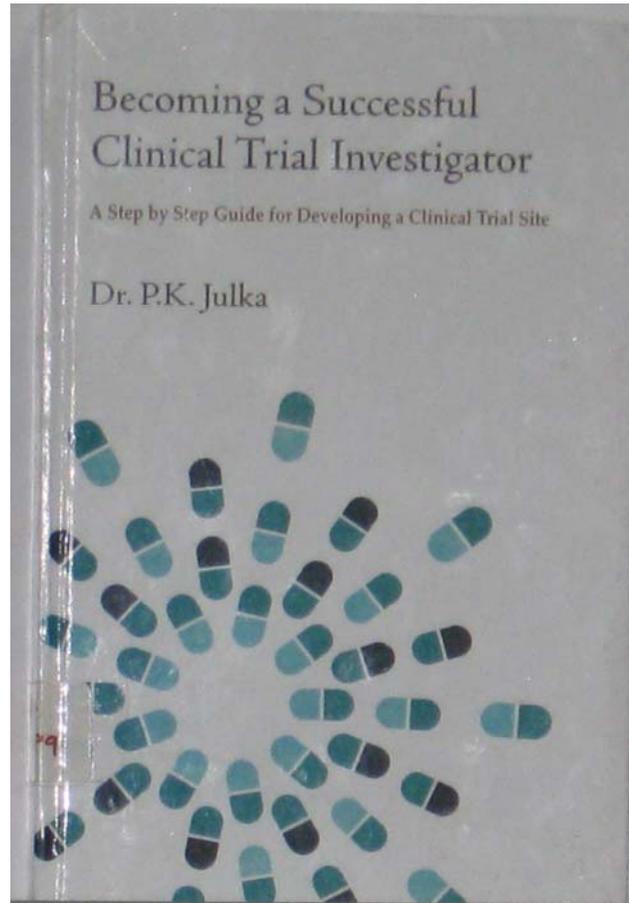**Keywords: Medical Engineering.**

**Julka, P.K.**

**Becoming a successful Clinical Trial Investigator: a step by step guide for developing a clinical trial site/ P.K. Julka. -- New Delhi: DNA Press, 2009. 163p. ISBN: 9788190827706.**

**Abstract:**

This book is intended to provide an insight on becoming, a successful clinical trial investigator. While navigating through the book, a reader would be able to develop a clear understanding on the steps involved in developing a good clinical trial site. The first edition of this book was very well appreciated amongst various clinical stakeholders. This edition will help the readers to incorporate the learning's into practice.
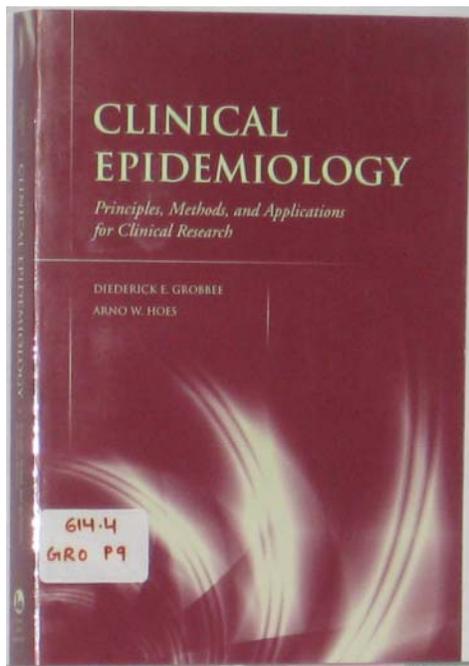**Keywords: Clinical Research.**

## 614.4 INCIDENCE OF AND PUBLIC MEASURE TO PREVENT DISEASE

**Grobbee, D.E.**
   **Clinical Epidemiology: principles, methods, and applications for clinical research/D.E. Grobbee, A.R. Hoes. --Boston: Jones & Bartlett, 2009. 413P. ISBN: 9780763753153.**
**614.4 GRO P9       5429**



