

## P2.1

## 3D Imaging/Printing and Planning in Maxillofacial Surgery Francis V. Roasa University of Santo Tomas Hospital, Philippines

The 21st century science and technology have revolutionized the way we live with better functionality. From communication, data management, and visualization, computers have made it easier for us to do all these things. Today, machines are taking all of these things into the operating room, from planning and execution, to obtain better outcomes in our surgery.

3D Imaging/Printing and planning in maxillofacial surgery have helped us to understand the 3-dimensional anatomy and geometry of the maxillofacial region. It provides a more accurate pre-operative diagnosis, well-defined virtual surgical planning, improves operative accuracy, leading to the enhanced outcome. The workflow would require data acquisition, data export to treatment planning platform, data manipulation and template design and generation. Its application is beneficial in complex maxillofacial trauma and tumor reconstruction as well as in temporomandibular joint (TMJ) surgery, orthognathic surgery, and dental implantology.