Resuscitation great

Max Harry (Hal) Weil – A leader, mentor, friend, and wonderful colleague

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Dr Hal Weil was born in Baden, Switzerland on February 9th, 1927. He was the younger of two brothers whose parents were Gretl and Marcel Weil. His family moved from Baden to Stuttgart, Germany in 1932. In 1937 they immigrated to the United States to avoid the anti-Semitic programs of Germany. They settled in New York City where they were surrounded by loving aunts and uncles.

Dr Hal Weil graduated from the Bronx High School of Science in New York. In 1944 he attended the University of Michigan, College of Literature, Sciences and Arts in Ann Arbor, where he majored in science and mathematics and minored in psychology. This was interrupted from 1946 through 1947 while he served in the United States Army Medical Corps as a psychiatric social worker. He then continued his education at the University of Michigan where he received his Bachelor of Arts in 1948. In 1952 he was awarded the M.D. degree from the State University of New York, College of Medicine. In 1957 he received his Ph.D. in Medicine (Physiology) from the University of Minnesota, Minneapolis.

In 1957, after he completed his fellowship at the Mayo Clinic and the National Heart Institute, he became the Chief of Cardiology at the City of Hope Medical Center in Los Angeles. From 1959, he was the Director of the Shock Research Unit at Los Angeles County/University of Southern California (USC) Medical Center; he was working at USC Medical Center as Professor of Medicine and Biomedical Engineering and Chair of Critical Care Medicine until 1981. In the LA County/USC Medical Center, in 1958, Dr Weil met the late Dr Herbert Shubin. The two cardiologists often wondered why many patients died, often at night while recovering from a heart attack, shock, or surgery. They discovered that without a way to check vital signs continuously, nurses often were not aware that their patients were deteriorating. Monitoring blood pressure, heart and respiratory rates and other vital signs continuously would give the staff a chance of earlier diagnosis and provide lifesaving interventions. This insight laid the foundation of the current critical care medicine specialty. In the early 1960s, the four-bed ‘shock ward’ of Drs Weil and Shubin at LA County/USC Medical Center was the first of its kind. It evolved within a decade into a 42-bed center
for the critically ill at USC, becoming a model for today's intensive care, coronary care, trauma and post-operative care units.

Dr Weil is generally considered to be the "father of modern day critical care medicine" because of his substantial contributions to this relatively new specialty. The details of his scientific contributions to the field are too long to list. In his early career, his main research interest was in circulatory shock. The Weil–Shubin shock classification developed by Drs Weil and Shubin in the late 1960s is still considered as the best pathophysiological classification of shock. Dr Weil established arguably the very first intensive care unit in the world and introduced the concept of computerized patient monitoring. He also invented the concept and implemented the very first 'stat lab', which provided quick laboratory results for the evaluation and treatment of critically ill patients in the ICU. In 1970, Max Harry Weil, Peter Safar and William Shoemaker, together with 25 other specialists, founded the Society of Critical Care Medicine (SCCM). Dr Weil served as the first President of the Society.

In 1981, Dr Weil moved to Chicago and served as Chairman of the Department of Medicine, Chief of the Division of Cardiology and Critical Care Medicine, Professor of Medicine, and later, Distinguished University Professor. In 1991, he retired from the Chairmanship so that he could spend more time on developing the Institute of Critical Care Medicine.

The Institute of Critical Care Medicine was founded by Drs Weil and Shubin in 1961 and incorporated as a non-profit research organization in 1975. It was initially located in Los Angeles, then in Chicago. In 1994, it was moved to Palm Springs and established its permanent headquarters in Rancho Mirage, California in 2005. In 2006, when Dr Weil retired as the Institute's president, the Board of Trustees renamed it the Weil Institute of Critical Care Medicine in honor of his substantial contributions. Dr Shubin, Dr Weil's closest friend and colleague, also contributed significantly to the development of the Institute. As Dr Weil often told us: "without Dr Shubin, this Institute would never be as strong as it is today". Unfortunately, Dr Shubin died in 1975, at the age of 50, of an acute myocardial infarction while climbing a mountain. The death of Dr Shubin had a profound impact on Dr Weil's life and prompted him to change his major research focus on cardiopulmonary resuscitation (CPR).

