

Laudatio to the „Iron Lady of Orthodontics” Professor Birthe Melsen

Birthe Melsen, one of the most recognized and respected Orthodontists, was born in Aabenraa, Denmark in 1939. She received her Dental Degree in 1964 from Aarhus University in Aarhus, Denmark. Melsen began her ascending road with obtaining the orthodontics specialty in the year of 1971 and received her orthodontic certificate in 1974 from Royal Dental College.

Her complex academic activity was accomplished with abnegation and dedication, over the course of decades dedicated to study and scientific creation. She has been a full professor since 1975, and between 1975 and 2012 she was Head of Department of Orthodontics at the School of Dentistry, Aarhus University, Denmark. Since 1986, she has been working part-time in a private practice in Lübeck, Germany (Adult Orthodontics only).



The intense research activity, her passion and organizational capabilities, have brought her many leadership positions over the years, in different scientific societies.

Writing about professor Melsen is a more difficult task than it seems, One can say a lot about her impressive and complex activity and also about the multiple sides of her defining personality, but we must summarize the vast information that we possess.

A remarkable university specialist and reputed scientist, professor Birthe Melsen is also actively involved in philanthropic causes, since 1989 fundraising for third world children, especially in South America, where she lectures to generate money for the unprivileged children, and also regularly donating for several Children Organisations.

The leadership positions

1976 - President, Scandinavian Orthodontic Society; 1984 - President, Nordic Orthodontic Society; 1988 - President, Danish Orthodontic Society; 1989 – President, Third International Symposium on Dentofacial Development, Aarhus, Denmark; 1990 Vice-president, European Orthodontic Society Congress, Copenhagen, Denmark; 1993-96 Vice-president of International Symposium on Comprehensive Management of Craniofacial Anomalies; 1994-97 President of the Danish Orthodontic Society; 1994- Associate Editor of Orthodontics and Craniofacial Research; In 2000 she received the “Knighthood of Dannebrog 1st degree”, the highest possible award for University affiliated researchers. In 2004 he was elected President of the European Orthodontic Society.

She has supervised 18 Phd theses and advised for research projects in Australia, Brazil, Italy and Thailand. She has, since 1975, been a regular lecturer at a large number of the postgraduate programs in the US and South America and during the last decenium also in Australia and various Asian countries. She is a regular member of The Angle Society and an international member of the American Association of Orthodontics and the World Society of Orthodontics.

The scientist

Professor Melsen has made significant contributions in the field of orthodontics with her research. She has authored more than 380 publications in the fields of growth and development based on research on human autopsy material, bone biology and clinical implant studies.

Her entire activity was oriented in three major directions all with profound practical implications: Skeletal Anchorage- Mini-Implants: Where Are We? In 2005 Birthe Melsen said "In my opinion, skeletal anchorage is clearly not a replacement for other proven anchorage systems. Skeletal anchorage should serve merely to expand the orthodontic services we can offer our patients"

An innovation that professor Birthe Melsen introduced and developed was the Aarhus System. These miniscrews yield a perfect balance of sizing, strength and working diameter for maximum clinical application. The system has an excellent one-dimensional control through button head screws, ideal for elastic chains and NiTi spring applications, and two-dimensional control accepting wires, hooks, lever arms and other auxiliaries.

Virtual Imaging

Professor Melsen's "3-D occlusogram" software, as suggested by Fiorelli and Melsen, was determined to develop a user-friendly software which in addition to the advantages mentioned by Marcotte can also provide the bases for the computerized appliance design.

Adult Orthodontic Treatment

She has published a textbook called Adult Orthodontics in 2012 and has made significant contributions in the field of orthodontics with her research, publishing many papers in different scientific journals. This is a major new work dedicated to the increasingly prominent area of adult orthodontics. The opening chapters provide the context for adult orthodontics, including patient demographics and a etiology, and the book goes on to detail treatment planning considerations, including patient case profiles, suggesting initial outcomes and longer term expectations.

After having lectured for so many years about biomechanics, and after working together for more than 20 years on the "Biomechanics in Orthodontics" software, professor Melsen and dr. Fiorelli have decided to undertake a new challenge of teaching the "real" biomechanics in five weeks of hard work. In 2013, professor Melsen started alongside dr. Giorgio Fiorelli, The Orthodontic Biomechanics Summer School, with the 1st edition in Arezzo, and then went on yearly in Viareggio and Lido di Camaiore.

From 2006 she is Associate Editor of the Journal of Clinical Orthodontics.

Over the last few years I have had the chance and the joy of getting to know her more closely, discussing at different international congresses either in France, at the FFO Congress where we discussed about the next two meetings scheduled in Romania for AREO members, or in America during the meeting of the AAO ambassadors, where we had the pleasure to work together, along with other big names from the orthodontic world, at the working meeting of the WIOA advisors for the preparation of the WIOC 2019 congress, which will be held in Bucharest from October 23-26, the second time after many years in Europe again.

As of 9 June 2019, Birthe Melsen is 80 years old.

Happy birthday dear lady Birthe Melsen!

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