Editor's Introduction

The British Library hosted the twice-annual public conference of the International Council for Scientific and Technical Information (ICSTI) on 22 January 2007. The organizers began with the premise that conventional business wisdom requires that an understanding of user behavior – not just technology alone, nor administrative edicts, nor novel business models – can help to determine whether information services geared toward the scholarly research world will be successful or relevant. This powerful driver has been neglected by key stakeholders in the past, with only occasional forays as best exemplified by such experts as Donald King and Carol Tenopir, and their assessments of scholarly behavior patterns and how they change over time [1].

In recent years there has been a greater focus on assessing how scholarly authors and researchers cope with the challenges created by information overload, and what some critics have claimed to be a dysfunctional market mechanism. This stems partly from more urgency being given to ensuring that the science base, key to the knowledge economy and economic wealth of the nation, is supported by an information service which relates to the needs of the users. Also, new metrics are emerging which in a web environment give the opportunity for measuring the impact of information services in a quantitative as well as a qualitative way. The one-day program addressed the current state of studies in scholarly user behavior, and provided a forum in which evidence rather than assumptions can help form the basis for a greater understanding of trends in this area. The presentations were grouped into three sessions: User Behavior, Metrics, and Funding. Speakers' complete power point presentation slides are accessible from the ICSTI website [2].

The first session, *User Behavior*, provided an introduction into how researchers from different disciplines have adapted to the challenges of current information collection and assimilation. **Dr. Sarah Coulthurst**, Cambridge University, provided a biological scientist's perspective on identifying, accessing and disseminating scientific data, with particular emphasis on common problems and approaches, especially a new reliance on well-maintained electronic public databases (e.g., PubMed, Web of Science) and search engines (e.g., Google Scholar). **Dr. Adrian Jones**, University College London, spoke from the perspective of the geological sciences, contrasting the behaviors of short- and long-term researchers and their use of electronic tools that range in scope from those that depict ancient events to those that support modern day explorations for mineral wealth. **Michael Mabe**, International Association of Scientific, Technical and Medical Publishers reported on a large-scale study that surveyed 6,000 respondents on key issues relating to their attitudes towards research funders, journals, publishers, and archiving repositories in today's rapidly evolving web environment that fosters new relationships and dependencies among these disparate players. Similarly, **Hugh Look**, Rightscom, interviewed both researchers and information professionals and found little behavioral differences between those who had matured in today's electronic age and those who had not, with scientific discipline and role accounting for more variance than chronological age. **David Hoole,** Nature Publishing Group concluded the segment with an enlightening look at the so-called Web 2.0 environment and the new interactive search tools that employ user-generated tagging and key word indexing, while assessing content correlations between such disparate sources as Wikipedia, Science Direct, PubMed Central and Google.

The second session, *Metrics*, examined specific measurement strategies and performance indices. **Jim Pringle**, Thomson Scientific, provided a fresh look at the venerable and sometimes controversial journal

citation and impact factor, and the re-emerging fields of bibliometrics and scientometrics which seek to create new ways to assign value that are of potential use to publishers, funders, and researchers alike. **Prof. David Nicholas**, Centre for Information Behaviour and the Evaluation of Research (CIBR), UCL Centre for Publishing, reported on his use of deep log analysis on an evidence base of 6 million users and millions of usages over a 5-year period, uncovering empirical evidence of what scholars actually do online, not just what they say they want. **Dr. Peter Shepherd**, Counting Online Usage of Networked Electronic Resources (COUNTER), described how COUNTER statistics can support the development of other metrics, such as the cost of full text article downloads vs. publishers' Big Deals. **Dr. Elliot Siegel**, US National Library of Medicine (and *ISU* editor), provided an overview of a multidimensional approach to web evaluation, with an in-depth look at online user satisfaction surveys and the results of an experimental application of this methodology in a case study of 60 websites at the National Institutes of Health.

The third session, *Funding*, took a critical look at what funders of research can accomplish by intervening positively in the dissemination and archiving process, in a role that expands and strengthens their contributions to the scientific research enterprise. **Richard Boulderstone**, The British Library, discussed a new collaborative project with The Wellcome Trust to launch a UK version of PubMed Central that would, at once, continue the tradition of national libraries serving as enablers of long-term preservation and deliverers of documents, while placing the BL strategically at the center of UK-funded bioscience research. **Bahram Bekhradnia**, Higher Education Policy Institute, gave a sobering look at the potential misuse of impact and quality metrics by funding agencies. **Dr. Liz Allen,** The Wellcome Trust, continued the discussion of funders' use of bibliometrics data that support funding decision-making, including the mining of publicly accessible databases that link to full-text papers and those that do not. Lastly, **David Worlock**, Outsell Inc./EPS Ltd., offered a contrarian view that challenges our past concepts of user behavior and the validity of metrics that purport to measure it, while advocating for a better understanding of the changing behavior of a networked research world and how researchers actually work in it.

Bernard Dumouchel, CISTI/NRC, closed the conference in much the same vein as it was opened by the host, **Lynne Brindley**, The British Library, with both speakers observing that adaptation to our own and interrelated changing environments coupled with honest self-reflection, offer the best means for prospering in the face of the shared challenges and opportunities that lie ahead for libraries, publishers, scientists and funders.

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References

[1] D.W. King, C. Tenopir and M. Clarke, Measuring total readings of journal articles, *D-Lib Magazine* **12**(10) (2006). http://www.dlib.org/dlib/october06/king/10king.html
[2] www.ICSTI.org