

The Scholarly Database (SDB)

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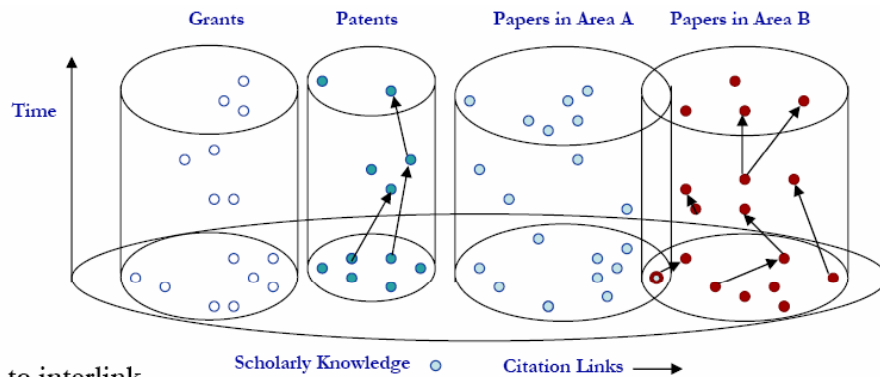
for the Digital Library Brown Bag
Nov 5th, 2008



Data Sets

Dataset	#Records	Years Coverage	updated	Restricted Access
Medline	16,053,495	1898-2008	Yes	
PhysRev	398,005	1893-2006		Yes
PNAS	16,167	1997-2002		Yes
JCR	59,078	1974,1979,1984, 1989,1994-2004		Yes
USPTO	3,710,952	1976-2007	Yes	
NSF	174,835	1985-2003	Yes	
NIH	1,043,804	1972-2002	Yes	
Total	21,456,336	1893-2008	4	3

Challenges



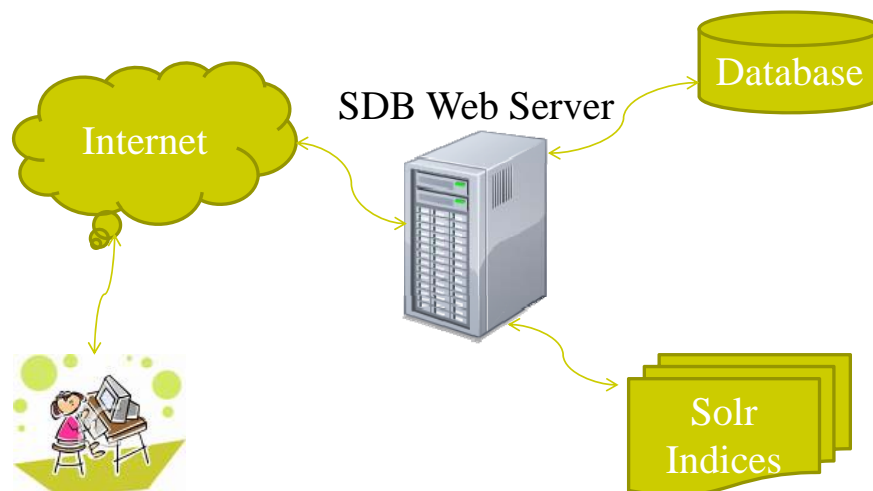
Need to interlink

- Grants and papers/patents.
- Grants/papers/patents and their PIs/authors/inventors, etc.

Use resulting networks to

- Count #papers, #citations, etc.
- Determine strength of co-PI/author/inventor relations, etc.

SDB Architecture



SDB Architecture (continued)

- Solr: full-text search server
 - <http://lucene.apache.org/solr/>
 - Open source
 - Uses the Lucene search library
- Interface developed in Django
 - <http://www.djangoproject.com/>
 - Open source
 - Particularly suited for content-focused web applications

SDB Interface <http://sdb.slis.indiana.edu>

SCHOLARLY DATABASE
Cyberinfrastructure for Network Science Center, SLIS, Indiana University, Bloomington

IU User
IU Users must login using the Central Authentication Service (CAS), the standard IU authentication system. Please click the button below to proceed to the IU login page.
Go to IU Login

Non-IU User
Email:
Password:
Login

Not Registered Yet?
Register as a New IU User
Register as a Non-IU User

In the News
Whitfield, John, 2008, *Group Theory*, Nature, 455, 91, 720-723.

Please Cite As
La Rosa, Gavin, Andre, Surmeat, Burgeon, John, de, Weisman and Bömer, Katj, (2007) The Scholarly Database and Its Use for Research in Research. In Proceedings of the 11th International Conference on Science and Information, Madrid, Spain, June 25-27, 2007, pp. 437-442.
<http://sdb.slis.indiana.edu/~boby/papers/11-icis-07.pdf>

Acknowledgements
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Any opinions, findings, and conclusions or recommendations expressed in this material are those of the author(s) and do not necessarily reflect the views of the National Science Foundation.

