

IADR General Session**March 22, 2017****3:15-4:45 pm****Quo Vadis Dental Materials?**

Dental materials science is in the midst of historical transition from traditional synthetic materials towards true biological replacements. While cell-based biomaterial research may yield new tooth in the future, it is hard to foresee the application of such entities achieving desired clinical functionality within the next decade or two. Therefore, the conventional dental materials, particularly those with improved service life, may remain in use for a long time to come.

The purpose of this symposium is to re-examine the role of dental materials in restorative dentistry. Current challenges and future directions of dental material research, as one of the major basic science and didactic subjects in all of dentistry, will be reviewed. Specific emphasis will be given to the role of adhesive interface and strategies for bond preservation. Furthermore, priorities and funding opportunities for dental biomaterial research from the perspective of the NIDCR will be presented.

Learning Objectives:

- Critical evaluation of factors affecting tooth/adhesive interface and strategies for bond preservation
- Dental materials of today and tomorrow – design, testing and fabrication
- Dental materials research in academia - challenges and directions
- Funding priorities/opportunities from the perspective of the leading US government organization

Chairs:

Drago Skrtic, PhD

Diane Bienek, PhD

ADA Foundation, Volpe Research Center

Symposium Speakers:**Lorenzo Breschi, DDS, PhD: “Stability of the adhesive interface”**

Dept. of Biomedical and Neuromotor Sciences, University of Bologna

Robert Kelly, DDS, PhD: “Materials are here to stay in dentistry. Next steps?”

Reconstructive Sciences, UConn Health

Nikolaos Silikas, BSc (Hon.), M. Phil., PhD, FADM “Dental materials research in the 21st century”

University of Manchester, School of Dentistry

Orlando Lopez, PhD: “Innovation, priorities and opportunities in dental and biomaterial research”

Director, Dental and Biomaterials Program

National Institute of Dental and Craniofacial Research, National Institutes of Health