

University Research Distribution: From Option to Necessity

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The present passive role of the University in publishing.



- Publication is the responsibility of the author.
- The author's incentive is scholarly motive pride, merit salary increases, promotion, tenure, and sometimes even money.
- Publication Venues: Scholarly Journals, Academic Press Monographs, Trade and Commercial Publishers.

Distribution of high quality research to portions of targeted audiences

- Scholarly Journal and University Press Monographs have limited distribution and, in most cases, the distribution is steadily diminishing.
- The audiences tend to be limited by ability to pay of the reader or of the organization to which the reader belongs.

But scholarly journals and university presses do provide . . .

- High quality refereeing and review yielding some help in sorting through the mass of research literature.
- We also rely on them in our evaluation processes



What would be gained if we could distribute research to all who wanted access to it without damaging scholarly journals or presses?

Imagine that each of these were on-line and freely accessible:

- All Rutgers faculty referred publications
- All Rutgers grant final reports
- All Rutgers federally funded data sets
- All Rutgers dissertations
- All Rutgers masters theses and senior honors papers
- All Rutgers Centers and Institutes related publications
- All Rutgers . . .

What Would be Different?

- For individual authors?
- For scholarship?
- For the Rutgers & its departments, centers and institutes?

Imagine further

- That all this was available through a web portal and readily identifiable with the Rutgers
- You have that vehicle available to you through *RUcore*

