

Portico and the Preservation of Electronic Scholarly Resources

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E-Journal Archiving and Preservation
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Portico's Mission

To preserve scholarly literature published in electronic form
and to ensure that these materials remain available
to future generations of scholars, researchers, and students.



Portico's History

- In 2002, JSTOR initiated a project known as the Electronic-Archiving Initiative, the precursor to Portico.
- The goal was to facilitate the community's transition to secure reliance upon electronic scholarly resources by developing a technological infrastructure and sustainable archive for digital literature.
- Portico was launched in 2005 by JSTOR and Ithaka, with support from The Andrew W. Mellon Foundation and the Library of Congress.
- Portico is a not-for-profit organization with a mission and singular focus to provide a permanent archive. Our initial focus is electronic scholarly journals.



Portico's Approach: Content Scope

In scope:

- Electronic scholarly, peer reviewed journals
- Intellectual content of the journal, including text, tables, images, supplemental files
- Limited functionality such as internal linking

Out of scope:

- Full features and functionality of publisher's delivery platform
- Ephemeral look and layout of today's HTML rendition of a journal



Portico's Approach: Migration Supplemented with Byte Preservation

- Publishers deliver “source files” of electronic journals (SGML, XML, PDF, etc.) to Portico.
- Using specialized software Portico converts proprietary source files from multiple publishers to an archival format suitable for long-term preservation. For e-journals Portico's preservation format is based on the NLM Archiving DTD.
- Source and archival files are deposited in the archive. Once deposited, content must remain in the archive. To date more than 495,000 articles from 8 publishers are in the Portico archive.
- Portico migrates files to new formats as technology changes and preservation formats are developed.



Portico's Approach: Access

- Portico offers access to archived content to only those libraries supporting the archive.
- Portico's delivery infrastructure leverages JSTOR's existing technology and investment.
- Access is offered only when specific trigger event conditions prevail **and** when titles are no longer available from the publisher or other sources.



Portico's Approach: Access

- Trigger events include:
 - When a publisher ceases operations and titles are no longer available from any other source.
 - When a publisher ceases to publish and offer a title and it is not offered by another publisher or entity.
 - When back issues are removed from a publisher's offering and are not available elsewhere.
 - Upon catastrophic failure by publisher delivery platform for a sustained period of time.



Portico's Approach: Access

- Trigger events initiate campus-wide access for all libraries supporting the archive regardless of whether a library previously subscribed to the publisher's offering.
- Until a trigger event occurs select librarians at participating libraries are granted password-controlled access for archive audit and verification purposes.
- Libraries may rely upon the Portico archive for post-cancellation access, **if** a publisher chooses to name Portico as one of the mechanisms designated to meet this obligation.
- Portico may be one of several perpetual access mechanisms designated by publishers.



Sources of Support

- Support for the archive comes from the primary beneficiaries of the archive - publishers and libraries.
- Contributing publishers supply content and make an annual financial contribution ranging from \$250 to \$75,000 depending upon journal revenues.
- To date more than 5,800 journals from over 30 publishers have been promised to the Portico archive. Participating publishers come from across the spectrum, for example:
 - Elsevier (commercial)
 - Cambridge University Press (university press)
 - IEEE (scholarly society)
 - The Berkeley Electronic Press (e-only publisher)



Sources of Support

- Libraries make an Annual Archive Support (AAS) payment based upon total library materials expenditures. AAS payments range from \$1,500 to \$24,000 annually.
- All libraries that initiate support for Portico in 2006 and 2007 are designated "Portico Archive Founders" and make a significantly reduced AAS payment.
- To date more than 350 libraries are Portico Archive Founders. Participants range from small colleges to the university systems.
- Approximately 25% of early library participants are from international institutions.





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Volume 8, Issue 5, May 2006

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533-534, May 2006

[Archived Article](#)

Pharmacologic transgene control systems for gene therapy

Wilfried Weber, Martin Fussenegger

535-556, May 2006

[Archived Article](#)

Radioprotective gene therapy through retroviral expression of manganese superoxide dismutase

Thomas D. Southgate, Victoria Sheard, Michael D. Milsom, Timothy H. Ward, Robert J. Mairs, et al

557-565, May 2006

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Article Information

Bibliographic Information

Current Journal Title: Journal of Gene Medicine

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Journal Subtitle: A cross-disciplinary journal for research on the science of gene transfer and its clinical applications

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Pharmacologic transgene control systems for gene therapy

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History

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Abstract

Pharmacologic transgene-expression dosing is considered essential for future gene therapy scenarios. Genetic interventions require precise transcription or translation fine-tuning of therapeutic transgenes to enable their titration into the therapeutic window, to adapt them to daily changing dosing regimes of the patient, to integrate them seamlessly into the patient's transcriptome orchestra, and to terminate their expression after successful therapy. In recent years, decisive progress has been achieved in designing high-precision trigger-inducible mammalian transgene control modalities responsive to clinically licensed and inert heterologous molecules or to endogenous

Keywords

Geneswitch; inducible expression; viral vector; gene regulation

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Introduction

Gene therapeutic interventions in the well-orchestrated and multi-regulated gene networks operating in the human body require (semi-)synthetic trigger-inducible gene switches for optimal fine-tuning of therapeutic transgene expression levels and kinetics to meet the specific needs of the patient [1-3]. Recent advances in heterologous transgene control design have resulted in a portfolio of gene regulation systems responsive to clinically licensed small-molecule drugs such as antibiotics [4-7], steroid hormone analogs [8], [9], rapamycin [10], and Food and Drug Administration (FDA) approved anti-cancer drugs [11].

control systems will become the prime dosing technology in the gene therapy era.

[Untitled section]

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Emerging Themes and Lessons

- Publishers understand the library market now requires robust preservation arrangements.
- Publishers want to be a part of the archiving solutions that libraries support.
- Publishers are developing multi-layered strategies.
- Libraries are actively evaluating the scope of their archival responsibilities and options for meeting these.
- Library e-preservation strategies and print collection management strategies can usefully inform one another.
- Overt communication of archival strategies or intentions assists both parties.



Response

- Financial support sufficient to sustain the archive over the long term and through technological evolutions must be available from diverse sources.
- Archives must have the requisite resources to adjust preservation strategies as e-journal publishing practices and technologies continue to evolve.
- Diversity – in preservation strategy, technological approach, organizational structure, and economic model – provides significant security to the community.
- Multi-lateral collaboration is needed.



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