Saturday, May 1
Fairmont Hotel Vancouver
Vancouver, Canada
Orthomolecular therapy is the prevention and treatment of disease by varying the concentrations in the human body of substances that are normally present.

—Linus Pauling, 1968

Orthomolecular medicine will become the norm and the major diseases which plague us today will disappear.

—Abram Hoffer, 2005
Program

Honouring Our Orthomolecular Pioneers

Hosted by

Steven Carter

7:00 pm Reception

7:30 pm Welcome & Dinner

8:30 pm Induction Program

Presenters

Dag Poleszynski
Stephen Lawson
Steven Carter

Orthomolecular Medicine Hall of Fame 2010 Inductees

Casimir Funk
Bruce Ames
Harold D. Foster

Tribute to Dr. Abram Hoffer

2008 Hall of Fame Inductees

Joseph Goldberger
Adelle Davis
Carlton Fredericks

Robert Cathcart III
Richard Kunin
Michael Lesser

2009 Hall of Fame Inductees

Ilya Metchnikov
Thomas L. Cleave

Hugh MacDonald Sinclair
Archie Kalokerinos
Jeffery Bland

2010 Inductees

Casimir Funk
Bruce Ames
Harold D. Foster
2006 Hall of Fame Inductees

Bill Wilson
Ruth Flinn Harrell
Arthur Sackler
Max Vogel
Abram Hoffer
Lendon Smith
David Hawkins
Theresa Feist

2007 Hall of Fame Inductees

Henry Turkel
Fannie Kahan
Ewan Cameron
Glen Green
Bernard Rimland
Masatoshi Kaneko
Casimir Funk is remembered as an outstanding biochemist and early explorer in the field of nutritional science, who is best known for the first formulation of the concept of vitamins in 1912. It was Funk who coined the term “vitamin,” to describe compounds that were “vital” to health and were centered around an “amine” group. He also postulated the existence of vitamins B\textsubscript{1}, B\textsubscript{2}, C and D. In 1936, he determined the molecular structure of thiamin, and was the first to isolate niacin, vitamin B\textsubscript{3}. He discovered that many human diseases are caused by a lack of particular nutrients that are readily available in certain foods. He found cures for such devastating illnesses as beriberi, pellagra, rickets, and scurvy. Funk later did extensive research on hormones.

Born in Warsaw, Poland, the son of a renowned dermatologist, Casimir Funk studied organic chemistry at Switzerland’s University of Berne, from which he received his Ph.D. in 1904. Funk worked at the Pasteur Institute in Paris until 1906, and then at London’s Lister Institute of Preventative Medicine. It was at the Lister institute that Funk’s career as a scientist truly began. He was assigned to research beriberi, a common illness in the Far East that causes peripheral nerve damage and heart failure. Scientists had thought the disease was due to insufficient dietary protein, but Funk discovered that the typical Far Eastern diet of polished rice was deficient in thiamine. Adding this vitamin back into the diet cured beriberi. Later that year, he isolated a substance now known as niacin (vitamin B\textsubscript{3}). When he published his findings in 1912 and his book *The Vitamin*, in 1913, Funk immediately became well known in the scientific world.

The publication of “*The Vitamin*” earned him public recognition and a Beit Fellowship from the University of London. He became head of the Biochemistry Department at the Cancer Hospital Research Institute and later became head of research at H. A. Metz and Company, where he remained until 1921. While at Metz, Funk developed Oscodol (a vitamin A and D concentrate). He began a job in New York as a consulting scientist for the U.S. Vitamin Corporation, and in 1940 he became president of the Funk Foundation for Medical Research.

During his lifetime, Funk published more than 140 articles, advanced humankind’s understanding of nutrition and revolutionized the way people looked at their health. His original insight that lack of vitamins in the diet was responsible for disease helped develop effective preventive and curative measures for anemia, beriberi, osteomalacia, pellagra, rickets, scurvy, and sprue. The Polish Institute of Arts and Sciences of America (PIASA) annually honors Polish-American scientists with the Casimir Funk Natural Sciences Award.
Bruce Ames, PhD
b. 1928

Bruce Ames is a professor of Biochemistry and Molecular Biology at the University of California, Berkeley, and a senior scientist at Children’s Hospital Oakland Research Institute. In the 1950s, Ames began working at the NIH, where he investigated ways of mutating the DNA of bacteria in order to learn more about gene regulation. This work led him to develop the “ Ames Test,” one of the key diagnostic tools for detecting mutagens that is still used worldwide. With that breakthrough, Ames and other investigators were able to show that most cancer-causing chemicals act by damaging genes—a finding that now seems obvious only because Ames helped prove it. The revolution in the Ames Test was its speed and cost: it can be done in an afternoon, whereas previously animal cancer tests cost millions of dollars and took years to complete.

