



Characterizing Publication Integrity

UW BIRI lecture 8/8/2005
Harold "Skip" Garner

Skip Garner reporting for
the team- Mounir Errami,
Tara Long, Angela George
and Johnny Sun.

Mission and Vision for the Innovation Laboratory

- The lab develops applied computational biology/bioinformatics and instrumentation applications focused to address topics in biomedical research: cancer, heart disease, drug discovery, biodefense, basic biology, computer science and engineering.
- The lab's goal is to impact medicine, biomedical research and the state of knowledge through development, operation, and use of advanced biocomputing technologies.

Garnering Innovation

The Lab | Research | Projects | Hot Topics | Contact | Tools/dbs

Spin Outs

- Xanapath
- BioAutomation
- Nimblegen

Bioinformatics Services

- eTBLAST**
A text similarity-based engine for searching literature collections
- Deja Vu**
A study of scientific publication ethics
- Spinout**
A researchers guide to corporate identity
- PATHOGENE**
A CDS Finding and Primer Design Tool for Microorganisms
- HomologeneP**
A database of Genes and

Identification of duplicate citations in the bio-medical literature

The project aims at identified highly similar citations (based on their abstract) to flag potential cases of unethical publications, using a text comparator algorithm named eTBLAST.

Hyperspectral Imaging applications -10x multiplex

Tissue samples can be analyzed for specific biomarkers which provide indications of disease, our system will save time and money over other methods and provide superior quantitative results.

Identification of new uses for existing drugs

We created and apply a hypothesis generation tool named IRIDESCENT to discover new uses for existing drugs.

Gene Expression Microarray Analysis and Interpretation

Using our own custom arrays we examine the roles of microsatellites in speciation, cancer and other human disease conditions.

Subcellular light activation control and manipulation using a dynamically reconfigurable microscopic patterning system

In The News

March 6, 2009
Further work on the Deja Vu project reported in Science.

November 12th 2008
Cristi Galindo wins Postdoctoral poster session
Dr. Garner wins first annual Award for Excellence in Postdoctoral Mentoring from UTSW.

October 23rd 2008
Iranian former vice president act of plagiarism identified by Deja Vu. Read in Nature.

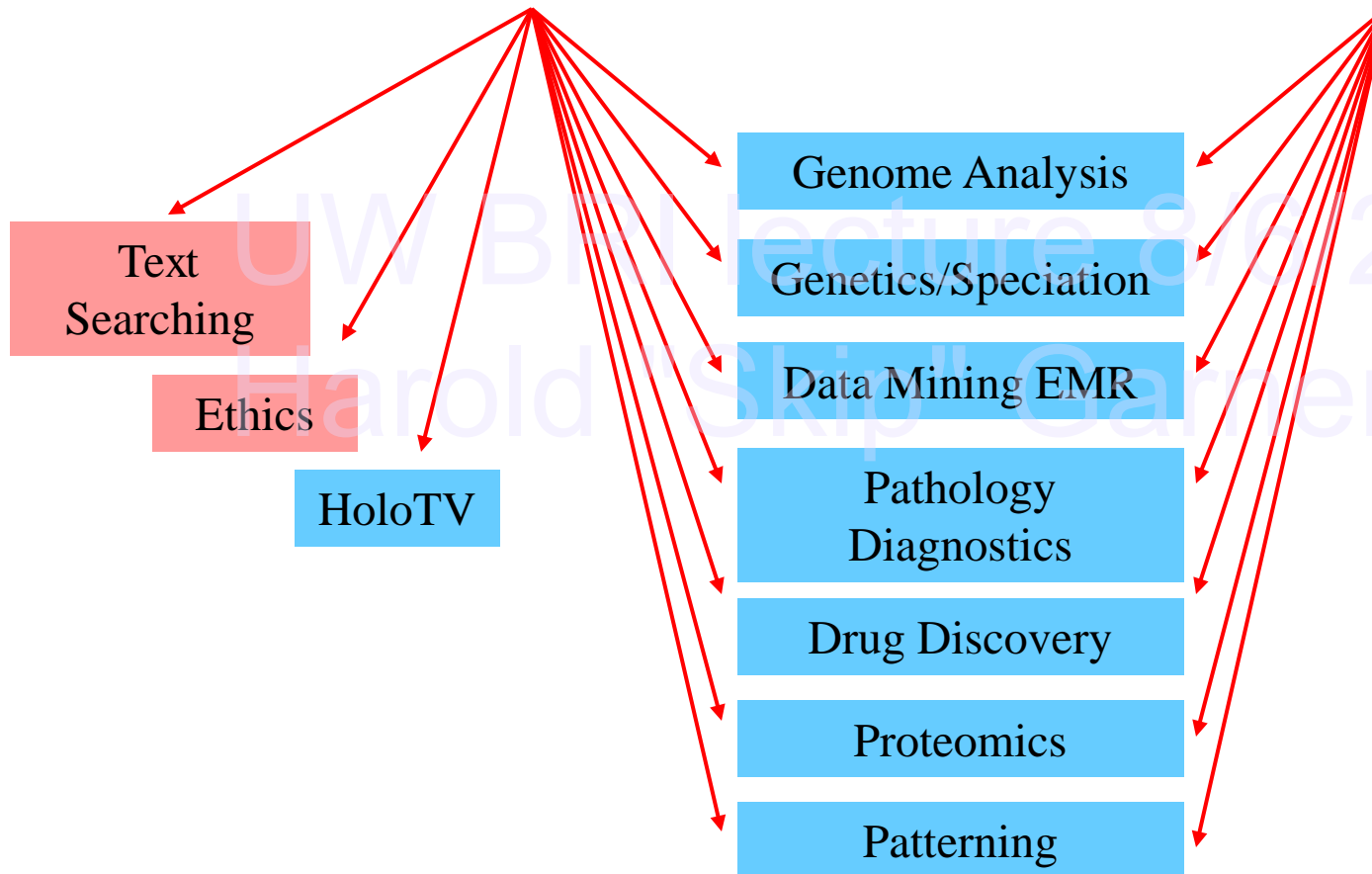
October 8th 2008
Labs tool Deja Vu recognized in a Nature news article. The state of the art in automated duplication detection.

January 25th 2008
Technology developed by Garner lab identifies fraudulent article by Harvard Professor. Read on Boston.com, Harvard Crimson, Nature and much more on google. January 25th 2008

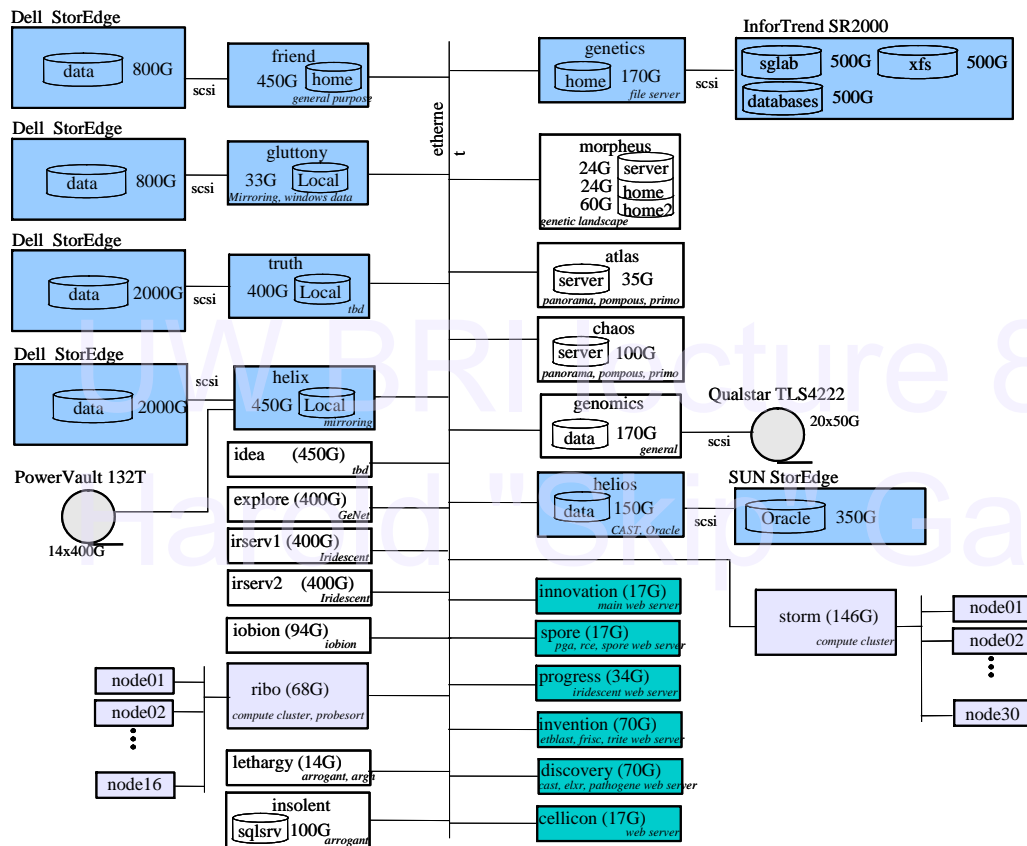
Innovation Lab Project Areas – basic and clinical research

