60th Annual AADR / Dentsply Sirona

Student Competition for Advancing Dental Research and its Application Awards Program and Reception

Wednesday, June 19, 2019
Fairmont Hotel Vancouver
Welcome to the 97th General Session of IADR, 48th Annual Meeting & Exhibition of the AADR and 43rd Annual Meeting of the CADR. The American Association for Dental Research and Dentsply Sirona are proud to host the 60th Annual AADR/ Dentsply Sirona Student Competition for Advancing Dental Research and its Application Awards (SCADA) Program and Reception celebrating our 2019 Student Clinicians.

Dental research and discovery serve as the foundation of the dental profession. This evening we honor the accomplishments of our 2019 Student Clinicians. As men and women of science, these talented students from across the globe have experienced the excitement for dental research and its promise to improve the health and well-being of patients globally.

With its rich 60-year history, the SCADA Program has seen many former Student Clinicians become leaders in dentistry. This year’s Student Clinicians have the potential to make significant contributions to dentistry as outstanding practitioners, inspiring educators, and innovative scientists. Wherever their professional journey takes them, these talented students will truly make a difference in the profession as well as their communities.

Dentsply Sirona is the proud supporter of this program since its inception in 1959 and reflects our strong history and commitment to innovation and clinical research and education. The SCADA program exemplifies Dentsply Sirona’s vision of “Delivering innovating dental solutions to improve oral health worldwide” and supports the AADR mission to advance research and increase knowledge for the improvement of oral health.

Creating healthy smiles throughout the world depends on scientific advances and the committed work of researchers, academicians, and clinicians. The SCADA Student Clinicians have demonstrated leadership, commitment, and dedication to the advancement of science to improve health. It is our pleasure to honor you during this Awards Program.

Congratulations to our 2019 Student Clinicians!

Teresa A. Dolan, D.D.S., MPH
Vice President and Chief Clinical Officer, Dentsply Sirona
Dentsply Sirona’s vision is to deliver innovative dental solutions to improve oral health worldwide. This vision cannot be achieved without a strong commitment to scientific discovery. One way we encourage innovative thinking is through our long-standing support of student research.

The first International Association of Student Clinicians - American Dental Association (ADA) or SCADA Program was launched as a joint venture between DENTSPLY International and the American Dental Association in 1959 during the centennial session of the ADA in New York City. The program was conceived by the late Dr. Harold H. Hillenbrand, former Executive Director of the ADA, and the late Mr. Henry M. Thornton, former Chairman of DENTSPLY International. Their goal was to establish a program that would stimulate student interest in dental research and introduce dental students to the American Dental Association.

In 2017, the SCADA Alumni Association entered into a strategic collaboration with the American Association for Dental Research (AADR), and AADR became the co-sponsor of the Student Clinician Research Program in the United States.

SCADA’s mission today remains the same -- to advance the art and science of dentistry by introducing pre-doctoral students to the world of dental research. By immersing themselves in research, students learn how to apply the scientific method to best solve clinical problems, as well as broaden their understanding of career opportunities in dentistry. In fact, many of today’s dental leaders were first drawn to research and academic careers through SCADA. Throughout its 60-year history, the program has seen dental students across the globe become leaders in the profession.

Product innovation and clinical research have always been important to Dentsply Sirona. Student researchers, with faculty guidance, play an essential role in the path to discovery of oral health innovations. Our SCADA program is designed to peak students’ interest in research, to serve as a catalyst for their career development, and to recognize the importance of organized dentistry. Sincere congratulations to this year’s student scientists. The future of dentistry will advance rapidly in their capable hands.
Dear Colleagues:

It is my honor and privilege to serve as President of the American Association for Dental Research (AADR). AADR is proud to be a partner with Dentsply Sirona in co-sponsoring the important SCADA program that allows future leaders of dental, oral, and craniofacial research to develop skills that will drive their careers and the profession forward.

The mission of the AADR is to advance research and increase knowledge for the improvement of oral health, support and represent the oral health research community and facilitate the communication and application of research findings.

