‘These are exciting times in which we live’

An interview on stem-cell research in dentistry with Prof. Thimios Mitsiadis, head of the Institute for Oral Biology at the University of Zurich

Dental Tribune Germany: Prof. Mitsiadis, which factors determine the formation of enamel?

Prof. Thimios Mitsiadis: This is a very complex process, which is determined by the dental epithelium at a very early stage and different to that of the skin epithelium that covers the body.

There is a multitude of transcription factors, one of which is Ptx2, which governs the formation of oral and dental epithelium.

Based on this, there are other transcription factors. At the moment, we only know of Tbx1, which co-

forms the ameloblasts. Of course, there are further transcription factors that we do not yet know much about and that are regulated by certain growth factors.

The transcription factors occur within a very tight timeframe to form enamel. It is a highly complex process from the beginning to the final formation.

Which factors may disrupt the formation of enamel?

Dental enamel can be damaged

The ADA says ‘Aloha!’ from Hawaii

Hundreds line up to receive free dental care

By Fred Michmershuizen, Online Editor

At various events around the country, hundreds of people with little or no insurance have been lining up for hours for the chance to receive free dental and medical care.

In La Crosse, Wis., for example, the Wisconsin Dental Association (WDA) and WDA Foundation held a two-day event, called Mission of Mercy, in which 1,533 children and adults received dental care at no charge.

More than 900 volunteers, including 170 dentists and 87 hygienists, were involved in the setup, two treatment days and cleanup of this inaugural, large-scale oral health care event, held at the La Crosse Center.

Medical professionals from Wis-
We recently formed a European consortium with researchers working with stem cells in Germany, Finland, Switzerland, Italy and France. The objective is to isolate stem cells from teeth, the face and the head, and to use them to generate products.

Distraction osteogenesis vs. autogenous

Endosseous implants fare equally well after either distraction osteogenesis or autogenous bone grafting, according to a new report published in the September 2009 issue of the Journal of Oral Implantology, the official publication of the American Academy of Implant Dentistry and of the American Academy of Implant Prosthodontics.

Following alveolar reconstruction, endosseous implants support and retain the prosthesis. Therefore, it is important for the method of alveolar reconstruction to be highly compatible with the subsequent implantation. The authors conducted a retrospective analysis to determine whether distraction osteogenesis or autogenous bone grafting offers a greater chance of clinical success.

The authors included 82 consecutive patients from the patient population of Loma Linda University in a retrospective analysis of the two alveolar reconstruction techniques.