

ICORSI

Independent Council for
Road Safety International

International Symposium Road Safety Around the World: Future Concerns

Programme

19 March 2018
University of Chicago Center in Paris

Acknowledgement

Independent Council for Road Safety International is supported by Tata Education and Development Trust, Mawana Sugars, Tata Consultancy Services and individual donors.

The International Symposium *Road Safety Around the World: Future Concerns* has received support from The University of Chicago Center in Paris and Veolia.

Declaration

The presentations at the symposium will be recorded and used for public information.

The papers presented at the ICoRSI International Symposium *Road Safety Around the World: Future Concerns* may be published separately after discussion at the symposium.

All presentations and papers will be available at www.icorsi.org after the symposium.

Welcome

Welcome to the 2018 ICORSI International Symposium in Paris. I am delighted to be chairing this important event which brings together some of the best independent minds in the field of road safety, from around the world.



The need to investigate, explain and find solutions to the road casualty problem has never been greater. It is a scandal that 1.3 million people will die on the world's road in 2018. This is sometimes described as a major public health problem. But this not like AIDS, Ebola or malaria. This is a man-made problem – the result of ever more vehicles being added to unsuitable roads without the systems to manage and control them safely.

Like you, I am passionate about tackling this issue. But we know that passion alone is not enough. We need good scientists, engineers, doctors, lawyers, statisticians, psychologists, and others to devise evidence-based policies that will work. We know a great deal already about what works, particularly in Europe. But the challenges in many newly-industrialising countries are quite different and the standards and solutions of the West are often unworkable or inappropriate.

I believe ICORSI can play a major role in developing knowledge, solutions and in-country capacity in road safety in all countries. That way we may avoid the “hearts and flowers” approach that, whilst understandable, does not work and will not reduce casualties.

Barry Sheerman MP

Chair ICORSI

Programme

- 09:00 Introduction to ICoRSI & the Symposium: *Barry Sheerman*
- 09:30 Chair: *Girish Agrawal*
- Preventing motor vehicle injuries and deaths – Science vs. folklore.
Brian O’Neill
- 10:00 Panel discussion - Past and Future
Chair: *Ian Roberts*
- Global road safety and future directions. *Mark Stevenson*
 - Effect of road safety interventions on traffic injuries globally. *Kavi Bhalla*
 - Dealing with existing theory – vehicles & personal safety measures.
Dinesh Mohan
- 11:30 Coffee
- 11:50 Panel discussion - Vehicles, roads and speeds
Chair: *David Davies*
- Speed in a high-speed society. *Christer Hyden*
 - Development of safer rural highway systems. *Geetam Tiwari*
 - Safety of motorised 2 & 3 wheeled vehicles & informal transport sector.
Maria Isabel Gutierrez Martinez
- 13:20 Lunch

14:20 Chair: *Guoqing Hu*

- Prehospital care – evolution, practice, science and evidence.
Mathew Varghese

14:50 Theoretical issues in road safety
Chair: *Hermann Knoflacher*

- Road safety research and practice: problems of coexistence. *Ezra Hauer*
- The development of knowledge: an evolutionary interpretation: *Rune Elvik*
- Road users: formal & informal rules. *Farida Saad & Sylvain Lassarre*

15:50 Coffee

16:10 Institutional Perspectives
Chair: *Yves Page*

- The future of road safety in Europe: challenges and opportunities:
Antonio Avenoso
- Implementing the safe system and analytical capacity building around the world: *Stephen Perkins*
- Future safety technologies for low cost vehicles in LMICs: *Jacques Faure*
- Global Voluntary Performance Targets on Road Safety: *Nhan Tran*

17:20 Open discussion: Way forward
Chair: *Ian Johnston*

18:00 Concluding remarks: *Barry Sheerman*

18:15 Reception

Speakers



Antonio Avenoso is the Executive Director of the European Transport Safety Council where he has been working since 2001. Within ETSC Antonio has managed several international research networks and road safety programmes. He has worked in the “Railway and Interoperability Unity” of the Directorate General for Energy and Transport of the European Commission. He holds an academic degree cum laude in Political Science from the University of Pavia and an M.Phil. in European Studies from the University of Cambridge.



