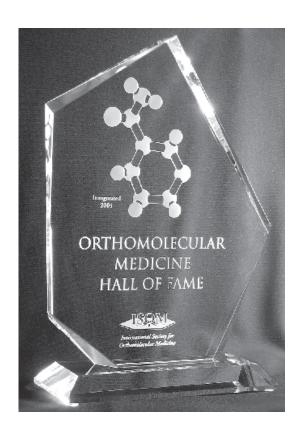
Inauguration of the

ORTHOMOLECULAR MEDICINE Hall of Fame



Saturday, May 1, 2004 Fairmont Waterfront Centre Hotel Vancouver, Canada

Orthomolecular therapy consists in the prevention and treatment of disease by varying the concentrations in the human body of substances that are normally present."

-Linus Pauling, 1968

Program

Honouring Our Orthomolecular Pioneers

Andrew Saul, PhD Master of Ceremonies

7:00 pm Reception

7:30 pm Welcome

Dinner

8:15 pm Introduction

2004 Hall of Fame Inductees

Linus Pauling
William J. McCormick
Roger J. Williams
Evan Shute & Wilfrid Shute
Irwin Stone
Carl Pfeiffer
Alan Cott
William Kaufman
Humphry Osmond

Abram Hoffer, MD, PhD Closing Remarks

Linus Pauling, Ph.D. 1901-1994



"Linus Pauling was right."

—Associated Press

After bringing high-dose vitamin C therapy for colds and flu to the public (and to much of the medical profession) in 1970, Dr. Pauling had to spend quite a bit of time defending the vitamin from under-informed critics. Pauling's interpretive reviews of the medical literature on vitamin C have had so great an impact that it may be quite some time yet before they are fully appreciated. Typically, Pauling reexamined studies which originally concluded that vitamin therapy was of no benefit and then showed that the authors either failed to see the statistical significance of their own work, or made outright incorrect conclusions. Pauling was therefore regarded as an "outsider" and a sharp critic of medical politics and dogma. He risked his considerable reputation to define and promote orthomolecular medicine, spending much of the last third of his life to bring this health knowledge directly to the people. For such a great and humanitarian accomplishment, he may well have deserved a third Nobel Prize.

"Professor Pauling as always is ahead of his time. The latest research on vitamin C substantiates his twenty-five years of advocacy and investigation on the benefits of vitamin C." J. Daniel Kanofsky, MD, MPH, Albert Einstein College of Medicine.

For a list of the nutrition-related publications of Linus Pauling, produced in cooperation with the Linus Pauling Institute and Oregon State University, see http://www.doctoryourself.com/biblio_pauling_ortho.html.

William McCormick, M.D.

1880-1968

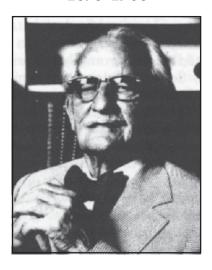
"Vitamin C is a specific antagonist of chemical and bacterial toxins."

over 50 years ago, it was Toronto physician William J. McCormick, M.D., who pioneered the idea that poor collagen formation, due to vitamin C deficiency, was a principal cause of diverse conditions ranging from stretch marks to cardiovascular disease and cancer. This theory would become the foundation for Linus Pauling and Ewan Cameron's decision to employ large doses of vitamin C to fight cancer.

Over twenty years before Pauling, McCormick had already reviewed the nutritional causes of heart disease and noted that four out of five coronary cases in hospital show vitamin C deficiency. McCormick also early proposed vitamin C deficiency as the essential cause of, and effective cure for, numerous communicable illnesses, becoming an early advocate of using vitamin C as an antiviral and an antibiotic. Modern writers often pass by the fact that McCormick actually advocated vitamin C to prevent and cure the formation of some kidney stones as far back as 1946. And fifty years ago, McCormick "found, in clinical and laboratory research, that the smoking of one cigarette neutralizes in the body approximately 25 mg of ascorbic acid." His early use of gram-sized doses to combat what then and now are usually regarded as non-deficiency-related illnesses set the stage for today's 100,000 mg/day antiviral/anticancer vitamin C IV's.

