

Access to the Vision Literature

Supporting International Collaborations: New Challenges, New Opportunities

Pamela C. Sieving¹ and Bette Anton² for the Association of Vision Science Librarians³

¹National Institutes of Health, Bethesda USA ²University of California, Berkeley USA ³www.avsl.org

Characteristics of the Vision Literature

- Distributed across clinical & basic sciences:
 - Optometry, ophthalmology, psychology, nursing
 - Genetics, neuroscience, cell & molecular biology
- 50% of vision-related articles are not published in vision journals
- AVSL's Union List of Vision-Related Serials (9th ed) includes >than 1100 titles
- Medline indexes 157 ophthalmology, 10 optometry titles
- ISI currently ranks and indexes 48 vision titles
- Additional titles indexed by LILACS, Embase, IndMed, CINAHL, PsycINFO
- Optometry indices: Visionet www.visionet.sco.edu Visioncite www.visioncite.com
- Impact factors for vision journals range from 6.306 to 0.094 (2008)
- Several 'born free' titles
 - Molecular Vision (PMC), Journal of Vision, BMC Ophthalmology (PMC)
- 17 titles listed in DOAJ, half non-English
 - Archivos de la Sociedad Española de Oftalmología, Middle East African Journal of Ophthalmology, Revista Cubana de Oftalmología
- Additional PubMed Central titles
 - British Journal of Ophthalmology (1917-2006), Indian Journal of Ophthalmology (2007-09), Transactions American Ophthalmological Society (1865--)
- Other freely available titles
 - Investigative Ophthalmology & Visual Science (1962-2008), Journal of Ophthalmic Photographers, Community Eye Health Journal
- HINARI provides access to 54 current vision journals



What does the Vision Literature Cost? More than most!

- In 2003, the top 25 vision journals ranged from \$3561 US to \$189 US, plus one free journal
- In 2008, the top 25 vision journals ranged from \$5578 US to \$278 US, plus two free journals
 - Price increases from 2007 to 2008 ranged from a low of 2% to a high of 64%, average 24%, median 22%
 - Compared to other medical journals:
 - Subscriptions to core clinical journals in medicine averaged \$587 in 2008, per EBSCO
 - Library Journal's 2009 serial price survey showed health sciences titles averaging \$1401 in 2009
- Relative Price Index (RPI) for vision journals in 2008 ranged from 7.66-3.10 for 7 journals ranked as a 'bad' value, 2.41-1.33 for 5 ranked as a 'medium' value, 1.13-0.23 for 8 journals ranked as a 'good value'. RPI calculations can be found at www.hss.caltech.edu/~mcafee/Journal/

Who Pays?

- Libraries at the universities of California, Wisconsin, North Carolina, Nottingham & Calgary manage funds to support author charges
- Funders both large (NIH, HHMI, Wellcome Trust) and small (Canadian Breast Cancer Research Alliance, Principality of Asturias [Spain], Arthritis Research Campaign) support author charges, mandate free access. Directory: www.eprints.org



How Much PubMed-indexed Vision Content is Free?

- The table shows PubMed vision-related content from NIH funding
- Other funders which mandate PubMed Central deposit:

Howard Hughes Medical Institute:

127 vision-related papers, 2004-2008
Available in PubMed Central: 97 (76%)

Wellcome Trust:

870 vision-related papers, 2004-2008
Available in PubMed Central: 457 (53%)

Year	N	NIH funded	%NIH	Free	%Free
2004	12149	1208	9.9	1855	15.3
2005	13987	1373	9.8	2239	16
2006	15693	1507	9.6	2586	16.5
2007	16610	1549	9.3	2715	16.3
2008	17005	1712	10.1	2451	14.4

What Effect Does Free Access Have on Impact?

- Lansingh, 2009: free access articles averaged 15.2 cites vs 11.5 for non-free (Scopus) and 6.4 vs 4.0 (Google Scholar)
- Clinical use of articles seldom results in trackable citations
- Top-cited AREDS paper (Arch Ophthalmol 2001; 119:1417) cited 688 times (Web of Science), 384 (56%) since deposit in PubMed Central (April 2004); 36 of 65 (55%) cites in 2009 are from non-vision journals

References: Duffel PG: The impact of ophthalmology. Ophthalmology 2009; 116:1423; Lansingh VC: Does open access in ophthalmology affect how articles are subsequently cited in research? Ophthalmology 2009; 116:1425; Liesegang TJ: The open access initiative in scientific and biomedical publishing. American Journal of Ophthalmology 2005; 139:156; Oren GA: the crisis in scholarly publishing: open access to the rescue? Journal of Neuro-Ophthalmology 2008; 28:1

