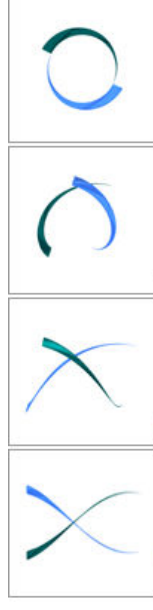


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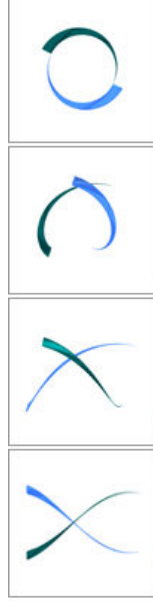
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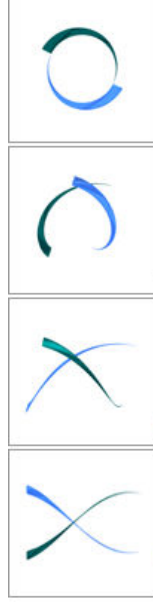
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# Scientific Publishing....

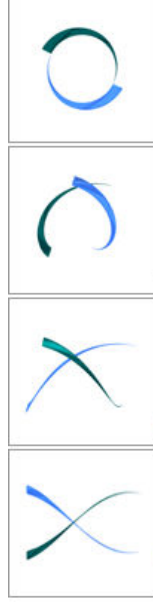
- **What is the current publishing model?**
- **What's wrong with it?**
- **What are the alternatives?**



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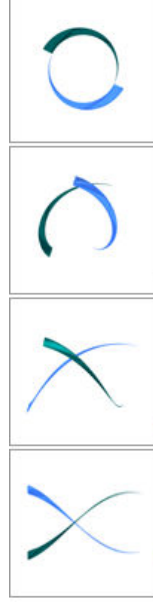
# Current Model

- › Subscription or licence, payable to obtain access
- › Authors hand over copyrights to the publisher
- › Content is being sold
- › Journals are quasi-monopolistic



*'We think of the publishers as being like a midwife... They are paid for their role, and at the end of the day, they give the baby back to the parents'*

Mike Eisen – Public Library Of Science

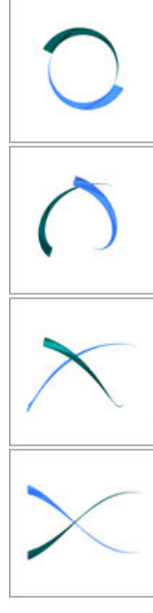


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# “What are publishers doing for us?”

*'I think scientists all over would be shocked to realise what a phenomenally lucrative business scientific publishing can be.'*

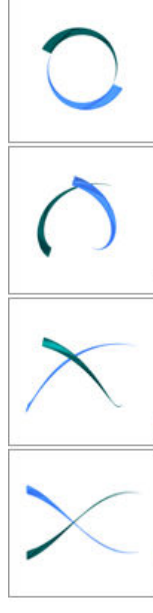
Nicholas Cozzarelli-  
editor in chief of the PNAS



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# Scientific Publishing....

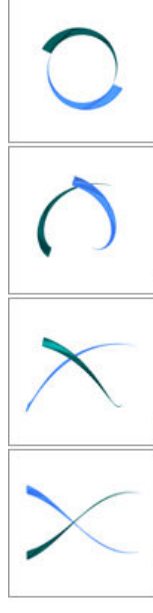
- What is the current publishing model?
- **What's wrong with it?**



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# Traditional role of the publisher is under scrutiny

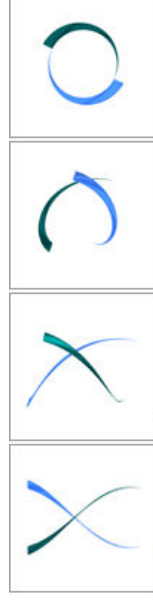
- › **Subscriptions and licences limit access**
  - › To be useful, research must be used
  - › To be used (read, cited, applied, extended) it must be accessible
- › **Prices do not reflect quality or costs**
  - › Subscription prices have increased by as much as 146% in 10 years – e.g.
    - › Brain Research
    - › 1991: £3,713
    - › 2001: £9,148
- › **Authors lose rights**
  - › e.g. to put their paper on a publicly accessible server
- › **Often inefficient and slow**





# Scientific Publishing....

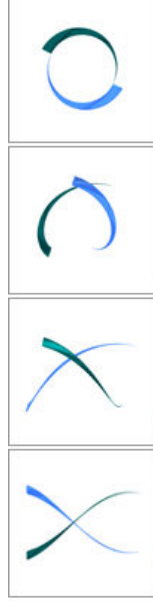
- › What is the current publishing model?
- › What's wrong with it?
- › **What are the alternatives?**



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# What Alternatives?