The SCADA program is one of the many ways that AADR advances our mission by empowering the next generation of dental leaders. By showcasing students’ research and tapping into their passion for discovery and innovation, we will foster their development and desire to play an active role in the future of dental care.

This competition gives students the opportunity to present scientific papers at the 97th General Session of the International Association for Dental Research, held in conjunction with the 48th Annual Meeting of the AADR and the 43rd Annual Meeting of the Canadian Association for Dental Research. SCADA participants attending our international meeting will be exposed to the latest cutting-edge research and have the opportunity to connect with AADR’s vast National Student Research Group (NSRG) and numerous international students, researchers and scientific leaders in the field.

Dentsply Sirona has been an invaluable partner and we look forward to continuing to invest in students who will soon be the leaders of our field.

Sincerely,

Maria Emanuel Ryan, DDS, PhD
AADR President
A Message from the Chief Executive Officer of the American Association for Dental Research (AADR)

On behalf of the American Association for Dental Research (AADR), I am pleased that AADR and Dentsply Sirona are partners in continuing to support another successful year of the SCADA program.

In 2017, Dentsply Sirona and AADR joined forces to co-sponsor the Student Competition for Advancing Dental Research and its Application (SCADA), formerly known as the Student Clinicians of the American Dental Association.

On behalf of AADR, an invitation to participate in the program has been sent to each CODA accredited U.S. dental school. At the Competition, each student will be judged on the basis of a poster presentation on the quality and relevance of the subject matter, presentation and professionalism.

This competition takes place at the 97th General Session of the International Association for Dental Research, held in conjunction with the 48th Annual Meeting of the AADR and the 43rd Annual Meeting of the Canadian Association for Dental Research. I strongly encourage each competitor to take full advantage by attending the three Distinguished Lecture Series Speakers, as well as the symposia, oral sessions and poster sessions. There are also programmatic activities specifically tailored towards student and young investigators, including the National Student Research Group’s business meeting.

The National Institute of Dental and Craniofacial Research (NIDCR) also provides programming that is beneficial to students such as the IADR/AADR/CADR/NIDCR Mentoring and Networking Lunch where students can join established investigators and NIDCR representatives for an informal mentoring and networking luncheon, NIDCR Trainee Research Presentations, a session on NIDCR Research Training and Career Development Opportunities and a session on NIDCR Mentored Fellowships (F) and Career Development Awards (K): Pre-Application to Peer Review.

I am thankful to Dentsply Sirona for providing us with another great opportunity to develop our next generation of dental, oral and craniofacial researchers.

Sincerely,

Christopher H. Fox, DMD, DMSc
Chief Executive Officer
A Message from the
SCADA Alumni Association President

Dear Colleagues:

It is my esteemed honor to serve you as President of the SCADA Alumni Association. SCADA serves a critical role in facilitating the global Student Clinician Research Programs and disseminating the importance of these programs in the development of future dental professional leaders throughout the world.

SCADA was formed by clinicians participating in the first ADA/Dentsply Sirona Student Clinician Research Program held in 1959. It was recognized very early that this organization would play an integral role in promoting the enhancement of leadership skills among young dental professionals. In 2017, SCADA established a strategic partnership with the American Association for Dental Research (AADR) and we remain grateful for AADR’s great support of the program. Today, our membership is comprised of individuals who have presented research presentations since the beginning of the Student Clinician Research Program and in programs jointly conducted with the British, Canadian, French, German, Indian, Japanese, Mexican, Scandinavian, South African, South Korean, and Turkish Dental Associations, the Dental Association of Thailand, the Chinese Taipei Association for Dental Sciences, the Southeast Asian and Brazilian Divisions of the International Association for Dental Research.

On behalf of our international association, I wish to express sincere appreciation to Dentsply Sirona for providing us with the opportunity to develop research and critical thinking skills, promote the pursuit of new knowledge, and mentor others. This invaluable support has allowed SCADA to grow, adapt, and ensure that a strong commitment to research remains a core component of the dental profession.

