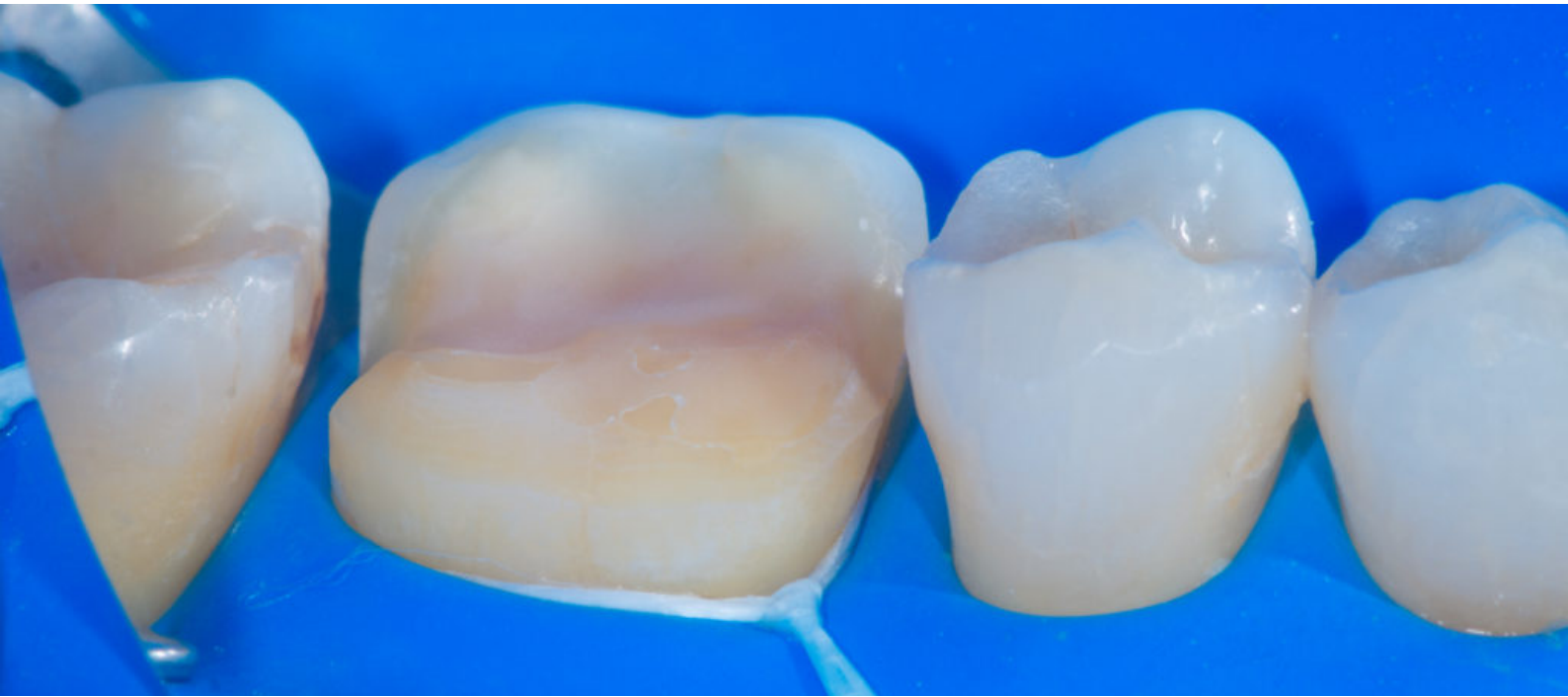


INTRO THE BIOMIMETIC APPROACH

 September 25-25 2020

 San Jose, CA



Course Description

Course Overview

The intact natural tooth has the perfect combination of properties via dentin, enamel, and the DEJ. These three uniquely distinct material layers combine to work harmoniously and perform incredibly well together, despite the inadequacy of any given layer to perform well on its own. In the Biomimetic approach, this performance and biomechanics of natural teeth are replicated through material properties and a strong union through concepts and technique which maximize adhesion. Ideal restorative materials replicate the properties of the dental structures (*enamel, dentin, dej*), and healthy intact tooth structure is preserved through adhesion without additional preparation requirements. This is in sharp contrast to traditional dental procedures that rely on preparation designs to accommodate the retention or strength requirements of the restorative material or technique. As a result, the teeth restored with a traditional approach require significant additional tooth preparation and experience a significantly higher chance of complications such as pain, sensitivity, root canal treatment, recession, and fracture.

Course Details

Price	\$300
Prerequisite Course	none
Speaker/s	Dr. Matt Nejad
CE Credits	2
Dates	September 25-25 2020 (2 hours)
Times	Evening

Location

San Jose, CA

Learning Objectives

- Learn the main concepts of the Biomimetic approach
- Learn the properties of Dentin, Enamel, and DEJ and how they work harmoniously to produce the natural tooth's function and biomechanics
- Learn the strengths consequences and complications of traditional preparation designs.
- Learn how adhesive dentistry can be dramatically improved with proper materials and application techniques.
- Learn how polymerization stresses and residual stresses contribute to successful adhesion.
- Learn how a strong adhesive bond can completely eliminate the need for mechanical retention and mimic the “biological-bond” strength of natural enamel to dentin.
- Learn how a strong adhesive bond improves the performance of the material and restores the biomechanics of natural teeth.

Training Coverage

This introductory lecture will introduce the Biomimetic Approach and provide an overview of the following concepts as they relate to Biomimetic Dentistry:

- Properties and Structure of Natural Teeth
- Preserving Tooth Structure
- Maximizing Adhesion
- Polymerization Stress and Residual Stress
- Adhesive Retention vs Mechanical Retention
- Advantages and Performance of Biomimetic Restorations

Instruction Areas

The techniques and science covered in this course are categorized into the following instruction areas:

1. Structural Analysis
2. Caries Removal Endpoint/Peripheral Seal Development
3. Immediate Dentin Sealing/Resin Coating
4. Stress Reduction
5. Maximizing Bonds
6. Restorative Materials and Preparation Designs