- › Open Access
- › Achieved by *reversing* the business model
- › From *output*-paid, to *input*-paid
  - › No subscription/licensing charges
  - › Article Processing Charges
- › Further financed by alternative revenues such as advertising

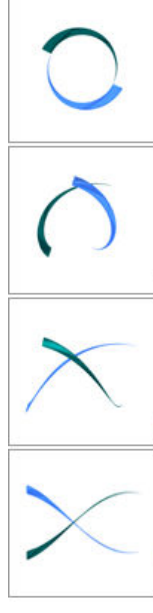


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# Open Access

## PubMed Central

- › PubMed Central – public initiative sponsored by NIH <http://www.pubmedcentral.nih.gov/>
- › Provides free online access to the full text of life science research articles
- › Does not accept publications directly from authors
- › Existing publishers can contribute by making original research papers available through PubMed Central

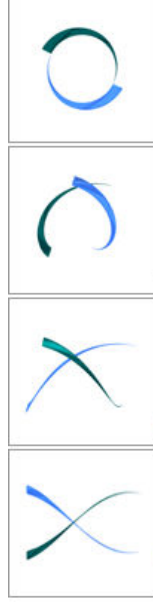


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# Open Access

## PLOS

- › Public Library of Science open letter initiative  
<http://www.publiclibraryofscience.org/>

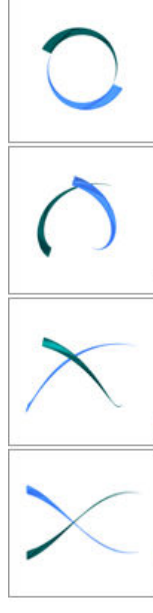


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# Open Access

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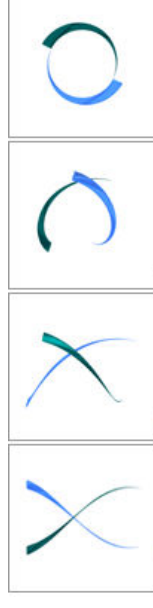
- › Budapest Open Access Initiative  
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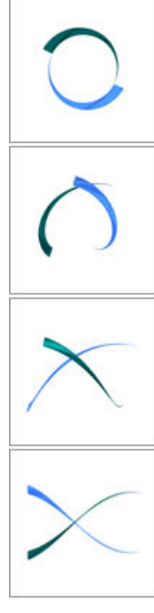
- › BioMed Central supports the goals of PubMedCentral, PLoS and BOAI



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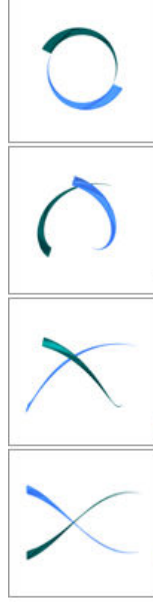
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  - › None of the spatial constraints of print
- › True free access for all
  - › Not even compulsory registration
- › Fast, efficient peer review
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  - › 200 downloads per article per month
  - › Authors have access to download figures
- › Authors keep copyright and control



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## More Advantages

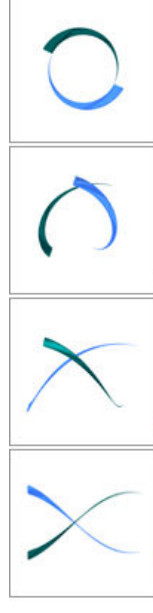
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  - › Archived on PubMed Central
- › Searchable and retrievable
  - › Indexed in PubMed immediately upon publication (applications to Medline outstanding)
  - › Published in one journal, but cross-listed in other relevant ones
- › Deposited in CrossRef, indexed by ISI
- › Extensive promotion for outstanding articles
- › Opportunities to link to and from updates





