JAN NYBERG was born 1960 and raised in Stockholm, Sweden. After dental school in Stockholm and Dental Degree in 1987 he moved to Eskilstuna and worked as a dentist. In 1996 he started his training at the Department of Oral- & Maxillofacial surgery at Örebro University Hospital. After working as a maxillo-facial surgeon at the Central Hospital in Västerås he returned to Örebro in 2006. He has now a position as Senior Consultant in maxillo-facial surgery at the Department of Oral- & Maxillofacial surgery and head of the Örebro center for head and neck oncology at Örebro University Hospital. He has focused on clinical research on implant surgery in irradiated and reconstructed head- and neck cancer patients.

In this thesis a prospective clinically long-term follow up of dental implants inserted in irradiated and non-irradiated fibula flaps in reconstructed mandibles is reported. Bone tissue reactions adjacent to micro-implants in the fibula reconstructed mandibles were histologically and histomorphometrically evaluated.

In animal studies effects of an external single radiation dose (20 Gy) on bone adjacent to inserted micro-implants were studied. Histomorphometric measurements, histological evaluation, removal torque testing and gene expression analysis demonstrate radiation effects on osseointegration and on bone formation and remodeling.

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JAN NYBERG On implant integration in irradiated bone

Doctoral Dissertation

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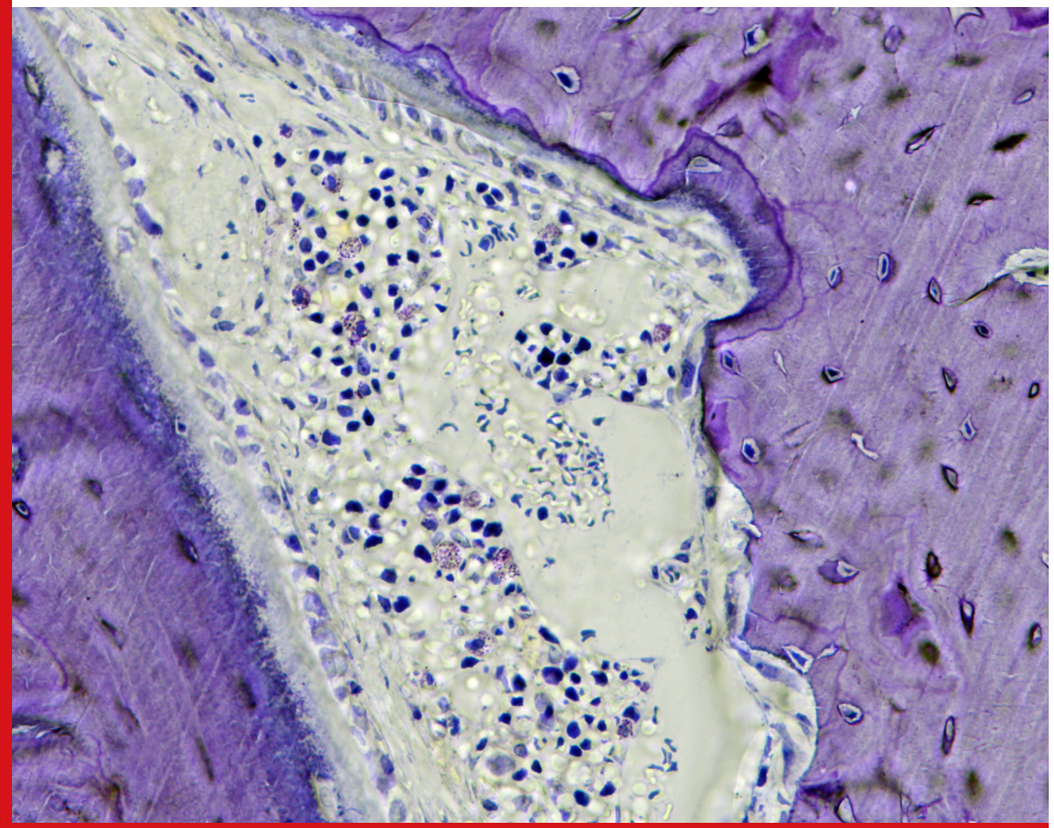
– clinical and experimental studies

JAN NYBERG
Medical Science with a specialisation in Surgery



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