

ANNUAL REPORT 2016

January 1st – December 31st 2016

**MCGILL UNIVERSITY
FACULTY OF EDUCATION
DEPARTMENT OF KINESIOLOGY
AND PHYSICAL EDUCATION**

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ASSOCIATE PROFESSOR AND CHAIR**

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McGill's Department of Kinesiology and Physical Education (KPE) in 2016

2016 has been another successful year as we continue to work towards our vision of *striving to be world leaders in the optimization of health and well-being across the lifespan*. We began the year with 14 Full-time Faculty members and 1 Full-time Faculty lecturer. In addition, 2016 saw a major transition in the Department leadership, with the appointment of a new Chair (Côté) following the retirement of Prof. Turcotte, a new Graduate Program Director (Pearsall replacing Jensen, who was appointed Interim Director of the McGill Research Centre for Physical Activity and Health). In the sections below, we highlight our main achievements for 2016.

Research and Publications

Once again this year, faculty members were successful obtaining research grants from provincial, federal, international and private sources, while continuing to manage grants previously obtained. Total research funding is over \$2M and per capita funding is around \$160K per tenure track faculty member. In the recent 2 years, there has been a small decrease in our research intensity (Fig. 1) due to some recent departures, but overall, our research intensity continues to be one of the highest in the country for similar academic programs. These grants continue to make it possible to offer financial support to current graduate students, attract new students and help the professors move their research agenda forward.

Among new or renewed research grants or awards obtained in 2016 as Principal Investigator, several were obtained from NSERC. Dilson Rassier, Julie Côté and Dennis Jensen renewed their NSERC Discovery grants. Côté also was awarded by NSERC an Accelerator Supplement for 2016-18 to enhance her research program on fatigue, and obtained an NSERC Industry Partnership grant for collaborative work with MusicMotion©. Jensen also was awarded a Tier 2 Canada Research Chair for his research into COPD and obtained private funding from AstraZeneca (with co-PI Shane Sweet), Tilray, and Boehringer Ingelheim. Shane Sweet obtained new grants from the Craig H. Nielsen Foundation and from the Rick Hansen Institute generally supporting his program on exercise and quality of life in people with physical disabilities. Lindsay Duncan was awarded a large grant from the prestigious International Olympic Committee for her work on doping prevention. David Pearsall obtained an NSERC ENGAGE grant for partnership work on smart garments in collaboration with Hedokko Inc. and an IRSST grant for the evaluation of work shoes. Lee Schaefer was awarded new grants from SSHRC, the Saskatchewan Community Initiatives Fund and Potash Cooperation for his work on youth wellness and physical education. For KPE, 2016 marks an important acceleration of research revenue from private funding sources, helping KPE diversify and face increasingly low tri-council success rates.

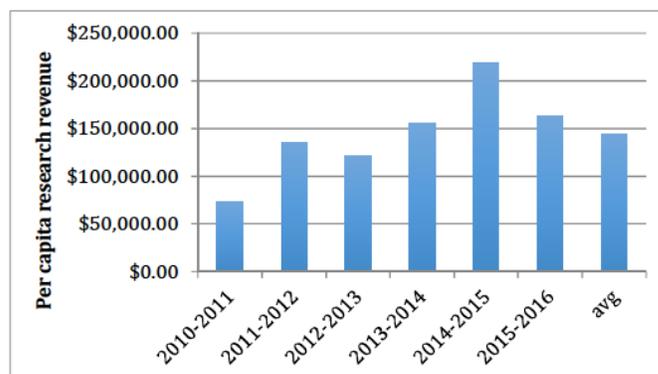


Figure 1: KPE Per capita research funding, 2010-16. Includes Canadian and Quebec funding agencies, private foundations, contracts, and CFI; CRCs are included but only partially for 2015-16.