**Abstract:**

It is intended for those who are currently practicing medicine and related disciplines (such as pharmacy, health sciences, nurse's sciences, veterinary medicine, dentistry) as well as those involved in the design and conduct of applied clinical research. It provides benefits for undergraduate students and Ph D fellows in medicine and related disciplines. Also helps to teach both the users and doers of quantitative clinical research. The contents of clinical teaching experience on the methodology of applied clinical teaching over the last 20 years. It explores the challenges clinicians face in daily practice and the quantitative knowledge required to practice medicine. Every section of the book includes worked out examples from daily clinical practice and clinically relevant clinical research that can be used as exercise. It also contributes to a better understanding of the strengths of clinical epidemiology as well as helps both users and researchers of quantitative clinical in their endeavors to further improve daily clinical practice.
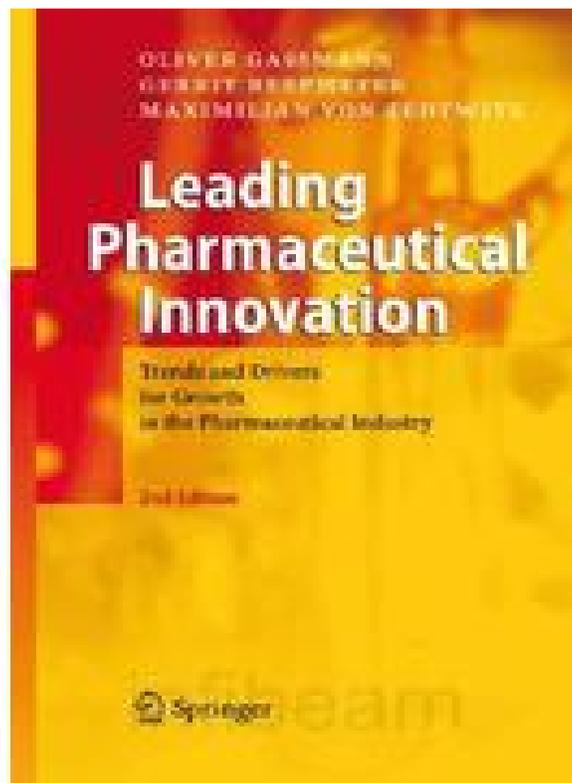**Keywords: Clinical epidemiology.**

## 615 DRUGS

**Gassmann, Oliver.**
   **Leading Pharmaceutical Innovation: trends and drivers for growth in the pharmaceutical industries/Oliver Gassmann, Gerrit ReepMeyer, Maxmilian Von Zedtwitz.—2nd ed. --Berlin: Springer, 2008. 186p. ISBN : 9783540776352.**
**615.1 GAS  P8            5452**



**Abstract:**

This book describes and analyzes how industry leaders face challenges of Pharmaceutical industry, what tools they deploy to find new solution. The 2nd edition include the latest technology, industry information , new management models like, open innovation systematic partnering, out licensing and international  diversification of Research and Development (R&D). It provides more balanced information regarding global perspective by including examples from U S & Asia in addition to Switzerland.
The goal of this book is to provide mankind with better drugs and therapies to live and survive.
**Keywords: Drugs- Research.**

**WHO Model Formulary 2008: Based on the 15$^{th}$ model list of essential medicines. --Genewa : WHO, 2009. 634p. ISBN: 9789241547659.**
**615.13  WHO  P9        5432**
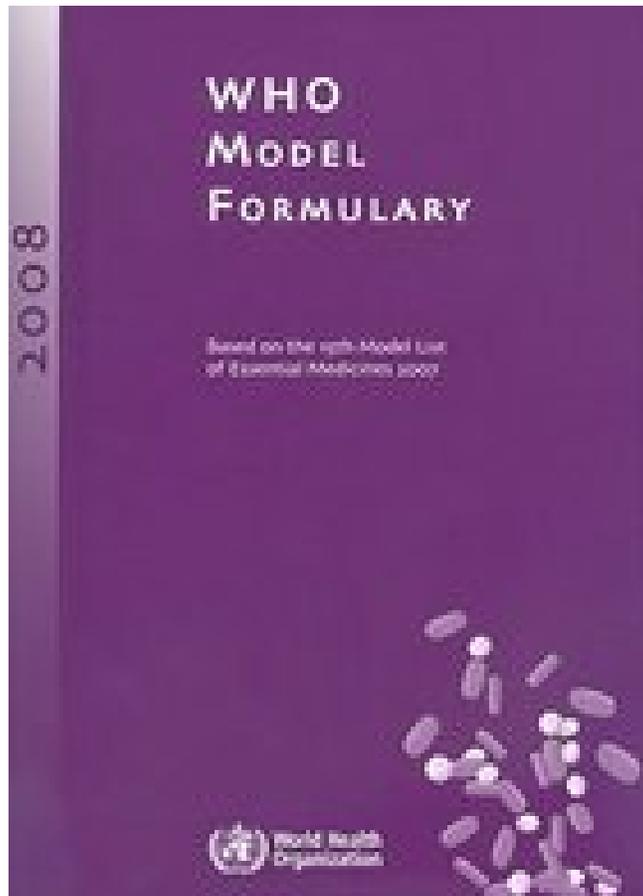


