



# Deep Indexing of Biomedical Journals

**EAHIL**

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# The Problem: There is Limited Time Available to Scan a Discipline

- Scholarly output is seemingly growing exponentially year after year
  - Various useful tools have come available to aid clinicians by summarising available evidence, and by identifying relevant content to keep knowledge current on specific topics
  - But what if we look upstream, and consider the researchers for a moment...the same types of tools are in many ways, not relevant
  - Often the researcher's goal "is not to find an article to read, but rather to find, assess, and exploit a range of information by scanning portions of many articles".



-Strategic Reading, Ontologies, and the Future of Scientific Publishing -- Renear and Palmer 325 (5942): 828 – Science VO 2009 IS 12/8/2009NO id: 1 ED <http://www.sciencemag.org/cgi/content/abstract/325/5942/828>

# Aiding the Researcher: Better Enabling Discoverability and Efficiency in Searching

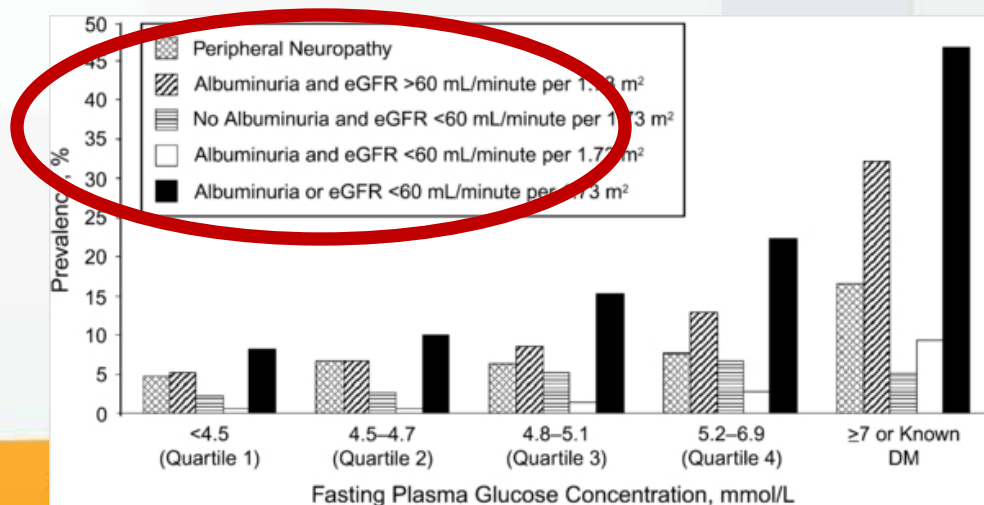
- **Provide tools that:**
  - Facilitate efficient, precise and relevant search retrieval
  - Lead the researcher to the right choice of full text, quickly

# Aiding the Researcher: Better Enabling Discoverability and Efficiency in Searching

- Tables and figures embedded within scholarly articles are often the distilled essence of the research – the closest thing to the raw datasets
- Tables and figures can assist a user with the ability to quickly establish the relevance of an article to their research
- Unfortunately, traditional indexing in bibliographic databases is done at the article level
  - **Tables and graphs are very often invisible in traditional search environments**

# Aiding the Researcher: Better Enabling Discoverability and Efficiency in Searching

- **A full text search bypasses the image files**
  - Text in tables & figures are considered a part of the image, not searchable text
- **Essential content from within tables and graphs often does not appear in a traditional index**
  - E.g. MeSH terms for the article from which the graph below was extracted do not include “Albuminuria”, the unit of measurement reflected in the graph; nor does the term appear in the article abstract

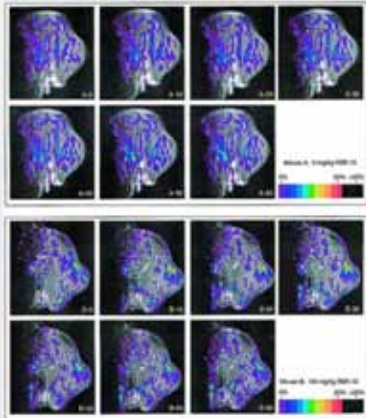


# Aiding the Researcher: Deep Indexing of the Scholarly Literature

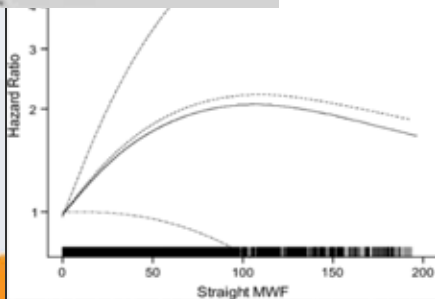
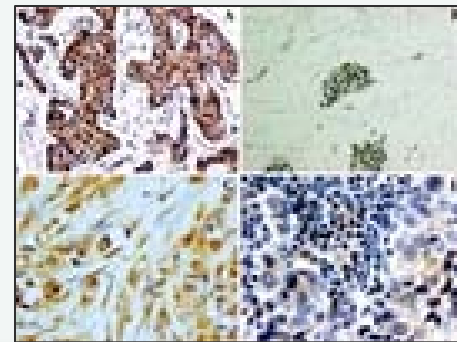
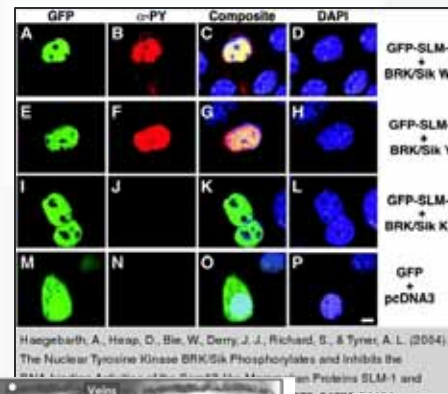
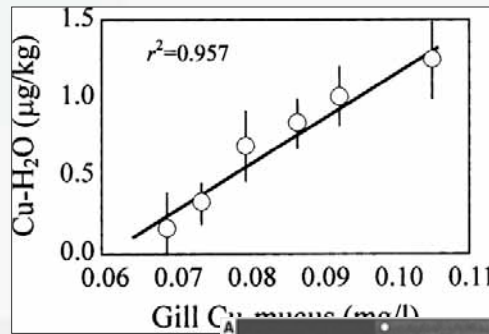
- The Cambridge Scientific Abstracts part of the ProQuest business began a unique innovation in bibliographic databases in 2005 by **deep indexing** the literature of natural sciences and technology
- Over the past few years have been dramatically increasing the coverage of biomedical journals