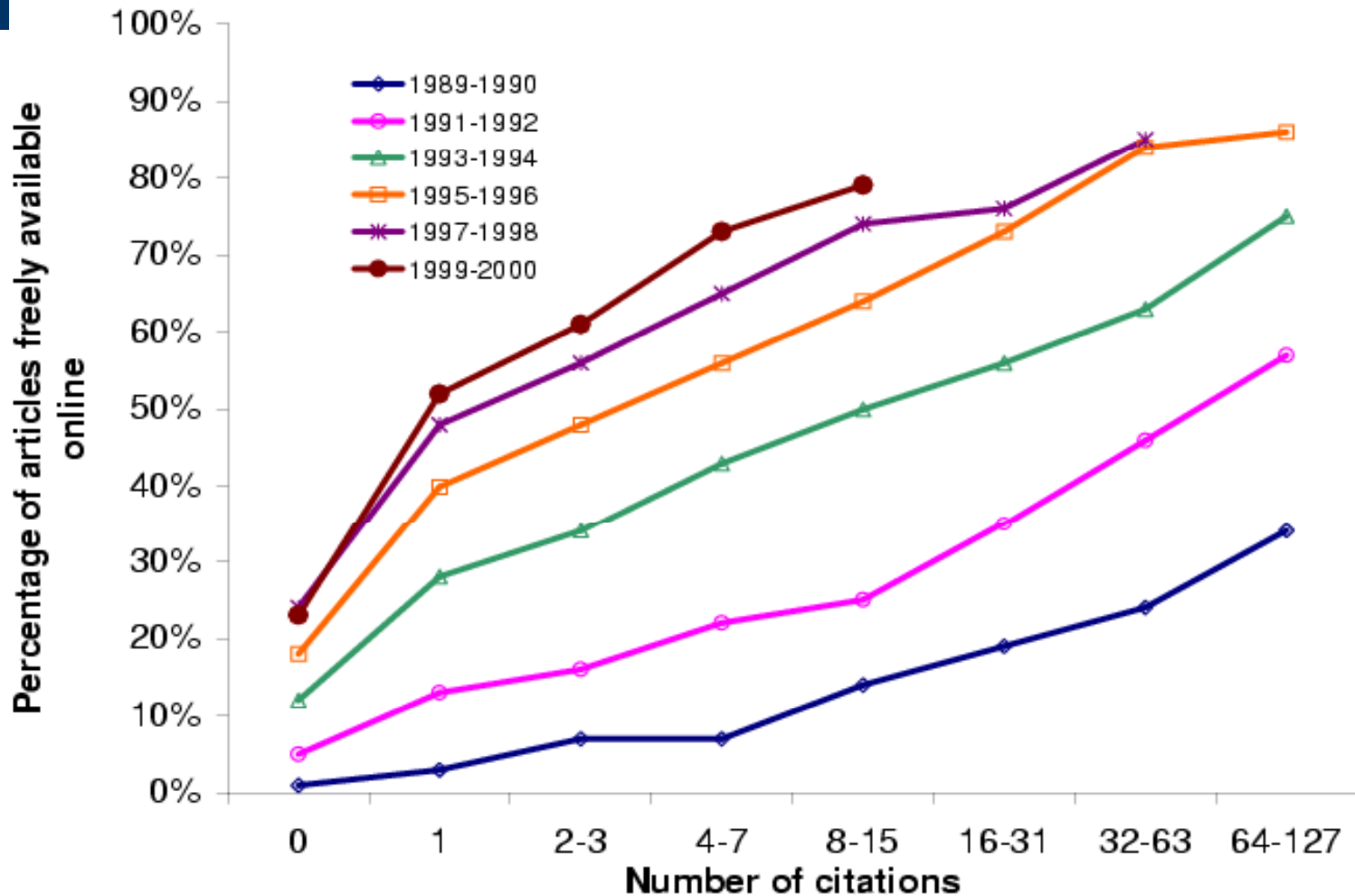
15,000+ objects and growing

Different For Authors?

- More Visibility for Your Faculty's Work
- More Citations of Your Faculty's Works
- Therefore, more fame and fortune for them and for your university.

On Line or Invisible

Steve Lawrence, Nature 2001, Vol. 411p.253



Gunther Eysenbach, “Citation Advantage of Open Access Articles”,

PLoS Biology 2006;4(5)e8

- More citations
- Article cited sooner
- Citations continue at a significant rate for a longer period of time

Where to Place Your Work to Win a Fields Medal: arXiv.org

- **3. math.DG/0307245** [[abs](#), [ps](#), [pdf](#), [other](#)] :
 - Title: **Finite extinction time for the solutions to the Ricci flow on certain three-manifolds**
Authors: **Grisha Perelman**
Comments: 7 pages
Subj-class: Differential Geometry
MSC-class: 53C
- **4. math.DG/0303109** [[abs](#), [ps](#), [pdf](#), [other](#)] :
 - Title: **Ricci flow with surgery on three-manifolds**
Authors: **Grisha Perelman**
Comments: 22 pages
Subj-class: Differential Geometry
MSC-class: 53C
- **5. math.DG/0211159** [[abs](#), [ps](#), [pdf](#), [other](#)] :
 - Title: **The entropy formula for the Ricci flow and its geometric applications**
Authors: **Grisha Perelman**
Comments: 39 pages
Subj-class: Differential Geometry
MSC-class: 53C
 - *Perelman was awarded the Fields Medal in 2006 but declined it.*

Different for Scholarship?

- Easier, More Complete Literature Review
- Reduced Probability of Reinventing the Wheel—
Less Wasted Time
- University Resources less Severely Restrict
Scholarship
 - US
 - Developing nations

More Rapid Development of Knowledge

But Isn't Everything On Line Now?

- Stephen A. Hansen American Association for the Advancement of Sciences
- Survey of 2,157 U.S. Scientist in March and April 2006 reported in Chronicle of Higher Education Daily News (January 17, 2007)
- Nearly one-third said their own research had been affected by difficulties in obtaining copyrighted scientific literature.

Invisible in Paper : History or Current Event?



- Fleming reported the discovery of penicillin Journal of Experimental Pathology, 1928
- Chain and Florey, 1938 “rediscovered” the Fleming article and developed penicillin. Through USDA production and manufacturing process perfected and used by Allied troops in WWII.

JSTOR

- Older Articles **Rediscovered** When Placed Online
- Citations to them increase

