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I am proud to share our successes and achievements in this year’s annual report for the Centre for Health Evaluation and Outcome Sciences (CHEOS). I welcome this opportunity to highlight our achievements and to recognize the outstanding work of our members.

CHEOS continues to facilitate clinical research and training in conjunction with the University of British Columbia (UBC) Faculty of Medicine and the Providence Health Care Research Institute (PHCRI), sharing with them their mandate to invest in high-quality research that informs policy and practice.

We are pleased to welcome four new Scientists to the Centre this year: Dr. Rita McCracken, Clinical Assistant Professor at UBC and Associate Head of Providence Health Care’s (PHC) Department of Family and Community Medicine; Dr. Beth Snow, Program Evaluation Lead for the Clinical and Systems Transformation Project and Adjunct Professor at Simon Fraser University (SFU); Dr. Mark Harrison, Assistant Professor in the Faculty of Pharmaceutical Sciences at UBC; and Dr. Greg Werker, Full-time Lecturer at the UBC Sauder School of Business. These investigators bring fresh perspectives to our already multidisciplinary group of researchers.

Dr. Mark Harrison was named the inaugural recipient of the UBC Professorship in Sustainable Health Care. UBC’s Faculty of Pharmaceutical Sciences established the Initiative for Sustainable Health Care, which is supported by industry, government, and academia, to help provide the evidence base to ensure effective and cost-efficient health care delivery in British Columbia and beyond. Congratulations, Mark!

The Inner City Youth Team, including Drs. Chris Richardson and Steve Mathias, had a banner year. They expanded their services, including opening a centralized care centre on Granville Street to provide integrated primary care with mental health and substance use services for youth under 24.

I would also like to congratulate Dr. Adeera Levin, who received two accolades: the Michael Smith Foundation for Health Research (MSFHR) – Aubrey J. Tingle Prize from LifeSciences B.C., and an appointment to the Order of Canada, one of Canada’s highest civilian honours. Her leadership in kidney research and treatment has been monumental. Acknowledgement is also warranted for Drs. Sean Barbour, Jagbir Gill, and Martha Mackay, who received 2014 Scholar Awards from MSFHR in the Health Sciences research pillar.

Our centre is dedicated to advancing the influence of personalized medicine on health care. Dr. Daphne Ling, recent MSFHR Trainee Award recipient, is CHEOS’ inaugural Postdoctoral Fellow in Personalized Medicine. We hope to expand our expertise in this area of research in the coming years.

As always, CHEOS continues to assist other investigators in their work through our services division. Dr. Nathalie Beliveau joined CHEOS and the CIHR Canadian HIV Trials Network in early 2015 as Chief Clinical Research Officer.

As we continue to inform patient care, the dedication and enthusiasm of our team members is a constant source of pride. I would like to take a moment to thank those who contribute to the success of our organization: staff, trainees, and investigators. Their unique combination of skills and knowledge allows CHEOS to continue to be a driving force in transforming the health care system through scientific and clinical discovery.

Sincerely,

Aslam Anis, PhD, FCAHS
Director, CHEOS
Four new investigators joined the Centre this year.

**Rita McCracken, MD, CCFP, PhD (Candidate)**

We are pleased to welcome Dr. Rita McCracken as a new CHEOS Scientist. In addition to her appointment as Clinical Assistant Professor in UBC’s Faculty of Medicine, Dr. McCracken is the Associate Head of PHC’s Department of Family and Community Medicine, where she works with clinical and operations colleagues to improve acute care services and their interface with the community.

After working for ten years as a human resources professional, Dr. McCracken is now a family physician, providing nursing home care to residents at St. Vincent’s Langara. She also supervises and mentors Family Medicine residents at St. Paul’s Hospital during their second-year research projects. She completed medical school at the University of Calgary, her Family Practice Residency at St. Paul’s, and is currently a PhD Candidate in Experimental Medicine at UBC studying polypharmacy in frail elders.

**M. Elizabeth Snow, PhD, MBA, CE**

Dr. Beth Snow joined CHEOS in 2014. She is the Program Evaluation Lead for the Clinical and Systems Transformation Project, and an Adjunct Professor at SFU. She holds a Credentialed Evaluator (CE) designation from the Canadian Evaluation Society.

Dr. Snow earned her M.Sc. in Human Biology and Nutritional Sciences from the University of Guelph, a PhD in Human Nutrition from UBC, and most recently, her MBA from the Sauder School of Business at UBC. Her work focuses on bridging the gap between research and evaluation evidence and health services delivery, with a strong interest in equity. Previous roles include operating a transdisciplinary research training program at the B.C. Centre of Excellence for Women’s Health and serving as the Evaluation Specialist in Public Health for Fraser Health.

