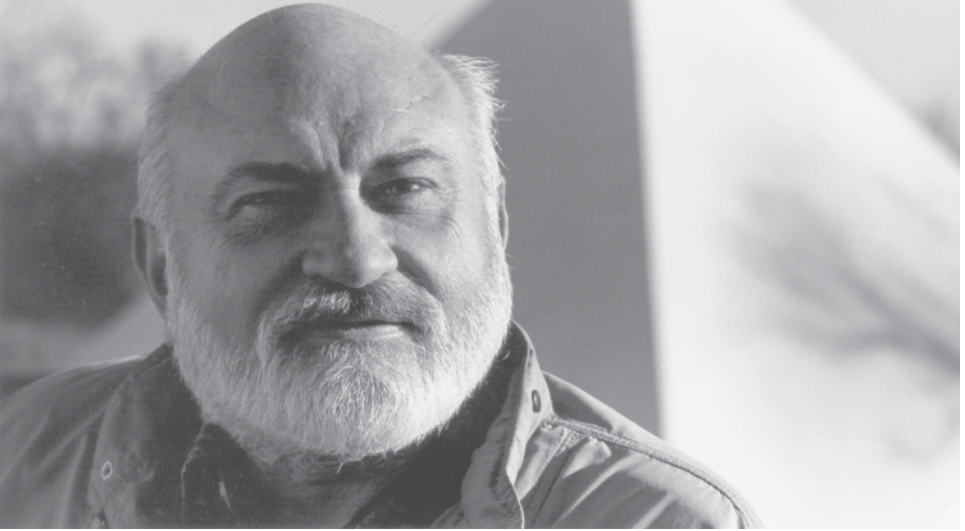


In Memoriam

Hugh Desaix Riordan

May 7, 1932 – January 7, 2005



The key to immortality is to live a life worthy of being remembered. Such was the life of our beloved Dr. Hugh. His presence will remain in our hearts forever.

–Alejandro José, friend and colleague

*“Roses are red,”
We’ve all heard it said;
“Orthomolecular for you”–
We heard it from Hugh!*

–Andrew Saul, Contributing Editor

Orthomolecular psychiatry and medicine emphasize the primary importance of nutrition and of reinforcing the diet with nutrients in optimal doses. For many, the amounts of nutrients present in the best of diets are not sufficient to achieve and maintain good health. The word “orthomolecular” was created by Nobel Prize winner Linus Pauling whose contribution to what we know about the biochemistry of the body became the basis for much of modern medicine. Be-

cause he emphasized the use of vitamin and mineral doses that are larger than the recommended daily allowances, his view became very unpopular and the word orthomolecular achieved notoriety as an irritant for the medical and other healing professions. Pauling’s conclusions were derived from the studies of a number of pioneer physicians who found that certain vitamins in large doses had therapeutic properties previously not recognized.

Many years were required before the medical profession recognized that vitamins had any value at all and their use was restricted to preventing classical deficiency diseases such as scurvy, pellagra, and rickets. This is the old vitamins-as-prevention paradigm, which we all grew up with: vitamins were needed only in very small doses and only for the classical diseases. It also meant that they were not to be used for other conditions and never in large doses.

Medical Mavericks

The early orthomolecular pioneers or, in Hugh Riordan's terms, "Medical Mavericks," persisted in demonstrating that vitamins were more versatile. Gradually this led to the establishment of the vitamins-as-treatment paradigm, in which vitamins were recognized as having value for conditions not considered deficiency-caused and in much larger doses. The best example is vitamin B₃, the niacin form, which, in doses of 3 grams daily, 150 times the amount needed to prevent pellagra, lowers total cholesterol, elevates HDL and generally normalizes blood lipid levels. This modern paradigm is slowly growing in spite of the opposition from governments, professions and journals but it is being supported by a small group of medical mavericks. Of these, Hugh Riordan was one of the most knowledgeable, both as a maverick par excellence and as a historian of "Medical Mavericks."