A Vision of a More Productive Future

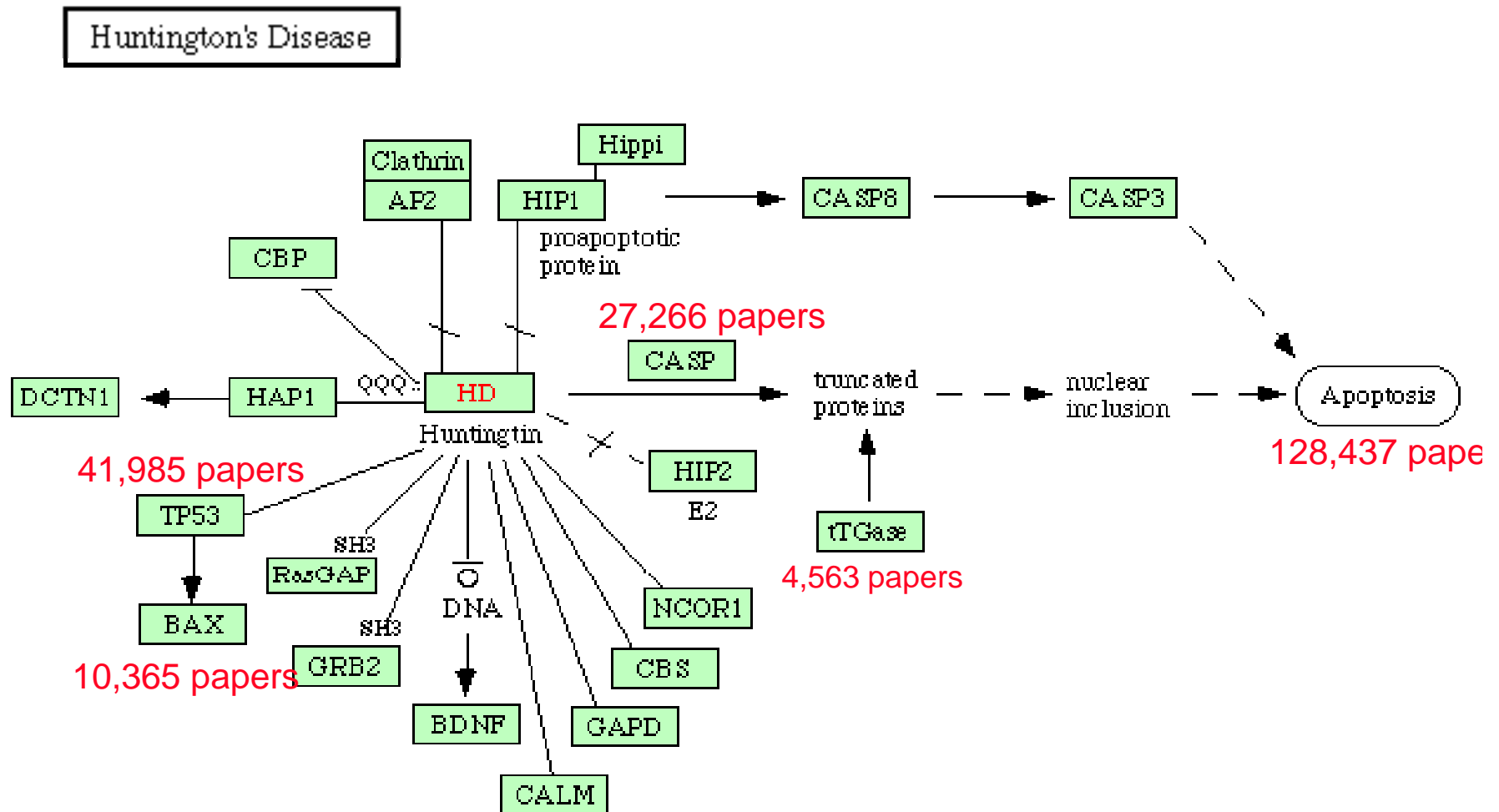
Elias Zerhouni's (NIH Director) vision of the future of medical research involves having all research studies, all genome structures, all chemical information, etc. on-line so that connections that an individual scientist may never encounter by reading the literature become discoverable.



