Scientific Symposium
The Health Effects of Shift Work
Toronto, April 12, 2010

Speaker Biographies

Paul Demers is a Professor and the Director of the University of British Columbia's School of Environmental Health. He is an epidemiologist whose research has primarily focused on occupational cancer, lung disease, and heart disease. His recent epidemiologic studies have included an examination of the impact of air pollution on child health and several retrospective cohort studies of firefighters, paramedics, aluminum smelter workers, and sawmill workers. He has been a member of various International Agency for Research on Cancer (IARC) Working Groups for the Evaluation of Carcinogenic Risk to Humans, including the working group that evaluated shift work in 2007. He is the director of the CAREX Canada project, a national occupational and environmental hazard surveillance program funded by the Canadian Partnership against Cancer and will be presenting shift work data from that project at this symposium. Paul has just accepted an offer to become the new director of the Occupational Cancer Research Centre in Toronto.

Torbjörn Åkerstedt, PhD, is a Professor of Behavioral Medicine at Stockholm University and Karolinska Institutet and the Head of the Institute for Stress Research (Stockholm University).
Åkerstedt has published more than 200 scientific papers on sleep regulation, work hours and health, and related areas. He is the past Secretary General of the World Federation of Sleep Medicine and Sleep Research Societies and past President of the European Sleep Research Society. He is also a co-organizer of the next biannual congress of the Working Time and Shift Work Society (a section of the ICOH) in Stockholm in 2011.

Scientific Symposium
The Health Effects of Shift Work
Toronto, April 12, 2010

Richard Stevens received a B.S. in Genetics from the University of California, Berkeley, and a Ph.D. in Epidemiology from the University of Washington in Seattle. He has been working for a long time trying to help figure out why people get cancer. One of his major interests has been in the possible role of iron overload. Largely on the basis of his work, published in the Journal of National Cancer Institute and the New England Journal of Medicine, the Swedish food industry decided to cease iron fortification of flour in the early 1990s. A perplexing challenge which Stevens began to engage in the late 1970s is the confounding mystery of why breast cancer risk rises so dramatically as societies industrialize. He proposed in 1987 a radical new theory that use of electric lighting, resulting in lighted nights, might produce 'circadian disruption' causing changes in the hormones relevant to breast cancer risk, and thereby play an important role in breast cancer causation worldwide. Accumulating evidence has generally supported the theory. Women who have an occupation requiring work in the evening or at night are at higher risk; blind women have been reported to be at reduced risk; and a new study from Finland has found women who sleep longer than average have much lower risk of breast cancer. Dr. Stevens' theory has received wide scientific and public attention. For example, his work has been featured in SCIENCE NEWS (October 17, 1998 and January 7, 2006) and on the cover of the scientific journal CANCER RESEARCH (July 15, 1996) as well as cited in the March 24, 2008 issue of US News & World Report ('Turning Out the Lights' by Ben Harder), the August 20, 2007 issue of the New Yorker ('The Dark Side' by David Owen), and the August, 2008 issue of O Magazine ('Bright Lights, Big Risk for Cancer' by Catherine Guthrie).

Scientific Symposium
The Health Effects of Shift Work
Toronto, April 12, 2010

Scott Davis, PhD, is Professor and Chairman of the Department of Epidemiology in the School of Public Health and Community Medicine at the University of Washington and a Full Member in the Program in Epidemiology of the Division of Public Health Sciences at the Fred Hutchinson Cancer Research Center. He obtained his undergraduate degree in Biology and Chemistry from the University of New Mexico, a Master of Science in Community Health from the University of Rochester, and a Ph.D. in Epidemiology from the University of Washington. He served as a Research Associate in Epidemiology at the Radiation Effects Research Foundation in Hiroshima, Japan, from 1983-1985. Dr. Davis was a Special Fellow of the Leukemia Society of American from 1986-1987, and the recipient of a Research Career Development Award from the National Cancer Institute from 1988-1993. He is an elected member of the American Epidemiological Society, and a Fellow of the American College of Epidemiology. He served as a member of the BEIR (Biological Effects of Ionizing Radiation) VII Committee of the National Academy of Sciences, and is an elected member (Academician) of the Russian Academy of Medical Sciences. He currently serves as a member of the National Cancer Institute Board of Scientific Counselors for Clinical Sciences and Epidemiology.

