This month we introduce a new format and name, from BPK News to BPK Pulse. Thank you to Richard Ward for the suggestion of this new name which fittingly matches the kinesiology and physiology aspects of what we do in BPK, measuring where we are now and what we are moving towards in our research and teaching.

Congratulations to all our Graduands! The Convocation Ceremony will take place on June 12th, 2013 at 9:45 a.m. We wish you well in further studies or in starting a career. We also look forward to your keeping in touch with us regarding your career path.

Congratulations to Van Truong, who is on maternity leave (see Newcomers section). Sophie Dunbar is now our acting Manager, Academic and Administrative Services. Thank you to Sophie for her excellent work in learning the job. At the same time Sophie has been training her replacement, Michelle Kangro, whom we welcome as our new acting Undergraduate Advisor.

Glen Tibbits

**JUNE 2013 GRADUANDS**

**PhD**

Alejandra Noelia Farias Godoy
David Kelly Jones

**MSc Thesis**

Clarice Barreto Avelar
John David Willis Manning
Ramasamy Meyyappan
Mannan Wang

**Course Work Masters**

Clarice Avelar  MSc
Emmanuela Gardan  MSc
Rodrigo Sandoval  MSc
Andrea Westbrook  MSc

**BIF (Biomedical Physiology)**

Bajwa, Harmanjit
Dragutinovic, Milan
Fodin, Brenton William George (Hons)
Gill, Diven Kaur
Gray, Samantha Michelle
Hundle, Jason Singh
Law, Winnie Wing Yee
Leung, Jason Ho-Ting
Lindsay, Alastair John
Ly, Junee
Miller, Andreas Bradley (Hons)
Nassouli, Nima
Peters, Colin Heath
Phan, Catherine
Scott, Bryan Nelson
Sheergar, Naureen
 Smythies, Carrie Maureen
Tra, Christina
Webster, Sydney Laine
Wu, Fan

**BNEU (Behavioural Neuroscience)**

Brown, Lucas Alexander
DeBrincat, Annie Margaret
Fowler, Rebecca Morgan
Marchand, James Ryan
Parnyovoy, Maksim
Wong, Megan Stephanie

**BSc (Kinesiology)**

Asimo, Esther Phoibe
Canale, Veronica Filomena
Chew, Cheryl Xueling
Karakoc, Anastasia Dawn
Kurbis, Erin Marie
Lin, Lisa
Lord Ferguson, Sarah Theresa (Hons)
Luong, Cynthia Anne
Malhi, Nuvjiwan Kaur
Neufeld, Jonathan Dietrich William
Neuls, Taisja Lynne
Patidar, Risha
Patidar, Trisha
Rajaram, R. Gangad
Tanner, Robert Stephen
Thai, Elizabeth Gunadi

**HEALTH CONCENTRATION**

Battistel, Nicole Diane
Bisla, Parminder Singh
Boecker, Kirk Ernest
Brancati, Anna Elizabeth
Bryant, Heather Daniel
Carrao, Nicole Breanne
Chatha, Virender Singh
Chouinard, Joseph Esprit
Choutka, Tyler Wade
Chow, Sarah Heather Jane (Hons)
Chu, Samson Ho Him
Combow, Suneeeta Natasha
D’Arcey, Ellen Brenna
Dittmann, Katrina
Girard, Naomi Melissa
Hendy, Stephanie Francine
Hundal, Satvinder
Jawwal, Serena
Jung, Kathryn Lindsay
Jung, Tanya Michelle
Kaloti, Shannon Preet Kaur
Lai, Edward Kah Wah
Lee, Spencer William Patrick Joseph
Lin, Wayne Robert
Lindquist, Nelson Christopher Lawrence
Liu, Ping-Cheng
Milne, Tallon Kevin
Nacional, Arthur Junn Zarris
Philips, Emily Benesad Teeter
Pickford, Michelle Elizabeth
Rai, James Amit Singh
Ravji, Ali
Russell, Cassandra Noelle
Sernagigia, Jordan Daniel
Staden, Katie Suzanne
Steffenson, Korin Elizabeth
Volintiru, Bianca
Windl, Chelsea Chrystal
Wong, Amanda Yu Wah
Wong, Ming Foong

**ERGO CONCENTRATION**

Brinkman, Matthew Dylan
Handford, Midori Kame Kita
Yeung, Adrian Nicholas

**PHYS CONCENTRATION**

Wong, Iris Wing Yau
**AWARDS**

Congratulations to three graduate students for receiving prestigious awards.

