

ANNUAL REPORT 2014

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

**SUBMITTED BY; Rene A. Turcotte, Ph.D.
ASSOCIATE PROFESSOR AND CHAIR**

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Section I - Description of Department of Kinesiology and Physical Education

The department met near the end of 2014 for a retreat and devised a new mission statement and objectives for the department. This new statement is written below.

➤ **DEPARTMENT OF KINESIOLOGY AND PHYSICAL EDUCATION:**

OUR VISION:

We strive to be *world leaders* in the *optimization* of health and well-being *across the lifespan*.

OUR MISSION:

Training leaders of tomorrow through excellence in teaching, research and service. Advancing and translating knowledge about sport, physical activity and human health across the lifespan, through a transdisciplinary focus from the cell, to the individual and to society.

OUR OBJECTIVES:

To respect the diversity of the disciplinary bases and professional practices associated with Kinesiology and Physical Education, to encourage transdisciplinary research and professional endeavors, and promote collegiality.

Teaching and training objectives:

- To develop emerging research leaders and highly qualified personnel capable of cutting-edge research in the field of kinesiology and physical education.
- To offer a curriculum which views human movement from psychosocial, and biological perspectives.
- To encourage creative and critical thinking in students through a variety of instructional approaches.
- To nurture students in becoming independent and active life-long learners in acquiring and evaluating knowledge as they mature as scholars and professionals.
- To provide professional learning opportunities through courses and field placements which place priority on “linking theory to practice”.

Research objectives:

- To facilitate and support the development of sustainable, transdisciplinary research partnerships.
- Scaling from cell to society, to elucidate the physiological, neuromechanical and behavioural mechanisms of health, disability and disease across the lifespan.
- To develop, test and implement novel and effective interventions for optimal physical and psychosocial health across a broad range of populations.

Service objectives:

- To value and foster continuing education opportunities for alumni and current professionals.

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- To further develop and nurture community partnerships in physical activity, sport, health and well-being.
- To advocate for optimization of health through physical activity, sport, education and research.
- To instill / reinforce the importance of social engagement.
- For faculty and trainees to be leaders promoting and providing health evaluation and intervention for members of McGill, Montreal and surrounding communities.
- To embrace our role as responsible citizens of the city, the region, the province, and the global community.
- To foster actions, programs, and scholarship that will lead to a sustainable future.

Academic staff

Ross Andersen, Professor, active
Gordon Bloom, Associate Professor, active
Julie Côté, Associate Professor, active
Lindsay Duncan, Assistant Professor, active
William Harvey, Associate Professor, active
Russell Hepple, Professor, active
Dennis Jensen, Assistant Professor, active
Theodore Milner, Professor, on leave
David Pearsall, Associate Professor, active
Dilson Rassier, Professor, active
Celena Scheede-Bergdahl, Faculty Lecturer, active
Shane Sweet, Assistant Professor, active
Tanja Taivassalo, Associate Professor, active
René Turcotte, Associate Professor, active

Section II - Achievements of the past year

➤ Highlights

Research

A number of highlights from this year are worth noting. First as is part of our mission in this department our Faculty members continue to secure research funding from all three of the tri-councils (CIHR, NSERC, SSHRC). This year most faculty members are in the middle of completing numerous grants already awarded and a number of professors are starting new grants as was the case last year. Total PI funding from peer reviewed grants is over \$3,000,000 and per capita funding is around \$210,958.00 per tenure track faculty member. This represents a significant increase from previous years and our research intensity is one of the highest in the country for similar academic programs. These grants have made it possible to once again offer funding support to graduate students, attract new students and help the professors to move the research agenda forward. This past year students received over \$631,000.00 in funding from internal and external sources. The Research Center for Physical Activity and Health with Dr. Hepple as director launched its first symposium entitled *"Making Connections" on October 3, 2014 at the McGill Faculty Club*. Professor Hepple along with the communications officer Stephen Lalla launched the research center's web site

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(<http://www.mcgill.ca/edu-kpe/channels/event/kpepath>). The center will review its executive committee positions this year as the governing board meets in the spring. The research at the center will continue to focus on the benefits of physical activity in maintaining and improving health in normal populations and populations with chronic disease. An important element of the research will be to develop appropriate and effective treatment and rehabilitation strategies for the populations studied and to understand the underlying mechanisms as an eventual path to these strategies. Research conducted at the center already involves collaboration from the Faculty of Medicine and many other local organizations and it is anticipated that more extensive collaborations already in place will become part of the center as it broadens its research mandate. These initiatives are taking on increasing importance as they are the underpinning for the future research direction of the department.

