Welcome to our new faculty member, **DAMON POBURKO**, Assistant Professor, who joined our Department on January 1st, 2012. Damon’s research is in the area of cardiovascular physiology.

Congratulations to **RICHARD WARD**, Senior Lecturer, on 25 years of service to SFU, **ANDY HOFFER**, Professor, on 20 years of service to SFU, and **VAN TRUONG**, Department Manager, on 10 years of service to SFU.

We also welcome back **MAGGIE YEUNG**, Financial Assistant, who has returned from her maternity leave. At the same time, a big thank you to **LAURA SETO** who was our temporary Financial Assistant for the past year.

You are invited to attend BPK’s Year End Party, on April 5th, 5:30 - 8:30 at Club Illia. Tickets are still available from **LAURIE KLAK** in the BPK Main Office.

I also invite you to attend and/or participate in SFU’s May 26th Open House, to help showcase BPK’s highlights at this highly visible community event.

**GLEN TIBBITS**

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**SFU ATHLETICS HALL OF FAME**

Congratulations to the late **PAUL SAVAGE** and his wife **MARG SAVAGE**, who were inducted into the re-established SFU Athletics Hall of Fame on February 29th, 2012. They were honoured at a luncheon at the Diamond Alumni Club, hosted by **LORNE DAVIES**, Founding Athletic Director. Paul was the first head coach of the SFU swimming team, and he and Marg coached many BC and Canadian swimmers to international prominence in the 1960’s, 1970’s and early 1980’s.

Dr. Marg Savage was also an Associate Professor in the then School of Kinesiology, having served in various roles since 1965, including Undergraduate Program Chair and Graduate Program Chair, and took early retirement in 1999. See story at: [http://athletics.sfu.ca/news/athletics/sfu-hall-of-fame-induction.html](http://athletics.sfu.ca/news/athletics/sfu-hall-of-fame-induction.html)

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**SFU OPEN HOUSE**

You are invited to SFU’s Open House on May 26th! BPK will be a part of this event so come and check out our displays. For more information check: [http://www.sfu.ca/openhouse/2012/discoveropenhouse.html](http://www.sfu.ca/openhouse/2012/discoveropenhouse.html)

Please email vtruong@sfu.ca by April 20th, if you would like to volunteer for this exciting event!

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**GRADUATE PROFILE**

(from the SFU Dean of Graduate Studies website)

[http://www.sfu.ca/dean-gradstudies/blog/studentprofiles/LauraDewar.html](http://www.sfu.ca/dean-gradstudies/blog/studentprofiles/LauraDewar.html)

**LAURA DEWAR**, PhD candidate & Chief Coroner, BC Caribou Region

Laura has been a death investigator for 20 years in BC’s South Caribou region, and is also currently working on her PhD in the Molecular Cardiac Physiology Laboratory (GLEN TIBBITS, Supervisor) at SFU in the Department of Biomedical Physiology and Kinesiology.

Laura’s current research examines the causes of sudden, unexpected death in the young (SUDY): the non-traumatic death of an apparently healthy young person under the age of 40. (When a newborn is involved, it’s often referred to as sudden infant death syndrome/SIDS.)

A significant portion (perhaps 20% or higher) of these tragic deaths may be due to inherited cardiac disorders that do not show up at autopsy. Given that these disorders are inherited, if the cause of death is not identified, surviving family members may be at risk of another death.
Most death investigation agencies in Canada do not routinely use genetic testing to help determine cause of death. In addition to uncovering the molecular mechanisms of sudden cardiac death underlying SUDY, Laura’s thesis work includes development of guidelines for coroners and medical examiners to assist agencies in the investigation of SUDY deaths, and help SUDY-affected families find answers.

Laura is also part of the “SUD in Western Canada” research network consisting of clinicians, researchers and death investigation agencies working together to determine the causes of SUDY. While Laura’s graduate research is independent of the BC Coroners’ Office, it has implications which may greatly benefit the Office’s practices and helping grieving families.

She was a Richard Rowe Research Competition Student Presentation Award Finalist for Pediatric and Congenital Cardiology at the Canadian Cardiovascular Society Conference on October 25th, 2011 for her presentation “Current practices regarding the clinical care and management of families affected by Sudden Unexpected Death in the Young in Canada.”