Roger J. Williams, Ph.D.

1893-1988



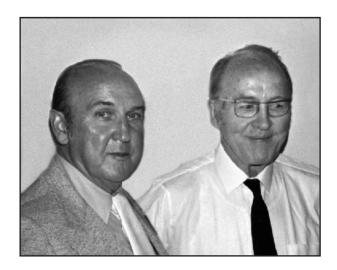
"When in doubt, try nutrition first."

r. Roger J. Williams authored nearly 300 scientific papers in the years spanning 1919 to 1986. He was the originator of key orthomolecular concepts including biochemical individuality and genetotrophics, and was a pioneer in the nutritional treatment of alcohol abuse.

Donald R. Davis, Ph.D. writes about Williams: "As probably no other scientist has, he led the way toward a broad view of nutrition and its importance in health and preventive medicine, including the prevention of alcoholism. Almost single-handedly he recognized and called attention to the biological facts of human diversity and their broad importance in science and human affairs. For over 20 years he and his coworkers worked to discover, isolate, characterize and synthesize the substance he named pantothenic acid, an essential cog in the biochemical machinery of all living things. He also first concentrated and named folic acid, another B vitamin. . . His oldest brother, Robert R. Williams, became known for his work on beriberi and the isolation and synthesis of thiamin (vitamin B_1).

"Williams founded at the University (of Texas) the Clayton Foundation Biochemical Institute and served as its director until 1963, when he turned 70. During that time more vitamins and their variants were discovered in this laboratory than in any other. Pioneering work was done on pantothenic acid, folic acid, folinic acid, pyridoxal and pyridoxamine (forms of vitamin B₆), inositol, and lipoic acid" as well as the synthesis of vitamin B₁₂. (*Davis DR. In Memoriam: Roger John Williams. Journal of Applied Nutrition 1988; 40(2):121-125.*) Bibliographies of Roger J Williams' books and papers are posted at http://www.cm.utexas.edu/williams/

Wilfrid Shute, M.D. Evan Shute, M.D. 1907-1982 1905-1978



n. Evan V. Shute and his brother Dr. Wilfrid E. Shute began vitamin E research in the late 1930's. Over the next several decades they would use high doses of vitamin E to successfully treat cardiovascular disease in tens of thousands of patients; by 1936, the Shutes were already at work employing tocopherol from wheat germ oil to relieve angina symptoms and by 1940, the Shutes were curing atherosclerosis with vitamin E. By 1946, thrombosis, phlebitis, and claudication. Yet when the Minimum Daily Requirements first came out in 1941, there was no mention of vitamin E. Furthermore, the Shute's work was literally judged fraudulent by the United States Post Office Department, which in a 1961 court decision said, "Vitamin E has been thoroughly studied and there is no doubt whatsoever as to its lack of utility."

For decades, vitamin E was lampooned as a "cure in search of a disease." In 1985, Linus Pauling wrote: "The failure of the medical establishment during the last forty years to recognize the value of vitamin E in controlling heart disease is responsible for a tremendous amount of unnecessary suffering and for many early deaths. The interesting story of the efforts to suppress the Shute discoveries about vitamin E illustrates the shocking bias of organized medicine against nutritional measures for achieving improved health." Dr. Pauling would most likely have appreciated this comment from a recent Harvard Health Letter: "A consistent body of research indicates that vitamin E may protect people against heart disease... The data generally indicate that taking doses ranging from 100 to 800 IU per day may lower the risk of heart disease by 30%-40%." Over half a century ago, the Shute brothers and colleagues showed that, with even higher doses than those, and with an insistence on the use of natural vitamin E, the results are better still.

Today's growing appreciation of the role of d-alpha tocopherol in preventing and reversing cardiovascular disease is due primarily to the Shute brothers.

