Fall is always an exciting time in BPK. This year we will welcome about 200 first-year BPK majors. If you are new to SFU, University will probably feel more intense than you expected. It’s important to make a few new friends early in your time with us, so be sure to attend as many of the department’s events as possible.

One thing you may not realize in your first couple of years is that many of your professors lead dual lives, as your teachers in lectures, and also as working research scientists who train graduate students and make new discoveries. You will get the most from your undergraduate experience if you spend some time in one of our research labs, and get to know what doing hands-on science is really like. You can volunteer, do a research co-op term, apply for an undergraduate research award (USRA) and later do a directed studies or Honours research. Your experience will be completely different from the classroom. Start thinking now about which lab might interest you by checking out the research profiles and videos on the BPK website.

During the summer of 2016 we had many faculty changes. First of all, we wish CRAIG ASMUNDSON, Senior Lecturer, all the best on his retirement as of August 31st, 2016. After 41 years of service to BPK, he will be sorely missed! (see article on Craig in the Inspiring Alumni section, Sept 2015 BPK Pulse at: https://www.sfu.ca/bpk/news_events/newsletter.html)

Welcome to the following faculty members whose appointments started on September 1st, 2016: DIANA BEDOYA who has been promoted to a continuing Lecturer appointment; Dr. JIM CARTER who is appointed as Limited Term Lecturer, and two new faculty members, Dr. LEANNE RAMER, Lecturer in Anatomy, Dr. NADINE WICKS, Lecturer in Physiology. (see below for further details).

The BPKSA held their annual orientation for new students, entitled “BPK 101” on Friday, September 9th, 2016. During this event students learned all about BPK, how to survive and develop skills for their futures, in addition to meeting fellow BPKers and socializing with them. Also included was a BPK-esque scavenger hunt.

The BPKSA’s annual Terry Fox Run will be on Friday, September 30th, 2016. Terry Fox was one of our own students, and he trained for his famous Marathon of Hope by running up and down Gaglardi Way in Burnaby. Join us to walk or run. Last year Team BPK was the largest team, with 192 participants. Help us maintain our ‘dominance’ of this important event! We also welcome BPK alumni to join us to keep up the spirit (and the numbers), and to reconnect with old friends.

I will look forward to meeting many of you during the year.

ANGELA BROOKS-WILSON, Chair

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The annual BPK Welcome BBQ was held this month on September 15th, 2016 in the Courtyard beside K8638. For only “Two Toonies for Terry,” everyone enjoyed a burger and drink.

Proceeds totalled $560.50 (up from $335.70 in 2015!) and will all go to the Terry Fox Foundation.

Thank you to all sponsors of this event: Nesters Market, BPK Department, BPK Co-op, and the BPKSA.

Immediately after the Welcome BBQ, Labs Tours, BPK version, were held. There were four main stops which included short presentations providing students with information on opportunities perfect for someone in BPK.

The stops included: SFU Recreation and SFU Physiotherapy; BPK’s Cardiovascular Physiology Lab (Dr. Victoria Claydon), and BPK’s Neuromuscular Mechanics Lab (Dr. James Wakeling).

JOIN TEAM BPK @ TERRY FOX WALK/RUN

Terry Fox Day at SFU will be held this year on Friday, September 30th, 2016 at 12:30 p.m. The purposes of the event are:
- to celebrate the memory of Terry Fox, who was an SFU Kinesiology student;
- to raise money for the Terry Fox Foundation to help find a cure for cancer; and
- to enhance community spirit at SFU.

Event details will be sent to department members during the next few weeks.

DIANA BEDOYA and JIM CARTER, BPK Team Captains
Congratulations to **DIANA BÉDOYA** on her recent promotion to continuing Lecturer in BPK effective this September 1st, 2016. Diana is well known in BPK since she taught as Sessional Instructor from 2008 to 2011 and as a Limited Term Lecturer from 2011 to 2016. She has taught BPK 110, 140, 311, 343, 326, and 326 Labs, at all three SFU campuses. She holds an MSc degree in Kinesiology from SFU, and a BSc degree in Biomedical Science (Honours) from the University of Guelph.

Congratulations to **JIM CARTER** on his appointment as Limited Term Lecturer effective September 1st, 2016. Jim has taught in BPK for the past 15 years as a firefighter for the Port Coquitlam Fire and Emergency Services. In order for him to join BPK full time, he has now retired his position as firefighter. He will be replacing **CRraig Asmundson**’s teaching. Courses which he has taught many times over the past years are Kin 140, 142, and 343. Jim holds a PhD in Applied Sciences from SFU, an MSc in Applied Sciences from SFU, a BSc in Kinesiology from SFU, and a BSc in Zoology from the University of Western Ontario. He will be effective September 1st, 2016. Jim has taught BPK 110, 140, 311, 343, 326, and 326 Labs, at all three SFU campuses. He holds an MSc degree in Kinesiology from SFU, and a BSc degree in Biomedical Science (Honours) from the University of Guelph.

Welcome to Dr. **LEANNE RAMER** our new BPK Lecturer in Anatomy. Leanne has taught BPK 426 as a Sessional Instructor. She holds a PhD in Zoology from UBC, an MSc in Neuroscience from UBC, and a BSc (Hons) from the University of Western Ontario.

