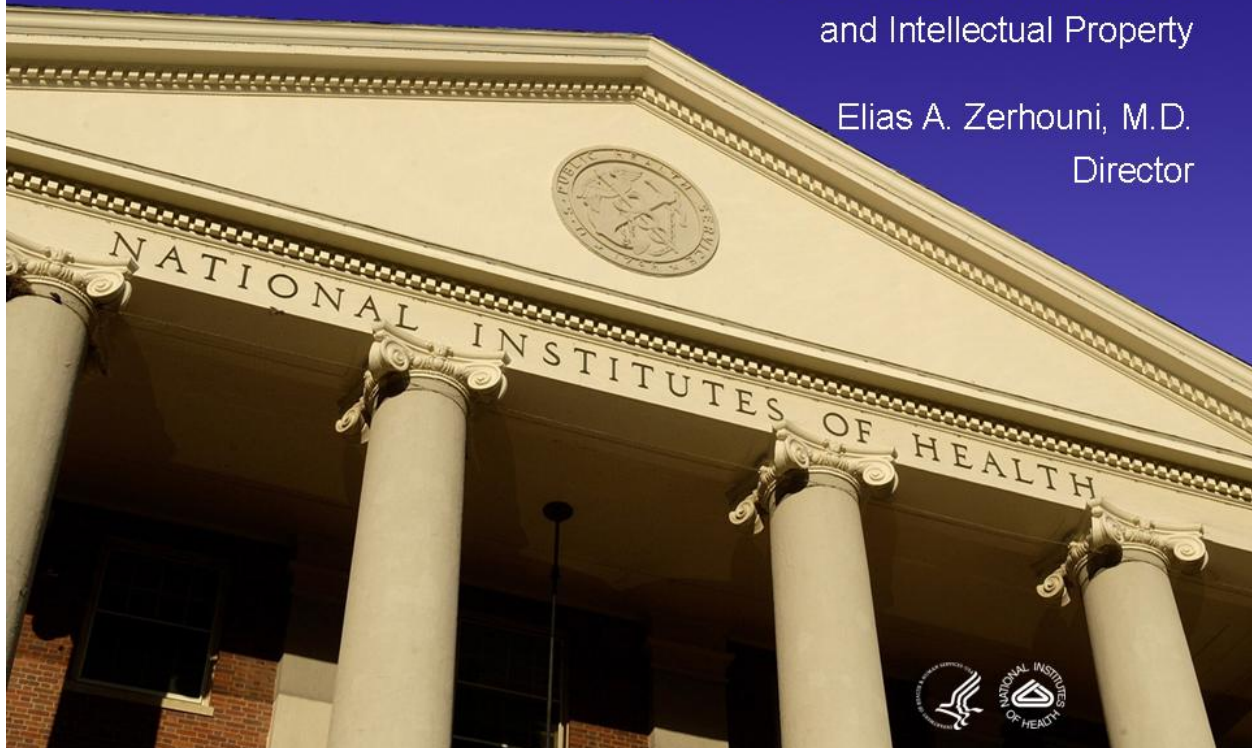


# NIH's Public Access Policy

Subcommittee on Courts, the Internet,  
and Intellectual Property

Elias A. Zerhouni, M.D.  
Director



Notes:

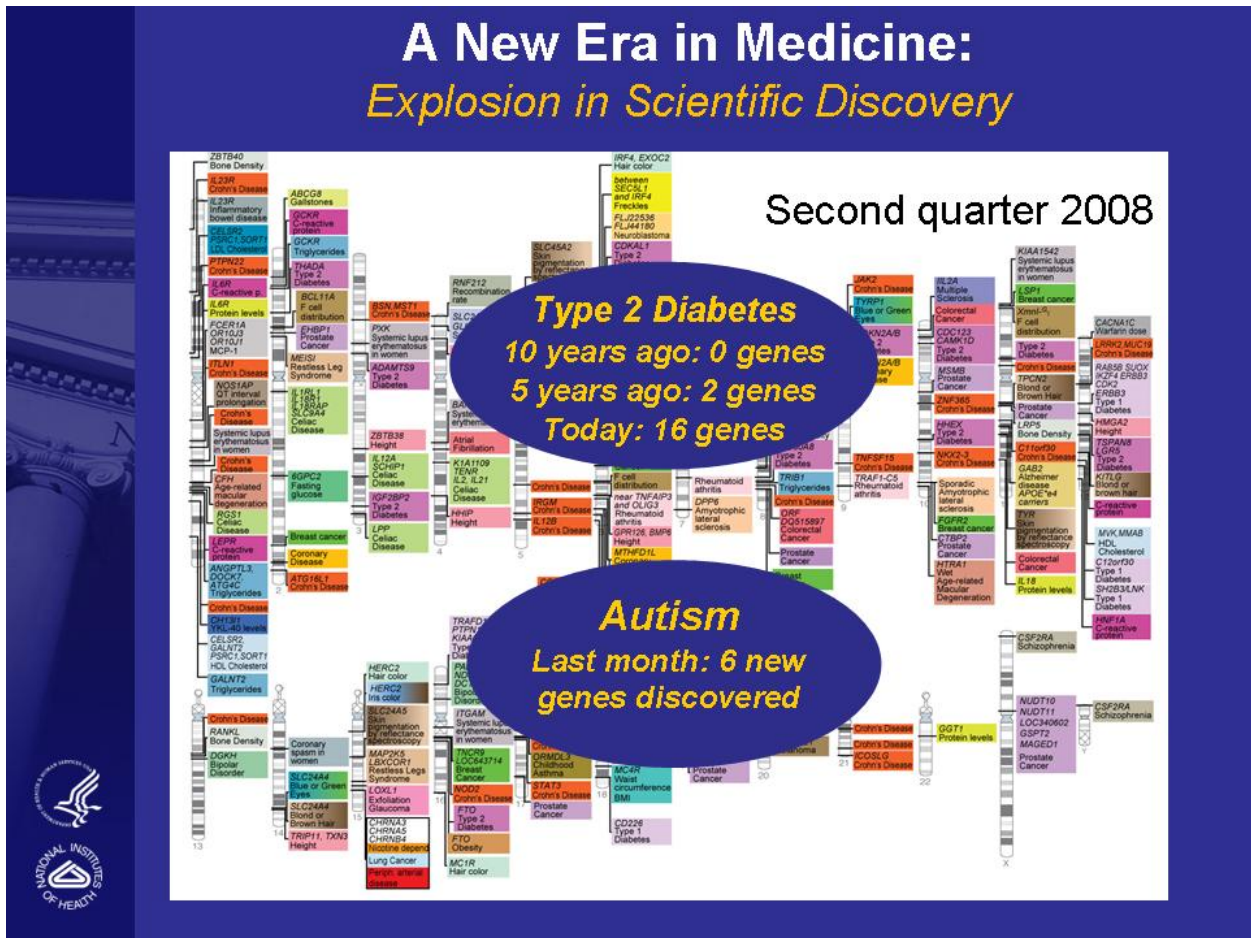
## **NIH's Public Access Policy**

Subcommittee on Courts, the Internet, and Intellectual Property

Elias A. Zerhouni, M.D.  
Director

145th Meeting of the National Cancer Advisory Board  
February 5, 2008; 10:30am-11:30am  
Building 31, Conference Room 10, 6th Floor C Wing  
"NIH Director's Report"  
You will be introduced by Dr. Niederhuber