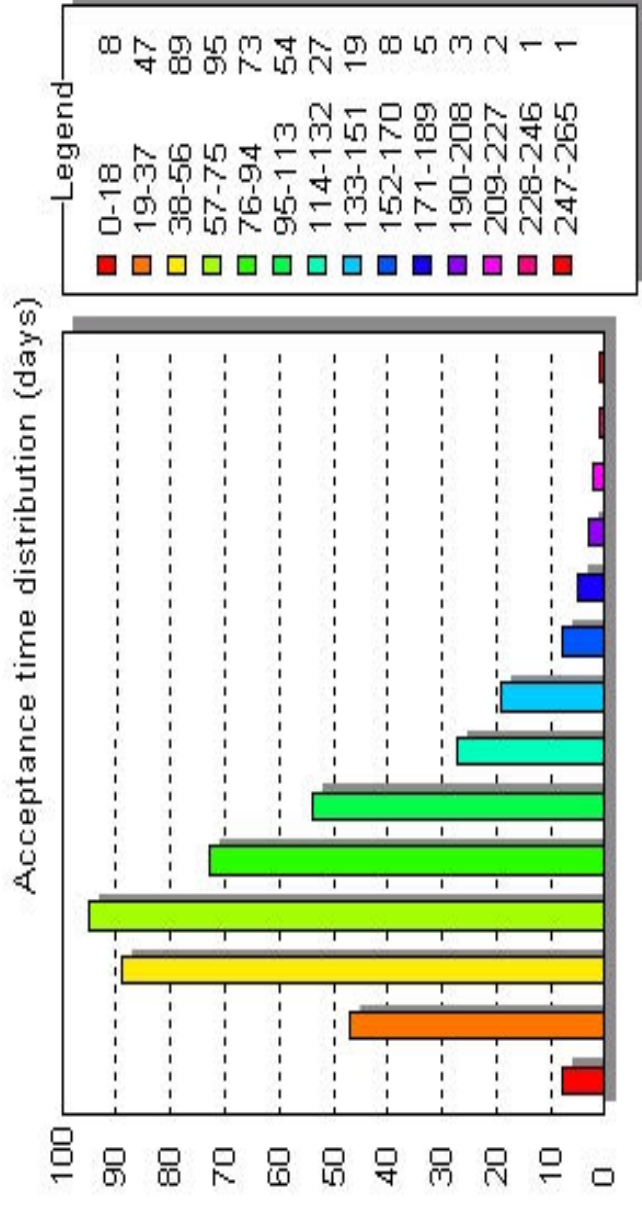
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- › Online – rapid
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  - › For medical journals only
- › Decision on whether to publish based on *validity* (even negative results are published)

