At the California Digital Library, we do more than put information online. We deal with information at every stage of its life on a global scale. Our integrated services reach the University of California’s nearly quarter million students, a distinguished faculty with more Nobel laureates than any other public institution, and a worldwide scholarly community. With these numbers, our services have to be flexible and our approaches as open as possible.
WHO WE ARE

The CDL was founded by the University of California in 1997 to take advantage of emerging technologies that were transforming the way digital information was being published and accessed. Since then, in collaboration with the UC libraries and other partners, we have assembled one of the world’s largest digital research libraries and changed the ways that faculty, students, and researchers discover and access information.

In partnership with the UC libraries, the CDL has continually broken new ground by developing systems linking our users to the vast print and online collections within UC and beyond. Building on the foundations of the Melvyl Catalog, we developed one of the largest online library catalogs in the country. We save the University millions of dollars by facilitating the co-investment and sharing of materials and services used by libraries across the UC system. We work in partnership with campuses to bring the treasures of our libraries, museums, and cultural heritage organizations to the world. And we continue to explore how services such as digital curation, scholarly publishing, archiving and preservation support research throughout the information lifecycle.

Serving the UC libraries is a vital component of our mission. Our unique position within the University allows us to provide the infrastructure and support commonly needed by the campus libraries, freeing them to focus their resources on the needs of their users.

Looking ahead, the CDL will continue to use innovative technology to connect content and communities in ways that enhance teaching, learning, and research. The work of our four core portfolios—Access & Publishing, Collection Development & Management, Discovery & Delivery, and University of California Curation Center (UC3)—is intertwined to support research from inception to preservation.
The past year witnessed the evolution of many of CDL’s shared services to continue the efficient transition from print to digital resources and expand the scope of UC’s world-class digital library. By shifting service support to earlier in the information lifecycle, we aimed to streamline the research process for scholars and ensure that UC’s scholarly output is accessible to future generations.

The beginning of 2011-2012 focused on governance as we presented the findings of two reviews to the Systemwide Library and Scholarly Information Advisory Committee (SLASIAC), a culmination of work from the prior academic year. The CDL Review confirmed that CDL is “a strategic resource for UC” and the report of SLASIAC’s Library Planning Task Force (LPTF) pointed the libraries in three major directions to address funding and space shortages.

The Task Force also recommended a new model for systemwide library planning to increase involvement of the Council of University Librarians and the Council of Vice Chancellors while naming SLASIAC as the official governing board for CDL. Along with a new process for approving budgets for UC Office of the President units, these developments deeply affected CDL’s planning and work for the year.

Meanwhile, developments in scholarly communication, digital libraries and higher education also influenced our work, sometimes presenting new fiscal and legal challenges, but more often resulting in new partnerships and opportunities. It was truly the best of times and the worst of times.

This report highlights a few of the major accomplishments in CDL’s four core initiatives during the past year. The first initiative focused on supporting the “Next Generation” activities of the UC libraries which also reflect the “shared services” emphasis in the LPTF. Next Generation Melvyl was completed with the launch of the new system using WorldCat Local. Many of the other initiatives under the Next Generation Technical Services banner are still in planning phases and will continue into 2012-2013; CDL is contributing a number of staff to the various working groups.

The second initiative emphasized supporting the scholarly research and teaching lifecycle. Libraries can now offer to their researchers a rich service landscape combining CDL tools with local services that supports this cycle, especially for data-intensive research.

Although many more materials are openly available through the growth of public domain materials in HathiTrust and open access publications in eScholarship, some efforts were set aside due to legal and policy challenges.

**SLASIAC LIBRARY PLANNING TASK FORCE Recommendations**

- **Expand the portfolio of shared library services** to address library space shortages and achieve library efficiencies while leveraging partnerships outside UC and supporting ongoing innovations in scholarship.

- **Address the pricing of academic publications** through publisher negotiations and support for open access publishing.

- **Recover costs, diversify revenue** by marketing new or existing services to non-UC clients.