If these great physicians and powerful fighters for the truth had not existed in history, we would, for example, still be treating smallpox by increasing fever. One of the early "mavericks" was Sir Thomas Sydenham. About three hundred years ago Lieutenant Sydenham, in Oliver Cromwell's army in England, was demobilized when Cromwell won the war. He decided to become a doctor. There were no medical schools, the apprenticeship method was used. He shadowed a doctor for two years, he wrote his exams and was awarded his degree. I think there is a lot to be said for this method.

The pandemic of that age was not SARS or AIDS; it was smallpox. Nothing was known about viruses or bacteria. In classical theory, smallpox was caused by increased pressure of the "humors," hypothesized to be present. In trying to break out of the body they created little vesicles, like tiny volcanoes which erupted through the skin. Based upon this hypothesis the traditional therapy, at least 1,500 years old, was that one should facilitate the release of

these evil vapors. This was done by increasing the pressure by increasing the fever. Sydenham, a good orthodox doctor, followed the ancient treatment which consisted in covering the victims with blankets to retain the heat, giving them strong English whiskey and keeping all the windows closed to keep the cool air out. In England, however, people had no central heating, they were cold in the winter and warm in the summer. In the summer, the treatment was pretty effective in heating up the patients, but there was a problem achieving this in the winter. Eventually, Sydenham realized that the death rate of his patients was very much higher in the summer. This was directly opposite to the theory, the death rate should have been much less. In fact, the rate in the summer was close to fifty percent and in the winter under ten percent. Eventually he had to conclude that the theory and treatment were wrong; instead of increasing the fever he should do the opposite. Thereafter he allowed his patients to remain uncovered, kept the windows open, and did not permit anything stronger than a light English ale. The death rate in the summer went down to the winter level.

When Sydenham shared his findings, his colleagues were aghast at this assault on hoary theory and practice. He was challenged to a duel and threatened with the loss of his medical licence. He wrote a long letter to one of the nobility outlining what he had found and the reaction he was getting. He ended with the something like the following statement: "A medical discovery is like a sapling in the middle of the King's highway. If it is not fenced in it will be destroyed by the galloping hordes." Hugh Riordan helped us build that protective fence.

If the medical establishments had their way for the past 300 years we would still be treating fevers by making them worse. Sydenham was supported, eventually was knighted, and is recognized as the father of clinical bedside medicine and

one of the first to show that fever should be decreased, not increased, especially in the case of smallpox. There is a bronze plaque dedicated to this great Maverick near Parliament in London. I do not think Dr. Riordan was challenged to a duel but he was challenged legally when he wanted to treat his patients with high dose vitamins in the hospital. He won. He deserves a plaque at the University of Kansas; one of the domes at the Center in Wichita named after him.

Early Meeting

Hugh and I established a relationship when we began to correspond in May, 1989. We met in Princeton at a board meeting of the Princeton Brain Biocenter in 1990 when my wife, Rose, and I met Hugh and his wife, Jan. We met again at a meeting in San Diego on Vitamin C in April of 1994. In his lecture he described a case of melanoma he had cured by a salve of pyridoxine in castor oil. We had our first extended meeting in Wichita when he invited me to participate in the 14th Institute Conference on Human Functioning September 8-19, 1995. Hugh was so gracious and kind to Rose

and to me. In 1996 he came to Victoria, for peace and quiet and time in which to work on his books but he also gave the Cancer Victors of Victoria a remarkable address on his great work.

Hugh joined the editorial board of the *Journal of Orthomolecular Medicine* in 1991, then became Associate Editor in 2000. He also served on the board of directors for the International Schizophrenia Foundation since 2003.

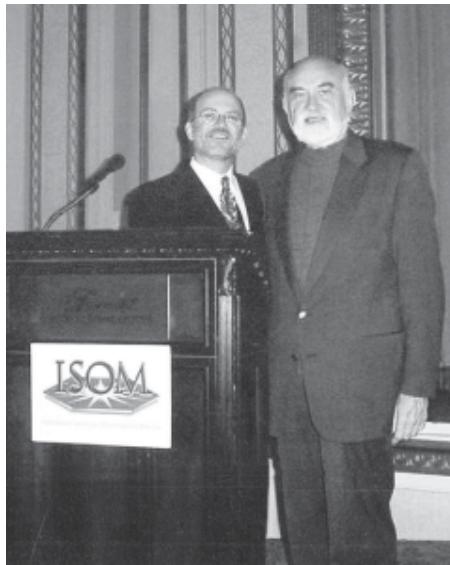
In the last few years, he travelled to Toronto once or twice annually for brainstorming sessions with Steven Carter, Managing Editor of our Journal. Hugh attended many Nutritional Medicine Today Conferences and made major presentations which I always found enormously interesting and valuable.