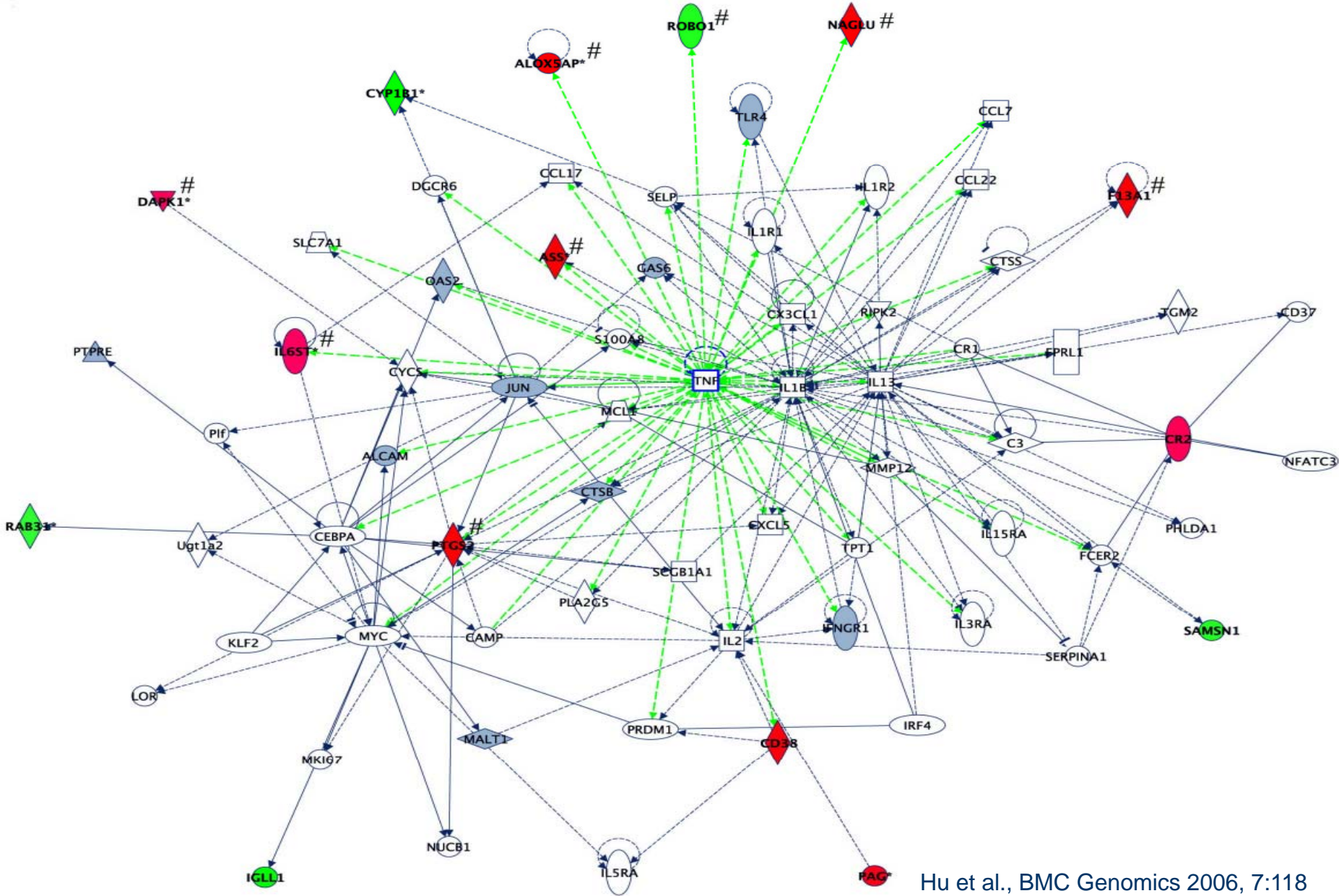
- "Perhaps no problem facing the individual scientist today is more defeating than the effort to cope with the flood of published scientific research, even within one's own narrow specialty."

- Robert K. Merton, "The Matthew Effect in Science," 159 *Science* 56-63 (**1968**).

For each gene or protein that may be associated with Huntington's Disease there are thousands or hundred of thousands of papers.



Or a representation of gene and cell interactions that may be implicated in autism



The examples need not be from the sciences There is too much to read in most established fields of research.

- How many books/articles on Lincoln?
- On Chaucer?
- On Shakespeare?

- How many University Press books sell 500 or fewer copies and sit unseen in Library collections

- Put them on-line and they have a better chance for visibility
- Google Books
- University of Pittsburg Press

Different for Rutgers and its Departments, Centers and Institutes?

- Visibility Increases
- Recognition of Value Increases
- Perhaps—Some of the Increased Value Becomes Tangible—More Funding
- Internal-A Little Less Paperwork & A Lot More Accuracy
- Impact on Proposal Success?

It is not just academics who care.