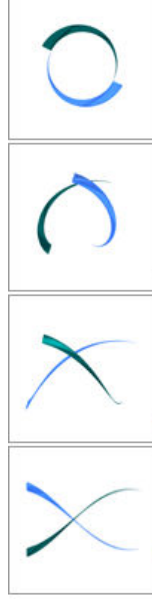


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# Publication Speed

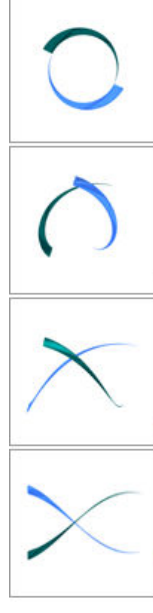
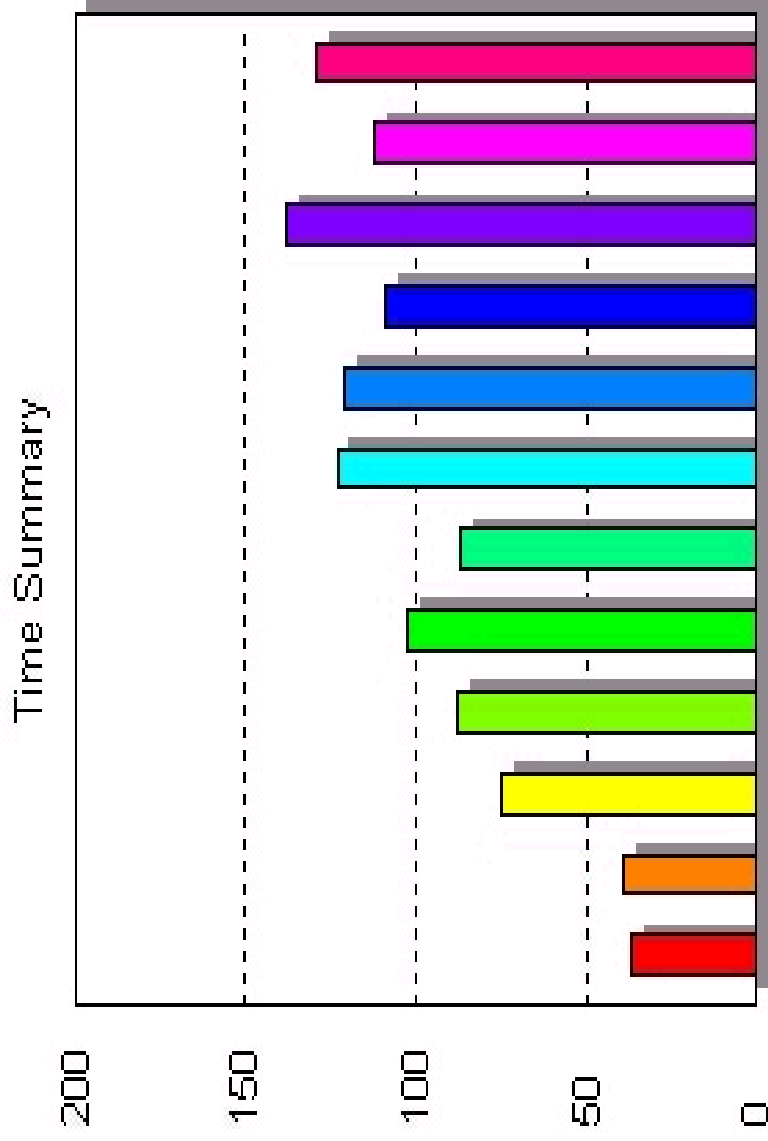


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Research article

# IL-6 signaling by STAT3 participates in the change from hyperplasia to neoplasia in NRP-152 and NRP-154 rat prostatic epithelial cells

Beverly E Barton<sup>1</sup> , Thomas F Murphy<sup>1</sup> , Patricia Adem<sup>1</sup> , Richard A Watson<sup>2</sup> , Robert J Irwin<sup>2</sup> and Hosea F Huang<sup>2, 3</sup>

<sup>1</sup>Division of General Surgery, Department of Surgery, UMDNJ-NJMS, 185 S. Orange Ave., Newark, NJ 07103, USA

<sup>2</sup>Division of Urology, Department of Surgery, UMDNJ-NJMS, 185 S. Orange Ave., Newark, NJ 07103, USA

<sup>3</sup>Department of Veterans' Affairs, New Jersey, Health Care System at East Orange, NJ 03 019, USA

BMC Cancer 2001 **1**: 19

This article is available from: <http://www.biomedcentral.com/1471-2407/1/19>

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## Outline

## Abstract

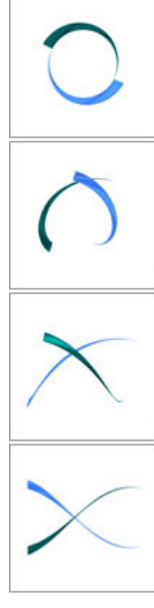
## Background

[Abstract](#)



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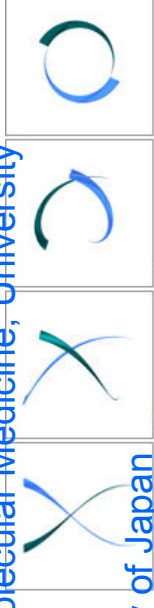
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# BMC Journals

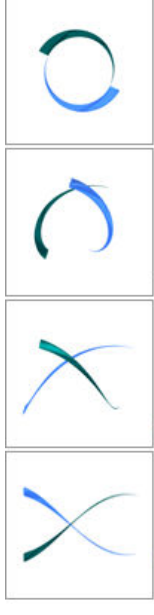
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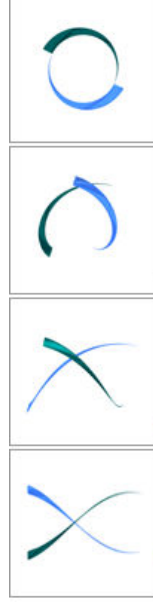
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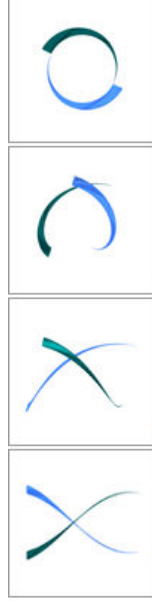


