



ACE 2016
NIAGARA FALLS

HARNESSING THE POWER OF ERGONOMICS
EXPLOITER LA PUISSANCE DE L'ERGONOMIE

**47th Annual Conference of the Association of Canadian Ergonomists
Harnessing The Power of Ergonomics**

**October 18 - 20, 2016
The Crowne Plaza Hotel, Niagara Falls Canada**

**Workshops
October 17, 2016**

**Conference Proper
October 18-20, 2016**

**Exhibitor Showcase
October 18-19, 2016**

**CONFERENCE
PROGRAM**



Continuing Education Credits have been applied for, or are eligible for:

ABIH
BCRSP
CCPE
BCAK



Association of Canadian Ergonomists
Association Canadienne d'Ergonomie

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Association canadienne d'ergonomie
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Association of Canadian Ergonomists
Association Canadienne d’Ergonomie

Established in 1968, the Association of Canadian Ergonomists/Association Canadienne d’Ergonomie (ACE) is a bilingual, professional association with over 600 members from coast to coast who have an interest, research, or practice in the field of human factors/ergonomics.

To find out more about ACE or to become a member, visit our website: www.ace-ergocanada.ca

Sponsors

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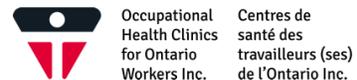
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Association of Canadian Ergonomists
Association Canadienne d'Ergonomie

The Association of Canadian Ergonomists (ACE) is pleased to announce its 47th annual conference, “**Harnessing the Power of Ergonomics**” held in Niagara Falls, ON from October 17th to October 20th, 2016. This year’s event recognizes that the science of ergonomics and human factors together with evaluation and design serves to provide all systems with a competitive advantage. The 2016 National Conference hopes to harness the power of our collective knowledge and build upon each other’s experiences and work practices. Together, our collaboration can lead to some of the best ideas and work in our field.

The 2016 conference will be of interest to ergonomists, human factors professionals, researchers and students, as well as members of allied professions, including: safety, health, rehabilitation, industrial hygiene, industrial design, human resources, psychology, engineering, usability, user experience and facility planning. The event will include internationally renowned speakers, practicing ergonomists, researchers and students, all of which will be presenting their most recent work in oral presentations, panel discussions, workshops, and symposia sessions. Ample opportunity for networking and learning about exciting products and services in the field is also available.

The **technical program** (October 18 – 20th) will include, research studies, applied studies/work and presentations, and panel discussions on a range of topics spanning the physical, cognitive, behavioral, psychosocial, and organizational aspects of human factors and ergonomics.

Pre-conference workshops (October 17th) will offer professional development opportunities.

This year’s event will be at the Crowne Plaza Hotel located at 5685 Falls Avenue, Niagara Falls. The hotel is only steps away from The Falls and conveniently located next to the Clifton Hill Tourist District. The conference centre also offers complimentary parking to conference guests staying in the hotel, an indoor saltwater pool, sauna, hot tub, and exercise room.

For more information on what to see and do in the Niagara Falls area, check out

<http://www.niagarafallstourism.com/plan/free-things-to-do/>

Please join us this October in Niagara Falls, Ontario!

Brenda Mallat
2016 ACE Conference Chair

For more information or to register for the conference, visit the conference website

https://www.ace-ergocanada.ca/news_and_events/conference/ace-2016/index.html

2016 Organizing Committee

Conference Chair

Brenda Mallat, BHK, CCPE
2016 ACE Conference Chair

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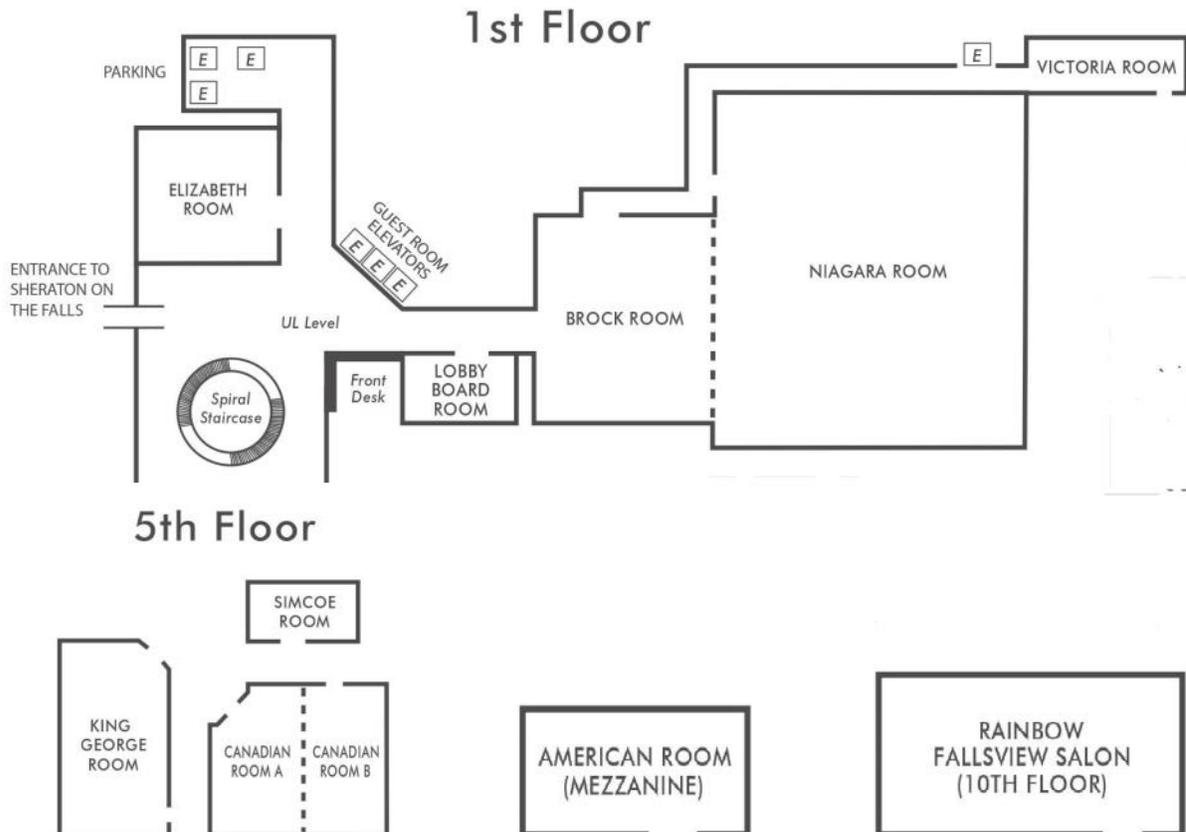
Social Coordinators

