9TH ANNUAL (EDMONTON) INTERNATIONAL CONFERENCE ON URBAN TRAFFIC SAFETY

4TH INTERNATIONAL CONFERENCE ON TRANSPORTATION INFORMATION AND SAFETY

AUGUST 8–10, 2017 BANFF, ALBERTA, CANADA
Tuesday August 8, 2017

9:30 – 10:00 am
KC 101/103/105

**ALI MOSLEH**

*Safety and Reliability Autonomous of Maritime Transportation: Human Still in the Loop*

Ali Mosleh is Distinguished University Professor and holder of Evelyn Knight Chair in Engineering at the University of California in Los Angeles where he is also the director of the UCLA Garrick Institute for the Risk Sciences. Previously he was the Nicole J. Kim Eminent Professor of Engineering and Director of the Center for Risk and Reliability at the University of Maryland. He was elected to the US National Academy of Engineering in 2010, and is a Fellow of the Society for Risk Analysis, and the American Nuclear Society, recipient of several scientific achievement awards, and consultant and technical advisor to numerous national and international organizations, including appointment by President George W. Bush to the U.S. Nuclear Waste Technical Review Board.

He conducts research on methods for probabilistic risk analysis and reliability of complex systems and has made many contributions in diverse fields of theory and application. He holds several patents, and has edited, authored or co-authored over 500 publications including books, guidebooks, and technical papers. In 2013 he received the ANS Thompson Award for his contributions to probabilistic risk and safety assessment. Mosleh has led many major studies on risk and safety of complex systems such as space missions, nuclear power plants, commercial aviation, communication networks, and healthcare systems.
Tuesday August 8, 2017

3:30 – 4:30 pm
KC 101/103/105

IAIN CAMERON

Iain Cameron has public sector policy, strategy and leadership experience in education, public health, drug strategy, transport, roads and road safety.

Iain was Executive Director of the Western Australian State Office of Road Safety from 2000 to 2015. Iain’s team lead the development of Towards Zero, the WA Government’s ambitious strategy to reduce serious crashes by at least 40% by 2020, the first in Australia to articulate a vision zero through a safe system. The rate of road deaths fell from 11.3 per 100,000 population in 2000 to 6.2 in 2015.

Iain made significant contributions to the Australian Road Safety Strategy (2011–2020) and the bi-annual national action plans. Iain is a Trustee of the Towards Zero Foundation (a UK registered charity) and an Independent Director on the Board of the Australasian New Car Assessment Program (ANCAP). Iain chaired the OECD/ITF Safe System Working Group, the Austroads National Road Safety Task Force and he was a member of the WA Road Safety Council and the Curtin Monash University Accident Research Centre Board. He is a graduate of the Australian Institute of Company Directors.

In 2014 Iain was awarded as a Fellow of the Australasian College of Road Safety by the Governor General of Australia for his significant contributions to road safety locally, nationally and internationally.

In December 2016, the ITF Report Zero Road Deaths and Serious Injuries: Leading a Paradigm Shift in Road Safety chaired by Iain won the 2017 Special Award of the prestigious Prince Michael of Kent International Road Safety Awards. Canada made a significant contribution to this leading work through Gerry Shimko on the writing and editorial team.
SUSAN L. TIGHE

Incorporating Safety into Pavement Engineering and Management.

Dr. Susan L. Tighe is a founding member and Director of the Centre for Pavement and Transportation Technology (CPATT) at the University of Waterloo, President Elect of the Canadian Society for Civil Engineering, and a Norman W. McLeod Professor of Sustainable Pavement Engineering. Prior to assuming the Director role in September 2010, she served as the CPATT Associate Director of Research and Technology from 2005 to 2010.

Dr. Tighe worked for the Ministry of Transportation of Ontario prior to pursuing a career in academia. She is a past Canada Research Chair in Pavement and Infrastructure Management. She is a member of the inaugural class of the New College of Scholars of the Royal Society of Canada, and was named one of Canada’s Top 40 Under 40 for her leadership and vision with respect to the Canadian Transportation Community. She received the Transportation Association of Canada Academic Merit Award, the prestigious Research & Development Medal given to her by the Ontario Society of Professional Engineers (OSPE) and Professional Engineers Ontario (PEO), as well as the Inaugural Bleeds Black Award from the Ontario Hot Mix Producers, and Inaugural Region of Waterloo Top 40 Under 40.

She has successfully completed over 45 graduate students since starting at the University of Waterloo in 2000; many of whom are now in academic, public and private sector leadership positions. She currently supervises over 20 PhD and MASc graduate students. She is an author of over 400 technical publications in pavements and infrastructure, including being the principal investigator on the 2013 Transportation Association of Canada Pavement Asset Design and Management Guide, and is involved in a number of national and international research projects. She has been involved with projects in Africa, Chile, India, China, Australia, New Zealand and throughout North America.

During sabbaticals she has spent time in Australia working for a contractor, and has also received academic Fellowships including the Erskine Fellowship at the University of Canterbury in New Zealand, the U.K. Royal Academy of Engineering University of Nottingham in England and the Queensland Pavement Center located at University of the Sunshine Coast Australia.
Wednesday August 9, 2017

9:00 – 10:00 am
KC 101/103/105

JIN WANG

How can a Risk-Based Approach be Effectively Used in Design and Operation of Large Marine Transportation Systems Under Uncertainties?

