

# Reflecting on 2018



## UBC Department of Physical Therapy **2018 ANNUAL REPORT**



THE UNIVERSITY OF BRITISH COLUMBIA

Department of Physical Therapy  
Faculty of Medicine



Susan Murphy  
Department Head

## A message from the Department Head

I am so proud of the accomplishments made in 2018 by our students, alumni, faculty and staff. Their achievements are numerous and strengthen our connection to the community. I am pleased to provide details on a few of them here in this report.

Our researchers and their trainees are making discoveries and contributions that positively affect lives. Through their research, service and knowledge translation efforts they are helping others in clinical practice, research and health.

Former student, Josina Rhebergen joined a growing number of UBC graduates helping reduce the shortage of health care professionals in rural and remote communities.

A big thank you to all for a job well done!

# Clinical Education

We are fortunate to be supported by many excellent clinical educators that give of their time to share their expertise with our students on clinical placement. We are grateful to all of our sites and physical therapists who take on a mentorship role for our MPT students. Their knowledge, guidance, experience, understanding and leadership are a wonderful contribution to the 1,080 clinical hours each of our students spend on placements.

In 2012 our Clinical Education team began an awards program to recognize clinical educators who students feel have provided exceptional experiences. Three awards are given corresponding with different student placement levels (1a/1b, 2a/2b and 3a/3b).

## Clinical Educator Award winners

### Nomination Statement

Level 1:

**Ricardina Jara**  
Ponderosa Lodge



Ricardina's excellence was demonstrated from her initiative to bridge class-room learning with clinical education. She would frequently take me to the geriatric unit so that I could learn and practice my newly acquired gait analysis and posture skills on unique diseases. Her clinical supervision was flexible to accommodate my learning curve. For skills I was less experienced in, such as history-taking, she provided greater guidance, but with familiar skills such as mobility and transfers, she gave me more space and independence. Ricardina ensured I was reaching my objectives every step of the way.

Kamloops

Ricardina instilled in me the fundamentals of clinical reasoning and patient interaction that will now be evident in my future practice.

Level 2:

**Gina Galway**  
GF Strong  
Rehabilitation  
Centre



Gina encouraged me to generate my own hypotheses and identify what I thought were the most important contributing factors to a client's prognosis. This allowed me to practice being independent with the development of my clinical reasoning, which will be critical as I move closer to becoming an independent practitioner. I always felt like I had the support and supervision I needed.

Vancouver

Thanks to this practicum experience and Gina's mentorship, I am excited to become a physiotherapist.

Level 3:

**Kari Styles**  
CBI Health Centre



Kari demonstrated that PT is a career of learning; she herself enrolled in a 2-year continuing education program to improve her knowledge skills, even after 15+ years of practice. Not only did she teach me skills, and facilitate my practical learning, but she taught me how to engage in my independent studies through various resources (i.e. journal articles, social media, professional networking).

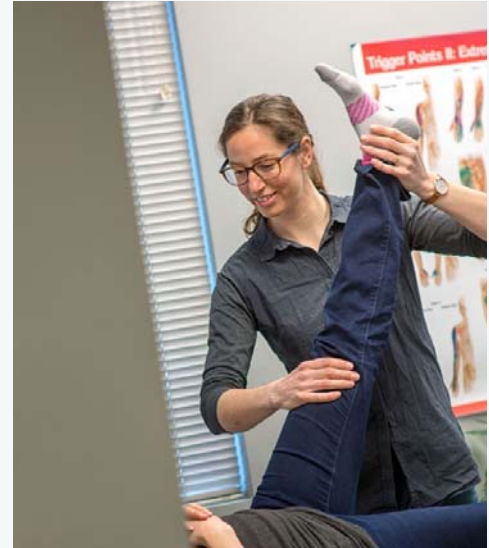
Victoria

Kari taught me skills that I now use every single day.

# Alumni

## Josina Rhebergen, MPT (class of 2015)

has been working as physical therapist in Smithers, B.C. since completing her training in rural communities across the province.



When Josina Rhebergen scrolls through her work schedule in the morning, she's always inspired by the people she helps. Rhebergen accepted a position in her hometown of Smithers shortly after completing her training.

"I love the north," she says. "And through the program I was able to see the opportunities for practice, as well as gain the skills and confidence to do it."

Building on the foundation of expanding UBC's medical program, the NRC initiative was launched in partnership with the University of Northern British Columbia to expose students to the unique challenges and rich rewards of rural practice.

From Haida Gwaii and Kitimat to Vernon and Prince George, Rhebergen trained in rural and remote communities across the province.

"We gained so much hands-on experience during our placements," she says. "You're exposed to a lot of different practice models that don't exist in urban centres."

Today, she works with a variety of patients recovering from stroke, postpartum, surgery, injury and those living with chronic pain. She also travels once a week to the neighbouring Gitanyow First Nation community – providing community members with physiotherapy services for the first time.