Jessica Cappeletto, H.B.Sc.Kin, M.Sc,
Amy DuBriel, B.Sc. (HK), CCPE,
Melissa Statham, MHK, BHK

We are excited to be hosting the
2016 ACE National Conference at



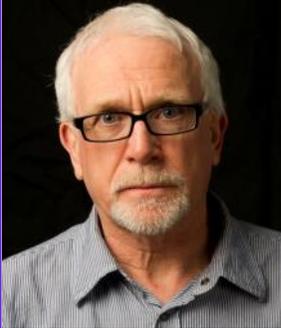
CROWNE PLAZA
NIAGARA FALLS - FALLSVIEW
AT FALLS AVENUE RESORT



Keynote Speaker - Tuesday, October 18, 2016

YOUR KEYNOTE SPEAKERS!

Dr. Richard Wells



Richard Wells is a Professor in the Department of Kinesiology, Faculty of Applied Health Sciences, at the University of Waterloo. His major work is on the pathophysiology, risk factors and risk assessment for Musculoskeletal Disorders (MSD), as well as their controls and implementation. Dr. Wells uses a number of approaches to looking at these issues including studies on cadavers, laboratory studies of function, epidemiological studies to link work to MSD, workplace studies to develop assessment methods and quantify the demands of jobs and intervention studies to examine the effectiveness of workplace change. His more recent work has been on integration of MSD prevention into organizations' processes. He is Director of the Centre of Research Expertise for the Prevention of Musculoskeletal Disorders, a multi-university network hosted at the University of Waterloo. He is also an Adjunct Scientist at the Institute for Work and Health.

Keynote Speaker - Wednesday, October 19, 2016



Michelle Morrissey

Michelle Morrissey is the President of The G.O. Group, a small management and leadership consulting company that she co-founded following almost 30 years experience in the utility industry. Much of that time, Michelle held multiple positions at the senior level in one of North America's largest utilities in both staff and operations roles. In those roles she provided proactive and dynamic leadership and was accountable for the safe and efficient execution of all work including many large capital construction projects and work programs. She also oversaw the development and implementation of various management systems and programs related to health, safety and environment as well as work methods, training and apprenticeships. Michelle earned a Masters of Science in Kinesiology from the University of Waterloo and she remains affiliated with the faculty as a long standing member of the Dean's Advisory Council for Applied Health Sciences. She is a past member of the Centre of Research Expertise for the Prevention of Musculoskeletal Disorders (CRE-MSD) Advisory Committee and the Canadian Electrical Association representative on the Canadian Standards Association Occupational Health and Safety Steering Committee. She is a past President of the Business Council on Occupational Health and Safety in Ontario. She is also a past member of the Provincial Labour Management Safety Committee, the Association of Electrical Utility Safety Professionals, and the Ontario Energy Association Occupational Health and Safety Joint Sector Committee. In her current role, she utilizes her education, business acumen and field experience to assist her clients with practical and customized solutions to maximize human and organizational performance and to reduce risk

Keynote Speaker - Thursday, October 20, 2016



Katie Allanson, CCPE

Katie Allanson, CCPE, is a Human Factors Engineer at Ford Motor Company's headquarters in Detroit, MI. In addition to leading usability for new technology and in-vehicle infotainment systems, she is part of the global team responsible for ensuring that sound ergonomics, human factors and inclusive design principles are designed into the interiors of every new Ford and Lincoln vehicle. Her work includes designing and validating interaction behaviours in touchscreens as well as steering wheels, cluster displays and driver assist features to ensure that the newest technologies are intuitive and easy to use for the entire driving population.