In 2016, KPE professors published on average of 4.1 peer-reviewed journal articles and 8.9 conference proceedings or publications (Table 1). In addition, professors published a total of 8 book chapters, for a grand total of 13.6 publications per professor. This is the highest average number of publication on record over the last 7 years. Among the notable publications, Rassier published an invited editorial in *Biophysical Journal*, and Schaefer won an Award for Outstanding Publication by the AERA. KPE professors have also delivered a high number of invited presentations. Notably, Andersen (Australian Rheumatoid Conference), Côté (PREMUS) and Rassier (Gordon Research Conference) delivered keynotes at major international conferences.

year	2010	2011	2012	2013	2014	2015	2016
Articles/prof	6.0	4.1	3.1	4.3	3.4	4.0	4.1
Proceedings/prof	4.9	5.1	4.1	4.8	6.9	7.2	8.9
Tot pubs/prof	12	9.9	7.6	9.4	10.9	11.4	13.6

Table 1: Publication trends for KPE full-time professors

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The McGill Research Center for Physical Activity and Health (PATH) originated from KPE leadership in 2012, and KPE continues to assume the scientific leadership and actively support the initiatives of this Faculty of Education-housed research centre (<http://www.mcgill.ca/path/>). In Summer 2016, Russ Hepple resigned from his role of PATH director, and Dennis Jensen was appointed interim director. Prof. Jensen, along with Prof. Caroline Paquette, organized the 3rd PATH Annual Research Symposium at the McGill Faculty Club around the theme of Exercise, Mobility and Neurological Disorders, which was a success and attracted delegates in record numbers. For the remainder of 2016, the PATH website was revamped and the Centre was reorganized around three research axes. KPE will continue to support the development of PATH, with whom it shares a research mission to advance and disseminate knowledge and help develop HQP training around the theme of physical activity and health.

In 2016, KPE faculty have continued to partake in many active collaborations at the international level. Ted Milner collaborates with researchers at the University of Oxford, the University of Zurich and Université Pierre et Marie Curie in France. Gordon Bloom collaborates with researchers in Nanyang University in Singapore, Universities of California State (Fresno) and Utah, University of Western Sydney in Australia, and Instituto Universitario da Maia in Portugal. Lee Schaefer collaborates with colleagues at Emory University, University of Cork, Loughborough and Macquarie. David Pearsall collaborates with colleagues at the University of Bridgewater and Harvard, and with Maastricht University in the Netherlands. Lindsay Duncan collaborates with colleagues from Yale University, and Caroline Paquette collaborates with colleagues from the Karolinska Institute. Julie Côté collaborates with colleagues in Virginia Tech, Aalborg and Southern Denmark Universities, and University of Cagliari (Italy). Ross Andersen collaborates with experts in Sydney, Emory and Portland State. Dilson Rassier collaborates with colleagues from Florence, Vermont and Washington. Finally, KPE professors actively collaborate with researchers appointed in a variety of departments and specialists in a diversity of disciplines. Table 5 lists a few of the current main collaborations for each current KPE professor. The variety of disciplines includes psychology, physical and occupational therapy, neurosurgery, nursing, management, physics, mechanical engineering, bioengineering and, of course, kinesiology and physical education.

Teaching and Learning

Undergraduate Programs

Total enrolment in our undergraduate programs is approximately 200 in the PHE and 230 in the BSC KIN. These figures reflect a continuous increase over the last few years, as do our new admissions numbers (Fig. 2). Our B.Ed. physical and health education program is the only one that certifies teachers in the English sector in Quebec. Our physical education program was evaluated favorably by CAPFE

(Comité d'agrément des programmes de formation à l'enseignement) in 2011-2012. With a complement of contract academic staff, physical education professionals and two recent hires (Prof. Schaefer in 2016, a new hire to join us in August 2017), we continue to provide students with a high quality program that is designed to meet the education ministry's requirements/standards. Another unique feature of our program is an opportunity for students to deliver directed physical activity programs in-house for kids of the community as part of the EDKP 396 Adapted Physical Activity course and the Winter Basketball jamboree.

