

Supporting research engagement: insights from a study tour of universities in Canada & USA.

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Executive summary and findings

This report provides insights from a study tour of eight universities in Canada and the United States of America in June 2019 which focused on how institutions support research engagement. In informal meetings with 65 researchers from a range of disciplines and professional staff we discussed how and why universities supported researchers to engage with stakeholders and partners in their research, as well as the broader community, industry and government. It was clear that while engagement was a fundamental part of many researcher's methodology and institutional missions, it required coordinated, targeted and timely support to not only be effective, but to build organisational capacity and reputation for generating research that makes a difference.

The key findings were:

- **Canadian universities recognise that research engagement activities require specific skills, resources and time.** Researchers need time and capacity to conduct engagement activities and support of skilled professional staff to achieve this. This support can be provided through a variety of organisational models, but the key element is that research engagement is a unifying strategic priority and is available to researchers at all stages of the research lifecycle. The most common models were:
 - A centralised role providing strategic and overarching guidance, advice and capacity building, which enabled the institution to shape research engagement that reflected strategic priorities and organisational culture. These roles were generally located within the Research portfolio, with a leadership role, supported by professional staff. They facilitated and curated access to dispersed services and programs offered by communications units, library, partnerships and research offices, and provided training, guidance and resources both pre and post award.
 - Faculty or research institute roles that respond to the needs of a faculty or group of researchers and provide targeted, responsive and contextualised support both pre and post award. An understanding of the research ecosystem and needs of stakeholders is a key part of building trust and facilitating relationships. These professional roles formed a network of support with similar roles in other faculties, research centres and central research and engagement offices.
- **Universities in the United States saw research engagement as part of their commitment to supporting communities and addressing societal challenges.** They supported research engagement through programs and institutes which responded to challenges that required partnerships and participatory approaches to research, institutional commitments to support local communities and National Science Foundation requirements for generating broader impacts. Engagement activities were supported by both academic and professional staff.
- **Research engagement occurred throughout the research lifecycle.** It is the process of connecting research to those who can use it and involves a wide range of activities and relationships throughout the research life cycle. It can involve:
 - Initiating research engagement when developing proposals and involving partners and stakeholders to reflect their interests, expertise and aims.

- Incorporating appropriate engagement and dissemination activities within the research methods e.g. products such as publications, websites, videos, social media and events like workshops, seminars, meetings or performances and promoting these within the university and externally to professional and community networks.
- Establishing and maintaining long term trusting relationships that support a two-way flow of information between researchers and relevant stakeholders.
- Collecting, collating and evaluating engagement activities to build institutional capacity to inform future research, researcher training and institutional story telling.
- **Researchers are positive about building engagement, it is a researcher driven activity, but many felt it competes with academic priorities and should be recognised in tenure and promotion criteria.** If research engagement activities and outputs are not recognised in the tenure process, academics are forced to choose between these and spending time on traditional outputs, teaching and service.
- **Research engagement is an essential element of successful research partnerships with industry, government and non-profit organisations.** US and Canadian universities recognise the importance of building strong working relationships with research partners and many reflected on the challenges involved and need for professional support both pre and post award.
- **Research engagement capacity is an institutional asset.** Strategic centralised support for research engagement enables coordinated collection of information about activities and impact and provides a valuable resource as a body of knowledge for management, marketing, capacity building, creating interdisciplinary connections, building partnerships and reporting to government and funders. Canadian universities are now considering how to support and capture research engagement activities strategically in preparation for impact measurement.
- **Research is changing and involves new tools for collecting and communicating with both academic and public audiences.** Research engagement is a natural element of applied and participatory research, but the practices, skills and tools for achieving engagement are changing rapidly. Researchers need support to upskill in the most effective methods of consultation, communication and technology to meet community and industry expectations and maximise the reach of their work.

Definitions and abbreviations

The terminology used for university structures and research engagement varies between Australia, Canada and the USA. In this report I will use standard Australian terminology, referring to *university faculties* (equivalent to Canadian/US colleges or departments), *academics* (US and Canadian use of faculty) and *professional staff* (staff). I will use the term *research engagement* to refer to activities in the Australian context and in general comments referring to all contexts. I will use the term *knowledge mobilization* (kmb) to refer to activities in Canadian universities and *broader impacts* in the US context.

research engagement	'the interaction between researchers and research end-users outside of academia for the mutually beneficial transfer of knowledge, technologies, methods or resources.' (Australian Government, 2017)
knowledge mobilization	(kmb) 'the reciprocal and complementary flow and uptake of research knowledge between researchers, knowledge brokers and knowledge users—both within and beyond academia—in such a way that may benefit users and create positive impacts within Canada and/or internationally, and, ultimately, has the potential to enhance the profile, reach and impact of social sciences and humanities research.' (SSHRC, 2019)
broader impacts	'the potential to benefit society and contribute to the achievement of specific, desired societal outcomes.' (NSF, 2018)
ARC	Australian Research Council
SSHRC	Social Sciences and Humanities Research Council (Canada)
NSF	National Science Foundation (USA)

Introduction

'Researchers are under more pressure today than ever before to demonstrate the economic and social benefits, or 'impact', of their work. But (they) have been trained how to do research, not how to generate impact' (Reed, 2016, p. 1)

Universities in Australia are considering how best to respond to the research engagement and impact agenda and looking to the experiences of universities in other countries. Internationally universities are increasingly expected to not only develop mechanisms for engaging with the community, industry and government, but to track and report on these activities and their impact. These new requirements challenge traditional approaches to conducting and disseminating research by introducing activities that researchers may not have the skills, time or experience to undertake. The research support infrastructure in universities has an important role in supporting researchers by providing strategic direction and practical support for engagement and impact.

This report summarises insights from meetings with 65 researchers and professional staff at eight universities in Canada and the USA in June 2019 as part of a study tour to investigate how researchers are supported to operationalise research engagement and impact strategies. It outlines how these institutions support research engagement, the types of activities and people involved, their motivation and how these relate to broader institutional priorities. While the national contexts differ, I have identified the commonalities that emerged and those insights with the potential to inform Australian practices.

This report presents an overview of the context and key findings, with appendices providing background, potential collaborations and case studies of each university.

Research engagement: National contexts

Internationally, in the last 10 years, there have been growing expectations by governments, industry and community that knowledge generated by academic research be accessible, useable and contribute to the betterment of society. This has manifested in assessment driven policy responses, such as the UK's [Research Excellence Framework \(REF\)](#) and most recently Australian [Engagement and Impact Assessment \(EI\)](#), funder requirements for research impact plans and institutional missions for broad engagement through teaching, research and service (Bayley & Phipps, 2019, p. 7). While the issue is not new in Australia, the introduction of the EI assessment has increased interest in how universities here should support and encourage researchers to plan and implement engagement and what is needed to track and document impact. Australian universities are looking overseas to learn what is needed to support researchers in developing impact plans (pre-award) and in implementing these (post-award). The issue is complex as it challenges traditional approaches to research and how institutions balance support for research driven activities and institutional mission and obligations relating to engagement.

Universities internationally are developing a range of models to address the increased complexity of managing research and gain competitive advantage in competing for funding (Shattock, 2010). In addition to traditional professional roles supporting grant applications and technology transfer, there are now specialised roles in business development, community partnerships, knowledge translation and

research impact (Derrick & Nickson, 2014; Schuetzenmeister, 2010). A key focus of these roles is facilitating research collaboration between academics and partners from the community, business or government and emphasis on relationships that build a shared understanding, coproduction of knowledge and true collaboration (Phipps et al 2016). These professional roles often have in-depth knowledge of the research and industry/community context and can mediate between researchers and the users of research (Bell & Head, 2017; Knight & Lightowler, 2010).

Australian context

In Australia successive governments have sought to link research outcomes with economic growth since 1990s with measures that incentivised partnerships with industry, supported innovation and leveraged knowledge production (Australian Government, 2014; Group of Eight and Australian Technology Network, 2012; McGaw, Boud, Poole, Warry, & McKenzie, 1992). Following a number of reviews of research funding in 2017 the government introduced the *EI Assessment exercise* as an accountability measure and 'to keep universities focused on research that has wider economic and social benefits' (Minister for the Department of Education, 2017). The National Health and Medical Research Council and Medical Research Future Fund grants are also introducing requirements for research translation and impact plans and Australian Research Council grants applications now require [a national interest statement](#) which outlines the value of the research to the country (ARC, 2018; NHMRC, 2018). The first assessment exercise conducted in 2018 highlighted the time-consuming nature of tracking and documenting case studies and flaws in the system which might actually impede development of engagement capabilities in universities (Tsey et al., 2019). Research managers are considering what support and capacity building is needed to meet these reporting and funder requirements, as well as developing a strategic approach to managing research engagement and measuring impact.

While there are many academics who naturally engage with the community or industry through the course of their research, for others there can be significant challenges. Studies in Australia found that the majority of academics were keen to engage with industry in research, but needed time, skills and resources do this (Bexley, James, & Arkoudis, 2011; Evans & Plewa, 2016). However, knowledge translation activities were 'constrained by limited expertise or training in knowledge translations and limited structured frameworks to translate and disseminate knowledge' (Clinton, Aston, & Quach, 2018, p. 23).

United States context

In the USA there has been a broad debate about the role of universities in society since the 1990s, with civic engagement through teaching, collaborative partnerships and service learning becoming a core mission for universities by the early 2000s (Boyer, 1996; Saltmarsh, 2017). Many universities have taken a whole of institution approach to engagement and developed support services and reward structures to recognise and incentivise the efforts of researchers (Whitmer et al., 2010). The types of activities conducted often overlap, but can be broadly classified into public scholarship, participatory or action research, collaborative partnerships, providing access to information or developing skills to use information (Barker, 2004). The strategic support for these activities within universities focuses on critical points in establishing and maintaining relationships, facilitating exchanges of information, meeting funding and staffing requirements and collating and sharing outputs. There is reputational value in capturing and promoting the stories of success, but apart from tracking of academic outputs,

there are no requirements for tracking research impact. The National Science Foundation (NSF) is the only funding body currently requiring formal planning and reporting on research impact activities, known as 'broader impacts'.