**TAYLOR DICK** has received an Alexander Graham Bell Canada NSERC Postgraduate Doctoral Scholarship (PGS) valued at $63,000 over 3 years from May 2013 to January 2016. Taylor’s research is focused on using experiments and dynamic musculoskeletal simulations to study muscle-tendon interactions during human locomotion. This NSERC Postgraduate Doctoral Scholarship provides financial support to high calibre scholars who are engaged in master’s or doctoral programs in the natural sciences or engineering. The web link is:


**DAVID JONES** has received a CIHR Vanier Canada Graduate Scholarship. The Vanier Canada Graduate Scholarship (Vanier CGS) was created to attract and retain world-class doctoral students to establish Canada as a global centre of excellence in research and higher learning. It is worth $50,000 per year for three years and is available to both Canadian and international PhD students studying at Canadian universities. For more information, see:


**CHANTELLE LACHANCE** has received a Frederick Banting and Charles Best Canada Graduate Scholarships Doctoral Award (CGS-D) from the Canadian Institutes of Health Research (CIHR), valued at $105,000 over a 3-year period from 2013 to 2016. The Frederick Banting and Charles Best Canada Graduate Scholarships Doctoral Awards (CGS-D) program provides special recognition and support to students who are pursuing a doctoral degree in a health-related field in Canada. Here is the link:


**FACULTY OF SCIENCE CONVOCATION RECEPTION**

The Faculty of Science is proud of the hard work and dedication that our graduating students have put into completing their degrees. Dean Cupples wishes to celebrate their success and invites all faculty and staff to a reception for our convocating students.

**Wednesday, June 12th, 2013**

(right after Convocation up to 2:00 p.m.)

**TASC2 7000 level Midway**

(access via walkway from Shrum P bldg)

Join us for a light lunch and time to say good-bye and best wishes to your students.

**BPK CO-OP GRADUANDS**

Congratulations to the following BPK Co-op Graduands. Six students who completed three Co-op Placements will receive a Certificate:

**Three Co-ops:**

Nicole Carrao  
Stephanie Hendy  
Ephem Lee  
Sharlene Lobo  
Bryan Scott  
Elizabeth Thai

Twelve students who completed four Co-op Placements, and one student who completed five Co-op Placements will receive the Co-operative Education Degree Designation:

**Four Co-ops:**

Nicole Battistel  
Brent Flodin  
Carlene Garcia  
Samantha Gray  
Satvir Hundal  
Kathryn Jung  
Tanya Jung  
Winnie Law  
Lisa Lin  
Sarah Lord Ferguson  
AJ Nacionales  
Jordan Sernaggia

**Five Co-ops:**

Ming Foong Wong

Darleen Bemister, Co-op Coordinator

**FACULTY, EMERITI, POST-DOCS & GRADUATE STUDENTS**

**CHANTELLE LACHANCE** of The Aging and Population Health Laboratory (DAWN MACKAY, supervisor) will be giving an oral presentation entitled “A Randomized Controlled Trial to Evaluate the Effect of Compliant Flooring on Fall-Related Injuries in Long-Term Care: The Flooring for Injury Prevention (FLIP) Trial,” at the World Congress in South Korea on June 27th, 2013.

**Steve Reynolds (left) and Andy Hoffer inspect an intravenous catheter, similar to a prototype Lungpacer catheter electrode.**

**CIHR Funds Lungpacer Collaboration**

*from SFU News, March 28th, 2013*

Professor Andy Hoffer, founder of Lungpacer Medical Inc., and Steve Reynolds, head of Critical Care and infectious diseases specialist at Royal Columbian Hospital, are collaborating to improve how intensive care units provide respiratory support for their sickest patients.