Sincerely,

Christopher Arena, D.D.S., M.S.
President, SCADA Alumni Association
The American Association for Dental Research and Dentsply Sirona take pride in Presenting our 60th Annual 2019 Student Clinicians

Bright Chang
University of Alabama at Birmingham
Class of 2019
Endodontic Post Retention using Calcium Aluminate, Glass-ionomer, and Resin Cement

Andrew Dugum
Arizona School of Dentistry and Oral Health
Class of 2019
Compliance with Fluoride Therapy and Caries Rate in Cancer Patients

Allen Tang
Midwestern University-Arizona
Class of 2021
Traditional vs. CAD/CAM Denture Base Materials: Mechanical Properties

Joseph Mullen
University of California, Los Angeles
Class of 2020
Microbiome Changes in Orthodontic Patients with Brackets Versus Clear Aligners

Hailey Taylor
University of California, San Francisco
Class of 2019
Oral Microbiome and Anthropometry Changes Following Caries Arrest Using Silver-Nitrate/Fluoride-Varnish

Nathan Nourian
University of Southern California
Class of 2020
Multi-Species Biofilm Mediated Peri-implantitis Model
Anastasiya Badziai
University of Connecticut
Class of 2020
In Vivo/In Vitro Analysis of Progenitor Potential of Gl1-Expressing Cells

Blake Crosby
University of Florida
Class of 2021
DNA Methylation Changes In Localized Aggressive Periodontitis

Divya Chawla
The Dental College of Georgia
Class of 2022
Innate Lymphoid Cells in melanoma: A novel therapeutic modality

Coleman Choate
Southern Illinois University
Class of 2020
Flexural Strength Comparison of EQUIA Forte versus Fuji II LC

Elizabeth Tremblay
University of Colorado
Class of 2019
Protective Effect of Theobromine Against Acid Attack on Tooth Enamel

Nancy Trang
Howard University
Class of 2021
DAMP Recognition In Oral Chronic Graft Versus Host Disease

Brian Cherny
University of Illinois at Chicago
Class of 2021
Community Co-Localization of Oral Health and Aerodigestive and Oral Cancers
Jonathan Toma
University of Detroit Mercy
Class of 2022
Simplified Method for Bactericidal Assessment of Natural Products on Biofilms

Alexandra Oklejas
University of Michigan
Class of 2024
L-6/STAT3 Inhibition Overcomes Cancer Stem Cell Resistance to Conventional Chemotherapy

Sheba Vincent
University of Minnesota
Class of 2020
A Community Assessment of Oral Health Knowledge, Beliefs and Behaviors of Lower Sioux Youth in Minnesota: A Qualitative Study

Quynh Nguyen
University of Mississippi
Class of 2020
Collagen And Elastin-Like Polypeptide Composite Scaffold For Controlled Drug And Protein Delivery

Rong Zeng
A.T. Still University - Missouri
Class of 2020
Effects of Milk Formulations and Streptococcus mutans on pH

Zachary Vogel
University of Missouri - Kansas City
Class of 2021
Efficacy Of Grape Seed Extract On Stabilizing Denatured Dentin Collagen

Adam Goodrick
Creighton University
Class of 2021
Forensic Dentistry: Bite Mark Analyses On Live Human Subjects

John Welk
University of Nebraska Medical Center
Class of 2019
Anthropometric Neck Length Measurements and Obstructive Sleep Apnea Severity
Jeffery Coon  
University of Nevada, Las Vegas  
Class of 2021  
MiR-365 (microRNA) Expression In Oral Squamous Cell Carcinoma Exosomes

Bari Padover  
Columbia University  
Class of 2020  
Virtual Reality and Video Eyewear for Managing Pediatric Dental Anxiety

Parandis Nejati  
Stony Brook University  
Class of 2020  
Carbohydrate Influence on Streptococcus Mutans and Candida Species Mixed Biofilms

James Parker Jr.  
East Carolina University  
Class of 2021  
Antifungal Evaluation of Capric Acid on Candida species in Vitro

Jennifer Navatto  
Rutgers School of Dental Medicine  
Class of 2020  
Proximal versus Occlusal Decay of Primary Molars: Matrix Metallopeptidase SNPs

Hannah Johnson  
New York University  
Class of 2020  
Load Symmetry And Failure Modes Of Repaired MOD Composite Restorations

