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News for Vancouver Island



FACULTY OF MEDICINE



University of Victoria

Winter 2015

New leader at the helm



Dr. Wright (R) chats with Division of Medical Sciences graduate students.

After six months on the job as the UBC Faculty of Medicine's Regional Associate Dean, Vancouver Island, and Head of the University of Victoria's Division of Medical Sciences, Dr. Bruce Wright is clearly enthusiastic about his new role. "This job is attractive and challenging - it allows me to be principal of a medical school, as well as leader of a division of scientists, and layered on that I am navigating through two leading universities, a health authority and the Island community. I'm loving every minute of it," Wright enthuses. "And as a former Albertan, I much prefer the weather here," he laughs.

What is his vision for IMP during his term? He plans on continuing the good work of his predecessor, Dr. Oscar Casiro, by continuing to grow the program, now in its 10th year. Wright aims to create a culture on Vancouver Island that meets physicians' needs, ensuring that the right balance of family practitioners and specialists are in the communities needing them most and implementing strategies to ensure the long term success of the program. As a family practice physician specializing in geriatrics, he is also interested in developing new partnerships between Island Health, UVic and UBC around the theme of aging well in the community. According to Statistics Canada, almost 19% of Vancouver Island's population is currently over the age of 64. Projections indicate this age group will increase to 30% over the next 20 years.

Wright knows firsthand that virtual and classroom learning, when coupled with hands-on experience in a clinical community-based setting, gives learners the knowledge and skills they need to become excellent physicians. "The best way to teach medicine is to expose students to patients in their own communities. Having a medical school in Victoria, with training sites located from Sooke to Port Hardy, creates a better care environment for patients," Wright confirms. "Doctors who are trained in their local community become part of the local culture where they can mentor others and develop policies specific to the region," he adds. With close to half of all IMP students already connected to Vancouver Island as former high school or undergraduate students, it makes good sense to train them on their home turf.

UVic's Division of Medical Sciences was established to augment the integrated and multidisciplinary approach to health research already being conducted at the university. As the Division's head, Dr. Wright knows that its researchers, even though still early on in their careers, are excellent scientists. "They are punching above their weight and they want to make a contribution," he states proudly. While the Division was established when the IMP started in 2004, it took several years to develop a research focus.

In 2007 neuroscientist Dr. Brian Christie was the first researcher hired in the Division. Since that time, the Division has hired several more neuroscientists who have garnered numerous prestigious awards. The Division also led the way in establishing an interdisciplinary Graduate Program in Neurosciences at UVic. Partnering with other UVic departments and research centres, researchers are contributing to breakthroughs that will impact neurological disorders and diseases.

Wright knows it will take at least a year for him to learn all the ins and outs of his two positions. "Fortunately, I have a team that is more than competent. I am truly grateful for the friendliness and warmth people have shown me." In the meantime, he is relishing getting to know Victoria better. When he isn't checking out live theatre or spending time with his daughter who lives on the Island, you might just find him out on a run - usually the 10 kilometre circuit around Elk Lake.

Funding award will enrich Division research

Two faculty members with the University of Victoria's Division of Medical Sciences will be using \$750,000 in new funding to build on recent successes in their neuroscience research around brain health. Dr. Brian Christie and Dr. Craig Brown received \$300,000 from the Canada Foundation for Innovation, \$300,000 from the B.C. Knowledge Development Foundation and \$150,000 from the DMSC.

The two neuroscientists, whose reputations have attracted leading post-doctoral students in the few years they've been teaching at the DMSC, will use the funding for the Division's Behavioural Neuroscience Centre where further research on brain disorders like concussions, dementia and stroke recovery will take place. "The new infrastructure will enhance the research capabilities of my lab and push it into new directions that weren't possible before," Brown says. "It will definitely expand what we can do." For Christie, "The new infrastructure will enable us to move our bench research into the community, creating a new capacity for us to engage in mild traumatic brain injury research."

Some of the funding will go toward the purchase of a two-photon microscope and to renovate space to accommodate the sophisticated piece of equipment, used for research by Brown and his students. In addition, four sets of NeuroTracker software, 3D viewing screens and necessary computer hardware will enable high through-put concussion research. And the remaining funds will be spent on analysis software and the necessary staging equipment, that when used in tandem, will automatically assess and measure the behaviour of animals studied in lab settings. The three infrastructure additions will improve access for graduate and post-graduate students, adding more opportunities to carry out research.

Brown's lab already has one, five-year-old two-photon microscope that has to be shared among many eager students. "It's kind of like a house with one bathroom and six kids," he says. With a second microscope, "production" will increase, Brown says. The Japanese-made microscope will use light to excite certain brain cells while viewing how other surrounding cells respond and how blood flow is affected.

The four sets of NeuroTracker software will be added to the existing two sets. Developed in Quebec, NeuroTracker uses a video of bouncing yellow balls on a large 3D display to measure multiple-object tracking and cognitive function. It's primarily used by athletes to spread their attention by tracking many targets at high speeds, thus improving their ability to focus. The software has many applications which can be tailored to the individual's response rate, with rehabilitation an important use, Christie says. Much of Christie's work is around concussion and enhancing cognitive capacity and athletic performance in pediatric populations, as well as fetal alcohol syndrome research.