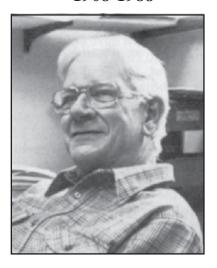
Irwin Stone, Ph.D. 1907-1984



umanity can thank biochemist Irwin Stone for introducing Linus Pauling to witamin C. Pauling spoke of this highly influential first contact, when Stone sent him "copies of some papers that he had just published, with the general title 'Hypoascorbemia, a Genetic Disease'. . . The 3,000 milligrams per day that he recommended is 50 times the RDA. My wife and I began taking this amount of the vitamin . . (and) the severe colds that I had suffered from several times a year all of my life no longer occurred. After a few years I increased my intake of vitamin C to 100 times; then 200 times, and then 300 times the RDA (now 18,000 mg per day). "Among the several arguments Irwin Stone presented to support his thesis that the proper physiological intake of vitamin C is 50 or more times the RDA were two that especially impressed me. . . Almost all animal species - dogs, cats, cows, horses, elephants, and so on - have continued to synthesize ascorbate. . . The second fact that impressed me is that animals manufacture very large amounts of ascorbate. The amount manufactured is approximately proportional to the body weight, and, converted to the weight of a human being, ranges from about 2,000 to 20,000 milligrams per day. Irwin Stone concluded that human beings with an average diet are accordingly all suffering from hypoascorbemia, a deficiency of ascorbate in the blood and tissues." (Linus Pauling in His Own Words: Selections from his Writings, Speeches and Interviews, edited by Barbara Marinacci. NY: Simon and Shuster, 1995). There could be no finer tribute to Irwin Stone than this.

Carl C. Pfeiffer, M.D., Ph.D.

1908-1988



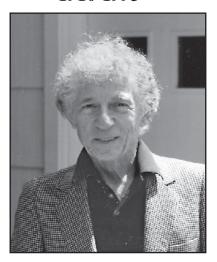
"For every drug that benefits a patient, there is a natural substance that can achieve the same effect." – Pfeiffer's Law

D avid Perlmutter, M.D., writes of Dr. Pfeiffer's work that it "excels not only in providing specific information as to what nutrients are appropriate for specific psychiatric illnesses but in addition it describes the negative impact that certain foods may have on psychological and other physical ailments." Dr. Pfeiffer treated patients with a low protein, high complex carbohydrate diet and supplemental nutrients, particularly vitamin B₆ and zinc. His therapy was seen to be effective against psychosis, hypoglycemia, and obsessive-compulsive and bipolar disorders. Dr. Pfeiffer was a pioneer in recognizing the problems with excess dietary copper, and was interested in cerebral allergies and the relationship of nutrient-deficient diet to crime and delinquency.

Lendon Smith, MD, a supporter of the Pfeiffer approach, wrote: "Carl C. Pfeiffer, in his book, Nutrition and Mental Illness, listed well-known causes of schizophrenia. . . He said, 'All of these are chemically-induced metabolic disorders, which suggests the strong possibility that the "true" schizophrenias left in the "wastebasket" might also be due to biochemical abnormalities." (http://www.smithsez.com/Hypertension.html)

Dr. Pfeiffer's other books include Mental and Elemental Nutrients, The Healing Nutrients, Dr. Pfeiffer's Total Nutrition, Nutritional Science and Cookery, and Neurobiology of the Trace Metals Zinc and Copper. His contributions to orthomolecular medicine live on through his writings, the clinics he inspired, and the annual Society of Orthomolecular Medicine lecture that bears his name. A bibliography of Dr. Pfeiffer's work is posted at http://www.doctoryourself.com/biblio_pfeiffer_ed.html

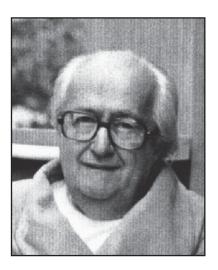
Alan Cott, M.D.



r. Alan Cott fasted psychiatric patients while an attending physician at Gracie Square Hospital in New York City. In so doing, Lendon Smith, MD, writes that Dr. Cott was following the work of Dr. Yuri "Nicolayev of Moscow, who has fasted more than 10,000 mentally ill patients. . . The manic phase of manic depressive illness can be brought under control in the first week of a fast. Cott made them exercise by taking long walks. They drank two quarts of water every day as a minimum. If a patient failed to drink this amount, he terminated the fast. . . By the end of the first week, the medicines they had been on were usually discontinued." (http://www.smithsez.com/mentalillness.html)

