

Lung Cancer and Prevention in Mining Symposium, July 10-11, 2017

Speaker Biographies

George Gritziotis, Chief Prevention Officer, Ontario Ministry of Labour



George Gritziotis joined the Ministry of Labour in October 2011 as Ontario's first Chief Prevention Officer (CPO) and Associate Deputy Minister.

As CPO, Mr. Gritziotis has been working to prevent and eliminate work-related injury, illness, and fatalities. He has led several strategic initiatives to improve the health and safety of Ontario workers, including the implementation of the province's first Integrated Occupational Health and Safety Integrated Strategy, the Mining Health, Safety and Prevention Review, mandatory health and safety awareness training, new Joint Health and Safety Committee certification standards and standards for working at heights. Mr. Gritziotis is currently on the Workplace Violence Leadership table and is leading the Prevention strategy for first responders with Post Traumatic Stress. He is also responsible for the oversight of funding to the Health and Safety Associations, occupational health and safety research grants and produces the Occupational Health and Safety in Ontario Annual Report to the Minister of Labour. Mr. Gritziotis is currently leading the Construction Health and Safety Action plan, and the development of Construction Health and Safety Awareness training standards.

Before joining the ministry, he served as founding executive director of the Construction Sector Council, a national organization committed to developing a highly skilled workforce to support the human resources needs of Canada's construction industry. Mr. Gritziotis holds an MBA from the University of Ottawa. He also has an economics degree from Concordia University.

Fergus Kerr, Consultant and former Employer Vice-Chair of the Mining Health, Safety and Prevention Review Advisory group.



Fergus is retired after over 40 years management experience in uranium, copper and nickel mines throughout Canada. He now consults on Leadership and Management Development and conducts occupational health and safety reviews globally, recently in Mongolia and Indonesia, and also in mine development projects in Ontario and West Africa.

He worked for 14 years at Denison Mines in Elliot Lake (a large underground uranium mine), the last 5 years as General Manager. After leaving Denison, when it closed, he held the position of Area Manager for INCO in Sudbury for 7 years. He was then appointed initially Director of the Mining Sector with the Workplace Safety and Insurance Board and then Director of the Occupational Disease and Survivor Benefits program in Toronto. He was also the Employer Co-Chair on the Mining Safety, Health and Prevention Review committee representing the Ontario Mining Association.

Rui Wang, Vice-President, Research, Laurentian University



Dr. Rui Wang has been Vice-President Research of Laurentian University since January of 2015. From 2004-2014, Dr. Wang was the Vice-President Research and then Vice-President Research, Economic Development and Innovation at Lakehead University. Dr. Wang has also held positions at the University of Saskatchewan, the Mount Desert Island Biological Laboratory, and Université de Montréal. Trained in China as a medical doctor, he received a PhD degree in 1990 from the University of Alberta.

Dr. Wang is an international leader in the biomedical study of a group of small molecules of gas, known as gasotransmitters, a category which includes nitric oxide, carbon monoxide, and hydrogen sulfide (H₂S). Dr. Wang's achievements have been recognized with numerous honors and awards.

Paul Demers, Occupational Cancer Research Centre



Paul Demers is the Director of the Occupational Cancer Research Centre, based at Cancer Care Ontario in Toronto, and the Scientific Director of CAREX Canada. He is a Professor with the Dalla Lana School of Public Health at the University of Toronto and a Clinical Professor with the University of British Columbia. Paul is an epidemiologist whose research has focused primarily on occupational and environmental cancer, lung disease, and heart disease. He has a PhD in epidemiology and a Master's degree in occupational hygiene. His epidemiologic studies have included studies of uranium miners, aluminum smelter workers, and diatomaceous earth miners and millers. He is also the lead principal investigator for a national team developing estimates of the human and economic burden of occupational cancer in Canada. He has been a

member of many national and international expert panels dealing with occupational and environmental cancer for organizations such as the International Agency for Research on Cancer, the U.S. National Toxicology Program, the Canadian Cancer Society, the Royal Society of Canada, the U.S. Institute of Medicine, the Health Effects Institute, and the American Conference of Governmental Industrial Hygienists.