The software analysis package and staging equipment, will greatly free up the time researchers spend on observation. When studying stroke recovery and mild traumatic brain injury with rats and mice, students can conceivably spend hours watching the animals walk on a runway that measures movement such as the animals' gait and stride. The new proprietary software will not only track how many steps, and of what length, but also track how much weight the animal puts on its paws. Such information is transferrable to how a human stroke victim would move. "The main benefit of this platform is that it reduces the number of hours that students need to spend doing frame-by-frame analysis," Brown says.

The intent of the new infrastructure is to build on Brown's and Christie's innovative therapies for enhancing cognitive function following brain damage. While it took more than a year for the two scientists to learn their funding application was successful, Christie says the rigour necessary to obtain the money was worth it. "It was a bit of a process but it shows UVic's commitment to this research and creating an exceptional training and research environment for its students," he says.

Removing barriers to success

At the Island Medical Program, we seek to remove the barriers to medical education faced by our students. The UBC Faculty of Medicine admissions process looks for well-rounded students from a variety of backgrounds, including those from rural and Aboriginal communities. Our students are not just evaluated based on academic achievement but rather a combination of marks, personal qualities and a diversity of experience.

We hope that these efforts to recruit a diverse student population translate into new physicians who are better able to serve the needs of our communities, particularly rural and northern communities. Focusing on diversity often means some of our students face financial barriers on their road to becoming doctors. Over half of our students qualify for financial aid, meaning that they have a financial need that remains unmet even after student loans. In addition, graduates from UBC Medicine have one of the highest average debts of any medical school in Canada.

Bursaries are incredibly important as they provide financial assistance to students in need. Thanks to the generosity of the local medical community, the Medical Staff Association – South Island (MSA) has offered bursaries to first year IMP students since 2008. In 2013, the bursary fund was endowed through donations from the MSA's membership.

Our goal is to increase the endowment to \$150,000, which will fund two bursaries in perpetuity. All money raised supports IMP students studying at UVic and in Island clinical settings.

For more information, please contact Angelica Pass, apass@uvic.ca or 250-721-6102.



UBC Midwifery Program comes to Vancouver Island

Lorna McRae proudly points out a sign at Victoria General Hospital that directs people toward the Midwifery Program. September 2014 marked the first time that eight of 20 students earning their four-year Bachelor of Midwifery (BMW) degree will spend part of their second year away from UBC. The BMW degree is provided through the Division of Midwifery within the Department of Family Practice in the UBC Faculty of Medicine and this year the program has been distributed, bringing a portion of the class to Vancouver Island.

"We're so happy being here in Victoria," says McRae, an instructor with UBC's Midwifery Division and a Registered Midwife. Praising the great space and equipment, and the very helpful administrative and medical staff, McRae says the Island Midwifery Program (IMWP) is "benefiting from an excellent and useful collaboration with the Island Medical Program."

In 2002, B.C. became the third Canadian province, following Quebec and Ontario, to offer a degree program in midwifery. That year, 10 students were admitted to UBC. Today, enrolment has doubled and could likely double again based on the demand for midwives in communities such as Prince George, McRae says. About 190, mostly women, applied to UBC for the last intake, McRae says. Those applicants were narrowed to 120 and after an interview process, the final 20 were chosen.

Midwifery students spend the first year at UBC, attending classes that range from pharmacology and lactation consultation to women's health Issues and literature appraisal. In their second year, students continue to learn clinical skills and work with a practising midwife. In years three and four the students carry out practicums throughout B.C., with at least one placement in a rural setting. Even though the 2014 cohort is the first to study away from UBC in Vancouver, McRae hopes that the distribution template for the program becomes a model for expansion beyond Vancouver Island.

In Victoria, the eight midwifery students and McRae spend about three hours per week on tutorials. They also complete work in a clinical setting, often working with a variety of health professionals, with skills review days spread throughout the first semester. Model of care is important, as is evidence-based learning. "We try to balance the art and science of midwifery," says McRae, who before becoming a midwife in 2000 was a social worker.

Midwives are registered and regulated by the College of Midwives of B.C. Upon graduation, they offer primary maternity care to newborn babies and healthy pregnant women, from early pregnancy, through labour and birth, until roughly six weeks postpartum.

Catherine McGeorge, one of the eight midwifery students who form the Vancouver Island midwifery cohort, was very glad to be admitted to the program and even happier to be training in Victoria. "It's a joy to be in Victoria, such a treat," says McGeorge, who lives



L-R Deb Little, Catherine McGeorge, Lorna McRae

near Nelson, B.C. After her initial year in Vancouver, heading to the smaller city of Victoria feels a bit more like home, she says. And the IMP facilities and Victoria General Hospital staff have proven to be wonderful. "I've been to other hospitals, but this is by far the best," McGeorge says.