Congratulations to **CLARE ZHENG** who has joined the staff as temporary Undergraduate/Graduate Program Assistant.

Welcome to Dr. **YIJIAN YANG** and Dr. **KIM VAN SCHOOTEN**, both chosen to receive a Michael Smith Foundation for Health Research Trainee Award in July 2016.

Dr. Yang’s project will examine strategies that promote mobility and physical activity in older men in assisted living. Yijian will be based at the Centre for Hip Health and Mobility at UBC with Professors Heather McKay and Joanie Sims-Gould. See link: http://www.msfhr.org/strategies-promote-mobility-physical-activity-older-men-assisted-living

Dr. van Schooten’s project will examine the factors that determine successful transferring (moving from sitting to standing) in older people and she will be working in Dr. **STEVE ROBINOVITCH**’s lab. See full project outline at: http://www.msfhr.org/movement-strategies-transferring-without-falling-older-people

Congratulations to Dr. **DIANA BEDOYA** on her recent promotion to continuing Lecturer in BPK effective this September 1st, 2016. Diana is well known in BPK since she taught as Sessional Instructor from 2008 to 2011 and as a Limited Term Lecturer from 2011 to 2016. She has taught BPK 110, 140, 311, 343, 326, and 326 Labs, at all three SFU campuses. She holds an MSc degree in Kinesiology from SFU, and a BSc degree in Biomedical Science (Honours) from the University of Guelph.

Welcome to **NADINE WICKS** our new BPK Lecturer in Physiology. She has taught BPK 208, 306, and 140 as a Sessional Instructor for BPK. She has also taught as a Biology Instructor for 3 years at Douglas College, New Westminster, BC. She holds a PhD in Molecular Pharmacology & Physiology from Brown University, an MSc in Molecular Biology & Biochemistry from SFU, and a BSc in Molecular Biology & Biochemistry from SFU.
U.S. military takes SFU power-generating project for a test walk

By Mark Hume

VANCOUVER — The Globe and Mail
Published Wednesday, July 13th, 2016

An idea germinated in a biomedical lab at Simon Fraser University is being tested by the U.S. military in a research project meant to turn foot soldiers into their own power-generating stations.

Using a lightweight device that looks like the kind of knee brace a high-performance athlete might wear, soldiers can use the Canadian-designed PowerWalk® Kinetic Energy Harvester to produce enough electricity to run their GPS units, night-vision goggles and radios. In the process, they can shed the 20 pounds of batteries they now have to carry into the field.

“They are really trying to take science fiction and turn it into something they can use,” SFU’s MAX DONELAN said of the field trials being done by the U.S. military under a $5-million (U.S.) contract with Vancouver-based Bionic Power Inc.

The field tests are part of a project known as the Joint Infantry Company Prototype, which is run by the U.S. Army and the Marine Corps. According to a Web posting by Captain Anthony Ripley of the Marine Corps Expeditionary Energy Office, the project “is aimed at lightening the load and reducing the size, weight, and power requirements” of foot soldiers.

He states that over the past decade, Marine Corps battalions have seen a 250-per-cent increase in the amount of power they need for radios and a 300-per-cent increase in the power needed for information technology, including computers.

“Consequently, for the individual Marine, the increased dependency on energy has meant an increase in overall weight carried, increased injury, and an increased dependence on resupply,” Capt. Ripley writes. “If the weight of Marines is too heavy, they either function at a reduced capacity, or they break.”

DR. MAX DONELAN, a professor in SFU’s biomedical physiology and kinesiology department, wasn’t thinking of foot soldiers when, about 15 years ago, he first came up with the concept of generating power from walking.

At the time, he was contemplating the mechanics of the simple act of walking and wondering about the power potential.

“I was working in the course of my research on how people walked and how much energy they needed, how many calories they consumed. And it occurred to me that the walking was doing something inherently inefficient,” he said in an interview on Wednesday.

Dr. Donelan said that when people walk down a hill, their muscles work as brakes, with the energy dissipating as heat.

“It occurred to me that that is in some ways silly because you could instead use a generator to help slow you down and the generator instead of turning it into [lost] heat would turn it into electricity,” he said. “If it sounds like how regenerative braking works in hybrid cars, it’s because it is – it’s exactly the same.”

But the challenge facing Dr. Donelan was how to take that concept and turn it into an actual working device.

“The trick in [harvesting energy from] walking is just to know when the muscles are pushing on the brake … and then rather than engage a conventional brake, which in the case of walking is muscles, … you engage a generator instead,” he said.

Working with a team of researchers and engineers at SFU, funded by a grant from the Natural Sciences and Engineering Research Council of Canada, Dr. Donelan came up with a prototype of what would later evolve into the PowerWalk device. It can generate 10 to 12 watts of electricity – enough in an hour’s walking to charge four smartphones.

“It was hard,” he said of the development process. “That first proof of concept took us a good solid year to build. … It was this fairly clunky thing hanging off the side of the knee that convinced us we were on to something … but it was far from being something people could actually use. … It was too heavy, too bulky, too uncomfortable, too noisy, too expensive.”

Bionic Power Inc., of which Dr. Donelan is a founding director, was created to push his idea further. Two years ago, the company signed a $3.8-million (U.S.) contract with the U.S. military, which was intrigued by the possibilities. That contract was recently extended for $1.25-million to allow field trials.