# A New Era in Medicine: Explosion in Scientific Discovery



Notes:

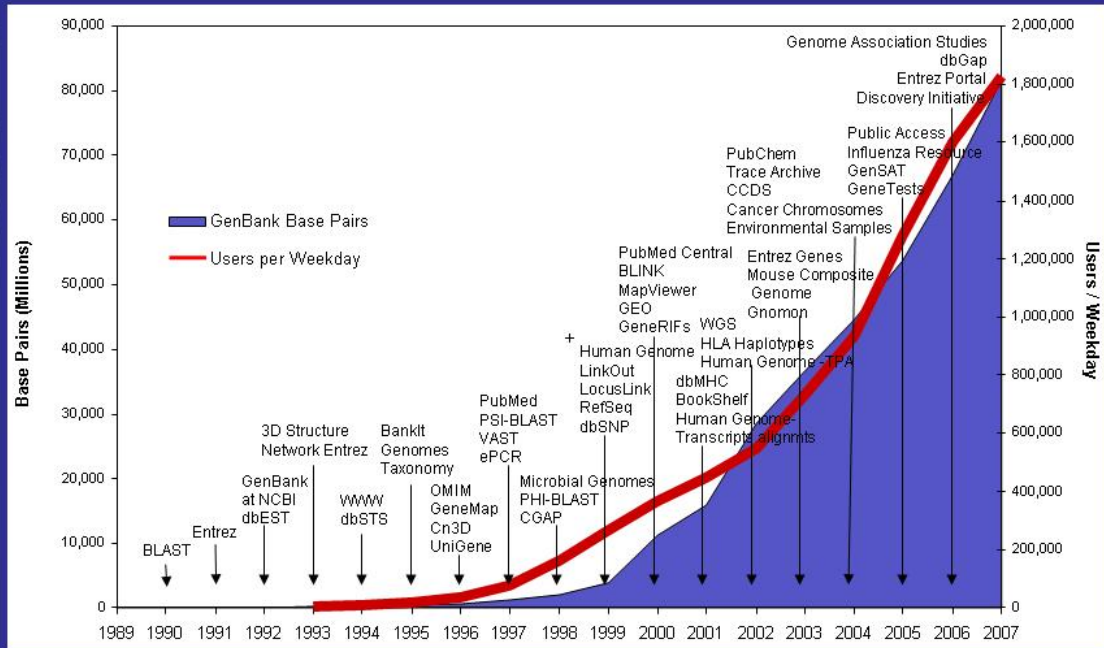
## A New Era in Medicine: Explosion in Scientific Discovery

Ten years ago we knew of one gene that was implicated in diabetes. Recent research has resulted in an explosion of knowledge about the complex genetic underpinnings of diabetes. For type 1 diabetes, three genes were known five years ago, ten genes are known today, and discovery of an additional 14 genes is soon to be announced.

Similarly, ten years ago, no genes had been found for type 2 diabetes—the most common form of diabetes. Five years ago, two were identified. Today, 16 have been found. These discoveries provide new avenues for exploration as researchers probe the functions of these genes in the hope of establishing targets for novel interventions for the treatment of diabetes.

Autism is another example of an explosion of knowledge that needs to be exploited. Two years ago, we were able to associate only 3-5% of autism with genetic mutations, within the last 12 months, 15% of autism is understood to be based on genetics – 6 of these genes were announced just last week. These are great leads – but now we need to pursue them aggressively. We also need to improve our tools for detection because we know that the earlier we can detect this devastating disorder, the better the outcome. Our ultimate goal is to develop new and better interventions strategies to be used as early as possible. And while we attacking this set of leads are have not let up in looking for more. We are undertaking a monumental effort to fully sequence at least 50 genes, which we hope will exponentially increase our search for a cure. In cancer, there are a plethora of new leads.

# Explosive Growth of Knowledge: NCBI Scientific Databases- 2 Million Users/Day!



Notes:

## Explosive Growth of Knowledge: NCBI Scientific Databases- 2 Million Users/Day!

# Roadblock to Scientific Discovery



- In the Internet age, the real value is in the full *connectivity* of *all* available electronic sources of scientific information and their efficient exploitation with the powerful emerging software tools of specialized search engines and not in just posting articles for passive display!
- This is what 21st Century Science and Health require given the current explosion of knowledge and what NIH needs to keep its competitive edge.



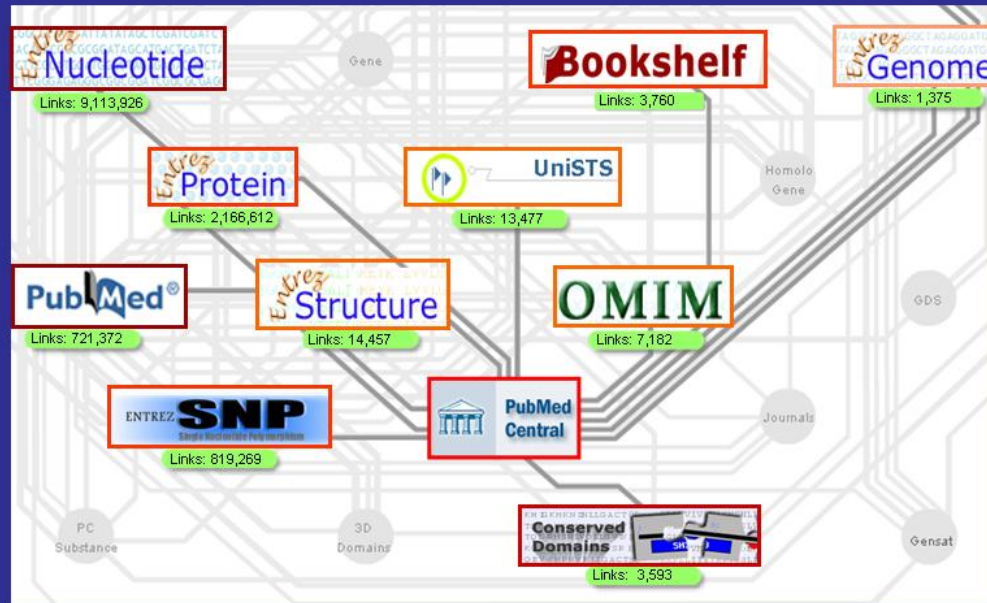
4

Notes:

## Roadblock to Scientific Discovery

- In the Internet age, the real value is in the full *connectivity* of *all* available electronic sources of scientific information and their efficient exploitation with the powerful emerging software tools of specialized search engines and not in just posting articles for passive display!
- This is what 21st Century Science and Health require given the current explosion of knowledge and what NIH needs to keep its competitive edge.

# PubMed Central (PMC): A Vital Component of 21<sup>st</sup> Century Science



Only a few of the interconnected NLM/NCBI scientific databases

Notes:

## PubMed Central (PMC): A Vital Component of 21<sup>st</sup> Century Science

Only a few of the interconnected NLM/NCBI scientific databases

# The World *Before* Public Access



The screenshot shows a Google Scholar search interface. The search bar contains the text "tumor biomarkers for the detection of ovarian cancer". Below the search bar, there are several search results. The first result is titled "Cancer Biomarkers" and is from the website www.Origene.com. Below this, there are several scholarly articles listed with their titles, authors, and citation counts. One article, "The use of multiple novel tumor biomarkers for the... [Gynecol ...]", is highlighted with a red border. The National Institutes of Health logo is visible in the bottom left corner of the screenshot.

Google  Search [Advanced Search](#) [Preferences](#)

Web Scholar

**Cancer Biomarkers**  
www.Origene.com Gene Expression Level Screening And Analysis For Oncology Biomarkers.

Scholarly articles for **tumor biomarkers for the detection of ovarian cancer**


 [Three Biomarkers Identified from Serum Proteomic ...](#) - Zhang - Cited by 344  
[Identification of biomarkers for ovarian cancer using ...](#) - Kozak - Cited by 149  
[Proteomic analysis and identification of new biomarkers ...](#) - Liotta - Cited by 238

[Characterization of serum biomarkers for detection of early stage ...](#)  
markers for early detection of ovarian cancer is paramount. ... has proven to be a poor diagnostic tumor biomarker. for early stage ovarian cancer [8]. ...  
doi.wiley.com/10.1002/pmic.200500093 - [Similar pages](#) - [Note this](#)  
by KR Kozak - 2005 - Cited by 51 - [Related articles](#) - [All 3 versions](#)

[Future Medicine - Biomarkers in Medicine - 2\(3\):291 - Full Text](#)  
Biological requirements for early detection of ovarian cancer ..... The use of multiple novel tumor biomarkers for the detection of ovarian carcinoma in ...  
www.futuremedicine.com/doi/abs/10.2217/17520363.2.3.291 - [Similar pages](#) - [Note this](#)  
by PM Das - 2008

[The use of multiple novel tumor biomarkers for the... \[Gynecol ...](#)  
[Cancer Epidemiol Biomarkers Prev. 2005]; Bead-based ELISA for validation of ovarian cancer early detection markers. [Clin Cancer Res. ...  
www.ncbi.nlm.nih.gov/pubmed/18061248 - [Similar pages](#) - [Note this](#)  
by RG Moore - 2008 - Cited by 4 - [Related articles](#)

[Proteomic approaches to tumor market discovery: Identification of ...](#)  
Current tumor markers for ovarian cancer still lack adequate sensitivity and ... of potential biomarkers for detection of ovarian cancer with discriminatory ...  
findarticles.com/p/articles/mi\_qa3725/is\_200212/ai\_n9161611 - 49k -  
Cached - [Similar pages](#) - [Note this](#)



Notes:

## The World Before Public Access

# PubMed Abstract Shows NIH Funding

The screenshot shows the PubMed interface for a search on "tumor biomarkers for the detection of ovarian carcinoma". The search results show one article from *Gynecol Oncol*, 2008 Feb;108(2):402-8. The abstract title is "The use of multiple novel tumor biomarkers for the detection of ovarian carcinoma in patients with a pelvic mass." The authors listed are Moore RG, Brown AK, Miller MC, Skates S, Allard WJ, Verch T, Steinhoff M, Messerlian G, DiSilvestro P, Granal CO, and Bast RC Jr. The abstract text describes the study's objectives, methods, and results, highlighting the use of HE4 and CA125 biomarkers. The NIH funding information is displayed at the bottom of the abstract: CA086381/CA/United States NCI, CA105009/CA/United States NCI, and P50 CA083639/CA/United States NCI.

NCBI PubMed A service of the U.S. National Library of Medicine and the National Institutes of Health www.pubmed.gov My NCBI Sign In Register

All Databases PubMed Nucleotide Protein Genome Structure OMIM PMC Journals Books

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Limits Preview Index History Clipboard Details

Note: Performing your original search, *tumor biomarkers for the detection of ovarian carcinoma*, in PubMed will retrieve [757 records](#).

Display AbstractPlus Show 20 Sort By Send to

All: 1 Review 0

1: *Gynecol Oncol*, 2008 Feb;108(2):402-8. Epub 2007 Dec 3. [Full Text Article](#) Links

**The use of multiple novel tumor biomarkers for the detection of ovarian carcinoma in patients with a pelvic mass.**

Moore RG, Brown AK, Miller MC, Skates S, Allard WJ, Verch T, Steinhoff M, Messerlian G, DiSilvestro P, Granal CO, Bast RC Jr.