Vic Pakalnis, President and CEO, MIRARCO Mining Innovation



Vic Pakalnis has a rich and diverse background in the mining industry, government and academic institutions. In 1972, he obtained a Bachelor's Degree in Mining Engineering and in 1976, obtained a Master's Degree in Engineering, both from McGill University. He had a 32 year career in provincial government at the Ontario Ministry of Labour. He worked as the Chief Mining Engineer, Provincial Director of Mining, Director of Industrial Health & Safety, Regional Director of Eastern Ontario (which included corporate and program responsibilities for Health and Safety Programs and Employment Standards) and Operations Director for Human Resources (which required him to recruit and train over two hundred new inspectors). In July 2012, he became President and CEO of MIRARCO Mining Innovation; a not-for profit corporation with 50 researchers and revenues of \$4M. On November 1st 2016, he was appointed Associate VP at Laurentian Mining Innovation Technology, an umbrella

organization composed of 225 researchers at Laurentian University.

Leo Gerard, United Steelworkers of North America



Leo W. Gerard is the International President of the United Steelworkers, the largest and most diverse industrial union in North America and the dominant union in paper, forestry products, steel, aluminum, tire and rubber, glass, chemicals and petroleum. Under Gerard's direction, the 850,000-member USW has heightened its focus on reversing the alarming decline of manufacturing in the United States.

During his tenure, the USW has grown through organizing and through mergers with the Paper, Allied-Industrial, Chemical and Energy Workers International Union (PACE) and other unions. In recognition of the global strategies of the USW's multinational employers, Gerard has long championed strategic alliance agreements with unions throughout the world.

In 2008, the USW joined with Unite, the biggest union in the United Kingdom and Republic of Ireland, to create Workers Uniting, the first global union.

Prior to his election as International President, Gerard served as the union's International Secretary-Treasurer (1994-2001), as National Director of Canada (1991-1994), and as Director of District 6 in Ontario (1986-1991). He was appointed a USW Staff Representative in 1977. Gerard also serves on the AFL-CIO's Executive Committee. He is a co-founder of the BlueGreen Alliance, a national partnership of labor unions and environmental organizations dedicated to expanding the number and quality of jobs in the green economy.

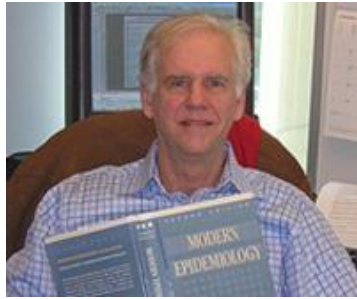
Val Wolfe, Executive Director, Occupational Health Clinics for Ontario Workers



Val Wolfe is a Health, Safety and Administrative professional with a passion for communication and prevention. An Engineering Chemist with certification in Industrial Hygiene, OHS, and Risk Management, she joined the Occupational Health Clinics for Ontario Workers in the fall of 2014 after a long and successful career helping workers & students as the EHS leader at a busy university (with a broad & diverse portfolio including Wellness, Disability Management, Insurance, Personal Security, Life Safety and Environmental Compliance). In her current role she supports and fosters the important patient, workplace and community work of the Hamilton Clinic, is an active member of OHCOW's leadership team, and is heavily involved in Prevention System committees and planning. Building on foundational work by OHCOW staff and system partners, Val recently led a multi-stakeholder

Reference Group in the development of a ground-breaking Occupational Disease Action Plan for Ontario, and currently chairs the ODAP Implementation Team.

Kyle Steenland, Emory University



Dr. Kyle Steenland is an epidemiologist who is a professor in the Environmental Health Department, at Rollins School of Public Health at Emory University in Atlanta, Georgia. Prior to moving to Emory in 2002, he worked 20 years for the National Institute for Occupational Safety and Health (NIOSH), the US government agency responsible for research on occupational health. He has worked on a number of projects involving occupational exposure and cancer, including studies of workers exposed to diesel fumes, silica, dioxin, lead, and welding fumes. We are part of a group at the International Agency for Research on

Cancer, part of the World Health Organization, which determined that diesel fumes caused lung cancer in 2012. He has authored over 120 first-authored article in peer-reviewed journals.

