

2005 Mini-Residency in Advanced Restorative Dentistry Techniques July 11-July 15, 2005

University of Minnesota, School of Dentistry
Minneapolis, MN, USA

Sponsored by

3M ESPE

University of Minnesota School of Dentistry Continuing Dental Education

Course objectives

1. To familiarize dentists with the newest adhesive dental materials (includes visit to the research laboratory and overview of testing techniques)
2. To train dentists to treat aesthetic clinical cases according to techniques backed up with scientific data;
3. To help dentists with decision-making regarding the numerous treatment options currently advertised by manufacturers in the clinically oriented literature.

Faculty:

Dr. Jorge Perdigão, Course Director

Languages spoken: Portuguese, Spanish, English, French

Contact: Tel. (612) 625-5432

Email: perdi001@umn.edu

Dr. Anthony Versluis

Languages spoken: English, Dutch

Dr. Omar Zidan

Languages spoken: Arabic, French, English

Dr. Sillas Duarte Jr.

Languages spoken: Portuguese, Spanish, English

Dr. George Gomes

Languages spoken: Dutch, Portuguese, Spanish, English

Dr. Holger Meiser

Languages spoken: English, German

Topics to be covered in the lecture room and in the clinical setting (hands-on)**DAY 1**DENTAL ADHESION6-410 MOOS TOWER

MORNING - Lectures

8:00 – Welcome and Introduction

8:15-9:45 State-of-the art of dentin/enamel adhesives (Perdigão)

Coffee Break

10:15-11:05 Resin cements: total-etch and self-etch resin cements (Perdigão)
Techniques for bonding different types of ceramic restorations (Perdigão)

11:05-11:50 Adhesives and techniques for bonding fiber posts and adhesive amalgam restorations (Gomes, Perdigão)

Discussion

LUNCH- OUTSIDE IN CAFÉ- 2ND FLOOR PHILLIPS-WANGENSTEEN BUILDING

1:00 – 5:00 – Hands-on (Perdigão, Duarte, Gomes)

7-555 MOOS TOWER-CLINICAL RESEARCH CENTER

- Two patients for direct bonding.
- Participants will use Adper Prompt L-Pop or Adper Single Bond Plus on extracted bovine teeth to be tested in microtensile bond strength mode. Results of the tests to be announced during the last day (surprise prizes for three highest bond strength values).

Discussion

DAY 2

COMPOSITE RESINS AND LIGHT-CURING

6-410 MOOS TOWER

MORNING - Lectures

8:00-8:40 State-of-the art of composite resins and photo-polymerization (Perdigão)

8:40-9:40 Polymerization contraction (Versluis)

Coffee break

10:05-11:00 Anterior restorations with new composite resins (Duarte, Perdigão)

- Natural esthetic restorations and dynamics of light
- Translucency, opalescence, fluorescence

11:00-11:50- Posterior restorations with new composite resins (Duarte, Perdigão)

- Simplified techniques for composite application
- Techniques for anatomical characterization and sculpture

Discussion

LUNCH- OUTSIDE –IN CAFÉ-2ND FLOOR PHILLIPS-WANGENSTEEN BUILDING

1:00 – 5:00 – Hands-on (Perdigão, Duarte, Gomes)

7-555 MOOS TOWER-CLINICAL RESEARCH CENTER

- Insertion and finishing posterior composites with Filtek Supreme.
- Insertion and finishing a direct composite veneer with Filtek Supreme.
- Patients for diastema closure, class IV restoration, and class II restorations.
- Fabrication of a temporary crown with Protemp Garant 3 will be demonstrated. Participants welcome to perform the same procedure in their typodont models.
- Discussion

DAY 3

INDIRECT RESTORATIONS

6-410 MOOS TOWER

MORNING - Lectures

8:00-8:30 Types of ceramics, including zirconia-based and alumina-based ceramics (Perdigão, Duarte)

8:30-9:40 Porcelain veneers – from preparation to bonding (Perdigão, Duarte)

Coffee Break

10:10-11:00- Porcelain and composite inlays/onlays - from preparation to insertion (Gomes, Perdigão)

11:00-11:50- Impression materials and techniques (Duarte)

Discussion

LUNCH- OUTSIDE-IN CAFÉ- 2nd FLOOR PHILLIPS-WANGENSTEEN BUILDING

1:00 – 5:00 – Hands-on (Perdigão, Duarte, Gomes)

7-555 MOOS TOWER-CLINICAL RESEARCH CENTER

- Impressions with Impregum Penta Soft Quick Step Impression Material.
- Cementation of a crown with RelyX Unicem on a typodont.
- Two patients with LAVA crowns and one patient with a LAVA 3-unit bridge to be cemented with Rely X Unicem.
- One patient for bonding porcelain veneers with Rely X Veneer.
- Patient for two anterior crowns – preparation and impression with Impregum Penta Soft Quick Step Impression Material; temporization with Protemp Garant 3.

Discussion

DAY 4

DAY AT 3M CENTER

DAY 5

7-519 MOOS TOWER- CONTEMPORARY DENTAL CLINIC

MORNING - CAD-CAM restorations (Zidan)

8:00-9:30 CAD-CAM: Overview of materials and systems (Zidan)

10:00-12:00 Fabrication of a CEREC 3D restoration (Zidan)

LUNCH- OUTSIDE-IN CAFÉ-2ND FLOOR PHILLIPS WANGENTSTEEN BUILDING

1:00 – 5:00 – LECTURES - 6-410 MOOS TOWER

HANDS-ON – 16-146 MOOS TOWER

How do we conduct research in Operative Dentistry? (Perdigão, Duarte, Gomes)

1:00-1:30 Electron Microscopy applied to Operative Dentistry and Dental Materials

1:30- 1:45 Clinical research with composite resins and dentin adhesives at the University of Minnesota

1:45-2:15 Bond strength testing (with hands-on if participants wish to run dentin bond strength testing)

3:00-4:30 Hands-on, including Scanning Electron Microscopy for participants who wish to use the SEM under Dr. Perdigão's guidance.

DISCUSSION

CLOSING REMARKS (TEAM)