LIBRARIES AND CULTURAL RESOURCES UNIT REVIEW

Summary Report

The Site Visit of the Unit Review Team for Libraries and Cultural Resources took place from June 27-28, 2016. The Unit Review Team consisted of:

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Following the Site Visit, the Unit Review Team prepared a written report containing comments and recommendations. Libraries and Cultural Resources subsequently provided responses to the recommendations. General comments and the recommendations and responses follow.

General Comments of the Unit Review Team

The University of Calgary *Eyes High* vision and associated strategic plans lay out ambitious goals for the University of Calgary. Unit Reviews, part of the Quality Assurance Process, assess alignment with institutional ambitions and goals, and offer an encompassing evaluation of the Unit's programs and assets that support and drive education, research, and service contributions.

This review of Libraries and Cultural Resources (LCR) assesses the five-year period of 2011-2016, a period of rapid growth and significant change for LCR. This time frame is also reflective of a decade of transformative change in the environment in which research libraries exist – an environment in which technologies and new models have transformed teaching and learning, research and scholarship, scholar communication practices, and publishing. This is a highly interdependent environment, and one in which a research library plays a dual role as both service agency as well as an intellectual agency in its own right.

The Libraries and Cultural Resources organization is unusual in its broad portfolio of cultural and institutional resources: a constellation of libraries, museums, galleries, institutional archives, and the University Press. The portfolio is complex in its composition, as well as the challenges of supporting distinct missions and diverse constituencies.

A second distinctive characteristic of LCR is reflected in the visible shift from a collection-centric organization to one that is more focused on seizing the potential of digital technologies. The construction of the Taylor Family Digital Library (TFDL) and the High Density Library (HDL) has repositioned collection assets, with recent investments in discovery tools and delivery systems ensuring sustained access to legacy collections. This shift is not unique, but in many libraries the process is more evolutionary, with a gradual de-emphasis on collections as an organizing

paradigm for library services and increased emphasis on the unique expertise with knowledge resources within the organization that can be extended to support curriculum and research. While there is evidence of increased LCR collaboration and integration in campus programs (e.g., data curation support or instructional programs), the speed and scale with which collections have moved offsite undoubtedly has been challenging as librarians and other staff integrate these new roles. Resource constraints have further limited the organization's ability to shift its capacities and invest in new areas.

Similar to the rapid rise of the University of Calgary as a leading research institution in Canada, LCR has gained recognition in North America for its programmatic accomplishments, notably its capital innovations, acquisition of stellar special collections, open access publishing support funds and visible community engagement. Also noteworthy has been Calgary's institutional commitment to developing and supporting the organization, evidenced in the significant capital investments and the ongoing support for collections in the face of Canadian currency fluctuation.

The review team's assessment recognizes the progress LCR has made in five years, while highlighting the challenges of shifting focus and resources. Its recommendations target areas for attention to support and further Calgary's strategic directions and the transitions underway.

General Response from Libraries and Cultural Resources

The Review Team did not identify any major or systemic flaws in the operational, organizational, or professional management of Libraries and Cultural Resources (LCR) during this period. We are pleased by these findings. Also of major importance is the confirmation of the appropriateness of principal strategic directions to which LCR is currently committed. There were, however, concerns raised, and suggestions for improvement were offered. Our response addresses the concerns expressed by the Review Team and focuses on opportunities for programmatic enhancement going forward.

The Review Team opens their report by characterizing this time frame as "reflective of a decade of transformative change in the environment in which research libraries exist – an environment in which technologies and new models have transformed teaching and learning, research and scholarship, scholarly communication practices, and publishing. This is a highly interdependent environment, and one in which a research library plays a dual role as both service agency as well as an intellectual agency in its own right." (Unit Review 2016. p.1) In our response to this review, LCR seeks to acknowledge and fully embrace the impact of these ongoing transformations – striving to maintain the quality of its role as a "service agency" while emphasizing its leadership as an "intellectual agency."