Professor Jin Wang is Associate Dean (Research and Scholarship) of Faculty of Engineering and Technology at Liverpool John Moores University (LJMU), UK. He is also Director of Liverpool Logistics, Offshore and Marine (LOOM) Research Institute at LJMU. Following just less than 5 years’ research as a Research Associate at Newcastle University, UK, he joined LJMU as a lecturer in 1995, and was promoted as Reader in Marine Engineering and Professor of Marine Technology in 1999 and 2002 respectively. He has been involved in safety and reliability research of large engineering systems with significant financial support from the UK research councils, EU, etc.

Jin Wang has successfully completed supervision of more than 50 doctoral/postdoctoral researchers. His research areas are in risk-based design and operation of large maritime engineering systems such as ships and offshore installations. Prof. Wang’s publications include 2 research monographs and more than 120 SCI cited journal papers (h-index 28, more than 2,200 citations in Web of Science). He has won several research awards including two Denny Medals from the Institute of Marine Engineering, Science and Technology (IMarEST). He has led seven UK research council funded projects as PI and two EU funded projects (REFERENCE and RESET) as the coordinator. He has been a member of IMO’s formal safety assessment experts group since 2008 and the chairman of the marine transportation safety committee of European Safety and Reliability Society since 2010. Prof. Wang was a sub-panel member (sub-panel 12: Aeronautical, Mechanical, Chemical and Manufacturing Engineering) in the Research Excellence Framework 2014 for assessing the quality of research in the UK’s higher education institutions.
Wednesday August 9, 2017

3:30 – 4:30 pm
KC 101/103/105

**BARRY WATSON**

Dr. Barry Watson is a global road safety expert based in Australia and an Adjunct Professor at the Queensland University of Technology (QUT). Between 2015 and early 2017, he was the Chief Executive Officer of the Global Road Safety Partnership (GRSP), which is hosted by the Federation of the Red Cross and Red Crescent Societies in Geneva, Switzerland. As the CEO of GRSP, Barry was responsible for the overall strategic direction of the organisation as well as the management of its activities in over 35 countries worldwide.

Prior to this, Barry worked in the road safety field for over 30 years in government, academic and civil society organisations. Between 2008 and 2015, he was the Director of the Centre for Accident Research & Road Safety (CARRS-Q), based at the QUT in Brisbane, Australia. Barry has conducted research and policy development into a wide range of road user safety issues including drink driving, speeding, driver licensing, driver education, and traffic law enforcement, and developed and delivered road safety training programs in a wide range of countries. Barry is a member of the Executive Board of the International Council on Alcohol, Drugs & Traffic Safety (ICADTS) and a Fellow of the Australasian College of Road Safety (ACRS).
Thursday August 10, 2017

9:00 – 10:00 am
KC 101/103/105

EZRA HAUER

Can one get Crash Modification Functions from Regressions?

Professor (emeritus) Ezra Hauer, Department of Civil Engineering, University of Toronto.

Education: B.A.Sc., Technion, Israel; M.A.Sc. Technion, Israel; Ph.D., U.C. Berkeley.

Thursday August 10, 2017

9:00 – 10:00 am
KC 101/103/105

XINPING YAN

The Development of Transportation Safety and Safety Technologies in China.

Professor Xinping Yan received the BSc and Master degree in Marine Mechanical Engineering from Wuhan University of Water Transportation Engineering, China in 1982 and 1987 respectively, and PhD in Mechanical Engineering from Xi’an Jiaotong University, China in 1997.

His research interests include condition monitoring and wear diagnosis, risk assessment and reliability, renewable energy for marine power, intelligent transport system and safety science, etc.


He has published 10 monographs and textbooks, over 500 refereed journal and conference publications (98 SCI-cited journal papers since 2005), 15 keynote speeches in international and national conferences, Second Prize for Technological Invention Award of China (2012) and Second Prize for Science and Technology Progress Award of China (2016).

He is the former Vice President of Wuhan University of Technology (2000–2015), and the Chair Professor of marine engineering, Reliability and Safety in Wuhan University of Technology, and Director of National Engineering Research Center for Water Transport Safety (WTS Center), China.
Thursday August 10, 2017

3:15 – 4:15 pm
KC 101/103/105

LETTY AARTS

Dr. Letty Aarts studied psychology in Amsterdam and obtained her doctorate with a thesis on situation awareness in ship navigation. Letty has been working for SWOV Institute of Road Safety Research, the Netherlands since 2003. She has done research on a variety of topics related to the interaction of road users, their behaviour and the design of the traffic system, such as speed and risk, and self-explaining road design.

Furthermore, she managed several local, national and international research projects on road safety statistics including serious road injuries and road safety performance indicators, forecasting and road safety policy issues. Letty is author and co–editor of the updated version of the Sustainable Safety road safety vision of the Netherlands (2005) and is currently leading the next update of the vision which will become available later this year.