Barry Sheerman has been the Member of Parliament for Huddersfield, UK, since 1979. As a new MP, Barry organized a group that successfully introduced compulsory seat-belt wearing for adults and restraints for all children in cars. This group later became the charitable trust, Parliamentary Advisory Council for Transport Safety (PACTs). He organized the European Transport Safety Council (ETSC) with leaders from the Netherlands, Sweden & Germany. Barry was founding supporter of the World Bank's Business Partners for Development, which created the Global Road Safety Partnership (GRSP), where he served as Chair. He is the Chairperson of the Independent Council for Road Safety International (ICoRSI).



Brian O'Neill joined the Insurance Institute for Highway Safety (IIHS) in 1969, in 1985 he was made president, a position he held until his retirement in 2005. Under his leadership, IIHS built a state-of-the-art vehicle research center in 1992 and initiated the IIHS crashworthiness evaluations in 1995. His own research covered a wide range of highway safety issues. From 2010 until 2017, he served on the Board of the Pacific Institute for Research and Evaluation, a public health research group, from 2014 to 2016 he was the Board Chairman. In 2015, following the recall of several million Takata airbag inflators, he was hired by Honda and Takata to conduct an independent audit of the original Takata development testing of inflators that not been recalled.



Christer Hyden obtained his civil engineering degree at Lund University in 1971. Since then he has been employed at Lund University in the Department of Traffic Engineering (now the Department of Technology and Society), where he has been Professor since 1993, and Emeritus since 2012. His main areas of research are safety in urban areas, assessment technique like the traffic conflict technique, speed, speed limiters in cars, and ITS. He has been the Chairman of International Cooperation on Theories and Concepts in Traffic Safety. He won the Volvo Traffic Safety Award, in 1991.



David Davies has a background in sustainable transport, road safety, public sector scrutiny, planning and research. He has worked in local government and transport consultancies, including five years at the Transport Research Lab. In 2003 he moved to the Audit Commission, and subsequently to the UK Parliament House of Commons Transport Select Committee, managing inquiries into road safety, aviation strategy, high-speed rail, national policy for ports and bus competition. He has been the Executive Director of PACTs since January 2013. Current priorities for PACTs include improved collision investigation procedures, improved vehicle safety standards and better use of technology to encourage/enforce safer road use. PACTs is active in the autonomous vehicles debate.



Dinesh Mohan is Distinguished Professor at Shiv Nadar University, India and Honorary Professor for Biomechanics and Transportation Safety at the Transportation Research and Injury Prevention Programme at the Indian Institute of Technology Delhi. He obtained his Ph.D. degree in Biomechanics from the University of Michigan, Ann Arbor, and has worked at the Insurance Institute for Highway Safety, Washington, DC, and the University of Michigan Transportation Research Institute. His research includes transportation research (safety and pollution), human tolerance biomechanics and road safety. Dinesh is the Director of the Independent Council for Road Safety International (ICoRSI).



Ezra Hauer is a Professor Emeritus in the Department of Civil Engineering at the University of Toronto. His research focuses on the relationship between roadway design and safety. His books, *Observational Before-After Studies in Road Safety* (Pergamon 1997) and *The Art of Regression Modelling in Road Safety* (Springer 2015), provide invaluable guidance to state and federal transportation agencies as well as to the research community. Hauer received the Roy W. Crum Award, the highest honour bestowed by the Transportation Research Board, for his outstanding contributions to developing and using statistical and experimental methods in transportation design and safety. He received the ITE Transportation Safety Award in 1993



Farida Saad has a post-graduate degree in Social and Industrial Psychology and she developed her research at the French National Organization for Traffic Safety, ONSER, which later became part of the French National Research Institute on Transport and Safety, INRETS, and later part of the French Institute of Science and Technology for Transport, Development and Networks. She has conducted applied research at the national and international levels in driving ergonomics, driver behavior in safety critical situations in real driving conditions and studying use, acceptance and behavioral impacts of new driver support systems. She retired from IFSTTAR in March 2013.



