

# **THE NEWEST TECHNOLOGIES BECOME INVOLVED IN DENTAL MEDICINE**

**Professor Norina Consuela Forna**

Faculty of Dental Medicine, Grigore T. Popa University of Medicine and Pharmacy, Iasi

The fundamental characteristics of contemporary dental medicine are precision, avant-garde, technologization and successful clinical finality. In order to become competent on a permanently evolving field, governed by exigency, esthetic rehabilitation and rigor, it is essential to have an excellent theoretical and practical training.

The purpose of this lecture is to individualize the performance methods applied in the territory of dentistry with profound impact in theory and practice of the future practitioner.

The use of 3D-DentSim simulation systems makes possible the creation of high precision restorations and the development of backups preserving maximum exigency approaches. The use of 3D navigation systems in oral implantology gives maximum precision to implant manipulation.

In the teaching process, the simulation takes an essential role, being employed as the first step in learning practical maneuvers and allowing the cultivation of practical abilities for each clinical entity of dental medicine. The complexity of the simulation includes evolutionary steps, from the preparation to the arch level on models systems to computer-assisted simulation, a performant facet of the present, which leads to accurate manoeuvre and to ideal preparation forms.

Another facet of the simulation can be found in 3D modelling, adapted to each clinical case, correlated with the type of biomaterial used, the type of dental prosthetics and biomechanics corresponding to each biosystem. To predict, to give definite trajectories of certain predictability, are essential features that belong to the field of the new and the concrete.