Dr Weil was a great leader. He had the natural ability to attract people around him to pursue his lifelong goal; "to save more lives", and did so with remarkable elegance. He is well known to have had the vision of how to achieve the goal in a right way. During the last 23 years, we have attended many events that honored his accomplishments. All he said was that, "I could not have done this alone" and then gave all of the credit to his colleagues. However, when things were not going right, he always took the responsibility and then made sure that the person who really had the responsibility would learn the lesson. His leadership has attracted all of us at the Institute. We joined Dr Weil in 1988 as research fellows and he convinced both of us in his unique way that we should stay with him to pursue the goal of saving more lives. We have worked together since then.

Dr Weil was a great teacher. In his life time, he personally mentored over 400 fellows from all over the world. Each of the fellows benefited tremendously from his mentorship, not only in their professional life, but in their life in general. He taught us to pay attention to smallest details from day one of the fellowship. Develop hypotheses, literature reviews, protocol writing, performing experiments, data analysis, and completing reports and he was there to guide us every step along the way. Even in the later stages of his life, he still edited each fellow's protocol or paper at least 20 times before it could be sent out. We remember vividly the countless weekends and nights that we spent together with him at his home, drinking orange juice, eating cookies as a lunch, discussing the protocol or results, editing manuscripts and writing grant applications. As Dr Weil often told his friends; "The greatest pride of my life is in the many young physicians, engineers and scientists from all over the world whom we were privileged to train in the science and practice of lifesaving medicine". After the Institute moved to Rancho Mirage and Dr Weil retired as the President of the Institute, he started a Community-wide CPR/AED program with the goal of training 10% of the local residents to learn CPR skills. He walked into each class and used his excellent teaching skills to communicate with the students and taught them how to save lives. We have read countless comments from the students indicating that the most attractive part of the class was Dr Weil's talk. He did it persistently until 2 weeks before he died.

Dr Weil was a great scientist and innovator. The first thing we learned from him was the remarkable attention he paid to the smallest details during scientific research. He believed religiously in the accuracy and truth of the scientific results. We have seen many times that while he was working on manuscripts with his fellows, if there was some number that bothered him, he would stop working and go to the lab with the fellow and go through the raw data one by one until he felt comfortable. He did this persistently in more than 1300 publications throughout his life. We were always impressed by his remarkable knowledge of medicine, physiology and pathophysiology and he never stopped learning. During the last 5 years, even though he was not involved directly in the daily scientific research activities, he joined all discussions of the ongoing research projects with impressive knowledge of the current science of each project. He never stopped creating new ideas. We do not remember how many times he called us during the middle of the night because of his new ideas or the solutions to the tough problems we were facing. Almost all of the inventions of our Institute were initiated by him.

Dr Weil was a great humanitarian, a dear friend, and a wonderful colleague. He has been regarded as a lifelong friend and father by many of his trainees. His care for each of them was beyond their professional lives. He did the same for his colleagues. We often remember our own birthdays by receiving birthday gifts from him. He never failed to reply to the mail of his admirers from all over the world, answering their questions and providing help, even though he never met most of them. Two days before he died, we visited him at his home. He was obviously in pain. However, the first thing he said to us was, "What happened in Norway was terrible. Please send emails to our Norwegian friends to see if they are OK". When we told him, we did, and all of our friends are OK there, he smiled.

We quote part of Dr Myron Weisfeldt's condolence letter as the conclusion: "Hard to think about our field without Hal. He worked for all of us and showed us the way many times. He kept on our 'tails' for quality and commitment. Resuscitation is weakened tremendously by his loss."

Many thanks Dr Weil, for the time we spent together and for the spirit you left to us.

References