Canadian Context

While kmb has been a requirement of Canadian funders for just on 10 years, the support structures within Canadian universities varies and is still evolving. In Canada there is a growing body of research and practice in kmb in health and social sciences which incorporates activities, services and programs to facilitate access to and use of research (Levin, Cooper, Arjomand, & Thompson, 2011; Phipps, 2018). Kmb strategies can be categorised as 'research based products, events, and networks' (Cooper, Rodway, & Read, 2018, p. 4) and in many fields collaborative research is seen as one of the most effective mechanisms for building and sustaining both quality research and uptake of new knowledge (Lavis, Ross, McLeod, & Gildiner, 2003; Phipps, Pepler, Craig, Cummings, & Cardinal, 2016). However, these activities can place significant demands in terms of time and skills on the researchers and their institution, competing with traditional academic priorities of academic publication (Cooper et al., 2018). A number of organisations support knowledge sharing and capacity building in kmb practices, including [Research Impact Canada](#) and [Knowledge Network for Applied Education Research \(KNAER\)](#).

How is research engagement supported?

'we spend time telling the story, don't we have an obligation in helping create these stories?' Canadian university.

The approaches to supporting research engagement and impact varied across the five Canadian and three US universities, reflecting their different structures, research disciplines, institutional priorities and cultures. I identified five institutional models for supporting research engagement at the institutions I visited. These models are not mutually exclusive, and some institutions had a combination of these providing support through several organisational units. These models are:

1. Centralised unit supporting research engagement
2. Faculty based roles
3. Research institutes and centres
4. Partnerships focused roles
5. Library engagement centres

Most of the universities I visited were actively considering how to support research engagement more effectively and many had recently reviewed key elements of their research management, training and support functions to identify gaps and opportunities. The discussions highlighted that strategic research management was a delicate balance between providing direction and enabling activities and the independence of faculties and investigator driven research. At all institutions research engagement was closely aligned with the centralised research management functions with links to faculty-based roles providing both pre and post award support. Decisions regarding the location of research engagement support roles within faculties took into consideration the different approaches by disciplines and variations in demand.

The models of supporting knowledge engagement are outlined below, with examples from some of the universities I visited. Full details of each universities research engagement activities are available in the appendices.

Centralised unit supporting research engagement

In Canada approximately a quarter of universities have a central role or unit for research engagement usually located within the research portfolio, partnerships offices or libraries.¹ A few the institutions I visited have, or are considering establishment, of a dedicated central role or unit to provide some level of coordinated support and training in kmb. Centralised roles face challenges in aligning institutional and faculty engagement goals, determining the appropriate level and scale of support and complementing existing services. A number of those I met felt the organisational location of these roles not only shaped their priorities and activities, but also the perceptions of academics as to their purpose. For example, locating them within commercialisation units may act as a disincentive to those involved in community and non-profit focused research partnerships development.

Many noted that institutions with a focused research engagement capability and track record of impact will increasingly have an advantage in grant applications as it demonstrates experience and commitment to engagement that is considered favorably by community and industry representatives on their assessment panels. Also, too the institutional capacity to support research engagement is evidence researchers can cite in their applications to prove that they can achieve the activities in their kmb plan. One researcher who has participated on funder review panels pointed out that this is particularly important for early career researchers who don't have a track record to evidence their capabilities in kmb but citing training and institutional support can provide valid evidence instead.

'On their own researchers are doing great things, but it's not captured, not supported and not built into the way research is managed (without a central role coordinating Kmb)' Canadian university.

Examples

York University Knowledge Mobilization Unit is internationally renowned for its leading role in developing kmb practices, policies and managing the national community of practice, Research Impact Canada. I met with David Phipps (Director of Research) and Michael Johnny (Knowledge Mobilization Manager) who provided not only a detailed overview of the support they provide to York researchers, but the history and current debates on kmb in Canadian universities.

The kmb unit at York has been running for 12 years with the current staff and was established by David Phipps who developed an approach that built on York's commitment to serving the community and his background in technology transfer. The unit provides services that support kmb through research partnerships, events, training and grant writing and is based within the research portfolio. The team have been working together for 12 years and have deep connections with the local community and across the institution. They currently manage the Research Impact Canada network, which is a membership network with 18 members who function as a community of practice sharing

¹ According to a search conducted on Canadian university's websites by Prof. Valorie Crooks, Simon Fraser University.

expertise, challenges and information meeting once a year and regularly online. The network has 2 international members, including the University of Auckland who joined recently.

The unit approaches kmb in a holistic way that embeds it into research proposals by assisting researchers write grant applications, implementation support, communications and partnership management. Building partnerships with the local community has been a core focus with staff spending significant time with community and government to identify interests and facilitating connections with researchers to seed new projects. They focus strongly on supporting researchers to build collaborative relationships with partners that create genuine opportunities for co-creation, knowledge exchange and research impact. They provide training courses and individual support that supports skill development in all researchers and professional staff, both within York and at other universities internationally.

The **Faculty of Education at York University** benefits from the strong infrastructure of support provided by the Kmb unit and reinforces this through their approach to supporting researchers. Their orientation program for new staff and mentoring of early career researchers aims to ensure that they have access to all the required training and support services to develop and implement effective kmb practices. The faculty recognises a wide range of non-traditional outputs in their tenure processes and encourages staff to pursue creative approaches to community engagement and communications.

University of British Columbia (UBC) [is currently reviewing](#) the institutional research engagement activities to identify the nature and extent of these, challenges and opportunities for development. UBC is focused on building the institutional capacity for kmb through the creation of the new Research and Innovation Knowledge Exchange Unit, led by Karine Souffez. The mission of this unit is to support knowledge exchange (two-way flow) between the university and the wider community (including non-profit organisations, business and governments), research partners and stakeholders and thereby increase the societal impact of their research. The unit aims to do this by raising awareness of kmb, building capacity in kmb activities, supporting knowledge exchange planning and creating a system for assessing and communicating the impact of these activities. The unit will function as a central hub connecting with other centralised units such as communications, library and research office and research management staff, such as grants officers and local kmb staff in faculties and departments.

The unit is still in the early phase of setting up and will be conducting an environmental scan of all current kmb roles and activities across the university which not only reflects the diversity of kmb activities but also the needs. The initial services by the unit will focus on training, awareness raising, and advice on knowledge exchange planning and implementation.

Simon Fraser University is currently reviewing the activities and planning how the institution could take a more strategic and coordinated approach to supporting researchers in kmb. This review was ongoing at the time of my visit but had identified the need for a central office coordinating strategy and activities with the library as a hub for supporting researchers, providing training, access to kmb tools (communications) and staff expertise.² The review process was conducted by Prof. Valorie Crooks as an initiative of the Vice President Research Joy Johnson. It included an environmental scan of Canadian

² SFU will appoint a Knowledge Mobilization Officer and Valorie Crooks is now Strategic Lead for Knowledge Mobilization (Aug 2019).

universities' responses to kmb and consultations with researchers and staff within the university providing support for research engagement such as the library and external communications. This process focused on identifying grass roots interest by researchers in kmb across all disciplines. SFU is unique in Canada in the library being located with the Research portfolio which provides a strategic alignment with a centralised kmb role.

Faculty based roles supporting research engagement

Support roles at faculty level provided targeted support for research engagement that was highly contextualised to the discipline and needs of individual researchers. These roles often had a range of responsibilities supporting grant application development, researchers' collaborations and partnerships. The professional staff in these roles had extensive knowledge of the research ecosystem and discipline area, as well as an understanding of the broader social and business context where it could be applied. They were also skilled in supporting collaborative relationships and communicating across organisational and discipline boundaries.

Examples

In 2013 **McMaster University** created Research Support Facilitator roles within social science, business and humanities to provide proactive and targeted assistance to researchers to engage with community and industry. These roles work one-to-one with researchers to assist them in not only developing research partnerships, but post award in maximising opportunities for engagement, managing partnership relationships and effective dissemination. They were also involved in development of interdisciplinary connections and bridging gaps in expertise or knowledge and overcoming organisational silos, by facilitating access to services within the university. The professional staff in these roles developed an in-depth understanding of the research undertaken within their faculty and were able to identify opportunities for applying it in new contexts. The location of these staff within faculties, 'just down the hall' and their mandate to initiate discussions with researchers, is key to their success in building relationships and a deep knowledge of the research fields.

'these roles were created to meet needs of the faculties, to create unique roles shaped by needs of faculty, to do planning, build partnerships and also think about the kmb activity.' McMaster University.

At the **University of Toronto** support for kmb is based in the faculties and departments, but centrally there is a consolidation of research resources and tools underway to provide better access. The [Ontario Institute of Studies in Education \(OISE\)](#) has a small research management team which takes a proactive and personalised approach to supporting the 135 academics and views kmb as an integral part of all research. The kmb activities are considered at all stages of the research cycle and planned methodically and strategically to maximise the impact and research success. The outputs and kmb activities are tracked and consolidated along with traditional academic outputs. The institute has deep connections with the school boards in Ontario and the Ministry of Education and works proactively to be aware of their research interests. The faculty research staff have a comprehensive knowledge of current issues in education, the researchers within the institute, their interests and current projects which enables her to identify opportunities and facilitate partnerships and new projects.

"the conversations blend into kmb strategy as its about integrating the partner early in the process" University of Toronto.

The **University of Maryland** provides support to researchers centrally and at faculty level to develop research proposals, partnerships and dissemination activities. Generally, engagement activities supported by externally funded research would need to be aligned with the research methodology and would include seminars and conferences. Currently, only the National Science Foundation (NSF) requires statements and descriptions of broader impacts within their proposal. However, the award does not necessarily fund these activities. UMD administrators believe agencies such as the National Institutes of Health (NIH) will begin requiring a broader impacts section within their proposals. As such, UMD's the Division of Research, faculties, and researchers are committing additional funds to engagement activities to demonstrate the broader impacts of research happening at Maryland.

Teachers' College at Columbia University the [Office of School and Community Partnerships](#) facilitates partnerships with New York public schools with the aim of improving educational opportunities. The Office supports school and teacher led initiatives to access the expertise and knowledge held within the Teachers College. The projects are driven by the needs of schools and include research projects, PhD student's placement in schools and teacher professional development. The office provides a central point of contact between Teachers College and school, facilitating greater engagement of schools in research by building their capacity to participate in research and apply it to practice. The development of strong relationships is key to the work of the office, which enable both researchers and schools build a better understanding of each other.

Columbia University's Faculty of Engineering's Outreach Programs provide K-12 teachers and students access to STEM education expertise and resources. The program was developed to provide a mechanism for making *National Science Foundation* (NSF) funded research more accessible to schools. The NSF grants require researchers to demonstrate how their research will have 'broader impacts' outside academic spheres, such as informing education, industry and social issues. The programs at Columbia consist of visits by schools to university laboratories, academics visiting schools and summer programs at Columbia students. The program works with around 200 faculty members and has recently increased from one staff member to three to meet demand for support. The small team works closely with the faculty members and schools to develop activities that are mutually beneficial and well planned.

