The term “biomimetics” originates from the Greek words bios (life) and mimesis (to imitate), yet its definition is not as simple as just those two words. More specifically, biomimetics is a creative form of technology that imitates nature to improve human lives. There are two major perspectives to which the term biomimetics is applied: the biologic perspective that focuses on recreating original tissue, and the synthetic perspective that focuses on using dental materials that result in a mimicked biologic result.

Biomimetics, or rather the “biomimetic approach,”¹ in restorative dentistry is based on the philosophy that the intact tooth with its ideal optical properties and its anatomy, mechanics, and location in the arch is the guide to its successful functional and aesthetic reconstruction. The Academy of Biomimetic Dentistry (ABD) is a popular representative of this philosophy.

Some years ago, a group of dentists founded the Bio-Emulation™ – from the Greek word bios (life) and the Latin word aemulus (equal) – group, which follows the principles of biomimetics, but which acts more as a “think tank” that strives to promote the biomimetic approach in dentistry.

This issue of IJED is focused on these biomimetic principles, and I would like to thank all the authors for sharing their ideas; ideas that give us plenty of “food for thought” to learn from nature.

Enjoy reading.

Sincerely yours

Alessandro Devigus

Reference