Hardware/Software/Instrumentation (80%)

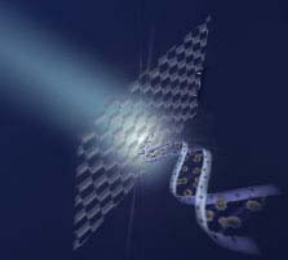
Wet Lab Experimentation (30%)



A network of clusters and dedicated servers enable us to compute.



- 32 bit clusters – Dell 300, 40, 40, 20, several 4 core machines
- 64 bit clusters – Sun 32 and 24 core machines
- ~75 Tb storage (in addition to drives in machines)



We have created web-based software
40,000+ accesses/mo., you may like to try some
of them

- [eTBLAST](#), FRISC, TRITE, RIC, ARGH, [IRIDESCENT](#) – Text searching, data mining and knowledge discovery tools.
- Eremorph – Gene centric microsatellite and SNP predictions of impact.
- PathoGene – ORF finder and primer designer for all microbes, fungi.
- HomologeneP – A database of homologous genes in microbes, fungi.
- Databases – SporeBase (Cancer), XanaBase (Pathology), Déjà vu (Ethics).
- Local BLAST Server – UTSW BLAST utility for comparison against EST/cDNA/RefSeq sequences from UTSW microarrays, specialized collections and BioThreat work.
- MarC-V, Signal, ARROGANT, PANORAMA, POMPOUS, SNIDE, SNPCEQer, PCR now, SiR, Nome della Proteina, Instant Array, Pathogen Human Immune System Genes Database/Virulence database
- Mass spec and [Array design, analysis and interpretation pipeline](#)



Text Similarity Searching

UW BIR Lecture 8/8/2009

Harold "Skip" Garner

For improved access to biomedical
databases

eTBLAST, a free on-line tool has a simple Google-like interface.



eTBLAST 3.0: a similarity-based search engine

Input your text

Microsatellites are highly mutable, repetitive sequences commonly used as genetic markers, but they have never been genotyped/studied en masse. Using a custom microarray to measure hybridization intensities of every possible repetitive nucleotide motif from 1-mers to 6-mers, we examined 25 genomes. Here we show that global microsatellite content varies predictably by species, as measured by array hybridization signal intensities, and particular motifs are characteristic of one species versus another. For instance, hominid-specific microsatellite motifs were identified despite alignment of the human reference, Celera, and Venter genomic sequences indicating substantial variation (30-50%) among individuals. Differential

Search Database

- ☒ MEDLINE
- ☐ CRISP
- ☐ NASA
- ☐ Medical Cases
- ☐ Pubmed Central (sections)
- ☐ PMC Full Text
- ☐ PMC METHODS
- ☐ PMC INTRODUCTION
- ☐ PMC RESULTS
- ☐ PMC (paragraphs)
- ☐ PMC Medical Cases

Select
database to
search

Paste your
text in here

Search

And search

Access the resource at: etblast.org or <http://etest.swmed.edu/etblast3/>

eTBLAST results are linked to the full abstract and other tools, of value while writing, reviewing or studying



eTBLAST 3.0:
a similarity-based search engine

[Current version](#) [Previous version](#) [Pair Comparison](#) [For clients](#) [My eTBLAST](#) [APIs](#)

Analyze the results with a post-processor:

[Find Expert](#)

[Find Journal](#)

[Publication History](#)

[Implicit Keyword](#)

[View query](#)
[Query keywords](#)

Most Similar Matches in MEDLINE:

Score of self comparison: 796.216

Relevancy Threshold (Similarity ratio = 0.56). Entries above here have an unusual level of similarity

- | | | |
|---|--|------------------------------|
| 1 | <input type="checkbox"/> Perceptions of plagiarism in the use of other authors' language. | Score: 174.95
Ratio: 0.22 |
| | K Julliard. Family medicine, 1994, Jun, , 26(6): 356-60. PMID: 8050656 | |
| 2 | <input type="checkbox"/> Nobel Prize winners for literature as palliative for scientific English. | Score: 163.06
Ratio: 0.2 |
| | S Sri Kantha. Croatian medical journal, 2003, Feb, , 44(1): 20-3. PMID: 12590423 | |
| 3 | <input type="checkbox"/> Plagiarism. | Score: 143.38
Ratio: 0.18 |
| | JE Skandalakis, P Mirilas. Archives of surgery (Chicago, Ill. : 1960), 2004, Sep, , 139(9): 1022-4. PMID: 15381625 | |
| 4 | <input type="checkbox"/> Editorial independence at medical journals owned by professional associations: a survey of editors. | Score: 132.86
Ratio: 0.17 |
| | RM Davis, M Müllner. Science and engineering ethics, 2002, Oct, , 8(4): 513-28. PMID: 12501720 | |
| 5 | <input type="checkbox"/> Digital plagiarism--the Web giveth and the Web shall taketh. | Score: 130.26
Ratio: 0.16 |
| | JM Barrie, DE Presti. Journal of medical Internet research, , , 2(1): E6. PMID: 11720925 | |

Some related tools
and private access
areas for clients

Some post-processors
that analyze the
returned 'hits'

Raw self-similarity
score of query

Most similar record

Raw similarity score
between query and
this record

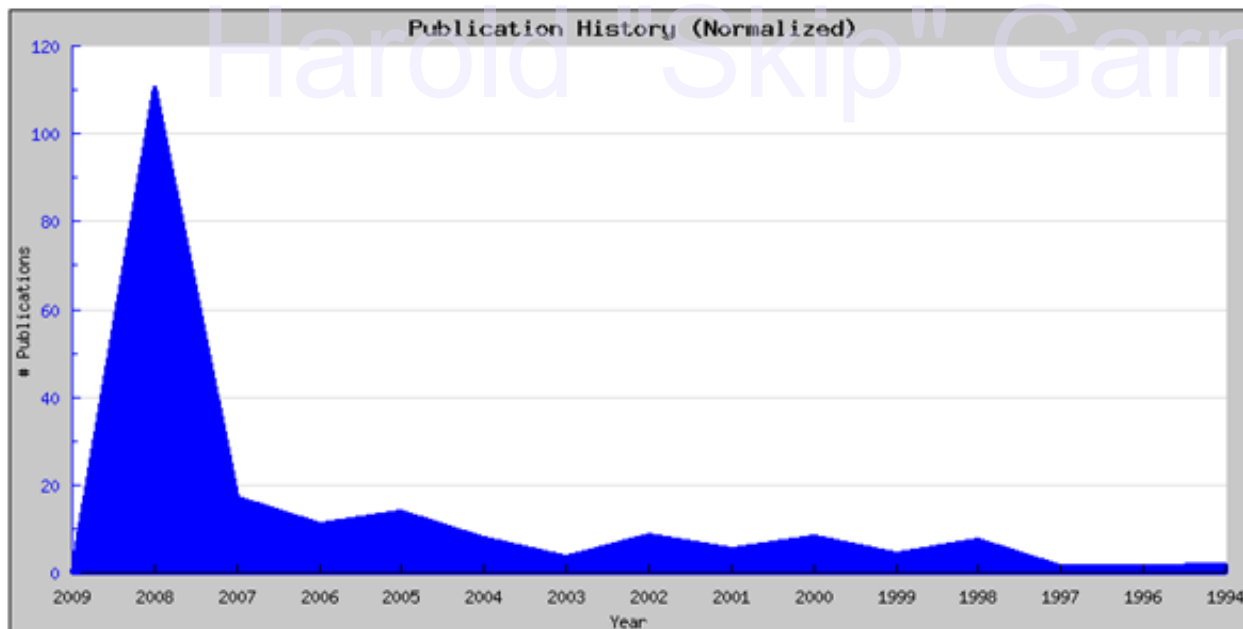
Exploiting the post-processors for potential discoveries or interpretations

