

You don't need an MD to do medical ILL or what I learned during my 15 years at a Medical School

Kurt Munson,
Northwestern University Library
March 19, 2014



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Outcomes

- Understand how biomedical information is structured or communicated and what this means for ILL
- Learn how to increase your fill rate by using sources other than ILL
- Explore how the NIH Public Access Policy and other like policies will make ILL of biomedical articles easier in the future.
- See many pictures of doctors from TV.



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The Structure of Biomedical Information (biologically)

- ✓ **Proteins** make
- ✓ **Cells** which make
- ✓ **Tissues** which make
- ✓ **Organs** which make
- ✓ **Systems** which make
- ✓ **Living creatures**

Published materials tend to be at one of the above levels.





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The Structure of Biomedical Information (library-ly)

- ✓ Textbooks not encyclopedias or reference books
- ✓ Journals not books
- ✓ PubMed instead of a catalog.
- ✓ Not like other disciplines

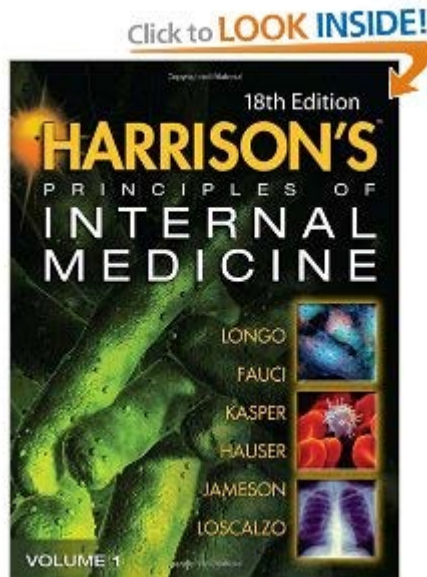


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Textbooks



- ✓ Overview of the topic
- ✓ Gold Standard
- ✓ Generally cover a system, organ or type of illness
- ✓ A new edition is *always* coming out

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Journal Articles

- ✓ Scientific knowledge grows incrementally via experimentation
- ✓ Experiments are supposed to be repeatable and generalizable
- ✓ Articles are the *primary* way doctors communicate



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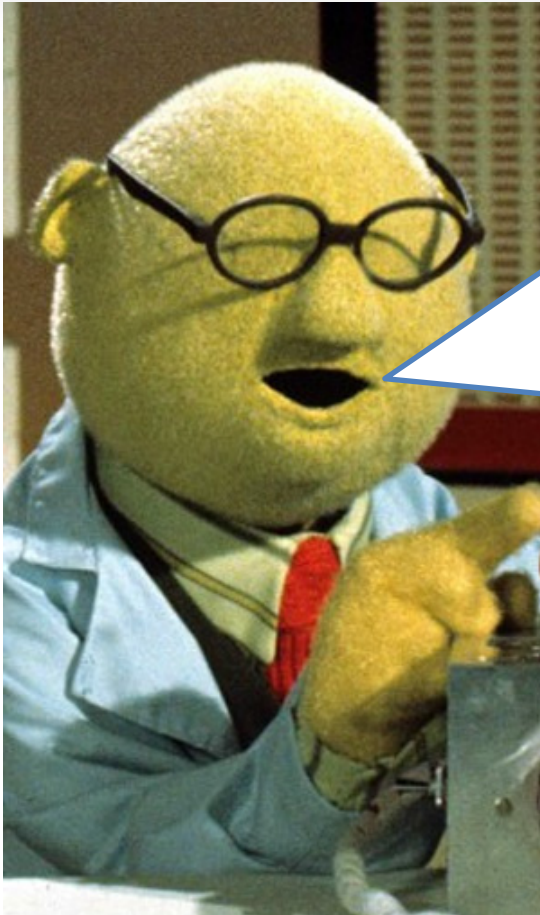


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PubMed- It's how doctors find articles



- Largest Biomedical Index in the world
- It's Free
- One stop shopping
- Extensive links to external content
- Becoming an ecosystem
- If it isn't here, a doctor can't find it



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[The effect of high protein diets on renal hypertrophy in rats following wholebody irradiation.](#)

1. KONISHI F, **ROSEN VJ**, BRAUER RW.

Rep U S Nav Med Res Lab. 1961 May 18;510:1-18. No abstract available.