Katie currently sits on two ISO committees (Ergonomics Applicable to Road Vehicles and Ergonomics of Human-System Interaction) and is on the Curriculum Advisory Board for the Advanced Ergonomics Studies Program at Fanshawe College. Prior to joining Ford, Katie held various positions in Ergonomics, HMI and Engineering at General Motors, RIM and Chrysler. She holds a Bachelor of Human Kinetics degree from the University of Windsor and a Master of Engineering degree from Lawrence Technological University. She also holds specialists certificates in Human-Centered Design and Interaction Design.

Notes

Workshop Schedule - Monday, October 17, 2016

Room		
King George	<p>08:00—17:00</p> <p>How to Integrate Ergonomics into the Engineering Design Process</p> <p><i>Judy Village & Patrick Neumann</i> <i>Human Factors Engineering Lab,</i> <i>Department of Mechanical & Industrial Engineering,</i> <i>Ryerson University</i></p>	
Candian A/B	<p>08:00-12:00</p> <p>Assessing HF Capability in Organizations:</p> <p>Identifying new opportunities to benefit from ergonomics</p> <p><i>Michael Greig & W. Patrick Neumann</i> <i>Human Factors Engineering Lab, Dept of Mechanical & Industrial Engineering,</i> <i>Ryerson University</i> <i>Don Patten, Workplace Safety & Prevention Services</i></p>	<p>13:00—17:00</p> <p>Ergonomics-informed, Forensic Approaches to Falls Related to Built Environments</p> <p><i>Led by Jake Pauls, CPE,* Consulting Services in Building Use and Safety, Toronto</i></p>

Workshop Descriptions

N.B. Workshops are described in the language in which they are presented

Full Day Workshop

How to Integrate Ergonomics into the Engineering Design Process

*Judy Village & Patrick Neumann
Human Factors Engineering Lab, Department of Mechanical & Industrial Engineering,
Ryerson University*

In this one-day workshop, participants will learn about how human factors/ergonomics can be effectively integrated into the engineering design process to improve not only worker health, but business performance. Participants will learn about HF and the industrialization process and various production design issues and strategies. They will also learn how to link HF to corporate strategies to gain support from senior management for HF. Ergonomists will be challenged to think about gaps in their understanding of engineering design language, tools and techniques and strategize to find ways to gain this information in order to work more effectively on a team with engineers. Common business improvement strategies such as “Lean” and “Six Sigma” will be discussed highlighting ways that HF can enhance these strategies. Several engineering design tools that have been adapted for HF will be presented (such as the failure mode effects analysis, and design for assembly). Participants will learn ways to work with engineering groups to adapt other engineering design tools and techniques to include HF.

Judy Village is an Adjunct Professor in the School of Population and Public Health at the University of British Columbia and a Certified Professional Ergonomist in Canada and the US. She has more than 25 years of experience conducting research, consulting and teaching in musculoskeletal injury prevention. She earned her Ph.D. in the Department of Mechanical and Industrial Engineering at Ryerson University. The goal of her research, working with a large electronics company, was to work with engineers and human factors specialists to find ways to integrate human factors into design of their assembly production systems. Her publication in the Ergonomics Journal describing the three-year action research collaboration recently won the 2015 Liberty Mutual Award for the paper most advancing the field of ergonomics. She is currently employed with SCN Lavalin as a Human Factors Consultant to engineers in the Infrastructure Division.

Patrick Neumann is an Associate Professor in the Department of Mechanical and Industrial Engineering of Ryerson University. He holds a limited engineering license in Ontario, the European Ergonomist designation and a doctoral degree in design science from Lund University in Sweden. His research focuses on integrating human factors into the design and management of operations for sustainable competitive advantage through improvements in productivity, quality and employee competence development.

Goal of Workshop

To help Ergonomists/Human Factors Specialists with integrating their knowledge into engineering design processes, and adapting tools and techniques to assist with this, to proactively prevent negative occupational health and performance outcomes.

Target Audience

Ergonomists, Human Factors Specialists, Engineers, Human Resources Personnel, Health and Safety Personnel

Workshop Level

Intermediate-Advanced

Workshop Descriptions

N.B. Workshops are described in the language in which they are presented

Half Day Workshop

Assessing HF Capability in Organisations: Identifying new opportunities to benefit from ergonomics

*Michael Greig & W. Patrick Neumann
Human Factors Engineering Lab, Dept of Mechanical & Industrial Engineering,
Ryerson University
Don Patten, Workplace Safety & Prevention Services*

This half-day workshop focuses on improving the ability of attendees to assess the extent to which an organisation is capitalising on ergonomics in their routines. Participants will learn the principles and application of a novel organizational assessment method: the Human Factors Integration Tool (HFIT). The method allows companies to quantitatively assess their organization for its level of World Class maturity of HF capability and integration.

It can open new doors for applying ergonomics in organisations and help monitor progress as companies improve their ergonomics related processes across the firm. The reasoning behind the method and the approach itself will be presented and discussed. Participants will be invited to exchange insights on how evaluations at the organisational level can help them achieve deeper implementation of HF in their organisations, and find new ways to help ergonomics contribute to organisation success in terms of both improved employee wellbeing and better work system performance. Attendees will be encouraged to discuss the pros and cons of their experience with HF audits. The session will highlight the importance of measuring the level of HF integration, the potential impact of HF beyond health and wellbeing and demonstrate how HF can impact other functions in an organization.