---

*ANNUAL REPORT 2011-2012*
The third initiative of digital library development and service adoption benefitted from maturing and new partnerships. HathiTrust’s 60+ members held a ground-breaking “constitutional convention” to set the future direction of the organization. CDL continues to play a major leadership role in the new governance model and in influencing future priorities. Other large-scale partnerships and collaborations include the Digital Preservation Network and the Digital Public Library of America. CDL participated in meetings to shape the form and direction these organizations might take, contributing experience we have gained from similar activities on a UC or regional level. We forged new formal partnerships with the Joint Information Systems Committee (JISC) in the UK for extending EZID services. We continue to investigate several other partnerships with organizations sharing similar expertise.

The fourth initiative challenged us to diversify funding sources and extend efficiencies. We experimented with using cloud computing services and investigated whether having a component of our interlibrary loan services hosted by OCLC would be more cost-effective for interlibrary loan services. We participated in new funding strategies for open access to research such as SCOAP3, and continued to explore other models and provide policy advocacy. Finally, Stephen Abrams in the CDL’s UC Curation Center (UC3) developed a sophisticated payment model for long-term preservation services that is being evaluated by the community.

As we turn toward 2012-2013, many of the same themes will continue with a different emphasis. In the area of scholarly communication, we will focus on further encouraging openness of data resources in particular, as well as the means for evaluating open resources. We will provide support for managing the information lifecycle at the proper scale with larger collaborations when greater impact is needed; we will also devote attention to meeting local needs of UC campuses and other clients. We will focus our strategic financial planning on both efficiency and value, while continuing our entrepreneurial efforts to make some services self-supporting.

CDL’s position in the ecology of supporting UC’s mission is even more important during these times of upheaval, as many players must adapt to new demands, decreasing financial support and more community-based modes of interaction. Our willingness and ability to experiment and shift direction, and yet provide substantive, reliable and efficient services is in sync with the times.

“…it was the age of wisdom, it was the age of foolishness, it was the epoch of belief, it was the epoch of incredulity, it was the season of Light, it was the season of Darkness, it was the spring of hope…”

— Charles Dickens

Executive Director
Among other responsibilities, SLASIAC is charged to “develop policies and strategic priorities for the California Digital Library including policies that support the extension of CDL services beyond the University”.

Gene Lucas (Chair)
Executive Vice Chancellor
University of California, Santa Barbara

Mark Aldenderfer
Dean of the School of Social Sciences, Humanities and Arts
University of California, Merced

Rosio Alvarez
Information Technology Division Director and CIO
Lawrence Berkeley National Laboratory

David Ernst
Associate Vice President, Information Resources and Communications and CIO
University of California, Office of the President

Laine Farley (ex-officio)
Executive Director, California Digital Library
University of California, Office of the President

Robin L. Garrell
Professor, Department of Chemistry and Biochemistry
University of California, Los Angeles

Daniel Greenstein (ex-officio)
Vice Provost, Academic Planning, Programs, and Coordination
University of California, Office of the President

Mara Hancock
Director, Educational Technologies
University of California, Berkeley

Charles F. Louis
Vice Chancellor for Research
University of California, Riverside

Christopher M. Kelty
Associate Professor, Center for Society & Genetics
University of California, Los Angeles

Alfred Kobsa
Professor, Informatics
Bren School of Information and Computer Sciences
University of California, Irvine

Mary E. MacDonald (ex-officio)
Senior Counsel, Office of the General Counsel
University of California, Office of the President

Laurie Monahan
Associate Professor, History of Art & Architecture
University of California, Santa Barbara

Alison Mudditt (ex-officio)
Director, University of California Press

Debora Obley
Associate Vice President, Budget Operations
University of California, Office of the President

Rich Schneider
Associate Professor, Department of Orthopaedic Surgery
University of California, San Francisco

Peter Siegel
Vice Provost and CIO, Information and Educational Technology
University of California, Davis

Ginny Steel
University Librarian
University of California, Los Angeles

Gary E. Strong
University Librarian
University of California, Los Angeles

Wendy Streitz
Director, Policy Analysis & Campus Services, Office of Technology Transfer
University of California, Office of the President

Robert M. Anderson
Chair, Academic Council
University of California, Office of the President

Cynthia A. Johnson
Librarians Association of the University of California (LAUC) Representative
Head of Reference and Acting Head of the Grunigen Medical Library
University of California, Irvine

