



**Tufts**  
UNIVERSITY

School of  
Dental Medicine

# **BATES – ANDREWS DAY 2014**

**Wednesday, March 5, 2014**

***PREDOCTORAL & POSTGRADUATE STUDENT TABLE CLINICS***

**10:30 am to 3:00 pm**

**Dental School – 14<sup>th</sup> and 15<sup>th</sup> Floors**

***KEYNOTE SPEECH***

**Carroll Ann Trotman, BDS, MA, MA**

Professor and Chair

Department of Orthodontics

“Restoration of Soft Tissue Dynamics and Form in the Cleft  
Patient”

**3:30 pm**

**Rachel’s Amphitheater, DHS 14**

***AWARDS PRESENTATION & RECEPTION***

**4:30 pm**

**Alumni Lounge, DHS 15**

Sponsored by the George A. Bates Society & the Robert R. Andrews Research Honors Society  
Tufts University School of Dental Medicine

## **MESSAGE FROM THE DEAN**

"Welcome to Bates-Andrews Day 2014, a showcase of our predoctoral and postgraduate students' research activities. This year's event will be the largest yet, with **78** student poster presentations! We appreciate your attendance and support of our students' efforts.

We are very pleased to have as our Keynote Speaker, Dr. Carroll Ann Trotman, Professor and Chair of Tufts Department of Orthodontics. She is expected to lecture on "Restoration of Soft Tissue Dynamics and Form in the Cleft Patient"

Bates-Andrews Day gives our students the opportunity to share with the rest of the Tufts community their accomplishments in fields of special interest. I applaud them for their initiative and achievements.

Strengthening and increasing research activity and creating an environment that encourages and supports student participation in research are integral parts of the School's strategic plan. Student research is also a key accreditation standard for dental education programs.

I appreciate the dedication of the faculty advisors for their mentorship. Special thanks go to the judges and the participation of the commercial exhibitors who help make this event possible. Finally, Eileen Doherty's guidance as director of predoctoral student research and Dr. Gerard Kugel's leadership as Associate Dean for Research are highly valued in enhancing our students' research experiences.

Huw F. Thomas, B.D.S., M.S., Ph.D.

Dean and Professor of Pediatric Dentistry

## **MANY THANKS TO OUR COMMERCIAL EXHIBITORS & CONTRIBUTORS:**

*3M ESPE*

*Dr. Chad Anderson, D04*

*Aspen Dental Management, Inc.*

*Benco Dental Company*

*Brasseler USA*

*Colgate Oral Pharmaceuticals, Inc.*

*Dentsply*

*Designs for Vision*

*Door to Door Dental*

*Eastern Dentists Insurance Company*

*General Scientific Corporation*

*Gentle Communications, LLC*

*GlaxoSmithKline*

*Great Expressions Dental Centers*

*Hu-Friedy*

*Johnson & Johnson Healthcare Products*

*Living Legacy Financial Group*

*Massachusetts Dental Society*

*Dr. Kistama Naidu, D02*

*Natick Dental Partners*

*NCDR, LLC for Kool Smiles*

*Patterson Dental*

*The Procter & Gamble Company*

*Shofu Dental Corporation*

*Sullivan-Schein Dental*

*Ultradent Inc*

## **BASIC SCIENCE PRESENTATIONS:**

### **Elizabeth Bingham D15**

Dab2 Depletion Modifies E-cadherin Expression in Squamous Cell Carcinoma Cells

### **Jimmy Chen D16**

Characterization of the Novel Zebrafish Helicase Craniofacial Mutant

### **Matthew Devine D16**

Adiponectin Attenuates Inflammation by Regulating the Jmjd3-Irf4 Axis in Macrophages

### **Rajvir Jutla D14**

Paracrine Effects of Diabetic-Foot Ulcer Fibroblasts on Keratinocytes *in vitro*

### **Sharod McKinney D16**

Characterization and Mapping of Two Novel Zebrafish Mineralized Tissue Mutants

### **Joanne O'Brien D15**

Growth Factors Secreted from Diabetic Foot Ulcer Fibroblasts

### **Shruti Pore D14**

Microenvironmental Cues Affect Dab2 Expression in Squamous Cell Carcinoma Development

### **Shawheen Saffari D16**

Tumor-Stromal Interactions Alter the Metabolism of Squamous Cell Carcinoma Cells

### **Jacqueline Servais D15**

Anti-VEGF Therapy Inhibits Hypothyroidism Associated with Infantile Hemangioma

### **Kyle Smith D16**

Epigenetically Modified BMSCs in Regenerating Dental and Craniofacial Bone Tissues

### **Ronney Tay D16**

Delineating Regulatory Mechanisms of Nasopharyngeal Carcinoma Development by Comparative Metabolomics

## **CLINICAL STUDIES**

### **Ola Alshuhail (Craniofacial Pain)**

Case Report: Management of Obstructive Sleep Apnea and Insomnia in a Patient with Complete and Partial Removable Dentures