The query:

For the cell lines, we will use 3 multiplexes (15 colors each). Each will include DAPI and 14 different TM-conjugates (total 42) 1: CK, CD45, HER2, uPAR, ER, PR, Ki67, Notch 1, Bcl2, EpCAM, p53, twist, ALDH1 and EGFR 2: IGF1r, VEGF, CyclinE, Cyclin D, pMAPK, CD133, Cathepsin D, TGF-b, hMam, pAkt, c-Myc, CXCR4, AR and uPA 3: BRCA1, BRCA2, SMADA4, SLP-2, ADAM proteases, X catenin, PEA-3, PTEM, p27, BRM51, MDR, PCD61P, TOPA2A, and BIRC5.

Implicit key words

Word	Count
breast:	47
cancer:	47
cells:	45
tumors:	24
proteins:	22
human:	22
tumor:	14
markers:	14
familial:	12
mda-mb-453:	12
cancers:	11
kinase:11d1:	10
epidermal:	10
amplification:	10
sporadic:	10
estrogen:	9
signaling:	9
centrosome:	9
sp:	8
non-brca1/2:	8





Although eTBLAST was created as a tool to help us better access the literature – reference finding and such, it has been applied to study ethics....a rather unique direction for the lab

Data and text mining

Text similarity: an alternative way to search MEDLINE

James Lewis, Stephan Ossowski, Justin Hicks, Mounir Errami and Harold R. Garner*

University of Texas Southwestern Medical Center, Eugene McDermott Center for Human Growth and Development, Division for Translational Research, 5323 Harry Hines Boulevard, Dallas, TX 75390, USA.

Received on May 22, 2006; revised on July 5, 2006; accepted on July 7, 2006

Advance Access publication...

Associate Editor: John Quackenbush

Nucleic Acids Research Advance Access published April 22, 2007

Nucleic Acids Research, 2007, 1–4
doi:10.1093/nar/gkm221

eTBLAST: a web server to identify expert reviewers, appropriate journals and similar publications

Mounir Errami¹, Jonathan D. Wren², Justin M. Hicks¹ and Harold R. Garner^{1,*}

www.sciencemag.org SCIENCE VOL 323 6 March 2009

POLICYFORUM

SCIENTIFIC INTEGRITY

Responding to Possible Plagiarism

Tara C. Long,¹ Mounir Errami,² Angela C. George,¹ Zhaohui Sun,² Harold R. Garner^{1,2*}

Documenting reactions from authors and journal editors to plagiarism may help others address the problem.

eTBLAST – electronic Text Basic Local Alignment and Similarity Tool

eTBLAST, a text analytics tool, is an alternative to PubMed and other text databases, using full text similarity search rather than keyword searches to get better results.

NETWATCH

edited by Mitch Leslie

TOOLS

Just the Right Words

Genome aficionados rely on the well-known BLAST search to find matches for a particular DNA sequence in gene databases. A site called eTBLAST from the University of Texas Southwestern Medical Center in Dallas lets you use the same idea to scan MEDLINE for germane articles. Enter a sentence or paragraph—say, from your latest paper—and you can search for abstracts with similar language. You can fine-tune the search by giving more weight to particular words. The results, delivered by e-mail, can take several minutes to arrive.

invention.usmmed.edu/etblast/index.shtmlSend site suggestions to netwatch@aaas.org.
Archive: www.sciencemag.org/netwatch

www.sciencemag.org SCIENCE VOL 304 14 MAY 2004

Vol 451/24 January 2008

COMM

A tale of two citations

Are scientists publishing more duplicate papers? An automated search of seven million abstracts suggests that they are, report Mounir Errami and Harold Garner.

With apologies to Charles Dickens, in the world of biomedical publications, "It is the best of times, it is the worst of times." Scientific productivity, as measured by scholarly publication rates, is at an all-time high¹. However, high-profile cases of scientific misconduct remind us that not all those publications are to be trusted—but how many and which papers? Given the pressure to publish, it is important to be aware of the ways in which community standards can be subverted. Our concern here is with the three major sins of modern publishing: duplication, co-submission and plagiarism. It is our belief that without knowing whether these sins are becoming more widespread, the scientific community cannot hope to effectively deter or catch future unethical behaviour.

Simultaneous submission of duplicate articles by the same authors to different journals also violates journal policies. Previous studies that have tried to gauge the level of unethical publishing have mostly relied on small surveys of specific communities. One of the largest to date used text-matching software to travel more than 280,000 entries in arXiv, an open-access archive of mathematics, physics, computer science, biology and statistics papers. The study suggested a low number of suspected acts of plagiarism (0.2% of arXiv papers), but a much higher number of suspected duplicates with the same authors² (10.5%). In 2002, an anonymous survey of 3,247 US biomedical researchers³ asking them to admit to questionable behaviour revealed that 4.7% admitted to repeated

citation index fewer than a
"The duplication of scientific articles has been largely ignored by the gatekeepers of scientific information."

800,000 cases different figures


The academy Establishing a in our view, important to ture. As the n has multiples publications. Fortunately, text-searching indexes or fu also making lications. not only





Motives for scientific misconduct can drive inappropriate behavior.

- Funding and career pressures of the contemporary research environment.
- Inadequate institutional oversight.
- Inappropriate forms of collaborative arrangements between academic scientists and commercial firms.
- Inadequate training in the methods and traditions of science.
- The increasing scale and complexity of the research environment, leading to the erosion of peer review, mentorship, and educational processes in science.
- The possibility that misconduct in science is an expression of a broader social pattern of deviation from traditional norms.

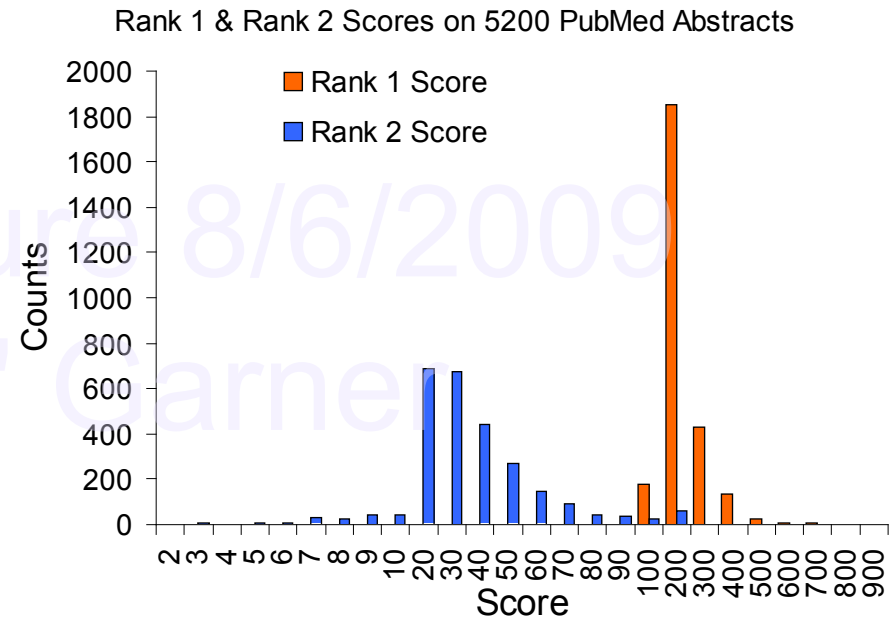
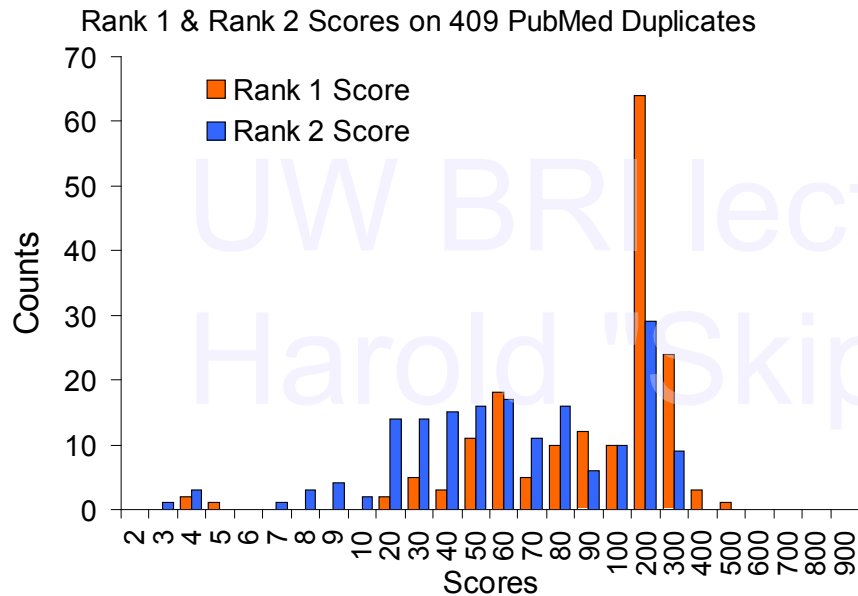