Joanne Miller
Systemwide Library Planning
University of California, Office of the President
A 2011 review of CDL highlighted CDL’s contributions to UC and the scholarly community. The review committee (see sidebar) deemed CDL “a strategic resource for UC,” noting its

- Value in licensing and aggregation of scholarly resources;
- Aggregation of technical resources and expertise, providing an affordable digital library infrastructure;
- “Smart, dedicated, accessible and innovative” staff;
- Neutrality, facilitating collaboration and resource sharing among the UC campuses from an unbiased position;
- National and international leadership role in establishing digital library standards, licensing terms, preservation, web archiving, open source development, facilitating successful multisite collaborations;
- Facilitating UC participation in many community initiatives, innovating with new technologies and producing cost effective access and data curation solutions for the UC community.

**STAFF PROFILE  Sherri Berger**

Access & Publishing Program Coordinator Sherri Berger was selected for UC Office of the President’s 2011-2012 Mentorship Program. The new program matches experienced OP leaders in one-on-one relationships with career staff who want to develop themselves both personally and professionally, expand their networks, and develop a better understanding of the intricacies of UCOP. Sherri was thrilled to be matched with Jan Corlett, Chief of Staff to the Vice President, Agriculture and Natural Resources.

Says Sherri, “Jan Corlett helped me better understand the goals and workings of UCOP, as well as my role within the organization. Her professional journey and path to UC leadership inspired me in my own career.”

---

**CDL 2011 REVIEW COMMITTEE MEMBERS**

**Shane Butler**
Professor of Classics and Associate Dean of Humanities
University of California, Los Angeles

**Jim Davis**
Vice Provost, Information Technology
University of California, Los Angeles

**Eric Kansa**
Professor of Information Sciences
University of California, Berkeley

**Clifford Lynch**
Director, Coalition for Networked Information
Adjunct Professor of Information Sciences
University of California, Berkeley

**Brian Schottlaender**
University Librarian
University of California, San Diego

**Ginny Steel**
University Librarian
University of California, Santa Cruz

**Michael Yonezawa**
Digital Library Services Group member
Statewide President of Librarians Association of UC (LAUC)
Reference Librarian
University of California, Riverside
CDL SERVICES AND SCHOLARLY MATERIALS

CDL provides faculty with access, discovery, publishing and preservation services, helping to increase the impact and reduce costs of scholarly communications and increase the competitiveness of UC faculty for winning grants and extramural funding.
CORE INITIATIVE 1: Support Next Generation initiatives and recommendations of the Systemwide Library and Scholarly Information Advisory Committee Library Planning Task Force.

These initiatives, sponsored by UC libraries, emphasize greater efficiencies and transformative discovery and resource management practices to support the needs of 21st-century collections and researchers.

We help users navigate an evolving information world and provide elegant solutions to complex problems.

Provide infrastructure for primary source collections

Now it is even easier for Online Archive of California (OAC) contributors to describe collections and contribute records to the OAC thanks to a tool called RecordEXPRESS, developed by the CDL team comprised of Mark Redar, Brian Tingle, and Adrian Turner. For institutions that either do not have the means or resources to easily create Encoded Archival Description (EAD) or MARC21-based collection guides, or may have legacy finding aids that are difficult to convert into EAD at this time, RecordEXPRESS solves the problem. With this and other services, the CDL is hoping to support institutions with “more product, less process”-based approaches to expose archival and special collections materials that would otherwise be hidden. This project was funded by The Andrew W. Mellon Foundation, administered by the Council on Library and Information Resources (CLIR) as part of its Cataloging Hidden Special Collections and Archives Program.

“RecordEXPRESS is a fantastic tool that allows us to easily create collection records that can be quickly published to the OAC enabling researchers to find our collections. The ability to upload PDFs of our finding aids which have not yet been converted to EAD is an important feature for archives, like ours, who have a very small staff which slows down the conversion of older finding aids to EAD.

RecordEXPRESS does everything its name says: allows you to create records in a flash and provide access to collections that would otherwise be hidden from researchers.”