Workshop Descriptions

N.B. Workshops are described in the language in which they are presented

Half Day Workshop

Ergonomics-informed, Forensic Approaches to Falls Related to Built Environments

Led by Jake Pauls, CPE, Consulting Services in Building Use and Safety, Toronto*

Background: This workshop follows up a session-length presentation, at ACE2015 in Waterloo, by Jake Pauls: “Stairway Usability and Safety: What ergonomists should know about the critical state of the nexus of public health, ergonomics and law in Canada and the USA.” The entire presentation is available as a 38-minute, streaming video at: http://www.imagosentertainment.com/Under_Construction.html. Pre-workshop viewing of this and other videos at this link, as well as at www.bldguse.com/Stairways.html, makes it possible to keep the proposed workshop a half-day session rather than a full-day session and still permit significant time for informed discussion. The other videos focus, in state-of-the-art detail, on the two main sites of design/construction-related fall injuries: those related to stairways and those related to bathing, showering and toileting. These categories are responsible for annual societal injury costs, in the USA and Canada, on the order of \$200 billion, a staggering societal toll that might be better appreciated when expressed on a per-hour basis—about 20 million dollars per hour for the USA and Canada.

Goals: Beyond the goal of appreciating the epidemiology and very high societal costs, the goals of the workshop are to:

1. Increase the competence of participants in understanding the etiology (causes) of such missteps and falls;
2. Follow up by improving abilities to intervene in their prevention;
3. Until that is achieved, equip ergonomists and others to investigate, document and report on such incidents in a state-of-the-art, professional fashion that is needed for competent forensic services applied in post-falls litigation proceedings, and;
4. Apply such appreciation, prevention and analytical skills to the place where we are most vulnerable, our own homes—the place where societal controls (such as from building and housing codes) are least applied due to design, construction and legal conventions.

Thus, a major objective for the workshop is to bring together a range of disciplines concerned with falls—the leading cause of nonfatal injuries. These include professionals with a wide range of roles including research, education, practice (with responsibilities for built environments design, construction, regulation, facility management; public health responses including nursing and EMS; etc.) and injury incident investigation plus related expert services in forensics. A key underlying assumption here is that ergonomists must become more relevant to much more than occupational settings which, heretofore, have been a prime focus of ACE (but not, to the same extent, some other national ergonomics associations).

This workshop comes after a series of one-day and half-day workshops around the world, over the last four decades, organized (and/or presented) by Jake Pauls, for a wide range of disciplinary contexts including ergonomics, public health, fire safety, architecture, engineering, and building regulation. Over the last decade alone, such workshops have been held in Canada, USA, Japan, New Zealand, Australia, United Arab Emirates, UK and Germany with shorter form (paper) presentations in these countries and others, notably the UK which hosts, in London, an international conference on falls on October 4-5, 2016.

Schedule at a Glance

Time	Monday October 17 2016	Tuesday October 18 2016	Wednesday October 19 2016	Thursday October 20 2016
7:30	Workshop Registration (Brock Lobby)	Registration (Brock Lobby) Exhibitor Showcase (Brock)	Registration (Brock Lobby) Exhibitor Showcase (Brock)	Registration (Brock Lobby)
8:00	Workshops Full day & AM Workshop (King George & Canadian A/B)			
8:30				
9:00				
10:00	A.M. Break (Brock)	A.M. Break & Exhibitor Showcase (Brock)	A.M. Break & Exhibitor Showcase (Brock)	A.M. Break (Brock)
10:30	Workshops cont'd (King George & Canadian A/B)	ACE AGM (Niagara)	Concurrent Paper Sessions 5 & 6 (King George & Canadian A/B)	Concurrent Paper Session 11 (King George)
11:00				
12:00	Lunch (Niagara)	Lunch (Niagara) Exhibitor Showcase (Brock)	Lunch (Niagara) Exhibitor Showcase (Brock)	Lunch Student Awards Closing Address (Niagara)
13:00	Full Day workshop cont'd Afternoon workshops starts (King George & Canadian A/B)			
13:30				
15:00	P.M. Break (Brock)	P.M. Break & Exhibitor Showcase (Brock)	P.M. Break & Exhibitor Showcase (tradeshow teardown after break)	
15:30	Workshops cont'd (King George & Canadian A/B)	Concurrent Paper Sessions 3 & 4 (King George & Canadian A/B)	Concurrent Paper Sessions 9 & 10 (King George & Canadian A/B)	
17:00				
18:00	Early conference registration 7PM - 10 PM (Brock Lobby)	Opening Reception & Exhibitor Showcase (Brock) 5:30PM—9:00PM		
19:00				

