

OCCUPATIONAL SCIENCE & OCCUPATIONAL THERAPY



FROM EXCELLENCE TO EMINENCE: 2016 ANNUAL REPORT

Department Strategic Priorities:

- 1. To advance occupation as a human right, articulate the profession's contribution to health and well-being, and increase the supply of occupational therapists;
- 2. To share our expertise, push the boundaries of education and practice, and increase global collaborations in education and research; and,
- 3. To support scholarly practice, advance research and innovation, and educate future generations of occupational therapists, occupational scientists, and health researchers.

Department Vision:

Health and participation for all.

Department Mission:

Create, inspire, and uphold a scholarly community that contributes to the health of individuals and communities through research on occupation and education programs for occupational therapy students, health professionals, and scientists.

MESSAGE FROM THE DEPARTMENT HEAD

Welcome to the 2016 annual report from the UBC Department of Occupational Science and Occupational Therapy. This year saw considerable dedication to focusing on the three OSOT strategies priorities, vision, and mission. These goals & priorities align with the Faculty of Medicine's 2016-2021 Strategic Plan, "Building the Future," which rests on four pillars:

- Education—Teach, develop and mentor practitioners and scientists so that they can work together effectively in an evolving system.
 - \Rightarrow Our students work in the classroom, in the field, and online to advance research in evidence-based care and to develop clinical expertise.
- Research—Facilitate knowledge creation, translation and exchange to gain insight and promote improved outcomes in patient and public health.
 - ⇒ Our work to prevent and manage life-changing traumatic injury, chronic disease, developmental conditions, and mental illnesses leads to reduced costs for the Canadian healthcare system, more effective clinical practice, and—for patients—both improved quality of life and increased engagement in meaningful activities.
- Organization—Create a working environment that inspires innovation, strengthens academic and operational affiliation, and foster agility.
 - ⇒ Our highly collaborative, interdisciplinary research environments facilitate new ways of thinking about the systems, products, and practices that contribute to healthy lives.
- Partnership—Shape practices and policies for improved care of the population across the province through collective system leadership.
 - ⇒ Our researchers are affiliated with clinical and health service research institutes and work with community, governmental, and industry partners to ensure the ready translation of our results.

This report outlines the contributions to knowledge of our students, postdoctoral fellows, and faculty—work that would not be possible without the generous support of our alumni, clinical faculty, staff, and donors. We are so thankful for your support and for being a member of the OSOT scholarly and educational faculty. I am particularly proud of the considerable national and international exposure enjoyed by UBC faculty and students through presenting at conferences, working on editorial boards, delivering keynote addresses, receiving awards, and fostering community partnerships. We are indeed "lifting above our weight." Thank you all for a successful 2016, and I look forward to continuing to advance our activities in education, research, and innovation in 2017 and beyond.

Sincerely, Susan Forwell, PhD, OT(C), FCAOT Associate Professor and Department Head, OSOT

OUR PEOPLE

OSOT Strategic Priority #1: Advance occupation as a human right, articulate the profession's contribution to health and well-being, and increase the supply of occupational therapists.

FACULTY SUPERVISE STUDENTS IN 5 PROGRAMS:

- MOT: Master of Occupational Therapy
- GCR: Graduate Certificate in Rehabilitation
- MRSc: Master of Rehabilitation Science
- MSc: Master of Science in Rehabilitation Sciences
- PhD: Doctor of Philosophy in Rehabilitation Sciences

SOURCES OF NEW FUNDING FOR TRAINEES

| BC Innovation Council | 1% | \$5,000 |
|---|-------|------------------|
| Canadian Child Health Clinician Scientist Program | 1% | \$5 <i>,</i> 000 |
| MITACS | 3% | \$15,000 |
| University of BC | 5% | \$28,000 |
| Fonds de recherche du Québec - Santé | 11% | \$60,000 |
| Brain Canada | 11% | \$60,000 |
| Canadian Institutes for Health Research | 68% | \$370,000 |
| | Total | \$543,000 |

AWARD-WINNING EMERGING RESEARCHERS

| Stephanie Glegg: Vanier Canada Graduate Scholarship |
|--|
| Kristy Inouye: UBC Affiliated Fellowship |
| Sara Izadi-Najafabadi: NeuroDevNet Brain Canada Training Award |
| Delphine Labbé: Fonds de recherche du Québec – Santé Postdoctoral Award |
| Emma Smith: CIHR Doctoral Fellowship & UBC Friedman Scholar Award |