His primary research focus is radiation epidemiology. For more than a decade he has directed two major research activities investigating the effects of ionizing radiation on human health. One is a series of studies in the Russian Federation of the effects of radiation exposure from the Chernobyl Power Station. These studies have focused on the risk of thyroid cancer and leukemia among children in the Bryansk Oblast, and recently have expanded to include the molecular characterization of thyroid cancer cases and a large-scale study of breast cancer. The second is a long-term follow up study of thyroid disease in persons exposed to atmospheric releases of radiation from the Hanford Nuclear Site in eastern Washington State (the Hanford Thyroid Disease Study). He has also conducted several epidemiologic studies of the possible health effects associated with exposure to power frequency magnetic fields, focusing on the risk of leukemia and breast cancer. Recently this work has expanded to include investigations of the effects of exposure to light-at-night and circadian disruption, including night shift work, on melatonin and reproductive hormones important in the etiology of breast and other hormone-related cancer. He has also maintained a long-standing interest in the etiology of the leukemias and lymphomas, and has directed epidemiologic studies of Hodgkin's disease, non-Hodgkin's lymphoma, and multiple myeloma.

Scientific Symposium
The Health Effects of Shift Work
Toronto, April 12, 2010

David E. Blask, Ph.D., M.D. is Professor and Head, Laboratory of Chrono-Neuroendocrine Oncology, Department of Structural and Cellular Biology, Tulane University School of Medicine, Tulane Cancer Center and Louisiana Cancer Research Consortium, New Orleans, Louisiana.

For over 30 years, Dr. Blask's research has focused on the circadian control and therapeutics of cancer by melatonin as well as the consequences of the circadian disruption of melatonin production by light at night on cancer risk. He has published over 250 journal articles, reviews, chapters and abstracts on this topic. His research has been supported by funding agencies such as the National Cancer Institute, National Institute of Child Health and Human Development, National Institute of Environmental Health Sciences and The Edwin Pauley Foundation. He currently serves on the editorial boards of the *Journal of Pineal Research, Neuroendocrinology Letters* and *Integrative Cancer Therapies* and is a consultant for the photobiology group of the International DarkSky Association. Dr. Blask has also served as a member of the working group on shift work for the International Agency for Cancer Research of the World Health Organization.

Eva Schernhammer, MD, DrPH, is an Assistant Professor in the Department of Epidemiology, Harvard Medical School. Dr. Schernhammer obtained her MD from the Medical University of Vienna, an MSc in Psychology from the University of Vienna, and a Masters degree and DrPH from the Harvard University School of Public Health.
Her primary research interest is in exploring the exposures that influence the circadian system in humans and the health consequences of these exposures. Current projects study the role of clock genes in the association between shift work and cancer and melatonin's cancer preventive potential. Another research focus is to examine the role of other endogenous hormones such as IGF-I and IGFBP-3, and differences with respect to functionally different polymorphisms of these genes, and risk of breast cancer. Dr. Schernhammer is also interested in the etiology and prevention of gastrointestinal tumors and in studying the relation of Parkinson's disease with cancer etiology, to further understand biological mechanisms in the development of cancer in humans.

Scientific Symposium
The Health Effects of Shift Work
Toronto, April 12, 2010

Cameron Mustard is President and Senior Scientist at the Institute for Work & Health and a Professor in the School of Public Health, Faculty of Medicine, University of Toronto. Dr. Mustard has a background in public health sciences, with an emphasis on epidemiology and health policy. He completed his doctoral training in epidemiology, health policy and behavioral sciences at the Johns Hopkins University School of Hygiene and Public Health.

Dr. Mustard has active research interests in the areas of work environments and health, the organization and delivery of health services and the adequacy and equity of disability income security programs. Dr Mustard is a past member of the Board of Directors of the Canadian Institute for Health Information where he served as Chair of the Canadian Population Health Initiative Council. He was a Fellow of the Population Health Program of the Canadian Institute for Advanced Research (1998-2003) and a past recipient of a CIHR Scientist award (1998-2003).

Poul Frost, MD, PhD, is affiliated with the Danish Ramazzini Centre in the Department of Occupational Medicine, Aarhus University Hospital, Denmark. Dr. Frost's recent research has focused on shift work and health, predictors of health-related job loss, and musculoskeletal disorders.

Matteo Bonzini, MD, MPH, is Assistant Professor of Occupational Health in the Faculty of Medicine of the University of Insubria in Varese, Italy. He obtained his MD from the School of Medicine at the University of Milan, and his Masters in Epidemiology from the University of Turin.
Dr. Bonzini's research interests include: shift work and pregnancy complications, air pollution exposure during pregnancy and neonatal health, occupational physical activity and pregnancy outcomes, musculoskeletal disorders, benzene exposure and cancer risk, and the genetic epidemiology of lung cancer and smoking.