Dr. Donelan said that when soldiers first tested the device, they complained that it was bulky and uncomfortable, but it was improved through redesigns. Now, he said, they tell him, “It looks like something I would wear when I’m playing a video game like Halo.”

“So it crossed from being an inconvenience to something that made them feel a little bit superhuman.”

The device is not available commercially, but Dr. Donelan said that if it passes field trials and gets adopted by the U.S. military, it could pave the way for mass production.

“My hope is that eventually we get to the point where we could start to address the needs of the developing world,” he said. “More than one billion people live without reliable access to electricity. … They rely on cellphones for so many things, but often don’t have the infrastructure to charge those cellphones.”

See full Globe and Mail article and video at:


SFU News article at: https://shar.es/1IlcOy
SFU's Stephen Robinovitch went looking outside of the university lab for hard evidence of how seniors fall

From VP Research website – see also Discovery IPML Video at: http://www.sfu.ca/vpresearch/Research50/a-fine-balance.html

Eight years ago, SFU researcher Stephen Robinovitch went looking outside of his Injury Prevention and Mobility Laboratory for hard evidence of how falls occur—the real-life circumstances or objects that literally trip people up. He also wanted to learn more about what the human body instinctively does, or fails to do, when a loss of balance occurs.

So with the assistance of SFU’s longstanding partner, the Fraser Health Authority, Robinovitch and a team of colleagues and students from the Technology for Injury Prevention in Seniors (TIPS) program began to analyze video footage taken in long-term care facilities. Their findings from over 200 fall events, published in the Lancet and CMA, overturned many common assumptions of how and why we fall. They are applying this knowledge to develop and evaluate novel preventive interventions, including compliant flooring and hip protectors that lessen the force of impact and reduce fall-related injuries. This work is being done in partnership with AGE-WELL, an SFU co-led national network for accelerating the development of technology-enabled solutions for the challenges of aging.

It’s not only in senior care facilities where falls occur. The TIPS team first made headlines in 2011, when they showed that fall-related injuries to public transit passengers could be reduced by proper body positioning. And in 2014, Robinovitch was awarded a Discovery grant from the Natural Sciences and Engineering Research Council (NSERC) for a research project aimed at improving the design of hockey pads and boards to prevent head injuries in ice-hockey players.

For these and other studies in the lab, researchers built a one-of-a-kind fall-inducing machine—the “Slipitron 2000”—to test how study-participants respond to losing their balance.

Robinovitch hopes that this work will result in designs for built environments and wearable sensor systems that promote “safe mobility” for older adults. He is also calling for injury prevention from falling to be declared a public health priority, in part because it costs the government over $6 billion per year to accommodate the injured—not to mention the loss to the injured person’s quality of life.

“As a university researcher, I strive to generate important new knowledge, and to apply knowledge to improve the lives of current and future generations. As a teacher, I strive to impart knowledge and problem-solving skills to students, that have personal and societal benefits.

What motivates you as a researcher or innovator?

My primary motivators are my scientific curiosity, my need to be creative and productive, and the enjoyment I derive from mentoring students and trainees. I’m also competitive in the sense that, while I don’t spend much effort in comparing myself to other researchers, I’m always comparing myself (and my research team) to last year in terms of productivity and innovation.
How important is collaboration in advancing research?

Collaboration in research and development is essential for identifying and understanding the needs of stakeholders, moving ideas from the lab to the real world, expanding the applications for your research results, and developing the resources (range of expertise and infrastructure) necessary for important advances.

What do you see as the most noteworthy emerging trend that will shape the direction of university research over the next 50 years?

The trend right now is for increasing engagement of university researchers in working to solve the problems of industry. Another emerging trend is community-based research that addresses the social needs of stakeholders. While both are important, I think we’ll see a return to recognizing and promoting the value of universities as “think tanks” for identification and investigation of important questions. The challenge for universities is to facilitate the balance between fostering discovery in research and the needs for implementation and uptake of results.

SFU has much to celebrate on its 50th anniversary. Looking ahead to our 100th anniversary in 2065, what do you think SFU will be most notable for?

My hope is that, through an innovative and long-standing focus on community engagement, SFU will emerge as a world leader in developing new models of research and education, that transform not only SFU but the wider academic community in generating solutions to important social issues.

**SFU NEWS**

**RESEARCH ARTICLE**

SFU researchers study DNA to find genetic mutation behind rare developmental disorder

June 15th, 2016
By Ian Bryce

Researchers from Simon Fraser University’s Biomedical Physiology and Kinesiology department have used groundbreaking genetic sequencing to diagnose a rare developmental disorder.

Professor Peter Ruben and doctoral student Menaken Abdelsayed were co-authors of a study recently published in the *New England Journal of Medicine*. The study analyzed the genes of four adults and 37 children who have unexplained intellectual developmental disabilities, looking for mutations in their DNA.

The team, consisting of researchers from over a dozen universities, hospitals, and research institutions around the world, used a method called whole-exome sequencing to examine the DNA of patients and their families, to find where genetic mutations occurred.

“Our DNA contains a huge amount of information and some of that is used to make proteins,” says Ruben. “Geneticists went through all of this information and found the proteins that were made incorrectly. We then studied one of those mis-made proteins in detail.”