Other speakers’ bios are available on urbantrafficsafetyconference.com.
PAMELA MCCULLOCH  
Master of Ceremonies

Pamela McCulloch is a Strategic Coordinator for the City of Edmonton. Currently, she works in Integrated Infrastructure Services department as the Employee Engagement and Culture Coordinator. Her previous roles with the City of Edmonton included working as a Strategic Coordinator in Transportation Department and a Corporate Culture Consultant, Corporate Services.

Pamela began her working career as a Social Worker working with families and youth. Before joining the City of Edmonton, she worked as an organizational management consultant in both the private and public sector.

Pamela has been involved for over 10 years with Rotary International, serving as president of Rotary Club of Edmonton Northeast and as a Director of International Youth Exchange Program. Currently, Pamela is Director of International Community Projects for her local club.
Why Talking to Your Car Can Drive You to Distraction

Driver distraction is increasingly recognized as a significant source of injuries and fatalities on the roadway. Indeed, studies have determined that up to 66% of the crashes involved driver distraction of one form or another. Driver distraction can arise from visual/manual interference, for example when a driver takes his or her eyes off the road to interact with a device. Impairments also come from cognitive sources of distraction when attention is diverted from safely operating the vehicle. In the latter case, the driver’s eyes may be on the roadway and their hands on the steering wheel, but they may not be attending to the information critical to safe driving. Working with AAA Foundation for Traffic Safety, we developed a rating system for cognitive distraction. Our research establishes that some of the newer voice-based interactions in the vehicle may have unintended consequences that adversely affect traffic safety.
JAMES C. FELL (JIM FELL)

James C. Fell is currently a Principal Research Scientist with the National Opinion Research Center (NORC) at the University of Chicago in the Bethesda, Maryland office. From 2001 to 2015 he was a Senior Research Scientist at the Pacific Institute for Research & Evaluation (PIRE) in Calverton, Maryland. Before that, Mr. Fell worked at the National Highway Traffic Safety Administration (NHTSA) from 1969 to 1999 and has 49 years of traffic safety and alcohol policy research experience.

He has authored over 150 publications in book chapters, scientific journals and conference proceedings. He has both a Bachelor’s and Master’s degree in Human Factors Engineering from the State University of New York at Buffalo. In 2015, Mr. Fell received the James J. Howard Highway Safety Trailblazer Award from the Governors Highway Safety Association (GHSA) for sustained outstanding leadership in endeavors that significantly improve highway safety and the Kevin Quinlan Advocacy Award from the Maryland Highway Safety Office.

ABSTRACT

LEGALIZATION OF MARIJUANA: LESSONS LEARNED FROM THE UNITED STATES

MARIJUANA USE:

More than 17 million people in the United States (US) use marijuana and the number will likely grow as more states legalize medical and recreational use. A national roadside survey conducted in 2007 of more than 10,000 drivers on week-end nights showed that 8.6 percent of all drivers had marijuana in either their saliva or blood. However, 12.0 percent of drivers aged 16-20 showed marijuana in their systems -- by far the highest percent in any age group. A similar national roadside survey in 2013-2014 showed that 12.6 percent of drivers on week-end nights had marijuana in their systems, a significant increase over 2007. Marijuana affects a number of critical driving skills -- including alertness, concentration, coordination and reaction time. It makes it harder to judge distances and to react to traffic signs and signals. High school seniors who smoke marijuana are twice as likely to be cited for a traffic violation, and 65 percent more likely to get into a crash, than those who don’t smoke it. Teens who use cannabis before age 14 are 4 times more likely to have a history of dependence, and 3 times more likely to report driving under the influence of marijuana, compared with adults who start using cannabis at age 21 or older.

MARIJUANA AND CRASH RISK:

A study for the National Highway Traffic Safety Administration (NHTSA) showed that 7.6 percent of over 3,000 drivers involved in crashes had marijuana in their system at the time of their crash. A week later at the same time, same day of week, same location, it was found that 6.1 percent of over 6,000 drivers on the roads but not involved in a crash had marijuana in their systems. After adjusting for driver age, gender and race/ethnicity, the risk of a crash for drivers with marijuana in their systems was 1.05 --
which was not statistically significant. By comparison the risk of a crash for a driver with a blood alcohol concentration (BAC) of .05 was 2.07, a statistically significant elevated risk. It appears that while marijuana does impair some driving skills (divided attention, lane tracking, cognitive functions), the risk of a crash with marijuana is low. While the statistical risk of a driver being involved in a crash with marijuana in their system is not currently significant, marijuana is known to impair certain driving skills.

LESSONS LEARNED:

Recently, eight states and the District of Columbia legalized the recreational use of marijuana. Those states have only adopted four laws prohibiting marijuana use by persons under age 21: illegal for a person under 21 to (1) purchase, (2) possess, (3) consume, and for someone to (4) furnish marijuana to a person under age 21. However, given our experience with underage drinking laws, states that have legalized recreational marijuana should strongly consider adopting the following laws:

1. If cited for underage use of marijuana, loss of driver’s license for at least 90 days (Use/Lose). Pertaining to alcohol, this law was associated with a 7.9% decrease in underage drinking drivers in fatal crashes

2. Zero Tolerance for driving (no amount of THC in blood or oral fluid if under 21). The MLDA-21 zero tolerance law was associated with a 2.9% reduction in underage drinking drivers in fatal crashes.