Conference Schedule

TIME	DAY 1 – TUESDAY, OCTOBER 18, 2016	
8:30 AM - 9:00AM 9:00 AM - 10:00AM	Welcome address and Exhibitor 60 second challenge (Niagara) Keynote Speaker—Dr. Richard Wells	
10:00 AM – 10:30AM	BREAK & EXHIBITOR SHOWCASE (Brock)	
10:30 AM - 1:30PM	Exhibitor Showcase (Brock), AGM (Niagara), Lunch (Niagara)	
	King George	Canadian A/B
1:30 PM - 3:00PM	<p>Julien M Christensen—Masters Award Finalists EXAMINING CONSTRUCTION WORKERS' PERCEPTION OF LINE OF SIGHT AROUND COMMON PIECES OF MACHINERY [Brandon Vance, Christopher Nydam, Dr. Tammy Eger , Dr. Alison Godwin]</p> <p>THE INFLUENCE OF AN ERGONOMICS TRAINING PROGRAM ON THE USE OF SIT-STAND WORKSTATIONS [Maureen Riddel]</p> <p>EVALUATION OF POSTURE, MUSCLE ACTIVITY AND COMFORT DURING PORTABLE COMPUTER USE [Claudia Hoang]</p> <p>FATIGUE TIME-HISTORIES OF SELECTED ROTATOR CUFF MUSCLES IN INDIVIDUALS WITH SHORT OR LONG ENDURANCE TIMES DURING A REPETITIVE TASK [Rachel Whittaker, Nicholas La Delfa, Clark Dickerson]</p>	<p>PAPERS – Health Care 1 ASSESSING THE PHYSICAL DEMANDS IMPOSED ON PARAMEDICS BY DIFFERENT STRETCHER DESIGNS [Um Lad]</p> <p>MEDICAL ERRORS: DOES A LACK OF INTERFACE CONSISTENCY CONTRIBUTE? [Amy Doan]</p> <p>EVALUATION OF A PATIENT TURNING AND REPOSITIONING DEVICE IN AN ACUTE CARE SETTING [Hollance Chan]</p> <p>ERGONOMIC DESIGN REVIEW OF A NEW AMBULANCE PROTOTYPE MODEL [Kathy Kawaja]</p>
3:00 PM – 3:30PM	BREAK & EXHIBITOR SHOWCASE (Brock)	
	King George	Canadian A/B
3:30 PM -5:00PM	<p>ACE Founders Award—Doctoral Finalists THE DEVELOPMENT OF AN ASSESSMENT TECHNIQUE FOR DESCRIBING MAXIMUM REACH MEASURES ASSOCIATED WITH SHOULDER INJURIES [Colleen Dewis]</p> <p>EQUATIONS TO PREDICT THE INTERACTING EFFECTS OF OFF-AXIS WRIST AND FOREARM POSTURES ON WRIST STRENGTH [Nicholas La Delfa, Jim Potvin]</p> <p>PREDICTING NURSING WORKLOAD USING DISCRETE EVENT SIMULATION [Sadeem Qrueshi, N.Purdy and W.P.Neumann]</p> <p>THE IMPACT OF A STANDING INTERVENTION ON LOW BACK PAIN DEVELOPMENT AND MUSCLE ACTIVATION PATTERNS [Kayla Fewster]</p>	<p>PAPERS – MMH and Workplace Exposures CHARACTERIZING INPUT ERRORS ON SELECTED OUTPUTS OF A WORKSTATION EFFICIENCY EVALUATOR TOOL [Michael Greig, W. Patrick Neumann]</p> <p>MUSCULAR DEMANDS ASSOCIATED WITH FOUR MANUAL PALLET WRAPPING TECHNIQUES [Kimberely Hogervorst]</p> <p>COMPARISON OF LIFTING TECHNIQUES AMONG ERGONOMIST AND NON-ERGONOMIST ACE CONFERENCE PARTICIPANTS 2015 [Milena Agabova, Elena Pasko]</p>
5:30 PM—9:00 PM	Opening Reception & Exhibitor Showcase (Niagara Room & Brock)	

