

*“Alles geben die Götter, die unendlichen,
Ihren Lieblingen ganz,
Alle Freuden, die unendlichen,
Alle Schmerzen, die unendlichen, ganz.”*
Goethe

Hommage à Franz Halberg



Photo by © Tom Foley

On behalf of the Neuroendocrinology Letters and myself, I would like to express my most cordial congratulations on the occasion of the 80th birthday of Professor Franz Halberg, M.D., Director of the Chronobiology Laboratories at the University of Minnesota, the “Father of Chronobiology,” one of the greatest and most appreciated scientists of our time, on July 5, 1999.

Franz Halberg and I have not met in person yet, but our intensive exchange of ideas, scientific visions and personal views during the recent year brought about an incredible “human touch.” It gave me the feeling of knowing Franz closely for years and essentially deepened my great admiration for his scientific efforts during the last fifty years.

We are very pleased and proud to have Franz with us “on board” at the Neuroendocrinology Letters. In this issue we publish a series of papers by him and his co-workers, which give a very representative and broad overlook over the main principles in the science of Chronobiology as developed by Franz. There are many common issues in the basic philosophy between Franz’s concepts and those of the Neuroendocrinology Letters such as of the indivisible continuity of life, the multi-inter- and transdisciplinary approaches and the stress on prevention rather than treatment of already existing disease or impairment (his concept of Pre-habilitation) and, last but not least, the knowledge that the whole is more than the sum of its parts.

Franz Halberg placed time as the undisputed fourth dimension in biology and thus created one of the fundamental laws within the bio-medical sciences, a new dimension without which life could not exist. “Chronome,” derived from chronos (time), nomos (rule, law) and in the case of biological chronomes, chromosomes, describes features in time, just as cells characterize the spatial organization of life.

Franz Halberg has dedicated almost 50 years of his life to chronobiological research. His studies represent a new original Minnesotan branch of science based upon resolving the chronome and its mapping “womb to tomb.” His research has had a great impact on many medical specialties beside general medicine, such as

neuroendocrinology, immunology, oncology, psychiatry, obstetrics & gynecology, pediatrics and, not least, gerontology by help of chronobiology to develop new markers of biological aging.

His current, much broader, perspective of chronomes may help us when we venture into space for preventive health maintenance, while the same system could also help us discern where we are coming from. Professor Halberg has been associated with NASA from its inception, championing acceptance of Chronobiology in space biology, as a science in its own right. He seeks to achieve for astrobiology what he has already done for chronobiology.

Franz Halberg not only coined the terms “circadian” and “chronobiology,” but he amassed much of the evidence for the importance of these rhythms from the circadians of RNA and DNA syntheses to those of the body as a whole and its responses to a variety of stimuli.

Changes in body rhythms can make the difference between life and death and have been exploited for chronotherapy. Franz Halberg understood the far-reaching implications of biological rhythms. He uncovered their rules of behavior and mapped a whole spectrum of interacting rhythms, thus laying the basis for a new science, Chronobiology. By adding to the existing body of knowledge a key element, time, chronobiology applies to all of biology and medicine.

The international scientific community has honored Franz Halberg for his outstanding contributions to science and technology with many awards. His achievements have not only been influenced by his inquisitiveness, fantasy, visions, intellectual mobility, outstanding intelligence, fun in work, and high working power, but also by his universal education shaped by humanism and by his outstanding character. Franz Halberg is the author and co-author of more than 2,000 scientific papers and even in recent years has been coordinating work of more than 100 scientists worldwide. At 80 years-old he is still working seven days a week, with more than 12 hours every day. And he still finds the time for his family and friends, for playing tennis and for skiing.

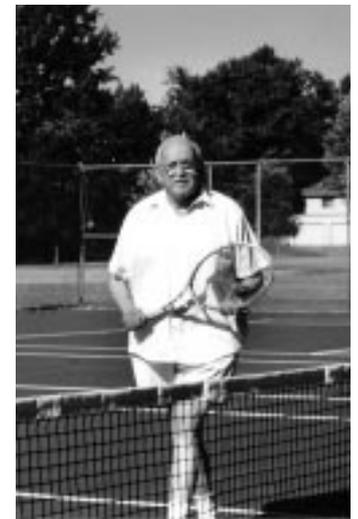
On his birthday, the mayor of Roseville, Minnesota, where Franz resides, declared his birthday, the July 5 “Franz Halberg Day” in Roseville.

Franz is greatly appreciated and loved by his colleagues and friends around the world and by his closest coworkers, some of them who have been with him for decades. In spite of his working timetable, his office door is always open, with priority given to any student eager to learn about chronobiology. He is an excellent teacher and his perfect knowledge of several languages, including his classical language education, is fascinating. His languages, both literary and scientific, are as striking as is his knowledge in both ancient Roman and Greek as well as European and American literature. He is an extraordinary human being who is characterized by a great portion of humility, charm, love, concern, caring and a deep unselfishness, kindness, warmth and personal dedication to the truth.

Writing this homage gives me a great confidence for the coming millennium concerning the rise of the “human touch” in sciences and in mankind, where we still need Franz and people whom he has influenced by his wonderful personality. Throughout his life, both scientific and personal, TRUTH and CREATIVITY have been common denominators. I would like to close my homage again by quoting Goethe:

“Was fruchtbar ist allein ist wahr.”

*Peter G. Fedor-Freybergh
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Franz Halberg in action 1999