2016 OSOT STAFF

Tracy Henderson MOT Student Services Manager

Letitia Henville, PhD Research Grants Facilitator (March 2016 —)

Cynthia Hsieh Research Grants Facilitator (until February 2016)

Shareen Khan Department Administrator Mark Meheriuk Information Systems Coordinator

Ivy Thompson Executive Assistant

Isabella Squarisi Roque Senior Program Assistant

Helen You MOT Program Assistant

OUR TRAINEES:

- **103** new & continuing MOT students
- 82 new & continuing MRSc & GCR students
- 35 new & continuing MSc & PhD students
- 30 international students in MRSc, MOT, MSc & PhD programs
- 25 MOT research projects presented at the Capstone Conference
- **9** MOT placements abroad
- 5 Postdoctoral fellows

INTERNATIONAL STUDENTS' COUNTRIES OF ORIGIN:

| China | Philippines |
|---------|----------------|
| Germany | Qatar |
| Iran | Singapore |
| Israel | South Africa |
| Nigeria | United Kingdom |
| Oman | USA |

CLINICAL FACULTY AWARDS

- **Giovanna Boniface** Chris Courtney Award for Excellence in Fieldwork Education
- lan Philips CAOT Fieldwork Educator Award of Excellence

Kevin Waldorf – UBC Faculty of Medicine Clinical Faculty Award for Excellence in Clinical Teaching

CLINICAL FACULTY BY THE NUMBERS:

- **276** new & continuing clinical faculty members
- 49 members taught in MOT classroom & lab
- 49 clinical faculty tutors of a small group tutorial
- 23 clinical faculty involved in MOT admissions
- 3 clinical faculty with year contracts (K. Elissat, P. Mason, P. Mortenson)



OUR NEWEST RESEARCH FACULTY MEMBER Skye Barbic, PhD, OT (C)

Dr. Barbic is a scholar in the field of mental health rehabilitation and clinical outcome assessment. Her post-doctoral work sought to uncover and measure constitutes meaningful outcomes for Canadians living with mental illness. Her acumen as a health outcomes expert and community health care researcher in mental health is an excellent addition to our department and the broader community.



Sue Stanton, MA, FCAOT After 38 years of dedicated service, Sue Stanton left the Department and the Rehabilitation Science Online Programs (RSOP) on June 30. Sue was the Head of the Division of

Occupational Therapy from 1985-90 and again from 1993-95. She developed the RSOP, and has lead it since 1999. Her exemplary service has been recognized with a UBC Killam Teaching Excellence Award in 1990, a Pan-Canadian 3M Fellowship in 1992, and the UBC Faculty of Medicine Innovation in CME/CPD Award in 2009. These awards only begin to attest to her skill and dedication as an educator.

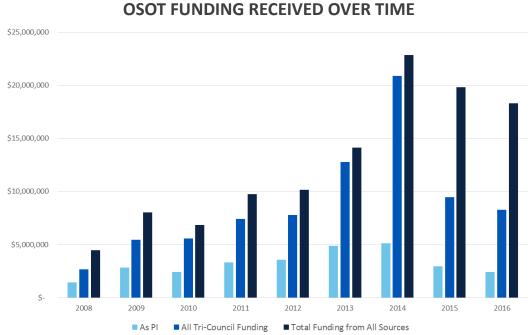
RETIREMENTS



Melinda Suto, PhD, OT Dr. Suto retired on December 31, 2016, after more than 27 years of distinguished service to the Department. A highly regarded instructor from day one, particularly in

psychosocial rehabilitation and qualitative research methods, Melinda received the prestigious UBC Killam Teaching Excellence Award in 2008. She provided outstanding guidance as a graduate supervisor to MOT, MSc, and PhD students. Her research focused on recovery from mental illness, most recently as principal investigator for a collaborative, community-based project on community gardening as a path to well-being. **OUR RESEARCH**

OSOT Strategic Priority #2: Share our expertise, push the boundaries of education and practice, and increase global collaborations in education and research