# New Journals

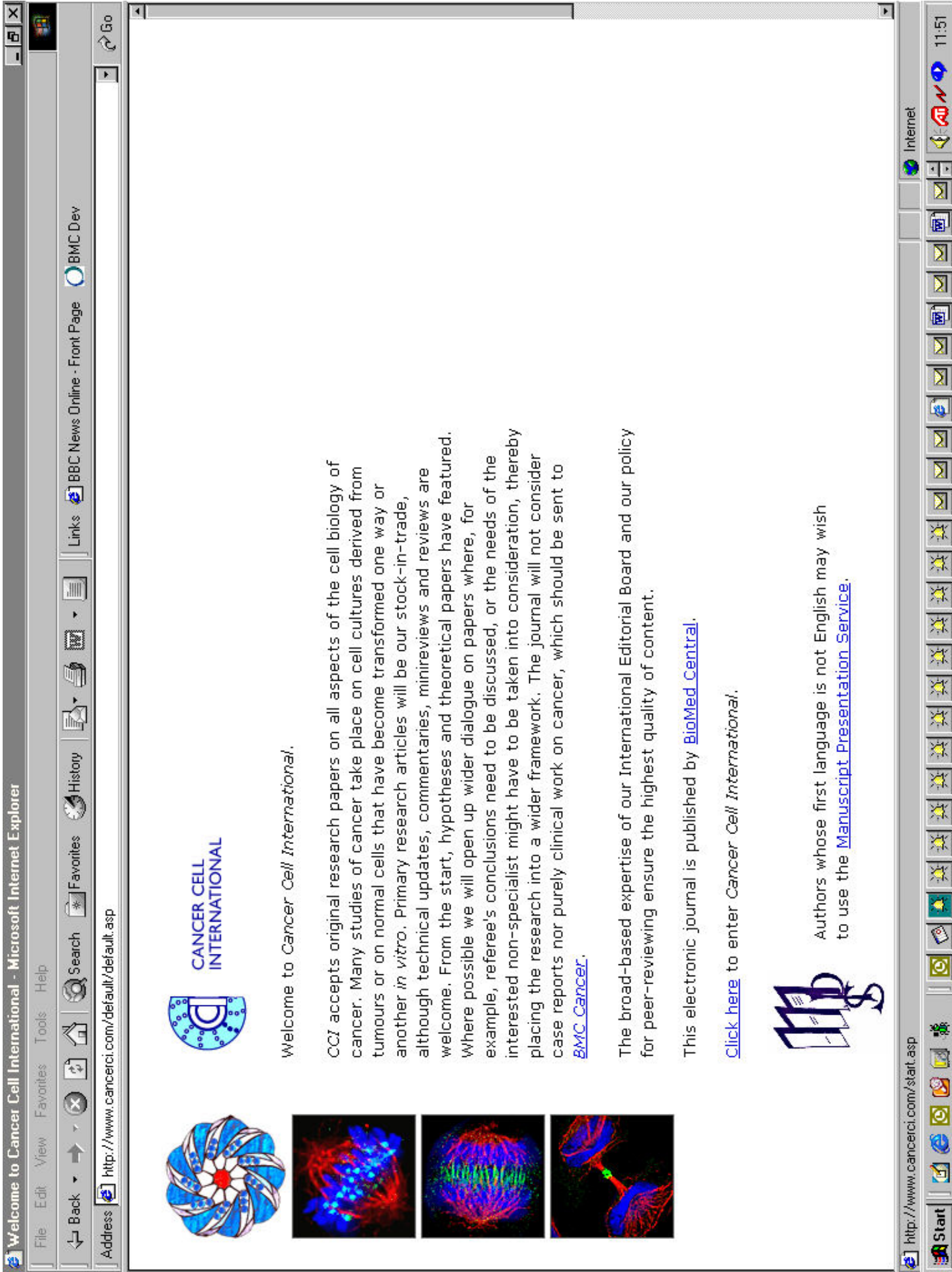
## New Journals 'buy into' the 'input-paid' publishing model

