

Review of Dalhousie Research Services



Conducted by:

Martin Kirk, PhD (UBC)

Karina McInnis P.Eng., MPA (Queens)

Jean Marshall, PhD (Dalhousie)

February 2018

Executive Summary

In February 2018, Martin Kirk (University of British Columbia), Karina McInnis (Queen's University) and Jean Marshall (Dalhousie University) conducted a review of Dalhousie Research Services (DRS). The terms of reference for the review are provided (see attached). The review team were provided background documentation that included the results of a recent researcher satisfaction survey, details of the organizational structure, and various business process maps. The review team then spent two days onsite interviewing various stakeholders including groups of researchers, administrative leaders, and research administrators. The observations and recommendations of the review team are detailed in this report.

The most important finding emerging from this review is that researchers recognized they received high-quality service from DRS. The staff were judged as highly effective. The leadership provided by the Executive Director, Nancy Hayter, was well regarded. There is low turnover and high job satisfaction expressed by the DRS staff.

The areas for recommended enhancements are as follows with more detailed commentary in subsequent sections:

- 1) Electronic Systems – Deployment of the ROMEO Researcher Portal system is a critical first step and additional software tools for identifying collaborators and funding opportunities would be advantageous.
- 2) Relationship with Health Authorities (HAs) – There is significant need for high-level co-planning, possibly shared positions, an MOU and template agreements to enhance the efficiency of the Dalhousie/HA partnership.
- 3) Organizational Structure and Staffing – An unflattening of the organizational structure and a strategic increase in staffing levels is badly needed in some areas.
- 4) Research Development - A transformation from reactive to proactive research development is needed.
- 5) Internal Deadlines – Develop different “levels” of internal deadlines and internal review: content and administrative.
- 6) Legal Review – develop processes and/or software for tracking legal review time.
- 7) Orientation of New Faculty Members – Develop more enhanced orientation processes and tools for new faculty members.

During the course of the review the team met with:

- 1) Associate Deans Research
- 2) Health Authority Administrators
- 3) Canada Research Chairs
- 4) PIs and administrators who lead major projects
- 5) Early career investigators
- 6) Industry Liaison and Innovation Office staff
- 7) Central sister unit staff (research accounting, procurement etc.)
- 8) Open drop in
- 9) Information management staff
- 10) IR & D Director and Legal Advisor
- 11) DRS staff (grants, institutional projects and international)
- 12) Grant facilitators
- 13) Compliance (ethics) staff

Detailed Observations and Recommendations

1. SYSTEMS

Observations:

The inefficiencies we found in DRS processes are likely to be greatly minimized with the deployment of the ROMEO Researcher Portal system. The introduction of an electronic workflow and approval will bring to an end the current situation of chasing signatures prior to proposal submission.

Researchers also mentioned the absence of systems as a key issue in other circumstances, e.g., where access to information in locating research expertise held in systems such as Elsevier SciVal were available to library staff but not readily available to others. Other related software systems that capture research outputs and impacts, but also enable communication with CCV and generation of academic CVs, is being studied and a request for proposals is being developed.

Researchers mentioned a pressing need for information on funding sources beyond the typical federal funding programs. There are software systems on the market that help researchers find appropriate funding sources and can auto-alert them of new funding opportunities, e.g., Pivot and Research Research are not available at Dal.

Recommendations:

We recommend: 1) Complete a successful deployment of the ROMEO Researcher Portal; 2) DRS subscribe to a funding opportunity system; 3) Deploy software for capturing research outputs and impacts.

2. OPERATIONAL ALIGNMENT BETWEEN DRS AND HEALTH AUTHORITY (HA) RESEARCH ADMINISTRATION GROUPS

Observations:

DRS administrators and researchers both identified lack of alignment (people, systems and business processes) with health authority research administration as a major source of frustration and inefficiency. Researchers told us that it can take months to transfer research funds between the university and HAs. This is the most basic administrative function that should be extremely efficient with a week maximum turnaround time. We understood that a specific agreement (requiring legal review on both sides) is often required for a fund transfer to ensure that the terms and conditions of the funder are understood and agreed by both transferring and receiving parties. Apparently, Dalhousie can transfer standard grant funds to HAs without legal review, but any other transfer requires legal review. This issue is one of the most serious and pressing we discovered.

