Clinically, it is a tremendous challenge to create natural gingival esthetics after immediate or delayed implant placement. Stability of the soft tissue during implant surgery is of major importance for the implant site and adjacent teeth. For cases in which only the tooth is compromised and not the soft-tissue or osseous form, a flapless surgery can be performed. In cases of localized horizontal or vertical deficiency, dehiscence or fenestration, another approach is necessary. From a prosthetic prospective, the soft-tissue architecture around implants has to be similar or close to that of the natural tooth. While the dental laboratory can deliver the best functional and esthetic work, it will be harmonious only if the soft-tissue dimensions are maintained or developed surgically or with the help of the prosthetic reconstruction. Single-implant placement has proved to be more predictable than multiple-implant placement. In the case of multiple implants and delayed loading, it is possible to form a soft-tissue profile with provisionals or proceed directly to the final reconstruction. This is done with the help of a wax-up on the final metal frame to control the pressure of the soft-tissue intraorally.
Soft-tissue management for bone augmentation

Different tissue biotypes react differently to surgical trauma. For this reason, we have adapted the surgical approach to the biotype (tissue thickness) specific to each patient and the location in the oral cavity. The tissue thickness dictates the way it is manipulated for high-volume augmentation. Thick biotypes can be managed in a conventional manner. However, thin biotypes require new surgical approaches with specific instruments. This course will describe step by step the gain of soft-tissue for tension-free closure even in cases of reduced soft-tissue thickness.

The course will define predictable soft-tissue manipulation around implants according to soft-tissue biotype. Learning from our clinical experience in soft-tissue manipulation, we can adapt soft-tissue surgery. We need to graft more, to manipulate the soft tissue, to treat each particular case.

There is little data in the literature on adapting surgery according to soft-tissue thickness. Most articles describe the same kind of surgery for all cases, with no distinction between biotypes. With this in mind, we have to adjust surgery to the tissue conditions for better soft-tissue closure in cases of grafting and for better esthetics. This means individualized flap design for every tissue type. The next step will be the development of instruments, but more than that, of implant surfaces and biomaterials that address not only the bone but also the soft tissue. Adapting therapy to soft-tissue biotype is changing the way we approach implant dentistry.

Prosthetic soft-tissue development in implant dentistry

The main purpose of this course is to explain, demonstrate and teach soft-tissue development around implants with the help of prosthetic components in fixed, single- and multiple-implant placement.

The course will cover abutment design for ideal soft-tissue support, pontic design for esthetic soft-tissue development, emergence profile design for the crown and abutment, different wax-up modalities, esthetic try-ins for different therapeutic phases, crown margin definition, gingival management with temporaries, and mock-ups.

Soft-tissue complications and full-arch restoration

With the increasing number of implants being placed in the esthetic zone according to immediate or delayed protocols, we face soft-tissue complications like recession of the soft-tissue and papillary loss. There are no predictable methods documented in the literature regarding how to increase the soft-tissue height for the papillae or correct recessions around implants.

The course will demonstrate individualized approaches to correct papillary loss in the esthetic zone using modern flap design techniques. Furthermore, increasing soft-tissue thickness and moving the soft tissue coronally after recession around implants through surgery and prosthetic methods will be described.

Soft-tissue management: Vertical augmentation

Vertical bone loss represents a major surgical challenge in the implant treatment of the posterior mandible, owing to anatomical factors and technical difficulties. Proper management of the soft-tissue is crucial for success of any regenerative procedure: A complete and stable closure of the flaps during healing is essential to prevent contamination and infection and allow for undisturbed graft healing and incorporation. This prerequisite can be accomplished only if buccal and lingual flaps are sufficiently released, in order to obtain a passive coverage of the augmented area, stabilizing it with tension-free sutures. In the posterior mandible in particular, the use of conventional periosteal incisions is not always sufficient for a proper buccal flap passivation, often being limited by anatomical factors.

Over time, bone augmentation has moved from highly specialized clinics into the dental office. With the help of modern grafting material, the augmentation volume in the dental office has increased year by year. However, the main issue remains soft-tissue closure for high-volume augmentation, especially in the posterior mandible and posterior maxilla. We have developed special flap designs and suturing techniques specific to location to address this ongoing problem of soft-tissue management. The participants will learn about and practice soft-tissue closure according to location.