

## LETTER FROM THE PRINCIPAL INVESTIGATOR



Welcome back to the winter term and Happy New Year! I hope you had a rejuvenating and relaxing holiday break.

We kicked off Year 2 last fall with a good number of highlights. We welcomed our largest cohort of new trainees as well as new VADA Program faculty and Advisory Committee members. Our graduate course on the Foundations of Disease Analytics was realigned to better meet our goals and trainees are well into their skills development. We also infused our committees with new members, and I look forward to working with these new faculty.

Our winter term will be busier all around. Our graduate course on the Foundations of Disease Analytics will expose students to a number of technical and soft skills, such as in research communication and presentation to non-academic audiences. Our committees (see below) will be working hard at organizing the summer school, at overseeing practicum placements, as well as selecting a new cohort of VADA trainees. We expect it to be a full and exciting term.

Our students will also be involved in a number of events. A few will be attending and presenting at the ITCH Conference (Information Technology & Communications in Health) in Victoria, where they will get a chance to meet their counterparts from the University of Victoria with whom they engage with, mostly via videoconference. Lisa Lix, co-lead of the VADA Program, and Allison Poppel VADA Program Coordinator, will make an annual trip to visit VADA Program faculty and students at UVic and have timed it to align with a lecture in the Foundations course. Such in-person meetings are essential for strengthening the ties between our two campuses and to allow UVic students to meet our UManitoba leadership. I am also planning to attend the ITCH Conference, and I look forward to meeting some of the VADA Program faculty and students then.

I am very excited to see all the new developments that will take place this term and wish all our members the best of success in 2019.

## CREATE Knowledge Sharing

The leadership team has been connecting with other CREATE programs both locally (H2O CREATE) and nationally (CREATE DAV, CREATE TRIBE) to gain insights about successes and lessons learned. This process has provided great ideas that are being explored for implementation within the VADA Program. Stay tuned!

## Advisory Committee Update

The VADA Program is happy to announce and welcome Dr. Andriy Koval to the Advisory Committee. Dr. Koval is an Assistant Professor with the Department of Health Management and Informatics at the University of Central Florida. He has a background in quantitative methods and interest in data-driven models of human aging. He received his Ph.D. in Quantitative Methods in 2014 from Vanderbilt University, where he studied statistical modeling, design of graphical displays of information, and reproducible research. Interest in data-driven narratives of human aging lead Dr. Koval to explore the use of

electronic health records (EHRs) for research and improvement of patient care. Since October 2015 he has worked with Dr. Kenneth Moselle, the director of the [Applied Clinical Research Unit \(ACRU\)](#) of Vancouver Island Health Authority (VIHA) on curating the transformation of VIHA's EHR into an analyzable form and creating opportunities for academic and clinical researchers to work with these data in responsible and reproducible way. Dr. Koval's program proposes to develop a system for population health surveillance that focuses on chronic diseases, with particular focus on mental health and substance use (MHSU) conditions.



## 2018/19 Committees

### Summer School Committee

The Summer School Committee organizes and oversees the annual summer school, liaising with the George and Fay Yee Centre for Healthcare Innovation at the University of Manitoba to offer this weeklong intensive training event. This includes recruiting speakers, arranging schedule activities and informal networking opportunities, planning the Big Data Challenge, and deciding on the technical and professional skills that will be the focus of the week. After the summer school has been completed, the committee also gathers to review evaluations by faculty and students. This year's Committee is comprised of:

- Dr. Lisa Lix – University of Manitoba - Chair
- Dr. Xuekui Zhang – University of Victoria
- Dr. Alex Thomo – University of Victoria
- Dr. Gary Van Domselaar – University of Manitoba
- Naomi Hamm – University of Manitoba
- Tom Arjannikov – University of Victoria

### Internship/Lab Exchange Committee

The Internship/Lab Exchange Committee identifies potential partners, builds and maintains relationships with them and matches them to interested students. This Committee also evaluates the processes around and outcomes of the internship. This year's Committee is comprised of:

- Dr. Pourang Irani – University of Manitoba - Chair
- Dr. Laura Cowen – University of Victoria
- Dr. Elizabeth Borycki – University of Victoria
- Dr. Farouk Nathoo – University of Victoria
- Dr. Julian Arino – University of Manitoba

### Recruitment & Selection Committee

The Recruitment & Selection Committee identifies venues for recruiting students and faculty to the VADA Program. This Committee also establishes processes and criteria for evaluation of candidates and recommends new and existing students to the Program. This year's Committee is comprised of:

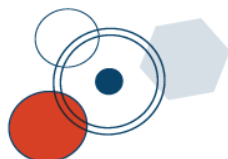
- Dr. Jason Leboe-McGowan – University of Manitoba - Chair
- Dr. Pingzhao Hu – University of Manitoba
- Dr. Andre Kushniruk – University of Victoria
- Dr. George Tzanetakis – University of Victoria
- Dr. Karen Kobayashi – University of Victoria

## VADA Program in the News!

- The VADA Program was featured in **UM Today**. MSc trainee Rayhan Shikder was interviewed about his internship experiences, which can be found [here](#).
- PhD trainee Olawale Ayilara was interviewed about his internship with the Canadian Network of Observational Drug Effect Studies (CNODES). The newsletter containing this interview can be found [here](#).