The Department of Kinesiology and Physical Education has been involved in the organization of Bloomberg-Manulife Prize for Promotion of Active Health. The Dean and Chair met to discuss the criteria for the prize and strategies to increase the number of applicants and to rethink the organization of the event. An ad hoc committee consisting of Russ Hepple and Ross Andersen was created to help organize the events surrounding the Bloomberg Prize. This committee will formulate a strategy to maximize leverage of the event to increase the visibility of our department at the university and in the community.

Professors continue to publish extensively, with approximately 51 refereed publications, 103 conference proceedings and presentations and 9 book chapters and 1 book published in 2014. We are publishing at a rate of 4.5 refereed publications per year counting books and book chapters and are maintaining the productivity we have enjoyed in the past ½ dozen years or so.

Upon reflection as chair however there are some red flags that should be pointed out when examining our research productivity over the recent half dozen years. It is of concern after completing the self-study document in 2014 that although we are very productive, when we compare ourselves to other institutions with similar programs we are performing well above what is normal considering the number of faculty members in the department. This level of productivity is unlikely to be sustained unless we increase the size of the department. Most units similar to ours have on average 21 faculty members across the country. Some of the top performing units have 30 or more faculty members. Our department will need to grow to maintain our research intensity and productivity. Another concern related to research is the acquisition of space for laboratories for new faculty members. In order to attract new faculty the space issues must be resolved and this must be done soon in order to be able to negotiate and attract excellent new faculty. Some mechanism must be established to provide sustainable funding for the Research Center to help increase the department's visibility, increase research center membership and develop a cohesive interdisciplinary research group forming the core of the center and its research mandate. Finally, in the last couple of years there has also been some question in the department concerning our place in the Faculty of Education. I believe personally that the Kinesiology program at the undergraduate and graduate levels would be better served in a more science oriented unit. There had been overtures between the School of Dietetics and Human Nutrition and our department about a union that should continue to be explored. From the point of view of research philosophy and the overall objectives of both units it would be a very good academic fit. We share and co-teach several courses at the undergraduate level and there are some research collaborations that already exist. The potential for more extensive collaboration is tremendous and both units have had a strong desire to explore the possibility of a merger.

Undergraduate Program

As part of our departmental strategic plan we intend to develop research programs at the research center related to the effects of physical activity and diet on health in the general population; clinical exercise practices and diet for the treatment of specific diseases; and physical activity and diet for healthy aging.

Our kinesiology program reflects the interdisciplinary nature of our field of study and the growing trend for research to be conducted in teams and to cut across disciplines to provide better answers to current research problems and to provide students with the appropriate tools to intervene with their clients and patients in a more practical and helpful way. 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. Dr. Celena Scheede-Bergdahl represents McGill University at council meetings and the FKQ has deposited an application for a professional order. The purpose of the FKQ council is twofold: first, to inform the universities of the range of services provided by kinesiologists in Quebec and the knowledge which they require and second, to provide a forum for communication between the universities and the FKQ about program content

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and development of new programs, with the objective of defining the scope of practice of kinesiologists in Quebec and ensuring that they receive training which is adequate for their responsibilities. The competencies which Kinesiology graduates will be expected to have in order to be entitled to practice as professionals in kinesiology have been defined. The department has also reviewed both the Kinesiology and Physical Education programs content. The purpose of the review was to ensure that the Kinesiology program content was consistent with the guidelines which the FKQ has established as a common standard for Kinesiology programs in Quebec. In addition, the Department is exploring mechanisms to the FKQ certification exams administered to students graduating in Kinesiology. This process is especially important in light of the deposition to the ministry for professional order this year. The entire curriculum has been reviewed to ensure that all of the competencies required are compliant for certification in Quebec. The central venue for students will be the Research Center for Physical Activity and Health. In addition, a very important part of these initiatives is to provide students with 400-600 hours of practical hands on experience the field of kinesiology. In support of this initiative the Department is especially proud and appreciative of TLS at McGill for providing the department with the opportunity to create a state of the art teaching laboratory that is equipped with the technology required to develop the skills in the students who want to become certified Kinesiologists. This initiative represents a 1.5\$ million investment to the Department.