- › Annals of Clinical Microbiology
- › Annals of General Hospital Psychiatry
- › Biomedical Engineering Online
- › [Cancer Cell International](#)
- › Cardiovascular Diabetology
- › Cardiovascular Ultrasound
- › Cell and Chromosome
- › Clinical and Molecular Allergy
- › Comparative Hepatology
- › [Current Controlled Trials in Cardiovascular Medicine](#)
- › Directed and Applied Evolution
- › Dynamic Medicine
- › EHealth International
- › Environmental Health: A Global Access Science Source
- › European Journal of Rural Health
- › Filarial infections, diseases and their control(FIDAC)
- › Health Technology Assessment and Policy
- › IJHG – International Journal of Health Geographics
- › International Journal for Equity in Health
- › Journal of Experimental Ageing Research
- › Journal of the Global AIDS Pandemic
- › Journal of Inflammation
- › Kinetoplastid Biology and Disease
- › Lipids in Health and Disease
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- › [Microbial Cell Factories](#)
- › Molecular Cancer
- › Natural Negatives
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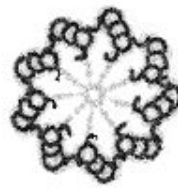


#### Review

### Mitotic death: a mechanism of survival? A review

Jekaterina Erenpreisa and M S Cragg  
*Cancer Cell International* 2001 1:1 (23 November 2001)  
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#### Primary Research

### Galectin-1 in the azacytidine-induced differentiation of a B lymphoma cell line (BL36)

Poirier et al.  
*Cancer Cell International* 2001 1: 2  
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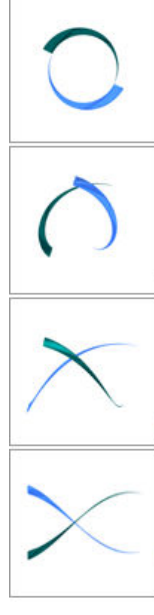
## finance

### *Costs cut*

- › Paper, printing
- › Distribution, warehousing
- › Maintaining subscriptions
- › Marketing, Sales, Admin
- › Protecting content, copyright

### *Costs left*

- › Ensuring and organising rapid peer review
- › Electronic (XML) mark-up
- › Quality Control
- › Web site
- › 'Marketing' to authors

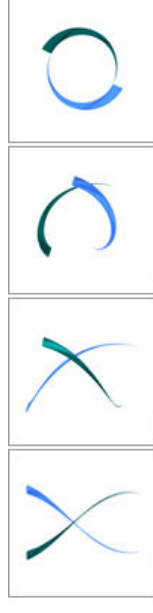




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- › Advertising

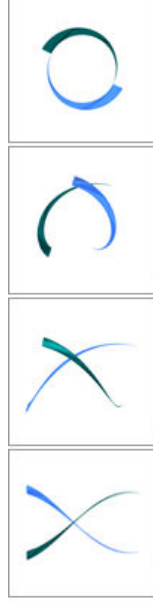


# Article Charges

## perspective

Some print journals have *page charges* (and subscription charges) so that an eight page article in:

- › **J Bacteriology** costs the **author \$530**
- › **J Neuroscience** costs the **author \$480**
- › **Mol Biol of Cell** costs the **author \$520**
- › **PNAS** costs the **author \$320**
- › **Diabetes** costs the **author \$600**
- › **Am J Pathology** costs the **author \$360**



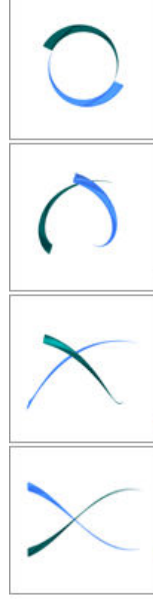
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# Article Charges

## perspective (2)

Many journals *also* levy *colour charges*:

- › **The Plant Cell**: \$500 first figure; \$500 for second, then \$250 each
- › **Cell**: \$1000 first figure; then \$100 each
- › **EMBO J**: \$504 each for first 3; then \$336 each
- › **Brain Research**: \$200 each figure
- › **J Neurosci**: \$1000 each figure
- › **Mol Biol of Cell**: \$1000 first figure; then \$500 each
- › **PNAS**: \$200 each figure
- › **The Plant Journal**: £380 per page