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SCHOLARLY DATABASE
Cyberinfrastructure for Network Science Center, SLIS, Indiana University, Bloomington

Search | Edit Profile | Admin | About | Logout

Search

Creators:

Title:

Abstract:

Full Text:

First Year: 1898

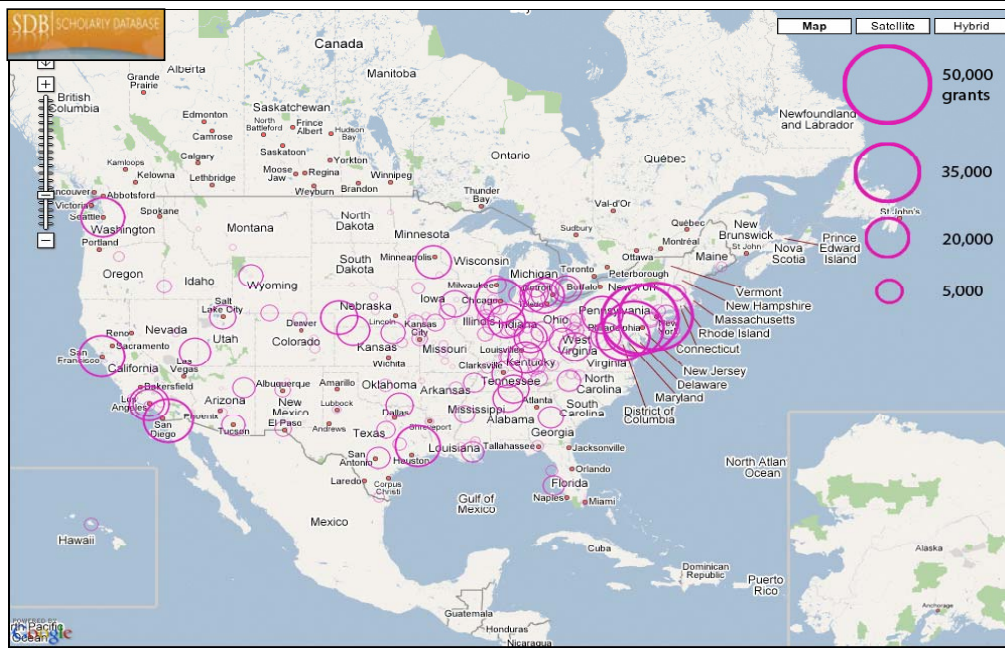
Last Year: 2008

Medline (1898 - 2008)
 NIH (1961 - 2002)
 NSF (1965 - 2004)
 USPTO (1976 - 2007)

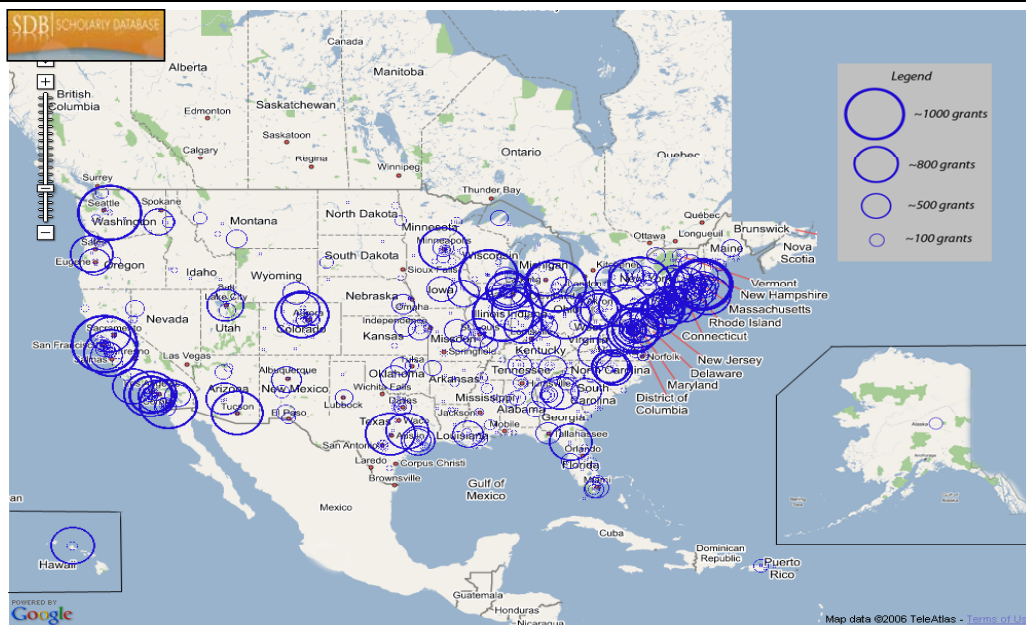
Search

If multiple terms are entered in a field, they are automatically combined using OR. So, "breast cancer" matches any record with "breast" or "cancer" in that field.
You can put AND between terms to combine with AND. Thus "breast AND cancer" would only match records that contain both terms.
Double quotation can be used to match compound terms, e.g., "breast cancer" retrieves records with the phrase "breast cancer", and not records where "breast" and "cancer" are both present, but not the exact phrase.
The importance of a particular term in a query can be increased by putting a ^ and a number after the term. For instance, "breast cancer^10" would increase the importance of matching the term "cancer" by ten compared to matching the term "breast".