Dam Soh  
University at Buffalo  
Class of 2021  
Harvesting Novel Bacterial Glycan-Binding Coadhesion Partners from Multi-Species Oral Biofilms

Talia Johnson  
University of North Carolina at Chapel Hill  
Class of 2019  
Childhood Adiposity in a Community-Based Oral Health Study
Ran Yan
Case Western Reserve University
Class of 2021
Reliability and Validity of a Measure of Dental Injection Pain

Syrus Haghighi
The Ohio State University
Class of 2019
Female Mandibular Condyle Bone Mineral Density is Related to Dentition

Steven Hassenplug
University of Oklahoma
Class of 2019
Evaluation of Intraoral Sensors for Detection of Simulated Occlusal Caries

Elisa Herrman
Oregon Health & Science University
Class of 2021
SCN9A Genetic Polymorphisms and Dental Pain Sensitivity in Autistic Children

Michael Koerner
Temple University
Class of 2022
Novel Sintered Nanoparticle Composite Platform for Intra-Oral Ultra-Long-Term Drug Delivery

Christopher Lai
University of Pennsylvania
Class of 2019
Mechanical Properties of a Novel PVM/MA Incorporated Acrylic Resin

Patrick Donnelly
University of Pittsburgh
Class of 2021
Low-Temperature Phase Transition of Zirconia Under Simulated Oral Conditions

Elias Pabon-Vazquez
University of Puerto Rico
Class of 2020
Acquiring Clinical Skills with Standardized Patients: A Mixed Methods Approach
Tessa Streeter  
Medical University of South Carolina  
Class of 2019  
Dicer1e Depletion Mediates miR-548 Biogenesis and Induces G2/M-DNA-Damage Checkpoint Control

Alyssa N. Lambert  
University of Tennessee  
Class of 2019  
Effects of Cosmetic and Conventional Dentifrices on Dental Materials

Megan Short  
University of Texas Health Science Center at Houston Dental Branch  
Class of 2019  
Impact of Accelerated Aging on 3D Printed Orthodontic Model Accuracy

Emily Thomas  
University of Utah  
Class of 2021  
5-lipoxygenase Regulates SMG Pro-Inflammatory Cytokine Expression in a Sex-Dependent Manner

Raven Douglas  
Meharry Medical College  
Class of 2021  
Intimate Partner Violence and Cardiovascular Disease: Is There A Link?

Francesca C. Daigle  
Texas A&M University, Baylor College of Dentistry  
Class of 2021  
Glycosaminoglycans are Critical Regulators for Limb Bud Outgrowth

Ola Ukaoma  
University of Texas Health Science Center at San Antonio Dental School  
Class of 2020  
Oral Care Guide For The Caregiver Delivery

Hannah Ehreth  
Virginia Commonwealth University  
Class of 2020  
Accuracy of Blood Pressure Measuring Devices Used at VCU SoD
Claire Mills
University of Washington
Class of 2021
Low Molecular Weight Hyaluronan Increases Human Periodontal Ligament Cell Motility

Francis Dentino
Marquette University
Class of 2020
3D-Printed PCL-Gelatin Membrane For Guided Tissue Regeneration

Kathleen Schessler
West Virginia University
Class of 2019
Treatment of Obstructive Sleep Apnea Patients with Oral Appliances
International Program Winners

We congratulate the winners of the International SCADA Programs sponsored by Dentsply Sirona throughout the world.

Natalie Rosenthal
University of Manitoba, Faculty of Dentistry
Canada
Factors Affecting the Degree of Conversion of Universal Adhesives

Anthony Mazel
UFR Odontologie, Aix-Marseille Université
France
Peri-implantitis Risk Factors: A Prospective Evaluation

Mads Hagen Pedersen
Aarhus University
Denmark
Coronectomy Of Mandibular Third Molars. A Long-term Clinical Study

Niklas Ullrich
University Medical Centre of Regensburg
Germany
The Role of Mechano-transduction versus Hypoxia in Orthodontic Tooth Movement

Elena Günther
University Leipzig
Germany
Assessment of Root Caries by Quantitative Light-Induced Fluorescence in Vivo?