The Review Team organized their report in response to six questions addressed to them by Provost Marshall:

- Collections and Operations Balance
- Organizational Model and Staffing Configuration
- Collection Resources and Commitments
- Electronic Resource Management
- Open Access Investment and Direction
- University Press

This response is similarly organized, but rather than addressing the recommendations individually, we have adopted a thematic approach in an effort to provide a more holistic response demonstrating operational and strategic enhancements within the context of campus-wide, national, and international leadership.

Detailed Reviewer Recommendations and Unit Response

Collections and Operations Balance

Recommendations:

1. Leverage LCR facilities for increased integration of LCR content and expertise into curriculum and research.
2. Continue development, reallocation, and repositioning of staff resources to align with contemporary service and collection management needs.
3. Explore opportunities for shared infrastructure and expertise across all LCR organizational units.
4. Invest in at-scale, consortial solutions to collection management and preservation challenges.

Response:

In addressing the question of an appropriate balance between investments in Collections and Operations, the Review Team notes that 44% of LCR's 2015-2016 budgetary allocation is assigned to Collections and 56% to Operations (Staffing and Utilities) and that this is not dissimilar from other research libraries of comparable size. They then, however, call attention to the broader scope of LCR's portfolio including the operation of museums and galleries and the responsibility for institutional records management and comment that these operational responsibilities are beyond those normally assigned to research libraries and represent additional staffing costs. It should be noted that the 44% allocation for 2015-2016 includes substantial one-time funding from the Office of the Provost, in large part addressing the magnitude of the drop in purchasing power between the 2014-2015 and 2015-2016 fiscal years (a decrease of 22 percent). In order to sustain the sharing of operational infrastructure and staffing across multiple functional areas, a 40% / 60% division is a more realistic distribution going forward. (The issue of expenses associated with the management of University financial and human resources records is addressed in the *Collection Resources and Commitments* section.)

Although the diversity of the library facilities maintained by LCR is an ongoing challenge, the University's Classroom and Facility Alteration Request program (CAR/FAR) and generous contributions from the Students' Union Quality Money program have met some of our more pressing needs and have supported innovative enhancements in several of our facilities.

Transformation of our staffing configuration has been a central driver in reshaping LCR within the current information environment. While the eighteen-month suspension in hiring (October 2014 – March 2016) was necessitated, in part, by continuing financial pressures on our Staffing and Utilities budget, certain enhancements and operating efficiencies were achieved through the reconfiguring of staffing assignments and the identification of new priority hires once the hiring freeze was lifted. In combination with the elimination of a small number of positions explicitly associated with managing the physical collection, significant progress has been made. Recent support from the Office of the Provost for critical hires in new areas has been particularly important. The Review Team confirmed that LCR is maintaining core services while reshaping its role in areas of new priorities.

LCR's focus on articulating an inclusive content strategy aligns with evolving practices in other research libraries today. This approach acknowledges the growing diversity of academic resources beyond the printed books and electronic journals employed by students and faculty today. An increasing portion of the knowledge base is accessible in less traditional ways through broadly shared resources and Open Access distribution. Management and sharing of research data is accelerating this trend. In addition to the introduction of a content strategy framework, metadata creation will now be applied to information resources far beyond traditional cataloguing. In addressing this need for new approaches, Metadata Services was incorporated into our Technology, Discovery and Digital Services unit on July 1, 2016.

The Review Team's emphasis on institutional collaboration is important. The opportunities for regional and national collaboration are significant, and LCR has been an active participant in such collaborations. Current examples include the Council of Prairie and Pacific University Libraries (COPPUL), the Coalition for Networked Information (CNI), the Association of Research Libraries (ARL), the Canadian Association of Research Libraries (CARL), The Alberta Library (TAL), and the Canadian Research Knowledge Network (CRKN).