**Mark Harrison, PhD, M.Sc.**

Dr. Mark Harrison was also appointed as a CHEOS Scientist in 2014. He is an Assistant Professor in the Faculty of Pharmaceutical Sciences at UBC, where he leads the faculty’s initiative for Sustainable Health Care. He is also affiliated with the faculty’s Collaboration for Outcomes Research and Evaluation (CORE).

Dr. Harrison’s main methodological and research interests lie in the measurement and valuation of health, preferences for health care interventions, and health technology and policy assessment. His research focuses on evaluation/re-evaluation of the type of health care provided, the point in the treatment pathway, and the way in which care is delivered. Dr. Harrison completed his M.Sc. at the University of Edinburgh, and his PhD at the University of Manchester, both in Epidemiology.

**Greg Werker, PhD**

After completing his Postdoctoral Fellowship at CHÉOS, Dr. Greg Werker was appointed as a Scientist. His interests lie in operations research in health care, with a focus on strategic planning in mental health and addictions treatment. Other areas of interest include health system optimization, network modeling of patient flow through treatment pathways, and the queuing theory and optimization tools that support these efforts.

Dr. Werker is a Lecturer in the Operations and Logistics Division at the Sauder School of Business at UBC, where he teaches students on introductory statistics and quantitative decision-making. He leads MBA courses on introductory operations, supply-chain analytics, and product and services management. Dr. Werker has a PhD in Management Science from the Sauder School of Business, and holds an M.Eng. in Operations Research from Cornell University. In the past, he has worked as an operations research consultant and a software engineer.
Our Research

Our research spans numerous clinical areas such as cardiopulmonary health, HIV, nephrology, emergency medicine, and rheumatology. We also focus on various psychosocial and structural determinants of health, including mental health, addictions, ethnocultural health disparities, homelessness, and urban health.

Inner City Youth Program expands services for Vancouver’s youth

The Inner City Youth (ICY) Program, led by Dr. Steve Mathias, CHÉOS Scientist and the Program’s Medical Manager, has had an exceptional year. In April 2014, the program, which treats homeless and tenuously housed youth and young adults aged 16 to 24 with undiagnosed or untreated mental illness and/or addiction, received $750,000 from the B.C. Ministry of Health. This financial contribution, along with the Ministry’s commitment to support programs and services assisting those with severe mental health or substance use issues, led to the expansion of the ICY Program.

A six-bed home opened in the Renfrew Heights neighbourhood in the fall of 2014, followed by the Granville Youth Health Centre in March 2015. The Centre was developed as an innovative youth-friendly space that integrates primary care with mental health, substance use, and psychosocial supports for youth. Services can be accessed via referral and open drop-ins (see http://innercityyouth.ca) and includes an intensive case management program, primary care, counseling, independent living skills (financial planning, meal planning, and food preparation), vocational training, income assistance, and a range of housing supports.

The ICY team was recognized for their achievements in June 2014, when they received the 2014 Top Innovation – Affiliate Award from the Health Employers Association of B.C. This award is given to a project that has made efforts that result in lasting, positive change, while continually seeking improvement, demonstrating tangible results, and using best practices.

The Program also conducts research on addiction and mental health in their treatment cohort. CHÉOS Scientist Dr. Chris Richardson is the ICY Research Lead. Current projects include investigating the impact of the Take Home Naloxone Program on youth; and evaluating how well a supported employment program led by occupational therapists helps youth find meaningful jobs.

Patients who are discharged from hospital to transition back into the community after having an adverse cardiac event often experience poor outcomes and are vulnerable to readmission. As many as 30 per cent of patients do not take the medications that are prescribed to them during their hospital stay.

In the first 60 days after being discharged, investigators will send participants text messages about behaviours related to their health and recovery, including follow-up care, healthy lifestyle tips, and medication use. Researchers hope to reduce the number of hospital readmissions and improve quality of life in this cohort.

Walkalong: A web portal to empower youth

The CHÉOS Addiction and Concurrent Disorders Group, led by Dr. Michael Krausz, have created WalkAlong, a mental health portal aimed at improving mental wellness in young Canadians. The website contains interactive, personalized measurement tools; self-help exercises; and online and local resources.

Users can track their mental health using the Life Chart feature; hear stories and experiences of others; and read the latest news about mental health and related research. The platform has almost 2,500 registered users. Almost 60 per cent of all visitors to the site are Canadian, but there are a large number of users from the U.S., Brazil, U.K., Australia, China, and Germany.

An updated version of WalkAlong is scheduled to launch soon, which includes additional content focused on substance use and trauma. The team is currently developing new digital tools to provide personalized feedback for users, and is intending to pilot a game-based tool focusing on stress management. Funding for this project was provided through Bell Canada’s Let’s Talk Initiative.
Making inroads in personalized medicine

Research in personalized medicine is poised to change the future of health care, and CHÉOS is dedicated to advancing work and knowledge translation in this field.