McGeorge had worked as an unlicensed midwife, then stopped when midwifery was regulated in 1995. But she missed the work of a profession she deeply values, so decided to earn a midwifery degree. "In my gut, in my heart, I knew when the program started I wanted to do it," she says. McGeorge will be staying in Victoria for the second semester of year two, and is grateful for her registered midwife preceptor, Deb Little. Each midwifery student works with one midwife, shadowing her throughout the semester and getting true "hands-on" experience. Being able to spend eight months in one location, with the same midwife preceptor, will allow McGeorge to experience continuity of care, McRae says.

Little, a former obstetrical nurse, has been a midwife since 1979. In 1995, she was a founding board member of the College of Midwives of B.C. Having the Midwifery Island cohort will give the eight students varied opportunities and experiences they might not get in Vancouver, Little says.

Preceptors like Little are invaluable to the program, McRae says. "They're the ones that make the program work." The pregnant women are of course essential because they "welcome students into their care team," McRae says.

McRae adds that the eight midwifery students in Victoria are happy to be part of a more-focussed, tight-knit group who are enjoying training that is tailored to the individual student. And one more bonus about being in Victoria? "There's much less travel," McRae says.

Introductions:

Dr. Danièle Behn Smith

Dr. Danièle Behn Smith with Dr. Glenn Bowlsby, family practice preceptor with Vancouver Native Health Society

In this issue Dr. Danièle Behn Smith, a rural family physician in Duncan, BC tells us about her work as a medical educator and leader in the UBC Postgraduate program on Vancouver Island.

site by seeking out the guidance of our Elders and trying to ground our work in principles of health - respect, humility, gratitude, balance and ceremony.

What is the most gratifying aspect of your work as a clinical teacher?

The best part of my clinical teaching work is being able to work with an amazing team to support learners through some of the most demanding chapters of their lives and to bear witness to the tremendous metamorphosis that occurs as they transition into independent, caring, compassionate and culturally safe practitioners. We have been privileged to stand alongside some incredible physicians in the making. The knowledge that they are going out and serving our communities in a good way is supremely gratifying.

Do you have an inspirational mentor and/or a favourite quote?

I am inspired by so many people ... my life is full of amazing teachers. I suppose one quote that grounds me is from Auntie Betty, a Navajo Elder who told me "My girl. It's all ceremony. Walking. Hauling water. Chopping wood." She illuminated for me the infinite possibilities to welcome ceremony into my life and practice. She helped to transform my approach to family medicine by making visible the sacred ceremony of our everyday work!

Anything else you wish to share?

I am forever grateful to the amazing team of people that make our Site successes possible. Our irreplaceable Site Coordinator Carlea Remodo, our supportive Program Director Willa Henry, our committed preceptors, our generous Elders, our countless allies and of course our courageous residents who signed on for this wild ride!

Read more about the UBC Aboriginal Family Practice Residency program in a recent article on the UBC Faculty of Medicine website <http://med.ubc.ca/advocating-for-aboriginal-health>

Why did you choose rural family medicine as your specialty?

I wanted to be able to build relationships with individuals, families and communities. I wanted to provide full scope, comprehensive care across a person's lifespan and to be challenged on a daily basis ... rural family medicine just couldn't be beat.

What are your predominant roles in terms of clinical education?

I am the Site Director for the Aboriginal Family Practice Residency Site within the UBC Family Practice Residency Program and a clinical assistant professor. I have been with the UBC Faculty of Medicine since May 2011.

What motivated you to become a clinical educator?

To be honest, my work as a clinical educator was foretold to me by an Australian Aboriginal Elder. While filming a documentary series about traditional medicine, Auntie Minnie Mace on the Gold Coast of Australia told me I was going to teach at a medical school. She gave me a beautiful dot art painting to hang over my desk. At that time, I was heading back to the Yukon to practice in Dawson City ... a town of 800 year-round residents that is 2500 km from the nearest medical school. It was hard to imagine Auntie Minnie's prediction coming true. A few years later I got a call from the University of Alberta inviting me to join their teaching team. That was my first foray into medical education and I have been enjoying it ever since. I am motivated to be the best clinical educator I can to help transform the medical training journey from a potentially harmful one to a healing one. We accomplish this at our

Island Medical Program celebrates 10 year anniversary

The Island Medical Program at UVic was launched by UBC's Faculty of Medicine in 2004 as part of a bold and innovative multi-stakeholder plan. The aim is to increase the number of new physicians in British Columbia and encourage them to establish practices in mid-sized, rural, remote and coastal areas of the province.

The IMP is one of four regional sites of the distributed and expanded UBC MD Undergraduate Program, the others being the Northern Medical Program at UNBC, the Southern Medical Program at UBC-Okanagan and the Vancouver Fraser Medical Program at

UBC-Vancouver. The province-wide medical education program was the first of its kind in North America and has become a model for similar efforts elsewhere.

This year marks the UBC MD Undergraduate program's 10th anniversary.

The UBC Faculty of Medicine has launched a special website to celebrate 10 years of expanded and distributed medical education in British Columbia. Please visit the site to find out more <http://bcmd10.med.ubc.ca>



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