Violations of accepted practices have been estimated by surveys.

- Faking research data- 0.3%
- Plagiarism- 1.4%
- Multiple publications of the same data- 4.7%
- Removing data- 6%
- Inappropriate inclusion of authors- 10%
- Changed a study design – 15%
- Inadequate record keeping- 27.5%

Anonymous questionnaire, sent to 8,000 with 3,234 respondents (Martinson et al. 2005)

Known duplicate articles are tagged in Medline, and can be used as a training set



Duplicate article scores and self-similar article scores are very similar, much more so than what is observed for the average distribution of randomly selected Medline articles

Similarity is obvious. If you are going to cheat, don't be so lazy, change the title and abstract more

Duplicate Details [Similarities] [Differences]

Transurethral needle ablation (TUNA): safety, feasibility, and tolerance of a new office procedure for treatment of benign prostatic hyperplasia

Schulman, C C; Zlotta, A R; Rasor, J S; Hourriez, L; Noel, J C; Edwards, S D

Many attempts have been made to develop a method for treating benign prostatic hyperplasia (BPH) that is minimally invasive, efficacious, and low cost. The transurethral needle ablation (TUNA) device has recently been developed to treat BPH by selectively ablating hyperplastic prostatic tissue. A special catheter incorporates needles that deliver low-level radiofrequency power directly to a very localized area of the prostate. The needles have adjustable shields to protect the urethra if desired or necessary. It is positioned via transrectal ultrasound or direct vision. A pilot study was performed in patients to evaluate TUNA feasibility via histopathological measurement of thermal lesion size and TUNA safety by: (1) monitoring urethral and rectal temperatures; (2) assessing the ability to localize lesions, and (3) determining patient tolerance of the procedure without anesthesia. Twenty patients were treated using TUNA prior to scheduled retropubic prostatectomy. The surgical prostatic specimens were recovered from 1 day to 1 month after TUNA, were step-sectioned, and examined histologically. Patients were 68 years old on average with prostate weight varying from 14 to 88 g. The TUNA procedure averaged 27 min, 4 lesion treatments per prostate, and 4-15 W of power applied for 3 min. Proximal lesion temperature was about 40-50 degrees C with central lesion temperatures of about 80-100 degrees C. Urethral temperature averaged 37-42 degrees C and rectal temperature remained unchanged. Macroscopic examination of the specimens demonstrated localized lesions averaging 12 x 7 mm. Microscopic examination showed larger lesions of extensive coagulative necrosis averaging 30 x 15 mm. Specific immunohistochemical staining showed destruction of all tissue components. (ABSTRACT TRUNCATED AT 250 WORDS)

Eur Urol, (1993)

Medline : 7505228 ; Deja vu: 1067

Transurethral needle ablation (TUNA): histopathological, radiological and clinical studies of a new office procedure for treatment of benign prostatic hyperplasia

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Many attempts have been made to develop a method for treating benign prostatic hyperplasia (BPH) that is minimally invasive, efficacious, and low cost. The transurethral needle ablation (TUNA) device has recently been developed to treat BPH by selectively ablating hyperplastic prostatic tissue. A special catheter incorporates needles that deliver low-level radiofrequency power directly to a very localized area of the prostate. The needles have adjustable shields to protect the urethra if desired or necessary. It is positioned via transrectal ultrasound or direct vision. A pilot study was performed in patients to evaluate TUNA feasibility via histopathological measurement of the size of the thermal lesion and TUNA safety. Fifty patients have been treated, twenty-five patients were treated using TUNA prior to scheduled retropubic prostatectomy. The surgical prostatic specimens were recovered from 1 day to 1 month after TUNA, were step-sectioned, and examined histologically. Patients were 69 years old on average with a prostate weight varying from 14 to 88 g. The TUNA procedure averaged 30 minutes, 4 lesion treatments per prostate, and 4-15 W of power applied for 3 to 5 minutes. Proximal lesion temperature was about 40-70 degrees C with central lesion temperatures of about 110 degrees C. Urethral temperature averaged 37-42 degrees C and rectal temperature remained unchanged. Macroscopic examination of the specimens demonstrated localized lesions averaging 12 x 7 mm for 3 mins. and 10 x 17 for 5 mins. treatment. Microscopic examination showed larger lesions of extensive coagulative necrosis up to 35 x 15 mm. Specific immunohistochemical staining showed destruction of all tissue components. Preservation of the urethra and capsule integrity were noted. Magnetic resonance imaging performed in vivo and ex vivo showed lesions in the prostate corresponding to the recovered surgical specimen. All patients were treated without anesthesia and tolerated the procedure well. Of the 9 patients treated for chronic retention, 6 recovered voiding within 48 hours. Three month follow-up in 11 patients showed significant improvement in both objective and subjective parameters. Because of good lesion localization and maintenance of a normal rectal temperature TUNA appears to be safe. The feasibility of its widespread use was shown by the creation and sustainability of adequately sized lesions and good tolerance as an outpatient treatment. Ongoing clinical studies are evaluating the sustained efficacy of the procedure

Prog Clin Biol Res, (1994)

Medline : 7528418 ; Deja vu: 1069

Are duplicate abstracts representative of duplicate articles?

85% of the text in the duplicate is present in the original. The remaining 15% is comprised of 3 paragraphs taken verbatim from PMID 9171517, PMID 3585347. Less than 1% of the text in duplicate article cannot be found in a different article.

The later article does not cite the earlier, 50% of references are shared with the original.