A personalized medicine approach to health care incorporates genetic information into treatment decisions, resulting in an individualized approach to care. Moving away from a ‘one-size-fits-all’ method of treatment, personalized medicine aims to deliver a tailored intervention by validating diagnostics based on biomarkers, targets, and genomic signatures. This can include determining disease risk, or prescribing medication more effectively, with the goal of better medical decisions and fewer mistakes.

In early 2015, Dr. Daphne Ling began her joint appointment as a Postdoctoral Fellow in Personalized Medicine with CHÉOS and the Faculty of Pharmaceutical Sciences at UBC. Dr. Ling completed her PhD in Epidemiology at McGill University and has conducted research in the U.S., Canada, South Africa, and Taiwan. Prior to joining CHÉOS, she worked as an epidemiologist at the B.C. Centre for Disease Control in the areas of HIV, STI, and TB.

Dr. Ling is investigating the health economics of personalized medicine. Funded by a MSFHR Postdoctoral Fellowship Award, she will evaluate the cost-effectiveness of biomarkers that can predict response to treatment with biologics in patients with rheumatoid arthritis. Biologics account for the largest proportion of expenditures in the public drug program in Canada. Thus, economic evaluations of a personalized approach in this group of patients will be crucial as we continue to operate in challenging fiscal climates.

CHÉOS has been involved in knowledge translation activities surrounding personalized medicine. In January, Dr. Larry Lynd participated in a public forum on personalized medicine, hosted by the UBC Life Sciences Institute. The goal of the forum was to discuss how environmental, biological, and behavioural factors impact health. The Centre was also a sponsor of the Personalized Medicine Summit, which took place in June 2015.

Alarming findings about rates of Type 2 diabetes in British Columbians

In January, new research by Dr. Nadia Khan and colleagues found that Type 2 diabetes has drastically increased in people under 30, surpassing Type 1 diabetes.

The findings, published in the journal Diabetes Medicine, found that the majority of young people under 30 with diabetes have Type 2 diabetes. In White youth with diabetes, 62 per cent have Type 2, among South Asian youth that number increases to 86 per cent, and among Chinese youth it is 87 per cent.

Investigators recruited 712 South Asian, 498 Chinese and 6,176 “White” (mainly Caucasian, with a few from Aboriginal and minority groups) people in B.C. under the age of 30 with diabetes.

Researchers also uncovered alarming findings about rates of Type 2 diabetes cases, especially for South Asians, who had higher incidences of Type 2 diabetes compared with both Chinese and White people. In those aged 20 to 29, new cases of Type 2 diabetes were 2.2 times higher in South Asians than in White people and 3.1 times higher in South Asians compared to Chinese people.

South Asians had higher incidences of Type 2 diabetes compared with both Chinese and White people.

Type 2 diabetes, caused mostly by obesity and physical inactivity, has generally been considered a disease of older adults, typically occurring in people 35 years and older. Although the rates for youth remain much lower than in older patients, Type 2 diabetes is a growing health problem, doubling the risk of heart disease, kidney disease, and is a significant risk factor for early death. Previous studies have demonstrated that younger people are experiencing rapid increases in cases of Type 2 diabetes—45 per cent of new diabetes cases in adolescents are Type 2, compared to 3 per cent 20 years ago.

Researchers echo current Clinical Practice Guidelines, which recommend that screening for Type 2 diabetes should start at age 40 in the general population; they add that based on the results of the study, screening in high-risk South Asian people should start at younger ages.

The study findings garnered interest from local media outlets, including Global B.C., The Vancouver Sun, Fairchild Television, and CBC Vancouver.

According to research by Dr. Nadia Khan and colleagues, 45 per cent of new diabetes cases in adolescents are Type 2.

Children of residential school survivors are at increased risk of sexual assault

A new study from The Cedar Project, published in early 2015, is the first in Canada to show that survivors of sexual abuse and children of residential school survivors are at a disproportionately higher risk of sexual assault.

“Their trauma needs special care — not just numbers. They are our children, our relations.” – Kukpi7 (Chief) Wayne Christian

The study aimed to identify risk factors for sexual assault among young Aboriginal women who use drugs. Researchers found that women who had a parent who attended a residential school were 2.35 times more likely to be sexually assaulted. Women were also nearly 10 times more likely to be sexually assaulted later in life if they had a history of childhood sexual abuse.

The Cedar Project is a partnership between Indigenous leaders and health researchers to examine vulnerability to HIV among Indigenous people who use drugs in Prince George and Vancouver. The findings from this study, recently published in the journal Violence Against Women, point to alarming patterns of historical trauma, childhood sexual abuse, and vulnerability to sexual assault among at-risk Aboriginal young women in B.C.