[Research institutes and centres](#)

The research institutes and centres I met with had developed a range of mechanisms to support research engagement which included highly collaborative research partnerships with industry, non-profit organisations and governments, sophisticated communications strategies and knowledge brokers supporting community involvement in and access to research. Research engagement is incorporated into all stages of the research lifecycle from community reference groups providing input to grant proposals through to developing information resources that collate and communicate research findings. An important element is development of community capacity and skills to access, interpret and apply information to support personal growth as well as broader benefits to the community.

Examples

The **University of Maryland Centre for Health Equity** within the School of Public Health was established in 2010 with a mission to address health disparities through research, teaching and service activities that prioritised engagement with community and building relationships. The centre has achieved significant impact in:

- influencing changes in government health policy,
- improving disadvantaged communities' access to health services, information and networks,
- including the voice of marginalised communities in research,
- increasing cultural diversity in the academy,
- raising awareness of racial bias in health services and
- strengthening connections between the university and the local community.

The integration of research, service and practice provides a model for health research that has real world impact on health outcomes in a number of ways. Engaging with community and building robust relationships is key as this ensures research addresses real needs and provides access to research knowledge. Two programs exemplify this approach, the [Maryland Community Research Advisory Board \(MD-CRAB\)](#) and the [Health Advocates In-Reach and Research project \(HAIR\)](#).

The *MD-CRAB* is a state-wide network of individuals which represent the community as a standing advisory board for review of research proposals. This advisory board enables community members to provide input on research projects, learn more about the processes of research and builds greater understanding among researchers about the communities they involve in research.

The *Health Advocates In-Reach and Research project (HAIR)* began in 2012 training African-American barbers to provide health information and advice on health screening. The initiative was successful in building capacity of local barbers to support their communities, increasing access to health screening and training health professionals to understand the barriers to disadvantaged communities accessing health care. The success of this initiative has enabled participants to access subsequent research and service programs.

*'understand their points of view, experiences and values, but also training them and providing them with evidence-based information translated into plain language'.
Canadian centre.*

[McMaster Health Forum](#) is focused on making research accessible to those in health policy and services through a research, training, information services, community support, consultations and facilitating networks. The forum was established in 2009 by Professor John Lavis, who is still Director, and has continued to develop and refine its services during this time. The forum provides seven key services to support broader access to research:

1. Training for health policy makers in finding and using research evidence.
2. Databases and information resources providing access to regularly updated pre-appraised synthesized research evidence, and a rapid response program.

3. Stakeholder dialogues and consultations which generate briefings and action plans for stakeholders.
4. Providing health-system leaders (policymakers and stakeholders) with a variety of resources and services to support evidence-informed policymaking.
5. Supporting evidence-informed policymaking about Sustainable Development Goals.
6. Citizen information and awareness programs.
7. Network conveners supporting evidence-informed policymaking.

They engage in research partnerships through competitive grants, sponsored research with government agencies and research institutes. They also have collaboration agreements with 40 institutions covering joint programs of research, education programs and knowledge exchange.

The University of Connecticut [Institute of Collaboration on Health Intervention and Policy](#) (InCHIP) was originally a project focused on HIV intervention and prevention but has broadened its scope across health programs and policy. The institute supports health research across the university providing a one stop shop for support throughout the research lifecycle including administration, grant development, researcher training, community engagement, partnership development and outreach. Engagement is a core element of many of the research programs and includes outreach activities aimed at study participants, the community and government. In an effort to refine their approach they have established a *Community Engagement Studio* based on the model developed at [Vanderbilt University](#). It involves establishing a database of community representatives who provide feedback and advice to researchers at any stage of research projects. There is recognition that coordinated support is needed at institutional level to help community access information and expertise, but also for internal communications that can overcome discipline and organisational silos.

The [Encounters Series](#) at **University of Connecticut** was initiated by a [group of humanities academics](#) who felt that their disciplines had a great deal to offer the community beyond the traditional approaches to outreach like public lectures, exhibitions, media stories and podcasts. The [unrest on university campuses](#) in the USA in 2015, and the subsequent efforts to address tensions with community dialogues inspired the group to develop an approach that used a combination of dialogue and humanities. They developed *Encounters*, which facilitates an informed conversation about challenging social issues by focusing on an artefact of history or society. The events have also highlighted the importance of cultural and community institutions, such as libraries, as shared spaces and providers of reliable information.

Partnerships focused roles

Universities in Canada and USA are increasingly focusing on supporting the nurturing of partnerships with industry by providing researchers with the skills and knowledge to overcome the many challenges of these arrangements and build real collaborative partnerships. Partnerships are a significant vehicle for kmb, where the involvement of a government, industry and non-profit organisations will provide a conduit for research. All the universities have focused resources on building new partnerships, with roles such as Partnerships Managers or Business Development Managers, whose roles vary in scope and priorities depending on the discipline area they support. All acknowledged that research partnership relationships can be complex, and researchers often needed support and advice to manage

relationships on issues such as intellectual property, communicating progress and negotiating co-production activities.

'while there is a general willingness by researchers to communicate with partners, it can require more work than envisaged'. Canadian university.

Examples

At McMaster University the [Office of Community Engagement](#) was established in 2016 and provides a bridge between researchers, staff, students and the community to facilitate partnerships for teaching programs, volunteering and research. It coordinates a network of staff, faculty, and students within the university that facilitates connections across disciplines and organisational units. The establishment of the Office was a strategic initiative to enhance and guide community engagement activities that had been happening to various degrees for many years. The model acknowledges the autonomy of researchers and has focused on identifying and building initiatives from the grass roots through working with researchers and community members to identify areas of need and interest. They have developed resources and tools for researchers (such as principles for community engagement) to inform the way they approach community engagement and provide the community with information and a central contact point. Their role focuses on establishing and supporting partnerships, rather than creating broader access to research outputs, although they are piloting some input to developing kmb plans.

At **University of Toronto** kmb is considered an integral part of community and government research partnerships and is supported by Partnership Development Officers centrally in the research and intellectual property offices. These roles provided guidance to external partners and researchers in co-developing research proposals for collaborative partnerships that have strong, respectful relationships and reflect the interests and needs of both parties. They might initiate small partnership projects as a way of building relationships and gradually developing the skills of both parties, and as a proof of concept for the research. There has also been a review of all the partnerships within specific disciplines to identify potential consolidation and value adding for future projects where interests and research overlap. University of Toronto has been successful in increasing partnership research in recent years by providing support to companies and researchers to find common interests, hosting industry offices on campus and attracting foundation grants from industry. While most of the support is provided pre award, the Partnerships Development Officers provide ongoing facilitation for large scale partnerships where relationships are more complex.

The Faculty of Architecture at **University of Maryland** has several programs that provide expertise and information to the local community and government and have developed strong relationships through student projects, advocacy and research. The *Partnership for Action Learning and Sustainability* is a university wide program coordinated from the Faculty of Architecture which has been running for 6 years. The program works with a local government to identify issues or problems that can be the focus of a student project. It is supported by a Program Facilitator whose role is funded by the Provost. The projects produce tangible outcomes and services for the government, improvements for the community, practical learning experiences for students and development of relationships between the university, community and local government.

The **Faculty of Engineering at UMD** has developed strong industry partnerships over several years by developing holistic relationships with sponsors that respond to opportunities and needs. Initially the faculty had one sponsor for a symposium series and through strategic management by the Partnerships Development Manager (Ted Knight) expanded this into a significant partnerships program. A corporate partnership program was developed with involved companies contributing an annual sponsorship which supported a branded colloquium series and research fellowships, representation on a faculty advisory board and branding on faculty publications. The colloquium series provided a range of opportunities for industry partners to connect with the faculty, students and public. This series provided a basis for strong relationships with industry and resulted in collaborations on research, industry contributions to course content and encouraged industry competitors to joining the program.

The [Connecticut Sea Grant](#) at **UConn Avery Point** campus is part of a national network of 33 programs based at flagship universities in U.S. coastal and Great Lake states and territories. The program is funded by state and federal funds and conducts [research](#), [education](#) and community outreach with a focus on building connections between researchers, government and industry. They have a program of grants that reflect this priority as well as conducting applied research programs supported by a range of funders. Engagement and research impact are fundamental to their work and research projects are designed and delivered to reflect this. The researchers have skills in partnership development and communication and have often worked in industry roles prior to academia. They highlighted the importance of the long-established relationships they have with external stakeholders that supports the transfer of knowledge, new collaborations and informs their approaches to grant proposals. The program has a media officer who manages and generates content for a variety of channels including [magazine](#), events, local media, [school resources](#), website and social media.

Partnership development officers at University of British Columbia work with specific disciplines and research clusters to develop research partnerships with industry, government and non-profit organisations. These roles facilitate new relationships and collaborations by brokering the interests of industry/business and researchers, bridging the gaps between expectations and priorities and addressing issues in intellectual property discussions. These roles develop a detailed understanding of the research interests and capabilities of their faculty in order to represent them in the discussion with external parties.

Library roles in research engagement

A few institutions used the library as a focal point for research engagement, drawing on the library's expertise in research training, dissemination and technology tools. The library also offered an organisational location which was still connected to the research enterprise, but not tied to the grant application processing, commercialisation or partnership development. This was an important element for those universities seeking to provide an inclusive service that supported research across all fields and funding models. A number of those I met reflected on the impact of open access policies on university libraries, which has increased their involvement in post awards, data management, publication repositories, data gathering and management tools.

'Library involvement is important (in research engagement), it provides support for the research life cycle and other programs that have an engagement angle. It is a neutral space'. Canadian university.

Examples

Simon Fraser University is unique among Canadian universities in that the library sits within the Research portfolio. It provides a range of support services throughout the research lifecycle as well as broader community engagement initiatives. The traditional programs for researcher support and training have been consolidated into a symposium that focuses on managing research impact through strategic dissemination at all stages of the research life cycle. The library has a key role in supporting kmb through training, facilitating access to tools and targeted advice.

The new Knowledge Exchange unit at **University of British Columbia** plans to develop programs with the library to support researchers from pre award to completion.

The **University of Toronto** is developing the *Centre for Research & Innovation Support* (CRIS) which is a collaboration between VP research and libraries. The university has identified 150 services and resources to support researchers with kmb, but they are dispersed across different areas of the university and can be difficult for researchers to find. CRIS will act as an online clearinghouse and a physical space for training and support based in the library. It will complement the faculty-based support and assist in identifying any gaps in services.