Recommendations:

We recommend: 1) Extensive co-strategic planning between DRS with their HA peers that is mandated and supported at the Vice-President Research and senior hospital administration levels; 2) Development of a joint MOU that captures the essence of the HA/Dalhousie operational relationship and template documents to enable fast and efficient transfer of funds/compliance/funder terms and conditions; 3) Regular meetings of HA and DRS staff to facilitate efficient research

administration processes; 4) Shared DRS and HA positions. (At UBC this shared model has been extremely successful and a key enabler of effective partnership.)

3. OPERATIONAL ALIGNMENT AND INTEGRATION BETWEEN DRS AND FINANCE

Observation:

The review team heard complaints in the time it took to open research accounts and the time it took to transfer funding to or from other partner institutions. Sometimes cheques were being misplaced causing significant delays in setting up accounts. Researchers complained about the low usability of the current financial system interface and the lack of ability to track the process of account opening and reporting processes.

Recommendation:

The usability of the finance system needs to be studied from a researcher productivity perspective. It clearly does not meet the needs of researchers in its current form. The electronic integration between the new ROMEO system and the finance system needs to be carefully planned so that there are: 1) No avoidable delays in setting up accounts or transferring funds, and 2) DRS has strategic control of setting up the accounts.

4. DRS ORGANIZATIONAL STRUCTURE

Observation:

The Executive Director of DRS has too many direct reports and the DRS structure is too flat.

Recommendation:

The organizational structure should be carefully studied, slightly un-flattened with additional managers or associate directors to create a more manageable and effective team structure.

5. DRS STAFFING

Observations:

Staff in DRS are working flat out and, in areas such as “Grants”, have unmanageable workloads, e.g., the term “survival mode” was used. The ambitious plans at Dal to improve tri-agency funding will not happen without adequate support in DRS especially within the “Grants” group.

Successful deployment of the Romeo Researcher Portal will be dependent on adequate staffing, otherwise, user acceptance of the new software will not be obtained and will result in low staff and faculty morale.

Recommendations:

We recommend: 1) A DRS workload study and a significant investment made in new positions as needed especially within the “Grants” group; 2) Strongly recommended that the staff working on the Romeo Researcher Portal are solely

dedicated to this work and there is adequate staffing to manage all aspects of change management and customer service, e.g., business analyst, help desk, ticketing system, training and training materials. (At Queen's University, the research administration electronic systems managed by University Research Services has three full-time staff in the sustainment phase and more for implementation.) 3) Several additional PhD positions to support research development and grantsmanship. (At Queen's University, four new joint positions between the largest three faculties and URS were created to manage all non-institutional funding programs in addition to the three staff in the central office.)

6. RESEARCH DEVELOPMENT

Observation:

There are central research development resources available to Dalhousie researchers. Support for large, institutional programs (e.g., CFI and NCE) was deemed superb; however, the support for smaller (e.g., operating grants) was judged as inadequate. Some PIs had received high-quality proposal reviews whereas others had experienced cursory, mainly administrative reviews that added marginal competitive advantage. In general, the research development group within DRS were judged to be high quality, but mostly reactive. There are internal deadlines for administrative review purposes; however, these generally do not allow enough time for intensive review and editing. The staff expressed their frustration that there was a lot of last minute reviewing with high volume that prevented intensive reviews likely to improve success rates.

Recommendation:

We recommend that resources be dedicated to research development planning and this be conducted with the associate deans of research of the faculties/schools. Decisions are required to understand which programs should be properly supported; and aggressive deadlines are needed to ensure there is adequate time for intensive reviews of a reasonable proportion of the total applicant cohort. Last minute reviews should no longer occur as they are seldom successful.

7. INTERNAL DEADLINES

Observation:

Researchers told us that the DRS internal timelines were too long and they questioned the nature of reviews and the value received.

Recommendation:

We recommend that DRS establish and communicate two different internal deadlines, explaining the difference between the two. It is strongly recommended that the associate deans of research be engaged in establishing and communicating the deadlines.

