Engaging our BPK Alumni is our new initiative which connects us with former students. This is turning out to be both fascinating and enjoyable. Our Alumni are happy to be contacted and they are also interested in finding out how we are doing.

A recent survey of our BPK Alumni demonstrates keen interest in receiving news from BPK. As a result, with this issue we are inaugurating the addition of interested Alumni to our distribution list.

We are very excited to engage our Alumni in this way, both as a means of updating them, and also as a way to keep in touch with their career paths.

Internally newsletter distribution includes BPK faculty, staff, postdocs, grads, undergrads, associate members and adjunct professors, the Faculty of Science (FS) office (Burnaby and Surrey), all FS Chairs, Deans, VPs, and the President. We also distribute to Co-op groups, the Registrar’s Office, and Media and Public Relations.

Externally we distribute to BC Parks and Recreation, the BC Assoc of Kinesiologists, faculty members at UBC, UFV and McGill, plus a few by special request.

Thank you to DARLEEN BEMISTER and SOPHIE DUNBAR who are coordinating this project.

Thank you also to SABRINA AZARIA, a BPK Co-op student, who was hired as a Communications Assistant for the development of the project. This has included summarizing the history of the department, creating the alumni survey and starting up alumni engagement through social media. (see article below)

Please view our updated website, Alumni section at: www.sfu.ca/bpk/Alumni.html

GLEN TIBBITS

We are very excited to have our alumni be a part of the BPK family.

If you have any questions, feedback or comments about our alumni engagement efforts, please email bpkalum@sfu.ca

GRADUATE PROFILE

by PETER RUBEN, Supervisor

I first met COLIN PETERS at a scholarship event. He was then still a high school student, and SFU was trying to woo, with handsome undergraduate scholarships, the best and brightest.

Colin Peters (r) explains his poster to another scientist on BPK Research Day

I invited Colin and a few other students (along with some of their parents) to tour the Molecular Cardiac Physiology Group (MCPG) laboratory. I hoped, but didn’t assume, that one or more of these bright students might choose to work in our group. Early the following September, Colin knocked on my office door and said, “So, when can I start?” The rest, as they say, is history.

In his four years as an undergraduate student, Colin contributed substantially to 5 research publications, on one of which he was the first author. I feel very fortunate that he decided to stay at SFU to pursue his PhD.

A history of BPK was the first step that we took to engage our alumni. It is presented as a 3-page document that also highlights the department's historical timeline and presents charts to show BPK's growth and number of student majors.

Next we created a survey for our alumni that sought to gain insight into the ways in which they would like to connect with BPK. When we sent the survey out in late October, it was well received and we are thankful for so many positive messages from our alumni, many of whom are interested in connecting with BPK.

The next step was to have a place where alumni can interact with BPK students, faculty members and staff. We also wanted to provide networking opportunities between alumni. LinkedIn, a professional networking website, was one of our top choices as a platform where connection and networking can happen online. BPK now has two groups on LinkedIn: an open group for everyone and anyone involved and/or interested in BPK, and a closed group exclusively for alumni.

We have many other things in mind for our alumni engagement efforts in the future: featuring our alumni on our website and in the newsletter; inviting them to our events and seminars; welcoming them to be BPK student mentors, co-op employers, practicum supervisors; and much more.
“Audacious!” That is how a friend, colleague, and accomplished scientist described Colin Peters. And then she tapped into his ion channel modeling expertise, setting up a collaboration with Colin. His audacity is only part of Colin’s character but, perhaps, a critical component of his success. Coupled with wide-ranging intelligence, a strong work ethic, and a bold sense of humor, Colin’s confident approach to science leads him to try new techniques and creatively tackle methodologically difficult questions.

Colin Peters’ graduate research project is aimed at understanding the cause of cardiac arrhythmias – the kind that drops professional athletes in the middle of their game and tragically kills infants in their sleep. Colin wondered what the common thread between these two apparently disparate conditions might be and together we came up with a tentative answer: an increase in blood acidosis (caused by exercise in athletes, apnea in infants). His research thus far is compelling and provides a novel perspective into a potentially catastrophic disorder that still evades a cure.

Biophysicist by day, brew master by night, Colin and his siblings (one of whom also is a biophysicist) whip up an ever-changing array of tasty beers. This willingness to experiment, take risks (like the time he opened a beer during lab meeting and it erupted all over the Dean’s new meeting room table), to manipulate conditions, (the next time we had beer was far less dramatic), and to keep careful track of results, are key to the kind of success that Colin Peters has enjoyed.

Lab link: http://www.sfu.ca/mcpp.html

**FACULTY, POST-docs & GRADUATE STUDENTS**

**PARVEEN BAWA** was invited to be a Special Topics guest editor for *Frontiers of Neuroscience* starting in April 2013.

**PARVEEN BAWA** is giving a talk entitled “Transcortical Reflexes and Reaction Times,” in London, UK on December 5th, 2013.

**BRETT SHAW** and **RIANNE RAVENSBERGEN** in the Cardiovascular Physiology Lab (VICTORIA CLAYDON, Supervisor) published the following manuscripts:


The following paper was published recently and is from the Injury Prevention and Mobility Lab (STEPHEN ROBINOVITCH, Supervisor). The paper examines the frequency and risk factors for head impact and brain injury due to falls in older adults. REBECCA SCHONNOP is now in Medical School at UBC.