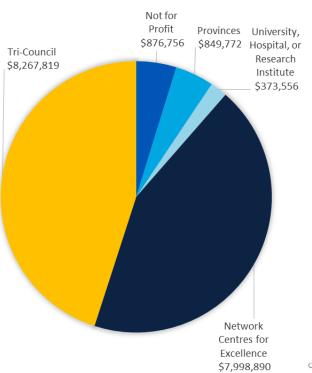


\$1,400,000

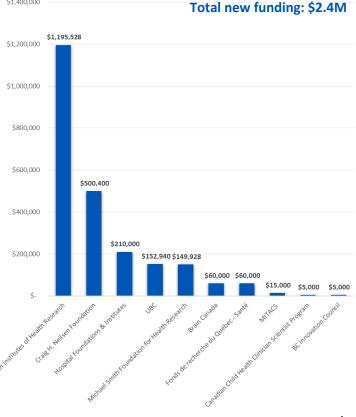
THE HEALTH FUNDING CLIMATE:

The changes in total funding received over time is closely linked to CIHR's research funding program changes. When CIHR replaced the Open Operating Grants with the new Project and Foundation schemes in 2015, our success rate dropped, but our faculty have continued to be awarded competitive funding despite the changing funding climate.

ONGOING RESEARCH FUNDING



SOURCES OF NEWLY-ANNOUNCED FUNDING



Total ongoing funding: \$18.4M

CANADA RESEARCH CHAIR IN NEONATAL HEALTH AND DEVELOPMENT



Liisa Holsti, PhD, OT(C) Dr. Holsti's research program, the Developmental Care Program, focuses on finding ways to assess and effectively treat pain and stress in preterm infants in the Neonatal Intensive Care Unit

(NICU). Her research program was the first in BC and one of the first in Canada—to focus on pediatric occupational therapy.

Before becoming an academic, Dr. Holsti spent almost 20 years as a clinician, working in the Neonatal Follow-up Program. Her research draws on this experience and integrates clinicians and patients who work together to bring her research results into practice. Dr. Holsti's long-term objective is to improve the health of preterm infants by minimizing the impact

of the NICU environment and of painful, stressful procedures on the development of the brain. To achieve this goal, Dr. Holsti's research involves assessing stress in premature infants, and determining the effects of neonatal pain treatments.

Dr. Holsti is driven to improve neonatal care because early, accurate assessment, and effective treatment of pain and stress are crucial to both prevent brain injury and improve neurodevelopmental outcomes for babies who are born premature.

CANADA RESEARCH CHAIRS:

Canada Research Chairs are nominated by their university to receive federal funding that recognizes and advances their program of research. The program drives Canadian research and training, attracting and retaining some of the best scholars and scientists in the world.

CIHR NEW INVESTIGATOR AWARD RECIPIENTS

The CIHR New Investigator Awards are five-year awards that target new and outstanding researchers, and help in the initiation and development of their health research. Only 40 researchers nationally received this award in 2016, and we are exceptionally proud to have two award winners in our department.

Dr. Zwicker's research program is focused on brain development and motor impairment throughout childhood. Using advanced neuroimaging techniques, she examines brain differences in children with developmental coordination disorder and explores early brain development in relation to neurodevelopmental outcomes of premature newborns.

The overall goal of Dr. Mortenson's research is to enable adults with disabilities and their informal caregivers to lead more fulfilling lives through the use of assistive technology (AT). His program focuses on three related areas: understanding barriers to successful AT use, developing novel approaches to training and measurement to support AT use, and developing innovative AT that addresses user needs.

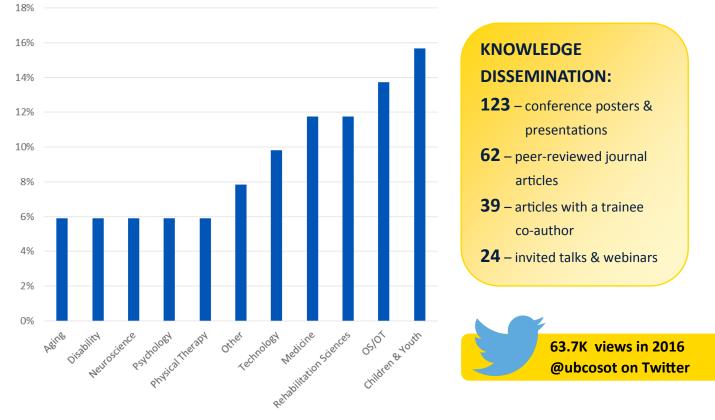


Jill Zwicker, PhD, OT(C) Developmental Coordination Disorder: Integrating Brain Imaging and Rehabilitation to Improve Outcomes