Conference Schedule cont'd,

TIME	DAY 2 – WEDNESDAY, OCTOBER 19, 2016	
8:30 AM – 9:00 AM 9:00 AM - 10:00 AM	Opening Remarks (Niagara) Keynote Speaker- Michelle Morrisey	
10:00 AM – 10:30AM	BREAK & EXHIBITOR SHOWCASE (Brock)	
	King George	Canadian A/B
10:30 AM - 12:00PM	<p>Update Q & A session: Ergonomics Standards Landscape: Wassup in the Office? [Lucy Hart]</p>	<p>Methods/Interventions THE RELATIONSHIP BETWEEN EXTERNAL THORACOPELVIC ANGLE AND LUMBAR SEGMENTAL AXIAL TWIST ANGLES USING AN ULTRASOUND IMAGE TECHNIQUE [Colin McKinnon]</p> <p>SUCCESSFUL PREVENTION OF MSD: BARRIERS AND CHALLENGES [Amin Yazdani]</p> <p>DATA COLLECTION AND ANALYSIS AFFECTS TO THE RESULTS OF WHOLE-BODY VIBRATION EXPOSURE FOR MACHINE OPERATORS [Greg G. Weames, George Page¹]</p> <p>RECOMMENDATIONS AND RESPONSES FROM ONTARIO CORONERS MINING FATALITY INQUESTS [Nicholas Schwabe]</p>
12:00 PM - 1:30PM	LUNCH (Niagara) & EXHIBITOR SHOWCASE (Brock)	
	King George	Canadian A/B
1:30 PM - 3:00PM	<p>Office Ergonomics SIT-STAND UNIT INTEGRATION: A METHOD OF EVALUATION [Alexander Mason]</p> <p>RELATING PERCEIVED PHYSICAL DEMAND AND MUSCLE ACTIVATION OF LEGS AND BACK IN POSTURES BETWEEN SITTING AND STANDING [Graham Mayberry]</p> <p>EFFECTS OF MONITOR ANGLE OF A LARGE TOUCHSCREEN SIT-STAND WORKSTATION ON RIGHT SHOULDER MUSCLE ACTIVATION AND PERCEIVED USER COMFO [Cleyton Viera de Vargas]</p> <p>PERCEIVED EFFORT IS RELATED TO TRANSITIONS BETWEEN STATIC POSTURES ADOPTED DURING STANDING WORK [Daniel Viggiani]</p>	<p>Modelling Approaches STENA PLUS: A MODEL SOLUTION TO THE NEED OF ERGONOMICS [Manobhiram Nellutla]</p> <p>AN EQUATION TO CALCULATE THE RECOMMENDED CUMULATIVE REST ALLOWANCE ACROSS MULTIPLE SUBTASKS [Murray Gibson]</p> <p>MODELING WORKLOAD AND QUALITY USING SYSTEM DYNAMICS [Mashal Varid, W. Patrick Neumann]</p> <p>USING EXERCISE AS A LOW-BACK INJURY PREVENTION STRATEGY IN "OCCUPATIONAL ATHLETES" A PRELIMINARY HYPOTHESIS TEST IN FIREFIGHTERS [Mamiko Noguchi]</p>

Conference Schedule cont'd,

TIME	DAY 2 – WEDNESDAY, OCTOBER 19, 2016 cont'd,	
	King George	Canadian A/B
3:00 PM 3:30 PM	BREAK & EXHIBITOR SHOWCASE (Brock)	
3:30 PM 5:00 PM	<p>Health Care 2</p> <p>A SURVEY OF ERGONOMICS EDUCATION OPPORTUNITIES AVAILABLE TO DENTAL HYGIENISTS IN ONTARIO [Nadia R. Azar, Alaina Zvric, Brenda Mallat, Nick Niforos, and Sean Horton]</p> <p>OUT OF THE LOUPE: THE PREVALENCE OF CO-AXIAL MISALIGNMENT OF SURGICAL LOUPES AMONG BC DENTAL PROFESSIONALS [Maggie Wen, Zul Kanji, Denise Laronde, Batoul Shariati, Lance Rucker]</p> <p>EVALUATION OF A COMPREHENSIVE SAFE PATIENT HANDLING TRAINING PROGRAM [Janice Jaskolka]</p> <p>CASE STUDY OF INJURY PREVENTION TRAINING PROGRAM [Dora Hsiao]</p>	<p>Jim Potvin CCCPE—Update on Educational Matrix</p>

Conference Schedule

TIME	DAY 3 – THURSDAY, OCTOBER 20, 20156
8:30 AM – 9:00 AM 9:00 AM - 10:00 AM	Opening Remarks (Niagara) Keynote Speake-Katie Allanson
10:00 AM – 10:30 AM	BREAK (Brock)
	King George
10:30 AM—12:00 PM	<p>Simulation & Design</p> <p>COMPARING USER IMMERSION IN CONSUMER VIRTUAL REALITY AND SIMULATION TECHNOLOGIES [Tim Doan]</p> <p>VIRTUAL REALITY AS A USEFUL MODE OF IMPARTING LINE OF SIGHT KNOWLEDGE [Alison Godwin]</p> <p>BUILDING BEAUTIFUL MOTORCYCLE SEATS FOR BEAUTIFUL BUMS –THE APPLICATION OF GYNOPOMETRICS™ [Becky Wheat-Bain]</p> <p>MAXIMUM PUSHING AND PULLING FORCES ARE REDUCED WHEN POSTURE AND OFF-AXIS FORCES ARE CONSTRAINED [Nicholas La Delfa]</p>
12:00 PM - 1:30 PM	LUNCH – Student Awards and Conference Closing (Niagara)

Notes

ACE Corporate Membership

ACE aims to promote ergonomics and to raise the standards of practice in ergonomics. Through our Corporate member program, we are building stronger links between ACE and private and public enterprise in pursuit of this mission.

Corporate members will be recognized as supporters of ergonomics in Canada. They will help ACE to achieve its goals and ACE will reciprocate with special Corporate member benefits. The program is a great step for both ACE and the field of ergonomics in Canada and we welcome the partnership opportunities it will provide!

Some of the advantages associated with Corporate membership include:

- Recognition as a supporter of ergonomics in Canada
- Visibility on the ACE Web site
- Access to the network of Canadian Ergonomists including professional consultants and researchers
- Access to national and regional conferences and workshops
- Member advertising rates for *Ergonomics Canada* magazine

For more information about Corporate membership, please contact the ACE National Office at 1-888-432-2223

Thank you to our corporate members for their support of ACE and ergonomics in Canada:

The Global Group
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Core Chair

Exhibitor Showcase

ACE 2016 brings together a diverse and influential group of professionals from throughout North America whose common goal is to enhance the safety and effectiveness of people at work and at play. Involvement with this event provides high profile exposure for your people, your products and your organization.