3. Age of marijuana sellers should be 21 or older. States that required bartenders to be age 21 or older showed a 4.1% reduction in underage drinking driver fatal crashes.

4. Fake ID retailer support: marijuana sellers can confiscate fake ID, can use ID scanners to detect fake IDs, and the state requires distinctive drivers’ licenses for persons under age 21. This MLDA-21 law resulted in a very large reduction in underage drinking driver fatal crashes (11.9%).

5. Dram Shop liability (can sue marijuana seller if underage purchases marijuana and then injures or kills someone in a crash). This law was associated with a 2.5% reduction in underage drinking driver fatal crashes when applied to alcohol.

6. Social host liability (can sue provider of marijuana if underage user crashes and injures someone). Regarding alcohol, this MLDA-21 law resulted in a decrease in underage drinking driver fatal crashes of 1.7% in states with that law.

All of the above findings were statistically significant (p<.001). These six recommended laws have excellent potential to reduce underage 21 marijuana impaired driving fatal and injury producing crashes.

SUMMARY
Marijuana usage is very high in the United States (over 17 million users) and will most likely increase as states legalize medical and recreational marijuana. So far, driving while under the influence of marijuana is illegal in every state and marijuana usage is illegal for all people under age 21. While the risk of a driver being involved in a crash with marijuana in their system is not currently significant, marijuana is known to impair certain driving skills. In addition, there were 375,000 emergency room visits in the United States in a recent year where marijuana was recorded as a factor. How can we limit marijuana impaired driving once it becomes legal in more states? Enforce the minimum purchase and possession age of 21, adopt strict drugged driving laws, and enforce drugged driving using roadside saliva testing.

**Marijuana Laws in the United States-2017**

![Image of marijuana laws]


**SPEAKERS:**

James Fell, National Opinion Research Center (NORC), Bethesda, MD 20814. [Fell-jim@norc.org](mailto:Fell-jim@norc.org)

The Washington State Patrol is the largest public safety, law enforcement agency in the state. The Washington State Patrol is a statewide general authority Washington law enforcement agency employing over 2,146 (1,067 sworn and 1,079 professional support staff) personnel with a biennial budget of $506.9 million. Chief Batiste oversees the day-to-day operations and manages the agency's six bureaus: Commercial Vehicle Enforcement Bureau, Field Operations Bureau, Fire Protection Bureau (State Fire Marshal), Forensic Laboratory Services Bureau (statewide crime laboratories), Investigative Services Bureau, and Technical Services Bureau.

Chief Batiste began his career with the Washington State Patrol in March 1976. He has promoted through the ranks of Sergeant, Lieutenant, Captain, and Deputy Chief. Chief Batiste obtained his Bachelor's Degree in Law Enforcement Administration from City University and is a graduate of Northwestern University's Center for Public Safety School of Police Staff and Command, as well as a graduate of the Federal Bureau of Investigation's National Executive Institute.

Chief Batiste has been involved in a variety of activities and organizations, including his work with the Kenya National Police Force to create a National Police Chaplain Program and the South African National Police Force to assist with training and procedures on ethical policing.

Chief Batiste is an Executive Board Member of the following: Washington Association of Sheriffs and Police Chiefs, Western States Information Network, Washington Criminal Justice Training Commission, Washington Traffic Safety Commission, Department of Justice/VALOR Advisory Board, International Association of Chiefs of Police (IACP) Governing Body, and was a Past General Chair of the IACP State and Provincial Police Division. Chief Batiste serves as a member of the American Association of Motor Vehicles Region IV, National Organization of Black Law Enforcement Executives, and also serves on the Washington State Forensic Investigation Council, IACP Criminal Intelligence Coordinating Council, Governor's Emergency Management Council, and IACP Transnational Crimes Committee.

**ABSTRACT**
WEED AND DRIVING: IS MARIJUANA LEGALIZATION KILLING MORE DRIVERS?
When marijuana is legalized, what impact does this have on fatal collisions and what can law enforcement agencies due to combat the problem. Washington State has been on the forefront of this issue and Washington State Patrol Chief John R. Batiste will offer insights and solutions for other governments grappling with this vexing problem.
PAMELA FUSELLI

Pamela Fuselli has worked in the health care/injury prevention field for over 18 years, in paediatric acute care and public health sectors. Her expertise includes prevention strategies related to injuries in the transportation, home and play environments. Pamela has strong relationships with the research community across Canada, leading knowledge translation activities in research studies. She is a member of numerous collaboratives and committees such as the Canadian Collaborative Centres for Injury Prevention, the Canadian Concussion Collaborative, and the Canadian Paediatric Society’s Injury Prevention Committee.

Pamela became the Vice President, Knowledge Transfer and Stakeholder Relations in July 2012 when Parachute was created from the amalgamation of four national injury prevention organizations. Her areas of interest are centered on knowledge mobilization resulting in behaviour change, the impact of good public policy on injury prevention and the importance of collaboration to further the impact on social change.

Pamela received her BSC in Psychology from the University of Toronto in 1992, her BHA (2002) from Ryerson University and MSc (2010) in Creativity and Change Leadership from the State University of New York College at Buffalo.