PMID: 24545776 [PubMed - OLDMEDLINE]

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[Contralateral mastectomy and survival after breast cancer in carriers of BRCA1 and BRCA2 mutations: retrospective analysis.](#)

Metcalfe K, Gershman **S**, Ghadirian P, Lynch HT, Snyder C, Tung N, Kim-Sing C, Eisen A, Foulkes WD, **Rosen B**, Sun P, Narod SA.

BMJ. 2014 Feb 11;348:g226. doi: 10.1136/bmj.g226

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[Selecting age-related functional characteristics in the human gut microbiome.](#)

Lan Y, Kriete A, **Rosen GL**.

Microbiome. 2013 Jan 9;1(1):2. doi: 10.1186/2049-2618-1-2.

PMID: 24467949 [PubMed]

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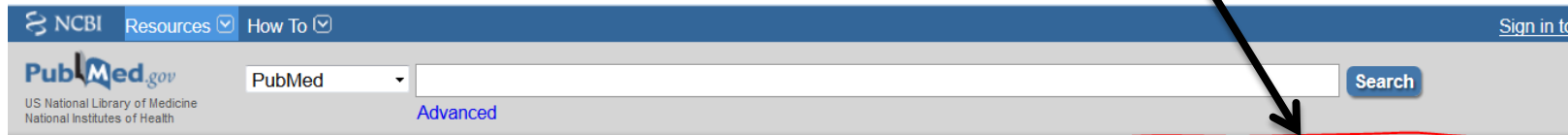
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Proc Natl Acad Sci U S A. 2014 Jan 7;111(1):391-6. doi: 10.1073/pnas.1315752111. Epub 2013 Dec 26.

β-Catenin induces T-cell transformation by promoting genomic instability.

Dose M¹, Emmanuel AO, Chaumeil J, Zhang J, Sun T, Germar K, Aghajani K, Davis EM, Keerthivasan S, Bredemeyer AL, Sleckman BP, Rosen ST, Skok JA, Le Beau MM, Georgopoulos K, Gounari F.

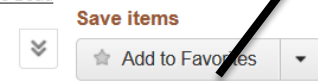
Author information

Abstract

Deregulated activation of β-catenin in cancer has been correlated with genomic instability. During thymocyte development, β-catenin a transcription in partnership with T-cell-specific transcription factor 1 (Tcf-1). We previously reported that targeted activation of β-catenin (CAT mice) induces lymphomas that depend on recombination activating gene (RAG) and myelocytomatosis oncogene (Myc) activities that these lymphomas have recurring Tcra/Myc translocations that resulted from illegitimate RAG recombination events and resembled translocations previously described in human T-ALL. We therefore used the CAT animal model to obtain mechanistic insights into the process. ChIP-seq analysis uncovered a link between Tcf-1 and RAG2 showing that the two proteins shared binding sites marked by the histone-3 lysine-4 (H3K4me3) throughout the genome, including near the translocation sites. Pretransformed CAT thymocytes had increased DNA damage at the translocating loci and showed altered repair of RAG-induced DNA double strand breaks. These cells were able to survive despite DNA damage because activated β-catenin promoted an antiapoptosis gene expression profile. Thus, activated β-catenin promotes genomic instability that leads to T-cell lymphomas as a consequence of altered double strand break repair and increased survival of thymocytes with damaged DNA.

KEYWORDS: Ctnnb1, DNA recombination Tcf7, beta-catenin/Tcf-1

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neoplastic transformation and Cancer Res. Beta-catenin stabilization stalls the transition from double-positive to single-positive [Blood]. [Review](#) DNA double strand break repair at chromosomal translocation: les [Oncogene]. [Review](#) The Yin-Yang of TCF/beta-catenin signaling. [Adv Cancer Res]



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Review of the structure of Biomedical Information- simple enough for even Dr. Nick



1. Articles not books are king because they report results of experiments
2. Books are textbooks that synthesize research reported in articles
3. PubMed is Google for doctors
4. Everything is called something funny in Latin or in scientific notation



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http://www.youtube.com/watch?v=b_bSp9DTgMw

HOW TO GET BIOMEDICAL INFORMATION FOR YOUR PATRONS



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Books

1. Traditional ILL
2. Buy a copy

Nothing new here, move along.....