—Diana Wakimoto, Archivist
California State University, East Bay University Archives
Provide support for Web-based collections and UC’s research output

> Data management plans are increasingly being required by funders such as the National Science Foundation, the National Institutes of Health, and the Gordon and Betty Moore Foundation. In November, 2011 the CDL’s UC Curation Center (UC3) partnered with several other major research institutions including libraries at UCLA and UCSD to develop the DMPTool. This open-source, freely available and easily configurable online application helps researchers generate data management plans and simple but effective documents for ensuring good data stewardship. The DMPTool supports plans and funder requirements across the disciplines, including the humanities and the physical, medical, and social sciences. As of June 30, 2012, over 450 institutions, including Yale University, the University of Chicago, and the Smithsonian Institution were using this tool.

Support UC libraries in producing financial and space savings, and expanded access where feasible, through shared approaches for ebooks by converting more print monographic purchasing to electronic form

> Springer ebook transition: The UC libraries transitioned from à la carte local print book purchasing for Springer ebooks to a consortial online contract with access to all of Springer’s ebooks published since 2005, as well as some earlier titles (over 45,000 titles in all). This acquisition has saved the campuses $2 million cumulatively in local expenditures over the last 4 years.

> Support UC libraries in providing financial and space savings: The Western Regional Storage Trust (WEST) made great strides in providing a system to ensure the collaborative management and preservation of the scholarly record for journals. CDL played two key roles as the administrative host for the partnership of over 100 libraries and by developing the Print Archiving and Preservation Registry (PAPR) sponsored by the Center for Research Libraries, a key tool for determining where journals could be archived. We are implementing additional strategies for collaborative management of prospectively-acquired print journals and archives while ensuring collection diversity. By focusing on print journals, the initiative also supports the UC libraries’ Collection Development Committee and Preservation Advisory Group.
CORE INITIATIVE 2: Support the UC scholarly research and teaching lifecycle.

In focusing on the scholarly research and teaching lifecycle, CDL has identified areas of importance to researchers. By considering the lifecycle for managing digital objects, CDL can ensure that all lifecycle activities are supported in an integrated way for an increasing number of formats or types of materials.

Provide lifecycle support by extending support for multimedia and data intensive research in eScholarship

> eScholarship (UC’s Open Access scholarly publishing and institutional repository service) is now better able to respond quickly to changing user needs and evolving content types after a two-phase overhaul. The first phase of the transition, completed in 2009, focused on creating a customized access interface for eScholarship content, emphasizing local branding and robust tools for discovery of publications and interaction with content.

The second phase, completed in December 2011, saw eScholarship’s submission management system transition from a vendor to a customizable open-source platform, partially powered by the Public Knowledge Project’s (PKP) Open Journal System (OJS). This local control of the submission management system offers eScholarship the flexibility and technical agility to better serve the publishing and dissemination needs of our users. For instance, while eScholarship has long supported supplemental content for repository submissions, the new submission and access interfaces have allowed us to begin working more effectively with data intensive research. Our first pilot project allows engineering faculty at UC Riverside to post datasets to the eScholarship repository, utilizing integrations with CDL’s EZID and Merritt services to provide long-term identifiers and preservation for their data “publications.” eScholarship is also now moving rapidly toward rich display for streaming multimedia publications, as well as HTML/XML-formatted texts.

“The readership of our journal has exploded since we started using eScholarship. Last April’s usage was greater than all of 2011 combined!”

—Andrea Broaddus, PhD Candidate, UC Berkeley & Managing Editor, Berkeley Planning Journal
We are making today’s information available tomorrow. We are actively building services to manage and preserve digital information of all kinds—from images to raw data to the deepest websites. Our curatorial approach to digital information helps scholars build on past discoveries to create new knowledge.

Orient services toward the research and teaching life cycle and academic workflow

> EZID (easy-eye-dee) is a service that makes it easy to create and manage unique, long-term identifiers such as Archival Resource Keys (ARKs) and Digital Object Identifiers (DOIs) for datasets, texts, etc. and that integrates with the research process. Researchers can then cite their data, be cited by others, assign identifiers to their works, and save time and resources while meeting funding requirements and planning for data management.

"Researchers are familiar with the concept of DOIs and associate them with persistence. Assigning DOIs to figshare content through the EZID system allows researchers to efficiently share and cite their research outputs in a way that has never been possible before. The great team at the California Digital Library has a setup that makes assigning DOIs a simple yet well-structured process. The partnership helps researchers get credit for all of their outputs and in turn, helps make the dissemination of scientific data more efficient and better linked."