What are the incentives for research engagement in Canada and USA?

The incentives for Canadian and US universities to support knowledge engagement were not restricted to funders requirements of government policies but reflected a range of interconnected drivers which influenced institutions and individuals. The key drivers for institutions to systematically support research engagement at the universities I visited in both Canada and USA were:

- Civic mission for engaged scholarship and teaching to create public benefit
- Funder requirements for research engagement and impact
- Capturing research impact stories and examples
- Reputation and competitive advantage
- Researcher driven demand
- Partnership development and management

Creating public benefit through research was a fundamental commitment at all institutions visited and was reflected in strategic institutional support for research engagement plans, partnership development, stakeholder engagement, communication of research outputs and post award support. This mission driven approach to engagement was also reflected in teaching and service programs, such as service learning (volunteering) by students, cultural events, community access to campus and academic involvement in community organisations. The models for supporting research engagement varied across the universities and decisions regarding the location and resourcing of these functions reflected institutional culture, organisational structures and research priorities. Individual researchers indicated that creating benefit to communities was a strong motivating factor in their research engagement.

Funder requirements for kmb plans and reporting on these activities has been a key driver in disciplines such as social sciences and humanities in Canada and sciences in USA in the last decade.

One research manager felt that these requirements had 'transformed' academics understanding of research outputs and that they were 'organically' embracing new ways of engaging. In Canada the requirements for kmb by the Social Sciences and Humanities Research Council (SSHRC) and the Canadian Institutes of Health Research (CIHR) are integral to the research project. In the USA the National Science Foundation grants require broader impacts, which can be provided outside the funded research activities as a program or activities managed by the faculty. These requirements have prompted universities to provide support to researchers in developing Kmb and broader impact plans, as well as support services to facilitate the activities.

Capturing stories of institutional research engagement and impact was cited as an important reason for providing a centralised coordination and support function. While the traditional outputs of research were captured in institutional systems of reporting, many reflected that the non-traditional outputs were difficult to identify and track. Research offices saw these examples of engagement and artefacts, such as podcasts, blogs, video etc as important not only for the institutional record of work, but in sharing the stories across the institution (internal knowledge management), with potential research partners and prospective students (marketing) and to demonstrate to governments the impact of research (assessment).

Institutional reputation and competitiveness were acknowledged by several as an important reason for institutional support for research engagement activities. Stories of successful research engagement activities were prominent on many research office websites, helping promote the discipline strengths of the university to future students, staff and potential research partners. The existence of a research engagement infrastructure also enhanced the competitiveness of funding applications by providing a tangible resource and expertise to support researchers in achieving their engagement plans. The review panels for grants increasingly consider this an advantage in their assessment of Kmb plans in Canada, particularly those who include community and industry representatives. Research activities also generated relationships between individual researchers, research managers and partnerships managers and counterparts within community organisations, government and industry. When nurtured and supported, these relationships produced significant tangible benefits from the research and enhanced institutional reputations. At all the institutions I visited support for management of partnerships was highlighted as a significant factor in their success.

Researcher driven engagement was a significant factor influencing development of support roles and services at all the institutions I visited. In addition to top down initiatives they cited a growing grass roots interest amongst researchers and graduate students in developing outreach activities, such as engaging with a stakeholder community early in a project through public forums, supporting this with publications and online materials that communicate the outputs to a range of audiences. This was a priority in fields working with First Nations communities and other marginalised communities and fields using participatory approaches to research. A number of individual roles and centres had been established or had their staff increased in response to researcher interest and activities.

'a lot of researchers would like to get their research out but don't have the time or the training to know how to do it' Canadian researcher.

Research partnerships with industry and community were a significant activity at all institutions and closely aligned with the broader mission of civic engagement. These partnerships were initiated and

supported with the assistance of professional staff in strategic roles focused on business development, community engagement and faculty partnerships. Researchers involved in research partnerships considered engagement and two way sharing of information as a fundamental part of the collaboration.

Challenges

In Canada while kmb was required by funders and many disciplines integrated engagement activities within their research methodologies, there were still challenges to supporting the involvement of researchers. In both Canada and the US institutions were conscious of growing scrutiny of research impact and the implications this could have for research support services and researcher training.

A number of those I met felt that more work needed to be done to build capacity for kmb amongst researchers, specifically addressing this through training for graduate and early career researchers. Some identified the potential of research assistant roles on projects to provide training in engagement and partnership activities for graduate and post-doctoral researchers.

Many felt it was difficult for some researchers to prioritise engagement without non-traditional activities and outputs being recognised in the tenure process. There was also many who commented on the significant issue of limited time and capacity to conduct engagement activities during research due to the many competing demands on researchers with heavy workloads.

'If you are going to assess it- what is the role of institution in supporting it.' Canadian university.

'knowledge mobilization is not top of the radar... it is built into grants but on the ground is still a box to tick' Canadian university.

In both Canada and the USA, the universities I visited were conscious of the potential for increased scrutiny by government and funders of research engagement and the likely introduction of impact measurement. This was influencing many to review their support for research engagement activities, consider how they would track and measure impact and what type of resourcing this would require. Several central Research Offices were considering the strategic elements of managing engagement and impact, as well as the practicalities of scaling support across the university, complementing support provided in faculties, training researchers and reviewing academic performance and promotion criteria to recognise non-traditional academic outputs.

'kmb as an issue to be addressed has passed and now the focus is on impact assessment' Canadian university.

'we are preparing for broader impacts to become a requirement' US university.

Conclusions

Research engagement was seen by the universities I visited as both an institutional responsibility and researcher-initiated activity at the institutions visited, driven by funder requirements as well as universities' strategic priorities for engagement with community. Universities support research engagement through targeted and strategic professional services either in centralised, faculty or centre

based roles available throughout the research lifecycle. The increasing focus on building research partnerships is reinforcing the importance of building genuine engagement with collaborators and stakeholders, both in achieving project goals and in sustaining ongoing relationships. While most researchers see the value of research engagement, there remains some disincentives when these activities are not recognised in the tenure and promotion process and institutions are considering how to address this. Institutional and researcher capacity to conduct effective research engagement is increasingly seen as an asset in funding applications, partnership negotiations and generating institutional research reputation. While each institution is supporting research engagement in its own way, there is a consistent message that the way research is conducted is changing to embrace wider collaboration and dissemination and that researchers and professionals in research management roles need new skills and strategies to achieve this.

References

- ARC. (2018). Funding world-leading research [Press release]. Retrieved from: <https://www.arc.gov.au/news-publications/media/media-releases/funding-world-leading-research>
- Australian Government. (2017). EI 2018 - Framework. Retrieved from: http://www.arc.gov.au/sites/default/files/filedepot/Public/EI/EI_2018_Framework.pdf
- Barker, D. (2004). The scholarship of engagement: A taxonomy of five emerging practices. *Journal of Higher Education Outreach and Engagement*, 9 (2), 123-137.
- Bayley, J., & Phipps, D. (2019). Extending the concept of research impact literacy: levels of literacy, institutional role and ethical considerations. *Emerald Open Research*, 1.
- Bell, J., & Head, B. (2017). Knowledge mobilisation intermediaries operating at the research-policy-practice nexus in Australia. *Developing Practice: The Child, Youth and Family Work Journal* (48), 7.
- Bexley, E., James, R., & Arkoudis, S. (2011). *The Australian Academic Profession in Transition: Addressing the Challenge of Reconceptualising Academic Work and Regenerating the Academic Workforce*. Centre for the Study of Higher Education.
- Boyer, E. L. (1996). The scholarship of engagement. *Bulletin of the American Academy of Arts and Sciences*, 49 (7), 18-33.
- Clinton, J. M., Aston, R., & Quach, J. (2018). Promoting evidence uptake in schools: A review of the key features of research and evidence institutions. Report prepared for, Education Excellence Review Secretariat, Department of Education, Australian Government. University of Melbourne, DOI, 10(49), 3.
- Cooper, A., Rodway, J., & Read, R. (2018). Knowledge Mobilization Practices of Educational Researchers Across Canada. *Canadian Journal of Higher Education*, 48 (1), 1-21.
- Derrick, G., & Nickson, M. (2014). Invisible intermediaries: A systematic review into the role of research management in university and institutional research processes. *Journal of Research Administration*, 45(2), 11.
- Evans, D., & Plewa, C. (2016). Academics do want to engage with business, but need more support. *The Conversation*. Retrieved from <https://theconversation.com/academics-do-want-to-engage-with-business-but-need-more-support-62902>

- Group of Eight and Australian Technology Network. (2012). Final report: 'Excellence in Innovation: Research Impacting our Nation's Future- assessing the benefits'. Retrieved from <https://go8.edu.au/sites/default/files/docs/atn-go8-report-web-pdf.pdf>
- Knight, C., & Lightowler, C. (2010). Reflections of 'knowledge exchange professionals' in the social sciences: emerging opportunities and challenges for university-based knowledge brokers. *Evidence & Policy: A Journal of Research, Debate and Practice*, 6(4), 543-556.
- Lavis, J., Ross, S., McLeod, C., & Gildiner, A. (2003). Measuring the impact of health research. *Journal of Health Services Research & Policy*, 8 (3), 165-170.
- Levin, B., Cooper, A., Arjomand, S., & Thompson, K. (2011). Research Use and Its Impact in Secondary Schools: Exploring Knowledge Mobilization in Education: ERIC.
- Minister for the Department of Education. (2017). Focusing research to make a difference [Press release]. Retrieved from <https://ministers.education.gov.au/birmingham/focusing-research-make-difference>
- NHMRC. (2018). National Health and Medical Research Council Corporate Plan 2018–2019 Retrieved from: <https://www.nhmrc.gov.au/about-us/publications/nhmrc-corporate-plan-2018-2019>
- NSF. (2018). Perspectives on broader impacts. Retrieved from https://www.nsf.gov/od/oia/publications/Broader_Impacts.pdf
- Phipps, D. (2018). Global perspectives on research impact. Retrieved from <https://www.knaer-recrae.ca/knowledge-hub/kmb-blog/9-tips-from-the-experts/650-global-perspectives-on-research-impact>
- Phipps, D., Pepler, D., Craig, W., Cummings, J., & Cardinal, S. (2016). The co-produced pathway to impact describes knowledge mobilization processes. *Journal of Community Engagement and Scholarship*, 9 (1), 31- 40.
- Reed, M. S. (2016). *The research impact handbook*. Aberdeenshire: Fast Track Impact.
- Saltmarsh, J. (2017). A Collaborative Turn: Trends and Directions in Community Engagement. In J. Sachs & L. Clark (Eds.), *Learning Through Community Engagement: Vision and Practice in Higher Education* (pp. 3-15). Singapore: Springer Singapore.
- SSHRC. (2019). Definitions of Terms. Retrieved from: <http://www.sshrc-crsh.gc.ca/funding-financement/programs-programmes/definitions-eng.aspx>
- Schuetzenmeister, F. (2010). *University Research Management: An Exploratory Literature Review*. Institute of European Studies, UC Berkeley.
- Shattock, M. (2010). *Managing successful universities*: McGraw-Hill Education (UK).
- Strategic Review of Research in Education (Australia). Review Panel, McGaw, B., Boud, D., Poole, M., Warry, R., & McKenzie, P. (1992). *Educational research in Australia*. Aust Government Pub Service.
- Tsey, K., Onnis, L.-a., Whiteside, M., McCalman, J., Williams, M., Heyeres, M., . . . Baird, L. (2019). Assessing research impact: Australian Research Council criteria and the case of Family Wellbeing research. *Evaluation and program planning*.
- Whitmer, A., Ogden, L., Lawton, J., Sturmer, P., Groffman, P. M., Schneider, L., . . . Raciti, S. (2010). The engaged university: providing a platform for research that transforms society. *Frontiers in Ecology and the Environment*, 8 (6), 314-321.