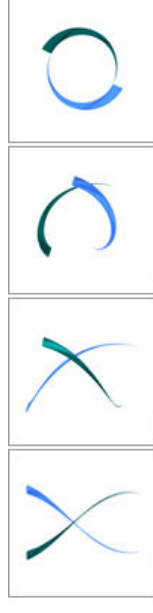
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# Article Charges

## perspective (3)

- › Some journals also levy *processing charges in addition to subscription charges*:
  - › **The Plant Cell**: **\$300** for accepted papers
  - › **American Journal of Physiology**: **\$50** for submitted papers
  - › **Plant Physiology**: **\$300** for accepted papers
  - › **Experimental Hematology**: **\$50** for submitted papers

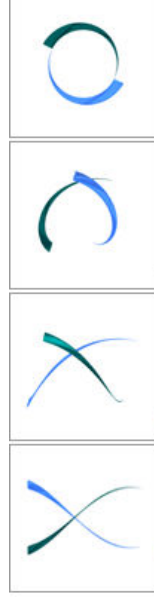


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# Article Charges

## Who pays?

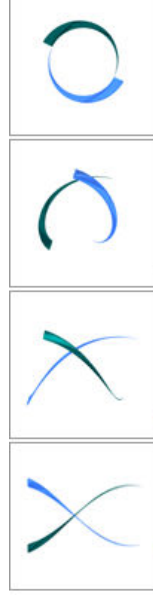
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#### Work published by researchers at Memorial Sloan-Kettering Cancer Center

Articles from other sites will be added as they become available.

##### RNA triphosphatase is essential in *Schizosaccharomyces pombe* and *Candida albicans*

Pei Y, Schwier B, Saiz J, Fisher RP, Shuman S  
*BMC Microbiology* 2001, **1**:29 (20 November 2001)  
[Abstract] [Full Text] [PDF] [PubMed] [Related Articles]

##### Time course of muscle soreness following different types of exercise

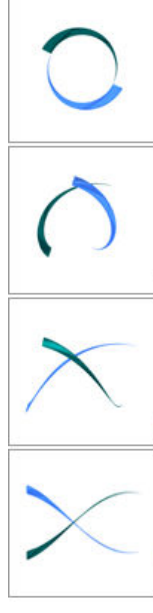
Vickers AJ  
*BMC Musculoskeletal Disorders* 2001, **2**:5 (23 October 2001)  
[Abstract] [Full Text] [PDF] [PubMed] [Related Articles]

##### Flow cytometric assessment of the reactivity of a panel of monoclonal antibodies (mAb) against

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## Open Access: The New Scenario

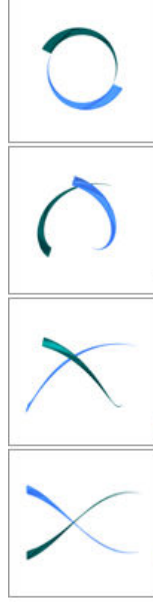
- › Authors take charge: author choice
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- › No need for copyright transfer from author to publisher
- › Massively increased exposure for research work
- › Introduces competition – breaks monopolies journals (publishers) have – enhances market efficiency
- › More cost-effective for academia



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## Hurdles to overcome

- › New, unknown model
- › No Impact Factors yet
- › Article Processing Charges
  - › Not (yet) common

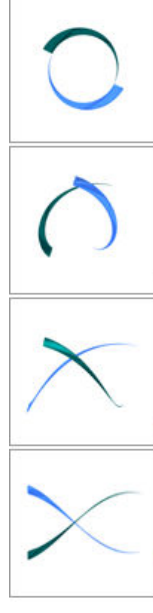


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have to figure out how they want  
their work to be available'

Mary Case -

Association of Research Libraries

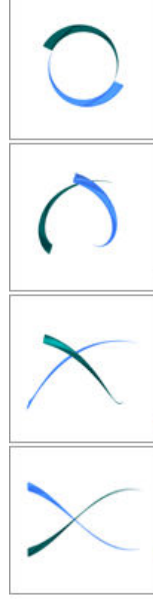


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*Thank You*

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