A web-accessible database of electronic biomedical reference materials has been developed by a consortium of science librarians and end-user organizations. Dependant upon license restrictions for each resource, a library visit, membership, card number or login/password may be required of the user. This tool is available to the public, researchers, students and health care professionals, and is available at http://epoi.hawaii.edu.

Introduction
The two major academic libraries that service the biomedical enterprise in Hawaii, Hawaii Medical Library (HML) and University of Hawaii Manoa Library (UHM) are steadily increasing the number of digital resources available to their patrons. Like many libraries throughout the nation, making these new resources easy to find and to access via the Internet is a major challenge. Web-based indices, search tools, and active links provide common solutions to this problem. The information environment in Hawaii offers an additional challenge since the two libraries have a complex overlapping set of patrons for whom recognizing available digital resources via the respective library is confusing.

Libraries and patrons are significantly challenged to possess current listings of what holdings are available to the patron. Online subscriptions are often bundled into collections of titles and ranges (dates of journal availability) by third-party subscription providers. These aggregate subscriptions are highly dynamic, and vary almost daily as specific agreements change between the aggregator and the originating publisher. Libraries must therefore subscribe to additional services that track the ever-changing availability. However, these reporting services do not provide searchable or reportable interfaces to the data for use by the end-user patron or the managing librarians.

Prior to the availability of the ePOI resource, the local end-user who wished access to an online biomedical journal was faced with several searches. First, the patron would determine whether they had privileges at HML or UHM. Several databases at those libraries would then be searched. Because of the dynamic nature of the holdings (see above), these in-house databases may not be complete or current. Having found the online availability, the user would then either go to the library to gain online access, or provide credentials (login) to remotely access the resource through the library’s server.

In recognition of these factors that impede access to online biomedical journals, science librarians of University of Hawaii at Manoa, Hawaii Medial Library, Library Resource Center of John A. Burns School of Medicine, and a bioinformatician have developed an inter-institutional collaboration. The complex technical and administrative needs of the various entities were discussed and accommodated when possible through a series of planning and development meetings. A proposal to fund development of the required website and database was developed. The successful collaborative effort required the definition of compromise solutions that met the needs and goals of the various partners.

The National Library of Medicine (NLM) funded the proposal, submitted by a consortium of science librarians and end-user organizations, to develop a web-based mechanism for library patrons to search and access electronic resources from UHMLibrary and HML. These resources include electronic versions of research journals, databases, textbooks, and websites. This consortium of providers and user organizations has agreed to publicize and facilitate use of the ePOI resource through shared links on their organizational websites. Participating organizations include Cancer Research Center of Hawaii, Hawaii Area Health Education Center, Hawaii Health Systems Corp., Hawaii Pacific Health, Hawaii Residency Programs, Pacific Biomedical Research Center, University of Hawai‘i School of Nursing and Dental Hygiene, University of Hawai‘i at Manoa School of Social Work, Honolulu Shriners Hospital for Children, Spark A. Matsunaga Veterans Affairs Medical and Regional Office Center, and The Queen’s Medical Center.

In summary, patrons and librarians had to check multiple places to figure out what was available and what was not, to whom and where; librarians were managing information about and access to these resources in multiple places. The ePOI project’s goal is to create one place for access and management of online biomedical resources.
**User Instructions**

ePOI, Pathways to Online Information, provides a single searchable database of digital biomedical resources (subscription-based and free resources). These online resources are available via the University of Hawai‘i Manoa Library (UHM) and Hawaii Medical Library (HML) to the biomedical research, education, community-based and healthcare organizations throughout Hawaii that are affiliated with the respective libraries. This database searches journal titles and holdings. Patrons must have identified a desired journal article citation before entering the ePOI resource.

The end-user enters http://epoi.hawaii.edu from any computer with access to the Internet, using an Internet browser of recent vintage. ePOI is used to browse or search through the extensive combined electronic resource collections of these libraries. Searches can be made by journal title, title abbreviation, keywords that describe the journal contexts, alphabetic title search and more advanced Boolean searches based on title and keywords. ePOI includes the names of journals, databases, e-books, and websites. Searches for individual articles cannot be made. To search for the article citations, primary reading or reference database such as PubMed or ScienceDirect are extracted, the full text of the desired article is accessed through ePOI.

Off-campus access to many of the resources requires a valid, activated UHM Library or HML card. Resources indicate whether a valid, activated library card is required or if they are freely accessible. If a resource indicates “HML”, then Hawaii Medical Library makes the resource available. The resource will be accessible directly from computers within HML and possibly from anywhere on the Queen’s Medical Center campus. Remote access may be available via HML’s proxy server with a valid HML Library card. For additional information HML’s membership policy is available on HML website at http://hml.org/WWW/hmlmem.html.

If a resource indicates “UHM”, then the resource is made available by the UHM Library. The resource will be accessible from any UHM Library computer. Out-of-library access to UHM resources requires a valid, activated UHM Library card or UHM username and password. For additional information UH Manoa Library’s Electronic Resources User Guide at http://www.hawaii.edu/serials/guide.htm#remote is accessed.

Many resources included in ePOI have open access, which means they are available to everyone with or without affiliation with UHM or HML. These resources are indicated by a “Free” designation and often include an embargo period. For more information and access to free journals, the websites: http://www.freemedicaljournals.com/, http://highwire.stanford.edu/lists/freeart.dtl, and http://www.pubmedcentral.nih.gov/ can be checked.

**Results**

The technical implementation developed includes a Microsoft SQL Server database with ASP pages dynamically generated and served through Microsoft IIS. The result is a secure and private website; end users cannot see the code that is generated, thereby limiting possible malicious interference. The data is primarily generated from the participating libraries, via a third-party vendor (Serials Solutions). As Serials Solutions does not report all the required data, manual augmentation of the data is performed by the relevant library. The database is updated regularly. An additional outcome of this program is the population and activation of over 1300 LINKOUT buttons at PubMed; a feature that allows the user to click directly to the e-journal from the PubMed website (http://pubmed.gov).

Approximately 12,000 online title holdings are contained in the ePOI database, with approximately 76,000 individual holding records. The scope of the database is primarily defined as those listed in the Index Medicus or can be found at PubMed. The ePOI website has received more than 10,127 page hits since the beginning of the 2004 calendar year. 7,426 searches have resulted in 3,152 links to online resources; yet the website has had limited publicity to date. Use levels are expected to increase as students, researchers and health care professionals become more aware of the ePOI resource.

Library administrative reports and patron use research are additional outcomes of the ePOI project. Patron use data will provide the librarians with information of what journals patrons are either not finding by POI or are not currently held in collections so that librarians can better build the collections. Supplemental administrative reporting and tracking functions are planned to improve the end-user experience and promote efficient and effective management of online biomedical journal resources.

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