Appendices

1. Background

This study tour was funded by the University of Melbourne Universitas 21(U21) Professional Staff Scholarship to investigate how universities in USA and Canada supported research engagement activities and to build connections with these institutions to facilitate knowledge sharing. The decision to visit Canadian and US universities was motivated by the established practices and research on knowledge mobilization in Canada and US universities engagement with communities and industry. The universities visited were:

1. University of British Columbia, Vancouver, British Columbia, Canada
2. Simon Fraser University, Vancouver, British Columbia, Canada
3. McMaster University, Hamilton, Ontario, Canada
4. University of Toronto, Toronto, Canada
5. York University, Toronto, Canada
6. University of Maryland, Maryland, USA
7. Columbia University, New York, USA
8. University of Connecticut, Storrs, Connecticut, USA

To arrange the study tour I initiated contact with Research Offices, Engagement Units, Faculty research management staff and several research centres and projects as well as liaising with international partnerships offices and U21 contacts. At most institutions I worked with key contacts to organise a program of meetings with professional and academic staff at institutional, faculty, research centre and project level. I provided an overview of the purpose of my visit, topics I was interested in and my background. I met with representatives from a wide range of research disciplines including Humanities, Social Science, Health, Science, Education, Business, Architecture, Information Systems and professional areas such as Research Offices, Library, Intellectual Property, Communications and International Partnerships.

Over 3 weeks I met with 65 academics and professional staff including Vice Presidents Research, Directors of Research Offices, Partnerships Managers, Librarians, Professors, Grants managers, Senior advisors, Project Managers, Directors of Institutes and Program Coordinators. While many of these roles worked across the institutions or within multi-disciplinary groups, I met with researchers and professional staff from the disciplines of Health, Business, Arts, Science, Engineering, Education, Social Science.

The meetings provided me with rich information, connections and learnings about research management for engagement, which are outlined in this report. I also met with several researchers and centres who expressed interest in establishing connections with counterparts at the University of Melbourne. I have included a section highlighting potential opportunities for the University to develop relationships, particularly with U21 institutions, but also others, where there may be shared interests (Appendix 2 below).

My interest in this topic has grown out of my role as project manager on a large cross-disciplinary (education, architecture and design) Australian Research Council (ARC) Linkage Project which is investigating the impact of school design on teacher practices in Australia and New Zealand. The

partnership has been highly collaborative, involving partner organisations in data collection, analysis and outputs and achieving significant engagement with their organisations and wider networks. My role has focused on building strong relationships with partner representatives, creating an international network of educators and architects who follow the project and the purposeful communication and dissemination activities aimed at non-academic audiences. This has resulted in significant grass roots engagement with the project activities and findings which has informed the research activities, stimulated new academic collaborations and has led directly to new research partnerships. The project website (www.iletc.com.au) and twitter account ([@projectILETC](https://twitter.com/projectILETC)) provides updates on activities, open access to findings and reports and resources.

2. Creating connections

The opportunity to meet with researchers and managers and discuss their engagement activities highlighted the potential for information sharing and possible collaborations between our institutions. The following areas expressed interest in connecting with researchers, centres and programs at The University of Melbourne to share expertise, experiences and insights for mutual benefit.

- **Centre for Health Equity, University of Maryland**

Prof. Stephen Thomas sbt@umd.edu

The Centre's approach to community engagement through the Community Research Advisory Board (CRAB), health information (HAIR) and service provision initiatives (Mission of Mercy) represented successful initiatives that achieved significant engagement across research, teaching and service priorities.

- **Office of School and Community Partnerships, Teachers' College, Columbia University.**

Dr. Nancy Streim Assoc VP for School and Community Partnerships,
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The Office of School and Community Partnerships facilitates partnerships with New York public schools with the aim of improving educational opportunities. The Office supports school and teacher led initiatives to access the expertise and knowledge held within the Teachers College. The projects are driven by the needs of schools and include research projects, PhD student's placement in schools and teacher professional development. The office provides a central point of contact between Teachers College and the schools and facilitates greater engagement of schools in research by building their capacity to participate in research and apply it to practice.

- **Centre for Technology and School Change, Teachers' College, Columbia University.**

Prof. Ellen Meier Director of the Center for Technology and School Change ellen.meier@tc.edu

Centre for Technology and School Change has been operating for 20 years and focuses on empowering teachers to use technology creatively to transform teacher practice. The centre operates professional development programs, evaluation services as well as conducting research and supporting community schools. The connections with schools and individual teachers provides an ecosystem for knowledge exchange that supports each stage of the research lifecycle. The success of this centre has provided a model for other centres within the College.

- **Encounters and Initiative on Campus Dialogue, University of Connecticut**

A/Prof. Brendan Kane A/Professor of History, Encounters Series Brendan.Kane@uconn.edu

The [Encounters Series](#) was initiated by a [group of humanities academics](#) who felt that their disciplines had a great deal to offer the community beyond the traditional approaches to outreach like public lectures, exhibitions, media stories and podcasts. The [unrest on university campuses](#) in the USA in 2015, and the subsequent efforts to address tensions with community dialogues inspired the group to develop an approach that used a combination of dialogue and humanities. They developed *Encounters*, which facilitates an informed conversation about challenging social issues by focusing on an artefact of

history or society. The events have also highlighted the importance of cultural and community institutions, such as libraries, as shared spaces and providers of reliable information.

- [Institute of Collaboration on Health Intervention and Policy](#) (InCHIP), University of Connecticut
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[Institute of Collaboration on Health Intervention and Policy](#) (InCHIP) was originally a project focused on HIV intervention and prevention but has broadened its scope to health generally. The Institute supports health research across the university providing a one stop shop for support throughout the research lifecycle including administration, grant development, researcher training, community engagement, partnership development and outreach. Engagement is a core element of many of the research programs and include outreach activities aimed at study participants, the community and government.

3. Institutional Case Studies

University of British Columbia
Member of U21

Member of Research Impact Canada



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Kmb priorities

The University of British Columbia ([UBC](#)) [is in the process of reviewing their knowledge mobilization \(kmb\) activities](#) and has documented the challenges identified through consultations. The priorities for kmb reflect the institutional commitment to creating community and national benefits from research and meeting funders' requirements to provide access to research outputs. UBC sees kmb as the connecting existing research with users outside academia and creating new knowledge through research partnerships.

The university feels it has a responsibility to take a systematic and strategic approach to managing and supporting Kmb as "an active part of a comprehensive strategy for research competitiveness" ([Enhancing KMB@UBC, Mobilizing UBC Research in the Policy Realm](#)). There is also a responsibility to engage meaningfully with First Nations and local communities.

Central kmb support is provided to guide, coordinate and facilitate Kmb practices on an institutional level. Each faculty establishes its goals depending on its research context and reflects the reality of the research activity that already involves kmb such as partnerships, community engagement and broader dissemination.

There is grass roots interest from researchers in disciplines where this is an important part of the research approach or provides flow on benefits such as creating new collaborations, commercialisation opportunities or improving practices in a professional discipline.

Support for Kmb

UBC is focused on building the institutional capacity for kmb through the creation of the new VP Research and Innovation **Knowledge Exchange Unit**, led by Karine Souffez. The mission of this unit is to support knowledge exchange (two-way flow) between the university and the wider community (including non-profit organisations, business and governments), research partners and stakeholders and thereby increase the societal impact of their research. The unit aims to do this by raising awareness of kmb, building capacity in kmb activities, supporting knowledge exchange planning and creating a system for assessing and communicating the impact of these activities. The unit will function as a central hub connecting with other centralised units such as communications, library and research office and research management staff, such as grants officers and local kmb staff in faculties and departments.

The unit is still in the early phase of setting up and will be conducting an environmental scan of all current kmb roles and activities across the university which not only reflects the diversity of kmb activities but also the needs. The initial services by the unit will focus on training, awareness raising, and advice on knowledge exchange planning and implementation.

Partnership development officers work with specific disciplines and research clusters to develop research partnerships with industry, government and non-profit organizations. These roles facilitate new relationships and collaborations by brokering the interests of industry/business and researchers, bridging the gaps between expectations and priorities and addressing issues in intellectual property discussions. These roles develop a detailed understanding of the research interests and capabilities of their faculty in order to represent them in the discussion with external parties.

Research clusters have been developed in the last 2-3 years as a means of building inter-disciplinary research with a focus on applied and engaged research. Seed funding is provided to initiate the collaboration and seed initial projects.

Support Programs to Advance Research Capacity (SPARC) provides centralised support for developing grants and work with faculty-based research support roles. Kmb plans are an element of their work and they work with researchers to frame their kmb plan in ways that are relevant to their project methodologies and the broad societal benefit of the research. These activities might be most appropriate through traditional academic dissemination and will depend on the project, but they also connect researchers with central university services for broader dissemination. It is acknowledged that kmb activities do require a different skill set to the current generations standard academic experience. There is the potential for this role in projects to be filled by upcoming PhDs, an opportunity which is often missed and could be developed.