"Josina is one of a growing number of Faculty of Medicine graduates practicing in northern or rural communities, helping to address rural health inequities," says Robin Roots, a senior instructor with the Department of Physical Therapy and coordinator of clinical education for the NRC.

# Research



**Dr. Patricia Camp, Associate Professor**

Affiliated with the Centre for Heart Lung Innovation

Dr. Camp is working to improve Indigenous lung health . She has secured several grants which first enabled the community-building activities needed for this work, and then for research data collection which began in 2018.

“Given how rural and remote some Indigenous communities are, many people face barriers when it comes to even receiving a diagnosis of COPD, which requires a test that is only available in certain areas of the province,” says Camp. “By bringing in these tools, we’ll get a sense of just how prevalent COPD really is, and explore what community risk and mitigating factors may be at play.

Dr. Camp is partnering with Carrier Sekani Family Services (CSFS) to conduct community-based lung health research for Indigenous populations. Over the next five years, she will be working alongside Dr. Travis Holyk, executive director of research, primary care and strategic services at CSFS, the wider CSFS team, as well as community members, to assess the prevalence of COPD in the region . Additionally, her team will determine the feasibility of creating a pulmonary tele-rehabilitation program, what could become the first of its kind in the province.

## Research



### Dr. Naznin Virji-Babul, Associate Professor

Affiliated with the Djavad Mowafaghian Centre for Brain Health

Dr. Naznin Virji-Babul sought to determine if the phrase “watch and learn” held truth. She led a study published in 2018 in the journal [Neural Plasticity](#) which examined the differences in brain activity when people practiced performing a task or observed someone else performing the task. Her findings have implications for brain injury recovery, education, and more.

Observational learning has long been an important component of adapting to new information, but it typically occurs as an immersive experience, as part of larger social conditioning or in reinforcing behaviours in settings such as the classroom or the sporting arena. Learning by observation has been found to be an effective component of motor learning, but how that looks in the active brain has not been well understood. Dr. Virji-Babul and her team recently looked at the mechanisms behind observational learning to determine its effectiveness overall, speculating on its impact in recovery from injury, neurological impairment, or fatigue.

“When people visualize themselves performing a task they are familiar with, it stimulates the premotor cortex,” explains Dr. Virji-Babul. “We wanted to know what was happening when people observed or imagined performing a skill they did not have experience with to understand what happens in the brain.”

“We found that the group who had practiced the task demonstrated the most activity in the premotor cortex,” said Dr. Virji-Babul. The premotor cortex is an area of the brain that connects with the spinal cord and may play a role in planning movement or behaviour. “In the group that only observed the task before being asked to perform it, only one part of the cortex was active, and responses were not as fast and produced more errors than in the group who engaged in practice. No activation was shown in the control (no-practice) group.”

“When teaching someone a new task for the first time, observation is not enough,” says Dr. Virji-Babul. “Observation cannot replace physical practice in learning a new skill, which is an important consideration in engaging people in new motor learning activities, such as in rehabilitation exercises for stroke.”

# Research Productivity

## Trainee Supervision

In 2018 191 trainees were mentored by Department faculty members (19 Post-doctoral fellows, 28 PhD, 23 MSc [thesis], 106 MSc [non-thesis] and 15 undergraduates). Trainees supervised by our faculty members appeared as first authors on 33 peer reviewed research articles published in 2018; there were an additional 47 publications published in 2018 in which trainees served as co-authors. Trainees were supported in their training with over \$3,500,000\*\*

\*\* total amount through the tenure of the award

## Publications

In 2018 our faculty members published 130 peer reviewed articles and at the end of the year had an additional 20 in-press.

## Research Funding

In 2018 faculty members held over \$14,000,000 as nominated principal investigator; in 2018 they were successful in obtaining over \$3,400,000 in new funding to support research projects.

## Honours and Distinctions

- Four faculty members hold or have held *Canada Research Chairs*:
  - Tier II:** Lara Boyd, Linda Li, Teresa Liu-Ambrose
  - Tier I:** Janice Eng.
- Eight faculty members hold or have held *Michael Smith for Health Research Scholar awards* (Lara Boyd, Pat Camp, Janice Eng, Jordan Guenette, Michael Hunt, Linda Li, Teresa Liu-Ambrose and Alex Scott).
- Lara Boyd was awarded the *Distinguished Achievement Award for Overall Excellence –Senior Career* from the Faculty of Medicine.
- Pat Camp received a *Killam Research Fellowship*.
- A *Silver Quill Award* was given to Linda Li for lead authorship of the best manuscript of the year published in *Physiotherapy Canada*.
- Teresa Liu-Ambrose made a member of the *College of New Scholars, Artists and Scientists* in the Royal Society of Canada.