

# 25<sup>th</sup> Global Dentists and Pediatric Dentistry Annual Meeting

April 25-26, 2019 | Rome, Italy

## 3D materials for rehabilitation: Applying technologies for oral treatments

**Gustavo Fernandes**

Catholic University, Portugal

The technologic evolution has brought new expectative to achieve better results and precision in treatments. The impression of biomaterials has helped to reduce the time and to obtain a more interesting conclusion. Over the last years, a wide variety of 3D printing technologies have been adapted to hard tissue. Modern dentists are becoming well acquainted with large volumes of digital data. 3D printing, also known as additive manufacturing (AM), layered manufacturing, rapid prototyping, solid freeform fabrication, works like an 'output' device for dental CAD software, making it possible to materialize objects of different materials. Interestingly, with the adjust of the operator's skill, it can make guides for surgeries, which to become the clinical procedure easier. It can be used also in the construction of scaffold in three-dimensions for cellular culture, or to be associated with others biomaterials like bone grafts or platelet-rich in fibrin. Beyond, it permits to personalize the titanium mesh through the prototyping printed and others applications that become the complex procedures simpler. Although 3D printers are becoming more affordable, the cost of running, materials and maintenance must be considered. Despite these concerns, 3D printing already has achieved an increasingly important role to play in dentistry.

[gustfernandes@gmail.com](mailto:gustfernandes@gmail.com)