Generally, the extent of kmb activities is determined by the focus of the grant and in some cases kmb is better addressed through specific subsequent grants for conferences or engagement activities which wouldn't be appropriate to include in the initial grant application (as they wouldn't meet the criteria for the research design).

Project management roles exist on large funded projects, particularly partnerships and are often held by someone with a PhD. Many research projects would engage a PhD candidate as a student or research assistant to work on a funded project and they could be involved in kmb activities. However,

the time spent on kmb might be limited, even though this is seen as an important element of research training.

Research partnerships are a significant part of kmb activities and include those funded by the research councils and industry funders. The research council grant criteria are very specific and result in detailed plans for collaboration, reciprocal information sharing and capacity building. However, these partnerships can face challenges if project teams are inexperienced in than anticipated partnership development roles and building capacity for cross disciplinary research through clusters.

In professional disciplines and applied fields kmb is a standard element of research involving partnerships with industry and communities and is also seen as a component of 'service' to sharing discipline knowledge or broader university engagement activities. However, the extent to which researchers engage in it is dependent on their skills, experience and competing priorities. UBC aims to provide increased support for researchers through the Knowledge Exchange.

Examples:

- [Peter Wall Institute of Advanced Studies](#)
- [Public Humanities Hub](#),
- [Participedia](#)



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Kmb priorities

Simon Fraser University's (SFU) mission is to be 'Canada's most engaged university' and has a strong commitment to engage with the community, industry and government and disseminate outcomes widely. SFU recognises that while its researchers are interested in kmb they have limited time or capacity to design and implement activities that will engage broader audiences with their research. SFU is considering how the institution could take a more strategic and coordinated approach to supporting researchers in kmb and is conducting a review into the needs of researchers, opportunities to support them and resources available. This review was ongoing at the time of my visit but had identified the library as a hub for supporting researchers, providing training, access to kmb tools (communications) and staff expertise.

Support for Kmb

SFU supports development research partnerships with community and industry and acknowledges the significant contribution these make to kmb. However, it is considering how it can better support researchers not involved in partnerships to extend the reach of their activities. There are many researchers conducting kmb activities as part of their research at SFU, but there is no systematic way of supporting or capturing these activities within the research management structures. The response to supporting kmb is being considered within the broader consideration of the architecture of the research process and taking a holistic approach to supporting wider engagement with research.

The review has identified that support for research is focused largely on the pre-award stage and development of kmb plans, but that more support is needed to ensure these plans can be

implemented. Support roles such as project or program managers within research centres and projects do provide capacity for kmb, but these are limited to large funded programs and their capacity is not available outside the specific centre or research group. It may be possible to develop the role of faculty grant administrators, who sometimes support the development of impact plans within applications, to being more involved in the post award support for kmb activities.

The review of kmb has involved identifying the needs and interests of researchers at the grass roots level and linking existing programs and support services. The library will be a focal point for providing coordination as it is located within the research portfolio and staff already provide a wide range of training and support to researchers and engage with external organisations. They have identified a need to support researchers to develop and implement impact/kmb plans, providing strategic coordination, facilitating access to information and develop an institutional network of kmb activities.

Professor Valerie Crooks is coordinating the review and recently conducted an environmental scan of Canadian universities websites to identify the range of approaches to supporting kmb. She identified that across Canada there were four broad categories of responses:

1. Kmb not a priority due to teaching focus
2. Research stories highlighted as examples of kmb, but limited institutional support services
3. Some kmb programs and training
4. Coordinated kmb support from centralised unit or staff, involvement with national kmb focused organisations and expertise in implementation science.

With kmb a key criterion on grant applications, SFU hopes to support individuals throughout their career by building awareness of the range of activities that constitute kmb, enhancing recognition of these as a valuable part of academic 'service' and considering how it can be better recognised with the tenure processes. They hope to make the existing support services more accessible and contextualised for researchers, include them in standard academic training, build the capacity of researchers while also supporting them at point of need. An example of a tangible benefit for providing a more coordinated kmb service was that researchers can refer to these programs and supports in their impact plans, to demonstrate institutional capacity to achieve the intended outcomes. Evaluation of the impact of kmb activities is also an important consideration of the new initiative and it is intended to develop measures of to validate the activities.

'kmb is about helping researchers navigate the support for research that is already there, just in time, tailored to their needs ... as well as capturing and evaluating it'. Simon Fraser University.

The library provides a range of research support services as well as broader community engagement initiatives. The traditional programs of researcher support and training have been developed into a symposium that focuses on managing research impact through strategic dissemination at all stages of the research life cycle.

Examples:

[Public Square](#) and [Philosopher's Cafe](#) are public engagement events which aim to build connections between the university and community, share knowledge and inform public dialogue.

[Public Knowledge Project](#) develops open source software and conducting research to improve the quality and reach of scholarly publishing. It is administered by the SFU library.

[Community Scholars Program](#) provides Vancouver community members with access to the university library research support services and online journals. This enables community and non profit groups to have a connection with the university which supports research and networking within the university.

[In partnership with UBC the *Making Research Accessible*](#) project was focused on supporting involvement of disadvantage communities in research. One of the outputs was the [Research 101 booklet](#) which provides guidance to researchers on working with the local Downtown Eastside community.

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U21 member

Research Impact Canada member



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Kmb priorities

Engagement with local community has long been a priority for McMaster University and is reflected in programs and support for collaborative partnerships for teaching and research and the initiatives such as the Office of Community Engagement. Those I met with indicated that the university is mindful of increasing expectations of Canadian universities to demonstrate the impact of research on society and that this will necessitate greater coordination strategies within institutions. Some also identified the importance of recognition of this activity within academic promotion criteria.

McMaster is supporting research engagement through initiatives which facilitate collaborations, build relationships across discipline silos and enhance awareness of research with the wider community. In recent years the Vice President Research has provided seed funding for support roles to faculties, which are now faculty funded. The Office of Community Engagement was formed in 2016 and supports faculty in developing research partnerships with local communities. A recent communications campaign [Brighter World](#) has provided a focus for demonstrating the value of wider engagement to researchers and raising awareness of opportunities for collaboration between disciplines.

Support for Kmb

McMaster University supports research engagement via a devolved model of centrally funded research facilitators working within faculties of business, social sciences and humanities. While some disciplines, such as engineering, generate tangible outcomes in the normal course of research, McMaster acknowledged that for other disciplines this will require development of new approaches. The university does not see a need for a centralised role focused on 'knowledge mobilization' as the discipline context for this varies so widely. There is research administrative support for all Faculties from the central research office, Health Research Services and Industry Liaison Office for research partnerships and technology transfer efforts.

These research engagement support roles were established in 2013 within social science, business and humanities to provide proactive and targeted assistance to researchers to engage with community and industry. These roles work one-to-one with researchers to assist them in not only developing research partnerships pre-award, but post-award in maximising opportunities for engagement, managing partnership relationships and effective dissemination. They also involve development of interdisciplinary connections and bridging gaps in expertise or knowledge and overcoming organisational silos, by facilitating access to services within the university. The professional staff in these roles develop an in-depth understanding of the research undertaken within their faculty and are able to identify opportunities for applying it in new contexts. The location of these staff within faculties, 'just down the hall' and their mandate to initiate discussions with researchers, is key to their success in building relationships and a deep knowledge of the research fields.

The **Office of Community Engagement** was established in 2016 and provides a bridge between researchers, staff, students and the community to facilitate partnerships for teaching programs, volunteering and research. It coordinates a network of staff, faculty, and students within the university that facilitates connections across disciplines and organisational units. The establishment of the Office was a strategic initiative to enhance and guide community engagement activities that had been happening to various degrees for many years. The model acknowledges the autonomy of researchers and has focused on identifying and building initiatives from the grass roots through working with researchers and community members to identify areas of need and interest. They have developed resources and tools for researchers (such as principles for community engagement) to inform the way they approach community engagement and provide the community with information and a central contact point. Their role focuses on establishing and supporting partnerships, rather than creating broader access to research outputs, although they are piloting some input to developing kmb plans.

The Office also has responsibility for related programs, such as staff and student volunteer placements and the Research Shop. The Research Shop is a service for community members and non-profit organisations to submit questions and students will scope the project, conduct a literature review or basic research.

McMaster Health Forum is focused on generating action on the pressing health-system issues, based on the best available research evidence and systematically elicited citizen values and stakeholder insights. making research accessible to those in health policy and services through a research, training, information services, community support, consultations and facilitating networks. The forum was established in 2009 by Professor John Lavis, who is still Director, and has continued to develop and

refine its services during this time. The forum provides seven key services to support broader access to research:

1. "Learn how": Training for health policy makers, stakeholders, researchers, and students in finding and using research evidence and on setting agendas and developing and implementing policies
2. "Find evidence": Databases and information resources providing access to regularly updated pre-appraised synthesized research evidence, and a rapid response program
3. "Spark insights": Stakeholder dialogues and citizen panels which generate briefings and action plans for stakeholders.
4. "Embed supports": The Forum provides health-system leaders (policymakers and stakeholders) with a variety of resources and services to help them institutionalize promising and proven approaches to evidence-informed policymaking.
5. Supporting evidence-informed policymaking about Sustainable Development Goals
6. Citizen information and awareness programs designed to empower citizens and help them push for evidence-informed change in health and social systems
7. Network convenors supporting evidence-informed policymaking.

They engage in research partnerships through competitive grants, sponsored research with government agencies and research institutes. They also have collaboration agreements with 40 institutions covering joint programs of research, education programs and knowledge exchange.

The Forum was established with seed funding from McMaster but is now self-funding through peer-reviewed awards, service agreements with government agencies and professional associations, and foundation grants. The organisational structure of the Forum involves scientific leads on key projects, project management, structured processes for administration, PhD students, [Queen Elizabeth Scholars](#) and student employment program. They have a coordinated approach to training staff and building capacity in researchers to support growing the capacity of the Forum. They have a dedicated communications manager and all staff have training and skills in writing and synthesising research for a broad audience. They acknowledge that building the capacity of the team takes time and coordination, but they have been successful in retaining staff by pursuing new opportunities and encouraging innovation.

University of Toronto, Canada.



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Kmb priorities

University of Toronto [research strategy prioritises](#) partnerships, collaboration and engagement and has invested significant resources to support these in recent years. Partnerships with industry have grown significantly with support from Business Development Officers, student entrepreneurship initiatives and involvement in the [MaRS Discovery District](#). Knowledge mobilization (kmb) is seen as integral to these and more traditional research activities in many disciplines, involving the multi-directional flow of information between researchers and stakeholders. In some areas kmb was driven initially by funder requirements but is now growing organically with researchers seeing the benefits of engaging with stakeholders and providing broad access to outputs. Centrally the university has been considering how to coordinate support for kmb and will soon launch a central hub providing improved access to research tools and expertise. The university is anticipating funders will increasingly expect evaluation of kmb and evidence of impact.