Geetam Tiwari is the MoUD Chair Professor for Transport Planning at the Department of Civil Engineering, and Transportation Research and Injury Prevention Programme (TRIPP) at IIT Delhi. She obtained her B. Arch degree from the University of Roorkee, and a Master of Urban Planning and Policy, and Ph.D. in Transport Planning and Policy, from the University of Illinois, Chicago. She has received the degree of Doctor of Technology honoris causa from Chalmers University of Technology, Sweden, in 2012. She has been an Adlerbretska Guest Professor for sustainable urban transport at the Chalmers University of Technology, Sweden, 2007– 2010. She has been working in the area of traffic and transport planning focusing on pedestrians, bicycles, and bus systems. She is editor-in-chief of the *International Journal of Injury Control and Safety Promotion*.



Girish Agrawal is the Associate Director for Strategy and Planning for the School of Engineering and the Head of the Department of Civil Engineering at Shiv Nadar University, a new research-led interdisciplinary university located in India. Dr. Agrawal's research includes transportation engineering, pattern recognition, urban systems, and large-scale data collection using dense networks of low-cost sensors. He has deep knowledge of transportation systems and road safety issues in an international context – more than two decades of professional experience in designing and building transportation infrastructure in multiple states in the USA, and a wide experience of collaboration with researchers in multiple countries on issues of road safety and transport law & policy.



Guoqing Hu is Professor and Vice Dean of Xiangya School of Public Health, Central South University. He holds a Ph.D. in Epidemiology and Health Statistics from Central South University and a Masters degree from Central South University, China, and has received 1.5 years training at Johns Hopkins Bloomberg School of Public Health. His research focuses on injury epidemiology and policy research. Guoqing has published over 100 peer-reviewed articles and serves as the editorial member of two international academic journals (*Injury Prevention*, *Injury Epidemiology*) and four domestic academic journals (*Injury Medicine*, *Chinese Journal of Modern Paediatrics*, *Practical Preventive Medicine*).



Hermann Knoflacher is Professor Emeritus and former head of the Institute for Traffic Planning and Traffic Engineering TU, Wien, Austria. He has been involved in road safety since 1963 through work in civil engineering, transport planning, traffic safety, and urban planning. His fields of research include design of transport elements, user behaviour, traffic-infrastructure and mobility, sustainable development of cities, traffic safety, energy-consumption, and the environment. He and his team have developed, bases on theory and empirical evidence, the core hypotheses for paradigm change in transport and urban planning. He has published 12 books, more than 600 scientific publications, and has lectured extensively in the field of transport planning and traffic engineering worldwide.



Ian Johnston has worked in the transport safety field since 1966. He has a special interest in how societies, governments and organizations think about and manage safety and in the translation of research results into policy and practice. He was awarded a Medal of the Order of Australia for his contributions in 2007. Ian was Managing Director of the Australian Road Research Board from 1989 to 2001 and Director of the Monash University Accident Research Centre from 2001 to 2006. He now runs his own consultancy in safety services. Ian is the independent chair of the National Road Safety Partnership Program and of the Victorian injury data working group and is the independent expert on the Tasmanian Road Safety Council. In addition, he served for six years as a non-executive Director (Deputy Chair) on the Board of the National Transport Commission.



Ian Roberts is Professor of Epidemiology at the London School of Hygiene and Tropical Medicine. He trained as a paediatrician and epidemiologist. He is coordinating editor of the Cochrane Injuries Group, a network that prepares systematic reviews of the effectiveness of interventions in the prevention, treatment and rehabilitation of injury. He is principal investigator of the CRASH trials, which are large international clinical trials of better ways to treat injured trauma patients. The CRASH-1 trial, showed that corticosteroids, which were widely used in the management of head injury, did not improve patient outcome after head injury but increased the risk of death. The CRASH-2 trial has shown that tranexamic acid, an inexpensive and widely practicable treatment, safely reduces mortality in bleeding trauma patients. He is the author of *The Energy Glut: the politics of fatness in an overheating world*.