## 2019 ITCH Conference

The 2019 Information Technology and Communications in Health (ITCH) Conference will take place February 14-17, 2019 in Victoria, BC. The conference is hosted by the University of Victoria's School of Health Information Science. The theme is: *From Research to Practice: Improving Usability, Safety and Patient Outcomes with Health Information Technology*. For more information visit [uvic.ca/hsd/itch](http://uvic.ca/hsd/itch)



The University of Victoria leadership (Drs. Andre Kushniruk and Elizabeth Borycki) will be attending the conference, as along with Dr. Pourang Irani from the University of Manitoba. Trainees Ali Neshati and Kenny Hong will be presenting their research at the conference.

## VADA Program Info Sessions

Information sessions will be held at the University of Manitoba's Fort Garry Campus on January 21<sup>st</sup> and the Bannatyne campus on February 15<sup>th</sup>. These sessions are open to interested faculty and students who would like to learn more about the Program and the application process. An information session is also planned for the University of Victoria on February 1.

## Conference Funding Opportunities

The VADA Program has funding available for trainees to attend conferences. Up to \$500 annually has been allotted for eligible conference registration, travel and related expenses. For more information please contact the Program Coordinator ([vada.program@chimb.ca](mailto:vada.program@chimb.ca)).

## Applications for the 2019/20 Academic Year

[vada.cs.umanitoba.ca](http://vada.cs.umanitoba.ca)

Applications to the VADA Program for the 2019/20 academic year are available on the VADA Program website and are **due by March 29<sup>th</sup> 2019**. Applicants must submit:

- a completed application form
- a curriculum vitae
- two letters of reference
- transcript(s)

Applicants must be registered or accepted in selected graduate programs at the University of Manitoba or University of Victoria by September 2019 and have an advisor who is a member of the VADA Program team.

## Recent Student Publications

Zhang L, Lix LM, **Ayilara O**, Sawatzky R, Bohm ER. The effect of multimorbidity on changes in health-related quality of life following hip and knee arthroplasty. *The Bone & Joint Journal*. 2018;100-B(9):1168-1174. doi:10.1302/0301-620x.100b9.bjj-2017-1372.r1.

**Ayilara O**, Bohm E, Yan L, Sajobi T, Sawatzky R, Lix L. Auxiliary information in multiple imputation models: Effects on estimated change in patient-reported outcomes from clinical registry data. *Annual Conference of the International Society for Quality of Life Research (ISOQOL)*, Dublin, Ireland, October 24-27, 2018.

Fouad Alallah, **Ali Neshati**, Yumiko Sakamoto, Khalad Hasan, Edward Lank, Andrea Bunt and Pourang Irani. (2018). Performer vs. Observer: Whose Comfort Level Should We Consider when Examining the Social Acceptability of Input Modalities for Head-Worn Display? *Virtual Reality Software and Technology Conference*. Tokyo, Japan, November 28-December 1, 2018.

## To Appear Soon

**MM Islam**, K Jeffers, AM Hogan, Q Liu, R Davis, S Cardona, **P Hu** (2018). Deep neural network model for predicting gene activity using three-dimensional structures of chemical compounds. In *Joint Statistical Meeting Proceedings, Section on Statistical Learning and Data Science*. Vancouver BC: American Statistical Association.

**Ali Neshati**, Yumiko Sakamoto and Pourang Irani. (2018). Challenges in Displaying Health Data on Small Smartwatch Screens. *Information and Technology in Health Conference*. Victoria, BC, February 14-17, 2019.

William Delamare, **Ali Neshati**, Pourang Irani, Xiangshi Ren. (2019). An Analytic Model for Time Efficient Personal Hierarchies. In *CHI conference on Human Factors in Computing Systems Proceedings*. May 4-9, 2019, Glasgow, Scotland UK. ACM, New York, NY, USA, Article 4, 11 pages. <https://doi.org/10.1145/3290605.3300598>

Yurii Vasyukiv, **Ali Neshati**, Yumiko Sakamoto, Randy Gomez, Keisuke Nakamura and Pourang Irani. (2018). Smart home interactions for people with reduced hand mobility using subtle EMG-signal gestures. *Information and Technology in Health Conference*. Victoria BC.

## VADA PROGRAM SUMMER SCHOOL

June 10<sup>th</sup> – 14<sup>th</sup> 2019 | Winnipeg, MB

The 2019 VADA Program Summer School will be held at the George and Fay Yee Centre for Healthcare Innovation, University of Manitoba. Watch for more details coming soon!