Igniting Change in the Scholarly Communication System

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University of London
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The Global Journals Problem

**UK 1989-99**
- Journals unit cost: +364%
- Faculty salaries: +60%

**North America 1986-00**
- Journal unit cost: +226%
- Journals expenditure: +192%
- Journals purchased: -7%
- Monographs purchased: -17%
- Faculty salaries: +68%
- Consumer Price Index: +57%

**Australia 1986-98**
- Serials unit cost: +474%
- Serials expenditure: +263%
- Titles purchased: -37%
Marketplace Factors

- Robust supply side
- Scarce good - inelastic market
- Barriers to market entry
- Library acquisitions practices
- Faculty expectations
- Disjunction between creator/user and fiscal agent
- Commercial firms, consolidations and mergers
Developing a Response

- **Reactive**
  - Ask for more money
  - Journal cancellations
  - Improve document delivery
  - Cooperative collection development
  - Consortial buying & site licenses for electronic information

- **Proactive**
  - Improve value signals between faculty & library
  - Increase promotion & tenure emphasis on quality
  - Create competition in the marketplace
  - Editorial boards gain control over journal business policies
  - Partner for mutual benefit with other players in the information chain
  - Introduce alternatives to institutional subscription model
  - Deconstruct the journal
SPARC

- Worldwide alliance of universities, research libraries, and organizations
- Constructive response to market dysfunctions in the scholarly communication system
- Supports open access to scholarly information through development of economic alternatives by taking advantage of the networked digital environment
SPARC Links Advocacy & Action

SPARC ADVOCACY
- Promote action options
- Enhance awareness
- Demonstrate success

SPARC PUBLISHING INITIATIVES
- Aid editors, societies, universities
- Build capacity
- Reduce startup risk
- Demonstrate success
SPARC Supports Alternatives

EXAMPLES


www.cwi.nl/projects/alp/


www.jmlr.org
Pressure to Reduce Prices

- Society demanded new deal with publisher
- Institutional price dropped from $2085 to $1390
- Expanded editorial office support

“SPARC played an essential role in our successful negotiations with our journal's publisher.... [The publisher] knew we'd been in contact with SPARC. Both our journal and association stand to benefit substantially.”

Chair, AAPA Publications Committee
SPARC Supports New Players

University Initiatives
- Univ. Arizona: J. Insect Science
- Univ. Bielefeld: Documenta Mathematica
- Univ. California: eScholarship
- Columbia Univ: Earthscape
- Univ. Warwick: Geometry & Topology Publications

Independent startups
- Evolutionary Ecol. Research.
- Internet Journal of Chemistry

Collaborative Partnerships
- BioOne
- Cornell Univ Lib/Duke Press: Project Euclid
The Value of Alternatives


<table>
<thead>
<tr>
<th>Subscription Year</th>
<th>Actual</th>
<th>Trend (+15%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>'95</td>
<td>$5,199</td>
<td>$5,598</td>
</tr>
<tr>
<td>'96</td>
<td>$6,003</td>
<td>$6,598</td>
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<tr>
<td>'97</td>
<td>$6,895</td>
<td>$7,498</td>
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<tr>
<td>'98</td>
<td>$7,936</td>
<td>$8,698</td>
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<tr>
<td>'99</td>
<td>$8,602</td>
<td>$9,698</td>
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<tr>
<td>'00</td>
<td>$8,859</td>
<td>$10,498</td>
</tr>
<tr>
<td>'01</td>
<td>$9,036</td>
<td>$11,498</td>
</tr>
</tbody>
</table>