In 1990 I reviewed *Medical Mavericks II* for our journal, Vol 15, 1990. I wrote "This is the second in the series. Another seventeen physicians are described: their major contributions, the

criticisms they had to face, and what happened to them. It is not a pretty picture of how medical establishments treat their fellow physicians who are innovators. But the



In 2000, Hugh presented the "Annual Pearl Maker Award" to the Journal of Orthomolecular Medicine (above, with Steven Carter, Managing Editor). In 2002, the International Society for Orthomolecular Medicine honored Hugh with the Orthomolecular Physician of the Year Award (below).



story is not entirely doom and gloom. The discoverers were eventually accepted, recognized and became part of medicine. Many of the discoverers were eventually honored in their lifetimes. There is a lot to be said for living a long time.”

His Research

Dr. Riordan published four books and about 70 clinical and research reports. His productivity did not decline with age as it does for so many scientists. He contributed the regular column, Case from the Center, to our journal, each time presenting very interesting cases. These anecdotes are very useful in teaching. His area of research covered histamine metabolism arising out of his interest in the classification developed by Carl Pfeiffer who classified some patients as having either too much or too little blood histamine. He did studies showing the value of chelation. His laboratory also investigated food allergies and used a cytotoxic test for determining reactive foods. His most important work was with the schizophrenic syndrome and with the treatment of cancer using non-toxic vitamin C chemotherapy.

Hugh's Work with Cancer and Schizophrenia

Cancer is the major disease in the world today. The only acceptable treatment is a direct attack on the tumour but unfortunately every major assault by surgery, radiation and chemotherapy is very difficult, very toxic and there is little evidence that it is very effective. The advantages of the usual chemotherapy are so minimal that when a controlled trial in-

volving thousands of patients shows a five percent advantage of the treatment against placebo there is a massive outburst of enthusiasm from the leaders in the battle against cancer. Hugh also attacked the cancer directly but his vitamin C therapy is safe. I have not heard of ascorbic acid killing anyone, if it had, it would be headlined in the *New York Times*. At the doses Hugh used, which he established by laboratory studies (~100 g over a 5-6 hour infusion) not only is the tumour directly attacked, but vitamin C is such a great healing nutrient that the body's immune defences are activated. In sharp contrast with the usual chemotherapy when patients always feel much worse, they always feel better when they are given ascorbic acid. Hugh was the leader in making available to cancer patients a treatment that is effective, safe, economical and tolerable. Few oncologists have ever seen these advantages unless they visited Hugh's clinic. Oncologists world wide suffer from the delusion that vitamin C is toxic. This is based upon no reports in the medical literature. The

Dr. Riordan was a mentor, supporter, colleague, friend and father figure for me. I will miss him dearly. His novel ideas, theories and dedication to patients will also be missed. I had the honor to publish various scientific papers with him and to discuss for long hours ideas, theories and information that I hope will change how degenerative diseases are treated. Thank you, Dr. Hugh for all this. We will keep working hard as you taught us by your example, this will be our way of honoring you.

—Michael J. Gonzalez, D.Sc., Ph.D.

vitamin C intravenous chemotherapy studies, initiated and established so well by Dr. Riordan, are being continued at the University of Kansas and McGill University, Montreal.

Very few know that Hugh was a psychiatrist. His interest in rational diagnosis and treatment was eclectic. He pioneered the biochemical classification of schizophrenic patients and the use of rational therapy based on this classification. Few people realize that psychiatric nomenclature is of very little value since there is almost no relation between diagnosis and treatment. Hugh expanded the use of the mauve factor, later called krytopyrrole, and

was part of an international team that was examining this factor further. It probably is one of the best markers of oxidative stress and is therefore found mostly in patients who are under severe stress. Schizophrenias, Autism and many other mental diseases, regardless of the diagnosis, as well as cancer, all involve severe oxidative stress. I think Hugh liked working with schizophrenic patients because he got such good results from his treatment. He and I were in complete agreement. If the vitamins were driven off the face of the earth I would promptly give up all medicine and go into major mourning.