Specific collaborative endeavours include active participation in the COPPUL Shared Print Archive Network (SPAN) to ensure a multi-institutional plan for Western Canada designed to provide long-term preservation for printed works without requiring that every institution retain multiple copies. LCR has completed Phase 3 of the SPAN Journal Project and is now participating in the SPAN Monograph Project. Also through COPPUL, the University of Calgary was an early participant in the use of a common LOCKSS server, as part of the LOCKSS network managed centrally at Stanford University in Palo Alto, California. This fall, COPPUL will be addressing the development of a new digital preservation strategy at their September meeting in Winnipeg to broaden existing collaborations. A component part of this development is reflected in our discussions with the University of British Columbia Library about shared access to data storage.

Canadian universities benefit from participating in collective purchasing of electronic resources through CRKN, a coalition of 75 member institutions. The majority of the University of Calgary's purchasing of electronic academic journals is through this partnership. The University of Calgary is participating in the CRKN Journal Usage Project to augment our knowledge of campus-wide scholarly journal use within a national context. This project includes a survey of University faculty to be conducted during the fall 2016 semester.

Organizational Model and Staffing Configuration

Recommendations:

1. With a highly functional senior leadership team now firmly in place, invest in organizational development initiatives that foster an engaged, solutions-oriented culture across the organization and across staff groups.
2. Pursue strategies to promote staff reassignments, mobility and cross-training consistent with collective agreement terms.
3. Promote project management skills development.
4. Initiate a structure and process to develop a campus conversation around the changing shape of scholarly communications and the roles of liaison librarians.
5. Consider use of shared positions with colleges in priority areas to support library engagement with interdisciplinary research areas (such as the Mellon grant fields: Arctic Studies; Smart Cities; and Visual Analytics).

Response:

The Review Team noted the effectiveness of the present organizational and administrative structure, led by four Associate University Librarians (AULs) responsible for core program areas. The current Senior Leadership Team, composed of the Vice Provost, the AULs, and the Manager of Communications and Marketing, has now been in place since July 1, 2015. This group works effectively in managing their respective areas, but of equal importance is their success in working together across their areas of responsibility. The current cohesiveness, in combination with appropriate delegation of responsibility, authority and accountability, has resulted in an enhanced model for collaborative management in LCR.

With enhanced program management within core areas now in place, more success must be realized in staff development and shared commitment LCR-wide. Responding to the results of the Employee Engagement Survey following consultation with the staff has led to overall improvement. Systematic reporting LCR-wide on a weekly basis provides regular awareness. Reporting on the Senior Leadership Team meetings and the Vice Provost's participation in meetings of each of the three principal staff councils also contribute to this effort. Frequency of Town Halls involving all staff will be increased beginning in fall 2016. The selection of a new Library Management System in the upcoming months will engage a broad spectrum of staff, drawing collectively on their specific expertise.

Considering the pace of change, communication must be accompanied by opportunities for the development of new skills. An emphasis on such support has been underway for over two years, beginning in August 2013 with the launch of the *Enabling 21st Century Competencies* program, allowing any staff member to request full funding for participation in sophisticated training programs nationally and internationally. This program continues and, while it has been more frequently used by academic staff, several Management and Professional staff and support staff have also participated. In the dynamic area of new technologies, workshops and webcasts are offered to all staff on a regular basis. It is also evident that more staff are taking advantage of University-sponsored training programs.

However, with LCR playing a distinctive role in adapting to new research and learning initiatives, broader engagement and understanding among the staff is essential in realizing these initiatives. In seeking to foster such capacity, implementation of change management and project management programs will prove valuable. In consultation with University Human Resources, LCR will initiate coordinated programs in these areas beginning in January 2017.

A recent example of efforts to engage staff across LCR in new initiatives is the establishment of a committee to determine what competencies are required to address data management, with membership including technology specialists, subject/domain specialists, and metadata specialists. A training program will be implemented in the fall using a variety of delivery methods to support these competencies. The same approach will be used for scholarly communication competencies.