Women and Infants Hospital, Brown University, Providence, RI 02925, USA. rmoore@wihri.org

**OBJECTIVES:** The CA125 tumor marker is used to help predict the presence of ovarian cancer in patients with an adnexal mass. Because elevated CA125 levels occur in many benign gynecologic conditions, we set out to identify other novel biomarkers that would increase the sensitivity and specificity of CA125. **METHODS:** Serum and urine samples were obtained preoperatively from women undergoing surgery for an adnexal mass. The samples were analyzed for levels of CA125, SMRP, HE4, CA72-4, activin, inhibin, osteopontin, epidermal growth factor (EGFR), and ERBB2 (Her2) and were compared to final pathology results. Logistic regression models were estimated for all markers and combinations, with cross-validation analysis performed to obtain the sensitivities at set specificities of 90%, 95%, and 98%. **RESULTS:** Two hundred and fifty-nine patients with adnexal masses were enrolled. Of these, 233 patients were eligible for analysis with 67 invasive epithelial ovarian cancers and 166 benign ovarian neoplasms. Mean values for all marker levels except Her2 differed significantly between patients with benign masses and cancer. As a single marker, HE4 had the highest sensitivity at 72.9% (specificity 95%). Comparatively, combined CA125 and HE4 yielded the highest sensitivity at 76.4% (specificity 95%), with additional markers adding minimally to the sensitivity of this combination. HE4 was the best single marker for Stage I disease, with no increase in sensitivity when combined with CA125 or any other marker. **CONCLUSIONS:** As a single tumor marker, HE4 had the highest sensitivity for detecting ovarian cancer, especially Stage I disease. Combined CA125 and HE4 is a more accurate predictor of malignancy than either alone.

PMD: 18061240 [PubMed - indexed for MEDLINE]

**NIH Funding**  
CA086381/CA/United States NCI CA105009/CA/United States NCI P50 CA083639/CA/United States NCI

**Related Articles**

- Utility of a novel serum tumor biomarker HE4 in patients with endometrioid adenocarcinoma of the uterus. [*Gynecol Oncol*. 2006]
- New tumor markers: CA125 and beyond. [*Int J Gynecol Cancer*. 2005]
- Potential markers that complement expression of CA125 in epithelial ovarian cancer. [*Gynecol Oncol*. 2005]
- Soluble epidermal growth factor receptor (sEGFR) [corrected] and cancer antigen 125 (CA125) as screening a. [*Cancer Epidemiol Biomarkers Prev*. 2005]
- Bead-based ELISA for validation of ovarian cancer early detection markers. [*Clin Cancer Res*. 2006]

» See all Related Articles...

**Related Reviews**

- New tumor markers: CA125 and beyond. [*Int J Gynecol Cancer*. 2005]
- SMRP and HE4 as biomarkers for ovarian carcinoma when used alone and in combination with CA125 and/or each other. [*Adv Exp Med Biol*. 2006]
- Prevention and early detection of ovarian cancer: mission impossible? [*Recent Results Cancer Res*. 2007]

» See all Related Reviews...

Notes:

## PubMed Abstract Shows NIH Funding

# But NIH-funded Article Isn't Available



The screenshot shows the ScienceDirect website interface. At the top, the ScienceDirect logo is on the left, and a notification bubble on the right says "You have Guest access to ScienceDirect" with a "Find out more" link. Below this is a navigation bar with "Home", "Browse", "My Settings", "Alerts", and "Help". The main content area is titled "Access Online Article" and features the article title "The use of multiple novel tumor biomarkers for the detection of ovarian carcinoma in patients with a pelvic mass". Below the title, it lists the journal "Gynecologic Oncology, Volume 108, Issue 2, February 2008, Pages 402-408" and the authors: "Richard G. Moore, Amy K. Brown, M. Craig Miller, Steven Skates, W. Jeffrey Allard, Thorsten Verch, Margaret Steinhoff, Geratyn Messerlian, Paul DiSilvestro, C.O. Granai and Robert C. Bast Jr." with a "View Abstract" link. A central form area is divided into two columns. The left column is for users with a username and password, with fields for "User Name:" and "Password:", a "Remember me on this computer" checkbox, and "Submit" and "Cancel" buttons. The right column is for users without a username and password, with a "Price: US \$ 31.50" (circled in red) and a "Register to Purchase" button. At the bottom of the page, there is a footer with "Home", "Browse", "My Settings", "Alerts", and "Help" links, followed by a "About ScienceDirect" link, "Contact Us", "Information for Advertisers", "Terms & Conditions", and "Privacy Policy" links. The Elsevier logo and "Copyright © 2008 Elsevier B.V. All rights reserved. ScienceDirect® is a registered trademark of Elsevier B.V." are also present. On the left side of the page, there is a vertical blue bar containing the NIH logo and the text "NATIONAL INSTITUTES OF HEALTH".

Notes:

## But NIH-funded Article Isn't Available



# Just Like Many Other NIH-funded Articles

NCBI PubMed A service of the U.S. National Library of Medicine and the National Institutes of Health  
www.pubmed.gov

Search PubMed for ovarian cancer biomarkers Go

[Gagnon A, Ye B.](#)  
Discovery and application of protein biomarkers for ovarian cancer.  
Curr Opin Obstet Gynecol. 2008 Feb;20(1):9-13. Review.  
PMID: 18196999 [PubMed - indexed for MEDLINE]

[Mok SC, Elias KM, Wong KK, Ho K, Bonome T, Birrer MJ.](#)  
Biomarker discovery in epithelial ovarian cancer by genomic approaches.  
Adv Cancer Res. 2007;96:1-22. Review.  
PMID: 17161674 [PubMed - indexed for MEDLINE]

[Thorpe JD, Duan X, Forrest R, Lowe K, Brown L, Segal E, Nelson B, Anderson GL, McIntosh M, Urban N.](#)  
Effects of blood collection conditions on ovarian cancer serum markers.  
PLoS ONE. 2007 Dec 5;2(12):e1281.  
PMID: 18060075 [PubMed - indexed for MEDLINE]

[Zhu Y, Wu R, Sangha N, Yoo C, Cho KR, Shedden KA, Katabuchi H, Lubman DM.](#)  
Classifications of ovarian cancer tissues by proteomic patterns.  
Proteomics. 2006 Nov;6(21):5846-56.  
PMID: 17068758 [PubMed - indexed for MEDLINE]

[Barua A, Bradaric MJ, Kebede T, Espionosa S, Edassery SL, Bitterman P, Rotmensch J, Luborsky JL.](#)  
Anti-tumor and anti-ovarian autoantibodies in women with ovarian cancer.  
Am J Reprod Immunol. 2007 Apr;57(4):243-9.  
PMID: 17362385 [PubMed - indexed for MEDLINE]

All Studies Listed Are Funded By NIH

Notes:

## Just Like Many Other NIH-funded Articles

# The World *After* Public Access

The screenshot displays the PNAS (Proceedings of the National Academy of Sciences) website interface. At the top, the PNAS logo and navigation links are visible. The article title is "HOXB13 promotes ovarian cancer progression" by Jiangyong Miao, Zuncai Wang, Heather Provencher, Beth Muir, Sonika Dahiya, Erin Carney, Chee-Onn Leong, Dennis C. Sgroi, and Sandra Orsulic. The article is published in Proc Natl Acad Sci U S A, 2007, 104(43): 17093-17098. A dropdown menu is open over the "PubMed related arts" link, listing various database options: PubMed record, PubMed related arts, PubMed LinkOut, Gene, HomoloGene, Nucleotide, Compound, Substance, Protein, Taxonomy, and Taxonomy tree. The article abstract is partially visible at the bottom of the page.