Dr. Ames is a National Medal of Science winner, has published more than 450 scientific papers, and has become one of the most cited scientists alive. Ames has been interested in the “free radical theory of aging” for many years. Free radicals are highly reactive molecules that ravage cell machinery, bond indiscriminately with other molecules, break chromosomes and cripple enzymes. In 1990 Ames published the first evidence that DNA oxidation actually increases with age. This research led him to look more closely at mitochondria because they are a significant source of the body’s free radicals. In order to burn fats and carbohydrates to make metabolic fuel, mitochondria take electrons from NADH and shuffle them among a suite of molecules in a complex chain reaction, ending in the reduction of oxygen to water. Invariably, some of the electrons escape from this “respiratory chain”, creating free radicals. His breakthrough in aging research, which came in the mid-1990s, took a closer look at a dietary supplement, acetyl-L-carnitine (ALCAR). Ames reasoned that high levels of ALCAR might also combat the problems of aging membranes and deficient enzymes. He began feeding ALCAR to his old rats and within weeks, he noticed improvements in the animals’ biochemistry and behaviour. Their mitochondria were going full bore again, and they had become far more active, they were still churning out oxidants at a very high rate. Ames decided to add an agent to the rats’ diet to neutralize the oxidants. He tried lipoic acid, a mitochondrial antioxidant. The results were profound. Oxidants and oxidative damage to mitochondrial components dropped dramatically. Both the structure and function of the mitochondria improved. Three years ago, Ames set up a company called Juvenon, which sells tablets containing 200 mg alpha-lipoic acid and 500 mg acetyl-L-carnitine, to be taken twice a day. Ames is also convinced that simple B vitamin therapy could combat many diseases, and has published an exhaustive review, with more than 300 references, showing that no fewer than 50 genetic diseases might be remedied with high doses of vitamins, minerals, and amino acids. Most recently, he has published on his novel “triage theory”, which posits that some functions of micronutrients are restricted during shortage and that functions required for short-term survival take precedence.

Harold D. Foster, PhD
1943 – 2009

Harold Foster was deeply invested in the resilience of life on the planet, and improving the quality of life for all living things. For more than 40 years, Harold worked as a geomorphologist, professor of medical geography, consultant to the United Nations and NATO in disaster planning, and avid researcher which culminated in the formation of the Harold Foster Foundation.

A Canadian by choice, he was born in Tunstall, Yorkshire, England, and educated at the Hull Grammar School and University College London. While at university, he specialized in Geology and Geography, earning a B.Sc. in 1964 and a Ph.D. in 1968. He was a faculty member in the Department of Geography, University of Victoria, from 1967 to 2008.

As a tenured professor, he authored or edited over 300 publications, the majority of which focused on reducing disaster losses or identifying the causes of chronic degenerative and infectious diseases.

His numerous books include Disaster Planning: The Preservation of Life and Property, Health, Disease and the Environment, and Reducing Cancer Mortality: A Geographical Perspective. He also wrote six books in the What Really Causes series, including those on AIDS, Alzheimer’s Disease, Multiple Sclerosis, Schizophrenia, SIDS, and Breast Cancer.

Harry became one of the giants in orthomolecular medicine, with boundless enthusiasm, a prolific gift of writing, and was a researcher who made unique contributions in our understanding of health and disease. Harry’s soaring scientific mind combined his expertise in geography, epidemiology and orthomolecular medicine to create new insights into nutritional medicine. He had a gift for synthesizing diverse, seemingly unrelated phenomena and showing us the orthomolecular whole.

A fixture at many of the Orthomolecular Medicine Today Conferences, Harry’s eagerly anticipated presentations were always fresh and original as he explored the complex relationships between genetic inheritance, health and the “nutritional geographies” of the world. He also conducted many groundbreaking studies of selenium in AIDS therapy in Africa- A low tech, but surprisingly effective approach which large pharmaceutical companies ignored in favour of expensive western therapies which, in the end, few Africans would be able to afford.

Harry’s accomplishments as a writer, researcher and educator are many and cover a broad range, including serving on the Editorial Board of the Journal of Orthomolecular Medicine for fifteen years, and on the board of directors for the International Schizophrenia Foundation for thirteen years.