— Mark Hahnel, founder
figshare (http://figshare.com)
In June 2012, CDL began marketing EZID to expand the user base of its current 31 client institutions and achieve cost recovery for this service. Ads ran in the PLoS ONE journal and there was an email campaign in Biomed Central, The Open Access Publisher.

> As a first step in exploring the potential for Calisphere to meet a user base beyond K-12 teachers, Sherri Berger of the Access & Publishing Group undertook an assessment to determine who is using this service. By means of a brief survey placed on the site for one week, she determined that Calisphere users are broad and diverse in their research roles. A large portion of survey-takers comprised graduate and undergraduate students. This information will inform the future direction of the service during the coming year.
Reduce access barriers to make collections and services more visible and available

> UC Reprints Service: Working with Hewlett-Packard and Amazon, CDL has expanded services for the University of California’s 517,249 mass-digitized works in the public domain, making it possible for customers worldwide to purchase a copy of one of our books through a UC branded print-on-demand service.

CORE INITIATIVE 3: Provide leadership in digital library development and service adoption.

This initiative acknowledges CDL’s unique responsibility for evolving the digital library and the transition from print to digital through its own initiatives as well as in a complementary relationship to developments on UC campuses and with external partners. Equally important to the development of digital library solutions is the outreach to various stakeholders to encourage understanding and incorporation of services.

Enhance services with outreach communication and training

> UC library staff learned more about UC3 services through an array of outreach webinars, conference presentations, blogs, wikis, and monthly updates in CDLINFO, covering services such as the DMPTool, Merritt Repository, Digital Curation for Excel (now dubbed DataUp), and the Web Archiving Service.

STAFF PROFILE Carly Strasser

Carly Strasser, a member of CDL’s University of California Curation Center (UC3) has been working on a yearlong project called DCXL (Data Curation for Excel), now called DataUp. The project, funded by Microsoft Research Connections and the Gordon and Betty Moore Foundation, has created two tools—an open source Excel add-in and a web-based application—to make data management, data sharing, and data archiving easier. Carly’s background is in the sciences. She has a PhD in Biological Oceanography from the Massachusetts Institute of Technology/Woods Hole Oceanographic Institution. She held a postdoctoral research position at the University of Alberta where she developed copepod population models to understand the potential for invasion via ship ballast water. Prior to coming to CDL, she had a postdoctoral position at the National Center for Ecological Analysis and Synthesis (NCEAS) at UCSB where she became involved with the DataONE project and evaluating socio-cultural issues associated with data. The CDL is Carly’s first library/non-science position. Learn more about Carly via her website and blog.
Web Archiving Service

- Site Management and Tagging
- Create and Capture Sites
- Display and Analyze Capture Results
- Evaluating Sites for Capture

> The Web Archiving Service (WAS) enables librarians, archivists and researchers to capture, curate and preserve websites and web-published materials. WAS makes it easy to build and manage web archives. Users control public access to their archives and can configure the appearance and navigation of each archive. With 25 institutions using WAS and more than 8,258 sites captured and preserved, WAS plays an active role in online education for its community of users.

We are connecting content and communities. We make interactive library systems work well together, so our users find and get the information they need as quickly as possible. Our goal is to provide seamless access to UC’s vast holdings, online and in print.

Advance digital library development

> Zephir: CDL’s Discovery & Delivery group is developing a system to address new ways of managing digital content to enrich and enhance the value of metadata for digitized works in HathiTrust (a large scale repository of digital content from research libraries including books digitized by Google and the Internet Archive and other collections). Zephir will also make it possible for other partners or services to use the metadata. For example, any library can mine the metadata files in Zephir and load records for public domain works into their local catalogs. The Zephir team is exploring other uses that would result in better clustering and de-duplication of records to improve access to records for users, and would provide another authoritative source of what has been digitized for collection analysis projects such as WEST.
STAFF PROFILE  Stephanie Collett

Stephanie Collett joined the CDL in 2007 as a programmer analyst on the Discovery & Delivery team, and has proved herself to be a “Jill of all trades,” having worked on a number of projects in the Discovery & Delivery group. Having studied the development of user-centered information services and the social aspects of computer-mediated communication at UC Berkeley's Information School, she has worked on projects that make searching and retrieving information easier for our users, such as ingesting UC's Internet Archive books into HathiTrust and creating an improved page turner for reading digital books. She is currently working on Zephir, a system to manage HathiTrust partners' bibliographic metadata. Stephanie also built out UC's version of the LibX tool that allows users to quickly search all ten campus and central UC Melvyl versions (e.g., Melvyl – UCLA Library), WorldCat.org, the local campus library catalogs, and Google Scholar.