Alternative $2,438

$3,034 Saving
Impact of Competition on Price

Evolutionary Ecology vs. Evolutionary Ecology Research
Price Per Page

- $1.20
- $0.80
- $0.60
- $0.40
- $0.20


EE (Kluwer)
EER (SPARC)
## SPARC Titles are Less Expensive

<table>
<thead>
<tr>
<th>Established Title</th>
<th>Price</th>
<th>Savings Oppty</th>
</tr>
</thead>
<tbody>
<tr>
<td>Topology &amp; Its Applications</td>
<td>$2,509</td>
<td>$2,509</td>
</tr>
<tr>
<td>Journal of Crystal Growth</td>
<td>$8,657</td>
<td>$7,057</td>
</tr>
<tr>
<td>Evolutionary Ecology (price reduced 2001)</td>
<td>$560</td>
<td>$255</td>
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<tr>
<td>Topology</td>
<td>$1,223</td>
<td>$1,223</td>
</tr>
<tr>
<td>Organic Geochemistry</td>
<td>$2,359</td>
<td>$2,259</td>
</tr>
<tr>
<td>Sensors &amp; Actuators, A &amp; B</td>
<td>$4,989</td>
<td>$4,594</td>
</tr>
<tr>
<td>Machine Learning</td>
<td>$1,006</td>
<td>$1,006</td>
</tr>
<tr>
<td>Tetrahedron Letters</td>
<td>$9,036</td>
<td>$6,598</td>
</tr>
<tr>
<td>Chemical Physics Letters</td>
<td>$9,637</td>
<td>$9,537</td>
</tr>
<tr>
<td>Jnl of Logic &amp; Algebraic Programming</td>
<td>$701</td>
<td>$401</td>
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</table>

<table>
<thead>
<tr>
<th>SPARC Alternative</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Algebraic and Geometric Topology</td>
<td>Free</td>
</tr>
<tr>
<td>Crystal Growth &amp; Design</td>
<td>$1,600</td>
</tr>
<tr>
<td>Evolutionary Ecology Research</td>
<td>$305</td>
</tr>
<tr>
<td>Geometry &amp; Topology</td>
<td>Free</td>
</tr>
<tr>
<td>Geochemical Transactions</td>
<td>$100</td>
</tr>
<tr>
<td>IEEE Sensors Journal</td>
<td>$395</td>
</tr>
<tr>
<td>Jnl of Machine Learning Research</td>
<td>Free</td>
</tr>
<tr>
<td>Organic Letters</td>
<td>$2,438</td>
</tr>
<tr>
<td>PhysChemComm</td>
<td>$100</td>
</tr>
<tr>
<td>Theory &amp; Practice of Logic Programming</td>
<td>$300</td>
</tr>
</tbody>
</table>

**Total Savings: $35,439**
Authors Are Making the Switch

Tetrahedron Letters vs. Organic Letters

Number of Articles

NO. OF ARTICLES

1998 1999 2000 2001 2002 2003 2004

YEARS

ACTUAL TREND

Tet. Lett. decline following Org. Lett. launch

Strong Org. Lett. take-off

New Economic Models

SPARC “open access” e-journals
- Algebraic & Geometric Topology
- Documenta Mathematica
- Geometry & Topology
- Journal of Insect Science
- Journal of Machine Learning Research
- New Journal of Physics

The Case for Open Access
- Est. revenue of commercial publishers: $4000 per article
- Est. first copy cost of preparing research for publication: $200-$1000 per article
- Marginal cost of e-distribution: virtually nil
- Savings potential: $3000+ per article
“Although the battle is being fought over subscription prices, what is really at stake...is the scientific process itself.”

SPARC Education & Advocacy

A Guide to Creating Community-controlled Science Journals

DECLARING INDEPENDENCE

SPARC presents GAINING INDEPENDENCE
A Manual for Planning the Launch of a Nonprofit Electronic Publishing Venture

Create Change

www.createchange.org
SPARC Accomplishments

- Demonstrated that new journals can successfully compete for authors and quickly establish quality
- Has been effective in driving down the cost of journals
- Created environment in which editors and editorial board members claim more prominent roles in the business aspects of their journals
- Stimulated the development of increased publishing capacity in the not-for-profit sector and encouraged new players to enter the market
- Provided help and guidance to scientists and librarians interested in creating change
- Carried the methods and message of change to international stakeholders
Introducing SPARC Europe

What is SPARC Europe?
- Europe-based coalition of academic & research libraries
- Supported by
  - LIBER
  - CURL
  - JISC
  - SCONUL
  - UKB

Why SPARC Europe?
- Organize campus education & advocacy in Europe
- Demonstrate potential of Open Archives
- Reach out to European societies

More information at:
www.sparceurope.org
What Can You Do?

- **Scholars**
  - Encourage discussion of the issues within department
  - Encourage professional society to consider new technologies as well as enhanced competitors
  - Modify publishing contract to ensure your right to use and post your own work
  - Examine pricing, licensing, and copyright agreements for any journal for which you write, review, or edit
  - Support open access

- **Librarians**
  - Encourage discussion of issues on campus
  - Meet with departments and hold discussions at faculty meetings
  - Participate in development of institutional intellectual property policies
  - Become familiar with (or even conduct) cost-per-use studies
  - Support participation in SPARC Europe
  - Support open access
Scholars Are The Key To Change

“There is a great deal that you can do. In fact, it is you and only you who can bring about the changes that need to happen. Unless you want access to more published research, unless you want costs that truly reflect value, you won’t get either.”

Michael Rosenzweig, Editor
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