ABSTRACT

Parachute is a national charity helping Canadians stop the clock on predictable and preventable injuries. One of our main areas of injury focus is the impact of motor vehicle collisions. Our extensive work in this area, led Parachute to believe that taking a Vision Zero approach to road safety is fundamental to changing the road environment, behaviour and ultimately reducing injuries and deaths. Our vision is bold -- a future where the number of traffic fatalities and serious injuries is ZERO. A future where traffic related injuries are no longer an everyday occurrence. Safer roads, safer communities, long lives lived to the fullest. This session will:

Provide an overview of Vision Zero and what implementation looks like in Canada,

Showcase how we are creating buy-in through the launch of the Parachute Vision Zero Network in response to a need expressed by our stakeholders to provide a one-stop destination that provides the tools and resources to affect change in their area, and

Report on early successes of what is working to help communities across Canada address road safety challenges with proven solutions.
Monica DeWald has worked for the Seattle Department of Transportation for more than 15 years with a focus on bicycle facility planning, design, construction, and evaluation. Monica leads the implementation of the Bicycle Master Plan for Seattle and has contributed to significant growth in the bicycle network over the past decade. She recently led the development of Seattle’s Bicycle and Pedestrian Safety Analysis – a retrospective review of bicycle and pedestrian collisions that will be used to develop a proactive, systemic approach to enhancing safety for vulnerable users.

Presentation:

Seattle operates one of the safest urban street networks in the world thanks to decades of context sensitive design and a long-standing culture of safety amongst residents. This presentation will provide an overview of Seattle’s multifaceted, data-driven Vision Zero program which aims to eliminate traffic-related serious injuries and deaths by 2030. Seattle will highlight their innovative approach to data analysis and how data informs all aspects of the city’s safety efforts.
FLAVIO PECHANSKY  
(Panel facilitator)

Flavio Pechansky is Tenured Full Professor and Director of the Center for Drug and Alcohol Research affiliated with the Federal University of Rio Grande do Sul in Brazil, and the Collaborating Center on Alcohol and Drugs inside the Hospital de Clinicas of Porto Alegre (HCPA), a large teaching hospital associated with the university. Dr. Pechansky earned his specialty in Psychiatry, his Masters and Doctoral Degrees with honors in Medicine at UFRGS, and was trained as a NIDA-funded Hubert H. Humphrey fellow at the Johns Hopkins School of Public Health. He currently chairs the Addiction Psychiatry Services at HCPA, as well as the Professional Masters Program in Prevention and Treatment of Drug Users at HCPA.

He has worked as an addiction psychiatrist for the last 31 years, and has trained hundreds of undergraduate, specialty and postgraduate students of medicine, psychology, odontology, and psychiatry. Dr. Pechansky is with the Department of Psychiatry at UFRGS since 1995, is Associate Visiting Scientist at the University of Kentucky and Adjunct Assistant Professor at the University of Pennsylvania. He has an extensive career in training, consultancy and writing in the field, with about 200 publications including books, book chapters, editorials and original papers in Brazilian and international scientific journals in the areas of epidemiology and treatment of alcoholism and drug abuse, adolescent drug and alcohol experimentation, risk behaviors for the transmission of HIV among drug users, and DUI-related issues. He has served as consultant for the Brazilian government and as chair/member of scientific committees of Brazilian and international institutions, as well as editor and member of editorial boards of Brazilian and international scientific journals. Currently Dr. Pechansky is Member-at-Large of the International Council on Alcohol, Drugs and Traffic Safety, Member of the Drug and Alcohol Committee of the Transportation Research Board, and a reviewer of many important journals in the field. He has been awarded a number of prizes for papers published and presented throughout his career, and has an Award of Excellence in International Leadership by the National Institute on Drug Abuse.

PANELISTS:

Chief John R. Batiste, Jim Fell, Kathy Stewart, Barry Watson
ABSTRACT

ACHIEVING VISION ZERO: HOW CAN REMOTE SENSING DATA HELP ROAD AGENCIES SAVE LIVES?

One glance at the number of fatality rates in any of the high-income countries shows a downward trend in traffic fatalities that began in the 1970s and 80s. Such improvements were partially due to the implementation of policies on seat-belt usage, vehicle crash protection, traffic-calming interventions, traffic law enforcement, among others. However, a closer look also reveals that these decreasing trends have started to flatten, suggesting that extra steps are needed to reduce these fatality rates further. Most high-income countries have implemented the majority of all the ‘quick wins’, however, the number of fatalities and injuries remains unchanged from one year to the next. Therefore, there is a need to explore new datasets and methodologies to achieve vision zero. In this presentation, I will explore the use of remote sensing data in developing a deeper understanding of the safety issues that exist on our roads. It is obviously clear that road authorities cannot continue to design/operate the roads in the same manner over and over again and expect safety to improve (Einstein Insanity!). A change is required, and that starts by re-engineering our roads.
Following 20 years as a road safety practitioner in the traffic engineering, management and design fields, Bruce has been a research academic at Monash University Accident Research Centre in Australia since 1993. His early research interests included improving the safety of pedestrians, motorcyclists, roadsides and intersections, through infrastructure design, speed management and, more recently, road safety strategy development and target-setting. A strong research theme involves innovative solutions based on the world’s best practice in road safety. Bruce’s work has found practical application at national and state levels, in Australia and New Zealand, as well as internationally, to guide best-practice infrastructure investment and develop high-impact road safety strategies.