Regarding shared appointments, three LCR faculty presently hold adjunct appointments in other Faculties and the Head of the Bennett Jones Law Library holds a joint appointment with the Faculty of Law. Our Teaching and Learning position includes a 40 percent time commitment with the Taylor Institute for Teaching and Learning. Other opportunities will be pursued, particularly in response to interdisciplinary research partnerships.

Collection Resources and Commitments

Recommendations:

1. Advance collaboration with CARL to achieve scalable collaborative solutions for content infrastructure and digital preservation needs.
2. Consider LCR leadership role in data scholarship offerings.
3. Explore sustainability models for new models of scholarship.
4. Evaluate the cost benefits of supporting University financial and human resources records.

Response:

Retaining the quality and breadth of the general collection of commercially acquired print and electronic books and licensed academic journals and databases remains vital to our academic community. Confronting the financial realities of doing so is an ongoing challenge. This challenge has been alleviated in part by consortial purchases and through one-time contributions from the

Office of the Provost. Critical to addressing this challenge is to make difficult decisions based on what our faculty and students actually use. In doing so, we will benefit from the collective experience of our Canadian colleagues and the research study currently being led by CRKN.

While commercial acquisitions remain central, current research indicates that other resources will soon be considered of greater importance to researchers. Such resources include disciplinary repositories such as arXiv.org, Open Access publications, shared data, and internationally aggregated collections such as HathiTrust. While the library catalogue will remain an important access point, discovery increasingly takes place through other search means. While the books and journals held at any one institution will be of decreasing importance, the value of Special Collections will increasingly determine the prominence and vitality of research libraries. The University of Calgary's Archives and Special Collections are a vital asset in providing distinctive research and teaching sources. Preserving the rich cultural record is also of essential societal value.

In addition to the primary role of LCR's University Archives in the preservation of those records of the history of the University of Calgary that have permanent value, this unit has also been assigned responsibility for support of the University's current and inactive corporate records documenting campus management. This aspect, while associated with the selection of archival records of permanent value, is records management – a business activity necessary to the day-to-day operation of the University and to comply with legal requirements associated with that operation. This activity is increasingly resource-intensive as we seek to address the management and disposition of electronic information based on legal, business, and financial requirements. The staffing and IT infrastructure costs necessary for effective electronic records management on campus exceed the resources currently allocated to University Archives.

LCR affirms the Review Team's observation that, in the case of most research libraries, this responsibility is assigned elsewhere in the institution. To more sustainably develop policies addressing information management, the administrative assignment of this responsibility should be examined, or the allocation of resources to University Archives should be sizably augmented in order to meet the University's need for responsive and comprehensive solutions. Led by the Provost, discussions should be initiated with Legal Services, UCIT, the Vice-President (Finance and Services) and the Vice Provost (LCR).

As the Review Team observed, new models of scholarship involving new resources (data), new techniques (geospatial analysis), and new tools (visualization and virtual reality) are combining to change the research landscape. LCR is exercising a leadership role in delineating the nature and needs of today's multidisciplinary research. Reflective of the extent of the transformational change necessary are the findings of multidisciplinary workshops sponsored by The Andrew W. Mellon Foundation and conducted by LCR in November 2015. Findings from these workshops, which have drawn broad international attention, identified six primary areas of research support needed by faculty representing fifteen different disciplines: data management and data repositories, digitization, metadata expertise, space, skills training, and funding for collaborative work. These findings are already stimulating plans for significant change, focusing on newly identified needs, new

business models, and on collaborative research initiatives between library staff and scholars and students across the campus.