The logo for ergoCentric, featuring the word "ergoCentric" in a blue, sans-serif font. The "C" in "Centric" is significantly larger and more prominent than the other letters.

ergoCentric

ergoCentric Seating Systems is a Privately Owned Canadian Company, with over 25 years in quality seating manufacturing. Our main focus is on health and productivity, while producing unique and modular chair designs and features. Working closely with ergonomists and health practitioners to continuously improve and refine our chair designs, ergoCentric Seating Systems offers a wide range of aesthetically pleasing task, executive, guest and stackable seating for the office environment.
www.ergocentric.com

ACE Corporate Member
Platinum Conference Sponsor

The Global Group

Like you, we believe ergonomics is an integral part of a successful work place

Educating the architect and design community about the importance of integrating ergonomics into work place design

Continuing to support ACE as the longest standing Corporate Member
Leadership in the development of ergonomic standards and guidelines for the work place

www.globalfurnituregroup.com

ACE Corporate Member
Bronze Conference Sponsor

The logo for Contour Design, featuring the word "contour" in a black, lowercase, sans-serif font, followed by a red square icon containing a white stylized mouse cursor arrow.

Contour Designs

Contour Design has specialized in manufacturing ergonomic input devices since 1995. Our core philosophy is to continue to provide evolutionary products that allow computer users to work on their computers for extended periods of time without the risk of physical pain or injury. Our RollerMouse products help eliminate the need to grip, or reach for, the mouse.

Visit our booth to experience unrivaled comfort, control, and pinpoint accuracy with RollerMouse Red; an innovative, ergonomic mouse that sits in front of the keyboard allowing users to stay in the optimal work zone with relaxed hands and a neutral wrist posture.

www.contourdesign.com

Exhibitor Showcase cont...

TEA – Technologie Ergonomie Applications

TEA develops analysis tools in cooperation with INRS for workplace analysis, ergonomics assessment, biomechanics, human motion and eyetracking: - CAPTIV-L2100 software for video-based Task Analysis, - CAPTIV-L7000 system: complete range of fully wireless sensors for unobtrusive data collection (ECG, EMG, force, 3D motion and angles, etc) with recording on tetherless portable datalogger or via real-time receivers. - FOVIO remote eyetracker and Dikablis Glasses eyetracker. Visit us on our booth and at www.teaergo.com



Ergonow

Ergonow is Ontario's source for Ergonomic Office Products. Sue Brunet, CCPE, is a Ergonomic Consultant and Product Specialist. Please contact Sue and her team with any inquiries. We are a great resource!

www.ergonow.com



Ergo Advantage

Ergo Advantage modular matting has the best warranty on the market. The 20 year warranty protects against wear, edges curling and connections staying together. The leg structure found on the underside of the mat distributes your weight evenly throughout the tile decreasing the fatigue of carrying your own body weight. This leg structure also allows you to run cords, wires and air hose through the underside of the mat, eliminating trip hazards while providing an anti-fatigue flooring system. The color options and modularity will enhance your 5S and 6S programs. The ESD and grit tiles will keep your employees safe from slips, and shocks while protecting your equipment and decreasing maintenance. If you are purchasing matting for your facility, this is a product that deserves consideration

www.ergoconceptsinc.com



Advanced Ergonomic Studies - Ontario College Graduate Certificate

Advanced Ergonomic Studies is a full-time program that builds on undergraduate education with the discipline-specific knowledge, skills and field experience to prepare graduates to enter the workforce as certified ergonomists. Graduates are prepared to pursue the Associate Ergonomist (AE) designation with the Canadian College for the Certification of Professional Ergonomists (CCCPE). The first of its kind in Ontario, this intensive program is delivered in two 15-week semesters followed by an 8-week field placement.

Apply now for September 2017!

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NexGen Ergonomics

NexGen Ergonomics is the leading worldwide source for software and instrumentation used in ergonomics and biomechanics for analysis, research, design and education. NexGen also supplies a broad array of medical products. Thousands of organizations worldwide use NexGen's products, including many Fortune 500 companies, hundreds of universities, insurance companies, government agencies and consultants. Visit us on our booth and at <http://www.nexgenergo.com/>



Dalimar

For 29 years, we have provided solutions to our customers with cutting edge technology in acoustics & vibration, product testing, data acquisition and transducers. Today, our team continues to strive for better ways to facilitate current research techniques. We are committed to resolving today's most complex research problems and providing our customers with technical expertise and unparalleled services. Our ability to network and partner with world leading suppliers is one of our key success factors. Your desire to improve the modern environment and its increasingly sophisticated concerns drives our quest to help you find better solutions. Know that our attention, experience, expertise and highly trained technical people are here for you, our customers. <http://www.dalimar.ca/>



Apex

Apex Occupational Health Solutions is your trusted advisor for occupational health, ergonomics and wellness, offering knowledge-based medical and regulatory guidance and a full spectrum of high-quality employee health solutions. Working closely with clients, Apex designs and delivers services that integrate easily into company operations, engage employees for increased program participation, and provide a cost-effective return on your investment in your employees. <http://apexocc.com/>



University of Waterloo—Ergonomics Specialization

If you're interested in solving movement problems in the workplace, consider the one-of-a-kind Ergonomics (Co-op only) Specialization. This Specialization builds on core Kinesiology courses and focuses on issues such as injury prevention, human-machine interaction, employee wellness, and equipment design.