Bruce has worked extensively in leading multi-disciplinary research teams seeking practical outcomes and widespread application. Bruce’s PhD was in achieving low risk traffic environments for pedestrians. After 20 years as a transport safety academic, Bruce has established Corben Consulting with the aim of taking road safety practice to ambitious new levels.

ABSTRACT

Mornington Peninsula Shire, located in the outer metropolitan area of Melbourne, Australia, has made the commitment to becoming a ‘Towards Zero’ Municipality, as it strives to eliminate death and severe injury from its roads. In part, this entails attempting to become the safest municipality in Victoria. This presentation will outline the steps being taken to protect the Shire’s residents and visitors from death or severe injuries when using Mornington Peninsula’s roads.

While the focus is strongly on traffic safety outcomes, opportunities are also being sought to improve population health, reduce the Shire’s carbon footprint, and support townships to become even better places to shop, conduct business, work, dine and simply enjoy. It is hoped that the leadership shown by Mornington Peninsula Shire will inspire other Victorian (and Australian) municipalities also to take up this most worthwhile challenge.
Doug was appointed as Assistant Commissioner, Road Policing Command in September 2015. He has strategic responsibility for road policing across Victoria, managing centralised road policing resources, working with state and federal governments and the road policing partners to identify and implement new road policing initiatives.

He previously performed the role of Commander Crime Command from April 2015 until August 2015. In this role he was responsible for the response and investigation into all serious and organised crime investigations. A significant part of the role involved working with Commonwealth and overseas law enforcement agencies such as the AFP, Border Force and international groups in combating organised crime.

Doug was appointed as Commander Southern Metropolitan Region (SMR), in July 2013 to April 2015, in charge of the 2300 staff in the delivery of the policing service. One of the many priorities of the position was to assist the Divisions in achieving reductions in crime, enhancing community safety and ensuring robust stakeholder engagement with both the community and partner agencies.

In 2012 he was promoted to the Commander of the Intelligence and Covert Support Command. At this time he had responsibility for the management and operations of the State Intelligence Division, Surveillance Services Division and the Covert Services Division.

In 2010 Doug was promoted to Detective Superintendent at the Crime Department, where he designed and led the OMCG strategy & taskforce which targeted the resurgence of criminal entities and had an impact on community safety. He was the Senior Investigating Officer, in charge of the Driver Taskforce, assigned with investigating and managing all aspects of the murder of Carl Williams.

He joined the force in 1985 and has served at Collingwood, Fitzroy and Camberwell CIB. In 1996 he was promoted to Sergeant at the Carlton Police Station. He also held roles as a Law Instructor, Team leader at the Drug Squad and Regional Training Officer at Broadmeadows. In 2005 he was promoted to Inspector and in 2008 took up the position of Detective Inspector in charge of the Drug Taskforce.

Doug has been awarded the Australian Police Medal, the National Police service medal, the national medal and the Victoria Police service medal. He has a graduate certificate in leadership and has completed his Executive master’s in public administration.
ABSTRACT

ROADSIDE DRUG TESTING IN AUSTRALIA – HISTORY, PROCESSES, AND LESSONS LEARNED

Victoria Police leads Australia in its drug testing regime of drivers & riders. In Victoria Illicit drugs now outweighs alcohol as a leading casual factor in road deaths and the challenge of changing the community culture to separate behaviours of taking drugs then driving is significant. In 2016 9000+ drivers / riders were detected with illicit drugs whilst driving (strike rate of 1/11). The session will discuss the testing regime, comparative lessons learnt from drink driving, what does the future hold with potential changes to legislation and how to maximize bang for buck in government investment.
KATHRYN (KATHY) STEWART

Kathryn Stewart is President of the International Council on Alcohol, Drugs and Traffic Safety and a founding partner in Safety and Policy Analysis International. She serves as the Director for the Dissemination and Diffusion of Science-Based Prevention at the Prevention Research Center in Oakland, California. She has broad experience in research and evaluation related to the prevention of problems related to substance use, with a special emphasis on underage drinking, drug and alcohol impaired driving and alcohol policy.

Kathryn is the editor of the ICADTS Reporter and previously served as Chair of the Committee on Alcohol, Other Drugs and Transportation of the Transportation Research Board of the U.S. National Academy of Sciences.

ABSTRACT

DRUG IMPAIRMENT IN TRAFFIC: A PROBLEM IN PERSPECTIVE

In recent years, the problem of drug impairment among drivers has received increasing attention among scientists, the public, policymakers, and enforcement agencies. Countries all over the world are adding and toughening laws meant to deter and punish drugged driving. But what do we actually know about the problem? How can we best translate current research knowledge into best practices?