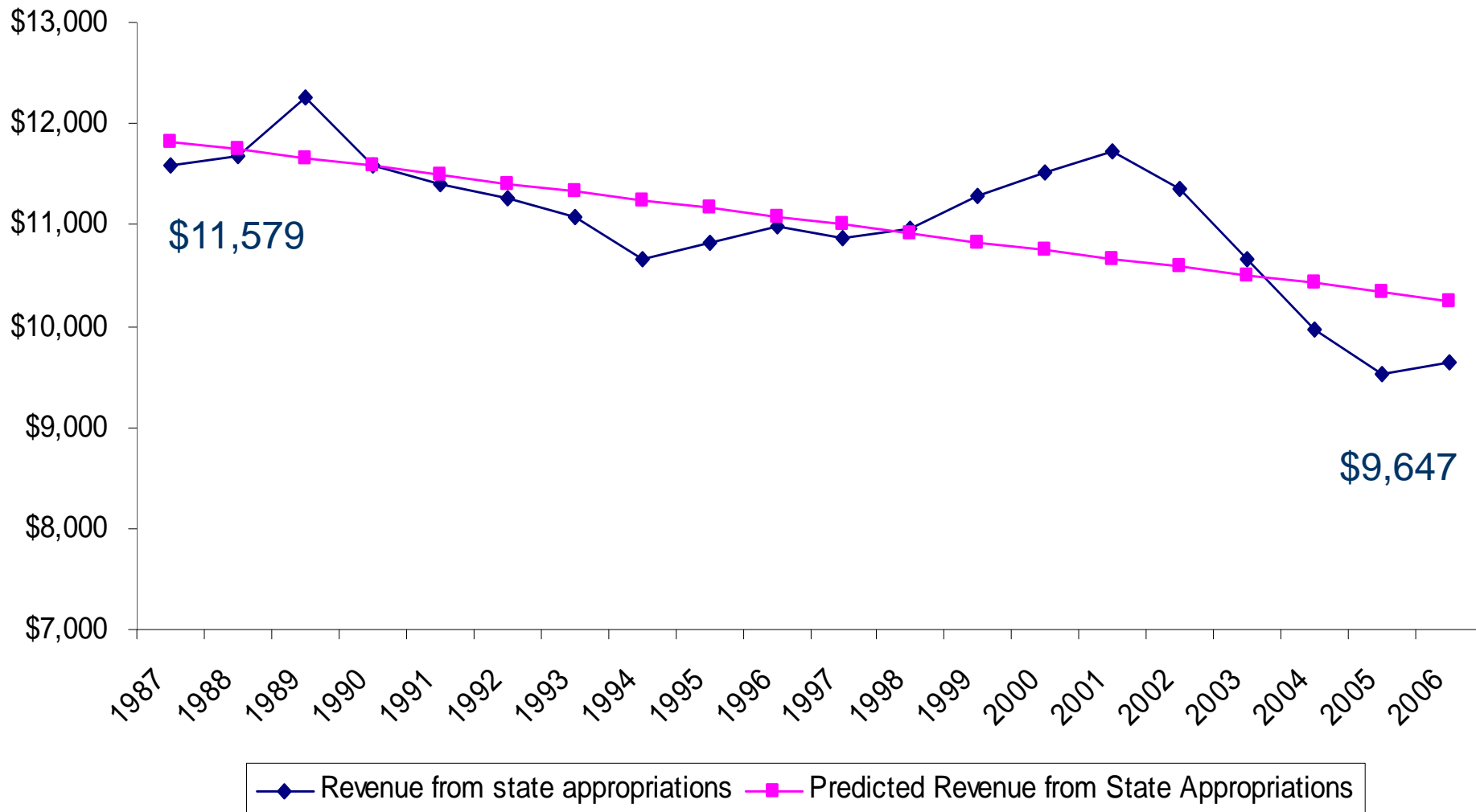
- Pat Furlong Parent Project Muscular Dystrophy (focused on Duchenne MD)
- Two sons with MD
- One unnecessary medical tragedy

Search of **RUCORE** for the sort of things New Jersey citizens might be interested in turned up:

- **Cancer** 186
- **Transportation** 159
- **Pharmaceuticals** 44
- **Obesity** 42
- **Gender** 31
- **Climate** 17
- **Immigration** 6