STAFF PROFILE  Kathryn Stine

Kathryn Stine is a metadata analyst in CDL's Discovery & Delivery group, working primarily on Zephir, the HathiTrust metadata management system. Kathryn works closely with staff at the University of Michigan to migrate and reconcile a massive amount of contributed bibliographic metadata, develop workflows and guidelines, and identify and address metadata policy issues. She is also involved in ensuring that metadata contributed to the HathiTrust effectively supports users of the digital library in finding, identifying, and selecting its digitized resources. She works with Zephir team programmers to define and capture core metadata elements from contributed records to support crucial system functions affecting resource discovery and access. Prior to her arrival at CDL Kathryn had several years’ experience managing archival processing, description, and digitization projects, working to provide access to a range of formats from oral history interviews and visual materials to organizational records and personal papers. She served as university archivist at the University of Illinois at Chicago, and prior to that, as manuscripts librarian.
We are building a world-class digital collection. We acquire digital resources in a variety of ways, from digitization to licensing. And we make UC dollars go further by doing so collaboratively, in partnership with the ten campus libraries.

> **Social Networks and Archival Context (SNAC):** A longstanding research challenge for scholars is discovering, locating, and using unique historical records as primary evidence for the lives and work of historical persons and events in which they participated. These records are held in archives and manuscript libraries, large and small, around the world. Scholars may need to search scores of different archives, following clues, hunches, and leads to find the records relevant to their topic.

The SNAC project aims to make records more easily discovered and accessed and also to build a resource that provides access to the socio-historical contexts including people, families, and corporate bodies in which the records were created.

CDL is a partner with the University of Virginia in this important project, funded by the Andrew W. Mellon Foundation, contributing the entire design and development process for the access layer, including user assessment.

http://socialarchive.iath.virginia.edu/xtf/search

> **The DMPTool** is one of five winners of the [Larry L. Sautter Golden Award](http://socialarchive.iath.virginia.edu/xtf/search), given by the by the University of California’s Information Technology Leadership Council for Innovation in Information Technology, July 2012. EZID received an honorable mention.

**STAFF PROFILE Brian Tingle**

Brian Tingle is a lead programmer for CDL’s Access & Publishing group. He has been involved in designing and building web-based access systems for the University of California Libraries, including Calisphere and OAC (Online Archive of California), for many years.

As the lead technical architect for the OAC, he worked extensively with Encoded Archival Description (EAD). Brian has experience with all aspects of web development and production, including server side technologies, such as XTF; front-end technologies including JavaScript and CSS; user-centered design methodologies and information architecture. He leads a team of programmers responsible for supporting a portfolio of applications and services at CDL.

A fourth generation Southern California native, Brian moved to the San Francisco Bay Area in 2001 to work for CDL.
CORE INITIATIVE 4: Diversify funding sources and extend efficiencies. Because CDL was established under the premise that collaborative efforts to acquire collections and provide services would create substantial savings, it has been a fundamental part of CDL’s approach to demonstrate that outcome.

CDL takes a comprehensive approach to digital library development that balances experimentation with strategy. We pursue simple, economical solutions to big challenges.

The CDL operates at a current annual cost-equivalent of $68 per UC faculty, student, and academic staff member (based on 2010 budget and data).

