

FELLOW PROFILE

Name: Y. Ian Noy

Degrees, PhD, CPE certifications, etc.: Current status: VP, Director, Liberty Mutual Research Institute for Safety Home page: <u>http://www.libertymutual.com/research</u> institute



Biography (How you got involved in the field, your major career activities and milestones):

While studying nuclear engineering at the University of Toronto (1967-1971), I took an elective course on man-machine systems. I was fascinated by human function and I became particularly intrigued with the interplay between human cognition and systems engineering. Inspired by this course, I decided to pursue a Master's Degree in Industrial Engineering, specializing in Human Factors.

Upon graduating from the University, I joined the Defence and Civil Institute for Environmental Medicine (DCIEM), as a defence scientist. After four years, I became Head of the Human Engineering Evaluation Division. In 1981, I joined the Road Safety Unit of Transport Canada, (which was co-located with DCIEM on a Canadian Forces Base in Toronto), and a few months later, I replaced the outgoing Head of the Road Safety Unit, Dennis Attwood. While working at the Road Safety Unit, I became interested in vehicle telematics and was fortunate to gain Departmental support to pursue my doctorate at the IE Department, University of Toronto. There, under the direction of Neville Moray, I investigated shared attention while driving with telematics devices. After earning my doctorate, I moved to Ottawa and continued my research as Chief of the Ergonomics Division, Transport Canada. In 2001, I was promoted to Director of Standards Research and Development, where I was responsible for motor vehicle and motor carrier safety regulations. In 2006, I moved to the United States to take up the Directorship of the Liberty Mutual Research Institute for Safety, a world class research organization devoted to advancing the science of workplace and road safety.

Throughout my professional career, I have been actively involved with the Human Factors Association of Canada (formerly HFAC, now ACE) and with the International Ergonomics Association (IEA). My involvement with HFAC provided wonderful opportunities to engage with scientists, teachers and practitioners in a broad range of fields. Highlights of this experience include, co-chairing the highly successful 1984 International Conference on Occupational Ergonomics, chairing the 1994 IEA Congress, and election to presidency of the Association in 1981. My involvement in the IEA began in 1981 when, as President of HFAC, I attended the IEA Council meeting in Rochester, NY. The following year, I attended the Tokyo IEA Congress, where Hal Hendrick introduced a new branch of ergonomics --macroergonomics-- to the IEA In 1983, Hal and I chaired two ad hoc committees of the IEA. This led to two significant personal milestones: a close collaboration and friendship with Hal Hendrick, and a 20-year involvement on the IEA Executive, culminating in my presidency 1997-2000.

Through my involvement in HFAC and IEA, I have been given many exceptional opportunities to serve the profession, and I have been exposed to many diverse perspectives that have enriched my career. In addition, I have befriended and worked with many people across the globe who have had a profound impact on me personally and professionally. I am grateful to a multitude of colleagues, mentors and friends who have inspired me, challenged me, and helped me in what continues to be supremely rewarding career.

Employment History (List top 5 positions):

- 1. **2006-Present**, Vice President Liberty Mutual Group and Director, Liberty Mutual Research Institute for Safety, 71 Frankland Rd., Hopkinton, MA 01748. Responsible for overall direction and management of the organization's scientific research aimed at the reduction and mitigation of occupational injuries, including oversight of the Institute's Center for Injury Epidemiology, the Center for Physical Ergonomics, the Center for Behavioral Sciences and the Center of Disability Research, as well as extramural/collaborative research.
- 2. 2002-2006, Director, Standards Research and Development, Road Safety Directorate, Transport Canada, 330 Sparks St., Ottawa. Responsible for motor vehicle safety regulations; ergonomics, crashworthiness and vehicle systems research; and motor carrier safety.
- **3. 1982-2006**, President and principal consultant, Systems Ergonomics Inc. Provided professional consulting services in a broad range of areas including, forensic analysis in cases involving personal injury arising from human-system failures, expert testimony in aid of civil or criminal litigation, workplace assessment, task analysis, specification of user interface design, and related research.
- **4. 1982-2002**, Chief, Ergonomics Division, Transport Canada, 344 Slater St., Ottawa. Responsible for directing the operation and research of the Division, including human factors research to support the development of vehicle safety standards and a variety of other accident countermeasures. During 1995-1998, also responsible for the management of the Vehicle Systems Division which conducted research in biomechanics and crashworthiness, heavy vehicle crash avoidance and other areas relevant to motor vehicle safety.
- 5. 1977-1981, Head of Evaluation Group, Human Engineering Section, Behavioural Sciences Division, Defence and Civil Institute of Environmental Medicine, (DCIEM, North York, Ontario). Responsible for the research of five scientists, including planning and directing human engineering studies to support research and development of military man-machine systems as well as conducting independent research into a variety of military problems. Represented DCIEM on international standardization committees.

What were your significant contributions to the field?

I have authored over 130 technical reports and publications and reviewed numerous scientific and technical reports. I was lead Editor, <u>Handbook of Human Factors in</u> <u>Litigation</u>, 2004, CRC Press. I also edited <u>Ergonomics and Safety of Intelligent Driver</u> <u>Interfaces</u>, 1997, Lawrence Erlbaum Associates. I also initiated and spearheaded the effort to formulate and adopt the IEA definition of Ergonomics (Human Factors).

Did you receive any notable awards or recognition during your career?

- U.S. National Highway Traffic Safety Administration's Engineering Excellence Award
- Distinguished Service Award, International Ergonomics Association
- Human Factors and Ergonomics Society's Distinguished International Colleague
 Award
- Prof. Wojciech Bogumit Jastrzebowski Medal of the Polish Ergonomics Society
- Guest Professorship, Department of Industrial Engineering, Tsinghua University, PR
 China
- Fellow of the International Ergonomics Association
- Fellow of the Human Factors and Ergonomics Society
- Honorary Fellow of the Association of Canadian Ergonomists/Association canadienne d'ergonomie
- Deputy Minister Commendation for Excellence, Transport Canada
- Delegation Leader, Ergonomics Delegation to the People's Republic of China, People to People Ambassador Programs

Which articles in the journal *Human Factors* would you say were the most influential to you and your research or practice?

The articles of most interest to me were those dealing with transportation safety. Over the years there have been numerous excellent articles in this area, too numerous to list.

Please provide any links to your online articles, essays, blogs, Wikipedia pages, etc., that pertain to your research, publications or practice.

www.libertymutualgroup.com/researchinstitute http://www.crcpress.com/product/isbn/9780415288705

What advice would you give someone considering HF/E as a profession?

When I look back at my career, I realize that many of the positive developments came about as a result of chance encounters and opportunities that emerged long after the seeds were unwittingly planted. My advice is to keep an open mind, stay current with developments in the field, pursue directions where you have true passion, take risks, and network extensively. I was fortunate throughout my career to have the latitude to pursue my passion, often in organizations and environments that are not considered overly stimulating. But the organizational environment played a very small part of my career trajectory. I was motivated from within and reaped rewards from colleagues far and wide. I realize that I was privileged to have the discretion to pursue my extramural activities having gained the trust and confidence of my employers.

So, the most important advice is to take responsibility for your own development relying on hard work and good fortune – the former is entirely within one's control; the latter is often spurred by the former.