

## Harald Löe, 1926–2008



Many great men and women have shaped the current science and practice of periodontics, but few have had the broad impact of Harald Löe. On 9 August 2008, Harald Löe passed away in his summer home in Østerås near Oslo, Norway, as a result of a massive stroke shortly after he celebrated his 60th Anniversary with his beloved wife Inga and his family.

Anyone who had the opportunity to work with Harald or even listen to one of his lectures was struck by his incredible love of personal interaction. In his presence you always felt as if you had his full and intense attention, even if you were in the audience of a lecture room. And that feeling was well-justified, because Harald really cared about what each individual thought about the topic of discussion. He asked about what you were doing; he asked about what you thought; he was passionate about his own beliefs; he challenged your thinking; and he was a careful listener. Part of his brilliance as a communicator came from the effort he made to understand what others were thinking. While he was Dean of the School of Dental Medicine

at the University of Connecticut Health Center, he ate lunch in the cafeteria almost daily at tables with students and faculty. At these lunches he talked science and dentistry and politics. As always he was very opinionated, but he listened to everyone. The students felt that they knew him, and they loved him. Harald's personal attention and focus was combined with creative science, you had the perfect mentor. Those of us who had the honor of having him as a mentor were forever changed.

This rare man had an unusually successful life of a scientist, professional leader, mentor and trendsetter of prevention of oral diseases and periodontology. Harald was born on 19 July 1926, in the town of Steinkjer, near Trondheim in Norway, where he grew up with his sister. During World War II (WWII), he enrolled in the Norwegian resistance and, towards the end of the war, trained in Sweden. In 1945, he belonged to the small team of Norwegians who liberated the Castle of Akershus in Oslo that marked the liberation of Norway at the end of the war. Harald kept in close contact with his friends from the military. After WW II, he enrolled at the University of Oslo and received his DDS in 1952. Jens Wærhaug became his mentor and instilled in Harald the critical importance of hypothesis-driven experimentation. The result of that training was that Harald led the change in periodontology from a field with uncertain clinical outcomes driven by expert opinion to predictable treatment guided by real science.

He spent a year in Chicago as a Fulbright Research Fellow at the University of Illinois, which helped him to complete in 1961 his Doctor of Odontology Dissertation (PhD) entitled "Bone Tissue Formation". At the age of only 35 years, Harald was called to the newly founded Royal Dental College in Århus, Denmark, where he served as Professor and Chairman until 1972. The 60s and early 70s were his most active research period. Thanks to

his well-designed clinical studies and his exceptional clarity of both written and oral communication, there is hardly a dentist in this world who is not familiar with his landmark work of the experimental gingivitis in man (1965). That work provided the basis for modern clinical periodontology. The cause-and-effect relationship between plaque and the host response of gingivitis that Harald established in those early studies still forms the keystone for prevention of plaque related oral diseases. The papers on experimental gingivitis were literature "classics" and are still widely referenced over 40 years after their publication. Perhaps most important to Harald was that millions of patients throughout the world received good predictable periodontal prevention and treatment as a direct result of his studies. Few individuals have such a long and practical impact on the world's health.

While numerous clinicians did not adhere to the absolute necessity of plaque removal and accepted suboptimal oral hygiene in daily care, Harald fought a lifetime for the paradigm that gingivitis was a true risk factor not only for the development of gum disease, but also of tooth loss. Only 3 years ago, working with a young generation of investigators, he was able to establish that concept.

Harald Löe's life as a researcher is also characterized by his studies on the natural history of periodontitis, a project he initiated in 1969 in tea plantations of Sri Lanka and in Oslo and that lasted practically until he passed away. Numerous coworkers in various parts of the world participated in this enormous pivotal project.

Beginning with his time in Århus, Harald became a mentor to young enthusiastic clinicians who were overwhelmed with his ability to excite and to stimulate creative thinking. Many of these individuals remained in academics and held chairs or teacher's positions throughout the world. He was one of the few academicians who could separate the practical and essential from less

important details. With this talent he was able to energize young researchers again and again.

In 1972, Harald and Inga continued to spend summers in Norway with their family but relocated to the United States where they remained until his passing. At the University of Michigan, Harald became the Director of the Dental Research Institute. Within a few years, he developed a new identity for the research institute and streamlined the direction of research towards the study of oral plaque diseases. Harald set his marks as an educator when he was Dean at the University Of Connecticut School Of Dental Medicine from 1974 to 1982. This was a time of tremendous development and team building, resulting in the University of Connecticut reaching the level of one of the leading Schools of Dental Medicine in the United States. In 1982, Harald was appointed Director of the National Institute of Dental Research, NIH, Bethesda, MD. He knew that the United States needed to attract new scientists into dental research, and he successfully introduced novel educational and research models that led to the education of numerous young dental scientists in the world. When he retired from NIH in 1994, he had served on more than twenty international and governmental health policy committees.

Harald published close to 400 scientific papers and continued to be an active contributor to the scientific literature even during his "retirement career," when he spent numerous months working with young colleagues. Harald was an incredibly engaging speaker, but he was well known as a man of differentiated and precise scientific writing. Many dental scientists and clinicians throughout the world owe Harald great tribute for our professional development.

Harald received numerous awards and honors in his life, including knight-hoods bestowed by Her Majesty Queen Margarethe II of Denmark in 1972 and by His Majesty King Olav of Norway in 1989. President George Bush honored him in 1991. No less than 17 Honorary Doctorates were bestowed upon him including Scandinavian, European, and American universities, as well as the Medical Sciences University in Beijing. Close to 20 national professional societies honored Harald with Honorary Membership or Fellowship. In 1969, he received the Basic Research in Periodontal Disease Award of the International Association of Dental Research. In 1979–1981 he was President of the IADR and in 1994, the Harald Løe Scholars Program was created to provide academic researchers with opportunities to study policy issues in research and education.

The dental community has truly lost a giant, of both science and of personality, a pioneer in dental research and an outstanding colleague. Those of us who were fortunate to have been Harald's student, coworker and friend have lost a phenomenal mentor, a stimulating discussant and a lovable and caring friend. We will keep him in mind and pay our tribute by living his legend and passing on his spirit to our students.

To Inga, Harald's loving wife, to Håkon, his son, and Marianne, his daughter, as well as to all the grandchildren we express our sincere sympathies. We are grateful for having been part of Harald Løe's life.

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Kenneth S. Kornman, Boston, MA, USA  
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## References

- Lang, N. P., Kornman, K. S. & Karring, T. (2008) Obituary for Harald Løe. *Clinical Oral Implants Research* **19**, 1091–1092; *Journal of Periodontology* **79**, 2011–2012.

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