



# Electronic Journals and the Library



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# Overview

- Increased Emphasis on Electronic Publishing
  - Preprint servers; growing popularity and accessibility
  - Free access to scientific publications?
- The Evolving Library
  - Adapting to online information environment
  - Synthesis of information from diverse sources

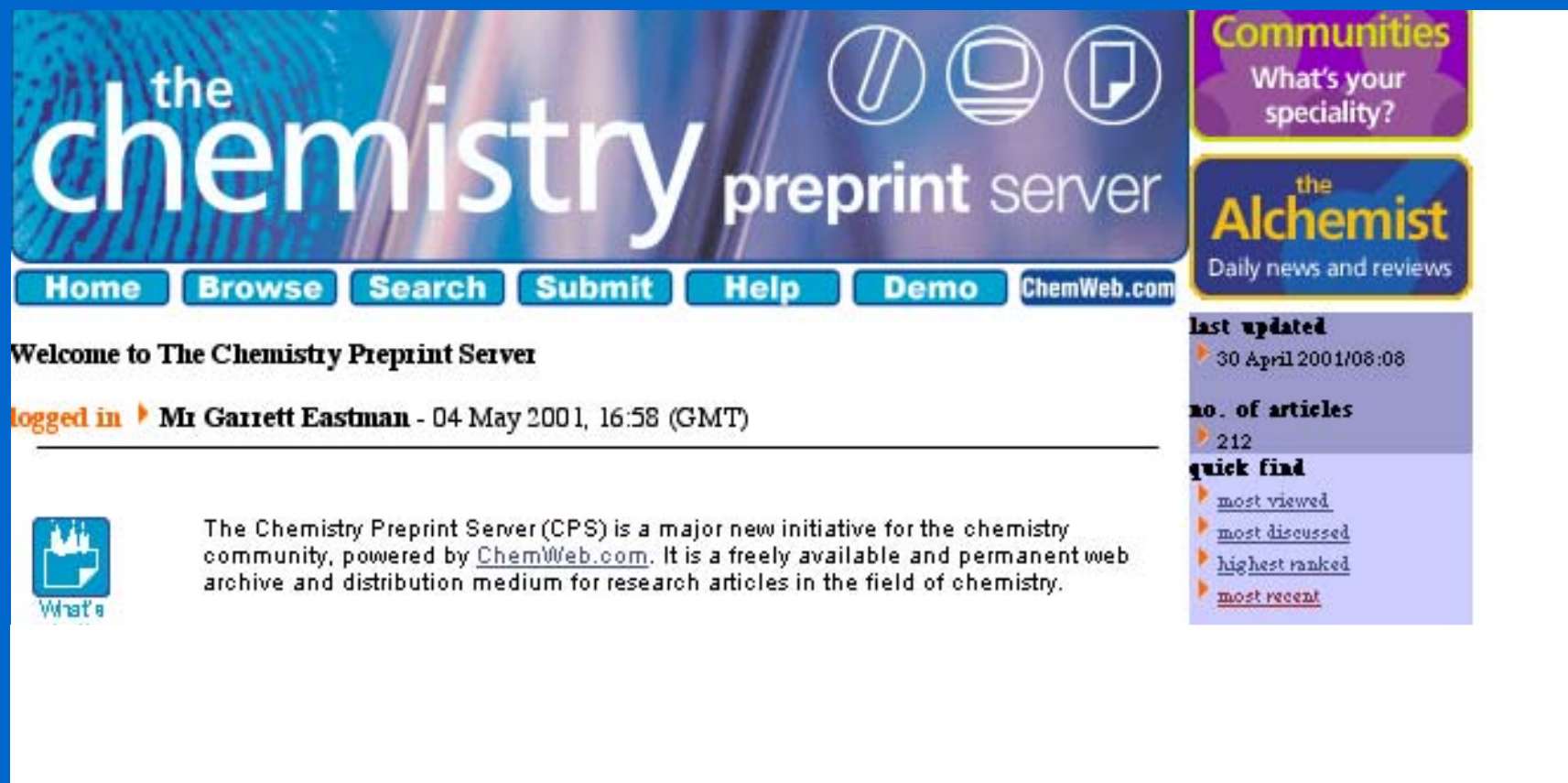
# All-electronic publication

- Preprint server model adapted in other disciplines
- Peer-reviewed publications online
- Collaboration between preprint archives to facilitate access, linking, searching

# Chemistry Preprint Server

- Hosted by ChemWeb (Elsevier), <http://preprint.chemweb.com>
- Author retains property of the article
- Hybrid between preprint server and online community
- However, some publishers (notably ACS) will not accept preprints for publication

# Chemistry Preprint Server



The screenshot shows the homepage of the Chemistry Preprint Server. The header features the site's name "the chemistry preprint server" in a large, white, sans-serif font against a blue background with a fingerprint-like pattern. To the right of the name are three circular icons: a test tube, a computer monitor, and a document. Below the header is a navigation bar with buttons for "Home", "Browse", "Search", "Submit", "Help", "Demo", and "ChemWeb.com".