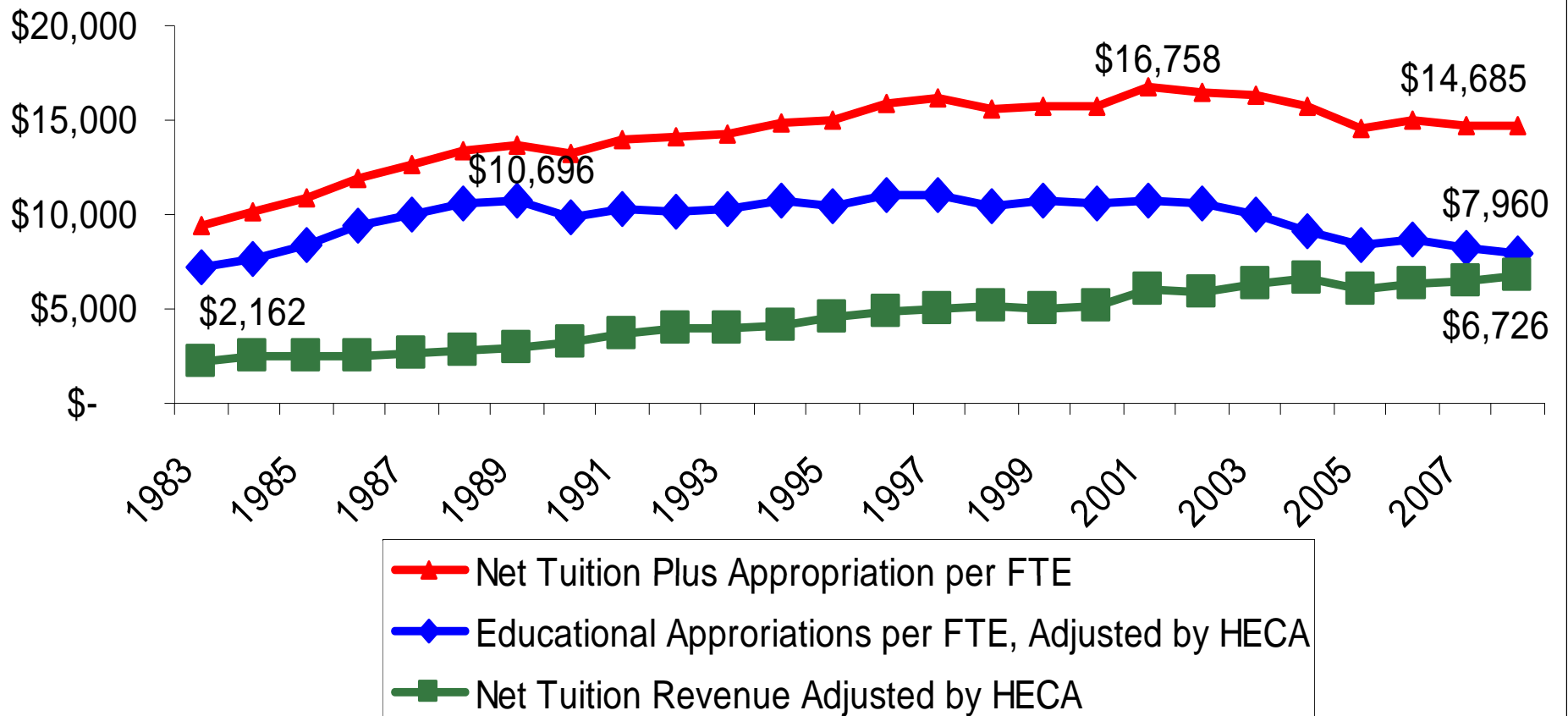
THE NATIONAL PICTURE

Actual and Predicted State Appropriations Revenue per FTE (2006\$)



New Jersey's Financing Trends

New Jersey's Higher Education Finance



So, What is Your Role?

- Place Your Stuff in *RU*core Web
- Develop Systems at Departmental, College, Center & Institute to ensure that the depositing routinely happens
- Recreate the Historical File as possible/desirable

Role - Continued

Live by the Golden Rule

- Modify Copyright Requests
- Publish in Open Access Journals
- Make sure your scholarly society values supporting scholarship and uses journal revenues only to support its journal(s)
- Support Your Library's Hard Decisions

Role Continued

Insist that “Public Goods” Remain Public

- Support requirements that Scholarship produced with Public Funds remain available to the Public
- Especially support the spread of the NIH deposit requirement to other agencies

NIH “Public Access” Deposit Requirement

- Research funded by NIH
- That is published in a scholarly journals
- Manuscript must be deposited in PubMed Central upon acceptance for publication by a scholarly journal and be made publicly available no later than one year after publication in that journal.

NIH Deposit Requirement - continued

- Limited in reach to articles published in scholarly journals
- specifically excluded: classified research, unpublished manuscripts, lab notes, phone logs, other background material used to produce the final manuscript, research resulting in works that generate revenue or royalties for authors (such as books) and patentable discoveries, to the extent necessary to protect a copyright or patent.

Include Other Agencies in Public Access

- Support Cornyn/ Lieberman's Public Research Act of 2009 S-1373
- All agencies with externally funded research of \$100 million or more
- Six month embargo maximum
- Deposit must be under agency approved terms but could be in non-agency repository

Period of embargo is a key variable

- Open Access has no embargo
- Public access generally has some embargo
- Impact on Journals?