The earlier deadline would be carefully communicated as one that is required if a PI wishes to have an intensive review/edit. Researchers would have to meet these aggressive timelines if they wished full review, but would understand that going through this review process would greatly improve their chances of being funded. Evidence supporting that would need to be provided to help compel PIs to participate in the DRS research development review process.

The later deadline would be just prior to submission to ensure appropriate institutional endorsement, CVs are attached, budgets are correct, etc., and to ensure that the proposal will upload successfully.

8. LEGAL REVIEWS

Observation:

The turnaround for contracts/agreements requiring legal review was considered too long according to researcher feedback. The complexity of contracts is increasing as is the volume of contracts. The legal group are tracking the total time required from beginning to end of the legal review process and not the time taken by each party to the agreement. It is widely recognized that the external party(ies)' review typically takes longer than internal, university review.

Recommendation:

There are electronic systems available for tracking the lifecycle of the legal review process that enables one to “clock in and out” a document depending on which party/ team has the document and for how long; measure the total review time; and individual party review time. UBC has such software and Queen’s uses Excel/Access for same. We recommend speaking to peers about the tools that are available and deploying such a system.

9. ORIENTATION OF NEW FACULTY MEMBERS

Observations:

Early career researchers stated that the orientation received regarding applying for grants, general research administration, compliance certification, etc. was wholly inadequate. One researcher, who had experienced this directly, noted that navigating the research administration process at Dalhousie was very much “On you” and new investigators felt they were in a “Sink or swim” environment. A lack of formalized (and informal) mentoring was also mentioned; it was the external review committee’s impression that some departments do a very good job of assigning mentors, while others do not make any effort.

Recommendations:

Effective and timely orientation is required so that researchers who arrive at Dalhousie (whether in March or September) are met with a useful orientation and, at a minimum, are introduced to the various professionals in DRS so that they know who to speak to as they navigate the various aspects of research administration. A consistent organization of research mentors would also be very beneficial.

Conclusions

The reviewers found a highly functional, well-led Dalhousie Research Services unit with highly skilled and engaged staff. The researchers we interviewed spoke highly of DRS staff skills, attitude and responsiveness.

To reach the full potential and meet the evolving needs of a world-class professoriate, an investment in additional staff, tools, software systems and some reorganization is required.

Significant effort is required to improve the efficiency of the working relationship with the health authorities and their research administrations.

The organizational structure requires unflattening and additional operational staff. With these changes, we are confident that DRS can reach its full potential as a superb, enabling service to a world-class professoriate.

Finally, it was a pleasure and a privilege to carry out the review. We sincerely hope our efforts and advice will result in a significant improvement in the effectiveness and level of service provided to the researchers at Dalhousie University.

Terms of Reference

External Review

Dalhousie Research Services

Dalhousie University

February 22 and 23, 2018

Purpose:

To conduct an external review of Dalhousie Research Services (DRS) in an effort to understand the current operations and challenges of DRS and provide recommendations to the Vice-President Research so that the office may function in the most effective and efficient manner, and provide the best possible service to the Dalhousie research community.

Review Committee Members:

1. Martin Kirk, Director, Office of Research Services, and Support Programs to Advance Research Capacity (SPARC), University of British Columbia (External Review Chair)
2. Karina McInnis, Executive Director, University Research Services, Queen's University
3. Jean Marshall, Professor, Department of Microbiology & Immunology, and Arthur B. McDonald Chair, Dalhousie University

Review Scope:

The external review will include four units in Dalhousie Research Services:

- Grants & Contracts
- Institutional Strategic Initiatives
- International Research & Development
- Human Ethics

The review does not include the Industry Liaison and Innovation office as it was reviewed in 2014.

The review does not include research accounting as this unit is located in Financial Services and reports to the Vice-President Finance & Administration.

Mandate and Process:

Reviewers will be required to review background documentation and visit Dalhousie University to conduct in-person meetings with stakeholders. This will include all members of the DRS staff as well as groups of researchers and administrators.