Space to conduct such collaborative research is one of the identified needs. The Lab NEXT concept represents a contextual hub for associated services in LCR and across the campus, and for the development of physical space enabling these kinds of activities. First steps in building Lab NEXT include the submission of a CAR/FAR application to reconfigure existing space on the 3rd floor of the Taylor Family Digital Library (TFDL). Consolidation of Digitization Services on the 3rd floor of the TFDL has already taken place. The architectural drawings have been completed for the 2017 move of the Prairie Regional Research Data Centre to provide immediate adjacency to Spatial and Numeric Data Services and the Visualization Studio on the 4th floor of the TFDL. In response to the recent acquisition of the EMI Music Canada Archive, basic research in the reformatting of large audio holdings will be conducted on the 3rd floor of the TFDL, also with the support of The Andrew W. Mellon Foundation.

These developments are essential components of a repositioning of the Library within the campus research enterprise.

Electronic Resource Management

Recommendations:

1. Plan for new library management system, exploring opportunity for cloud-based, collaborative services; given the core nature of this system, LCR leadership and expertise should have primacy in the assessment, selection, and implementation of a new system.
2. Ensure ongoing development of information discovery services, with a goal of a more coherent network presence and user experience.
3. Pursue an architectural review of LCR systems and technologies with a focus on creating a more seamless and coherent experience for the user.
4. Advance programs to ensure sound data practices to enable access, sustainability, and preservation of data in support of education and research.
5. Invest in consortial and collaborative strategies for research data curation and digital preservation.

Response:

LCR has received authorization from University of Calgary Information Technologies (UCIT) to reconfigure our existing digital repository, PRISM. Employing a new version of the DSpace software will offer much improved management and discovery and provide scholars with more detailed reporting of the use of their works held in the repository. Planning and evaluation leading to the selection of the DSpace software is reflective of campus-wide integrated planning involving LCR, UCIT, and the Research Services Office (RSO). A principal factor in choosing the DSpace option is its compatibility with Converis, the proposed platform for RSO's implementation of a campus-wide research information management system (RIM). With the implementation of the new RIM in 2018, substantial efficiencies will result from this collaborative approach.

Authorization has also been provided for LCR and UCIT to plan for a new Library Management System (LMS) implementation. An RFP for an LMS will be issued in the fall. The LMS project creates an opportunity for broad staff engagement and consultation. In addition, the new system will result in significantly changed workflows and processes creating opportunities for staff reassignments and training.

Implementation of the new LMS in August 2017 will be followed by a review of other collection management systems presently being employed for archives (AtoM) and for art and artifacts (EMuseum) in an effort to create more seamless management and access for all LCR collections.

Research data management is a critical initiative nationwide, with CARL taking a leadership role. The Portage Network is committed to the development of a national infrastructure and has developed a bilingual data management planning tool meeting the requirements of the *Tri-Agency Statement of Principles on Digital Data Management* issued in June 2016. LCR's involvement in the Portage Network initiative has included membership of our Research Data and Visualization Coordinator on the Data Management Planning Expert Group. In partnership with John Reynolds, Acting Vice-President (Research), the Vice Provost co-chairs the University of Calgary's Research Data Stewardship Committee in developing procedures to institute and support research data management planning across the campus.

Open Access Investment and Direction

Recommendations:

1. Articulate coherent relationships and expertise across functional areas that support open scholarship initiatives.
2. Evaluate eligibility requirements for the Open Access Fund and campus funding partnerships.
3. Explore provincial and national collaboration to extend capacity and resources for open educational resources and research data management.

Response:

Open Access to scholarly information has become a dominant trend internationally. While Canada has lagged behind leaders such as the United Kingdom and Australia, significant steps are now underway. The University of Calgary has long been a national and international leader. The Vice Provost served on the Steering Committee of the Scholarly Publishing and Academic Resources Coalition (SPARC), based in Washington DC, and while President of the Canadian Association of Research Libraries, he led CARL in becoming a founding member in the Confederation of Open Access Repositories (COAR), based in Göttingen, Germany.