Apply now!

<https://uwaterloo.ca/>



CoreChair

CoreChair is an active sitting, health and wellness chair that literally moves one to better health by encouraging movement during sitting time, helping to ward off the risks associated with sedentary lifestyles and benefit those who suffer from back pain! The World Health Organization has stated that about 3.2 million deaths annually can be attributed to insufficient physical activity. Ample reason to get moving on a CoreChair! <https://www.corechair.com/>

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ACE 2016 Registration

On-line registration on our conference web site at www.ace-ergocanada.ca

Full Conference - Oct 18-20, 2016

(Includes lunch each conference day, conference program and conference proceedings on CD-ROM)

All rates in \$CDN	ACE Member	Non-Member & ACE Affiliate Members	Student
Early (by Sept 23, 2016)	575.00	675.00	125.00
Late (after Sept 23, 2016)	675.00	775.00	175.00

Day Rate - Full Day

(Includes lunch, conference program and proceedings on CD)

All rates in \$CDN	ACE Member	Non-Member & ACE Affiliate Members	Student
Early (by Sept 23, 2016)	290.00	350.00	70.00
Late (after Sept 23, 2016)	335.00	395.00	85.00

1/2 Day Rate

(Includes lunch, and conference program)

All rates in \$CDN	ACE Member	Non-Member & ACE Affiliate Members	Student
Early (by Sept 23, 2016)	190.00	225.00	50.00
Late (after Sept 23, 2016)	220.00	255.00	60.00

Full Day Workshops

All rates in \$CDN	ACE Members	Non-members and ACE Affiliate Members	Students
Early (by Sept 23, 2016)	255.00	299.00	150.00
Later (after Sept 23, 2016)	285.00	340.00	175.00

1/2 Day Workshops

All rates in \$CDN	ACE Members	Non-members and ACE Affiliate Members	Students
Early (by Sept 23, 2016)	175.00	199.00	100.00
Later (after Sept 23, 2016)	190.00	240.00	115.00

Visit Niagara!

COME TO LEARN, BUT STAY TO PLAY!

The Niagara Falls area offers a variety of sites and attractions to visit during your stay. Whatever activity, whether it be culinary, thrill seeking, or unwinding, start your search here <https://www.niagarafallstourism.com/>

1. The Falls

There are a great variety of things to do in Niagara Falls Ontario Canada and activities to enjoy while on a Niagara Falls getaway, but most visitors come to experience the mighty Falls themselves. Once you've had a chance to see the American and Horseshoe Falls from the sidelines, getting up close is a must. <https://www.niagarafalls.ca/>

2. The Hornblower

Experience Canada's natural wonder at Niagara's newest attraction aboard a state-of-the-art 700-passenger catamaran or aboard the Hornblower Guardian – a 150-passenger jet-boat available for private charter for an intimate experience with the mighty Niagara Falls. More information [Here](#)

3. Clifton Hill

Clifton Hill is one of the most famous streets in Niagara Falls. Clifton Hill is located on the Canadian side of Niagara Falls just steps away from the mighty Niagara Falls. Clifton Hill known as the "Street of Fun"- so vibrant because of the many exciting attractions, themed restaurants and affordable hotels to stay at all in one area. Everything is just within walking distance! You can instantly recognize if you're on Clifton Hill by the giant wheel that sits 175 feet above Niagara Falls called the Niagara Skywheel, a 'must do' attraction. Clifton Hill - the "Street of Fun" caters to all ages, there's fun for your teen, there's fun for the family, and there's great nightlife and clubs if you're looking to dance up a storm!

4. Wineries & Breweries

Niagara Ontario Canada has become famous for its wines. Whether you are looking for wineries in the Niagara Region, or a specific winery in Niagara-on-the-Lake, Niagara is gaining international recognition as 'must visit' destination to enjoy a beautiful country escape with a bit of food and drink. Twenty-five vineyards dot the landscape just 15 to 20 minutes outside Niagara Falls, Canada in quiet and charming Niagara-on-the-Lake. The entire Niagara wine region along the shores of Lake Ontario-is home to over 50 wineries. Discover the best of the region's vineyards by following the Wine Route of Ontario through the countryside by car, bike or guided tour. Many Niagara wineries have restaurants, where they pair their fine wines with regional cuisine, and an overnight outing can easily be arranged at nearby a bed-and-breakfast or inn for a Niagara Falls romantic getaway. And if you fall in love with our wine, consider planning a Niagara vacation around one of our popular annual Niagara festivals. The Niagara Wine Festival, which occurs annually in autumn, includes tours and tastings at Niagara vineyards, concerts, Niagara cuisine, artisan shows, and family entertainment. The Niagara Icewine Festival in January celebrates Ontario's most famous wine in a winter wonderland setting, and the Niagara New Vintage Festival in summer gives visitors a chance to be the first to try the year's wines.