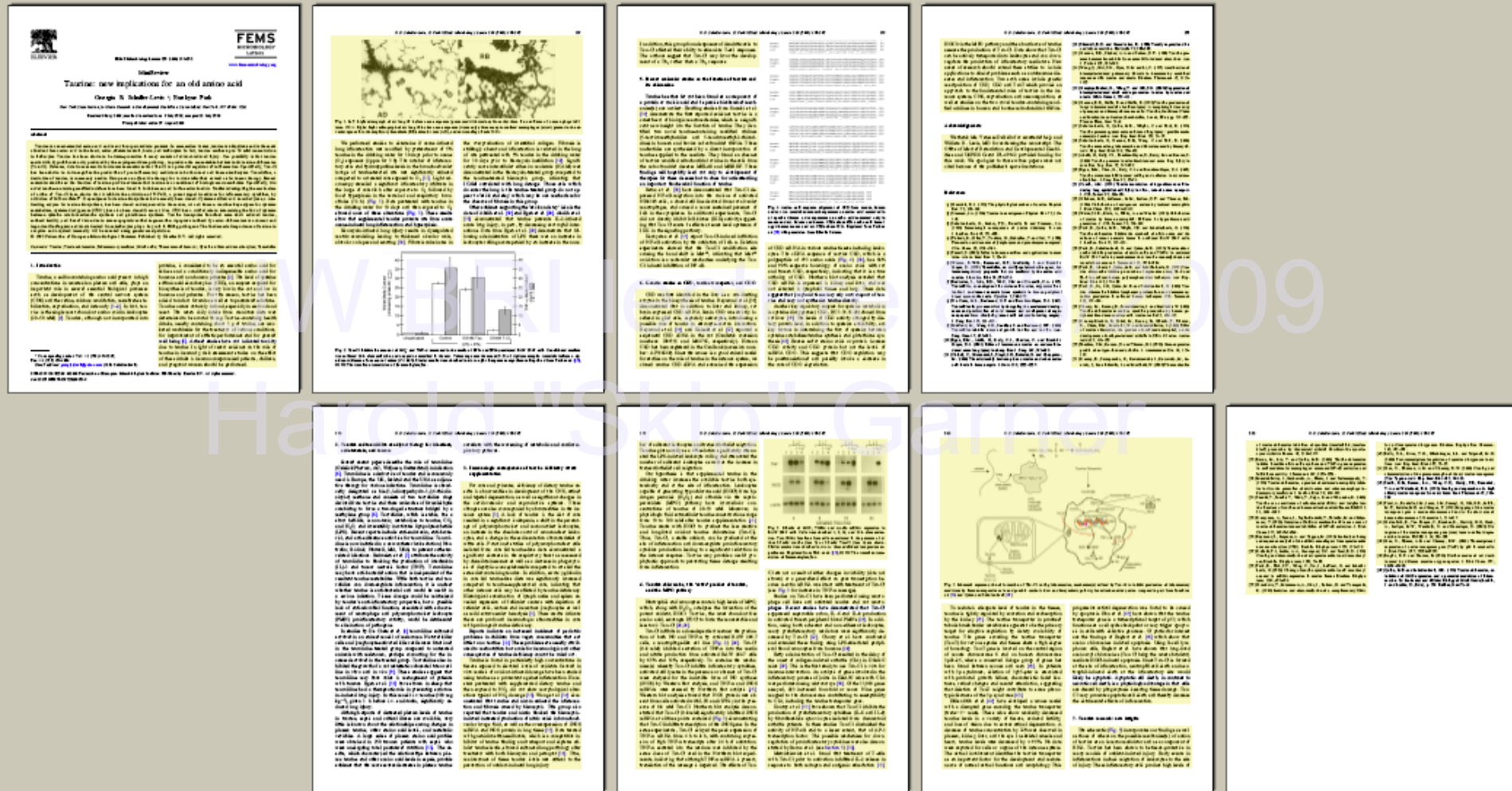
The article was originally published in an American journal and then republished 28 years later in a Thai journal by a different author. Later article retracted after questionnaire.

Acknowledgement

The author wishes to thank all the medical staff in the Department of Medicine for care of these patients and clinical review of the presented paper.



Is it OK to submit papers to more than one journal at a time?



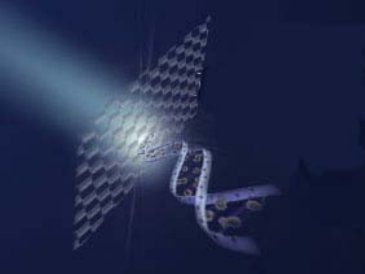
Yellow represents exact text match of this paper (G Schuller-Levis and E Park, Taurine and its chloramine: modulators of immunity, a mini-review, PMID 14992270) and a paper accepted 5 days after this one was submitted, PMID 14553911)

How many times can you publish the same thing?

Most Similar Matches to Your Query:

1. ☐ [Transurethral needle ablation \(TUNA\): histopathological, radiological and clinical studies of a new office procedure for treatment of benign prostatic hyperplasia.](#)
C C Schulman ... A R Zlotta
Prog Clin Biol Res 1994 ; 386(4)479-86. Score: 188.353824 Z-score: 1236.637
2. ☐ [Transurethral needle ablation \(TUNA\): histopathological, radiological and clinical studies of a new office procedure for treatment of benign prostatic hyperplasia.](#)
L A Hourriez ... C C Schulman
Acta Urol Belg 1994 Dec; 62(4)33-8. Score: 145.4738656 Z-score: 954.532
3. ☐ [Transurethral needle ablation \(TUNA\): safety, feasibility, and tolerance of a new office procedure for treatment of benign prostatic hyperplasia.](#)
C C Schulman ... S D Edwards
Eur Urol 1993 ; 24(3)415-23. Score: 140.141093 Z-score: 919.448
4. ☐ [Transurethral needle ablation of the prostate \(TUNA\): pathological, radiological and clinical study of a new office procedure for treatment of benign prostatic hyperplasia using low-level radiofrequency energy.](#)
C Schulman ... A Zlotta
Arch Esp Urol 1994 Nov; 47(9)895-901. Score: 83.057513 Z-score: 543.898
5. ☐ [Transurethral needle ablation \(TUNA\): thermal gradient mapping and comparison of lesion size in a tissue model and in patients with benign prostatic hyperplasia.](#)
J S Rasor ... C C Schulman
Eur Urol 1993 ; 24(3)411-4. Score: 46.432628 Z-score: 302.945
6. ☐ [Transurethral Needle Ablation of the prostate \(TUNA\): clinical results and ultrasound, endoscopic, and histologic findings in pilot study of patients in urinary retention.](#)
L M Harewood ... D Agarwal
J Endourol 1995 Oct; 9(5)407-12. Score: 35.4588318 Z-score: 230.749
7. ☐ [\[Transurethral ablation \(Precision Plus\) in the treatment of patients with benign prostatic hyperplasia\]](#)
E B Mazo ... G G Krivoborodov
Urologia 2005 May-Jun; (3)12-5. Score: 31.1596266 Z-score: 202.465
8. ☐ [Transurethral needle ablation of the prostate for the treatment of benign prostatic hyperplasia: a collaborative multicentre study.](#)
J Ramon ... J M Fitzpatrick
Br J Urol 1997 Jul; 80(1)128-34; discussion 134-5. Score: 29.305638 Z-score: 190.267

-



Deja vu

A study of scientific
publication ethics

[Home](#)[Browse](#)[Report](#)[Help](#)[Statistics](#)[Contact Us](#)[Team](#)[References](#)

Powered by eTBLAST
Innovation Labs

UT Southwestern Medical School - Dallas

Deja Vu: a Database of Highly Similar and Duplicate Citations*

Click [this link](#) to begin browsing entries , or click the "Browse" button above and follow the instructions.

We value your feedback. Please take one minute to take a brief survey ([Click here](#)). We appreciate your support.

Deja vu is a database of extremely similar **Medline** citations. Many, but not all, of which contain instances of duplicate publication and potential plagiarism. Deja vu is a dynamic resource for the community, with manual curation ongoing continuously, and we welcome input and comments.

In the scientific research community plagiarism and multiple publications of the same data are considered unacceptable practices and can result in tremendous misunderstanding and waste of time and energy. Our peers and the public have high expectations for the performance and behavior of scientists during the execution and reporting of research. With little chance for discovery and decreasing budgets, yet sustained pressure to publish, or without a clear understanding of acceptable publication practices, the unethical practices of duplicate publication and plagiarism can be enticing to some. Until now, discovery has been through serendipity alone, so these practices have largely gone unchecked.

