

## Chapter 5

# Open Access Initiatives in Medical Biology: A Study of Institutional Repositories in India

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### ABSTRACT

*Open Access (OA) is reshaping the world by redefining the scholarly communication methods with focus on building a knowledge society. It has the power to democratize the knowledge by removing hurdles from free access to scholarly works while encouraging knowledge sharing. Institutional Repositories (IRs) play a vital role in the OA movement by facilitating the Green Route to Open Access. In India, some elite educational and research institutes such as the Indian Statistical Institute, some CSIR Laboratories, IITs, and IIMs have taken significant initiatives in building IRs. In addition to these, a few Universities have also taken the initiative and now have their own IRs as their proudest possession. However, many Indian IRs, once functional are in bad shape and a few have been closed. This paper deals with IR initiatives in the discipline of Medicine and Biology including. The paper discusses their scope, collection strength, growth rate and their current status.*

### 1. INTRODUCTION

The journey of man from a nomadic society to knowledge society is very interesting and perhaps never ending. Free flow of information has played a pivotal role in this journey. But the journey is still incomplete as there exists a thirst – thirst for knowledge and is still unquenched. To facilitate a free flow of information, especially scholarly information is very crucial. At the same time it is a challenge as financial aspects are also involved in this. Scholarly communication has the potential to make this world a better place to live in as it is based upon the philosophy of equal access to knowledge. Open Access is augmenting and enriching the scholarly communication cycle and making the world a global village.

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Scholarly communication can be understood as the system through which research and other scholarly works are created, evaluated, disseminated to the scholarly community, and preserved for future use. It is the cyclical process. It is a cyclical process in which content is generated, reviewed, disseminated, acquired, preserved, discovered, accessed, and assimilated for the advancement of scholarship. The assimilation can potentially lead to generation of new content and thus start a new iteration of the process (or life cycle).

## **2. OPEN ACCESS AND THE TWINS**

Open access (OA) means unrestricted online access to peer-reviewed scholarly research. Open access is primarily intended for scholarly journal articles, but is also provided for a growing number of theses, book chapters, and scholarly monographs. Open access comes in two degrees: gratis OA, which is free online access, and libre OA, which is free online access plus some additional usage rights.

The Budapest statement defined open access as - “There are many degrees and kinds of wider and easier access to this literature. By ‘open access’ to this literature, we mean its free availability on the public internet, permitting any users to read, download, copy, distribute, print, search, or link to the full texts of these articles, crawl them for indexing, pass them as data to software, or use them for any other lawful purpose, without financial, legal, or technical barriers other than those inseparable from gaining access to the internet itself. The only constraint on reproduction and distribution, and the only role for copyright in this domain, should be to give authors control over the integrity of their work and the right to be properly acknowledged and cited.”

The Bethesda and Berlin statements add that for a work to be open access, users must be able to “copy, use, distribute, transmit and display the work publicly and to make and distribute derivative works, in any digital medium for any responsible purpose, subject to proper attribution of authorship.”

The two ways authors can provide OA are Green and Golden Routes/Roads. In green OA, authors self-archive their journal articles in an OA repository (IR). In the Golden OA approach, the author decides to submit the research papers in a selected repository, making it freely available over the world wide web. In Gold Open Access, the end users i.e. The readers are not supposed to pay any subscription cost, but the author has to pay the Article Processing Charges (APCs). The third approach, which is also becoming an accepted model is Hybrid OA which is most commonly associated with Gold Open Access. In this OA model is a mix of subscription charges and publication fees. In this model, some articles are available only to subscribers, while others are made available at no charge to anyone searching the web. Authors pay an additional fee for the open access option. They may do this because open access is a requirement of their research funding agency. Or they may do it so that non-subscribers can access their article for free. In this model, only the articles for which the authors have covered APCs are available for free.

According to Bo-Christer “in just over two years [2009-2012] the number of journals from major publishers offering hybrid Open Access has more than doubled, from approximately 2,000 to over 4,400. Since the overall numbers of journals from these publishers has remained on the same level, the hybrid share has risen from 25% to around 50% of all eligible journals.”

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