Reviewers will assess:

- Current systems
- Current operations/practices
- Stakeholder engagement
- Service culture
- Opportunities for improvement
- Office organization

In their assessment, reviewers will consider the University's Strategic Priorities, as stated in Inspiration and Impact: Dalhousie Strategic Direction 2014 – 2018, specifically:

- 2.0 Research
 - 2.1 Direct and attract resources to priority research areas, with local, national, and international importance
 - 2.5 Enhance research with state-of-the-art facilities and resources in accordance with the Institutional Framework for the Support of Research (IFSR)
- 5.0 Infrastructure and Support
 - 5.7 Improve the effectiveness and efficiency of administrative and operational processes aligned with our academic mission.

Reviewers will confirm that DRS continues to be well-aligned with the above areas or make recommendations to enhance this alignment.

Based on the review materials and discussions, reviewers will draft a report (approximately ten pages) for review by the Vice-President Research (VPR). The VPR will submit comments to reviewers who will revise the report accordingly and submit a final report. The draft and final report will be informed by the University's Guidelines for Unit Reviews. It is expected that the report will be finalized within one month of the review meetings and will be posted on the DRS website.

Background Documents:

Dalhousie University:

- Inspiration and Impact: Dalhousie Strategic Direction 2014 - 2018
- Strategic Research Plan - April 9, 2013
- Institutional Framework for the Support of Research (IFSR) – January 2017
- Research Funding Stats - 2017
- Dalhousie Research Advisory Committee (DRAC) Terms of Reference – December 2017
- Guidelines for the Assessment of Units Supporting the Academic Mission (draft for reference) – October 2016

Dalhousie Research Services (DRS):

- Summary of previous reviews – September 2017
- DRS Organizational Chart – January 2018
- DRS Contact & Responsibilities – January 2018
- Presentation to New Academic Staff – August 2017
- Application Stats by DRS unit – 2014 - 2017
- Business Process Mapping Report – January 2018
- DRS Support Survey 2017 - Report – January 2018
- Guidelines and Policies list (DRS website)
- Investigator's Checklist and Research Accountability Statement – September 2017
- DRS Newsletter (DRS website)
- DRS Outreach Events table 2017/2018
- Ethics Annual Report 2016/2017
- ILI External Review Report – March 2014
- Terms of Reference External Review (includes documents and meetings) – February 2018

Meeting Agenda
External Review
Dalhousie Research Services, Dalhousie University
February 22 and 23, 2018

All meetings will be held in Room #523, 5th Floor, Collaborative Health Education Building (CHEB), Carleton Campus, Dalhousie University, 5793 University Avenue

Lunch on Feb. 22 and Feb. 23 will be held in Room #520, CHEB

Thursday, Feb. 22 - Stakeholders:

9:00 – 10:00 am

Associate Deans Research

10:00 – 11:00 am

Health Administrators including Directors of Research Services at the Nova Scotia Health Authority and the IWK Health Centre, and research facilitators/administrators from the Faculties of Medicine, Health and Dentistry

11:00 – 12:00 pm

Canada Research Chairholders

12:00 – 1:00 pm

Lunch (Room #520)

1:15 – 2:00 pm

PIs/Administrators of large-scale research initiatives (Canadian Center for Vaccinology (CCfV), Marine Environmental Observation Prediction and Response Network (MEOPAR NCE), CFREF Ocean Frontier Institute (OFI), Ocean Tracking Network (OTN)

2:00 – 3:00 pm

Early Career Researchers

3:00 – 3:30 pm

Industry Liaison & Innovation (ILI) representatives

3:30 – 4:00 pm

Central Unit representatives: Research Accounting, Procurement and Facilities Management

4:00 – 5:00 pm

Drop-in for anyone interested in speaking with External Review Committee

Friday, Feb. 23 - DRS Staff:

9:00 – 9:30 am

Information Management (Manager, Administrator, and Data Technician)

9:30 – 10:00 am

Director, International Research & Development, and Legal Advisor

10:00 – 11:00 am

Facilitators (Grants, Institutional, International, Awards)

11:00 – 12:00 pm

Administrators and Officers (Grants, Institutional, International)

12:00 – 12:30 pm

Ethics (Director and Manager)

12:30 – 1:15 pm

Lunch (Room #520)

1:15 – 2:00 pm

Debrief with Ian Hill, Associate Vice-President Research, and Executive Director, DRS

2:00 – 2:30 pm

Closing with ED/Departure