The application of text similarity searching can robustly detect highly similar text records, offering a new tool for ensuring integrity in scientific publications. Deja vu is a database of computationally identified, manually confirmed highly similar citations (abstracts and titles), as well as user provided commentary and evidence to affirm or deny a given documents putative categorization. It is available via the web and to other database curators for tagging of their indexed articles. The availability of a search tool, **eTBLAST**, by which journal submissions can be compared to existing databases to identify potential duplicate citations and intercept them before they are published, and this database of highly similar citations (or exhaustive searching and tagging within Medline and other databases) could be deterrents to this questionable scientific behavior and excellent examples of citations that

Latest News

2008-10-23

Nature News reports on the retraction associated with entry 9866. [Read more...](#)

2008-10-09

The power of eTBLAST and Deja vu cited in Nature News. [Read more ...](#)

2008-08-31

Deja vu database in the Nucleic Acid Research 2009 Database issue. [Read PDF](#)

2008-06-23

Deja vu and eTBLAST have been cited in Chemical and Engineering News. [Read more ...](#)

2008-01-23 - eTBLAST and Deja vu spotlighted in Nature

Nature commentary, news and podcast describing the trends in duplicate publications through the analysis of the Deja vu database content. [Read more...](#)

2007-12-02 - Deja vu in Bioinformatics

eTBLAST application to the detection of duplicate publication and the Deja vu creation process are published in Bioinformatics and freely accessible. [Read PDF.](#)

2007-07-23 - NIH R01 Grant awarded

A R01 NIH Grant was awarded to the Deja vu team within the

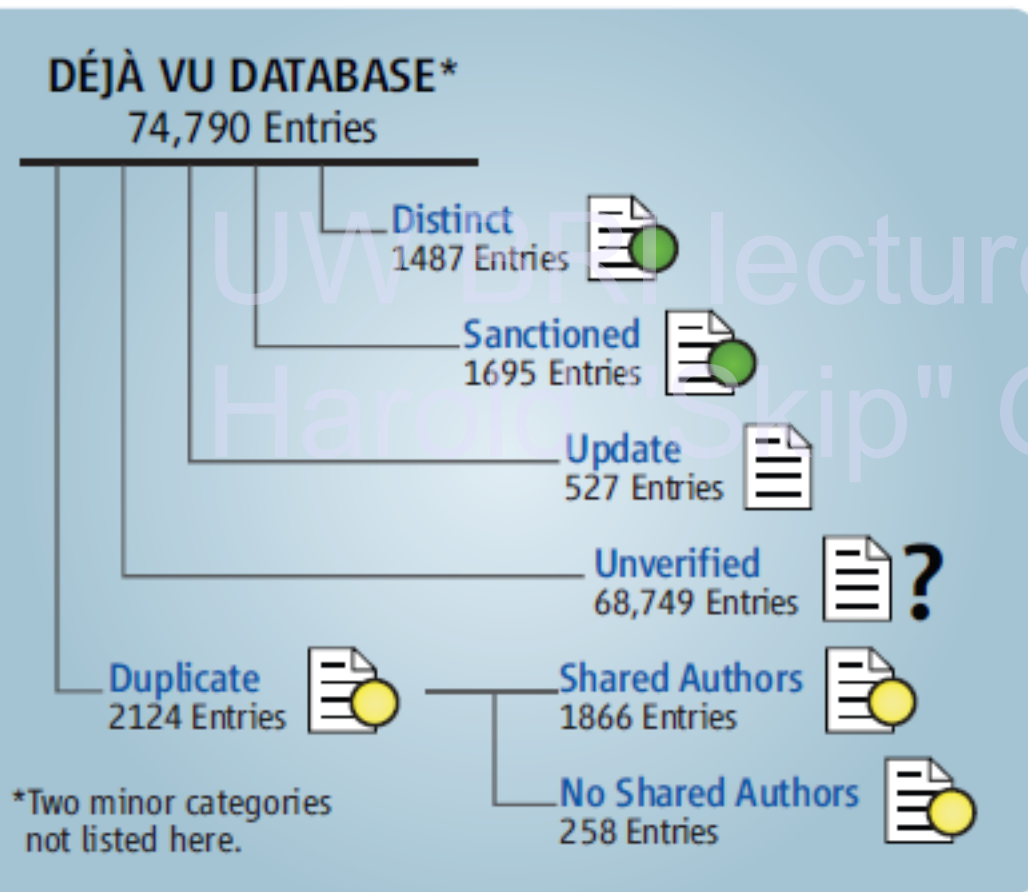
Déjà vu's categories, such as “duplicate,” may reflect inappropriate publication, others, such as “distinct,” indicate no problem.

We recently completed analysis of Medline from 2/2008 to 5/2009

Of the 1,232,048 new PMIDs, we analyzed 853,838

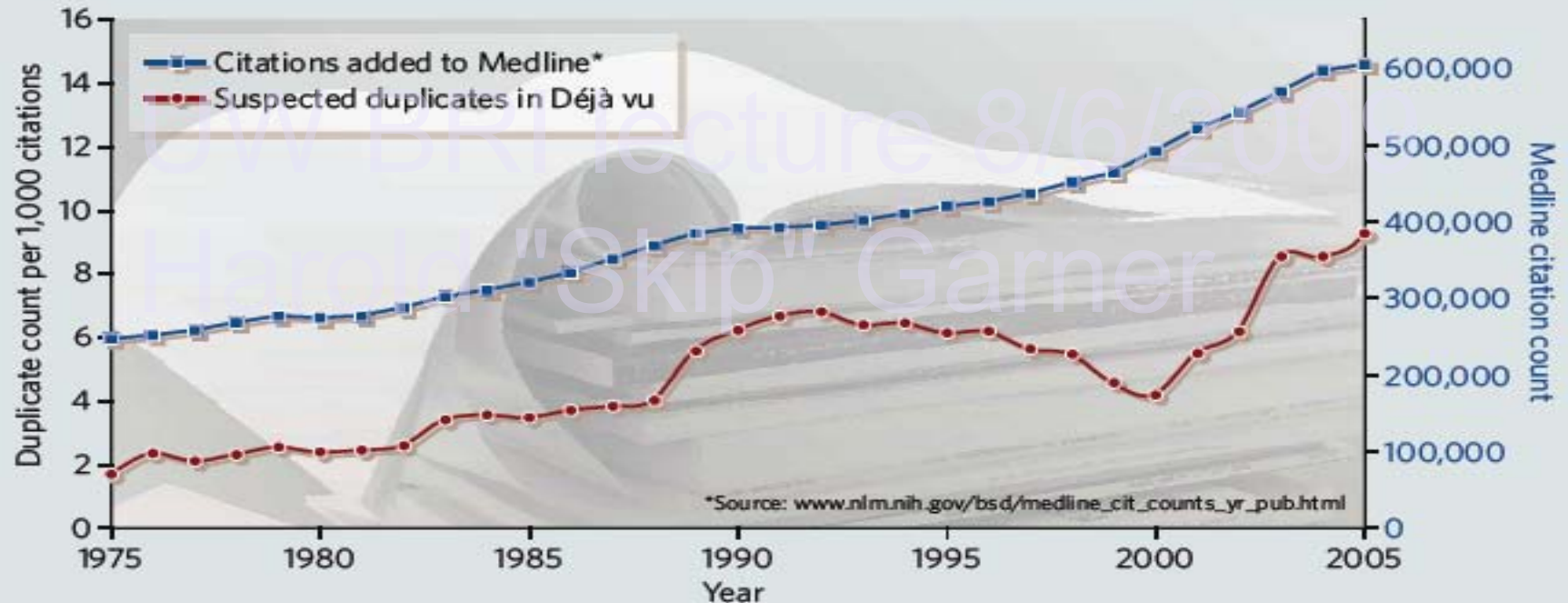
There was a total of 4,759 highly similar pairs, 315 did not share authors


So, the rate of similar citations is 5/1,000 and for possible plagiarized articles, 0.4/1,000



In the cut and paste internet age is this behavior getting better or worse?