Mary Schubauer-Berigan, US National Institute for Occupational Safety and Health



Dr. Mary Schubauer-Berigan is a Senior Research Epidemiologist with the National Institute for Occupational Safety and Health, in Cincinnati, OH. Since 1999, she has conducted epidemiologic studies of cancer and other health effects among workers, including studies of nuclear workers, flight attendants, uranium miners, and workers exposed to beryllium and carbon nanotubes. She is a collaborator in a new internationally pooled cohort study of uranium miners. She has contributed to the development of risk-based analytic tools for the compensation of radiogenic cancers among U.S. nuclear workers. She has co-authored over 85 peer-reviewed

publications. She received her PhD in epidemiology from the Medical University of South Carolina and a MS in biology from the University of Minnesota.

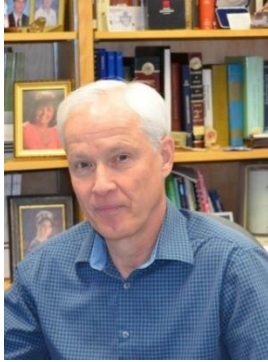
Curtis Caldwell, Radiation Safety Institute of Canada



Dr. Caldwell is Chief Scientist at the *Radiation Safety Institute of Canada*, and holds an Adjunct Professor appointment from the University of Saskatchewan. He received his B.Sc.(H) in Physics from Acadia University, his M.Sc. in Medical Physics from McGill University and his Ph.D. in Medical Biophysics from the University of Toronto. He served as a medical physicist and Corporate Radiation Safety Officer for 25 years at Sunnybrook Health Sciences Centre in Toronto. During that time he held appointments as an Assistant Professor in the Departments of Medical Imaging and Medical Biophysics, University of

Toronto, as well as Adjunct Professor, Department of Math, Physics and Computer Science, Ryerson University. He is an author of 84 peer-reviewed papers and approximately the same number of peer-reviewed abstracts. He is a member of the Canadian College of Physicists in Medicine and a former secretary of the Canadian Organization of Medical Physicists.

Michel Grenier, Natural Resources Canada



Michel Grenier is a researcher and the Alternative Energy Technology research program manager at Canmet MINING. He has worked on the development and technical evaluation of hybrid mining vehicle technology. He takes the lead in the development and introduction of analytical processes to measure the exposure of mine workers to diesel particulate matter in Canada. His group is currently active in the collaborative development of standards for alternative energy technology vehicles in U/G mines and the certification of cleaner diesel engine and after-treatment technology.

Emily Haas, US National Institute for Occupational Safety and Health



Emily has a PhD in Health Communication from Purdue University, Indiana, and an MA/BA from the University of Dayton, Ohio. Working at the Pittsburgh Mining Research Division for 4.5 years, Dr. Haas' research uses mixed-methods approaches to solving complex issues of risk management in the mining industry. She has led research efforts resulting in interactions with thousands of mineworkers and leadership to produce reports to inform the scientific community and industry stakeholders about new efforts to ensure the health and safety of mineworkers. She currently leads a project that implements organizational interventions with an emphasis on improving worker engagement, communication, and risk management. These interventions have helped facilitate healthier work practices by way of new mine technologies including proximity detection systems, helmet-CAM assessment technology, and continuous personal dust monitors. Her research is published in journals including Safety Science, Safety and Health at Work, International Journal of Qualitative Methods, and American Journal of Health Behavior.

Jozef Stachulak, MIRARCO Mining Innovation



Joe Stachulak received an MSc in mining engineering from AGH University of Science and Technology of Cracow, Poland, and a PhD from McGill University. He began his career as project engineer at Giant mine, Yellowknife, NWT. Since 1977, he has held positions in engineering, as operation/mine foreman, and as manager – strategic ventilation for Vale's base metal Global operation. He is an adjunct professor at McGill University. He has published extensively in the area of ventilation design/practices and health and safety and is a frequent speaker at international mine ventilation congresses. He has been a principal investigator of a number of successful projects with international scope, demonstrating a blend between pure research and practical industry application. Currently, he is leading the diesel emission research with MIRARCO Mining Innovation, a consortium supported by Vale Sudbury/Thompson, Glencore, KGHM, and CAMIRO. Joe is a member of APEO/ Professional Engineers of Ontario and CIM/Canadian Institute of Mining.