**Abstract:**

WHO Model Formulary complements the "WHO" model list of essential drugs. These would be a useful resource for countries wishing to develop their own national formulary. The "WHO" model list and "WHO" formulary are available electronically on the " WHO" essential medicines library web site (http://www.who.int/emlib/); this edition of "WHO" model formulary is fully compatible with the 15$^{th}$ "WHO" model list of essential medicines as recommended by the "WHO" expert committee on the selection and use of essential medicines.
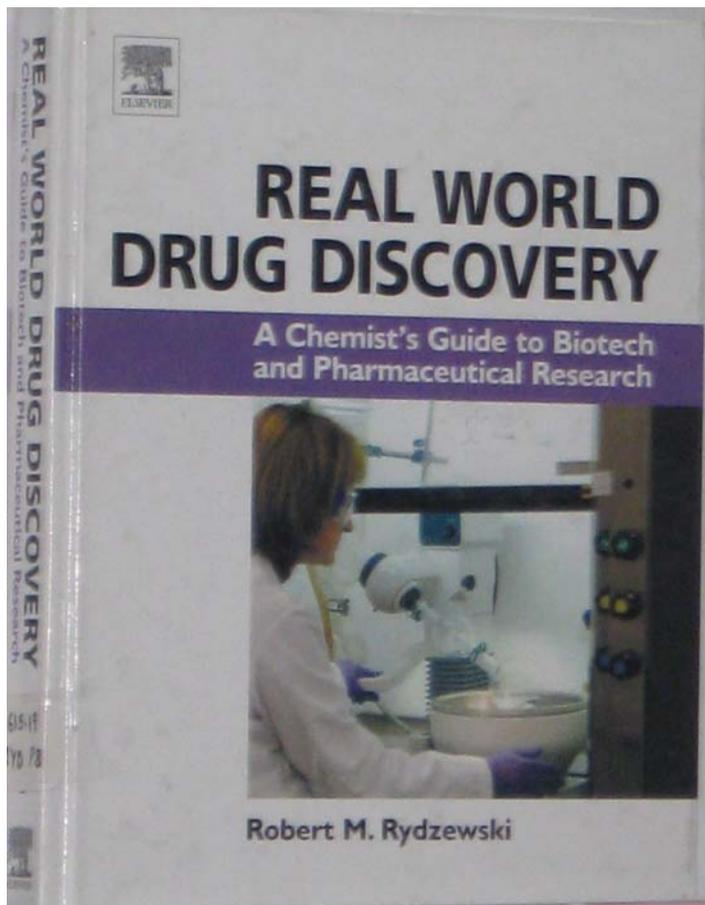**Keywords: Formularies-Standards.**

