Duke University

THE UNIVERSITY
of NORTH CAROLINA
at CHAPEL HILL

Transformation in Open Access Publishing at Two Universities

Medical Library Association 2006 Annual Meeting
Phoenix AZ

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Study Design

Identify free full-text articles in PubMed Central and PubMed by institutional authors. Both institutions ran searches on the same day and retrieved articles for 18 months, January 1, 2004 through June 30, 2005. Timeframe follows a period when many publishers were setting OA policies.

The articles were then analyzed by journal open-access status. The analysis also reviewed the number of OA articles published by author and departments. The data for UNC and Duke was compared and laid the groundwork for further studies.

Results All Free Full-Text Journals

Articles published in any OA journal
UNC = 411; Duke = 490; Total = 901
- Of the top 15 journals, only 3 had immediate open access
- Of the total OA articles:
  - 20% were available immediately
  - 30% were available within 6 months or less

Available immediately or within 6 months
- UNC -- 7.5% available immediately; 29.2% within 6 months.
- Duke -- 2.8% available immediately; 26.4% within 6 months.

OA journals with the most articles
- Five of top ten journals listed by BOTH
- Four in the top five for BOTH schools

Departments –most OA publishing
- Medicine is the most active department
- Basic sciences publish in more OA journals

Note: analyzed **only contact author** and primary department.

Results "Born Free" Journals

Articles in "Born Free" Journals
UNC = 99; Duke = 90; Total = 189
- UNC = 45 journals; Duke = 43 journals
- UNC = 260 authors; Duke = 216 authors
- Only 2 journals from top 15 list for free full-text
  - JCI listed by both
  - Nucleic Acids Research only UNC

BMC Journals
- UNC 26 titles; 43 articles; 60% journals
- Duke 9 titles; 17 articles; 40% journals

PLoS Journals
- UNC 1 journal; 1 article
- Duke 2 journals; 6 articles

Born Free journals with the most articles
- Six of top ten journals listed by BOTH
- Three in top five for BOTH schools

Departments -- most Born Free publishing
- 3 departments in top 5 for both universities
- Family medicine department in top 5 for both
- More clinical departments are represented in top 10 for born free publications

Note: analyzed **all** institutional authors and all departments listed.

⟳ Search Strategy

- Identified articles tagged as free full-text in PubMed Central and PubMed.
- Found institutional affiliation in the address field; each library developed their institutional search string.
- Included all biosciences as well as medical sciences.
- Reviewed citations and eliminated articles not affiliated with Duke or UNC.
- Used RefWorks (UNC) and EndNote (UNC and Duke)to store and manipulate results, along with Excel spreadsheets for analyzing and ranking the data.

Example of PubMed Strategy

#	Search duke[ad]
#	Search durham[ad] AND nc[ad] [note: UNC used "chapel hill"]
#	Search 27710 [and other zip codes used for institution]
#	Search #27 AND free full text[sb]

Field: All Fields
Limits: Publication Date from 2005/01/01 to 2005/06/30

⟳ Issues/Challenges Encountered

OA policies are moving targets – changing over time
- Retrospective analysis is difficult due to volatility of publishing policies
- Status of free full-text articles changes over time due to embargoes

Categorization by institution and department difficult due to:
- Multidisciplinary research within an institution
- Authors holding two or more joint appointments
- More collaborative projects among institutions

Identifying authors difficult due to:
- Transient nature of faculty and graduate students
- PubMed has only contact author's institutional affiliation
- Time required to research identification of all authors of a paper

⟳ Institutional Differences and Similarities

We expected to find institutional differences in open access publishing due to these factors:
- public university's (UNC) commitment to broader and shared access to information, compared to more traditional private university (Duke) approach to publishing and intellectual property;
- more positive attitude and administrative support for open access at UNC;
- UNC supports BMC through institutional membership; and
- UNC supports five schools and Duke supports two.

However, institutional similarities may also affect open access publishing:
- both libraries actively promote open access to their faculty;
- faculty size is similar; and,
- both institutions are research-intensive universities, with Duke having a greater amount of NIH funding, but UNC
  having more sponsored-research funding overall.