Ruben’s research focused on a rare mutation that affects development and function of skeletal muscle. By isolating and analyzing a specific protein, Ruben and Abdelsayed found that the genetic disorder created proteins that caused involuntary muscle contractions. This particular protein mutation, he says, primarily affects skeletal muscle growth but also significantly affects neurological development.

The discovery has great implications for understanding and treating developmental disorders. In this case, Ruben says that the disorder being studied is difficult to treat but not impossible.

“You can’t treat a disease unless you know what causes it,” says Ruben. “Now that we know what causes this particular disorder, drugs or gene therapy can be designed to target the identified protein.”

This research was supported in part by grants from the Rare Diseases Foundation and the Natural Sciences and Engineering Research Council of Canada (NSERC).

Of the 41 participants in the study, 90 per cent had their genetic causes identified and 44 per cent found treatments.

**Faculty, Emeriti-ae Post-docs & Graduate Students**

Dr. Peter Ruben, Molecular Cardiology Group, reports the following.

**Publications:**


**Presentations:**

- The prize for Best Poster was awarded to Colin Peters.

**Conference:**


On July 15th, 2016 Dr. Dave Clarke took the Clarke Lab on a break from their research to volunteer at the PoCo Grand Prix bicycle race in Port Coquitlam, a new event in the BC Superweek series of races. They helped set up the start area signs and grandstand, followed by spectating at the elite women’s and men’s criterium races later in the day.

**Photo (l to r):** Dave Clarke, Eli Mizelman, Andreea Alexandrescu, Jack Zhao, Ian Coccimiglilo, Jamie Riggs
Dr. Derrick MacFabe, PhD
Director, Kilee Patchell-Evans Autism Research Group
Schulich School of Medicine
Western U, Ontario

Tuesday, July 6th, 2016

Title: “Enteric Short Chain Fatty Acids: Microbial Messengers of Metabolism, Mitochondria and Mind: Implications in Autism Spectrum Disorders”

http://www.microbecolhealthdis.net/index.php/p/mehd/article/view/28177

Further information is at his website link: http://psychology.uwo.ca/autism.

Dr. Derrick MacFabe is Assistant Professor and Director of the Kilee Patchell-Evans Autism Research Group, Dept of Psychology (Neuroscience) & Psychiatry (Division of Developmental Disabilities), at the Schulich School of Medicine and Dentistry, Western University, London, Ontario, Canada. He is also a Core Member of the iTARGET Autism Initiative, University of British Columbia, Vancouver.

Dr. Derrick MacFabe’s research examines the role of gut-brain interactions on the identification and possible treatments of autism spectrum disorders. His research examining potential gastrointestinal and infective links in autism has been listed among the “Top 50 Scientific Discoveries in Canada” by the Natural Sciences and Engineering Research Council of Canada and was featured on the Canadian–EU documentary “The Autism Enigma.”


He was recently called to speak at the Nobel Forum, The Gut in Focus, at the Karolinska Institute, Stockholm, Sweden (see link at: http://ki.se/mtc/kalender/gut-in-focus).

Dr. Derrick MacFabe is a Fellow and on the Board of Directors of the American College of Nutrition and was a recent recipient of their Mark Bieber Award for his research in autism and the microbiome.

Undergrad Research

Undergrad gets muscle mechanics research published

July 13, 2016
Faculty of Science News & Events

Authors Stephanie Ross and Dr. James Wakeling with research poster

For muscles to perform external work, they must first overcome inertia due to their internal mass. This is what BPK undergrad Stephanie Ross, under the supervision of Dr. James Wakeling, discovered while researching her honors thesis. The research has just been published in Biology Letters.

“It’s similar to starting to run from standing position,” Ross explains. “Inertia is the resistance of an object to a change in motion because of its mass. In terms of muscles, each muscle is made up of many fibres that produce force, but also have mass and therefore inertia.”

“Most of what we know about how muscles work comes from experiments on fully active isolated fibres and the effects of added mass are ignored” Ross notes. “When every fibre is fully active and producing force to contract the muscle, each fibre primarily activates its own mass. But when only half of the fibres are active, those active fibres have to move their own mass and the ‘deadweight’ of the inactive fibres that are at rest. We hypothesized that the lower the activation and the lower the number of fibres contributing, the harder the active fibres had to work to contract the muscle.”

To determine if this assumption was reasonable, Ross added mass effects to a Hill-type muscle model, a type of computational model that is widely used in the field of biomechanics to predict and understand muscle behaviour.

Ross’s hypothesis proved correct. “Our findings show that muscle is made up of fibres that each have different levels of activation which directly affects the speed of contraction of the muscle”. She adds, “This suggests that we may need to account for the mass within muscle, particularly when the muscle is large or under natural conditions where the muscle is not fully active.”

Ross’s co-author James Wakeling is pleased that Ross was able to get her research published at an early stage in her career. “This work is very exciting for Stephanie because it combines her love of math and physics with her passion for physiology, giving her many options in terms of future research.” Ross is now pursuing her MSc degree and studying under SFU’s Injury Prevention and Mobility Lab.