The Physical and Health Education program has also undergone review. The Physical Education pedagogy committee continues to streamline the program to offer a better service to students and a program that emphasizes pedagogical training for the students in both theory and practical skills courses. A number of the skills courses have been modified to offer a better pedagogical content and approach to better train the students as future physical educators. Our physical education program is the only one that certifies teachers in the English sector in Quebec. With a complement of contract academic staff and several faculty members and physical education professionals we are able provide students with a high quality program that is designed to meet the education ministry's requirements/standards. Our physical education program was recently evaluated favorably by CAPFE (Comité d'agrément des programmes de formation à l'enseignement) 2011-2012. However, we are resource poor in this program and this will need to be addressed in the near future if we are to maintain program quality.

Enrolment in the programs is approximately 207 in the PHE and 195 in the BSC KIN. These figures represent an increase in enrolment from 2013 and future projections forecast further increases in both programs. Our objective, however, is to increase enrolment to match available resources so as not to compromise the quality of instruction at the undergraduate level.

Cooperation with other teaching units at McGill and other institutions

The Department of Kinesiology and Physical Education (KPE), will continue to deliver its undergraduate program in partnership with several other units within the Faculty of Education and the McGill community. KPE offers EDKP 332 for students in the Department of Integrated Studies in Education.

We continued to work with the School of Dietetics and Human Nutrition for joint teaching of the course EDKP 292 Nutrition and Wellness, and NUTR 503 Bioenergetics and the Life Span. Dr. Andersen and Professor Plourde from Dietetics and Human Nutrition were our departmental instructors for these shared courses. We also plan to include NUTR 344 Clinical Nutrition as a required course in the new Clinical Exercise Practices program.

Four of our faculty members (Dr. Rassier, Dr. Jensen and Dr. Taivassalo, Dr. Hepple) participated in the teaching of a course in the Department of Physiology, PHGY 502.

Dr. David Pearsall, continues to teach in the Department of Anatomy and Cell Biology. ANAT 315, a required course for Kinesiology students. This has allowed Kinesiology to have better access to anatomy laboratories and has resulted in the elimination of EDKP 205, which is no longer needed.

Quality of teaching

Undergraduate and graduate course evaluations in the past year for which there was at least a 25% and usually between 35-50% response rates. 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 response rates indicate average scores for overall teaching ability of 4.0 or better for full-time academic staff. There is consistently high quality of instruction

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in courses taught by full-time academic staff and in particular our faculty lecturer (Professor Celena Scheede-Bergdahl) with a few exceptions. Student comments are generally positive for all of our teaching staff including part-time staff. This is consistent with previous years and I am confident this trend will continue. I review all course evaluations on a yearly basis, especially with part-time teaching staff and instructors not performing at a good level are asked to take measures to improve. Consistently poor performance has resulted in the dismissal of some instructors.

Special Events

We continue to host the annual Bloomberg talk as part of the awarding of the Bloomberg Prize. The talks are held both in Toronto and at McGill. Last year's prize winner was Dr. David Jenkins. He swept through Toronto and Montreal performing a lecture series that included three presentations and two media interviews over a three-day span. The series of lectures, presented by McGill University's Faculty of Education and our Department, wound up with the flagship event, "A Conversation with Dr. Jenkins: Is It Time to Invest in Your Health?", Wednesday January 21st, 2014 at McGill.

Graduate Program

This year Professor Jensen has graciously accepted to take over as Graduate Program Director. He has initiated a number of important initiatives including a closer tracking of graduate students after graduation, the development of an exit survey for graduate students in collaboration with the graduate student committee, streamlined statistical evaluation of registration and applications to our graduate programs and an outreach initiative to keep all students and members of the department current on successes and achievements displayed on a plasma screen in the department hallway.

Our graduate program has continued to grow and the successful growth of the program is largely due to the success of our professors in the department. The excellent research programs and funding and productivity of the department make our program an attractive one. We currently have enrolled 29 in MSc, 18 in MA and 19 in the ad hoc PhD. Thus our current enrolment is 66 students, an increase from 55 students in 2013. The department also has 4 post-doctoral students working in our laboratories as well.

The ratio of students to faculty is 2.87 for MA/MSc. and 1.27 for PhD. Students spend on average 2.5 years in the Master's program. Data on length of PhD programs is not yet available. The GPD is currently involved in a Faculty wide review of the graduate programs in the faculty. Of interest in this review is a restructuring of course delivery, especially Research Methods and Statistics courses. In addition, the Faculty is developing a recruitment strategy and our department will formulate its own strategy after this review is complete.

The number of Ph.D. students enrolled in the Ad Hoc program has been increasing each year since 2004 when no students were enrolled. The most dramatic increases have occurred since 2006, when the program had 3 students enrolled. There were 19 Ph.D. students enrolled in the Ad Hoc program as of December 2010, up from 14 in 2009. This past year as mentioned above we had 19 students in the PhD program. We anticipate that the number will continue to increase in the coming years, particularly since our junior faculty is beginning to attract more Ph.D. applicants and we have two new faculty members as of 2012-2013 and another that should begin in January 2016.