An Orthomolecular Fighter

Hugh was one of the Medical Mavericks who fought hard and consistently on behalf of orthomolecular concepts. By doing so he became a member of the group that includes Linus Pauling, Roger Williams, discoverer of two vitamins, Carl Pfeiffer, Humphry Osmond, Irwin Stone, David Hawkins, Robert Cathcart, Allan Cott and many others. Ten of these mavericks were inducted into the Orthomolecular Medicine Hall of Fame in 2004 and Hugh Riordan will be added in 2005.

Hugh was not shy about defending Orthomolecular medicine. I remember that when Linus Pauling first coined the word orthomolecular in 1968, many of our group who had been using vitamin B₃ were not very happy with the name because it generated so much antagonism. It was the favourite target of the American Psychiatric Association. Hugh relished a good fight,

including writing letters to editors. In April 29, 2003, *The New York Times* wrote about the concern many medical experts had about the increasing use of vitamins. The headline was "Vitamins: More May Be Too Many." I have always been amazed at the bland-faced hypocrisy of physicians who express these major concerns about vitamins. To quote Andrew Saul, "Where are the bodies?" Until last year I heard very few of the same doctors expressing any concern about Vioxx, for example, which killed many thousands of people. There are no deaths from vitamins. I doubt one could commit suicide by over dosing with them.

Hugh wrote the *Times* in May 1, 2003. "What an amazing article 'Vitamins: More May Be too Many' by Gina Kolata is missing a few details. According to the latest available US Government statistics, the percentages of Americans over age 20 not getting even the RDA of many nutrients is appalling." He pointed out that 40% of Americans were not getting even the abysmally low vitamin C amounts, 55 % were not getting the low pyridoxine amounts, 70% were not getting

the magnesium doses recommend and 75% were not getting enough zinc. Then he added "Based upon its own data, our government and a responsible publication like the *New York Times* should be screaming that the nutrient intake of America is so low in so many that it a nation scandal and a public health menace."

More than just a man of letters, he was a doer. He worked tirelessly in building the Center for The Improvement of Human

If you were to search all Hugh's writings, view all the tapes of his lectures at The Center, and spend 17 years working with him as I have, you would not find one comment of his dishonoring the noble profession of medicine or discrediting any of his colleagues. Dr. Hugh was, however, guilty in the first degree of thinking outside the medical box. He never attacked conventional medicine but challenged conventional thinking. He was not afraid to defy convention, not for the sake of defiance, but for the sake of the advancement of medical care in this country.

—Ron Hunninghake, M.D., Medical Director,
Olive W. Garvey Center for Healing Arts.

Functioning, and developing a superb treatment center, which I am very happy to refer patients to with full confidence that they will be treated humanely and effectively. His research, in a very difficult field and against the opposition of the entire psychiatric and medical establishment, was innovative and productive. He was a great teacher at the conferences he addressed and the recent videos he prepared discussing the revolutionary changes in schools where children were given nutritious food and treated as members of a family. He was the first to demonstrate how large doses of vitamin C are chemotherapeutic for cancer patients. This is the first known safe chemotherapy. He expanded orthomolecular treatment for the mentally ill, especially the different schizophrenic types using the most modern laboratory methods, many new to orthomolecular psychiatry. He was a pioneer in establishing the new vitamins-as-treatment paradigm.

The Center and Hugh's family received a large number of very warm, supportive and helpful letters, all tributes to what Dr. Riordan had done for them. They came from colleagues, from co-workers, from patients, from reporters. They are all excellent.

As Hugh's colleague, dear friend and fellow maverick I reserve for myself the right to have the last word. This is what I wrote to Jan Riordan: "I wish I had the words to accurately describe the enormous shock when I heard Hugh had died. One would think that hardened by old age and by the experience of death amongst one's family, friends and colleagues that one could be desensitized to the fact. But no, it does not happen when good women and men die. Hugh's death left an enormous hole in my life and my work, which cannot be filled.