REBECCA SCHONNOP Bsc, YUJIAN YANG MD, FABIO FELDMAN PhD, ERIN ROBINSON Bsc, MARIE LOUGHIN MS, and STEPHEN N ROBINOVITCH PhD (2013). Prevalence of and factors associated with head impact during falls in older adults in long-term care. *Cdn Medical Assoc J.*

http://www.cmaj.ca/content/early/2013/10/07/cmaj.130498.full.pdf+

The Cancer Prevention Laboratory (MIRIAM ROSIN, Supervisor) reports the following Conference presentations by CATHERINE KANG, PhD Candidate and AJIT AULUCK, Postdoctoral Fellow:


**BPK CO-OP CORNER**

**SFU CELEBRATES "KIN WEEK 2013"**

On October 22, 2013, the BCAK (British Columbia Association of Kinesiologists), BPK Co-op and the BPKSA co-hosted a national KIN Week presentation by GEOFF DESMOULIN, SFU Kinesiology co-op alumnus and former “Deadliest Warrior” co-host. IRMACS Theatre was full with students, faculty, staff, alumni and BCAK members to hear Geoff present on: “How did Kinesiology help bring me to my current career.” Special thanks to the BCAK for sponsoring the pre and post event networking opportunities by providing pizza and dessert for this event.

Thank you to everyone who volunteered and supported this successful event. Special thanks to GEOFF DESMOULIN for coming out and sharing his personal experience with everyone.

Geoff Desmoulins (centre) with participants

http://www.sfu.ca/bpk/news_events/events/KinweekGeoffDesmoulin.html

**CAREERS IN BPK**

This popular annual event will take place on:

Tuesday, January 21, 2014
5:00 to 8:00 p.m.
Saywell Hall Atrium

Careers in Biomedical Physiology and Kinesiology is an opportunity for current undergraduate and graduate students to gain insight into the different careers available to them post graduation.

Students will have an opportunity to interact with professionals currently employed in
various fields, or with students currently in professional programs such as medicine, physical therapy (PT) and occupational therapy (OT).

This year's breakout sessions as determined by the undergraduate student planning committee include: Research, PT/OT, Medicine, Kinesiology and Chiropractics.

**Undergraduate Student Research Award (USRA) Competition**

In January, the BPK co-op office will be coordinating the USRA competition for the department. Students interested in research will have the opportunity to work with a faculty member in their lab on a specific project for one semester. Over the past three years, the BPK USRA competition has seen over 120 students compete for the awards.

The BPK USRA competition also helps students understand other research opportunities available to them within the department such as volunteering, subject participation, co-op, directed studies and honors.

**Darleen Bemister**

Cheri Fiedler

**EMPUs UPDATE**

The EMPU (Environmental Medicine & Physiology Unit) was featured in the Vancouver Sun as well as on Global news and Shaw TV highlighting the new "Diver Narcosis Experience" the lab is offering. Similar to the High Altitude program offered to pilots to experience hypoxia in a controlled environment, the narcissus dives allow certified divers the chance to experience narcissism in a controlled environment. The goal of both programs is to educate pilots and divers to the individual psychological and physiological effects of high altitude/law oxygen or high pressure/high nitrogen environments. The chamber ride for divers is to the equivalent of 160 feet of sea water, where divers experience a narcotic effect similar to alcohol intoxication. Unlike drinking, the effect reverses when pressure is reduced and there is no hangover afterwards. The education component and chamber ride will help divers understand the serious effect of deep air diving with the goal of helping divers make safe decisions about deep diving and the training and experience required.

**Sherry Ferguson**

Director, EMPU

**BPK Seminar Series**

During the Fall of 2013, the following speakers gave talks for the BPK Seminar Series. Please check this link for future talks and plan to join us: [http://www.sfu.ca/bpk/news_events.html](http://www.sfu.ca/bpk/news_events.html)

**Seminars Held**

**September-December 2013**

Tuesday, September 24th, 2013

**Barbara Shyloff, PhD**

Research Scientist

Navy Experimental Diving Unit

Panama City, Florida, USA

**Topic:** Physiological and performance aspects of combinations of external breathing resistance, inspired carbon dioxide, hyperoxia, and water immersion.

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Tuesday, October 16th, 2013

**LT Denis G. Colomb, PhD (MSC, USN)**

PI Hyperbaric Electrophysiology Lab

US Navy Experimental Diving Unit

Biomedical Research Division

Panama City, FL

**Jean-Frederic Gerbeau, PhD**

Deputy for Science of project teams’ committee of INRIA Paris-Rocquencour research center

Head of REO project-team (INRIA, CNRS, and Universite Pierre et Marie Curie – Paris 6)

Paris-Rocquencour, France

**Summary:** Non-technical overview of some works about three-dimensional computer simulations of the cardiovascular system. Stimulation of blood flow in large arteries and electrocardiograms will be considered. Forward and inverse problems will be presented for multi-physics systems.

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Tuesday, December 10th, 2013

**Lee M. Romer, PhD**

Centre for Sports Medicine

and Human Performance

Brunei University, UK

**TOPIC:** Respiratory influences on O2 transport and exercise performance.