Laura has also just published a book chapter on sudden cardiac death: “Familial Hypertrophic Cardiomyopathy-Related Troponin Mutations and Sudden Cardiac Death”. (Book is Cardiomyopathies - From Basic Research to Clinical Management)

To learn more about inherited cardiac syndromes that cause sudden death in young people, please visit the Sudden Arrhythmic Death Syndromes website. Also see the following:

- Cardiomyopathies - From Basic Research to Clinical Management book chapter: "Familial Hypertrophic Cardiomyopathy-Related Troponin Mutations and Sudden Cardiac Death"
- Molecular Cardiac Physiology Laboratory
- Department of Biomedical Physiology and Kinesiology

Presentation: Genetic Testing for Long QT Syndrome in SIDS Cases in BC (Laura was part of this collaborative study with researchers at UBC and BC Children’s Hospital on the incidence of inherited arrhythmia syndromes in SIDS and SUDY)

News1130: "SFU student looks into increase of SIDS cases"

SFU Issues and Experts: "Finding source of SIDS"

RHSRNbc Newsletter: "Member Profile: Laura Dewar" (see page 4 of pdf)

Congratulations to DAWN MACKNEY who was awarded a CIHR Institute of Aging Age+ Prize, which recognizes excellence in research on aging carried out by emerging Canadian scholars, for a 2011 paper she published in the Journal of Bone and Mineral Research, titled "Effects of antiresorptive treatment on nonvertebral fracture outcomes."

DAWN MACKNEY had a CIHR Planning Grant funded, titled "Immunizing Canadian Seniors Against Inactivity."

DAWN MACKNEY also received a grant from the Drummond Foundation, titled "Healthy Steps: A Pilot Randomized Controlled Trial of Exercise to Improve Walking Energetics, Fatigue, and Activity in Older Adults with Mobility Limitation."

Catherine Richardson, who was awarded a Vice President Research Undergraduate Research Award, will be joining the Aging and Population Health Lab (DAWN MACKNEY, Supervisor) in May 2012.

Lungpacer Medical Inc., spin-off company created by ANDY HOFFER and the Innovation Office to commercialize technology developed in the Neurokinesiology Laboratory, is listed among the 2012 Emerging Rocket life science companies in BC http://www.readytorocket.com/

The CDSM (Chronic Disease Systems Modelling) Lab is moving from their current location in TASC2 to the West Mall Complex in April. Dr. DIANE FINEGOOD started in her new appointment as President and CEO of the Michael Smith Foundation for Health Research on January 1st, 2012. Congratulations, Diane! (see also December 2011 BPK Newsletter, Chair’s Corner, re: her appointment.)


Andy Hoffer’s team presented two posters at the ICORD 2012 Annual Research Meeting:

Effects of Pacing the Diaphragm during Controlled Mechanical Ventilation: Preliminary Observations in a Pre-Clinical Study
Authors: R Meyyappan, RA Sandoval, CA Francis, MA Nollette, J Tang, L Tindale, B Tran, BB Afram, B Coquinco, S Reynolds, JA Hoffer
1Department of Biomedical Physiology and Kinesiology, Simon Fraser University, Burnaby, BC; 2Lungpacer Medical, Inc., Burnaby, BC; and 3Department of Critical Care, Royal Columbian Hospital, New Westminster, BC.

Proposed Ultrasoundographic Study of Progressive Diaphragm Impairment in Mechanically Ventilated Spinal Cord Injured Subjects
Authors: L Tindale, CA Francis, S Reynolds, JA Hoffer
1Department of Biomedical Physiology and Kinesiology, Simon Fraser University, Burnaby, BC; 2Lungpacer Medical, Inc., Burnaby, BC; and 3Department of Critical Care, Royal Columbian Hospital, New Westminster, BC.

Pat McDonald and Kate Henderson (Matt White, Supervisor) will present research at the Northwest American College of Sports Medicine annual meeting in Coeur D’Alene Idaho on March 29-30, 2012. For the conference Pat has won an award for his oral presentation as one of the top 3 MSc students. Their presentations are given below.

Ka Henderson, S Ghaffari, PLL McDonald, ML Walsh, and MD White. Effects of Hyperthermia and 30% Normoxic Nitrous Oxide on Ventilation and Cognition during Light Exercise

PLL McDonald, JG Greiner, ML Walsh, and MD White. Comparison of Ventilation Core Temperature Thresholds and Onset of Blood Lactate Accumulation During Incremental Exercise.

Matt White reports that Andrew Beaudin from his lab was first author on the following paper:


Report from the Chronic Disease Systems Modelling Lab, Diane Finegood, (Supervisor):
Ms. Lee Johnston gave an oral presentation at the 4th Pan-Canadian Conference of the Chronic Disease Prevention Alliance of Canada in Ottawa titled, “Analysis of Childhood Obesity Recommendations with a Complex Systems Framework”.

Dr. Carrie Matteson continued her community engagement work with two presentations. She spoke at the Burnaby School District DPAC Parent Information Session with “Framing Health Messages for Youth and Families: Get Real About Health”. In April, Dr. Matteson is speaking to clinicians at the Pediatric Weight Management In Focus Workshop sponsored by the Canadian Obesity Network in her presentation “Leveraging Complexity to Improve Conversations with Families”.

Egri, C, YY Vilin, and PC Ruben. 2012. A thermo-protective role of the sodium channel β1 subunit is lost with the β1(C121W) mutation. Epilepsia, 53:494-505.


Manku Rana PhD
March 13th, 2012
“3D muscle architecture in the triceps surae: 3D ultrasound methods and maps of fascicle orientation and curvature.”