He was active in so many fields as a physician, a healer, teacher, innovator, and fearless fighter. Hugh made major contributions to ideas and to organizations that are so dear to me—the use of nutrition and orthomolecular methods for treating patients and for preventing disease. I cannot think of anyone who

has done so much for safe chemotherapy by his use of intravenous vitamin C. This seminal work made it possible for my son, John, to obtain a research grant to carry on his work on intravenous vitamin C. Several of his important contributions were stymied by NIH but will eventually be published.

He was far advanced in his understanding of the schizophrenias and the use of treatment developed by myself and Dr. Carl Pfeiffer to recognize the type of psychosis they had and to treat them properly. He recognized the value of honoring pioneers in medicine in his three books *Medical Mavericks*, because the history of medicine is incomplete without describing the contributions made by those physicians, not only the ones that are past but the ones that are following. The history of medicine is a history of conflict. He was a very good teacher. It was a pleasure to hear him deliver his lectures and presentations. As a person, a gentle man in the old English tradition, a Mensch, he was gracious, kind, honest, interested and concerned. An example was his trip to Victoria several years ago to give me, personally, the Pearl Maker Award from his Center.

So I hope I have expressed the tremendous loss knowing he will be missed by you, your family, his friends and colleagues, by his patients and by patients who will now not ever have a chance to be healed by him

All I can write is I am sorry. But now you know what I mean. Hugh, good friend and scientific colleague, is gone but the good that he did will live on."

—Abram Hoffer, M.D., Ph.D.

For a comprehensive chronicling of Hugh Riordan's work, please visit his new web site www.orthomolecular.org Less than one year ago Hugh told the Board of the International Schizophrenia Foundation that this web site would be one of the best. It is. This is one of the three web sites I refer to most frequently. The other two are www.orthomed.org and Andrew Saul's www.doctoryourself.com

From Hilton Family Foundation, Major Supporter of Orthomolecular Medicine

I first recall meeting Dr. Hugh Riordan at the Nutritional Medicine Today Conference in Vancouver in 2002. Dr. Abram Hoffer had introduced him as one of the foremost researchers in Vitamin C. I was fascinated to learn about his clinic, and soon thereafter we visited him in Wichita to see for ourselves The Bright Spot for Health, Research, and Education! In Vancouver, we met with Dr. Riordan and other orthomolecular pioneers to learn what our family could do to best further the development of Orthomolecular Psychiatry, and he suggested that we have a super Orthomolecular website. Thanks to his vision and the trustees of the Princeton Bio Center, www.orthomolecular.org was created!

Of course there were countless projects Dr. Riordan led and participated in to further Orthomolecular medicine and to save and transform the lives of patients, not the least of which were his authorship of the *Medical Mavericks* book series (I was so grateful to learn of the *Medical Mavericks III* book being available) and his significant leadership in editing the *Journal of Orthomolecular Medicine* as well as serving on the International Schizophrenia Foundation Board. His Orthomolecular lectures were always enlightening for the newcomer as well as the veteran student of Orthomolecular Medicine.

Dr. Riordan's personality and communication style reminded me of my dad's, and although he was a man of few words, I always got a lot out of his words. Whether they were words of encouragement when we had sponsored the Orthomolecular section of the Food as Medicine Conference in 2001, or words of wisdom when he encouraged us to move forward with Orthomolecular research studies yet spend our funds judiciously, or guidance on health matters that helped me and others get and stay well, or words of understanding and thoughtful advice about my family, Hugh Riordan was an amazing influence to my family and all of those who knew him.

All we can do is let his family, friends, associates and his Bright Spot family know we care. I feel so honored and blessed to have gotten to know Hugh Riordan. I am a better person as a result of knowing and working with him, and so is the world better because of the phenomenal contributions of Dr. Hugh Riordan!

As I continue to reflect on the many ways Dr. Riordan has been a teacher to me, my family, the Orthomolecular family, his community, and the world, I remain a student and an advocate, more determined than ever to get the word out and make Orthomolecular medicine a household word and Orthomolecular treatment the standard of care for patients around the world!



Hugh presenting one of his great ideas to Julie Hilton, at the 2004 NMT conference.

With love, Julie for
Charles, Lela and Julie Hilton