Researchers followed a group of 259 young Aboriginal women who use drugs (aged 14–30) in Vancouver and Prince George over a 7-year period. During the study period, 28 per cent of participants reported that they were sexually assaulted, and of those, 41 per cent were assaulted more than once. The study also found that only 20 per cent of those assaulted received any type of counselling.

Kukpi7 (Chief) Wayne Christian (Splatsts Secwepemc Nation) and other Indigenous leaders in B.C. are calling for an integrated and trauma-informed response to addressing childhood sexual abuse and sexual violence in their communities.

“We honour our Elders who endured the trauma of residential schools, their sacrifices, courage, and determination to cope and survive for those yet unborn,” said Kukpi7 Christian, who is also Co-Principal Investigator of The Cedar Project. “However, these statistics are more than just numbers. They are our children, our relations.”

“Cedar Project research has repeatedly demonstrated relationships between historical traumas and negative health outcomes later in life, including HIV and hepatitis C infection,” said Dr. Patricia Spittal, CHÉOS Scientist and Principal Investigator of The Cedar Project. “We have to support the children who are currently being hurt, and develop trauma-informed addictions care for young people who are still coping with the pain of sexual violence.”

The study was reported on by CBC News The National, The Globe and Mail, The Vancouver Sun, and more.
Patient-reported outcome measures (PROMs) and patient-reported experience measures (PREMs) have become an increasingly important tool in capturing patient perspectives. PROMs focus on individualized patient care, by evaluating patient outcomes in a clinical setting. Similarly, PREMs focus on the evaluation of patient experiences, unedited by clinical interpretation.

Over the last three decades, research tools relating directly to patient-oriented care have been developed to identify and improve best practices. PROMs and PREMs are integrating patient perceptions with ongoing research, and are becoming a valued aspect of clinical decision-making.

In recent years, the U.S., U.K., and several European countries have implemented patient-reported measures in some areas of health care. Locally, patient engagement is one of the cornerstones of the CIHR Strategy for Patient-Oriented Research (SPOR). SPOR focuses on several key goals, including the identification of PROMs priorities, the creation of infrastructure to support PROMs research, and the training and recruitment of health care professionals in the field.

Several CHEOS investigators are contributing to the growing body of patient-oriented research. Dr. Rick Sawatzky, a Canada Research Chair in Patient-Reported Outcomes, has been examining the validity and utility of PROMs and PREMs in assessing patient and caregiver well-being. Dr. Sawatzky’s work has focused on exploring various types of PROMs, and characterizing their key strengths and limitations. This includes evaluating the use of electronically-administered PROMs as practice support tools in clinical practice to enhance patient-centred care in hospital and home care services.

CHEOS and UBC School of Population and Public Health Postdoctoral Fellow Dr. Anne Gadermann has also been applying patient-reported measures to her research. Focused on tracing child development in the middle years, Dr. Gadermann and colleagues developed the Middle Years Development Instrument (MDI) as a tool for self-reported data collection. Dr. Gadermann’s work focuses on developing tools such as the MDI, testing their validity, and evaluating their psychometric robustness.

Drs. Anita Palepu and Gadermann have worked with PROMs as part of the Health and Housing in Transition study to evaluate the self-reported physical and mental health status and quality of life of individuals who are homeless or vulnerably housed. As part of this project, they have been involved in the development of the Quality of Life for Homeless and Hard-to-House Individuals Inventory to assess subjective quality of life in this population.

Drs. Sawatzky (as Principal Investigator) and Gadermann (as Co-Investigator) have recently received funding to assess statistical measures in patient-oriented research. Specifically, they will work with investigators and knowledge users across Canada to develop methods to test for the effects of response shift (changing interpretations over time) and differential item functioning (varying interpretations of questions among patients with similar health outcomes) on PROM results, with the goal of improving accuracy in interpreting the patient response. This research relates to Dr. Sawatzky’s previous and ongoing work on the use of latent variable mixture models to evaluate the implications of diversity in the population with respect to the measurement of patient-reported outcomes.

CHEOS’ Pharmacoeconomics Program has also conducted research exploring the use of PROMs. Dr. Nick Bansback is working on integrating pre-existing PROMs data into decision aids to help patients make more informed decisions about their treatments. The hope is that by providing individualized outcomes from patients who have previously used the treatment under consideration, patients will have a better understanding of what they can expect. Additionally, Dr. Mark Harrison has explored the use of PROMs in evaluating surgical outcomes. His findings were published in the journal Health Economics and demonstrate that patients’ outcomes worsened as they waited for surgery.

PROMs and PREMs are poised to become an essential feature of the clinical setting as health care moves towards a more personalized approach.
Awards

Below is a sample of awards and recognitions received by CHÉOS scientists and trainees over the past year.