Notes:

## The World *After* Public Access

## HOXB13 promotes ovarian cancer progression

Jiangyong Miao<sup>1\*</sup>, Zuncal Wang<sup>1\*</sup>, Heather Provencher<sup>2\*</sup>, Beth Muir<sup>2\*</sup>, Sonika Dahiya<sup>1\*</sup>, Erin Carney<sup>2\*</sup>, Chee-Onn Leong<sup>2\*</sup>, Dennis C. Sgroi<sup>1,2\*</sup>, and Sandra Orsulic<sup>1,2\*</sup>

\*Molecular Pathology Research Unit and Center for Cancer Research, Massachusetts General Hospital, Charlestown, MA 02129; <sup>2</sup>Department of Pathology, Harvard Medical School, Boston, MA 02128; and <sup>3</sup>Massachusetts General Hospital Cancer Center and Harvard Medical School, Boston, MA 02114

Communicated by Kurt J. Isselbacher, Massachusetts General Hospital, Charlestown, MA, August 22, 2007 (received for review May 29, 2007)

**Deregulated expression of HOXB13 in a subset of estrogen receptor-positive breast cancer patients treated with tamoxifen monotherapy is associated with an aggressive clinical course and poor outcome. Because the ovary is another hormone-responsive organ, we investigated whether HOXB13 plays a role in ovarian cancer progression. We show that HOXB13 is expressed in multiple human ovarian cancer cell lines and tumors and that knockdown of endogenous HOXB13 by RNA interference in human ovarian cancer cell lines is associated with reduced cell proliferation. Ectopic expression of HOXB13 is capable of transforming p53<sup>-/-</sup> mouse embryonic fibroblasts and promotes cell proliferation and anchorage-independent growth in mouse ovarian cancer cell lines that contain genetic alterations in p53, c-myc, and ras. In this genetically defined cell line model of ovarian cancer, we demonstrate that HOXB13 collaborates with activated ras to markedly promote tumor growth *in vivo* and that HOXB13 confers resistance to tamoxifen-mediated apoptosis. Taken together, our results support a pro-proliferative and pro-survival role for HOXB13 in ovarian cancer.**

estrogen | Ras | tamoxifen | homeobox | mouse model

**The HOXB13 family of homeobox genes is an important group of developmental transcriptional regulators that are critical for various aspects of differentiation and morphogenesis (1). Similar to other genes that regulate normal growth and differentiation, HOXB genes have been implicated in different aspects of the oncogenic process, because ectopic expression of HOXB genes promotes cellular transformation *in vivo* and tumorigenesis *in vivo* (2). Of particular interest to human tumorigenesis is the observation that various human tumors including breast, colon, prostate, and lung carcinomas display altered HOXB gene expression (3–7). Several HOXB family members have been implicated in ovarian cancer differentiation (8, 9), although it is unknown whether HOXB genes play a direct role in ovarian cancer progression.**

**We recently demonstrated that dysregulated HOXB13 expression in human breast cancer is directly correlated with poor clinical outcome in estrogen receptor (ER)-positive breast cancer patients treated with tamoxifen monotherapy (10). In preliminary functional studies, we demonstrated that ectopic expression of HOXB13 in a nontransformed human mammary epithelial cell confers increased cell migration and invasion, two characteristics associated with tumor aggressiveness (10). Consistent with a possible role in human tumorigenesis, others have recently shown that HOXB13 is overexpressed in human endometrial, ovarian, and cervical carcinomas and that overexpression of HOXB13 is associated with the invasiveness of ovarian and endometrial cancer cells (11–13). Collectively, these observations suggest that HOXB13 may play an important role in tumors arising from endocrine-responsive organs. Herein, we characterized the expression of HOXB13 in ovarian cancer cell lines and tumors. Furthermore, we investigated the potential growth modulatory role of HOXB13 *in vitro* and in a genetically defined mouse model of ovarian cancer.**

**Results and Discussion**

**HOXB13 is Expressed in Multiple Human Ovarian Cancer Cell Lines and Tumors.** We have recently demonstrated in a cohort of 42 sporadic breast cancer patients that HOXB13 is markedly up-

**HOXB13 Induces Spindle-Like Morphology, Anchorage-Independent Cell Proliferation.** The observation that HOXB13 is expressed in human ovarian cancer cell lines and expression of HOXB13 in human breast cancer is associated with a more aggressive clinical course compared with that of breast cancer patients that do not express HOXB13, raises the possibility that HOXB13 may play an important role in tumor progression. To investigate this possibility, we first examined whether HOXB13 promotes ovarian tumor growth in a mouse model of ovarian cancer. Ectopic expression of this gene by retroviral delivery in T1 ovarian cancer cells from mouse ovarian surface epithelial cells confers increased cell proliferation and anchorage-independent growth *in vitro* (data not shown). To determine the effect of HOXB13 on tumor growth *in vivo*, we performed colony growth assays by measuring light absorbance at 540 nm of crystal violet dye. Compared with a control, the HOXB13-directed shRNA (shHOXB13-1 and shHOXB13-2) result in a 50–95% reduction in SKOV-3 and OVCAR-5 cell growth (data not shown). These results support the hypothesis that HOXB13 modulates growth of ovarian cancer cells.

**HOXB13 Promotes Ovarian Tumor Growth in a Mouse Model of Ovarian Cancer.** To determine the effect of HOXB13 on tumor growth *in vivo*, we performed colony growth assays by measuring light absorbance at 540 nm of crystal violet dye. Compared with a control, the HOXB13-directed shRNA (shHOXB13-1 and shHOXB13-2) result in a 50–95% reduction in SKOV-3 and OVCAR-5 cell growth (data not shown). These results support the hypothesis that HOXB13 modulates growth of ovarian cancer cells.