Our B.Sc. kinesiology program reflects the multidisciplinary nature of the field. The Department continues to be engaged with the Conseil National de la Kinésiologie, a body with representatives from the Fédération de Kinésiologues du Québec (FKQ) and all Kinesiology programs at Quebec universities. Two years ago, the FKQ submitted an application for a kinesiology professional order to the Quebec order of professions. In preparation for this, we have significantly increased our kinesiology practica offerings, such that an objective of our program is now to provide students with 400-600 hours of practical hands on experience in a kinesiology-relevant setting. This is largely done by placing students in the field where they are expected to assess physical condition and perform exercise interventions and prescriptions. Several of our placements are conducted in collaboration with McGill's Athletics

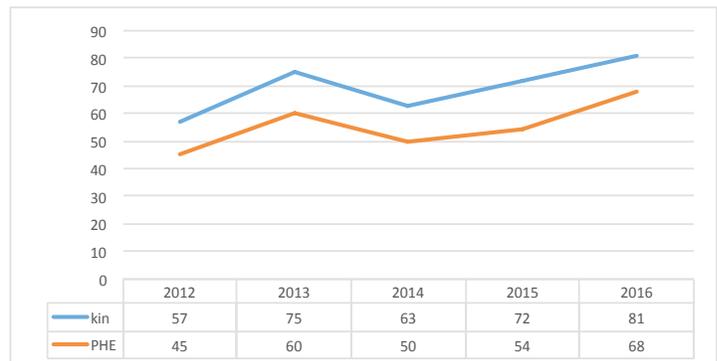


Figure 2: New admissions trends in the B.Sc. Kinesiology and in the B.Ed. Physical and Health Education programs

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and Recreation where our students provide fitness evaluations and consultations to McGill athletes and students using the Currie Gymnasium facilities. We have also developed placement opportunities with other Montreal partners such as the Cummings Center for seniors, and the Montreal Institut National du Sport. Prior to enrolling in these practicums with external partners, our students are trained in our state-of-the-art kinesiology teaching lab. The Department is especially proud and appreciative of the support from McGill's Teaching and Learning Services for providing funds to create this new teaching laboratory. This \$1.5M project was completed in 2015, and in 2016, we entered into a partnership with the Tassone family who provided a generous gift to create an operating fund for our teaching lab in memory of their son, Adriano Tassone. As a result, we inaugurated the *Tassone Teaching Lab*, which will be the home for kinesiology training for all KPE undergraduate students in the generations to come. Finally, our Department continues to offer a Minor in Kinesiology program, with 15 Science students enrolled in 2016, and a B.Sc. Kinesiology Honours program, with 9cr of research. Opportunities for undergraduate students to partake in research continue to be high, with several funded opportunities for funded Summer research experiences such as through the NSERC USRA and the Tassone Awards (awarded respectively to 3 and to 6 students in 2016).

The response rate for undergraduate and graduate course evaluations in the past year was usually between 35-50%. However, response rate in some courses was very low as in previous years and we need to take measures to improve response rates in the future. The evaluations with more than 25% response rate indicate average scores for overall teaching ability of 4.0 and usually higher for full-time academic staff. There continues to be consistently high quality of instruction in courses taught by full-time academic staff. Student comments are generally positive for all of our teaching staff including part-time staff, continuing on the trend of quality teaching in KPE.

Graduate programs

Our Department continues to maintain a healthy graduate program. We currently have 27 students enrolled in the MSc, 13 in the MA and 16 in the ad hoc Ph.D. (with 4 who graduated in 2016). The department also has 6 post-doctoral fellows working in our laboratories. The ratio of students to faculty is 3.3 for MA/MSc. and 1.33 for Ph.D. A feature of our graduate program is the funding that we are able to provide to students. Table 2 shows a consistent level of average per-student annual funding of about \$22K for Ph.D. students, and \$11K for Master's students. Given that tuition fees in the province of Quebec are comparatively lower than in other Canadian provinces, these average amounts compare favorably. Finally, it should be noted that the proportion of financial support in the form of fellowships (i.e. non-employment) has steadily increased over the last years, making it increasingly possible for students to focus on their research and graduate in timely and productive fashion.