Faculty of Science Link:


BPK Alumna: Defying the Odds

Our Alumna, Dr. Marianne Sadar was recently featured in an article for her outstanding research on prostate cancer.

Dr. Sadar’s research focuses on targeting the tail-end androgen receptor as a landing point for the drug and looks very promising.

Her article is entitled, “Defying the Odds: New Prostate Cancer Drug in Patient Trials.”

Dr. Sadar states, “We are committed to improving the lives of men with prostate cancer.”


http://www.microbecolhealthdis.net/index.php/p/mehd/article/view/28177

http://psychology.uwo.ca/autism.

Meet Dr. Nadine Caron, Canada's first female First Nations surgeon

Tuesday June 21st, 2016
CBC Radio, The Current
with Anna Maria Tremonti

Meet Dr. Nadine Caron, the first Indigenous woman to graduate from the University of British Columbia's medical school at the top of her class and Canada's first female First Nations general surgeon.

The trailblazer tells The Current's guest host Laura Lynch that despite challenges, she's optimistic about the future of Indigenous health care in Canada. But that doesn't mean there isn't work to be done.

"Sometimes I'm so optimistic...And then on other days I experience things in the hallways or I hear things that are unintended to be heard and you just hang your head...And so I think in the end it's just like anything else. We're not there yet but we don't even have the right to stop trying to get there."

For the past two years, the UBC medical school has instigated mandatory training in cultural competency and cultural safety for their medical students.

"I remember this one time a surgeon came in. And he sat down and was like, 'phew, if I never operate on another Indian it'll be too soon.'" Dr. Caron tells Laura Lynch.

The Truth and Reconciliation Commission made a number of recommendations around Indigenous health care including recognizing traditional healing practices.

According to Dr. Caron, traditional Indigenous healing practices and Western medicine can co-exist.

"I completely agree that our First Nations people and our other Aboriginal people in Canada really need to be respected," Dr. Caron tells Laura Lynch.

"If this is another area where they turn to for their health and and for their treatments then we need to work in collaboration with them to just make sure that what are they doing, what do we propose, how will it fit together — instead of feeling like we have to choose."

This segment was produced by The Current's Liz Hoath and Idella Sturino.

Distinguished Alumni Award


Congratulations from everyone in the BPK Department, to NA DINE CARON (BSc Kinesiology ‘93) for winning the prestigious Professional Achievement Outstanding SFU Alumni Award.

from SFU Alumni website:

When describing Dr. Nadine Caron, extraordinary is a word often used. Even as a student Nadine was extraordinary, winning more than 20 major academic awards. She was a star basketball player at SFU and earned the Shrum Gold medal as the top undergraduate student.

"A great student and athlete," says DR. PARVEEN BAWA, Professor Emerita, pictured left with DR. NADINE CARON (1993)

Nadine became the first female First Nations student to graduate from UBC's School of Medicine, again as the top student.

She was named one of Maclean's "100 Canadians to Watch".

While completing her surgical residency, she completed her Masters of Public Health at Harvard.

Today Dr. NADINE CARON continues to distinguish herself as an outstanding surgeon, researcher, mentor, educator, patient advocate and community leader.

She is a faculty member in the Northern Medicine Program at University of Northern BC, an associate faculty member at John Hopkins Centre for American Indian Health, and an assistant professor with UBC's Faculty of Medicine.

She is passionate about health policy and has served on many committees to help shape Canada's health agenda, including the BC and Canadian medical associations and the BC health ministry.

Nadine is internationally renowned for her advocacy work to address the special health needs and disparities of rural, remote, northern and Aboriginal communities.

Through role-modeling and public speaking, she encourages First Nations youth to share her love of learning and further their education – an extraordinary legacy indeed.

SFU ALUMNI APPRECIATION

Dr. JIM CARTER was honoured on the SFU Alumni Appreciation website, published May 2016. See the full tribute plus video at: http://www.sfu.ca/appreciation/tribute/483/index.html

JIM CARTER graduated from Simon Fraser University in 1989 with a Bachelor of Science in Kinesiology. Jim completed four Co-op work terms at B.C. Athletics, SFU, Canadian forces Base Chilliwack and Downtown Nautilus Rehab Clinic. After graduation, Jim became a fire fighter and is currently a Captain for the Port Coquitlam Fire Department.

While working as a fire fighter, Jim came back to SFU and completed a master's degree and a PhD degree. Dr. Carter has been a sessional instructor at SFU for the past 15 years and teaches courses in health and exercise physiology. Jim is also an instructor and research associate at the Justice Institute of B.C.

BPK CO-OP ICON

BPK's Co-op Icon of the month is Dr. JIM CARTER, Lecturer.

In honour of SFU Co-op's 40th Anniversary during 2016, Co-op presents their new alumni project: Co-op Icons! Each month of 2016, a profile on an SFU Co-op alum containing a video interview and a timeline that illustrates their journey will be released. SFU's Co-op alumni have gone on to do great things, and Co-op is proud to showcase the stories of people who began their career journey at SFU! Join in celebrating the incredible impact that SFU alumni have made around the world.