Support for Kmb

Support for kmb is based in the faculties and departments, but centrally there is a consolidation of research resources and tools underway to provide better access. Funding is provided from the central

research office for support staff on projects and it is commonly a PhD student who works in this role. These roles are seen as valuable training for researcher in managing partnerships, engaging with stakeholders and conducting kmb activities. The library is an important resource for training and access to tools that support kmb and care is taken to understand and support individual researchers in developing their research career.

'who will use the research is part of everything we do'. University of Toronto

The [Centre for Research Innovation and Support \(CRIS\)](#) is a joint initiative between the VP Research and the library and will be launched this year (2019) as a hub which will have an online presence and physical space within the library. The library has become increasingly involved in supporting research post award with tools for data collection, management and access repositories as result of funders requirements for open access.

Kmb is considered an integral part of community and government research partnerships and is supported by partnership development staff centrally in the research and intellectual property offices. These roles provided guidance to external partners and researchers in codeveloping research proposals for collaborative partnerships that have strong, respectful relationships and reflect the interests and needs of both parties. They might initiate small partnership projects as a way of building relationships and gradually developing the skills of both parties, and as a proof of concept for the research. There has also been a review of all the partnerships within specific disciplines to identify potential consolidation and value adding for future projects where interests and research overlap.

'the conversations blend into kmb strategy, as its about integrating the partner early in the process'. University of Toronto

Kmb is an important element of the programs which facilitate partnerships aimed at technology transfer. University of Toronto has been successful in increasing partnership research in recent years by providing support to companies and researchers to find common interests, hosting industry offices on campus and attracting foundation grants from industry. While most of the support is provided pre award, the partnerships officers to provide ongoing facilitation for large scale partnerships where relationships are more complex.

The [Ontario Institute of Studies in Education \(OISE\)](#) has a small research management team which takes a proactive and personalised approach to supporting the 135 academics and views kmb as an integral part of all research. The kmb activities are considered at all stages of the research cycle and planned methodically and strategically to maximise the impact and research success. The outputs and kmb activities are tracked and consolidated along with traditional academic outputs. The institute has deep connections with the school boards in Ontario and the Ministry of Education and works proactively to be aware of their research interests. The faculty research staff have a comprehensive knowledge of current issues in education, the researchers within the institute, their interests and current projects which enables her to identify opportunities and facilitate partnerships and new projects.

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Kmb priorities

York University has a long commitment to engagement with community through research, teaching and service with a strong focus on collaboration with communities to co-develop programs and projects. York was initially established as a liberal arts college and its commitment to knowledge mobilization (kmb) was in response to the need to bridge the gap between social science and humanities research and potential users. It is now internationally recognised as a leader in kmb and research impact through the work of the [Knowledge Mobilization Unit](#) and its establishment and continuing leadership of the [Research Impact Canada network](#).

'York's pan-university knowledge mobilization infrastructure supports multidirectional connections between researchers and research partners, encouraging the development of evidence that informs decisions about public policy and professional practice.' York University Strategic Research Plan 2018-2023.

Support for Kmb

York University was the first in Canada to create a unit focused on supporting knowledge mobilization within the central research office. The unit was established by David Phipps in 2006 and he is now recognised as a leading expert in the field of kmb and research impact. The aim of the unit is to support researchers in a coordinated and strategic way that achieves the broader university mission for community engagement, as well as meeting funders' requirements. It recognises the university needs to support kmb where it can and that this has many flow-on benefits to individual researchers and the institution in terms of attracting research funding, reputation and ultimately wider use of research outputs. The benefits to a coordinated and strategic approach to kmb for York University:

1. Communications and Reputation
 - a. Kmb helps create the stories of research by supporting the creation of relationships, outreach activities and resources that provide value to the community.
2. Rankings
 - a. Research impact will increasingly play a role in institutional rankings.
3. Funding

- a. Kmb builds relationships with community, industry and government that foster greater understanding of and use of research – all of which encourage future investment in research.
4. Partnering
- a. Kmb enables researchers to share the process and milestones of research with partners, facilitates two way exchanges of information and builds stronger collaborations.

The [Knowledge Mobilization Unit](#) sits within the Research and Innovation Services portfolio, of which David Phipps is now Director. The unit provides services to researchers across the university by supporting development of partnerships (with industry, community and government), advice and tools for developing events (conferences, seminars, community consultations), developing kmb plans for grant applications and training for PhD, academics and professional staff in a range of kmb activities. The unit also provides training for other organisations and institutions internationally and staff regularly publish peer reviewed articles and present at conferences.

The unit has extensive links through the staff, Michael Johnny and Krista Jensen, with community non-profit organisations, regional governments and school boards. The unit have spent considerable time in building close working relationships with community groups, understanding their needs and interests at a grass roots level. These connections have facilitated successful research collaborations addressing social problems locally and nationally as well as student internships, incubating start-ups and supporting entrepreneurs. Community groups have also developed expertise and knowledge in research methods and practices that enables them to collaborate more effectively in research, such as a developing community ethics protocols that help researchers engage respectfully and enable the community to benefit from the outcomes.

[Research Impact Canada](#) is a network of 17 Canadian universities (and one UK member) based at York University and currently managed by the Knowledge Mobilization Unit. David Phipps established this network in 2006 and along with the York Kmb Unit, coordinates the activities. This network operates as a community of practice to support members develop capacity within their institutions for greater kmb and research impact. Member institutions meet annually face to face and regularly online to share practice, resources, organises events, webinars and promotes research in the field of kmb. The network members represent a broad cross section of Canadian institutions (and one UK member) and range of institutional kmb models.

York's Knowledge Mobilization Unit has generated a significant body of evidence-based practice and through its outreach activities and Research Impact Canada's growing community of practice is influencing university approaches to kmb internationally.

University of Maryland, USA
U21 Member



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Research Engagement priorities

University of Maryland (UMD) is a 'land grant' university and as such has a fundamental commitment to supporting the local community by providing access to information, services, education and representation. This is a significant driver for university-community research collaborations.

Research management support centrally is focussed on development of grant proposals and partnerships, while post award support for facilitating relationships with partners, engagement with stakeholders and outreach is provided within faculties and departments. While the level of this support and types of activities varies, there is a recognition that making research knowledge accessible to the wider community is not only part of the Universities mission but is beneficial in attracting new research partnerships and improving the quality of outputs. At UMD research engagement involves:

- Central and faculty-based roles support researchers to develop engagement activities and outreach throughout the life of a project – from application to final report.
- Developing partnerships with community that address real world problems and provide broader access to information, services, expertise which informs policy development,
- Involving community voice in an advisory board for reviewing research proposals and informing research methodologies
- Developing 360 degree partnerships with industry that involve research collaboration, industry advisory roles, entrepreneurship programs, student employment, sponsorship of events and endowed fellowships.

Research engagement support

UMD provides support to researchers centrally and at faculty level to develop research proposals, partnerships and dissemination activities. Generally, engagement activities supported by externally funding agencies would need to be aligned with the research methodology and would include papers, seminars and conferences. Currently, only the National Science Foundation (NSF) requires statements and descriptions of broader impacts within their proposal. However, the award does not necessarily fund these activities. UMD administrators believe agencies such as the National Institutes of Health (NIH) will begin requiring a broader impacts section within their proposals. As such, UMD's the Division of Research, faculties, and researchers are committing additional funds to engagement activities to demonstrate the broader impacts of research happening at Maryland.

The Division of Research is trying to take a more holistic approach to supporting research by providing support services that bridge discipline silos and go beyond administration of grant applications. For example, recently the University has improved internal communications amongst research support offices through a [newsletter](#) and networking meetings to increase awareness of current research being undertaken, new grants commencing and outputs from research. Staff in central and faculty research offices try to develop a broad knowledge of research activities and areas of interest so they can connect researchers with common or overlapping interests. This can also involve targeted workshops and focus groups aimed at identifying potential research topics and expertise, which are typically sponsored through the Division of Research. There is also seed funding available -- [Maryland Catalyst Fund](#) -- that are supported by the Division re-investing funds from in-direct costs (a portion of research

funding that is allocated to the facilities and administration costs to the university). These funds can be used for pilot data collection as well.

The Faculty of Engineering has developed strong industry partnerships over a number of years by developing holistic relationships with sponsors that respond to opportunities and needs. Initially the faculty had one sponsor of a symposium series and through strategic management by the Partnerships Development Manager (Ted Knight) expanded this into a significant partnerships program. A corporate partnership program was developed with involved companies contributing an annual sponsorship which supported a branded colloquium series and research fellowships, representation on a faculty advisory board and branding on faculty publications. The colloquium series provided a range of opportunities for industry partners to connect with the faculty, students and public. This series provided a basis for strong relationships with industry and resulted in collaborations on research, industry contributions to course content and encouraged industry competitors to joining the program.

The [Centre for Health Equity](#) within the School of Public Health was established in 2010 with a mission to address health disparities through research, teaching and service activities that prioritised engagement with community and building relationships. The centre has achieved significant impact in:

- influencing changes in government health policy,
- providing disadvantaged communities' access to health services, information and networks,
- including the voice of marginalised communities in research,
- increasing cultural diversity in the academy,
- raising awareness of racial bias in health services and
- strengthening connections between the university and the local community.

The integration of research, service and practice provides a model for health research that has real world impact on health outcomes in a number of ways. Engaging with community and building robust relationships is key as this ensures research addresses real needs and provides access to research knowledge. Two programs exemplify this approach, the [Maryland Community Research Advisory Board \(MD-CRAB\)](#) and the [Health Advocates In-Reach and Research project \(HAIR\)](#).

MD-CRAB is a statewide network of individuals which represent the community as a standing advisory board for review of research proposals. This advisory board enables community members to provide input on research projects, learn more about the processes of research and builds greater understanding among researchers about the communities they involve in research. The *Health Advocates In-Reach and Research project (HAIR)* began in 2012 training African-American barbers to provide health information and advice on health screening. The initiative was successful in building capacity of local barbers to support their communities, increasing access to health screening and training health professionals to understand the barriers to disadvantaged communities accessing health care. The success of this initiative has enabled participants to access subsequent research and service programs.