**Abstract:**

This book is written to help reader in three different ways: 1.Gives overview of how modern industrial drug discovery works 2. Provide knowledge about the discipline involved their importance and impact on the job of the medicinal chemist 3. Provide knowledge about problems in drug discovery and how they can be overcome. This book is written as a funnel going from the broadest aspect of the industrial drug discovery to the particulars of real a world job there in.
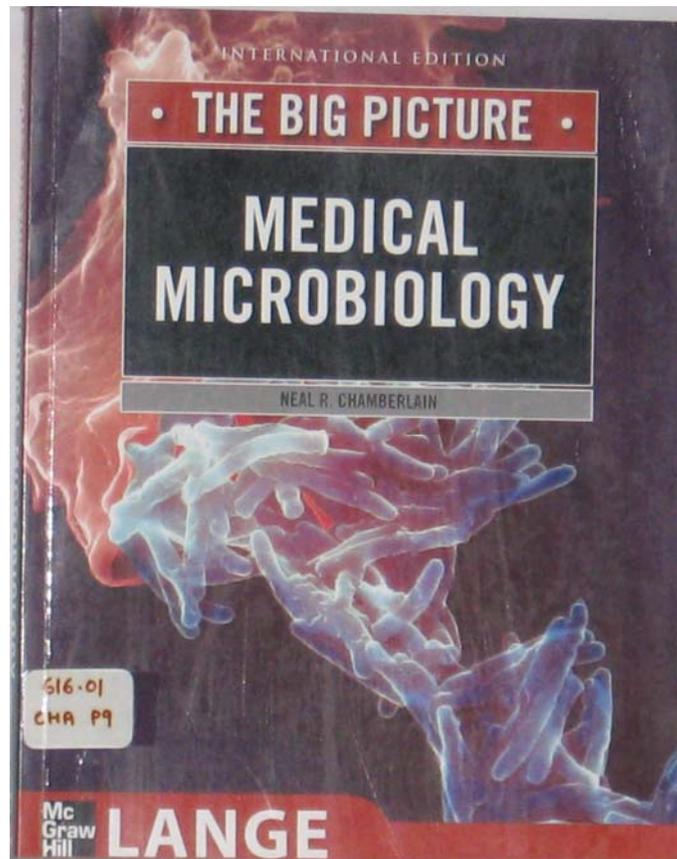**Keywords: Drug- Research.**

# 616.01 MEDICINAL MICROBIOLOGY

**Chamberlain, Neal R.**
    **The Big Picture: medical microbiology/Neal R Chamberlain. --New York: McGraw-Hill, 2009. 445p. ISBN: 9780071476614.**
**616.01 CHA  P9            5438**
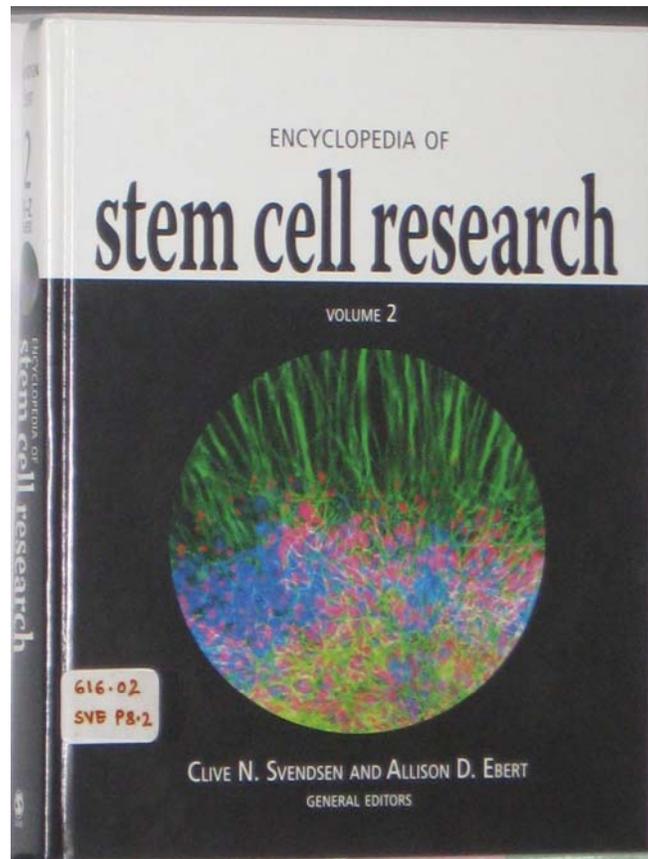


**Abstract:**

The big picture medical microbiology book is written to reorient microbiology knowledge in a clinically oriented way. This book is organized by organ systems and the infectious diseases caused by microorganisms. First chapter in each section starts with an overview "The Big Picture" that explains the organization of the organ system, immunological responses, diseases, and common causes of the diseases. Each chapter is discussed under the heading of etiology, manifestations, epidemiology, pathogenesis, diagnosis, therapy and prevention. It provides 280 colorful images that help readers to visualize diseases and these images illustrate the results of laboratory test that are used to identify certain pathogens.
**Keywords: Medical Microbiology.**