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### HOXB13 levels decrease in prostate cancer cells after irradiation treatment

Time	Dose	Cell Line	HOXB13 Level (GDS723 / 83360_at)
0 h	control	LNCaP	~25
6 h	1 x 10 Sv	LNCaP	~24
24 h	1 x 10 Sv	LNCaP	~23
6 h	4 x 2.5 Sv	LNCaP C4-2	~22

Legend: (single channel) count (red bar), percentile rank within the sample (blue bar)

PMC automatically provides a link to the Gene Expression database, where you learn how the same gene is controlled in prostate cancer treatment.

Notes:

## The HOXB13 Gene

HOXB13 is a gene that is important in the development of the embryo.

The PNAS Paper shows that the HOXB13 gene makes ovarian cancers grow faster.

In another NCBI database of gene expression experiments, there is a record that shows that the HOXB13 gene is also present in prostate cancer, and the levels can be reduced by radiation treatment.

Even though there is no direct link or citation to this experiment in the research article, we know they are related because our linking system knows that both the experiment and the article are referring to the same gene. So the power of this approach is that a person looking at the ovarian cancer article discovers that HOXB13 is also important in prostate cancer without having to know about or search another database.

### 1 PubMed Search Results

Search PubMed for anti-influenza treatment prevention

All: 177 Review: 24

Items 41 - 60 of 177

46: Bantia S, Parker CD, Ananth SL, Horn LL, Andries K, Chand P, Kotian PL, Dehghani A, El-Kattan Y, Lin T, Hutchison TL, Montgomery JA, Kellog DL, Babu YS. Comparison of the anti-influenza virus activity of RWJ-270201 with those of oseltamivir and zanamivir. Antimicrob Agents Chemother. 2001 Apr;45(4):1162-7. PMID: 11257030 [PubMed - indexed for MEDLINE]

### 2 Chemical Structures in Article

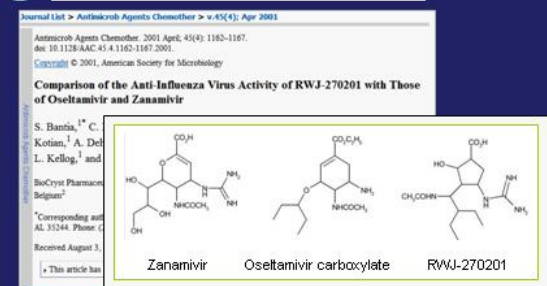


FIG. 1. Structures of compounds under investigation

### 3 Compound in PubChem

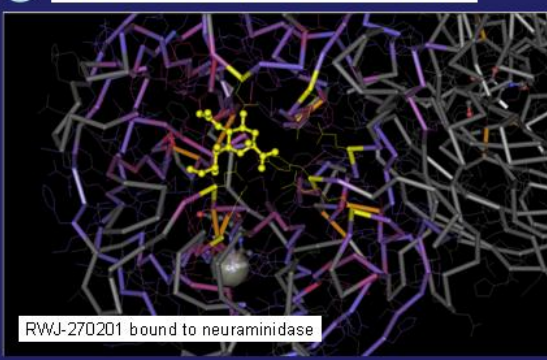
RWJ-270201

Compound Summary:

- CID: 154234
- Substances: 7 Links
- PubMed: 14 Links
- Protein Structures: 3 Links
- NLM Toxicology: Link
- Related Compounds: Same, Connectivity: 4 Links
- Similar Compounds: 5 Links
- Structure Search

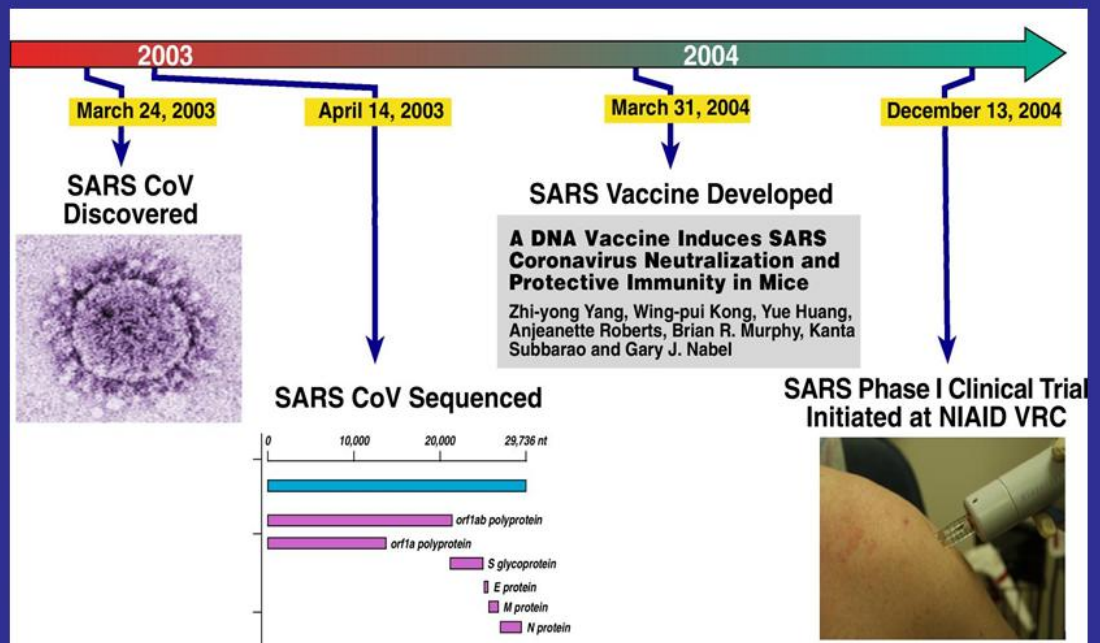
MeSH Synonyms Properties Descriptors Category Exports

### 4 3-D View of Chemical and Protein



No Notes

# Power of 21<sup>st</sup> Century Science: SARS Characterization and Vaccine Development



Notes:

**Power of 21<sup>st</sup> Century Science: SARS Characterization and Vaccine Development**

## Is There Evidence of a Deleterious Impact of Public Access?

- Since 2000, almost 500 journals have elected to fully participate in PubMed Central and provide *all* their content with embargo period up to 12 months – many reduced their embargo period to less than 12 months
- Through websites such as HighWire press, many publishers make their *full* content electronically available for free after 12 months
- *No negative economic or peer review impact has been demonstrated for these publishers*

