

From: Marcelo Magnasco
Subject: HR 3699 and "added value" to federally-funded research.
Date: January 11, 2012 4:46:03 PM EST
To: publicaccess@ostp.gov

The recent uproar over HR 3699, which particularly affects me since Rep. Maloney is my own representative, has led me to try to put some real numbers on the costs involved, to show how inappropriate it is to give sole control over the dissemination of research results to the editorial house.

Basic cost analysis of one of my research papers, of which I publish approximately 3 per year.

Borne by by institution (Rockefeller University):
My salary, benefits, cost of upkeep of my laboratory and other installations and other subsidies by my employer (Rockefeller University): 100'000\$
100'000\$.

Borne by my funding agencies (National Science Foundation/National Institutes of Health):
Salary of postdoctoral fellows and students involved in the project, supplies/reagents/computers used: 100'000\$
100'000\$

(These two include the advertisement costs for the paper (i.e. exposition of the research in international conferences and seminars etc.).)

Borned by their respective institutions:
3 hours of an academic journal editor's time: 600\$.
12 hours of referee's time: 1800\$.

2400\$.

Costs of the editorial house:
Amortized cost of the software tracking submission and reviewers, etc: probably <10\$ per paper.
Copyediting, formatting, color separation, etc: <2000\$/paper (extremely generous estimate given that self-publishing books costs in the dollar per page range and require mere hours from the author)

Here the fixed costs on a per-paper basis end. The next costs have to do with dissemination, and thus with how many libraries subscribe to the journal.

(Note that these costs are charged to the author in the form of page charges and figure layout charges.)

Cost of printing and shipping: <10\$ per paper per library (charged to the library)
Cost of electronic archival and bandwidth <10\$ per year per paper (charged to the libraries and electronic subscribers many times over)

Therefore it costs next to 200'000\$ to create the research behind each one of my papers and to pay for the writing of it, borne roughly equally between the Federal government and my research institution. It costs about 2500\$ for the scholarly side of peer review, and maybe another 2500\$ for the one-time productions costs that editorial houses add as "added value", which is usually charged to the author upfront. The other costs are to disseminate to the subscribers, who actually pay for the service.

Why would total control over the copyright and dissemination of the work be given to a company that is adding 2'500\$ worth of value to a 200'000\$ proposition? In which way does allowing the federal government to disseminate (from their servers which they pay for) the PDF of the work after 1 year, or 6 months, of initial publication impinge on the publishing house's recouping their 2500\$? (Which they do up front, I repeat).

Marcelo Magnasco
Professor and Head,
Mathematical Physics Lab <http://sur.rockefeller.edu/Plone>
The Rockefeller University magnasco@rockefeller.edu