Dr. JIM CARTER / PhD (Kin), 2001 / MA (Kin), 1996 / BSc (Kin), 1989

Watch Dr. Jim Carter’s video at: https://www.youtube.com/watch?v=2A6U7VnOryw&feature=youtu.be

JIM’S LAST “WALK OUT” FROM PORT COQUITLAM FIRE DEPARTMENT

On Saturday, August 27th, 2016, Dr. JIM CARTER had his last “Walk Out” from his former career position at the Port Coquitlam Fire Department. DARLEEN BEMISTER, Coop Lecturer, were both honoured to be invited to attend this special Walk Out ceremony.

Instagram link to video: https://www.instagram.com/p/BJnlCekAYoi/?taken-by=sfubpk

“(Dr) Jim Carter’s last ‘Walk Out’ from Port Coquitlam Fire Hall after 26 years of service. One door closes as another door opens. We welcome Dr Jim to full time teaching in BPK.”

Dr. JIM CARTER officially retired from the Port Coquitlam Fire Department on August 31st, 2016. He was a Captain in the Port Coquitlam Fire Department for 7 years, and was an Acting Deputy Chief for 5 years.

Jim now changes careers with his full-time appointment as Lecturer in the BPK Department, to take over the teaching of two important core courses in our department, BPK 142 and 407, from CRAIG ASMUNDSON who retired on August 31, 2016.

DR. JIM CARTER holds a BSc in Zoology from the U of Manitoba, a BSc in Kinesiology from SFU, an MSc in Applied Sciences from SFU, and a PhD in Applied Sciences from SFU.

In addition to being an excellent teacher as demonstrated by his Sessional Instructor teaching for the Department for the past 15 years, Jim brings a wide range of skills including extensive management experience from his firefighting career.

Jim is also taking on (jointly with with DIANA BEDOYA, Lecturer), Craig’s role as Captain of the BPK Terry Fox Day Team.

Jim is an avid outdoorsman who participates in trail running, hiking, cross country skiing, sea kayaking, and golf.

Welcome aboard, Jim!

Photos by DARLEEN BEMISTER

Article contributions by CRAIG ASMUNDSON
BPK CO-OP CORNER

GARRETT HUGHES, BPK Co-op student and Kinesiology major, had the unique experience of training his own replacement for a position that he would be returning to at Arthritis Research Canada.

So it matters – a lot!

Perspective is Everything: Experiences from Training My Replacement

by: Garrett Hughes | Kinesiology Student / Research Assistant
Posted September 1st, 2016

As the summer semester came to an end, I was wrapping up my first co-op term at Arthritis Research Canada (ARC). I had enjoyed a very successful few months as a Research Assistant, and it was with mixed emotions that I had to return to school in September. However, the study that I had been hired for had been extended, meaning another assistant was needed to take over.

Fortunately for me, this also meant that my supervisor was able to offer me a co-op job the following summer.

As a result, for the eight months in between, another assistant would join the team and take over my roles and responsibilities.

Since I was well versed in my role in the study, my supervisor trusted me to train and guide the new member of our team before school began.

Having the opportunity to be on both sides of a job (trainer and trainee) is quite an insightful experience. First and foremost, my perspectives of the job itself changed dramatically.

When you begin a new, unfamiliar job, it can be overwhelming. Your supervisor will assign you tasks that are quite straightforward to them at their level of experience.

However, as you go to do the task, you may realize either you forgot half of what they just told you, or you have no idea what they are even asking you to do. That was my feeling for the majority of my first week or so on the job. I was in unchartered territory in a sink or swim situation.

Conversely, as I got comfortable in my environment and familiar with the tasks I was assigned to do, I began to see why my supervisor found them so simple and straightforward.

Now imagine you are in your supervisor’s position. You have been on the job for months, maybe even years, and no task escapes your comfort zone. However, the workload is such that you need some relief.

When the time comes to train your assistant, how do you cope with their inevitable struggles of beginning a new job? That was the experience I had during the last couple weeks of my summer work term while training my replacement.

Suddenly, all the difficulties I had at the beginning of my work term began to make sense, such as the unfamiliarity of new tasks and the pressure to meet deadlines. I was able to view my own past struggles from a new lens, and understand how my work had impacted my supervisor early on in my work term.

What’s more, my appreciation for my supervisor increased considerably: their patience and guidance with me as I learned the ropes of the job added to the respect I already had for them.

This played a large role in helping me train my replacement, as I could better understand how to assist my trainee with their struggles by becoming more patient and guiding them better.

As a Research Assistant, one of the main tasks I was responsible for is data entry. Having performed this task almost every workday for the past three-and-a-half months, it was a very simple and doable task for me, one that rarely included any mistakes.

Now that I was responsible for training someone new with the software, I maintained my mentality that it was a simple task. This proved to be a bad approach, as I undersold the task to my trainee, unintentionally implying that it was something that could be done passively. Unfortunately, mistakes were made in the subsequent entry of data.

Upon reflection, I was able to understand the difference in perspectives that our new assistant had of data entry and my having done the task for a few months prior. While it was nearly second nature for me, it was still a task that required a high level of attentiveness from my trainee.

From then on, I had a different approach to training, one that was patient, understanding, and one that ensured the most important details were conveyed as such.

This proved a much more successful method of training for accurate data entry.

Förster et al. (2003) demonstrate that when a trainee is given a task to complete with a clear focus on error prevention, the accuracy of performance greatly increases.