Below the navigation bar, the main content area is divided into several sections:

- Welcome to The Chemistry Preprint Server**
- logged in** ▶ Mr Garrett Eastman - 04 May 2001, 16:58 (GMT)
- A description of the server: "The Chemistry Preprint Server (CPS) is a major new initiative for the chemistry community, powered by [ChemWeb.com](http://ChemWeb.com). It is a freely available and permanent web archive and distribution medium for research articles in the field of chemistry."
- A small icon of a laboratory flask with the text "What's" below it.

On the right side of the page, there are three vertical panels:

- Communities**: "What's your speciality?"
- the Alchemist**: "Daily news and reviews"
- last updated**: ▶ 30 April 2001/08:08
- no. of articles**: ▶ 212
- quick find**:
  - ▶ [most viewed](#)
  - ▶ [most discussed](#)
  - ▶ [highest ranked](#)
  - ▶ [most recent](#)

# BioMedCentral

- <http://www.biomedcentral.com>
- free access to articles, authors retain copyright
- Network of peer-reviewed, electronic-only journals
- Rapid publication, indexing in PubMed, archiving in PubMedCentral



## BMC Microbiology

Publishing peer-reviewed original research papers with open access ([Submit a manuscript](#))

BMC Microbiology  
Volume 1

Viewing options:

- [abstract](#)
- [full text](#)
- [PDF \(5,964KB\)](#)

Other papers by:

[Aravinthan Samuel](#)  
[Jennifer Petersen](#)  
[Thomas Reese](#)

Key:

- Email
- Corresponding author

Research article

# Envelope structure of *Synechococcus* sp. WH8113, a nonflagellated swimming cyanobacterium

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This article is available from: <http://www.biomedcentral.com/1471-2180/1/4>

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Outline

Abstract

# Open Archives

- Open Archives Project
  - <http://www.openarchives.org>
- Cross Archive Searching Service
  - <http://arc.cs.odu.edu>
- Cite-base Search (Finding preprints citing other preprints, etc.)
  - <http://cite-base.ecs.soton.ac.uk>

# Scientists Contra Publishers

- Public Library of Science
  - <http://www.publiclibraryofscience.org>
- Relevance of traditional publishing?
- Societies and smaller publishers caught in the middle?

# Public Library of Science

## Public Library of Science

### Open Letter

We support the establishment of an online public library that would provide the full contents of the published record of research and scholarly discourse in medicine and the life sciences in a freely accessible, fully searchable, interlinked form. Establishment of this public library would vastly increase the accessibility and utility of the scientific literature, enhance scientific productivity, and catalyze integration of the disparate communities of knowledge and ideas in biomedical sciences.

We recognize that the publishers of our scientific journals have a legitimate right to a fair financial return for their role in scientific communication. We believe, however, that the permanent, archival record of scientific research and ideas should neither be owned nor controlled by publishers, but should belong to the public, and should be freely available through an international online public library.

To encourage the publishers of our journals to support this endeavor, we pledge that, beginning in September, 2001, we will publish in, edit or review for, and personally subscribe to, only those scholarly and scientific journals that have agreed to grant unrestricted free distribution rights to any and all original research reports that they have published, through PubMed Central and similar online public resources, within 6 months of their initial publication date.

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[Article on PLoS in Scientific American](#)

[PLoS response to Science magazine's statement regarding this initiative](#)

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# Future e-journal considerations

- Multimedia
- Newer markup languages (XML, CML, others)
- Articles independent from publication

# E-books

- Widespread book digitization
  - Online book server (find URL)
  - National Academy Press (<http://www.nap.edu/>)
- Readers (Microsoft Reader, Adobe Reader (Glassbook))
- Software for Reading on PCs, Notebooks, PDAs
- Concerns for authors

# Our perspective

- Need to consider receiving certain journals only in electronic format
- Shift in emphasis from physical collection to complementary print and electronic resources
- Space considerations

# Electronic Journals at Rowland

- 100 subscriptions currently available in print and electronic format
- Why do we not subscribe online to some titles?
  - Print + online = expensive
  - Unreasonable access terms (publisher should acknowledge “fair use”)
  - Archiving unclear