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Biomedical Articles

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traditional ILL!

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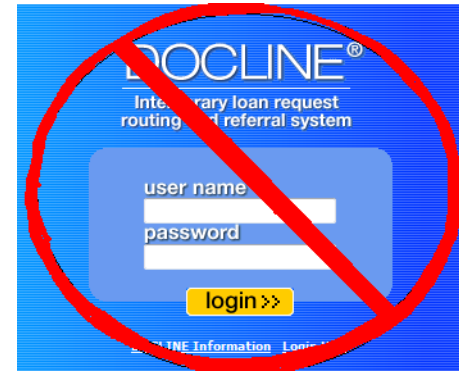
Plus, we have so many more options with
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Biomedical Articles (Part II)

- You don't need DOCLINE
- Searching OCLC isn't necessarily the place to start either...
- In fact, ILL isn't necessarily the way to go...
- Our offices are providing fulfillment via Document Delivery





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Sources of **free** Biomedical Journals



- PubMed Central
- Highwire Press
- OpenAccess in WorldShareILL
- Road.issn.org
- Randomly lifted embargoes
- Random Google Searches



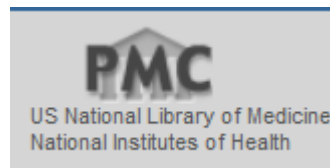
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PubMed Central

The NIH Public Access Policy implements Division G, Title II, Section 218 of PL 110-161 (Consolidated Appropriations Act, 2008). The law states:

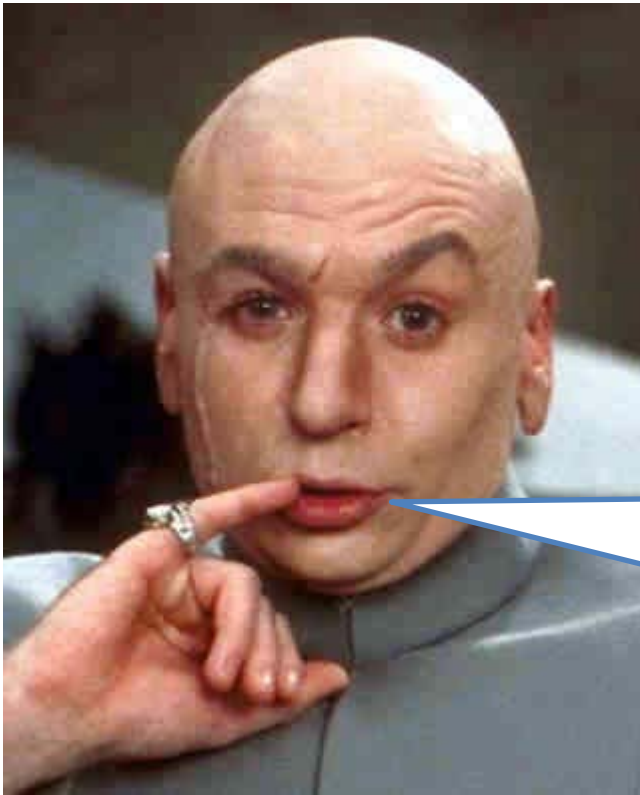
The Director of the National Institutes of Health shall require that all investigators funded by the NIH submit or have submitted for them to the National Library of Medicine's PubMed Central an electronic version of their final, peer-reviewed manuscripts upon acceptance for publication, to be made publicly available no later than 12 months after the official date of publication: Provided, That the NIH shall implement the public access policy in a manner consistent with copyright law.

<http://publicaccess.nih.gov/policy.htm>





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Kurt I. Munson, Thomas W. Hill

J Med Libr Assoc. 2003 July; 91(3): 377-378.