In addition to two popular books on supervised fasting, Dr. Cott wrote *Dr. Cott's Help for Your Learning Disabled Child: The Orthomolecular Treatment* and was a frequent contributor to the *Journal of Orthomolecular Psychiatry*. His papers on Controlled Fasting Treatment for Schizophrenia and the Orthomolecular Approach to the Treatment of Learning Disabilities were presented at the Nutrition and Mental Health Hearing before the Select Senate Committee on Nutrition and Human Needs in 1977.

William Kaufman, M.D., Ph.D.



"I noted that niacinamide (alone or combined with other vitamins) in a thousand patient-years of use has caused no adverse side effects."

Dr. William Kaufman was among the very first physicians to therapeutically em ploy megadoses of vitamin B₃ (niacin, or niacinamide). He prescribed as much as 5,000 mg of niacinamide daily, in many divided doses, to dramatically improve and restore range of joint motion in arthritic patients. This groundbreaking work remains important to this day. In his 1949 book, *The Common Form of Joint Dysfunction*, Kaufman published the details of his niacinamide arthritis treatment, which also incorporated the use of vitamin C, thiamin, and riboflavin, all in large doses. He kept meticulous patient records that repeatedly verified the safety and effectiveness of megavitamin therapy.

Over 50 years ago, Kaufman showed remarkable foresight half a century into the future of orthomolecular medicine, describing how the lack of a just a single nutrient can cause diverse diseases, including what is now known as attention-deficit hyperactivity disorder. Charlotte Kaufman lovingly writes of her husband, "He was always ready to help someone else. He truly was a healer and a problem solver. He played the piano; he loved Mozart. He wrote poems, plays, essays, and subscribed to about 30 medical journals, which he read. He practiced medicine in his own way, without regard to fads or fashion. He seemed to know intuitively what the clinical answers were, but he was a thoughtful person who did not make decisions lightly. He was an independent thinker who was constantly studying and learning, not just from the printed word, but from his patients. He really listened to his patients. His main objective was to help people live healthy lives."

Dr. Kaufman's bibliography is posted at http://www.doctoryourself.com/biblio_kaufman.html

Humphry Osmond, M.D.

1917-2004



Linus Pauling wrote: "In 1967, I happened to read a number of papers published by two psychiatrists in Saskatchewan, Canada Dr. Abram Hoffer and Dr. Humphry Osmond. (T)here was something extraordinary about their work. They were giving very large amounts of niacin to the schizophrenic patients, as much as 17,000 milligrams per day, which is 1,000 times the RDA. I was astonished that niacin and ascorbate, with the striking physiological property, when given in very small amounts, of preventing death from pellagra and scurvy, should be so lacking in toxicity that 1,000 times the effective daily intake could be taken by a person without harm. This meant that these substances were quite different from drugs, which are usually given to patients in amounts not much smaller than the lethal dosages. I thought that these substances, normally present in the human body, and required for good health and life, deserved a name to distinguish them from ordinary pharmaceuticals, and I decided to call them 'orthomolecular' substances." (Linus Pauling in His Own Words: Selections from his Writings, Speeches and Interviews, edited by Barbara Marinacci. NY: Simon and Shuster, 1995.)

Dr. Humphry Osmond's remarkable medical career included decades of distinguished psychiatric practice and a prodigious output of writing and research. He is widely recognized as a pioneer investigator into the chemistry of consciousness. Along with Dr. John Smythies, Osmond developed the theory that schizophrenics suffer due to endogenous production of an adrenalin-based hallucinogen. This led to the Hoffer-Osmond Adrenochrome Hypothesis in the early 1950's, the very origin of orthomolecular medicine. The popular press may today remember Humphry Osmond for coining the term "psychedelic," but countless thousands of grateful patients will remember him as the co-discoverer of niacin therapy for schizophrenia. A bibliography of Dr. Osmond's work is posted at http://www.doctoryourself.com/biblio_osmond.html