# 616.02 SPECIAL TOPICS

**Encyclopedia of Stem Cell Research/ edited by C. N. Svendsen and A.D. Ebert. -- New Delhi: Sage Publication, 2008. 2v, 902p. ISBN: 9781412959087.**
   **616.02  SVE   P8            5428**

**Abstract:**

This encyclopedia provides a source for experts to consider what is known and not known and finally a chance to understand the basic concepts from A to Z in stem cell biology in simple clear articles and learn about the politics, ethics and challenges every one in the field is currently facing. Further complexity comes when comparing embryonic and adult cells, cells in different tissues and cells, to explain the focus on describing the different types of stem cells, to explain for each age, tissue and species what is know about the biology of the cells and their history. It has captured at least a strong flavor of stem cell biology as it stands today and provides the reader with a reference manual to probe the mysteries of the field.
**Keywords: Stem Cell- Research; Stem Cell – Encyclopedia.**

# NEWS

## ebrary® New Medical Technology Database.

ebrary® announced its new subscription database in Medical Technology. In this database we can accesses titles from leading publishers including Elsevier Academic Press and Taylor & Francis CRC Press. The collection covers all aspects of Medial Technology including Biomedical Engineering and Materials, Imaging systems, Medical Instruments, Nanotechnology and Tissue Engineering. It provides sophisticated technology to quickly and easily find, use and manage information in the database.
http://tinyurl.com/ebrarymedtech.
http://site.ebrary.com/lib/corptitles/home.action

## New Hosting and support services for Koha libraries.

Equinox Software announces new hosting and support services for Koha open source Integrated Library Service (ILS) to libraries. Two different packages will be available for libraries to choose from based on their needs and resources. Koha on demand is aimed at libraries looking for quick provisioning of new Koha databases. This service provides a modern, full featured ILS with system administration managed by Equinox. Koha dedicated hosting provides a virtual private server (VPS) with Koha installed. This service geared toward libraries looking to out source the provisioning, hosting, and basic maintenance of a Koha database while still having direct access to customized and develop their Koha installations as they see fit.

## The IFLA Newspaper Conference2010.

The IFLA Newspaper Conference will be held at "Indira Gandhi National Centre for the Arts" in New Delhi from 25th - 28th February 2010.The Conference is co-organised by "Indira Gandhi National Centre for the Arts and IFLA News Paper Section". The main theme of the conference is Digital Preservation and Access to News and Views.

The sub themes are as follows-
- History, Heritage and Tradition Newspaper Libraries in South and South East Asia.
- Physical Preservation of Newspaper Resources (hardcopies archives, Microfilm Archives etc.)
- Digital Preservation of Newspaper Resources (digital text archives, e-paper archives, online web archives).

- Digital Preservation of News Resources: Clippings, Photographs, Cartoons and Infographics etc.
- Metadata Standards, Consistency and Harmonization for both digitized newspapers and born digital newspapers
- Newspaper Library Users and Their Information Needs
- Newspaper Digital Library Services and Access Methods
- Marketing and Promotion of Newspaper Library Services
- Library Staff Training and User Education in Newspaper Libraries
- Resource Sharing Among Newspaper Libraries

- IPR and Copyrights Issues in Newspaper Libraries
- Issues in Digital Preservation, Access and Management (ICT, Manpower, Budget Constraints etc.)
- Technical issues of preservation
- The publisher perspective and needs
- The software suppliers perspectives and needs from libraries
- Selection of newspapers for digitization and preservation: a user perspective case study
- Significances of historical newspaper indexing in a digital age
- Online Newspapers

# National Conference on "Relevance of Ranganathan in the Present Day Knowledge Society".

National Conference on "Relevance of Ranganathan in the Present Day Knowledge Society" will be held at Babasaheb Bhimrao Ambedkar University, Lucknow on 5-6 March 2010.

Abstract of the theme:

In today's knowledge society it is safe to say that no single individual has made quite such a wide contribution to the development of Library and Information Science in our country. Ranganthan brought a scientific approach to every facet of professional work. Dr. S.R. Ranganathan's contribution towards Five Laws of Library Science; cataloguing; classification and documentation are pioneering accomplishments ideas for Library Science.Ranganathan choose and came to Librarianship with iron determination to assert the necessity of sound theory for the advancement of LIS. He did realize the future of LIS for the advancement of Library Services in India and to bring best of modern and latest technology in the profession.