Ben Mortenson, PhD, OT *Maximizing Independence through the Use of Assistive Technology*

SNAPSHOT OF THE VARIETY OF JOURNALS IN WHICH OSOT FACULTY PUBLISHED IN 2016



MAJOR AWARDS WON BY OUR FACULTY IN 2016



Catherine Backman, PhD, FCAOT

 Association of Rheumatology Health Professionals (ARHP) Distinguished Lecturer Award

William C. Miller, PhD, FCAOT

- University of Western Ontario Barbara Sexton Lectureship
- Swinburne Institute of Technology (Australia)
 Swinburne Visiting Fellowship

Susan Forwell, PhD, FCAOT

 CSOS and SSO:USA Townsend-Polatajko Canadian Occupational Science Biennial Lectureship

Donna Drynan, MEd, OT(C)

- Universitas 21 (U21) Health Sciences Teaching Excellence Award
- UBC Faculty of Medicine Killam Teaching Prize





2016 ACADEMIC FACULTY

Catherine Backman, PhD, FCAOT

Professor

Senior Scientist, Arthritis Research Canada Affiliated Investigator, Vancouver Coastal Health Research Institute

Skye Barbic, PhD, OT(C)

Assistant Professor

Scientist, Centre for Health Evaluation and Outcome Sciences Associate Member, Department of Psychiatry, UBC

Katie Bunting, MScOT, OT(C)

Lecturer

Donna Drynan, MEd, OT(C) Senior Instructor & Academic Fieldwork Coordinator

Susan Forwell, PhD, OT(C), FCAOT

Associate Professor & Department Head

Research Associate, MS Clinic, Division of Neurology, UBC Principal Investigator, International Collaboration on Repair Discoveries (ICORD)

Liisa Holsti, PhD, OT(C)

Associate Professor & Associate Head

Investigator, BC Children's Hospital Research Institute Member, Women's Health Research Institute

Tal Jarus, PhD, OT

Professor

Principal Investigator, International Collaboration on Repair Discoveries (ICORD)

Scientist, Vancouver Coastal Health

Investigator, BC Children's Hospital Research Institute

Michael Lee, PDOT, MBA, OT(C), CPRRP

Senior Instructor

Vice-chair, BC Chapter, Psychosocial Rehabilitation Canada

William C. Miller, PhD, OT, FCAOT

Professor

Associate Dean Health Professions, UBC Faculty of Medicine Scientist, Vancouver Coastal Health Faculty Member, International Collaboration on Repair Discoveries (ICORD)

Ben Mortenson, PhD, OT

Assistant Professor

Adjunct Professor, Department of Gerontology, SFU Principal Investigator, International Collaboration on Repair Discoveries (ICORD)

Principal Investigator, GF Strong Rehabilitation Research Program

Laura Nimmon, PhD

Assistant Professor

Scientist, Centre for Health Education Scholarship (CHES), Faculty of Medicine, UBC

Melinda Suto, PhD, OT(C)

Associate Professor

Member, Collaborative RESearch Team to study psychosocial issues in Bipolar Disorder (CREST.BD)

Jill Zwicker, PhD, OT(C)

Assistant Professor

Investigator, BC Children's Hospital Research Institute Associate Investigator, Kids Brain Health Network Research Associate, CanChild Centre for Childhood Disability Research

OUR COMMUNITY

OSOT Strategic Priority #3: Support scholarly practice, advance research and innovation, and educate future generations of occupational therapists, occupational scientists, and health researchers.