Jacques Faure is an expert in vehicle safety at the automaker Renault SA. He graduated from Sup'Aero, an aerospace engineering school located in Toulouse, France, in 1984. He started his career in Renault as a body in white structural simulation engineer in 1987, working on all aspects of structural behavior (NVH, stiffness, endurance, and crash). In 1997, he took a new position as body in white project engineer, before joining Nissan, in the framework of the newly created Renault-Nissan Alliance, in 1999. After a rich personal and professional three year period at Nissan, he was called back to Renault late 2002, to become the head of the passive safety department, until 2009, where he was appointed as Chassis project engineer for a short period. In 2010, he then became Expert Leader for the newly created Renault expertise network, in the domain of vehicle safety.



Kavi Bhalla is an assistant professor in the Department of Population Health, Biological Sciences Division, and affiliated faculty of the Harris School of Public Policy at the University of Chicago. His research aims to develop transport systems that are safe, sustainable and equitable, with a central focus on road safety in low- and middle-income countries. His recent work has focused on the development of analytical tools for improving estimates of the incidence of injuries in information-poor settings using available data sources. Kavi co-led the injury expert group of the 2010 Global Burden of Disease Project. Kavi is the Convener of the Independent Council for Road Safety International (ICoRSI).



Maria Isabel Gutierrez Martinez is the Director of CISALVA Institute and Professor of Epidemiology at School of Public Health at the Universidad del Valle in Cali, Colombia. She has been a consultant for various national and local governments, and international institutions such as the Pan American Health Organization (PAHO), the Inter-American Development Bank (IADB), the World Bank, the United Nations Development Program (UNDP), and the United Nations Office on Drugs and Crime (UNODC), in strategies to identify and prevent injuries. She is Chair of the Safe Communities Latin-American and the Caribbean Network.



Mark Stevenson is an epidemiologist and Professor of Urban Transport and Public Health at the University of Melbourne. He is a National Health and Medical Research Council (Australia) Fellow, an Honorary Professor in the Peking University Health Science Centre, China, and an advisor for injury to the Director General of the World Health Organization. Dr. Stevenson has worked on numerous national and international projects that have influenced transport policy and worked with both Federal and State Governments in Australia and internationally. He is the director of the newly established Transport, Health, and Urban Design research hub comprising a cross-disciplinary research team exploring how the effects of urban form and transportation influence the health of residents in cities.



Mathew Varghese is the Head of the Department of Orthopaedic Surgery and the former Director of St Stephen's Hospital, Delhi. He is a post-graduate in orthopaedic surgery from the Maulana Azad Medical College, Delhi University. He specializes in trauma care with particular emphasis on reconstructive surgery for complex trauma to the musculo-skeletal system and in pre-hospital care for trauma patients. He is the chair of the Project Review Committee on Trauma Care for the Indian Council for Medical Research and member, Technical Committee on Trauma and Emergency Care Services (TECS) at the WHO, Geneva.



Nhan Tran joined WHO in 2011. For the last 6 years, he was the Manager of the WHO Alliance for Health Policy and Systems Research where he led the development of guidance and initiatives to facilitate the implementation and scale up of proven effective interventions. Since October 2017 Dr Tran is the Coordinator of the Unintentional Injury Prevention Team (UIP) within the Department for Management of Noncommunicable Diseases, Disability, Violence and Injury Prevention (NVI). Prior to joining WHO, Dr Tran worked for the United States Department of Health and Human Services. Later as a researcher at Johns Hopkins University, Dr Tran engaged in health systems and road safety research and co-founded the International Injury Research Unit.



Rune Elvik was educated as a political scientist at the University of Oslo. He has worked as road safety researcher at the Institute of Transport Economics since 1980. He obtained doctoral degrees from the University of Oslo in 1993 and 1999 and from Aalborg University in Denmark in 2007. He was associate editor of *Accident Analysis and Prevention* from 1997 to 2004 and editor-in-chief (together with Karl Kim) from 2005 to 2013. He has participated in many research projects funded by the European Commission, and been a member of Transportation Research Board committee on safety data, analysis and evaluation. He is the author of about 120 papers in scientific journals and many research reports.