When the University of Calgary established an Open Access Authors Fund in 2008, it was the first such fund in Canada, the second in North America, and the sixth in the world. In addition to this Fund, other activities have included hosting of Open Access Canadian journals (currently hosting 18). LCR uses the Open Journals System and is a gold sponsor of the Public Knowledge Project. PRISM,

the digital repository managed by LCR, was one of the first in Canada and has been operational for more than a decade. In addition to scholarly works, the repository also houses The Vault, the repository for University of Calgary electronic theses. The University Copyright Office, sponsored by the Office of the Provost and managed by LCR, ensures that the Canadian Copyright Act is appropriately applied in teaching and research. The Copyright Office also provides consultation regarding publishers' policies and author rights for scholars and students. The University of Calgary Press adopted an Open Access mandate in 2010, currently offering over 70 Open Access titles.

The Vice Provost serves on the Provincial Committee on Open Educational Resources and on the University's Open Educational Resources Working Group. The University Press has recently initiated an Open Educational Resources (OER) project. A collaborative initiative with the Students' Union in the production of OER works will be included in next spring's discussion between LCR and the Students' Union Executive.

After achieving broad recognition, the Open Access Authors Fund temporarily suspended operation in November 2015 after exceeding LCR's 2015-2016 commitment of $350,000. This was due to a heavy influx of requests and increased publication charges. We are pleased that the fund has recently been reinstated through a combination of support from the Office of the Provost, LCR, and the various Deans. As a result, the fund has been expanded to $700,000, honouring commitments as of April 1, 2016.

Campus-wide coordination and an awareness campaign focusing on compliance with the new Tri-Agency Open Access mandate will be led by our recently appointed Digital Initiatives and Scholarly Communications Librarian.

University Press

Recommendations:

1. Explore further opportunities to leverage LCR infrastructure and content to the benefit of the Press.
2. Explore opportunities for new imprints that align with institutional strategic goals and directions.

Response:

The University of Calgary Press is an award-winning publisher of print and electronic peer-reviewed scholarly literature. It publishes significantly in fields closely aligned with University research strengths, and while an Open Access publisher, its print sales have also substantially increased, contributing to a relatively healthy financial state. The current Director of the Press, appointed in April 2015, has led new initiatives in distribution and marketing and in publishing partnerships.

The Press benefits from economies-of-scale achieved through its integration with LCR's finance, human resources, and technological support infrastructure. With the expanded mandate for Metadata Services to broaden its contribution beyond library cataloguing, wider involvement with

press activities will be explored. Examining the potential for the adoption of a common publishing platform and shared workflows for open journal hosting and the Press's Open Access publishing also deserves attention.

The University of Calgary Press is strongly supported by its scholarly editorial board and is noted for its rigorous peer-review. Its reputation as a contributor to the academic reputation of the University is growing.

In Conclusion

In its report, the Review Team consistently addresses the transformative change in the environment in which research libraries exist today. In addressing the broad spectrum of interest and needs of today's experiential learner, the TFDL's design focus on knowledge creation aligns well. Our technologies are fostering the new emphasis on undergraduate research capacity as well as supporting core learning. Our branch libraries are also sites for innovative approaches.

Today's research goals and methodologies are increasingly focused on multidisciplinary approaches to "Grand Challenges" rather than on discipline-specific scholarship. LCR is a leader in defining the nature of this changing environment and has established strategic directions that align well with transformations underway. In order to instantiate our evolving role in addressing the current and future needs of our University, we have to reposition LCR as an active partner in today's research landscape. It is in this endeavour that LCR will best realize its role as an "intellectual agency." The reshaping of our facilities to encourage active research partnerships, exercising a pivotal role in data management, supporting new means of scholarly communication, and teaching new analytical research techniques are exemplary of this new profile.

We found the Review process invigorating and appreciate the insights offered and the challenges defined by the Review Team.

Follow-up

The Review Team recommendations will be revisited mid-way through the cycle. At that point, Libraries and Cultural Resources will be required to report on its status in acting on the recommendations, providing explanations and timelines for those which have not been met. This interim report should be submitted to the Provost in December 2018, with the next full review scheduled in 2021-2022.