Congratulations to Scientists Drs. Sean Barbour, Jagbir Gill, and Martha Mackay, who secured 2014 Scholar Awards from MSFHR in the Health Services research pillar.

Drs. John Gill and Jagbir Gill, with Drs. Caren Rose and James Dong, placed first in the B.C. Kidney Days Clinical Research poster competition with their entry, “Multiple wait listing: The advantage and the advantaged.”

Dr. Larry Lynd was promoted to the rank of Full Professor in the UBC Faculty of Pharmaceutical Sciences and appointed as Director for CORE.

UBC awarded Dr. Devin Harris with the 2014 Innovation in CME-CPD Award. This achievement is given in recognition of outstanding innovation and/or creativity with original work in the area of CME/CPD programming.

Dr. Steve Mathias and the PHC Inner City Youth Program were recognized with the 2014 Top Innovation - Affiliate Award from the Health Employers Association of B.C.

Dr. Linda Li received the Vancouver Coastal Health Research Institute’s 2014 Innovation and Translational Research Award.

Dr. Michael Krausz accepted the 2014 Healthy City for All Individual Award of Excellence from the City of Vancouver. The award pays tribute to outstanding leadership by an individual or organization in working towards creating a healthier city.

CIHR presented Dr. Nick Bansback with a New Investigator Award. This five-year funding will allow Dr. Bansback to explore research on the economics of patient-centred care.

CHÉOS Scientist Dr. Kamran Shojania received the St. Paul’s Hospital Howard B. Stein and UBC Master Teacher Award in recognition of his leadership in rheumatology training.

The Canadian Public Health Association provided CHÉOS Scientist Dr. Jim Frankish with the 2014 Ron Draper Health Promotion Award.

Arthritis Research Canada’s Arthritis Patients Advisory Board (APAB) presented Dr. Linda Li with the 2014 APAB Researcher Recognition Award for Outstanding Patient Inclusion.

CHÉOS Scientist Dr. Adeera Levin (left) was awarded the 2014 Medal for Research Excellence from the Kidney Foundation of Canada. The medal is conferred upon a Canadian resident for their excellence in national and international kidney-related research. Dr. Levin was also granted the MSFHR – Aubrey J. Tingle Prize from Life-Sciences B.C.

The award is one of nine bestowed upon individuals and companies who have made a significant contribution to research and excellence in B.C.’s life sciences industry. Finally, Dr. Levin was appointed to the Order of Canada, one of Canada’s highest civilian honours, for her leadership in the treatment of kidney disease.

Congratulations to CHÉOS Scientist Dr. Anita Palepu, who is the 2015 recipient of the St. Paul’s Hospital Howard B. Stein and UBC Master Teacher Award.

Colorectal Surgeons Drs. Carl Brown, Manoj Raval, P. Terry Phang, and colleagues earned a Canadian Journal of Surgery Editor’s Choice Award at the 2014 Canadian Surgery Forum for their abstract, “To suture or not: A multicentre, randomized, controlled trial of open vs. closed management of full thickness transanal endoscopic microsurgery (TEM) rectal lesion resections.”

Dr. Rita McCracken obtained a CIHR training grant for the Transdisciplinary Understanding and Training on Research—Primary Health Care (TUTOR-PHC) program. This is a one-year, national interdisciplinary program that includes a three-day symposium and online workshops.

PhD Candidate Alden Blair (Supervisor: Dr. Patricia Spittal) received an R36 Dissertation Award from the U.S. National Institutes of Health: National Institute on Drug Abuse for his project, “Substance use, trauma, and HIV: Untangling the complex web of health vulnerabilities in post-conflict Northern Uganda.”

PhD Student Stephanie Harvard (Supervisors: Drs. Aslam Anis & Bruno Fautrel) won first place in the 2014 UBC Three Minute Thesis (3MT) competition. Ms. Harvard went on to place second in the Western Canada 3MT competition.
Clinical Research Support Services

CHÉOS provides clinical research expertise to ensure that investigators, researchers, and study coordinators engage in high-quality clinical trials. From design to execution, we support research from a broad array of therapeutic disciplines and actively manage projects that ultimately contribute towards the betterment of our health systems at the local, national, and international levels.

During this past year, CHÉOS was enlisted as one of the host institutions for the provincial eHRR (electronic health records in research) Seminar Series. The purpose of this series is to promote awareness of opportunities and challenges in using electronic health records (eHR) for research. These talks reach a diverse target audience of researchers, clinicians, and administrators, and showcase real examples from leaders in the field.

In addition to contributing towards provincial initiatives, CHÉOS offers research support services for both investigator-led and sponsored endeavours. These services can be accessed via the Research Request Form on our website.

