



FOCUSED LEARNING SESSIONS (FLS)

A 60-minute informal discussion led by an expert on a topic of high interest over the designated time. These sessions are directed at students, but all are welcome to sign up. During the Focused Learning Sessions, you may discuss topics of current interest with the researchers identified below. FLS will take place in-person at the Oregon Convention Center. There is a \$25 fee to attend each session.

Thursday, March 16, 12:45 p.m. – 1:45 p.m.

FLS #1: Discussing Animal Models of Bone/Dentin Regeneration with Students and Scholars

Speaker: Patricia Miguez (University of North Carolina, Chapel Hill)

Sponsoring Group/Network(s): Dental Materials, Women in Science Network, Periodontal Research, Mineralized Tissue

Track Selection: C, E

Description: Hard tissue reconstruction in the maxillofacial area, although highly researched, remains unpredictable due to the complexity of the tissues including cell-microenvironment interfaces in bone and dentin. Despite significant advances in cell-based and cell-free grafts, biomaterial technology and variety of biologics, a set of individuals still present with bone grafting failures albeit the use of the best available therapies in the market. The appropriate design of pre-clinical studies to investigate regenerative therapies is crucial in ensuring clinical success. However, many animal models of mineralized tissue regeneration and maintenance exist and have different attributes, caveats and indications which must be understood for the proper interpretation of results and future application towards human conditions. This focused learning session aims to discuss various animal models of bone and dentin regeneration with students and scholars with the intent to critically review the advantages and disadvantages of different models and provide guidelines to students when designing their own studies. The Miguez lab has used multiple hard tissue models of regeneration and bone loss and the speaker will share her experience and a thorough literature review on the topic.

FLS #2: Will Self-adhesive Composites Have a Future in Restorative Dentistry?

Speaker: Antonio HS Delgado (Centro de Investigação Interdisciplinar Egas Moniz (CiiEM), Almada, Portugal)

Sponsoring Group/Network(s): Dental Materials

Track Selection: E, C

Description: The search for simplicity has always accompanied the history and evolution of modern adhesive dentistry. This led to the creation of simpler, user-friendly systems over the years, that make the procedures easier for the clinician to undertake and the patient to endure. Self-adhesive composites (SACs) were developed and introduced in restorative dentistry to surpass current multi-step adhesive systems, which are not ideal in terms of technique sensitivity, chair time required and expenditure. The self-adhesiveness of SACs is due to functional acidic monomers in their chemical composition. However, this simple alteration in the chemical composition of composites may not be enough to secure clinical success. Thus, it is important to review the properties and flaws of current commercial SACs and understand where they stand in relation to other current restorative materials, so as to plan the future prospects of this class of materials.

FLS #3: Utilization & Predictability of Implant Retained cantilever Prostheses

Speaker: Kenneth Kurtz (Montefiore Medical Center, Bronx, NY)

Sponsoring Group/Network(s): Prosthodontics

Track Selection: E, C

Description: Cantilever designs have existed for decades in restorative dentistry. For many reasons, cantilevers become necessary in implant dentistry. Their use can be used by anatomic limitations, esthetic concerns, or failure of implant integration. Properly prescribing pontic and retainer design for screw or cement retained cantilever prostheses can be confounding. Clinical treatment illustrating one abutment, one pontic and multiple abutments, one pontic designs will be detailed and accompanied by supporting scientific literature. Success can be ably predicted via "trial by provisional."