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- [Selecting age-related functional characteristics in the human gut microbiome.](#)
 1. Lan Y, Kriete A, **Rosen** GL.
Microbiome. 2013 Jan 9;1(1):2. doi: 10.1186/2049-2618-1-2.
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 2. Salloway **S**, Sperling R, Fox NC, Blennow K, Klunk W, Raskind M, Sabbagh M, I Porsteinsson AP, Ferris **S**, Reichert M, Ketter N, Nejadnik B, Guenzler V, Milosla Lull J, Tudor IC, Liu E, Grundman M, Yuen E, Black R, Brashear HR; Bapineuzu Clinical Trial Investigators.
N Engl J Med. 2014 Jan 23;370(4):322-33. doi: 10.1056/NEJMoa1304839.
PMID: 24450891 [PubMed - in process]
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- Cooperative project between the ISSN International Centre and the Communication and Information Sector of UNESCO
- Bibliographic records which describe scholarly resources in Open Access which have been assigned an ISSN by the ISSN Network.
- Journals, conference proceedings and academic repositories.
- Lists of titles at the journal level or conference proceeding level, not article level.
- http://road.issn.org/en/contenu/purposes-road-project#.UuwWS_vpGsY



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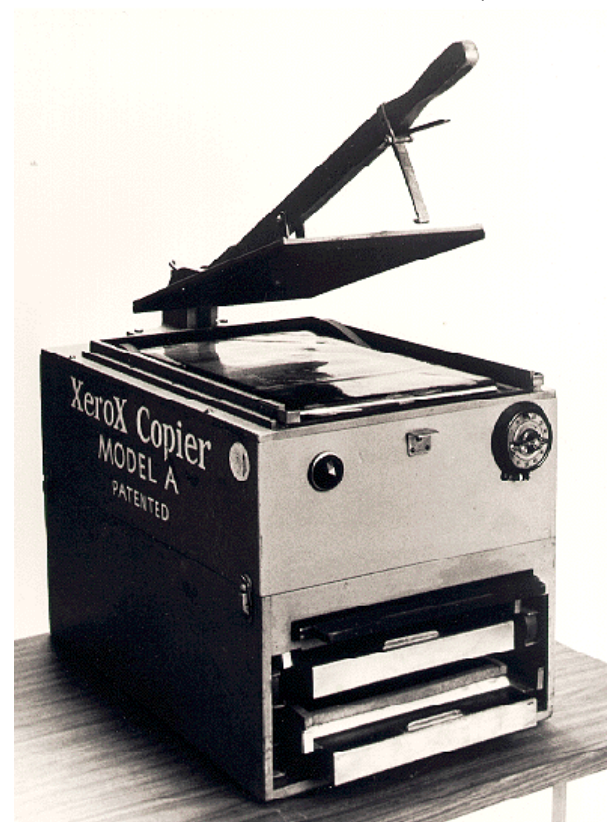


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Open Access and what it means for those of us who work in ILL

- One size no longer fits all, i.e., you shouldn't have to automatically place an ILL
- Photocopiers are **NOT** new technology.
- Are our processes still designed around Contu and the 1976 copyright law?

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Open Access and what it means for changing ILL workflows

- ✓ The publication date becomes **really** important
- ✓ Is it older than a year rather than older than five?
- ✓ Different publishing models (articles on both the publisher's website and in an open access archives)
- ✓ Knowledge Bases replace local holdings records
- ✓ Where are you going to find it?



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Articles with a side of Data

- ✓ Patrons want both the article **and** the data that support the article's conclusion
- ✓ A request for two things rather than just one



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Future developments...



- ✓ More Federally Funded research is required to be made available for free.
- ✓ Executive order requiring open access
- ✓ The Dept. of Labor and the Dept. of Education just made this a requirement
- ✓ PLoS data availability requirement



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Future Platforms...



- ✓ **PubFed**- using the PubMed Central approach for the entire Federal government
- ✓ **CHORUS** - (chorusaccess.org)
“Conceived by publishers” Great
- ✓ **Federated Institutional Depositories** – because a lot of universities already have materials in these



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Conclusion

Science!



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Conclusion

- New models of publishing and disseminating scientific information require changes in how we process article requests
- We have so many more options
- These changes give us great opportunities to better serve our patrons (and improve fill rates)
- We're really providing Document Delivery rather than just ILL



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Questions?

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