CHÉOS support research services include (but are not limited to):

- **Access to Clinical Research Training** via the Collaborative Institutional Training Initiative (CITI), which has been facilitated as part of CHÉOS’ representation on the Network of Networks (N2).
- **Clinical Trial Management**: Dedicated clinical research personnel and project managers ensure the seamless operation of your clinical research endeavour (both industry-sponsored and investigator-initiated).
- **Grant Facilitation**: We offer a number of services in this area, including budget and methodological consultations to help with the preparation of grant applications/submissions.
- **Data Management**: A dedicated team of data experts provides support with database development, data entry services, case report forms/questionnaire creation, randomization, and drug management systems creation.
- **Study Methodology and Statistics**: Our statisticians will perform a needs assessment in order to provide specialized support for statistical analyses, study design and methodology, randomization schemes and data analysis, including developing and carrying out a statistical analysis plan.

**Health Economics**: Decision-analysis services range from personalized medicine and health technology assessments to pharmacoeconomics, cost-effectiveness analyses, and assessing value of lost productivity.

- **Regulatory Affairs**: CHÉOS has regulatory and quality assurance/quality control experts who deliver guidance regarding ethics applications and audit preparedness, assist with navigating regulations from the various governing authorities, and ensure that your research meets industry/academic standards.
- **Programme Evaluation**: Our evaluators will work with program stakeholders to develop logic models that illustrate a program’s theory of change, design evaluations for measuring desired metrics, formulate assessment questions, analyze data, and make recommendations to determine if processes and outcomes are occurring as intended.

**Events Hosted and Organized**

- **May 7, 2014**: CRPD: Getting Started in Project Management
  - Topics included scope and time management concepts for project development, communication, and risk management strategies.
- **June 6, 2014**: CRPD: Clinical Trials Research Management Symposium
  - This session spoke to the challenges and developments in conducting Canadian Clinical Trials; including the newly piloted Consent to Contact for Research, as well as lessons learned from recent audits.
- **October 15, 2014**: CRPD: Budgeting Basics
  - This workshop covered budget development and recommendations for maintaining an effective research project budget.
- **October 16, 2014**: PCH Practice Based Research Challenge
  - This workshop provided an enhanced understanding of key concepts of emotional intelligence on organizational performance and commitment.

**New Staff: Dr. Nathalie Beliveau**

Dr. Nathalie Beliveau joined the CIHR Canadian HIV Trials Network and CHÉOS in January 2015 as Chief Clinical Research Officer. Her research interests have focused on organization behaviour and program development, specifically looking at concepts of emotional intelligence on organizational performance and commitment.

Dr. Beliveau’s core experience includes providing leadership and oversight for Clinical Program Monitoring FSP’s in Europe, Canada, and South America. Additional scope includes program resourcing, program financials, working with internal stakeholders, and functions. She has wide experience in KPI development and metric management, setting up globalized/standardized program specific plans, account/client management, and building FSP platforms.
Our Work in Progress (WiP) Seminar Series runs on alternate Wednesdays from September to June. WiP seminars allow speakers to showcase current and upcoming research and engage in dialogue with fellow investigators. Below is a sample of the seminars offered in 2014–2015:

**September 24, 2014: Dr. Sean Barbour**  
“Using Pathology to Predict Outcomes in IgA Nephropathy”

**November 19, 2014: Dr. Brian Grunau**  
“Out-Of-Hospital Cardiac Arrest: Time Until Return of Spontaneous Circulation, and Implications for Neurological Outcomes and Decisions of Transport”

**December 3, 2014: Dr. Nadia Khan**  
“Ethnic Differences in Diabetes Medication: Prescribing, Adherence, and Outcomes”

**April 22, 2015: Dr. Daphne Ling**  
“Going Beyond Sensitivity and Specificity to Replace the TB Skin Test”

**Hires and Departures**

CHÉOS welcomed the following staff this year: Jaafar Aghajanian, Victoria Alcuaz, Nathalie Beliveau, Tuan Le, Daphne Ling, Lucia Milosavljevic, Tina Mohammadi, Shawna Morrison, Stephen Pan, Shilana Premj, Javiera Pumarino, Olga Ruiz-Llaguno, Beth Snow, Mandana Sooodehl, Richa Sharma, Jonathan Stiansen, Gina Willis, Rana Young, and David Zamar.

We would like to thank the following individuals for their contributions to the Centre: Sindji Addorso, Tracey Chang, Mary Chiorn, Jo-An Donner, James Farwell, Nicole Gehring, Matthew Grantlund, Roxanne Joyce, Shehan Kay, Allison Laing, Pearl Lau, Rebecca Lee, Jessica Locheed, Rachel McKay, Jasmina Memetovic, Sarah Munro, Erika Neison, Judith Neville, Adam Peets, Mushfigur Rahman, Zahra Remutala, Cynthia Russell, Lindsay Seaby, Jillian Watson, Kessie Xu, Shahin Zangenehpour, and Derek Zhang.