### **Alireza Ashrafi (Oral and Maxillofacial Surgery)**

The Evaluation of a Non-Invasive Respiratory Volume Monitor in Patients Undergoing Dental Extractions during Moderate Sedation

### **Andras Balint (Oral and Maxillofacial Surgery)**

Survey About Use of Ambulatory Oral and Maxillofacial Surgery Safety Checklist Among Oral Surgeons in AAOMS Database

**Ranju Bhasin (General Practice Residency) and Brianne McGuinness (General Practice Residency)**

Special Considerations for the Dental Management of Patients with Osteogenesis Imperfecta

**Rachel Cohen D16**

Endodontic Treatment Outcomes in Patients with Sjögren's Syndrome

**Erin Gilmore D15**

Management of Atrophic Edentulous Mandibular Body Fractures: Comparison of Techniques

**Jennifer Guidry (Pediatric Dentistry)**

Repeat Dental Treatment Under General Anesthesia: A Retrospective Study

**Elaina Kazes D14**

A Comparison of Conventional Intraoral Radiography and Sectional CBCT Imaging

**Samantha Keck D16**

Oral Health Related Quality of Life in Primary Sjögren's Syndrome

**Chase Larsen D14**

All Ceramic Restorations: A Clinical Case

**Khusbu Patel D16**

Oral Health Quality of Life in Intellectually/Developmental Disabled (IDD) Individuals

**Sepideh Sabooree D15 and Alireza Ashrafi (Oral Surgery)**

Post Discharge Nausea/Vomiting After Ambulatory Anesthesia in Oral Surgery

**DENTAL MATERIALS**

**Ivy Ahluwalia D14**

Flexural Loading Strength of Provisional Restorative Material

**C. Marissa Alikpala (GPR) and Jennifer Logigian (GPR)**

Long Term Success Rates of Ketac and Photec in the Posterior Dentition

**Christopher Beninati D16**

Effect of Instruction on Energy Delivered to Simulated Restorations

**Jonathan Bishop D16**

Effect of Phosphoric Acid on Vitrebond Plus Resin-Modified Glass Ionomer

**William Brown D16**

Measuring the Dimensional Accuracy of Ceramic Orthodontic Brackets

**Stephanie Brue D14**

Comparing Microabrasion Techniques for In Vitro White Spot Lesion Removal

**Minh Bui D15**

Gluma Antimicrobial Effect on Five Strains of Cariogenic Bacteria

**Matthew Cannavo D14**

Microleakage of Bulk Fill Composites With Self Etch and Total Etch Bonding Systems

**William Chao D16**

Effects of Storage Conditions on the Hardness of Nanocomposite

**Elena Ciciolla D15**

Comparing Immediate Tear Strength of Elastomeric Impression Materials

**John Constantine D16**

Properties of Silk Electrogels: Functional Vehicles for Drug Delivery

**Daniel Dooley D16**

Depth of Cure and Radiopacity of Select Composites

**Lindsay Fox D15**

Elastic Recovery of Light-Bodied Impression Materials at Different Working Times

**Ryan George D15**

Pilot Study Analysis of Four Types of Digitally Processed Models

**Vishavjeet Girn D15**

Comparison of Mechanical Properties of Dental Restorative Material

**Aditi Jindal (Pediatric Dentistry)**

Effect of Carbonated/Non-carbonated and Sugary Drinks on Micro-leakage of Pit - Fissure Sealants

**Julia Kim D16**

Microleakage Evaluation of Beveling Cavosurface Margins in Composite Class-II Restorations

**Michael Kreitzer D14**

Strength Testing of Various Cements and Restorative Materials

**Hemanth Kunduru D14**

Effect of Mold Type on Depth of Cure

**Judyth Lee D14**

Effect of Curing Light on Depth of Cure

**Wei Liu D14**

Penetration Depths of Different Retraction Pastes

**Alissa Mariano D16**

Microleakage Evaluation of Restorations Sealed With a CO<sub>2</sub> Laser

**Kyler McEwen D14**

Shear Bond Strength of Different Dentin and Zirconia Treatments

**Amanda Merikas D15**

Shear Bond Strength Tests of Different Types of Silane Primers After Stress and Aging

**Courtney Michelson D14**

Comparing Compressive Strengths of New Self-adhesive Bulkfill Material to Restorative Materials

**Christina Penn D16**

Thermal Effect Due to Laser and Handpiece Usage on Pulp

**Jessie Reisig D16**

Effect of Contouring with Mylar on Composite Shear Bond Strength

**Justin Richer D16**

Comparing Publication Characteristics between Successful and Unsuccessful Dental Materials

**Sara Samaha D16**

Energy Delivery Based on Restoration Location and Light Curing Unit

**Leslie Slowikowski D14**

Fluoride Ion Penetration on Ionic Resin Materials

**Jesse Small D15**

Polyvinyl-Siloxane Impression Materials Performance in a Tensile Strength Test

**Michelle Tsao D14**

Influence of Air/Vinylpolysiloxane on Residual Layers of Temporization Materials

**Rami Muadab (Implant Fellowship)**

Shear Bond Strength of Acrylic Denture Teeth to Denture Base of Metal-Resin Implant-Supported Fixed Prosthesis: In Vitro Study