For instance, the hard copies of the files we dealt with were all confidential, and I had to stress that a high level of organization was critical. Throughout the new assistant’s eight months at ARC, there were no issues with lost or damaged files.

Throughout my experience training my replacement, I was able to grow a lot, not only professionally, but personally as well.

What I believe is most inspiring about being able to understand a situation from both perspectives (that of a trainer and a trainee) is how applicable this is to life as a whole.

Empathy goes a long way in building relationships, professional or not, and it is a virtue that is critical to a healthy society.

The experiences I had during my co-op with ARC, while on a small scale, helped me understand something crucial about life: perspective is everything.

http://www.sfu.ca/olc/blog/co-op/perspective-everything-experiences-training-my-replacement#.V89DciRXF7I.linkedin

Beyond the Article:

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Panetta two-steps her way onto the big stage

May 30th, 2016 by Sonya Hartwig
Posted in Features of The Peak

MELISSA PANETTA, a professional dancer by trade, has done everything from teaching community dance-inspired fitness programs to showing off her moves on Lopez Tonight.

She is an SFU success story, but also a source of inspiration to anyone struggling to find opportunities that satisfy their passions.

Panetta began her journey at five years old at Dance Steps in London, Ontario. She later trained and competed at the Oakville Academy for the Arts in Oakville, Ontario. Panetta recently graduated from Simon Fraser University with a degree in Dance and Kinesiology.

Her post-SFU journey is now taking her to Chicago, as she has been recruited by the Thodos Dance Company.

The Peak sat down with Panetta and asked her how she got here, and what’s next.

The Peak: When did you start dancing and what created that interest for you?
MELISSA PANETTA: I started dance when I was really little, and I have loved it ever since!

P: What made you decide to pursue dance professionally?
MP: It’s always been my passion and I [couldn’t] really see myself doing anything else. So I wanted to give it a shot [. . . ]. When I don’t perform [it’s like] something is missing. . . . when you get on stage, it’s just a certain feeling that you don’t get [anywhere else]. It’s hard to put into words, but I don’t think I could go without that.

P: Did you ever doubt the path you chose?
MP: Yes, definitely. I mean, it’s a hard career, just because you get a lot of noes along the way. But I knew it was going to be hard and it’s something that I really like doing, so it’s worth it in the end.

P: How did you deal with that rejection along the way?
MP: You just can’t take it personally. It’s hard for the first couple noes, they hit hard. But I also have a great support system at home. It’s amazing having such supportive parents. They really helped me along the way. You just have to look at [everything] as a learning experience. Even if I didn’t get the outcome that I wanted, I still learnt something from it, so it was still worth it in the end.

P: Why did you decide to come to SFU?
MP: I took a year off after high school because I wasn’t really sure what to do. I knew I wanted to pursue dance, but I wasn’t really sure what school I wanted to go to. I’m originally from Ontario, so I looked at the schools there at first, but nothing really interested me. Then, I found out that SFU allowed me to do both kinesiology and dance programs.

P: So, you knew that your interest was also in kinesiology from the beginning?
MP: Yeah! I wanted to have kind of a backup plan, but just in case dance didn’t work out. I wanted something in my back pocket. SFU was one of the great schools that allowed me to do both! Kinesiology was also a great way to support my dance major, because you have to know the body and all that tech stuff.

P: What did you enjoy most about going to SFU?
MP: I would say the people! My program was so small, so we really got to know each other in depth. Especially when we were collaborating every day. It was great to know so many different people from so many different places.

P: What did you enjoy most throughout the dance and kinesiology programs at SFU?
MP: I really liked how you get such a large variety of teachers and instructors. It was really nice to go through the four years and have so many different genres of dance throughout.

The Kinesiology program also offered so many opportunities. I found there was so much outside support. All of the teachers I had were really supportive.

P: How did your years at SFU change you?
MP: I think coming into SFU, talking from a dance perspective I was [very technical]. So coming to SFU really broadened my artistic side.

P: Can you share a bit of your artistic vision with us?
MP: What I lean towards is more of an organic movement style. I really like physicality, which can be seen in so many different ways. Essentially, I really love seeing strength and power in movement. . . . I lean more towards the physical part of dance and more strong movements.

P: How did you get selected for the company in Chicago?
MP: I Googled “contemporary dance companies auditions” and found the open audition. So, I made the trip to Chicago in March. There were a bunch of rounds [that I had to compete in]. It’s pretty intimidating, because they don’t know our names — all they see is your resumé, your headshot, and what you just did in the audition.

P: Will your interest in kinesiology be something you get to further pursue in Chicago?
MP: For sure! Through the company that I’m working with they have on-site physios and chiros, so we get to work with them personally. We will need them on site, of course, in case of injuries, but I’ll also get more exposure to the field through them.

P: What are you looking forward to most about moving to Chicago?
MP: I’m excited about moving to a new city. I’m excited to just take that next step and explore. I am a traveller for sure, so I love a new adventure!

P: Any advice to dancers? Professional or hobbyists.
MP: I think just remind yourself why you are doing dance. If you really love it, [remember] why you really love it. What made you start that very first dance class? Sometimes people really think about the technical side of it, and trying to make everything perfect. But you have to remind yourself of your passion, and don’t ever lose that.