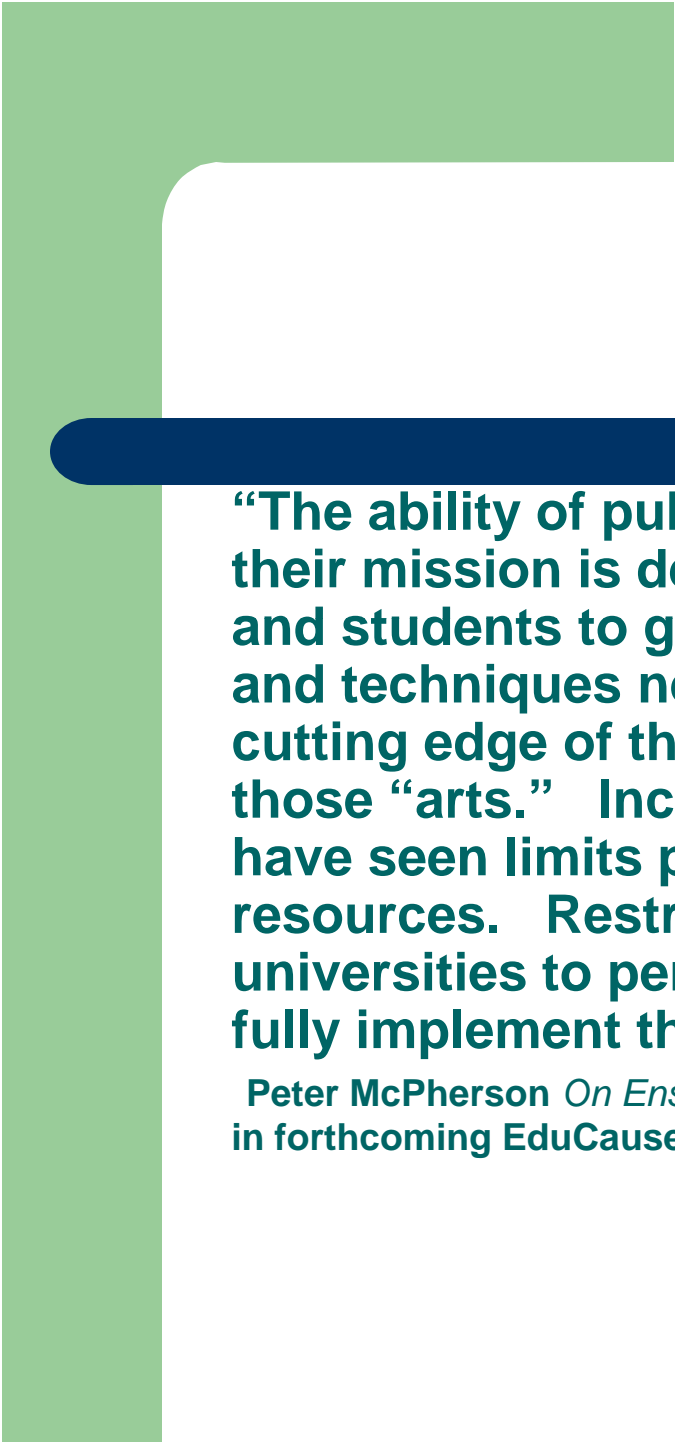
I know of no evidence of Journals dramatically losing subscriptions due to public access. Many journals have voluntarily permitted public access and more are contemplating doing so.

Campuses should initiate discussions involving administration and faculty about their current practices and/or intellectual property policies in order to promote and assure broad access to and dissemination of research and scholarly work produced by faculty.

Adopted by APLU CAA Executive Committee on 2/9/09 From APLU/AAU/ARL/CNI draft of call for campus discussions.



Follow the path established by Harvard, MIT, and now (5/28/09) the University of Kansas

Each faculty member grants to KU permission to make scholarly articles to which he or she made substantial intellectual contributions publicly available in the KU open access institutional repository, and to exercise the copyright in those articles. In legal terms, the permission granted by each faculty member is a nonexclusive, irrevocable, paid-up, worldwide license to exercise any and all rights under copyright relating to each of his or her scholarly articles, in any medium, and to authorize others to do the same, provided that the articles are not sold for a profit. This license in no way interferes with the rights of the KU faculty author as the copyright holder of the work. The policy will apply to all scholarly articles authored or co-authored while a faculty member of KU. Faculty will be afforded an opt out opportunity. Faculty governance in consultation with the Provost's office will develop the details of the policy which will be submitted for approval by the Faculty Senate.