In an effort to attract the best Ph.D. students into our program Professor Turcotte prepared a new draft of the PhD proposal for a PhD in Kinesiology and completed a first draft in December 2014. Associate Dean Cote continues to work on this draft proposal and it is currently being revised by Professor Cote and GPS.

The post-doctoral scholars in our department is also a sign of excellence in our research as they contribute to the development of the research agenda of the professors they work with and help to mentor graduate students .

Graduate Student Funding

For the upcoming academic year a new funding plan has been devised by our new Graduate Program Director (Professor Dennis Jensen). This plan will allow us to provide 20 Master's fellowships and 5 doctoral fellowships to incoming students. Two of our PhD fellowships are provided by the Bloomberg donation. All PhD fellowships are 2 years in duration. We have as an objective, to increase the funding available to graduate students by creating departmental awards which are being offered to the best incoming students. The breakdown of fellowships is as follows:

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1- 20 Master's fellowships (Dept. contribution \$3000, supervisor contribution \$2000)

2- 2 Bloomberg-Manulife Ph.D. fellowships second year (Dept. contribution \$15,000, supervisor contribution \$5,000)

3- 3 first year Ph.D. fellowships (Dept. contribution \$15,000, supervisor contribution \$5,000)

4- 3 second year Ph.D. fellowships (Dept. contribution \$13,500, supervisor contribution \$4,500)

5- 1 international Ph.D. tuition supplement fellowship \$5,000

Graduate students as a whole are obtaining provincial and national doctoral and Master's scholarships providing financial support for their graduate studies. In the past 6 years there has been a trend for an increase in fellowships obtained. This is a reflection of the increase in the department's ability to attract higher quality students likely due to the research excellence of the faculty. The tables below depict funds obtained by graduate students from 2010 to 2015 for Master's and PhD students. Of note is that in 2014 competitions for these awards has resulted in 14 new awards for 2015. This is the highest number of awards the department has ever obtained.

| | Masters Fellowships (2010-2015) | | | | | | | | |
|-------|---------------------------------|-------|-------|------|-------|-------|-------------------|------------------|-------|
| | CIHR | NSERC | SSHRC | FRQS | FRQNT | FRQSC | Tri-Council Total | Provincial Total | Total |
| 2010# | 2 | 5 | 0 | 0 | 0 | 1 | 7 | 1 | 8 |
| 2011# | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2012# | 1 | 1 | 0 | 0 | 0 | 0 | 2 | 0 | 2 |
| 2013# | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2014# | 1 | 2 | 0 | 0 | 0 | 0 | 3 | 0 | 3 |
| 2015 | 2 | 5 | 3 | 0 | 0 | 0 | 10 | 0 | 10 |

#statistics from KPE annual reports.

| | DKPE Doctoral Fellowships (2010-2015) | | | | | | | | |
|-------|---------------------------------------|-------|-------|------|-------|-------|-------------------|------------------|-------|
| | CIHR | NSERC | SSHRC | FRQS | FRQNT | FRQSC | Tri-Council Total | Provincial Total | Total |
| 2010# | 0 | 2 | 0 | 1 | 0 | 0 | 2 | 1 | 3 |
| 2011# | 0 | 1 | 2 | 0 | 2 | 0 | 3 | 2 | 5 |
| 2012# | 1 | 1 | 0 | 0 | 0 | 0 | 2 | 0 | 2 |
| 2013# | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2014# | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2015 | 1 | 1 | 1* | 1 | 0 | 0 | 3 | 1 | 4 |

*declined: student dropped-out of Ad Hoc Ph.D. Program; #statistics from KPE annual reports.

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, usually in the fall. Drs. Bloom, Harvey, sit on the executive of APEQ as McGill representatives. Another of faculty members continue to have important roles with NIH, CIHR and NSERC (Dilson Rassier and Russ Hepple, Dennis Jensen). A number of faculty members have represented 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). All of the department's professors have been very active reviewing manuscripts for journals in their field and have participated in peer review for Tri-Council granting agencies, consulting activities and community outreach and service. See appendix I, VI and VII for professors and duties carried out.

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Farewell message

This year has also been a year of change as Professor Enrique Garcia has resigned his post to explore other options for his future. We wish Professor Garcia well and good luck in his future endeavors. We are currently in the middle of a search for a replacement for Professor Garcia.