Examiner, UBC School of Human Kinetics

Inderjeet Sahota MSc
November 18th, 2011
“Cerebrovascular control following spinal cord injury.”

Examining Committee:
Dr. Matt White, Chair
Dr. Victoria Claydon, Senior Supervisor
Dr. Glen Tibbits, Supervisor
Dr. Andrew Blaber, Supervisor
Dr. Bill Sheel, External Examiner, UBC School of Human Kinetics

Examiner, UBC Computing Science
BPK SEMINAR

STEVEN REYNOLDS, MD, FRCP, Head and Research Director, Dept of Critical Care, Royal Columbian Hospital, on February 21st, 2012, “The Double-Edge Sword of Mechanical Ventilation in the Intensive Care Unit: Toward Improving Patient Outcomes through Diaphragmatic Pacing.”

BPK CO-OP NEWS

BPK VPR and NSERC USRA

Once again, the BPK Co-op office coordinated the USRA process for the BPK Department. 50 undergraduate students applied to the two NSERC USRA and two VPR USRA awards with many more who inquired about the research opportunity. The majority who applied were BPK undergraduates (41/50). The process resulted in 8 undergraduate awards. The recipients are:

NSERC USRA:
COLIN PETERS in Dr. PETER RUBEN'S lab; MICHELLE SCHEIER in Dr. MAX DONELAN’s lab.

VPR USRA:
CATHERINE RICHARDSON in Dr. DAWN MACKAY’s lab; CALEB LEUNG in Dr. PETER RUBEN’S Lab; KATARZYNA OLSZEWSKI in Dr. JAMES WAKELING’s lab; DANIELLE JEONG in Dr. TOM CLAYDON’s lab; BRENT FLODIN in Dr. GLEN TIBBIT’s lab; and SIDNEY MORMAN in Dr. WILL CUPPLES’ Lab.

Careers in BPK

The Careers in BPK event on January 25th, 2012 was jointly organized by BPK Co-op and the great BPKSA student volunteers. It was a resounding success with over 100 students attending. Lab Tours were given by Drs. WILL CUPPLES, VICTORIA CLAYDON and TOM CLAYDON. Three groups of 15 students rotated between the three labs, and the students enjoyed seeing what goes on behind those closed doors.

Off campus exhibitors and employers included; the BCAK, BCRPA, CBI Health, Kintec Footlabs, Medisys Health Group, University of Western States, and Zajac Ranch for Children. On-campus exhibitors included: BPK Ergonomics, BPK Graduate Program, BPKSA, SFU Physiotherapy & WIL/Career Services/Co-op.

Special guest speakers and presenters included the following alumni;
LAURA (nee LUSH) FRIESEN - Occupational Therapist
SAMANTHA HAGE-MOUSSA - 3rd year Medical student @ UBC
ERIN (nee KASTELEIN) MEGGAT - Physiotherapist
NICOLE (nee JENSEN) SLOBODA – Residential Care Disability Management Consultant, FHA
ANDREW WONG – 3rd year Medical student @ UBC

Special thanks to the student volunteers for once again making this event a huge success!

DARLEEN BEMISTER & CHERI FIEDLER

“Hi All – Well it went down to the wire but unfortunately the undergrads again rode their incredible luck and what is becoming (now we have lost three in a row) a dubious scoring system, to win 6-5. Faculty/Staff/Grads destroyed the undergrads in the Basketball game (28-14) and then soundly routed them in the dodgeball with a 3 games to 1 win. This translated ONLY into a 2-0 lead in the soccer match but soccer was an even battle, and with only 15 minutes to play we still held an overall 5-3 lead (3-3 in the actual soccer match). We were then guilty of some defensive lapses to allow the undergrads back into the game to finally win. We did have our offensive chances and we hit the post a couple of times and missed the target a few times when we should have done better. BUT all-in-all a good evening and everyone battled hard. Well done to everyone.

On such a night it is very unusual that the blame can be laid and the feet of any one person. However this year there is unfortunately one faculty member who must admit he is culpable. That person is.......ANDY HOFFER!

Now, I realize that Andy didn’t play...but he failed miserably in stopping or at least delaying /hampering his son ALEX HOFFER (who must have scored 3 or 4 of the undergrad goals and set another up) from playing for the undergrads. Couldn’t Andy have let the air our of Alex’s tires, grounded him, demanded he do some repair work around the house.... I mean, this isn’t much for us to expect is it? :-)

Cheers, TONY LEYLAND

“Dear Tony and Team – I'm sooo sorry...! The thought of somehow distracting Alex did cross my mind, as my supreme contribution to the Team. But how could I have possibly done such a thing? Echoes of Shakespeare bounced inside my head, all week long...So, I just couldn't be there to witness the noble battling, my allegiance being so intricately divided. What pride, what shame! OK, OK -- in this case, pride did trump shame. Cheer up, team. Great performances in b-ball and d-ball!” ANDY HOFFER

KIN KUP SOCCER BANTER

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