Siti Aliya Khairunnisa
University of Indonesia
Indonesia
70 kDa Salivary Protein Facilitates Streptococcus mutans-Streptococcus gordonii Antagonistic Relationship
American Dental Hygiene Association Winner

We congratulate the winner of the Dentsply Sirona / ADHA Graduate Student Research Award.
Student Clinician Research Program Judges

Category I: Clinical Research / Public Health

Dr. Gareth Brock *
Chorley, United Kingdom

Dr. Theresa E. Madden *
Olympia, WA

Dr. Alex C. Salinas *
San Antonio, TX

Dr. Andrew Brewer *
Glasgow, Scotland

Dr. Tadasha Culbreath
Alexandria, VA

Dr. Mark Macek
Baltimore, MD

Dr. Vincent K. Chee *
Loma Linda, CA

Category II: Basic and Translational Science Research

Dr. Raymond A. Dionne, Jr.
Washington, NC

Dr. Takashi Komabayashi *
Portland, ME

Dr. Richard Carlos Tatum *
Columbia, MD

Dr. Tetsu Okumura *
Japan

Dr. Jonathan An *
Seattle, WA

Dr. Andrew Gross *
South Jordan, UT

Dr. L. Bruno Ruest
Waco, TX

Dr. Chuck Schular
Vancouver, BC, Canada

* Denotes SCADA Member and former Student Clinician

Congratulations!

The following United States dental schools have sent a student clinician to participate in this program every year, either since the program’s inception or since the school opened. This participation recognizes the faculty’s commitment to advancing knowledge and mentoring the next generation of oral health scientists.

Arizona School of Dentistry & Oral Health
A.T. Still University - Missouri
Columbia University
East Carolina University
Temple University
Texas A&M University, Baylor College of Dentistry
Tufts University
University of California, Los Angeles
University of Iowa

University of Maryland
University of Michigan
University of Nevada, Las Vegas
University of Puerto Rico
University of Tennessee
University of Texas at Houston
Virginia Commonwealth University
Western University
A Salute

57 U.S. Dental Schools are participating in the 2019 AADR / Dentsply Sirona Student Competition for Advancing Dental Research and its Application

University of Alabama at Birmingham
Interim Dean Michelle Robinson

Arizona School of Dentistry & Oral Health
Dean Robert Trombly

Midwestern University Arizona
Dean Bradford Smith

University of Southern California
Dean Avishai Sadan

University of California, Los Angeles
Dean Paul H. Krebsbach

University of California, San Francisco
Dean Michael Reddy

Western University
Dean Dr. Steven Friedrichsen

University of Colorado
Dean Denise Kassebaum

University of Connecticut
Dean Sharon M. Gordon

Howard University
Dean Dexter A. Woods

University of Florida
Dean Isabel Garcia

The Dental College of Georgia
Dean Carol Lefebvre

Southern Illinois University
Dean Bruce Rotter

University of Illinois at Chicago
Dean Clark Stanford

Indiana University
Dean John N. Williams

University of Iowa
Dean David C. Johnsen

University of Louisville
Dean T. Gerard Bradley

Louisiana State University
Dean Henry Gremillion

University of Maryland, Baltimore
Dean Mark Reynolds

University of Arizona
Dean Robert Trombly

Harvard School of Dental Medicine
Dean R. Bruce Donoff

Tufts University
Dean Huw F. Thomas

University of Detroit Mercy
Dean Mert Aksu

University of Michigan
Dean Laurie K. McCauley

University of Minnesota
Dean Gary C. Anderson

University of Mississippi
Dean David A. Felton

A.T. Still University – Missouri
Dean Dwight McLeod

University of Missouri, Kansas City
Dean Marsha Pyle

Creighton University
Dean Mark Latta

University of Nebraska Medical Center
Dean Janet Guthmiller

University of Nevada, Las Vegas
Dean Karen P. West

Rutgers School of Dental Medicine
Dean Cecile A. Feldman
To download and view all the photos from the 2019 Global SCADA Program, please visit www.scadaresearch.org