A $160,000 proof-of-principle Phase I grant from the Canadian Institutes for Health Research (CIHR) will fund their trial of a transvenous diaphragm pacing system (DPS).

The device, developed at SFU, is designed to protect the diaphragm muscle from rapid atrophy, or wasting, in mechanically ventilated, critically ill patients. The goal is to make respiratory support safer and more effective than existing respiratory therapies.
The Lungpacer DPS technology consists of a minimally invasive, temporary intravenous catheter that electrically activates the diaphragm to keep it strong while a patient remains on the mechanical ventilator.

Currently 30 per cent of ICU patients fail to wean from the ventilator and are at high risk of acquiring ventilator-induced lung injury, pneumonia and infections.

Hoffer says the Lungpacer approach aims to significantly improve patient-care outcomes and dramatically reduce health care costs by improving the patient's chance of re-establishing diaphragm strength for a faster return to unassisted breathing.

Phase I clinical trials are the first in-human trials and will be monitored by the institutional research ethics boards and Health Canada. “This work has a very real possibility of changing the way we conceptualize mechanical ventilation, the cornerstone of the modern critical care unit,” says Reynolds.

“We value the opportunity to work together. Andy has extensive knowledge in biomedical physiology, running a lab and developing medical devices. My work as a clinician keeps me grounded in the day-to-day running of a critical care unit, and helps to ensure that the development of the device and the research in general has a real world capability.”

The ongoing collaboration between Reynolds and Hoffer is strengthening the developing research community involving investigators from both Fraser Health and SFU, and is a potential model for future partnerships.

Cardiovascular Physiology Lab News
(Victoria Claydon, Supervisor)

1) Victoria Claydon was awarded a Grant-in-Aid from The Heart and Stroke Foundation of Canada for the project entitled, “Cardiovascular autonomic control in acute spinal cord injury.”

2) Welcome to Matthew Lloyd who joined the lab in May to start his MSc training, examining cardiovascular reflex control.

3) Congratulations to our research nurse, Maureen McGrath, who was nominated for the highly prestigious YWCA Women of Distinction Award in the category of Health, Wellness and Active Living.

4) Congratulations to Jessica Inskip, Ph.D. student, who was awarded a Graduate Student Award of Merit from the Senior Women Academic Administrators of Canada for demonstrating outstanding leadership in the university and the community while maintaining an exemplary academic record.

5) Rianne Ravensbergen and Jessica Inskip, PhD candidates, were awarded Institute of Circulatory and Respiratory Health (ICRH) Young Investigators Forum Travel awards from the CIHR. They were invited to present their work at the ICRH meeting in Toronto, Canada. Rianne presented a poster entitled “What is the best marker for obesity in individuals with spinal cord injury” and Jess presented a poster entitled “Cerebrovascular control after spinal cord injury.”

6) Brett Shaw successfully defended his MSc Thesis (see Defences section on this page) and the Claydon Cup Trophy now proudly displays his name! This work was conducted in collaboration with Dr. Stephen RobinoVitch and the Injury Prevention and Mobility Laboratory.

7) Brett Shaw also received a CIHR Institute Community Support Award to facilitate his attendance at the upcoming 20th International Association of Gerontology and Geriatrics conference in Seoul, Korea, where he will present his M.Sc. thesis work.

8) Jessica Inskip attended the Experimental Biology conference in Boston, USA, where she presented an abstract entitled, “Can the study of individuals with autonomically complete spinal cord injuries help clarify the role of sympathetic nerves in cerebrovascular reactivity?”

9) We published the following manuscript:

CL Protheroe, HJC Ravensbergen, JA Inskip and VE Claydon (2013) Tilt testing with combined lower body negative pressure: a gold standard for the determination of orthostatic tolerance. Journal of Visualized Experiments, 73: e4315.