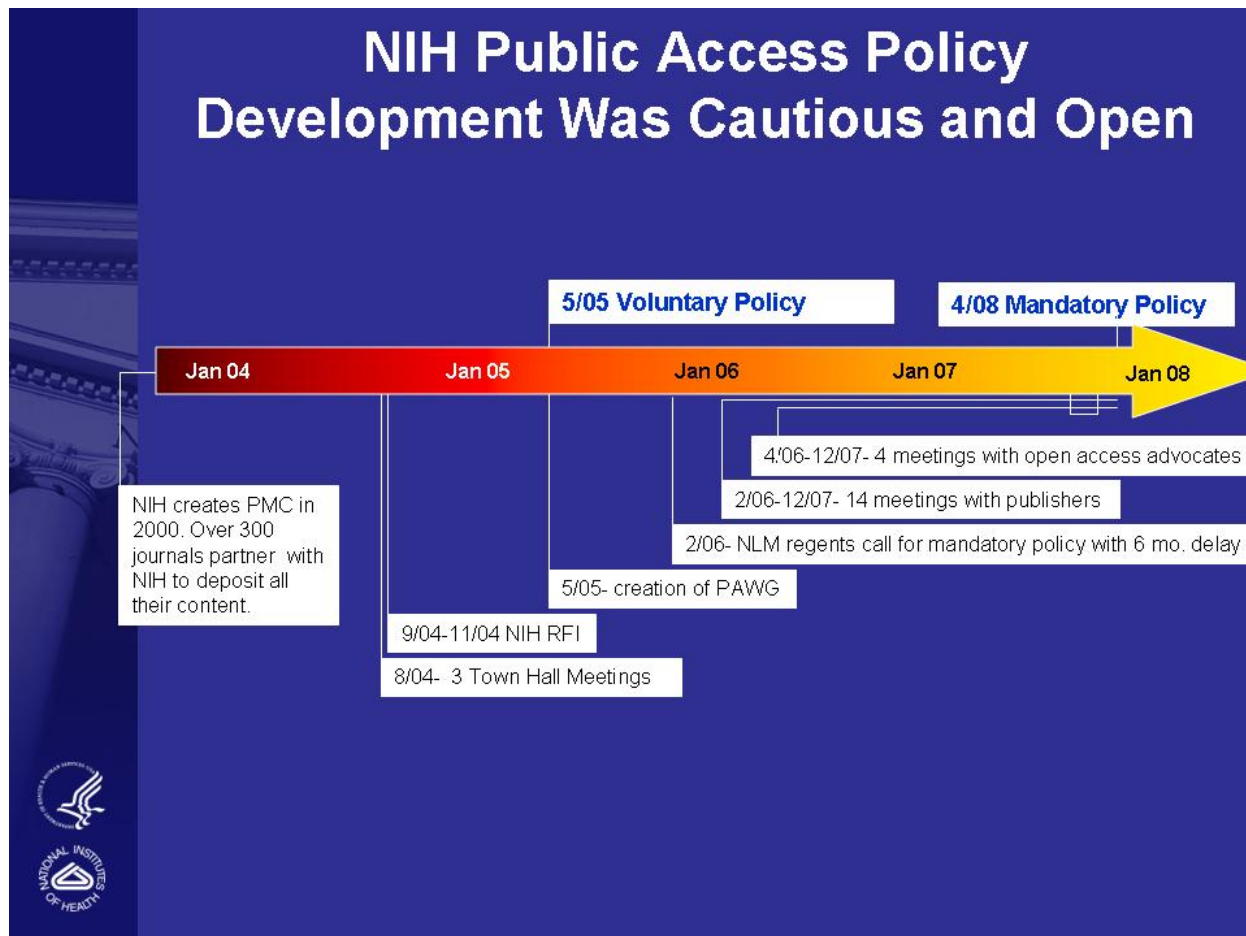


Notes:

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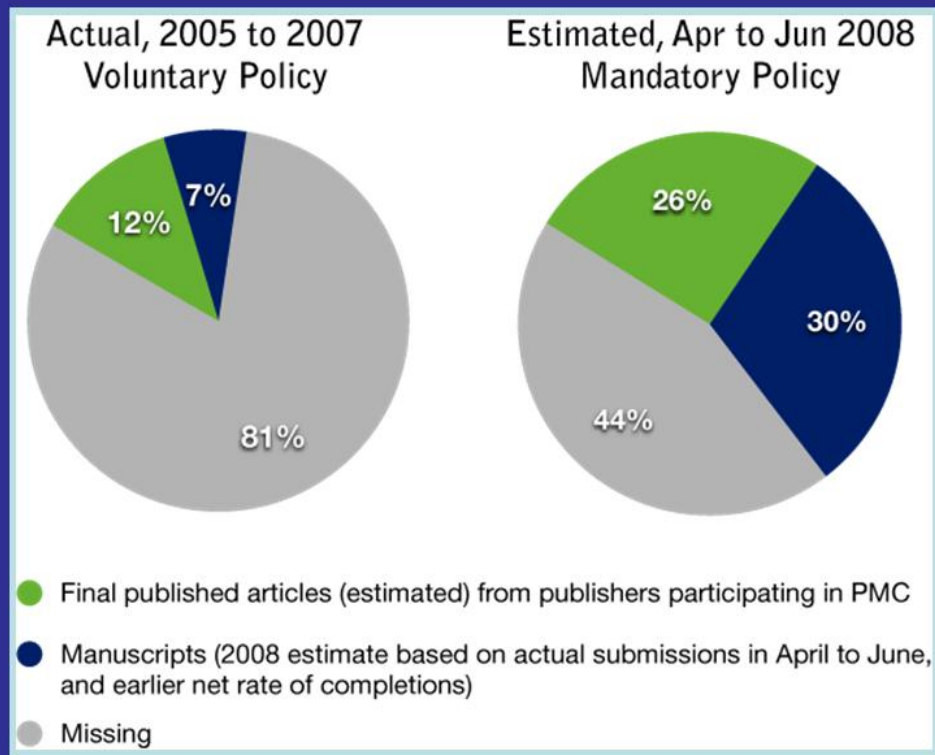
# NIH Public Access Policy Development Was Cautious and Open



Notes:

## NIH Public Access Policy Development Was Cautious and Open

# The New NIH Policy is Working



Notes:

## The New NIH Policy is Working

The CACR for year-end 2007 reported a total of 14,937 papers (13,519 from NIHMS and 1418 from NIH Portfolio) collected under the Policy from May 2005 through Dec. 2007. In the six or so months since then, authors have approved roughly 1,500 more papers that were deposited in the NIHMS prior to 2008, but did not yet have the necessary author approvals when the CACR numbers were developed.