SUSPECTED DUPLICATES IN THE BIOMEDICAL LITERATURE





As in any discipline, there are those that excel - there are multiple offenders

Author	Total Publications ¹	Number of Duplicate/DA	Number of Duplicate/SA	Publication Years ²
Alsabti, Elias A.	34	10	2	1977 – 1980 (1978 – 1980)
Dhuley, Jayant	31	10	--	1985 – 2003 (1998 – 2001)
Khanna, Chandra M.	41	9	--	1980 – 2000 (1991 – 2000)
Jendryczko, Andrzej	126	7	1	1983 – 1996 (1984 – 1994)
Shahrudin, Mohd-Dun	12 ³	6	4	1993 – 1997 (1993 – 1997)
Anagnostopoulos, Dimitris	46	6	--	1986 – 2005 (1989 – 1995)
Mavoungou, Elie	35	5	1	1990 – 2007 (1998 – 2006)
Poaty-Mavoungou, Virginie	15	4	1	(1996 – 2008) (1998 – 2002)

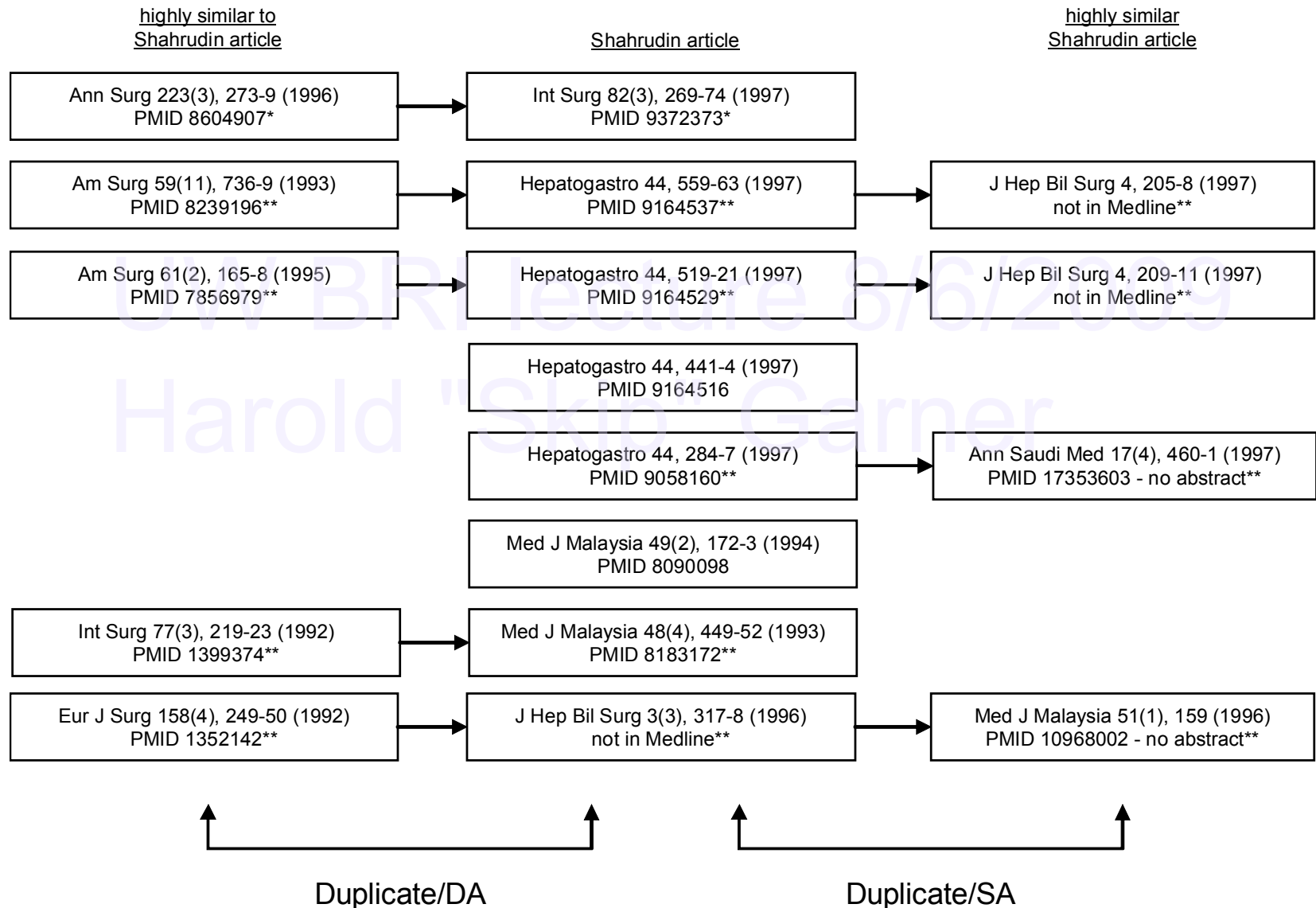
¹ Total number of articles in author's publication list as indexed by PUBMED.

² Specifies years in which all author's articles were published. Publication range in parentheses specifies years in which duplicates were published.

³ 3 of these 12 articles are not indexed in PUBMED.

A case of multiple duplicate publication –

Shahrudin Article Similarity Analysis
M Shahrudin





So, how do authors and editors respond to evidence of possible plagiarism?

For duplicates with different authors - potentially plagiarized articles - once full text is inspected and a high degree of similarity persists beyond the citation, we send an email to all the stakeholders - authors and editors of both papers - asking questions like:

Were you aware of the later article?

Is there an explanation for the similarity?

Was the earlier article copyrighted?

Were permissions requested/given to re-use the material?

....and we include a copy of both articles, with the later article annotated with areas of “high similarity”



There were sufficient responses to make statistical observations

- Unverified entries in Déjà vu with no overlapping authors 7,947
- Manually validated duplicates with no overlapping authors 206
- Average full text similarity 86%
- Average reference overlap 73%
- Pairs with at least one similar table/figure 72%
- Questionnaires sent 162
- Overall response rate 90.8%
 - Authors of earlier article 55.9%
 - Authors of later article 39.8%
 - Editors of journal publishing earlier article 59.1%
 - Editors of journal publishing later article 9.4%
- Average response delay following initial contact 8.3 days
 - Authors of earlier article 5.4 days
 - Authors of later article 10.8 days
 - Editors of journal publishing earlier article 8.7 days
 - Editors of journal publishing later article 9.8 days
- Total investigations initiated, including retractions 90+
- Retractions 50
- Average time from initial response to retraction decision 20.8 days



There were surprises..

93% of authors were unaware that they had been duplicated

UW BRI lecture 8/6/2009

26% of duplicate authors denied wrongdoing,

35% admitted and apologized,

16% were from co-authors claiming no involvement in the
writing of the manuscript

13% were not aware that they were 'authors'



A sampling of responses from the stakeholders

Authors of earlier article

- “Imitation is the sincerest form of flattery?”
- “[My] major concern is that false data will lead to changes in surgical practice regarding procedures.”

Editors of journal publishing earlier article

- “It's my understanding that copying someone else's description virtually word-for-word, as these authors have done, is considered a compliment to the person whose words were copied.”

Editors of journal publishing later article

- “Believe me, the data in any paper is the responsibility of the authors and not the journal.”

... but my favorites are ...