# Aiding the Researcher: Deep Indexing of the Scholarly Literature

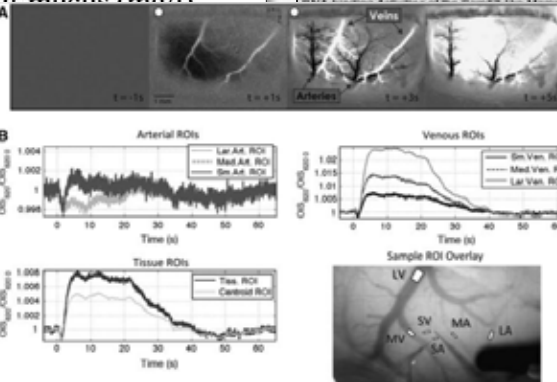
- Deep indexing goes beyond traditional indexing and supplements it, by **indexing each table and figure** (images, charts, graphs, etc.) from within the article



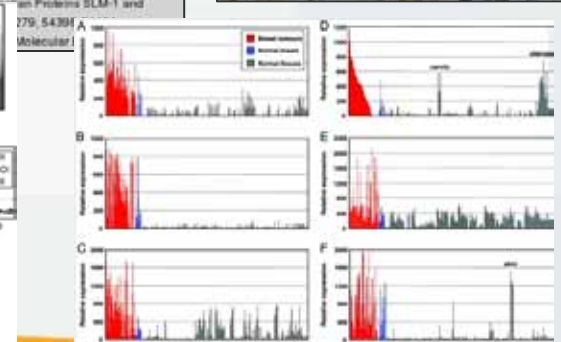
Wang, S. F., Liu, H., Holman, S. E., Fracko, S. S., Weisberg, S. N., Wang, T. et al. (2001). Enhancement of Tumor Oxygenation and Perfusion Response by the Akt/ERK1/2 Signaling Pathway. *Journal of Cellular Biochemistry*, 82, 284-292. Publisher: Wiley Periodicals, Inc.



Fitzmaurice, M. C., Corbelli, S., & Baines, E. A. (2008). Oxidative Exposure to Metabolizing Fluids and Bladder Cancer Incidence in a Cohort of Autochemists [Figure 1a]. *American Journal of Epidemiology*, 168, 1471-1476. Publisher: Oxford University Press, Oxford Journals Health.



Vazquez, A. L., Fukuda, M., Tasker, M. L., Masamoto, K., & Kim, S. (2010). Changes in cerebral arterial, tissue and venous oxygenation with evoked neural stimulation: implications for hemoglobin-based functional neuroimaging [Figure use\_5]. *Journal of Cerebral Blood Flow and Metabolism*, 30, 428-439. Publisher: Nature Publishing Group.



Radvanyi, L., Singh-Sandhu, D., Galichan, S., Lovitt, C., Pedyczak, A., Mallo, G., et al. (2005). The gene associated with trichorhinal syndrome in humans is overexpressed in breast cancer [Figure 1]. *Proceedings of the National Academy of Sciences, USA*, 102, 11005-11010. Publisher: National Academy of Sciences.

# Coming Soon to ProQuest biomedical databases: Unparalleled Discoverability and Efficiency


**Beginning this Fall, deep indexing records will be integrated as a standard part of the ProQuest biomedical aggregated databases**

At launch:

- ProQuest Medical Library will include
  - Deep indexing for nearly 1,600 journals
  - 3.1 Million deep indexing records
- ProQuest Health & Medical Complete will include
  - Deep indexing for more than 2,000 journals
  - 3.3 Million deep indexing records



# Coming Soon to ProQuest biomedical databases: Unparalleled Discoverability and Efficiency

 Includes deep indexing of content from key publishers including:

- ✓ Wiley-Blackwell
- ✓ Cambridge University Press
- ✓ Oxford University Press
- ✓ Springer-Verlag
- ✓ Elsevier Science
- ✓ Sage Publications Ltd.
- ✓ S. Karger AG
- ✓ Nature Publishing Group
- ✓ Human Press, Inc.

# ProQuest Deep Indexing: Combined with powerful ProQuest resources in a single search

Deep Indexing	Search precision Uncover Hidden Data in Tables and Figures <b>Innovative</b>
Bibliographic Databases	Discipline Oriented Comprehensive Guide to the Literature <b>Trusted</b>
Full Text	Subject Specific Aggregated <b>Cost Effective</b>

Enabling new discovery paths in biomedical research



Muito Obrigado!