VIRTUAL REALITY SCENARIOS THAT HELP CHILDREN WITH AUTISM



Tal Jarus, PhD, OT(C)

Dr. Jarus and her team of interdisciplinary researchers are developing a virtual reality program to help children with autism develop their interpersonal and communicative skill sets. With the support of the UBC Peter Wall Institute for Advanced Studies and the Michael Smith Foundation for Health Research, Dr. Jarus is working with children, their families, and clinicians to develop scenarios targeted to address the needs of the autism community. Her novel touch-less approach to fostering communication skills will help children with autism who live far from urban healthcare hubs, and will reduce the costs associated with intensive one-on-one therapeutic interventions.

JOURNALS WITH OUR FACULTY ON THE EDITORAL BOARD:

Arthritis Care and Research (Backman) Assistive Technology Journal (Mortenson) Canadian Journal of Occupational Therapy (Miller, Backman) Journal of Occupational Science (Forwell) Occupational Therapy International (Holsti) Physical & Occupational Therapy in Pediatrics (Zwicker, Holsti) The Open Spine Journal (Miller) The Scientific World Journal (Holsti)

OUR SCHOLARLY COMMUNITIES:

- **42** academic organizations & societies with which we're affiliated
- 36 journals for which we've reviewed
- ${f 8}$ conferences for which we've reviewed
- 4 national & international scholarly communities we chair

INNOVATION & TECHNOLOGY DEVELOPMENT

Calmer

Dr. Liisa Holsti's therapeutic platform, the Calmer, interacts with preterm infants in the Neonatal Intensive Care Unit to help decrease their levels of stress and pain. The Calmer simulates skin-toskin contact to soothe vulnerable infants while they undergo vital medical procedures.

Smart Wheelchairs

Dr. William C. Miller's CoPILOT focuses on the development of intelligent powered wheelchairs. His team's objective is to enhance powered mobility device design and training options by developing collaborative control systems which will allow users to independently move through their environments.

Mobile App for Spinal Cord Injury

Dr. Ben Mortenson and his team have developed a mobile app to facilitate selfmanagement among individuals with spinal cord injury to prevent secondary conditions like pressure ulcers. They are testing the app's efficacy in a large-scale randomized controlled study that examines the attainment of participant-selected self-management goals.



NUANCING PATIENT-CENTERED CARE RESEARCH

Laura Nimmon, PhD

Dr. Nimmon's qualitative research investigates the experience of health care treatments for patients with chronic, complex illnesses. Her work examines the gap between the type of healthcare espoused across Canada, and the reality of the care that is delivered. Drawing on ethnographic and sociological lenses, Dr. Nimmon is examining the barriers that make truly patient-centered care challenging to practice. Working together with patients with chronic disease, she is developing strategies to enable patients to lead their own care as empowered subjects, rather than disempowered objects of investigation.

2016 VISITING SCHOLARS

Col. Rakesh Jetly – February 2016

Military Psychiatry: Providing Care in a War Zone and on the Home Front

Colonel Jetly is the Senior Psychiatrist in the Canadian Armed Forces and Mental Health Clinical Advisor to the Canadian Forces Surgeon General. His career includes deployments to the Golan Heights, Rwanda, and two tours in Afghanistan.

Dr. Lisa Kenyon – October 2016

Providing Power Mobility Training for Children with Multiple, Severe Disabilities: The Grand Valley Power Mobility Project

Dr. Kenyon is an Associate Professor in the Physical Therapy Department at Grand Valley State University in Grand Rapids, Michigan. Her research interests include power mobility training and use for children with multiple, severe disabilities, and developing assistive technology devices for children.



PSYCHOSOCIAL REHAB & RECOVERY IN THE CHINESE CONTEXT

Michael Lee, MBA, PDOT

For the past eight years, Michael Lee has been bringing evidence-based practice and emerging knowledge on psychosocial rehabilitation to mental health practitioners in China. His workshops, skill demonstrations, and consultations are helping Chinese clinicians to apply evidence-based rehabilitation services to people living with mental illness—especially those living with severe mental illnesses such as psychosis and mood disorders—in a way that is mindful of the cultural context and appropriate to the Chinese health care system and cultural beliefs.

UBC SUMMER SCHOOL

In June, the department hosted 27 students from seven countries in one of two UBC Vancouver Summer School programs. This would not have been possible without the support of our fantastic staff as well as ten excellent instructors.

The students learned about living with chronic conditions and disabilities, discovered a range of rehabilitation strategies and tools, and dove into exciting experiential learning.







UBC