The new total number of manuscripts deposited via the NIHMS between May 2005 and Dec. 2007 that now are ready for, or loaded into, PMC is 15,011. Based on a policy target of 80,000 NIH-funded articles per year, that represents a 7% rate for manuscripts deposited via the NIHMS.



# Many Publishers Now Deposit Manuscripts on NIH-funded Author's Behalf

*Some Allow Embargoes of Less Than 12 months*

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American Chemical Society



As of September 2008

Notes:

## Many Publishers Now Deposit Manuscripts on NIH-funded Author's Behalf

Some Allow Embargoes of Less Than 12 months

As of September 2008

## The NIH Requirement is Less Stringent than Current International Public Access Policies

Funder	Delay Period	Funding
NIH Public Access Requirement (Sec. 218)	up to 12 mo	allowable cost for grants
Howard Hughes Medical Institute	up to 6 mo	dedicated fund
European Research Council	up to 6 mo	allowable cost for grants
UK Medical Research Council	up to 6 mo	allowable cost for grants
Wellcome Trust	up to 6 mo	dedicated fund



- NIH allows grantees to pay publication costs directly to publishers such as page, illustrations, reproduction and posting charges
- Many peer reviewers are NIH-funded scientists

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Posting Publisher's Published Articles Arising from NIH funds to PMC	Author→Publisher	Author→Publisher
Posting Published Articles Not Arising from NIH Funds to PMC	Author→Publisher	Author→Publisher
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Preparing Derivative Works	Author→Publisher	Author→Publisher
Posting NIH-funded Author's Manuscripts to PMC after 12 months	Author→Publisher	<b><i>Author Retains Right</i></b>
Posting Publisher's Published Articles Arising from NIH funds to PMC	Author→Publisher	Author→Publisher
Posting Published Articles Not Arising from NIH Funds to PMC	Author→Publisher	Author→Publisher
Posting Articles or Manuscripts to Other Archives	Author→Publisher	Author→Publisher
Distributing Copies for Transfer	Author→Publisher	Author→Publisher
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## What is at Stake

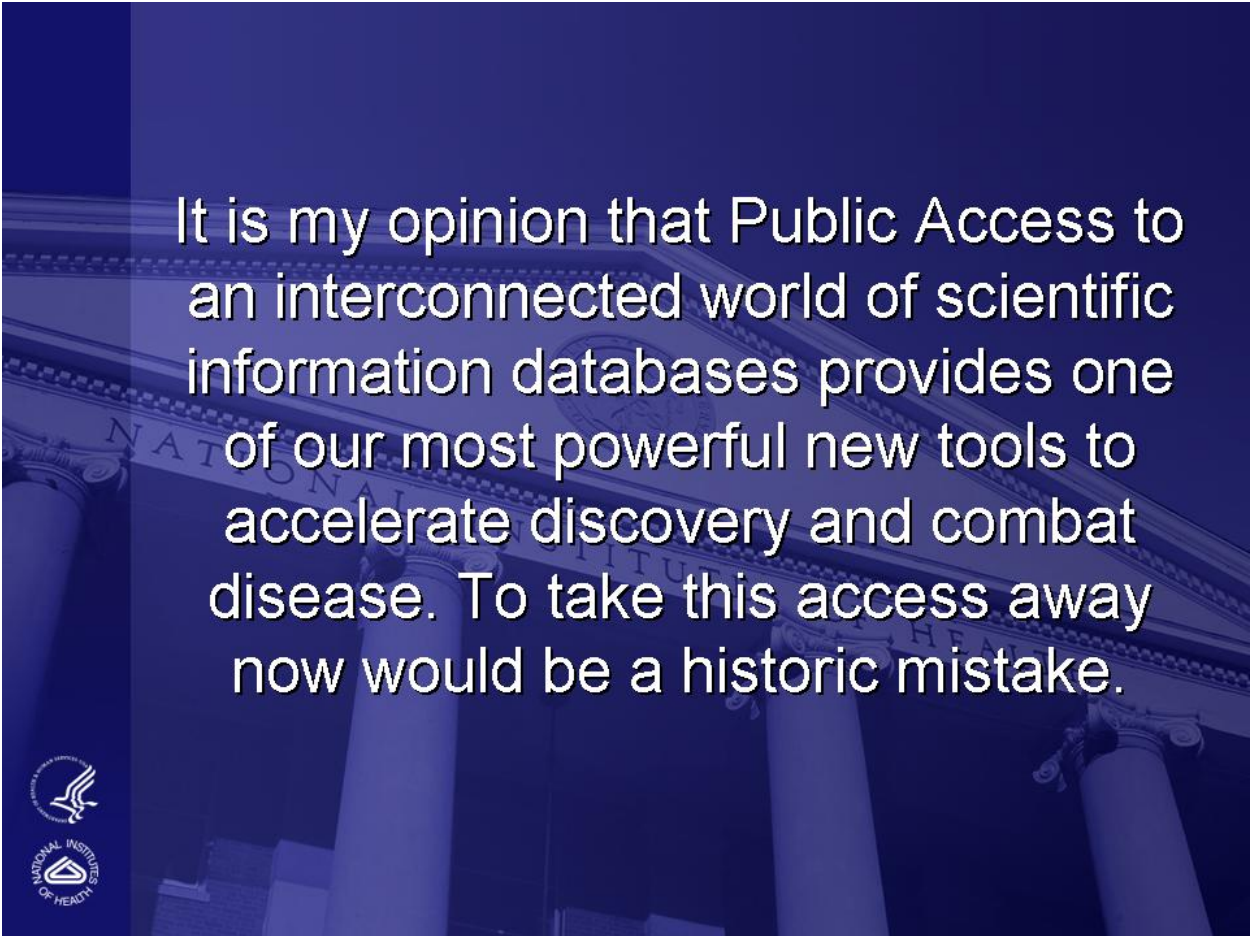
- About 80,000 journal articles that arise from NIH funds each year, and represent roughly \$23 billion of taxpayer investment
- Applying 21<sup>st</sup> information technology to the NIH investment to promote science and health in the context of a globally wired and networked world of scientific information
- Making NIH more transparent and accountable and better able to make strategic decisions about its portfolio
- Ensuring more rapid scientific progress and the discovery of new treatments



Notes:

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It is my opinion that Public Access to an interconnected world of scientific information databases provides one of our most powerful new tools to accelerate discovery and combat disease. To take this access away now would be a historic mistake.



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