**Trainees**

CHÉOS also hosts graduate students and postdoctoral fellows in the health sciences, with trainees from UBC’s School of Population and Public Health, Faculty of Pharmaceutical Sciences, Sauder School of Business, and clinical departments within the Faculty of Medicine supporting research activities.

**Trainees—Postdoctoral Fellows**

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<thead>
<tr>
<th>Name</th>
<th>Program Type</th>
<th>Supervisor (Co-Supervisor)</th>
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<tbody>
<tr>
<td>Chakrapani Balijepalli</td>
<td>Postdoctoral Fellow</td>
<td>Karin Humphries</td>
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<tr>
<td>Nathan Brunner</td>
<td>Postdoctoral Fellow</td>
<td>Nadia Khan</td>
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<tr>
<td>Chris Cheung</td>
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<td>Brian Grunau</td>
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<td>Fiona Choi</td>
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<td>Michael Krausz</td>
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<td>Gholam Douglas</td>
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<td>Larry Lynd</td>
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<td>Nick Dragojlovic</td>
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<tr>
<td>Mine Gadeiramnn</td>
<td>Postdoctoral Fellow</td>
<td>Anita Palepu</td>
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<td>Sobhna Thangaraju</td>
<td>Postdoctoral Fellow</td>
<td>John Gill</td>
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<td>Daphne Ling</td>
<td>Postdoctoral Fellow</td>
<td>Larry Lynd</td>
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<td>Rachel Magarinos-Torres</td>
<td>Honorary Postdoctoral Fellow</td>
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<td>Ara Russell</td>
<td>Postdoctoral Fellow</td>
<td>Nick Sawatzky</td>
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<td>Louise Strazman</td>
<td>Research Fellow</td>
<td>Brian Westerberg</td>
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<td>Marie Westby</td>
<td>Postdoctoral Fellow</td>
<td>Allison Jones, Linda Li</td>
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<tr>
<td>Hongbin Zhang</td>
<td>Postdoctoral Fellow</td>
<td>Hubert Wong (John Petkau, Paul Gustafson)</td>
</tr>
<tr>
<td>Wei Zhang</td>
<td>Postdoctoral Fellow</td>
<td>Adam Anis, Mieke Koehoorn</td>
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## Trainees—PhD Students

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<th>Program Type</th>
<th>Supervisor (Co-Supervisor)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mohammad Atiquzzaman</td>
<td>PhD</td>
<td>Aslam Anis (Nick Bansback, Jacek Kopec, Hui Xie)</td>
</tr>
<tr>
<td>Victoria Bartley</td>
<td>PhD</td>
<td>Penny Gurschtein (Jim Frankish)</td>
</tr>
<tr>
<td>Alden Blair</td>
<td>PhD</td>
<td>Patricia Spittal (Martin Schechter, Achilles Katamba, Herbert Muyinda)</td>
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<tr>
<td>Vagar Chavoshi</td>
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## Trainees—Masters Students

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<th>Name</th>
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<tr>
<td>Arun Agha</td>
<td>M.Sc.</td>
<td>Linda Li</td>
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<tr>
<td>Cam Clayton</td>
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<td>Aaron Gelland</td>
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## Trainees—Bachelors Students

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<tr>
<td>Patrick Daniele</td>
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<td>Megumi Iyar</td>
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<td>Amy Lockhart</td>
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Appendices

- Peer-Reviewed Publications: A2
- Abstracts: A17
- Invited Presentations: A32


10.1186/bmj.g3804. PMID: 24965222.


Elbof F, Frankish J. Multi-level barriers to mental health care among homeless women with mental disorders: Qualitative insights from Vancouver, Canada. International Association for Women’s Mental Health (IAWMH) 6th World Congress on Women’s Mental Health. Tokyo, Japan; Mar 23, 2015. Oral presentation.


Njidad-Jones A, Nicholls TL, Crocker AG, Roy L, Frankish J, Krausze M, Somers J. Forensic psychiatric service contact among homeless mentally ill adults in Vancouver, Canada. 75th Annual Convention of the Canadian Psycholog


Peters CE, Kalia S, Demers PA, Nicol AM, Koehoorn M. Exposure to solar UVR in outdoor workers in the Vancouver area of British Columbia, with a focus on industrial construction workers. Public Health 2014; Canadian Public Health As


al Meeting of the Society for Adolescent Health and Medicine Conference. Los Angeles, CA; Mar 18–21, 2015.


NF, May 1–4, 2014. Poster presentation P077.


Schütz CG. Mental health concepts and strategies for social inclusion. XVI World Congress of Psychiatry. Madrid, Spain; Sep 14–18, 2014.

Schütz CG. The impact of trauma on substance and the consequences for care. XVI World Congress of Psychiatry. Madrid, Spain; Sep 14–18, 2014.

