



# **THE 30<sup>th</sup> ANNUAL SCIENTIFIC SYMPOSIUM**

**PROGRAM, Oct 24, 2009**

**08:00 REGISTRATION**

**08:30 Opening Remarks** – Ron Nishi

**08:40 Bruce Cameron** – Decompression Bubbles and your Immune System

**09:20 Wayne MacPherson** – OPP Underwater Search and Rescue Activities

**10:00 Refreshment break**

**10:20 Sean Moore** – Remote hyperbarics

**11:00 Neal Pollock** – The Evolving Diver – Health, Fitness, Safety and Support

**11:40 UHMS-GLC AGM**

**11:50 Lunch (on site)**

**12:45 Peter Bennett** – Safe Ascent Profiles for Recreational Divers

**13:45 Bill Bateman** – What goes wrong in diving accidents ... And how to prevent them

**14:25 Refreshment break**

**14:45 Ron Linden and Ken Ledez** – Canadian Hyperbaric Medical Society and standards of hyperbaric care in the future

**15:30 Myths of Diving Panel** – All speakers, questions and answers.

**16:30 Decompression Stop** – Meet the speakers, refreshments.

**Tour of TGH hyperbaric Chamber**

## **SPEAKERS**

**W.A. (Bill) Bateman, CDR (CF ret'd), MD, CD, DAvMed** is a medical graduate of Queen's University and diplomate in Aviation Medicine from the RAF School of Aviation Medicine in the United Kingdom. He specializes in military, aerospace and diving medicine and is a Canadian Forces Flight Surgeon and Advanced Diving Medical Officer as well as being a certified SCUBA diver and pilot. He was a former Medical Officer in the Canadian Forces (1980-2000) with previous rank of Commander and currently Medical Officer at Research and Development CANADA (Toronto) where he is involved with training and education. Dr. Bateman has been an active Emergency Medicine physician at various hospitals since 1985 and is an on-call surgical assistant at Humber River Regional Hospital in Toronto. Dr. Bateman is a lecturer in the Department of Public Health, Faculty of Medicine, University of Toronto since 2000.

**Peter B. Bennett, Ph.D., D.Sc.** was born in Portsmouth, England. From 1953-72 he started his research on diving medicine and physiology at the RN Physiological

Laboratory, Alverstoke, including underwater blast, inert gas narcosis, oxygen toxicity, decompression sickness and discovered the high pressure nervous syndrome leading to a 1500 ft. record deep dive. From 1966-68 he was on loan to DCIEM Toronto to install their first hyperbaric chamber and develop a new diving research division. He left RNPL in 1972 as Deputy Director to go to Duke University Medical Center as a tenured Professor in the Anesthesia Dept. and Director of the then F.G. Hall Laboratory (now Duke Hyperbaric Center) with research on anesthesia mechanisms, diving medicine and HBO Therapy. In 1980, as President and CEO he founded the Divers Alert Network (DAN). In 1990, this grew to International DAN. In 1984, he initiated the deep Atlantis dive series to prove the value of TRIMIX to ameliorate the high pressure nervous syndrome culminating in a deep record dive by 3 men to 2250ft. He was a charter member of the Undersea and Hyperbaric Medical Society in 1967, President, 1972-76 and Editor of the Journal 1976-79 and was a Founding member of European Undersea Biomedical Society in 1972. Published over 200 papers and 8 books including the classic, "Physiology and Medicine of Diving" with Dr. David Elliott, first published in 1969 with the 5<sup>th</sup> edition in 2003. He was elected a foreign member of the Russian Academy of Sciences in 1994 and in 2001 and received a Dr. Honoris Causa degree from the University of Mediterranean, Marseille. The recipient of many awards such as, in 1981 received a letter of commendation from President Ronald Reagan, in 1983 the UHMS Albert R. Behnke Award, 1990 Prince Tomohito of Mikasa Prize (Japan), 1992 UHMS Craig Hoffman Award, 2001 Pavlov Medal Russian Academy of Sciences, 2002 Diving Equipment Manufacturers Assoc. "Reaching Out" Award, 2002 Ernst and Young Entrepreneur of the Year Award in Life Sciences for North and South Carolina and 2003 the British Historical Diving Society Reg. Vallintine Award for Lifetime Achievement. He retired from DAN in 2003 and from Duke Medical Center in 2007 to take on the position of Executive Director, Undersea and Hyperbaric Medical Society.

**Bruce Cameron, PhD** is the Research Coordinator at the Bamfield Marine Sciences Centre on Vancouver Island. After 24 years as a soldier in the Canadian Army, he received his BSc, MSc and PhD from Queen's University in Biology. He completed post-doctoral studies at the University of Montreal and the University of Pennsylvania and is currently a NSERC Post-doctoral Fellow at DRDC, Toronto. He has been an instructor/supervisor in the Canadian Armed Force School of Communications and Electronics, a SCUBA instructor for over 33 years teaching civilian, military and academic divers, an owner/operator of a diving charter boat, and is a pilot.

**Ken LeDez, MB, ChB, FRCPC** is a specialist in diving and hyperbaric medicine and is Director, Centre for Offshore and Remote Medicine (MEDICOR), Memorial University, Director, Hyperbaric Medicine Program, Eastern Health, Staff Anesthesiologist, Health Sciences Centre, St. John's Newfoundland and Labrador, and Associate Professor and Chair, Discipline of Anesthesia, Faculty of Medicine, Memorial University. He attended Medical School at the: University of Dundee, Scotland and did a Fellowship in hyperbaric medicine, University of Toronto.

**Ron Linden, MD, CCFP** is a diver and an avid sailor who has specialized in diving and hyperbaric medicine for over 20 years. He is the Medical Director and CEO of Ontario Wound Care, a Canadian registered charity and the Medical Director of the Judy Dan Research and Treatment Centre in Toronto, a University Health Network affiliated

research satellite. He is a staff physician in the Hyperbaric Unit of the Toronto General Hospital and North York General Hospital, a lecturer in the Faculty of Medicine, University of Toronto, the medical consultant and lecturer for Seneca College's Commercial Diving Program and clinical instructor for the Diver Medic Program. Dr. Linden is currently involved in a major research study on the treatment of diabetic wounds funded by the Ontario Ministry of Health, working with faculty from McMaster University and the University of Toronto. Dr. Linden has published numerous articles on diving and hyperbaric medicine.

**Neal Pollock, PhD**, is Research Director at Divers Alert Network (DAN) and a Research Associate in the Center for Hyperbaric Medicine and Environmental Physiology at Duke University Medical Center, both in Durham, North Carolina. His academic training is in zoology, exercise physiology and environmental physiology. His research interests focus on human health and safety in extreme environments. He has served as diving safety officer at the University of British Columbia and on the executive board of the Canadian Association for Underwater Science. He currently serves on the executive board of the American Association of Underwater Science and on editorial boards of the journals *Diving and Hyperbaric Medicine* and *Wilderness and Environmental Medicine*.

**Wayne MacPherson, SGT**, is a member of the Underwater Search and Recovery Unit for the Ontario Provincial Police.

**Sean Moore, MD** is an emergency physician with Arctic Kingdom Marine Expeditions, Inc., an Arctic expedition operator specializing in providing a range of services from tourism through commercial services.