This presentation will address some of the major issues surrounding drugs and driving, including the traffic safety risks posed by drugs, the legal frameworks in place around the world for dealing with drugs in traffic, and the problems posed for enforcement of drugged driving laws. This overview of drug impaired driving will attempt to put the problem into a wider traffic safety perspective, synthesize current knowledge, point out gaps in our understanding and suggest appropriate next steps for researchers and policy makers.
PAUL DELEUR, PH.D., P.ENG

Paul de Leur earned a Bachelor of Science (B.Sc. – Civil), University of Saskatchewan, Master of Applied Science (M.A.Sc.), University of British Columbia, and a Doctor of Philosophy (PhD), University of British Columbia, 2001.

Dr. de Leur has authored over 40 research papers and journal articles, as well as serving as a paper reviewer for several agencies including the US Transportation Research Board (TRB) and the Canadian Society of Civil Engineers (CSCE). He is involved in many national and international organizations, including Transportation Association of Canada’s Road Safety Standing Committee and PIARC / World Road Association Road Safety Technical Committees.

He has 25 years of experience dedicated to the discipline of road safety engineering and has experience and knowledge in the areas of:

- Road safety program development, management and evaluation;
- Road safety audits;
- Collision Analysis, collision prediction and safety modeling;
- Safety conscious road planning, and
- Road safety policy and research.

Experience / Positions:

1) 1992: Highway Research Engineer for the BC MOTI.
2) 1996: Director of the Highway Safety Branch for the BC MOTI.
4) 1999: Road Safety Engineer Consultant to ICBC’s Road Improvement Program
5) 2013: Manager, Road Improvement Program for ICBC.
6) 2014: Adjunct Professor at the University of British Columbia.

ABSTRACT

Cycling Road Safety Audit

Most cities have come to the realization that cycling is an important component of land use and transportation planning. Edmonton has been quite progressive in this regard and in 2009, created long term plans to for a bicycle friendly city by accommodating the needs of cyclists, including provisions for bicycle commuter routes to access the major destinations within the downtown core. In support of the Bicycle Plan, Edmonton City Council approved the construction of 7.1 kilometres of separated bicycle facilities to create a network within the City’s downtown core. A critical component of the project was a road safety audit (RSA).
The RSA for the Downtown Bike Network project was consistent with Edmonton’s Road Safety Strategy 2016 – 2020, where vulnerable road users were identified as a high priority to eliminate fatalities and injuries from motor vehicle collisions. The RSA proactively evaluated the safety of the Downtown Bike Network plan in order to ensure the safety for cyclists on the new cycling infrastructure, as well as the safety for all road users.

There are some important design issues that must be carefully considered when assessing cycling infrastructure and the impact of all road users. These considerations will be discussed, including some risk assessment methodologies that can be used to identify potential problem locations and then quantify and prioritize the level of road safety risk.

Important sources of cycling infrastructure design guidance / criteria will also be reviewed to illustrate the need to balance the needs of all road users in an attempt to avoid poor road user compliance and behaviour.
TAZUL ISLAM, PH.D., P.ENG.
Traffic Safety Analyst, Traffic Safety Section, City of Edmonton

Tazul Islam is currently a Traffic Safety Analyst at the City of Edmonton’s Traffic Safety Section. He received his BSc in Civil Engineering from the Bangladesh University of Engineering and Technology and both his MSc and PhD in Transportation Engineering from the University of Alberta. Tazul’s research interests include vulnerable road user safety, traffic safety culture, before-after safety evaluation and statistical modeling.

He has authored and co-authored over 50 peer-reviewed journal/conference articles and technical reports and presented his research in major transportation conferences. Tazul has received numerous awards for his academic excellence and research, including the most recent Young Researcher Best Paper Award 2016 from the Transportation Research Board’s Safety Data, Analysis and Evaluation committee. Tazul is a Professional Engineer (P.Eng.) in Alberta.

ABSTRACT

PEDESTRIAN SAFETY-THE CITY OF EDMONTON INITIATIVES

The City of Edmonton is the first major Canadian City to officially adopt Vision Zero in their Road Safety Strategy 2016-2020. It was identified that pedestrians are often over-represented in traffic fatalities. Therefore, improving pedestrian safety is one of the major components for achieving the Edmonton’s Vision Zero road safety goal. This presentation will provide an overview of the various engineering and educational initiatives undertaken to improve pedestrian safety in the City of Edmonton. The presentation will also highlight the ranking criteria developed to prioritize non-signalized crosswalks for potential improvements.
LAURA THUE, PH.D.

Laura is the Senior Research Coordinator with the City of Edmonton, Traffic Safety. She received her Master’s Degree in Criminology from Simon Fraser University, and her Ph.D. in Sociology from the University of Alberta. Prior to joining Traffic Safety, Laura was employed as a research analyst with the Edmonton Police Service and as an instructor at the University of Alberta and MacEwan University, teaching in the area of criminology and sociology. Laura’s research interests include traffic safety culture, drug and alcohol impaired driving, high risk drivers, and traffic enforcement and crime reduction. Laura is co-chair for the upcoming International Council of Alcohol Drugs and Traffic Safety (ICADTS) conference, to be held in Edmonton in 2019, and a co-founder of the Annual Run Walk Ride for Vision Zero.