**EDUCATIONAL RESEARCH****Yusuf Bhatti D14**

Global Oral Health Training in Pediatric Dental Residency Programs

**Dave Cho D14**

Student and Faculty Perception on Use of Objective Clinical Structured Examination in Preclinical Removable Partial Denture Course

**Dr. Daniel Coleman (Periodontics)**

Accuracy of Periodontal Probing Depth and Calculus Detection Through the Use of Kinoshita Nissan Periodontal Dental Model

**Irina Dragan (Periodontology) and Taylor Newman D15**

Assessing the Level of Evidence in Post-Graduate Experience at TUSDM

**Joshua Hall D16, Shivam Patel D16, and Brent Popovich D15**

A Survey: How Periodontists and Other Dental Professionals View the Scope of Periodontics

**Jasmine Jenkins D15**

Association Between Cumulative Grade Percent and Dental Licensure Exam Results

**Heather Leung D16**

The Relationship Between Learning Modality and Academic Performance

**Lauren Marzouca D16 and Bradley Belous D16**

Student Self-evaluation Versus Faculty Assessment of Operative Competencies: An Analysis of Calibration

**Courtney Robinson D16 and David Frantz D15**

Ergonomic Prevention Before Intervention: Early Education for Musculoskeletal Wellness

**Devina Shah (Pediatric Dentistry)**

Effectiveness of an Oral Health Education Program for Obstetrician/Gynecologist Residents at Tufts Medical Center

**Laura Shim D16**

Comparison of Flipped and Standard Classrooms in a Dental School Setting

**Esther Yun D14**

Association Between Sleepiness and Stress and Simulated Clinical Performance

**PUBLIC HEALTH RESEARCH**

**Riley Baldwin D16**

Survey of Special Education Teachers' Knowledge of Oral Health Principles

**Christian Benitez D14**

Evidence Based Study: The Correlation Between Diabetes and Periodontitis and the Importance of Incorporating Blood Glucose Tests [BGT] in the Dental Setting

**Yoojung Chang D15 and Jonathan Song D15**

Oral Health of Psychiatric Inpatients: Implications for Group Treatment

**Douglas Kim D16**

Retrospective Study of Oral Health Program in a Rural Zambian Community

**Alice Ko D15**

Assessment of Participants in Oral Health Project in Rural Zambia

**Jennie Leikin D15**

Tufts University School of Dental Medicine Geriatric Patients Oral Quality of Life

**Maryam Mahdavi D16**

Demographic/Utilization Information for an Oral Health Program in Rural Zambia

**Hubert Park (Pediatric Dentistry)**

BabySteps: Innovative Obesity and Caries Prevention Pilot for Young Children

**Christina Piacquadio D16**

Occupational Therapy and Oral Health of Individuals with Developmental/Acquired Disabilities

**Michelle Webb D14**

The Impact of Training Pre-School Teachers as Ambassadors of the Give Kids a Smile (GKAS) Program to Improve Children's Oral Health Disparities

## **HISTORY OF BATES DAY**

Since the 1930's this day is held annually to honor George A. Bates, an alumnus of Tufts University School of Dental Medicine, who taught Tufts medical and dental students. He was regarded by his students as an inspiring instructor in Histology. Bates Day at TUSDM helps to promote student research and thereby enhance the opportunities for professional growth of our students, alumni and faculty.

## **ROBERT R. ANDREWS SOCIETY**

This student-run organization was formed in 1921 in honor of Dr. Andrews, an outstanding researcher and distinguished dental surgeon. The Andrews Society seeks to promote dental research and to honor those who excel in it.

## **AWARDS**

### ***1<sup>st</sup> place* – ADA/Dentsply Student Clinician Program Award for Best Overall Undergraduate Table Clinic**

(winner will present at 2014 ADA convention in San Antonio, TX)

### ***2<sup>nd</sup> and 3<sup>rd</sup> Place* Undergraduate Table Clinics**

(winners will present at 2014 Greater NY or other regional dental meeting)

### **Andrews Society Award (in honor of Dr. A. Charney) for the Best Scientific Research Presentation by a Senior**

### **Bates Society Award for Best Postgraduate Table Clinic**

### **Massachusetts Dental Society and ASDA Public Health Award**

### **Omicron Kappa Upsilon (OKU) Hilde Tillman Bates Day Award**

### **Research Committee Award for Basic Science Research**

### **The Dr. Chad Anderson Family Award for Innovative Methodology and Research Design**

### **Multicultural Award for the Advancement of Dental Research**

### **Oral Health Disparities Award**

### **Bates Student Research Group “Peer-reviewed” Award**

### **ADEA Student Group Educational Research Award**