P: Any words of wisdom for current SFU students?
MP: I think just enjoy the time you have here, because it goes by so quickly. I didn’t realize how quick four years goes by. Just enjoy the ride and have fun.
THE PEAK: FIERCE FENCERS:
AN INTERVIEW WITH TWO SFU
STUDENTS GUNNING FOR A GOLD

Marie-Rose Bruskiewicz and Isaac Velestuk say it’s time for SFU to grow its list of varsity sports

June 12th, 2016 by Amneet Mann
Posted in Features, Top Features

Excerpts:

In late May 2016, two SFU student athletes earned bronze medals at the 2016 Canadian Fencing Federation’s National Championships in the University Division.

If you’ve never heard about SFU’s fencing team before, it’s because we don’t actually have one. In fact, even as MARIE-ROSE BRUSKIEWICZ (Kinesiology major) and ISAAC VELESTUK stood up on the podium to represent SFU, the university was completely unaware of the talent in their halls, and the achievements that were being earned under their name.

The Peak itself might have never uncovered the story of these two athletes if it hadn’t been for the determination of Marie-Rose, Isaac, and their coach, JONATHAN HUTCHINSON, to make their story known. I sat down with the trio to discuss fencing, life lessons, and hidden talent at SFU.

Read full interview, noting MARIE-ROSE BRUSKIEWICZ’s mental and physical journey along with her Olympic aspirations, at: http://www.the-peak.ca/2016/06/fierce-fencers-an-interview-with-two-sfu-students-gunning-for-a-gold/

“Masters of fencing, masters of life”

Hutchinson elaborated on how fencing stands apart from other sports: “[In combat sports], when the risk of losing is getting knocked out, you train very hard,” he pointed out. “[In fencing], if you lose, you would get hurt, stabbed, killed [. . .] That’s what factors into the brutal training. Strength, conditioning, and sprinting until you puke — that mentality bleeds into a lot of different training sessions.”

Bruskiewicz vehemently nodded her head at this, testifying to the brutal training sessions she’s been subjecting herself to since she began fencing.

“I was the only girl [at the club],” she explained. “Before [Jonathan] would teach me any fencing technique, he said, ‘We need to get you strong.’”

Perhaps the pinnacle of their training sessions would be what the group called “Mount Everest.” Mount Everest lives up to its name, and it goes something like this: you start with one sprint, three push-ups, three jumps, and three sit-ups. And then you double it and do it again. You keep doubling the routine until you’ve gone up to a rep that includes 32 sprints, 96 push-ups, 96 jumps, and 96 sit-ups. And then you go back to one sprint and three of each.

“When I started, I would do the mini version,” said Bruskiewicz. “I couldn’t keep up with the boys. But eventually I did.

“I started with knee push-ups, and now I can do 100 regular push-ups. I’m so much stronger than I ever was before. Mentally stronger, too.”

Fencing, for Bruskiewicz, is the most stressful endeavour she’s ever pursued. Her experience in competitive figure skating, soccer, and academics — another important part of her identity — pales in comparison.

“I was always so nervous coming into my first year of finals,” she recalled. “I wouldn’t be able to think straight. But there’s nothing more stressful than being down one point with 10 seconds on the clock in fencing. It teaches you to compose yourself.

“Finals are nothing anymore. I handle them like a champ,” she grinned.

Olympic aspirations

When describing the intense training sessions he prepped for his players, Hutchinson threw out phrases such as “high-performance athletes” and “dedication to reach the Olympic level.” When I inquired further into these notions, asking if Bruskiewicz and Velestuk were genuinely working towards fencing in the Olympics, I barely had a chance to finish my sentence before Velestuk responded.

“Yes,” he declared. “Having a good coach, working hard, financial hurdles, a healthy body and mind [. . .] I think those are all hurdles I can overcome. There are going to be challenges, but [if] I weren’t to make an effort, I’d feel like I was surrendering.

“If I’m aiming for the Olympics, it’s because I can’t see myself stopping [fencing].”

Bruskiewicz added her own perspective on the Olympic-level dreams: “Olympians used to feel like celebrities to me, like ‘untouchables.’ But I was reading The Champion’s Mind once which said, ‘If you can spot greatness in others, you have greatness in yourself.’ And two years down the road, and I have a national medal which I’m very proud of.

“I have a lot left to do,” she admitted, “but I’m catching up, and I feel I’m on that path.

“You’re not destined to become an Olympic athlete just because you started training [before] me. It’s the hours and hours of deliberate practice that you put yourself through, that I believe I’m putting myself through, the mentality, you need to be hard-working and have that drive, and constantly make sacrifices,” she said.

SFU’s golden opportunity

At the minimum level, the athletes are urging SFU to provide training space and minor funding for basic equipment for training. In addition, Bruskiewicz and Velestuk want fencers at SFU to be recognized as athletes of the university, so as to receive similar academic accommodations as other SFU sports teams.

By creating an environment that nurtures fencing at SFU, the trio argued that the university could be taking advantage of the wealth of untapped fencing talent present in the Lower Mainland.

Hutchinson passionately described his vision for SFU: “This place is such a wealth of talent, and has future potential for Olympians. When I talk to guys that I train with, they say the best wrestlers come from SFU. In half a second, the best fencers could come from SFU. Olympic medalists could come from SFU.”

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