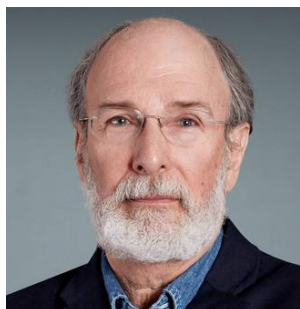
Victoria Arrandale, Occupational Cancer Research Centre



Victoria Arrandale holds an MSc in Occupational Hygiene and a PhD in Medical Science (Occupational Health). Victoria's interest in occupational exposure and disease stems from her experience in the pulp and paper industry as a young worker. Victoria's current research focuses on improving the exposure assessment in ongoing Canadian cancer cohort studies as well as the development and evaluation of interventions to reduce carcinogen exposure in Canadian workplaces, particularly in the mining industry. Victoria's work at the Occupational Cancer Research Centre is supported in part by a Career Development Award in Prevention from the Canadian

Cancer Society Research Institute.

Terry Gordon, New York University



Dr. Gordon is a Professor of Environmental Medicine at the NYU School of Medicine. Dr. Gordon's broad research interest is in inhalation toxicology and one focus of his research lab is the identification and understanding of the role of individual susceptibility and genetic factors in the pathogenesis of the adverse pulmonary effects produced by inhaled environmental and occupational agents. Another major research focus is identifying PM components which contribute to the adverse effects of PM observed *in vitro* and *in vivo*. With a network of collaborators, test samples of PM have been collected in the U.S. and globally at both urban and rural sites in both winter

and summer. Dr. Gordon has served as a consultant/author to the U.S. EPA on a number of issues of pulmonary toxicology related to the development of various documents and on ad hoc CASAC advisory panels. Dr. Gordon is currently an Associate Editor for *Environmental Health Perspectives* and the past Chair of ACGIH's TLV committee.

Frank Crowne, Goldcorp



Frank Crowne spent his first 20 years as an occupational hygienist practice in the pharmaceutical industry, working at Merck Frosst Canada's (Merck & Co.) in Montreal. For the last 10 years, Frank has worked in the mining sector. He served as the corporate industrial hygienist for the Vale Base Metals organization, supporting operations globally. He was a consulting senior occupational hygienist at Golder Associates, provided industrial hygiene, compliance, and risk consulting services. He is now employed at Goldcorp in a corporate health and safety role. He is certified in the practice of Industrial Hygiene by the American Board of Industrial Hygiene. He serves on the OMA Worker's Compensation and Occupational Health Committee, and the MLRC

Ventilation and Industrial Hygiene Sub-committee. He has a BSc. in Toxicology from the University of Toronto and a Msc(A) in Occupational Health from McGill University.

Sarah Toivonen, widow of Allan Toivonen



I am Sarah Toivonen; who happens to be the most blessed woman in the world; for I was married to Allan Robert Johannes Toivonen for 27 years. On March 30, 2016 the day before his 62 birthday our world together changed on a dime! He had cancer, a tumour (10cm X 10cm) in his abdominal cavity. Surgical removal with follow-up radiation and chemo was to happen at Mount Sinai in Toronto. As we waited nervously, precious time was ticking by and our worries grew intense with each passing hour. Unbeknownst to us, our worry was not the only thing growing. The tumour had a mind of its own. On May 17th, it ruptured Allan's bowel and he lost four feet of small intestine. The Toivonen name means HOPE in Finnish; we held on to that as a close family. It was truly a miracle that he survived that surgery. On June 6th, we were informed that the cancer was indeed Mesothelioma. How could that be? He mostly worked in a Government office! BUT...when he was young he worked at INCO, sweeping the Copper Refinery floors and surrounded by various mining equipment covered and releasing ASBESTOS and Allan ingested it.

I watched the World's Most Strong Man (always and forever in our eyes) go from a husky broad-shouldered hulk dwindle down to a small, weak, hollow frame in less than three months. On July 3rd, after his five younger brothers and his very adored children, Anja (27), Johannes (24) left, I held him in my arms as he told me how much he loved us all and took his final breath.

It was too early. He had worked so very hard all of his life, and was just approaching his Golden Years to watch his young adult children go and fulfill their dreams. There are no words to describe my life without him.

Occupational hazards, and the deaths resulting from them, have NO place in any work environment. Allan's story should be the last one that is ever told. By telling his story, I hope that I have enabled changes to be made. We hope future families have their loved ones live out their lives as planned. Everyone deserves to work in a safe, secure environment with no nightmares waiting around the corner.