ABSTRACT

2016 EDMONTON AND AREA TRAFFIC SAFETY CULTURE SURVEY

In 2016, the City of Edmonton launched the 2nd Edmonton and Area Traffic Safety Culture Survey. The purpose of this study was to collect data on the attitudes, perceptions and behaviours of road users as they relate to traffic safety. The results indicate that many road users consider behaviours such as making calls on a hand-held cell phone while driving, impaired driving, and speeding on residential streets to be a threat to their personal safety and unacceptable on our roadways, yet, some admit to engaging in these behaviours themselves. The survey findings point to an identifiable gap between what most road users consider acceptable and safe behaviour, and how they actually behave.

The findings from the 2016 survey mirror those of the first survey conducted in 2014, the results of which have been used to establish baselines to identify changes in traffic safety culture over time. This session will present an overview of the 2016 Edmonton and Area Traffic Safety Culture Survey, including the objectives of the study, methodology, key findings and implications for traffic safety.
Len Garis is an Adjunct Professor in the School of Criminology and Criminal Justice & Associate to the Centre for Social Research at the University of the Fraser Valley, a member of the Affiliated Research Faculty at John Jay College of Criminal Justice in New York, and a faculty member of the Institute of Canadian Urban Research Studies at Simon Fraser University. He has also been a member of the FIREfighting in Canada editorial advisory board since 2005. As Fire Chief for the City of Surrey, British Columbia, his focus is on addressing public safety challenges through evidence-based decision making and innovation.

Len Garis joined the Surrey Fire Service in 1998 and has worked in the fire service and related fields since 1980. He believes strongly that long-range vision, planning and innovation can reduce costs, improve efficiency and ultimately enhance services and public safety.

Several of these initiatives have garnered awards and recognition for the City of Surrey in the past decade, including the Union of B.C. Municipalities Community Excellence Awards (for four different programs), a Lieutenant Governor of British Columbia Award for Public Safety, recognition from the Ministry of Public Safety and Solicitor General and in 2013 a Community Health and Safety Award from the International City / County Management Association (ICMA) and in 2016 a Professional Development Award from the Canadian Association of Municipal Administrators (CAMA) and an Award for Collaborative Excellence from the Canadian Collaborating Centre Injury Prevention (CCCIP). In 2013 Chief Garis was awarded the Queen Elizabeth II Diamond Jubilee Medal for his contributions to Canadians.

ABSTRACT  FIRE SAFETY AND DRUGS

Illicit production of marijuana on residential properties creates significant health and safety problems. Health Canada grants licences to individuals to produce medicinal marijuana for personal use, conditional on their compliance with all appropriate regulations.

Health Canada does not inspect licensees’ activities to monitor regulatory compliance, and privacy legislation prevents Health Canada from sharing licence holders’ details with third parties. This research examines how effective this administrative structure is at preventing medicinal marijuana from being produced in residential buildings by licence holders.

The Canadian Government is about to introduce legislation to legalize marijuana, they are suggesting up to four plants may be grown in a person’s home.
GERRY ANNETTS  
Executive Director of Legal and Regulatory Services, Edmonton Police Service

Gerry Annetts graduated from the University of Alberta with a law degree in 2000 and was called to the Bar in 2001. He spent 25 years with the RCMP, working in Manitoba, Alberta, and Ontario. Over that time with the Force, he worked general duties, economic crime, and in police discipline, as a prosecutor, defence counsel, and for the last five years as an adjudicator hearing cases across the country. Gerry retired in September 2015 as the National Director of Adjudicative Services and joined EPS at that time as the Executive Director of Legal and Regulatory Services. He reports to the Chief of Police and he is responsible for the Legal Services Branch and the Professional Standards Branch. He has been involved with the police response to cannabis legalization since October 2015. Gerry sits on the AACP cannabis legalization committee and on the EPS legalization committee and drafted the AACP position paper on the issue.
Chief Neil Dubord joined the Delta Police Department on June 29, 2015 after three years as Chief of the Metro Vancouver Transit Police and 25 years with the Edmonton Police Service where he was the Deputy Chief in charge of Community Policing Bureau.

Chief Dubord brings to the Delta Police a career of working closely with the community. Some of his career highlights include the development and implementation of Community Action Teams, the management of the Neighborhood Empowerment Team, implementation of “The Spirit has No Colour” a cultural competence programs in support of police working in diverse communities and the advancement of a community based service delivery model.

Dubord is recognized nationally as an expert in critical incident command and was the Incident Commander in the Workers Compensation Hostage Taking in Edmonton. He is past president of the National Incident Command Working Group Association, has taught nationally at the Canadian Police College and is published internationally on the topic of Incident Command and Tactical Operations. He has been awarded the Police Officer Order of Merit from the Governor General of Canada, the Police Exemplary Medal and the Queens Diamond Jubilee medal.

He is a member of the International Association of Chiefs of Police, FBI National Academy, FBI Law Enforcement Executive Development Association and serves on committees for the Canadian Association of Chiefs of Police and the British Columbia Association of Chiefs of Police. He is the current President of the British Columbia Association of Municipal Chiefs of Police.

Chief Dubord holds a Master's degree in Leadership & Training from Royal Roads, graduated from the FBI National Academy and the FBI Law Enforcement Executive Development program, is a Canadian Human Resource Professional (CHRP) and successfully defended his dissertation to fulfill the requirements of his Doctor of Philosophy Degree in business from Northcentral University.