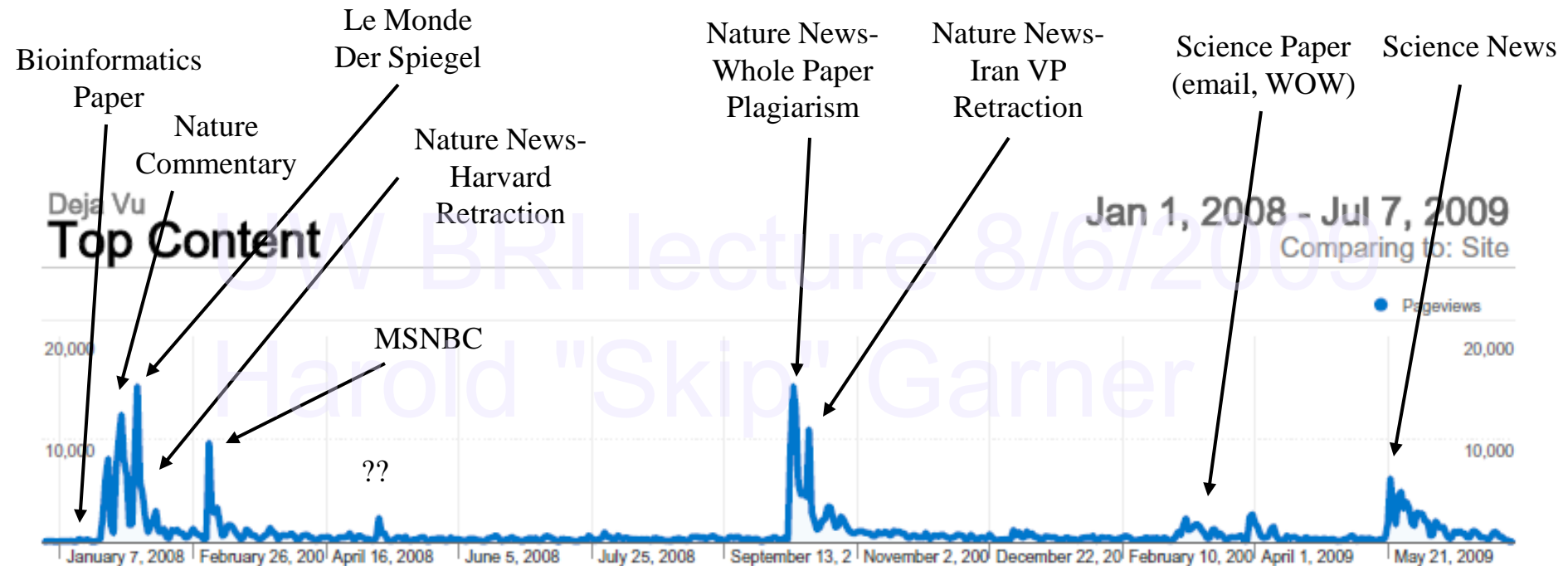


A sampling of responses from the stakeholders II

Authors of later article

- “I would like to offer my apology to the authors of the original paper for not seeking the permission for using some part of their paper. I was not aware of the fact I am required to take such permission.”
- “There are probably only "x" amount of word combinations that could lead to "y" amount of statements. ... I have no idea why the pieces are similar, except that I am sure I do not have a good enough memory and it is certainly not photographic, to have allowed me to have "copied" his piece. ... I did in fact review it [the original article] for whatever journal it was published in.”
- “It was a joke, a bad game, an unconscious bet between friends, ten years ago that such things could happened. I deeply regret.” [Author has 6 entries in Déjà vu, and is VP of the national ethics committee of his country]
- “At that time we had 2 medical students writing our results up into paper format. They may have been somewhat keen on using the [original] paper as a model to write our paper - resulting in very similar text. This unfortunately may be the result of some inexperience in paper writing which myself and [other author] were not aware of at the time.”

Déjà vu access statistics confirms interest in publishing ethics and impact of different media



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Now, this work is not without controversy.

NEWSFOCUS



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0959-6630/05/\$ - see front matter

CLINICAL INVESTIGATION

RADIATION-INDUCED DNA DAMAGE AND REPAIR IN LYMPHOCYTES FROM BREAST CANCER PATIENTS AND THEIR CORRELATION WITH ACUTE SKIN REACTIONS TO RADIOTHERAPY

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Purpose: Repair of radiation-induced DNA damage plays a central role for both the susceptibility of side effects after radiotherapy and their subsequent coverage. The study objective was to evaluate DNA repair data determined by comet assay correlated with the occurrence of acute skin reactions. **Methods and Materials:** Breast cancer patients receiving radiation therapy after a breast-conserving procedure were recruited in a prospective epidemiologic study. As an indicator for clinical radiotherapy reactions of the skin, acute skin reactions were assessed. Comet assay was performed on lymphocytes with 5 Gy in vitro and analyzed using the alkaline comet assay. Reproducibility of the assay was tested by repeated analysis ($n = 20$) of cells from a healthy donor. A coefficient of variation of 0.33 was determined. The various parameters determined to characterize the individual DNA repair capacity were compared. Eleven patients were identified with considerably enhanced DNA repair capacity after 15 and 30 minutes. Six patients exhibited severely reduced DNA repair capacity after 15 and 30 minutes. Six patients were identified with moderately reduced DNA repair capacity after 15 and 30 minutes. **Results:** Using the alkaline comet assay as described here, breast cancer patients with acute skin reactions showed significantly enhanced DNA repair capacity. Because impaired DNA repair capacity is associated with severe side effects, individuals exhibiting severely reduced DNA repair capacity should be considered for development of late clinical symptoms. © 2005

Imaging, Diagnosis, Prognosis

Correlation between DNA Repair Capacity in Lymphocytes and Acute Side Effects to Skin during Radiotherapy in Nasopharyngeal Cancer Patients


Wei-dong Wang,¹ Li-qing Li,² Li-qing Li,² Zhong-hui Cao,¹ Shi-liang Sun,²

Purpose: Repair of radiation-induced DNA damage plays a central role for both the susceptibility of side effects after radiotherapy and their subsequent coverage. The study objective was to evaluate DNA repair data determined by comet assay correlated with the occurrence of acute side effects during radiotherapy. **Methods and Materials:** Nasopharyngeal cancer patients receiving radiation therapy after a breast-conserving procedure were recruited in a prospective epidemiologic study. As an indicator for clinical radiotherapy reactions of the skin, acute skin reactions were assessed. Comet assay was performed on lymphocytes with 5 Gy in vitro and analyzed using the alkaline comet assay. Reproducibility of the assay was tested by repeated analysis ($n = 20$) of cells from a healthy donor. A coefficient of variation of 0.24 was determined. The various parameters determined to characterize the individual DNA repair capacity were compared. Eleven patients were identified with considerably enhanced DNA repair capacity after 15 and 30 minutes. Six patients exhibited severely reduced DNA repair capacity after 15 and 30 minutes. Six patients were identified with moderately reduced DNA repair capacity after 15 and 30 minutes. **Results:** Using the alkaline comet assay as described here, nasopharyngeal cancer patients with acute skin reactions showed significantly enhanced DNA repair capacity. Because impaired DNA repair capacity is associated with severe side effects, individuals exhibiting severely reduced DNA repair capacity should be considered for development of late clinical symptoms. © 2005

Science,
May 21,
2009

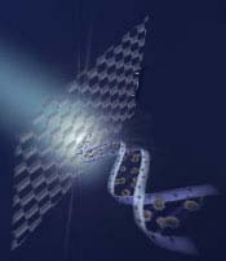
Plagiarism Sleuths

A Texas group is trolling through publications worldwide hunting for signs of duplicated material. The thousands of articles they've flagged online raise questions about standards in publishing—and about the group's own tactics



All together, our data had lead us to ponder such questions as:

- 1) Are there too many journals?
- 2) Are there too many journals indexed in Medline (and therefore receive equal access in response to searches)?
- 3) What are the criteria for being indexed in Medline, or better yet, what would it take to be removed?
- 4) Are there too many review articles?
- 5) What is the value of authors assigning copyright to journals if journals do not enforce them?
- 6) Is the pressure to publish really distorting the real purpose of publication?
- 7) How has open access affected these behaviors?
- 8) Should a new class of publication be created called an 'update' where additional material can be contributed by an author to a previous publication, while still getting credit for the advance without having to restate and republish a large fraction of something previous?
- 9) Are publication behaviors linked to other ethically questionable behaviors?
- 10) What constitutes a retraction? and most important
- 11) How often does a clinician unknowingly base a patient diagnosis or therapy upon a plagiarized or otherwise questionable paper, and how does this affect patient care?



The End.
Thanks for you attention.


Visit Garner Labs' home page:

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UW-BR lecture 8/6/2009
Harold "Skip" Garner





What we instruct our students about proper use of reference materials

- Anytime reference materials (text, figures, tables) whether from books, manuscripts, magazines or from web pages, are used or paraphrased in a new written work, it must be cited in a very obvious and relevant way.
- If any content in the materials (important phrases, sentences, larger sections of text) are used completely or in part they should be enclosed in quotes and also cited in a very obvious and relevant way.
- In addition to these publication ethics norms, many sources also copyright the material (text, figures, tables) as well. To directly use the material, permissions from those holding the copyright may also be required. For many professional journals, the threshold for requiring permission is when greater than 250 words or any figures, images, or tables are used.
- There are no absolute standards established, but these are considered the minimum requirements for ethical writing and publication.