Academic year	Program	Funding total*	Average funding per student**	% funding in fellowships
2011-12	Ph.D.	\$408,446	\$20,422.30	61%
	Master's	\$441,060	\$10,024.10	28%
2012-13	Ph.D.	\$452,279	\$21,537.07	64%
	Master's	\$394,535	\$8,394.36	26%
2013-14	Ph.D.	\$400,609	\$20,030.47	66%
	Master's	\$293,771	\$6,250.45	25%
2014-15	Ph.D.	\$382,632	\$20,138.52	68%
	Master's	\$434,732	\$9,056.92	43%
2015-16	Ph.D.	\$351,261	\$21,953.78	71%
	Master's	\$526,995	\$10,755.00	57%

Table 2: average yearly funding of graduate students enrolled in KPE; does not take into account academic year or tuition category (domestic, non-Quebec Canadian resident, international)

In December 2016, the Quebec Ministère de la Recherche et de l'Enseignement Supérieur advised all Quebec Universities that they were no longer allowed to accept new Ph.D. students through the Ad hoc options, which had been available for Programs without a formal doctoral program since the late 1990s, as was the case for KPE. Thus, our Department accelerated a process to request a formal Ph.D. program in Kinesiology Sciences. The proposal was recently formally approved by McGill University and is currently under review by the Ministry's *Comité d'évaluation des programmes*. The formal evaluation will contain a site visit from a committee of external experts in the next few months, and we hope to obtain a formal Ph.D. program allowing us to accept Ph.D. applicants into our Department in Fall 2018. Until then, KPE professors will continue to supervise Ph.D. students who had been admitted as KPE students prior to December 2016, and will be able to accept new Ph.D. students into other Departments to which they are cross-appointed and through inter-Faculty programs such as the Integrated Program in Neuroscience (one new Ph.D. student admitted for Fall 2017 under the supervision of KPE's Prof. Paquette).

Involvement in the community

The department maintains close links with the Association of Physical Educators of Quebec (APEQ) and is actively involved in hosting and contributing to the annual meeting of the association. Drs. Bloom and Harvey sit on the executive of APEQ as McGill representatives. They also organize the annual Jennifer Wall Lecture event, which in 2016 featured Dr. Jonathan McGavock, Associate Professor, CIHR Applied Health Chair and a KPE Grad, who delivered two keynote lectures (*Indigenous Approaches for promoting child health in schools*; *Physical Education Doesn't Deserve an F – Resilience as a path to getting an A from the Active Kids Report Card*) to audiences of current and former KPE students. Prof. Lee Schaefer also contributes to the leadership of the Department on the Canadian Physical Education scene by serving as the President of Physical and Health Education Canada. Several faculty members continue to have important roles as reviewers of panel members for NIH, SSHRC, CIHR and NSERC (notably profs. Andersen, Bloom, Rassier, Hepple, Côté). Many KPE professors are engaged in leadership roles in their respective kinesiology sub-disciplines; Prof. Bloom is on the executive council of the Canadian Sport Psychology Association, and Ross Andersen is the president of the Mid-Atlantic chapter of the ACSM and is on the Board of Directors of the American Council of Exercise. Prof. Julie Côté was also the Scientific President of the Center for Interdisciplinary Research in Rehabilitation's institutional review board until mid-2016. Several KPE Professors provide relevant community service such as consulting and testing for the McGill Varsity community (Andersen, Bloom, Duncan), for the US Olympic Committee (Bloom) and for the National Sport Institute of Quebec (Pearsall, Bloom, Côté). A number of faculty members have presented their work and our field in the public media and on television promoting the field of kinesiology and our research (Dr. Pearsall- Concussion research in ice hockey helmets, and Dr. Cote on issues related to ergonomics in the work place).

Milestones

New hires

A search for a new tenure-track Faculty member in the area of Physical and Health Education was initiated in 2016 and Professor Jordan Koch has been hired and will join us on August 1st, 2017. Professor Koch will lead a research program on Physical and Health Education among Aboriginal and Indigenous communities and in marginalized Youths. A search for candidates in the area of Muscle and Exercise Physiology was initiated in late 2016 and concluded with the hiring of two Faculty members who will officially join us in January 2018.

Departures

In early 2016, Professors Tanja Taivassalo and Russell Hepple resigned from McGill University and left in order to pursue other career objectives elsewhere.

Retirements

In August 2016, then-Departmental Chair and Associate Professor René Turcotte retired from McGill University after more than 30 years of service. Ms. Maricruz Garcia-Rejon, who had been acting as Managing Administrative Assistant for our Department for over 10 years, also retired in Fall 2016. We wish both well and thank them for significantly advancing our Department during their Tenure in KPE.