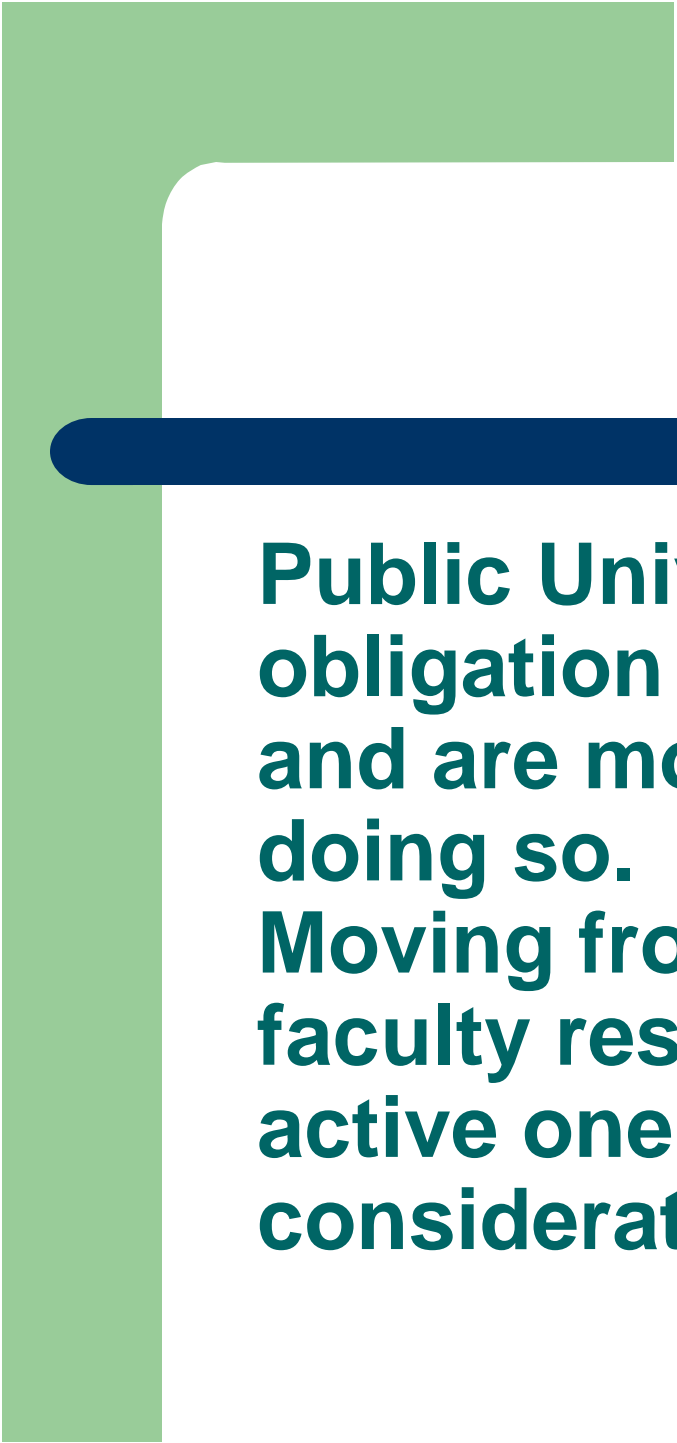


“The ability of public universities and others to carry out their mission is dependent upon the ability of our faculty and students to gain access to the knowledge, equipment, and techniques necessary to teach and research at the cutting edge of the disciplines and engage in the practice of those “arts.” Increasingly, our faculty and researchers have seen limits placed on their access to these critical resources. Restrictions that limit the ability of public universities to perform their missions make it difficult to fully implement the public good.”

Peter McPherson *On Ensuring that Intellectual Property Public Policy Promotes Progress*
in forthcoming *EduCause*



Rutgers could be the real leader of the academy if it affirmatively accepted a research distribution obligation and developed a complete, digital and accessible collection of its scholarly assets on *RUcore*.



Public Universities have a higher obligation to make their work public and are more likely to benefit from doing so.

Moving from a passive stance on faculty research distribution to an active one is worth your careful consideration.