Stephen Perkins Stephen Perkins is the Head of the Joint Transport Research Centre of the OECD and the International Transport Forum. The Joint Research Centre undertakes economic research in support of transport policy development. Its work underpins the activities of the Forum and facilitates policy dialogue and exchange of experience for transport research institutes and transport ministries. Stephen's previous experience includes work on energy industry restructuring and regulation at the International Energy Agency, work on economic regulation for a major gas utility and consultancy on energy policy and environmental issues for government and industry.



Sylvain Lassarre is a statistician and Emeritus Research Director at IFSTTAR. His main research topic is road traffic risk assessment and management supported by basic research on statistical methods for the epidemiology and analysis of road accidents, the evaluation of the effectiveness of road safety measures, the quantification of road risk factors, the analysis of road users' behaviour. Having been responsible for the Master Transportation Safety at UVSQ and internationally recognized for his work on the road risk management and road safety, he has participated in many OECD Transport research groups and conducted various expertises and teachings in Asia and Africa as part of the World Bank and WHO.



Yves Page is representing the "College Français de Médecine du Traffic", which is a French Association contributing to improve knowledge about traffic medicine and road safety. He has been working for the French automotive industry and previously in the ministry in charge of road safety policies. He was/is member of the Scientific Committee of the French National Road Safety Foundation, of the Committee of Experts for the National Council for Road Safety, of the Scientific Committee of the Belgian Road Safety Institute, of the Ethics Committee of IFSTTAR, and of the Scientific program Committee of the AAAM. He published more than 80 articles and reports about road safety those last 25 years.

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Vision

The implementation of effective strategies for the prevention of road traffic deaths and injuries is a global health priority and consistent with the goal of environmental sustainability. With the ultimate goal of eliminating all deaths and disabilities related to mobility, ICoRSI envisions a comprehensive and rigorous scientific evaluation of all mobility related policies and encourages promotion of evidence based safety interventions.

Keeping this vision in mind we believe that road safety and sustainable mobility policies should be based on sound analyses of road safety data and scientifically robust evaluations of road safety interventions. ICoRSI recognises that the field of safety is an area that involves expertise from several sectors including those from the engineering, planning, architecture, epidemiology, economics, statistics, medicine, environmental sciences and the social sciences. The Council will therefore draw from the experience, knowledge and the expertise of experts from many of these areas, so that recommendations from the Council are broad based and are socially, economically and scientifically acceptable. ICoRSI will maintain its independence by not accepting funding that could in any way compromise the integrity of the organization or the individual members.

Mission

Existing scientific knowledge on road safety can save thousands of lives globally. However, lack of awareness of this knowledge and experience among politicians, policy makers, NGOs, development and donor agencies can lead to adoption of practices that are not only ineffective but in some instances could lead to an increase in deaths and injuries. ICoRSI hopes to provide decision makers and practitioners with scientifically based information and advice to help save lives and prevent disabilities.

There is an urgent need to ensure that the road safety activities of local, national, and international institutions prioritize the most important issues that threaten the safety and wellbeing of society. Decision makers need to be provided with independent and unbiased advice on what is known from decades of safety research, as well as guidance on the expected effects of emerging technologies that could potentially be game changers. Wherever and whenever required ICoRSI hopes to generate scientific evidence for safety in transportation through independent research and reviews conducted by members or their associates or partners.

The Independent Council for Road Safety International is a not-for profit organization that provides independent authoritative advice on global road safety policies by road safety scientists that have no financial conflicts of interest. In summary ICoRSI aims to:

- Provide rapid, independent and evidence-based information on road safety policy and practice to policy makers and the public.
- Strengthen the capacity of safety professionals and policy makers to understand existing evidence and undertake new research.
- Facilitate capacity building for safety professionals and policy makers in the field of transportation safety

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