## Electronic Journals (cont.)

- Criteria for online-only access
  - Complete journal content available online
  - Significant \$ savings
  - “Publication of record”
  - “Fair Use”
  - Archiving Commitment

# Retrospective Journal Archives

- American Physical Society (APS) to 1958 (proposed 1893)
  - <http://prola.aps.org>, mirrored at LC and Cornell
- American Vacuum Society to 1964 (beginning of JVST)
  - <http://www.jvst.org>
- Highwire Press (260 sites, >250,000 full-text articles, <http://highwire.stanford.edu>)

# • • • Navigating information flow

- Nexus between print and online information environments
- Current Awareness
  - Draw on wide range of information sources
  - Keep you informed of developments in field
  - Scientist/Librarian ongoing evaluation and feedback

# Current Awareness

- specific and complex search criteria
- multiple sources
- Automatic searches
  - Search engines (e.g. Northern Light Alerts)
  - Abstract databases (PubCrawler)
  - Patent databases
  - DIALOG Alerts
  - “Virtual” journals

# DIALOG Alert (example)

Delivered-TO: eastman@rowland.org

X-Sender: eastman@netrider.rowland.org (Unverified)

Date: Sun, 22 Apr 2001 23:17:07 +0100

To: Garrett Eastman <eastman@rowland.org>

From: EDD Master Account <edd@dialog.com> (by way of Garrett Eastman)

Subject: MCCOLLOUGH EFFECT, AUTHORS AND TOPICS IN FMRI

FILE155, UD=200104, SER. DCRLS155

File(s) searched:

File 155: MEDLINE(R)\_1966-2001/Apr W3

(c) format only 2000 Dialog Corporation

Sets selected:

Set	Items	Description
1	1	MCCOLLOUGH()EFFECT? OR CONTINGENT()AFTEREFFECT? OR PATTERN()CONTINGENT()COLOR()AFTEREFFECT?
2	1	(AU=SKOWBO, D OR AU=SKOWBO D OR AU=KIERSTEAD D OR AU=KIERSTEAD, D) OR (AU=HUMPHREY, G K OR AU=HUMPHREY GK) OR (AU=MCLOUGH LIN NP OR AU=MCLOUGH LIN, N P)
3	5	((FUNCTIONAL()MAGNETIC()RESONANCE()IMAG?) OR (FUNCTIONAL()MRI) OR (FUNCTIONAL()BRAIN()IMAG?)) AND (STROOP OR WISCONSIN()CARD()SORT? OR MIRROR()TRAC? OR WORKING()MEMORY)
4	6	S1:S3

# Virtual Journal (BioMedNet)



Research Tools | **Reviews** | Journal Collection | News & Comment | Books & Labware | Science Jobs | Web Links

reviews.bmn.com | Latest Updates | Browse Subjects | Browse Journals | **My Virtual Journals** | Search Reviews | My E-Mail Alerts | MEDLINE | Section Search

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- Institutional Trial

## Bacterial Motility

[Browse My Journals](#) > Bacterial Motility

Articles in subject area : 237      1 - 20      View Subject :

Display :             [Next >](#)

1. Secretion and assembly of regular surface structures in Gram-negative bacteria  
Luis Angel Fernández and José Berenguer  
*FEMS Microbiology Reviews* , 2000, 24:1 :21-44  Select

[Go to my Journal](#)

Broad subject areas... [\[edit\]](#) none  
Specific search terms: [\[edit\]](#) (flagella not eukaryote) or pilus or pili  
E-mail alerts.....: [\[edit\]](#) None Weekly Bi-weekly Monthly

[Rename](#) this journal      [Delete](#) this journal

# DOE PrePrint Network

## PrePRINT Network

## PrePRINT Alerts

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Email Address

Enter one or more search terms:

Full Record:

Select number of records to retrieve from each collection:

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Check the collections to search:

- Computer Science
- Computing Research Repository (LANL)
- Networked Computer Science Technical Reference Library (NCSTRL)
- NECI Research Index

- Math
- CECM Preprint Server
- Chalmers Preprint Server
- Hopf Topology Archive

- Physics
- CERN Preprints
- Cornell Nuclear Physics Preprints
- Astrophysics (LANL)
- Condensed Matter (LANL)
- General Relativity & Quantum Cosmology (LANL)
- HEP - Experiment (LANL)
- HEP - Lattice (LANL)
- HEP - Phenomenology (LANL)

# The Library Web

- Information gateway
- Direct access to journals, databases and web resources
- Institute publications and patents

# Summary

- Scientific communication increasing transition to electronic
- Need to evaluate information sources for best value for Institute
- Library staff and information flow
  - Nexus between print and online environments
  - Synthesize information from multiple sources

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