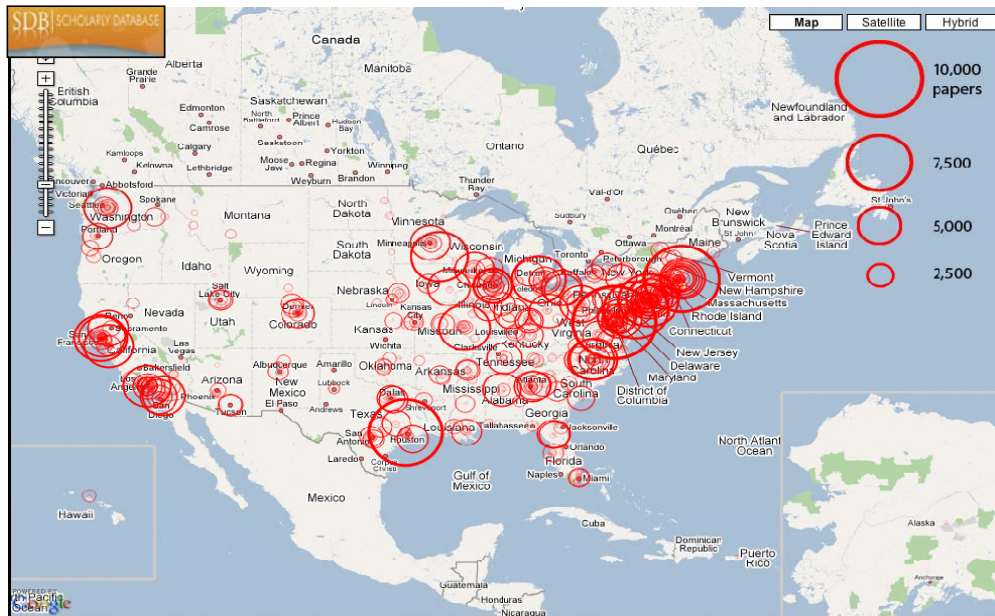
NIH Awards by Geo-location (U.S. only)



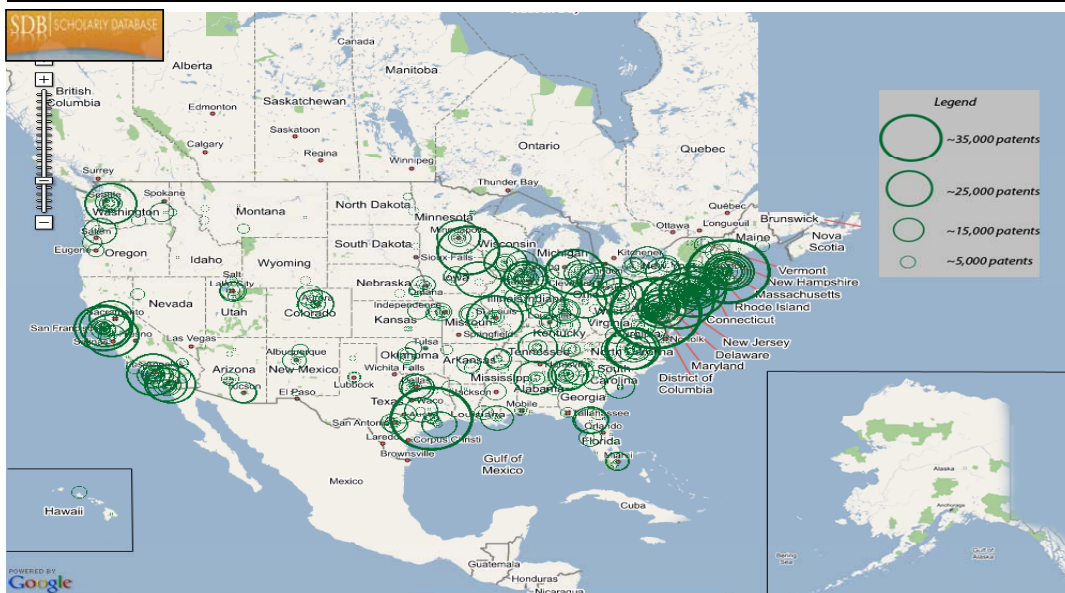
NSF Grants by Geo-location (U.S. only)



Number of Medline Publications



US Patent by Geo-location (U.S. only)





Future Work

- Provide full-text search on science news
- Add JCR impact factor to publications
- Discover user interests through what they search and download



References

- La Rowe, Gavin, Ambre, Sumeet, Burgoon, John, Ke, Weimao and Börner, Katy. (2007) The Scholarly Database and Its Utility for Scientometrics Research. In Proceedings of the 11th International Conference on Scientometrics and Informetrics, Madrid, Spain, June 25-27, 2007, pp. 457-462.
<http://ella.slis.indiana.edu/~katy/paper/07-issi-sdb.pdf>
- Whitfield, John. 2008. [Group Theory](#). Nature, 455, 9: 720-723.



Thanks

- You !
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