Schütz CG. Quality of life and substance use among vulnerable urban populations. XVI World Congress of Psychiatry. Madrid, Spain; Sep 14–18, 2014.


Invited Presentations


Anis A. "Willingness to Pay." International Value Coalition Workshop, European Accreditation Council for Continuing Medical Education. Prague, Czech Republic; September 18, 2014.


Bansback N. "Patient-Centred Care: Improving Outcomes and Saving Costs?" CHEOS Work in Progress Seminar. Vancouver, BC; May 21, 2014.

Barbour SJ. "Using Pathology to Predict Outcomes in IgA Nephropathy." CHEOS Work in Progress Seminar. Vancouver, BC; September 24, 2014.


Cundiff GW. "Management of Reduced Stress Urinary Incontinence." International Peace Women’s Hospital, Jia Tong University. Shanghai, China; June 19, 2014.


Cundiff GW. "What is Urogynaecology?" UBC Faculty of Medicine Undergraduate Women’s Health Speaker’s Series. Vancouver, BC; January 14, 2015.


Dodek PM. "Measurement and Use of ICU Quality of Care Indicators Based on Administrative Data from CIHI." Whistle, BC; February 25, 2015.


**Grundy BE** and Stub D. “Can Cardiology Play a Role in Refractory Cardiac Arrest?” Vancouver Island Regional Cardiology Rounds (Royal Jubilee Regional Hospital), Victoria, BC; 2014; UBC Department of Medicine Cardiology/Cardiovascular Surgery Rounds, Vancouver, BC; September 18, 2014.


**Harrison MJ.** Invited to present at C2E2 Rounds. Centre for Clinical Epidemiology and Evaluation (C2E2) Rounds. Vancouver, BC; June 22, 2015.


**Harrison MJ.** “Primary Care Pay-for-Performance in England: Were Emergency Admissions for Ambulatory Care Sensitive Conditions Reduced?” UBC School of Population and Public Health. Vancouver, BC; October 9, 2014.


**Humphries KH.** “Overview of Sex Differences in Cardiovascular Disease.” Heart and Stroke Foundation—Women’s Heart Health. Richmond, BC; 2015.

**Humphries KH.** “Predictors of Adverse Outcomes Among Patients with Stable Angina and No Obstructive Coronary Artery Disease.” American Heart Association (AHA) Scientific Sessions, Cardiovascular Seminar: New Insights into Open Artery Problems. Chicago, IL; November 15–19, 2014.


**Humphries KH.** “Update on Hormone-Replacement Therapy and Cardiovascular Risk.” Centre for Heart and Lung Innovation Friday Seminar Series. Vancouver, BC; April 25, 2014.

**Humphries KH.** “Hormone Replacement Therapy and the Risk of Cardiovascular Disease—Revisiting the Evidence.” Cardiology Grand Rounds, University of Saskatchewan (Regina General Hospital). Regina, SK; 2014.

**Humphries KH.** “Getting to the Heart of Preventing Cardiovascular Diseases.” CIHR Café Scientifique. Vancouver, BC; February 6, 2014.


**Khan NA.** “Top Five Papers in GIM.” Canadian Society of Internal Medicine General Meeting. Calgary, AB; October 1–4, 2014.


**Levin A.** “Renal School/Predialysis Clinic in Management of CKD.” 12th Congress of the Arab Society of Nephrology and Renal Transplantation; 6th ISN-EMAN Update Course in Nephrology. Dubai, United Arab Emirates; December 10–13, 2014.

**Levin A.** “Case Study: Activity-Based Funding Model Provides Foundation for Province-Wide Best Practices in Renal Care.” The Canadian Casemix and Activity-Based Funding Conference. Toronto, ON; December 4–5, 2014.


**Li LC.** “Can We Move from Sick-Care to Health Care?” Life Sciences Institute Public Talks—Personalized Medicine: Your Life, Your Genes, Your Health and Happiness. Vancouver, BC; February 4, 2015.

**Lynd LD.** “What is It and How Can the Physiotherapy Profession Use It to Facilitate Evidence-Informed Practice?” Canadian Physiotherapy Association. Amsterdam, Netherlands; May 31–June 3, 2014.


**Koehoorn M.** “Getting to the Heart of Preventing Cardiovascular Diseases.” CIHR Café Scientifique. Vancouver, BC; February 6, 2014.
CHEOS Work in Progress Seminar. Vancouver, BC; October 22, 2014.


Mackay M and Young Q. “Internet-Based Treatment for Depression in Cardiac Patients: A Feasibility Study.” CHÉOS Work in Progress Seminar. Vancouver, BC; January 28, 2015.


Oviedo-Joekes E. Invited to speak at the International Dual Disorder Conference. Barcelona, Spain; April 16–19, 2015.