Honours, awards and prizes

In 2016, three **KPE Professors** particularly shone with the following recognitions:

- **Lindsay Duncan:** Faculty of Education Heather Reisman and Gerald Schwartz Award for Excellence in Teaching. Professor Duncan's proficiency and diligence in developing original and innovative teaching methods as part of the Undergraduate Research Methods course was particularly noted and praised.
- **Lee Schaefer:** American Educational Research Association Outstanding Publication Award. Prof. Schaefer was also recognized as part of the McGill University Rising Star Event
- **Dennis Jensen** was awarded a Tier 2 Canada Research Chair (CIHR) in Clinical Exercise & Respiratory Physiology. Prof. Jensen is a former William Dawson and FRQ-S research scholar.

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The following **KPE students** were also recognized in 2016 with the following new or continuing awards:

Graduates:

- Sara Abdallah (Ph.D.), CIHR-Banting, Tomlinson (supervisor: Jensen)
- Christopher Bailey (Ph.D.), Bloomberg-Manulife fellowship (supervisor: Côté)
- Daniel Boucher (M.Sc.), NSERC (supervisor: Pearsall)
- Hiram Cantu (Ph.D.), CONACYT (supervisor: Côté)
- Susanna Cere (M.A.), SSHRC, FRQ-SC (supervisor: Harvey)
- Keryn Chemtob (M.A.), CRIR (supervisor: Sweet)
- David Conradsson (Post-doc), Fernstrom Karolinska Institute (supervisor: Paquette)
- Daniela Donoso (M.A.), Dan Marisi Award (supervisor: Bloom)
- Jacob Dupuis-Latour (M.A.), SSHRC (supervisor: Bloom)
- Ilse Frias Molina (M.Sc.), CONACYT, Best poster, CRIR student colloquium (supervisor: Paquette)
- David Greencorn (M.Sc.), NSERC (supervisor: Pearsall)
- Ricarda Haeger (Ph.D.), Bloomberg-Manulife (supervisor: Rassier)
- Laura Hallward (M.A.), SSHRC, FRQ-S (supervisor: Duncan)
- Dorelle Hinton (Ph.D.), NSERC, CIHR travel award, Best oral presentation, CRIR student colloquium (supervisor: Paquette)
- Eric Hutt (M.A.) SSHRC (supervisor: Duncan)
- Pierre Lepage (M.A.), McGill International Research Master's Award (supervisor: Bloom)
- Emilie Michalovic (M.A.), SSHRC, FRQ-S (supervisor: Sweet)
- Kayla Miguez (M.Sc.), CIHR (supervisor: Hepple)
- Fabio Minozzo (post-doc), CIHR (supervisor: Rassier)
- Trina Mitchell (M.Sc.), NSERC Alexander Graham Bell (supervisor: Paquette)
- Jamie Rebner (M.A.), SSHRC (supervisor: Duncan)
- Ryan Reid (Ph.D.), FRQ-S (supervisor: Andersen)
- Chelsey Saunders (M.A.), SSHRC (supervisor: Sweet)
- Jaymee Shell (M.Sc.), NSERC (supervisor: Pearsall)
- Kathryn Sinden (post-doc), CIHR (supervisor: Côté)
- Vita Sonjak (Ph.D.), Bloomberg-Manulife (supervisor: Hepple)
- Faryn Starrs (M.Sc.), Banting (supervisor: Paquette)
- Samantha Taran (M.A.), FRQ-S (supervisor: Sweet)
- Zachary Weber (M.Sc.), NSERC (supervisor: Côté)
- Chen Yang (Ph.D.), Bloomberg-Manulife fellowship (supervisor: Côté)

Undergraduates:

- Benjamin Dubuc, NSERC USRA, Tassone Award (supervisor: Côté)
- Allison Gu, Tassone Award (supervisor: Bloom)
- Laura Hallward, Gold Medal
- Corin Hasegawa, Tassone Award (supervisor: Côté)
- Thierry Lefrançois-Daignault, Tassone Award (supervisor: Côté)
- Elliott Li, NSERC USRA (Jensen)
- Jordan Oceau, NSERC USRA, Tassone Award (supervisor: Milner)
- Lauren Tracey, Tassone Award (Jensen)