<table>
<thead>
<tr>
<th>Expenditure per</th>
<th>CDL</th>
<th>University</th>
<th>CDL cost as a % of University Expenditure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student</td>
<td>$76</td>
<td>$15,120</td>
<td>0.50%</td>
</tr>
<tr>
<td>Faculty</td>
<td>$1,240</td>
<td>$265,000</td>
<td>0.46%</td>
</tr>
</tbody>
</table>

Develop sustainable business models

> The CDL produced unparalleled savings and cost avoidance for UC campuses in 2011 through a collective licensed content portfolio of $38.7 million, $25 million of which was for consortial online journal contracts. CDL negotiations extend access systemwide to content that would otherwise be unaffordable at many campuses, saving the libraries millions of dollars annually in direct cost savings or cost avoidance.

Improve internal CDL efficiencies

> Extend licensing efficiency through improved tools and reporting. In recent years, systemwide licensing of electronic journals via publisher packages has been the primary strategy for sharing journal literature among UC campuses. UC faculty, staff, and students have benefited via unprecedented access to a broad and diverse range of research resources. Through a combination of California Digital Library and campus library co-investment, UC has been able to acquire journals that would cost the University nearly four times what we currently pay—approximately $100 million, or 50% more than the combined materials budget of all ten campuses—if they were independently licensed by each campus at list price.

“The ongoing work of the CDL in negotiating licenses for the 10 campuses has resulted in enormous cost savings for the entire UC system. The consequence of their favorable negotiations is that even the smallest of the UC campuses can have a library collection unparalleled by almost any other academic institution in the world. Members of the UC community doing research, teaching, learning, and patient care benefit greatly from the access they have to such a broad and deep range of material. CDL also pursues transformative publishing models that can potentially result in expanded access to our faculty’s research, at far less cost. Thanks in large part to CDL, the resulting breadth and depth of our library collections is of immeasurable value in recruiting top ranked faculty and graduate students to our campuses.”

— Ginny Steel, University Librarian, UC Santa Cruz, Chair, Council of University Librarians
“All of the CDL tech leads worked with the Infrastructure group to make great progress on virtualizing our underlying technologies, resulting in about 25% overall cost reductions, with more to come in the coming year.”

— John Ober
Recently retired CDL Director of Infrastructure and Applications Support

In difficult budgetary times, however, UC must strive to do even better. CDL is currently working with the UC campus libraries on an innovative Journal Evaluation Project designed to improve and streamline our annual review process for these major packages. The project uses a holistic approach, including consistent principles and metrics, to review the UC Libraries’ entire e-journals portfolio and identify where improvements in overall value might be made. Using a data-driven algorithm developed by CDL as a base, UC librarians are reviewing journals across major publisher packages to help CDL build a comprehensive knowledgebase of journal value that combines numerical inputs with librarian expertise. This multi-faceted value-based approach will help CDL to better prepare and plan multi-year contracts. It will also provide important information that can be used in negotiations with publishers to tie pricing more directly to a journal’s value to UC.

Much of our success comes from bringing people together. We build and share expertise within UC’s ten campuses, and we partner with organizations on far-reaching problems. We openly share our services, content, and software whenever possible.

**STAFF PROFILE Rachael Hu**

Rachael Hu, CDL’s User Experience Design Manager, has a deep knowledge of academic users and the challenges that they face conducting their research in an online environment. She translates these users’ needs into effective design solutions for many of CDL’s online services. Rachael has a Master’s of Science in Information from the University of Michigan, where she pursued a tailored degree specializing in Human Computer Interaction and Archives and Records Management. Before coming to CDL, she worked at JSTOR where she was the User Services’ lead on the initial delivery system for the electronic archiving service, Portico. At CDL, she has led the design of a number of projects - the Online Archive of California redesign, the re-imagining of both the CDL and UC libraries websites, as well as the eScholarship submission system. She has also conducted user research in academic mobile use and in the data management eco-system. She represented CDL on the NISO/NFAIS Supplemental Materials Business Working Group and the DataONE Usability Working Group. Currently, she is embarking on user research and usability work for the SNAC: Social Networks and Archival Context Project to ensure that potential audience segments and their needs are accounted for in the prototype user access system.
GRANTS AND PARTNERSHIPS

