The Annual College of Rehabilitation Sciences Research report outlines the many research and scholarship activities, contributions and accomplishments by faculty members in Occupational Therapy, Physical Therapy and Respiratory Therapy between the period of July 1, 2015 and June 30, 2016. This impressive list of grants received, publications, and presentations is a testament to the dedication of faculty members who take seriously their responsibility of engaging in research and scholarship in contributing to the mission of the College. However this list of outcomes does not fully capture the day-to-day processes of researchers who embrace principles of inter-professional collaboration, mentorship, consumer engagement, and knowledge translation and exchange in their research activities. These “soft” processes are difficult to document but are essential, as it is by engaging in these processes that our researchers are able to achieve what they do and contribute to meaningful, relevant, and impactful research and scholarship at local, national and international levels.

In this report, we are pleased to highlight two of our established CoRS researchers. Working with the community as partners in her research, Dr. Gayle Restall addresses the social and attitudinal environmental barriers that people living with episodic disabilities face. Dr. Dean Kriellaars’ research focuses on increasing physical literacy among children through creative means such as circus art instruction and movement preparation programs. Through programs of research such as these, it is clear that CoRS research is having an important impact on the lives of Manitobans.

We have identified enhancing research and scholarship as a priority of our college over the upcoming years and, during our strategic planning in fall 2015, established several goals under the strategic priority Driving Discovery & Insight through Excellence in Research & Scholarly Work Activities. We have started to discuss a plan for establishing a research identity for the college; an activity which faculty view as an essential process for moving forward with our research. We will continue to strive for ways to support the work of our researchers so that they are best situated to contribute to the health, quality of life and participation of people locally, nationally and globally. With these additional strategies in place, we are positioning ourselves to enhance the existing culture of research and to move forward with vigour in the upcoming years.

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Often when thinking about rehabilitation sciences, the physical environments people face is the first thing that comes to mind. Gayle Restall’s research focuses on the social environments and attitudes people face that could support or hamper their participation in the activities they value like work, family, and community life.

While most people can grasp the physical barriers a patient may encounter, the social barriers and attitudes may not be so readily apparent.

Restall’s research work has been centred on three main areas: Inflammatory Bowel Disease (IBD), mental health conditions and HIV. These three conditions have something in common in that they’re ‘episodic’ disabilities, meaning people can have relatively long periods of good health before experiencing a setback. The episodic nature of these conditions creates a set of needs quite different from those of people living with permanent disabilities.

Restall says that her interest in social environments stems from her clinical work experience.

“I worked with people living with mental health conditions and the social component is important for that group,” Restall says. “I’ve worked in many different settings and the importance of environments became obvious to me and how willing and open the environment is to supporting people, regardless of their impairments.”

Currently, Restall is working with a research team focused on people living with IBD.

“One of the areas we looked at was work and how it impacts those living with that particular chronic disease,” Restall says. “Some of the research was focused on the physical environment, but a lot more was around the social environment, whether it was peoples’ attitudes if someone disclosed they had IBD; or attitudes they may face if they needed some kind of workplace accommodation; or the willingness of an organization to create and provide accommodations. Our interest is in how all those things came together to either help or hinder people to have long-term employment.”

Restall’s other research area is in HIV.

“HIV used to be considered a terminal illness but because of advances in medical treatments it’s now considered a chronic long term health condition,” Restall says. “One of the research projects we’ve been working on is developing delivery service models that include occupational therapy, physiotherapy and speech language pathology to support those living with HIV and also looking at what people living with HIV perceive as the things they need in terms of long term support.”

The stigma attached to HIV is also a major component in the social environment of those living with this chronic condition.

“One of the things that strikes us when we look at the information and the research is the impact of stigma,” Restall says. “Our research is looking at ways that we can both monitor the experience of stigma for people living with HIV and develop some interventions to reduce the kinds of stigma that people feel, whether in the health care system or the community at large.”

In all her research, Restall strives to work closely with the community and encourages the participation of those who will be impacted by her work.

“The thread that goes through my research is the whole idea that people who live with chronic health conditions are active participants, not only in research, but in their own health and the development of health services and social policy,” she says. “When I do research I like to really focus on effective ways of making sure their voices are heard, honoured and respected.”
From soccer to Cirque du Soleil, Dean Kriellaars’ research into physical movement has far-reaching implications worldwide.

Kriellaars, an associate professor in the department of physical therapy, focuses his research work in an area known as physical literacy. Often when we think of literacy, we think of the ABCs of reading and writing. Kriellaars’ research takes the same concept and applies it to physical activity.

“Physical literacy is the building blocks you put together, like the alphabet, to create movements we need to do in everyday life,” Kriellaars says. “We currently don’t deliver the basic alphabet of movement skills, and that alphabet is the foundation of physical literacy. If you don’t have that vocabulary, you’re blocked from participating actively in society, whether that’s sport, recreation or vocation.”