The Faculty of Architecture has a number of programs that provide expertise and information to the local community and government and have developed strong relationships through student projects, advocacy and research. The [Partnership for Action Learning and Sustainability](#) is a university wide program coordinated from the Faculty of Architecture which has been running for 6 years. The program works with a local government to identify issues or problems that can be the focus of a

student project. It is supported by a Program Facilitator whose role is funded by the Provost. The projects produce tangible outcomes and services for the government, improvements for the community, practical learning experiences for students and development of relationships between the university, community and local government.

Columbia University, USA



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Research engagement priorities

The main drivers for research engagement at Columbia University were the responsibility to support local New York communities, while also enhancing professional practice, address funding requirements for broader impacts and develop connections with industry. In the Teachers' College centres engagement with teachers and local schools was a fundamental element of research, teaching and service activities. The National Science Foundation requirements for broader impacts influenced the inception of the outreach programs in the Faculty of Engineering but has grown in response to increased interest by graduate students and academics. The Data Science Institute's mission to build interdisciplinary research capacity and address real world challenges necessarily involves working closely with industry.

Support for research engagement

The programs and centres I met with had roles dedicated to management of the outreach and engagement activities and processes that maintained links across the range of teaching, research and service activities. These roles varied but all involved ongoing brokering and nurturing of relationships between researchers and external organisations, project management and communications activities (internal and external). The *Office for School and Community Partnerships* provides a central point of contact at Teachers' College for academics and schools to mediate research projects and collaborations. This brokering role involves building and maintaining strong relationships, a good understanding of the interests of each group and the capacity to represent those interests in facilitating research.

Research engagement activities

Centres and institutes have developed funding models which enable them to employ dedicated staff with specialised skills to support research engagement activities, manage partnerships and take a strategic approach to developing new programs and grant applications.

[*Centre for Technology and School Change*](#) has been operating for 20 years and focuses on empowering teachers to use technology creatively as a means to transform teacher practice. The centre operates professional development programs, evaluation services as well as conducting research and supporting community schools. The connections with schools and individual teachers provides an ecosystem for knowledge exchange that supports each stage of the research lifecycle. The success of this centre has provided a model for other centres within the College.

The [*Office of School and Community Partnerships*](#) facilitates partnerships with New York public schools with the aim of improving educational opportunities. The Office supports school and teacher led initiatives to access the expertise and knowledge held within the Teachers College. The projects are driven by the needs of schools and include research projects, PhD student's placement in schools and teacher professional development. The office provides a central point of contact between Teachers College and the schools and facilitates greater engagement of schools in research by building their capacity to participate in research and apply it to practice. The development of strong relationships is key to the work of the centre, which enable both researchers and schools build a better understanding of each other.

The [*Office of School and Community Partnerships*](#) facilitates partnerships with New York public schools with the aim of improving educational opportunities in the local community, providing opportunities for graduate students to enhance their learning, and facilitating access for faculty to engage in research with schools. The Office supports school and teacher led initiatives to access the expertise and knowledge held within the Teachers College. The projects are driven by the needs of schools and include research projects, graduate student's placement in schools and teacher professional development. The office provides a central point of contact between Teachers College and the schools and facilitates greater engagement of schools in research and greater engagement of TC faculty in applying their research in practice. The development of strong relationships is key to the work of the centre, which enable both researchers and schools to build a better understanding of each other and derive mutual benefits.

[*Data Science Institute*](#) is a cross disciplinary institute which has 350 researchers from 12 schools at Columbia University which conducts research, degree programs, entrepreneurship programs, industry partnerships and public events. The institute aims to drive collaboration across the university through convening centres and working groups to address challenges that a single discipline area can't address alone. The institute has been successful in building a model of funding through an industry affiliates program which is integrate with the research and teaching activities. The program involves industry and businesses paying an annual subscription that provides a range of benefits including seminars, branding, student recruitment opportunities, involvement in the Masters capstone program and expert advice. This affiliates program builds relationships with industry that can enhance teaching programs and student industry placements, generate research collaborations and provide a channel for dissemination of research outputs. The relationships enable both the university and industry to

develop better understanding of each others priorities and modes of operation which informs the way research collaborations operate and ultimately the opportunities for application of outputs.

[*Columbia Engineering Outreach Programs*](#) provide K-12 teachers and students access to STEM education expertise and resources. The program was developed to provide a mechanism for making National Science Foundation funded research more accessible to schools and acknowledged that researchers did not have the time or capacity to conduct this outreach. The NSF grants require researchers to demonstrate how their research will have 'broader impacts' outside academic spheres, such as informing education, industry and social issues. Ellie Ford is the Program Coordinator and her role also involves managing outreach for a research centre. The demand for outreach activities is growing as researcher awareness increases. Universities across the US have a variety of approaches to these engagement activities and the [*National Alliance for Broader Impacts*](#) serves as a network of practice.

The programs at Columbia involve visits by schools to university laboratories, academic engineers visit schools and summer programs at Columbia for 12-15 students. The program works with around 200 faculty members and has recently increased from one staff member to three to meet demand for support. The small team works closely with the faculty members and schools to develop activities that are mutually beneficial and well planned.

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Research engagement priorities

UConn support for research engagement activities reflects their commitment to supporting local community as a land/sea grant university, the federal research funding requirements for outreach and engagement and communicating university achievements to prospective students and staff. Grant applications require engagement and dissemination plans and funders review progress rigorously through annual reporting.

Support for research engagement

The structure of research support services is largely dictated by the requirements of research grants, which stipulate that the funds are for research activities and not allocated to administrative roles. There are central and faculty level research administrative support roles that provide financial, organisational and reporting services to investigators. Project management roles are usually on larger

grants or partnerships and the incumbent will usually have a PhD and conduct the research and any outreach activities that were an element of the research methodology. These roles can also support broader impact and would generally have a blend of research experience and skills in communicating to a broader audience.

While the onus is on researchers to coordinate and implement these activities, the university provides a range of services to support them and faculties, institutes and centres have developed specific programs that provide discipline support and tools. There are systems in place such as mentoring, seed grants, outreach programs and services and faculty level programs that support training of PhD and early career researchers in how to plan and implement these activities.

There are some challenges for universities in supporting researchers to achieve the broader impacts as funding restrictions and the increasing cost of doing research means that researchers must prioritise the outputs required in their grant agreements. It can also be challenging for early career researcher to gain enough training and experience needed to manage research projects.

[Centre for Open Research Resources and Equipment](#) is a centre that supports researchers through a range of programs that bridge academic and organisational silos. The centre grew out of problem identified by Dan Schwarz, who was seeking information on researchers at UConn and developed a program [Lincus](#) that facilitated connections and the Biotech Bioservices Centre (now COR²E). The centre identified unexplored opportunities for UConn, such as the underutilization of undergraduate talent to build networking software and established [Squared Labs](#). This program not only generated bespoke software needed for research, but provided highly sought after experience for undergraduate students.

The [Human Rights Institute](#) is an interdisciplinary centre which originated from an interest in bringing human rights research into the domestic policy and government framework. The centre coordinates teaching and research across the faculties of Anthropology, Economics, History, Philosophy, Political Science, Sociology, Social Work, Engineering, Education and the Schools of Law and Business. Their mission to bridge disciplinary boundaries and encourage broader awareness and consideration of human rights in all professions is central to their holistic approach to all teaching and research activities. Grant funding is available to support researchers with traditional outputs as well as developing their capacity for outreach, engaging with external organisations and developing research, training and service partnerships.

[Institute of Collaboration on Health Intervention and Policy](#) (InCHIP) was originally a project focused on HIV intervention and prevention but has broadened its scope to health generally. The Institute supports health research across the university providing a one stop shop for support throughout the research lifecycle including administration, grant development, researcher training, community engagement, partnership development and outreach. Engagement is a core element of many of the research programs and include outreach activities aimed at study participants, the community and government. In an effort to refine their approach they have established a *Community Engagement Studio* based on the model developed at [Vanderbilt University](#). It involves establishing a database of community representatives who provide feedback and advice to researchers at any stage of research projects.

The Institute would like to increase its broader engagement and outreach, but is limited by funding, capacity and time. There is recognition that coordinated support is needed at institutional level to help community access information and expertise, but also for internal communications that can overcome discipline and organisational silos.

[Neag School of Education](#) is involved in significant community engagement and collaboration through teacher training placements and research. Engagement programs such as [as Husky Sport](#) and [COMMPACT Community Schools Collaborative](#) reflect the universities commitment to supporting local communities.

The [Encounters Series](#) was initiated by a [group of humanities academics](#) who felt that their disciplines had a great deal to offer the community beyond the traditional approaches to outreach like public lectures, exhibitions, media stories and podcasts. The [unrest on university campuses](#) in the USA in 2015, and the subsequent efforts to address tensions with community dialogues inspired the group to develop an approach that used a combination of dialogue and humanities. They developed *Encounters*, which facilitates an informed conversation about challenging social issues by focusing on an artefact of history or society. The events have also highlighted the importance of cultural and community institutions, such as libraries, as shared spaces and providers of reliable information.

'The Encounters Series is specifically designed to create institutionalized engagement opportunities for faculty that draw upon their research even if their work might not initially seem like a natural fit.' [Humanties for All website](#).

This series has been a highly successful model in connecting the local community members, cultural organisations and academics and has expanded to develop the [Initiative on Campus Dialogue](#) and program for high schools.

The [Connecticut Sea Grant](#) at UConn Avery Point campus is part of a national network of 33 programs based at flagship universities in U.S. coastal and Great Lake states and territories. The program is funded by state and federal funds and conducts [research](#), [education](#) and community outreach with a focus on building connections between researchers, government and industry. They have a program of grants that reflect this priority as well as conducting applied research programs supported by a range of funders. Engagement and research impact are fundamental to their work and research projects are designed and delivered to reflect this. The researchers have skills in partnership development and communication and often have worked in industry roles prior to academia. They highlighted the importance of the long established relationships they have with external stakeholders that supports the transfer of knowledge, new collaborations and informs their approaches to grant proposals. The program has a media officer who manages and generates content for a variety of channels including [magazine](#), events, local media, [school resources](#), website and social media.

In addition to funder requirements for engagement, there is a strong commitment by researchers who want their research to be used and to have meaning beyond their field, to integrate outreach activities from the beginning of their projects, even when it is heavily theoretical. The program is working to build engagement with community on environmental issues and is taking an interdisciplinary approach to broaden the approach to problem solving. They have had input on issues related to climate change, such as local planning legislation and compensation issues due to sea level rises.