Andrew W. Mellon Foundation
ArchivesSpace: (New York University Libraries, UC San Diego Libraries, University of Illinois Urbana-Champaign Libraries)
Association of Research Libraries (ARL)
California State Library / Califa Library Group (Local History Digital Resources Program)
Center for Research Libraries (CRL)
CERN
DataCite
DataOne
DMPTool partners
Google
HathiTrust
International Coalition of Library Consortia (ICOLC)
Internet Archive
International Internet Preservation Coalition
JSTOR/Harvard Object Validation Environment (JHOVE2) (Portico, Stanford University)
Lulu.com (commercial partner)
Gordon and Betty Moore Foundation
Microsoft Research
Name Assigning Authority Number (NAAN) Registry
National Digital Stewardship Alliance (NDSA)

OCLC
Public Knowledge Project: (Simon Fraser University, University of British Columbia, University of Pittsburgh, Stanford University)
ResearchHub (UC Berkeley)
Social Networks and Archival Context (SNAC): University of Virginia, Institute for Advanced Technology in the Humanities; School of Information at UC Berkeley
Scholarly Publishing and Academic Resources Coalition (SPARC)
University and Jepson Herbaria, UC Berkeley
Western Regional Storage Trust (WEST) (100+ partner libraries)

CDL PROGRAM COST 2011-2012

- Collection Development: $7.1 million (51%)
- Digital Special Collections: $414,440 (3%)
- Discovery & Delivery: $1.9 million (14%)
- Publishing Services: $705,700 (5%)
- UC Curation Center: $787,000 (6%)
- Immediate Office: $263,100 (2%)
- Infrastructure & Applications: $1.5 million (11%)
- Business Services: $460,300 (3%)
- Strategic & Project Planning: $120,100 (1%)
- Information Services: $301,700 (2%)
- User Experience Design: $363,400 (2%)

CDL PROgRAM COST 2011-2012

- Collection Development: $7.1 million (51%)
- User Experience Design: $363,400 (2%)
- Information Services: $301,700 (2%)
- Business Services: $460,300 (3%)
- Strategic & Project Planning: $120,100 (1%)
- Infrastructure & Applications: $1.5 million (11%)
- Immediate Office: $263,100 (2%)
- Business Services: $460,300 (3%)
- Information Services: $301,700 (2%)
- User Experience Design: $363,400 (2%)
- Collection Development: $7.1 million (51%)

OCLC
Public Knowledge Project: (Simon Fraser University, University of British Columbia, University of Pittsburgh, Stanford University)
ResearchHub (UC Berkeley)
Social Networks and Archival Context (SNAC): University of Virginia, Institute for Advanced Technology in the Humanities; School of Information at UC Berkeley
Scholarly Publishing and Academic Resources Coalition (SPARC)
University and Jepson Herbaria, UC Berkeley
Western Regional Storage Trust (WEST) (100+ partner libraries)
ADOPTION OF CDL SERVICES AS OF JUNE 30, 2012

<table>
<thead>
<tr>
<th>Service</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>OAC</td>
<td>219 contributing repositories, 34,889 collection guides (19,780 Encoded Archival Descriptions (EADs) and 15,109 MARC records)</td>
</tr>
<tr>
<td>eScholarship</td>
<td>329 departments across the 10 campuses, UC office of the President, University of California Press and Lawrence Berkeley National Laboratory</td>
</tr>
<tr>
<td></td>
<td>47,000 publications</td>
</tr>
<tr>
<td></td>
<td>57 journals</td>
</tr>
<tr>
<td>Merritt</td>
<td>9 institutions</td>
</tr>
<tr>
<td>DMPTool</td>
<td>450 institutions</td>
</tr>
<tr>
<td>WAS</td>
<td>25 institutions, 175 archives with 8,258 sites captured and preserved</td>
</tr>
<tr>
<td>EZID</td>
<td>31 institutions, 135,839 ARKs, 119,605 DOIs</td>
</tr>
<tr>
<td>HathiTrust</td>
<td>3,681,433 UC volumes; over 10,400,000 total 517,249 UC public domain volumes; over 3,000,000 total</td>
</tr>
<tr>
<td>Licensing of electronic content</td>
<td>49,550 electronic journals</td>
</tr>
<tr>
<td></td>
<td>463,954 ebooks</td>
</tr>
<tr>
<td></td>
<td>527 databases</td>
</tr>
<tr>
<td></td>
<td>(Tier 1 and Tier 2 resources combined)</td>
</tr>
</tbody>
</table>