One of the exciting research projects Kriellaars is currently working on focuses on increasing physical literacy in young soccer players, ages seven and up. The program—called Movement Preparation—is being launched across Canada with the goal of enhancing performance in soccer while increasing players’ endurance. Canada is the first country in the world to implement this kind of physical literacy-based movement preparation program.

Kriellaars’ other research work in physical literacy is with Cirque du Soleil and the national Circus School in Montreal.

We ask, ‘What is it about circus performers that makes them good at what they do?’” he says. “My job with the circus is to maximize performers’ durability and performance while minimizing injury.”

Performers go through a wide range of tests to measure bone density, muscle mass and many other physical characteristics.

“We can relate these findings to injury potential and performance potential,” the professor says.

Kriellaars’ physical literacy research with circus performers is also being used to make a positive impact on the lives of children in Manitoba. A new program is being implemented in schools across the province to help promote physical activity and literacy.

“I study the impact of circus art instruction and apply it to kids to help equip them with physical literacy for life,” he says. “If every person of every ability gets a challenge, confidence is built—confidence built on a fun and challenging pathway mixed with success and failures.”

Kriellaars continues to be enthusiastic about his research and physical literacy.

“‘That gateway to an active life is physical literacy,’ he says. ‘In the end it’s about getting back to moving again and valuing it in society. That drives everything I do. I live it and breathe it as best I can.’”


Temple, B., Martin, T., Dubé, C., Kilmnick, J., & Demczuk, L. Can we reduce injury by improving knowledge translation strategies for direct support workers of people with intellectual disability who display challenging behaviour? WCB, $180,000.


Leclair, L., Stern, M., Struthers, A., & Strome, T. Examining Outcomes of Older Adults Seen by Occupational Therapy in the Emergency Department. School of Medical Rehabilitation ReHabilitation Grant, $20,000 (2011-2015).


Ahmad, N. and Oranye, N. Does Empowerment Predict Work Stress and Job Performance among Nurses? Health Studies Research Grant, Brandon University, $2,500 (2015)
Restall, G., Leclair, L. & Daymont, C. Follow-up of children screened for developmental delay at 18-month well baby visits. Children's Hospital Research Institute of Manitoba. $5,000 (2015-2016).


Simms, A. & Restall, G. Perspectives of people living with HIV: Activity and participation needs when living at a distance from specialized services. College of Rehabilitation Sciences Endowment Fund, $4123 (2016-2017).


Ripat, J. Increasing the winter community participation of older adult wheelchair users. Centre on Aging Research Fellowship, $11,000 (2015-2016).


Webber S.C. & Kontulainen S. Do peak vertical accelerations experienced by premenopausal women during daily activities and common exercises meet the threshold for positive bone adaptation? Physiotherapy Foundation of Canada Women’s Health Division Grant, $5000 (2015-2016).


Webber S.C., Bohm E., Jones A., Ripat J., & Strachan S. Sedentary behaviour and physical activity before and after total knee replacement. ReHabilitation Grant Program, College of Rehabilitation Sciences, University of Manitoba, $19,933 (2014-2016).


**Restall, G. (2015).** Conceptualizing the outcomes of involving people who use mental health services in policy development. Health Expectations, 18, 1167-1179. DOI: 10.1111/hex.12091


Cooper, J. (2016). Mentoring graduate students. Workshop, Centre for the Advancement of Teaching and Learning, March 17, University of Manitoba.

Cooper, J. (2016). Mentoring graduate students. Workshop, Centre for the Advancement of Teaching and Learning, April 7, University of Manitoba.


Horbal, R.P. (2015). Your Aching Feet. MedTalks Program, Continuing Medical Education Program, Faculty Of Health Sciences, University of Manitoba, Winnipeg


Restall, G., MacLeod-Schroeder, N., & Dubé, C. (2016). Extended Discussion: Using an Equity Lens for Occupational Therapy Programs: Taking Action. CAOT Annual Conference, Banff, AB.


Walker, M. (2016). Exercise is Medicine: Do you believe it? Faculty of Medicine, Physical Medicine Student Interest Group.


Wener, P. (2015). A Model for Building Interprofessional Collaborative Relationships. University of Manitoba Faculty of Health Sciences, College of Medicine, Department of Family Medicine Interprofessional Faculty Collaborative Care Forum. October 14, Winnipeg, MB.


West, A. (2016). The relationship between the level of higher education attained by health professionals and health care outcomes. National Alliance of Respiratory Therapy Regulatory Bodies (NARTRB) - National Stakeholders Meeting on Respiratory Therapy Education. Ottawa, ON, Canada.

CONFERENCES ORGANIZED
Horbal, R., Manitoba Orthopaedic Surgeons Society Conference, Winnipeg, MB 2015.

OTHER RESEARCH ACTIVITIES
Schorr, R., 2015 Study coordinator, EVREST Multicentre, Riverview Health Centre, Winnipeg, MB.