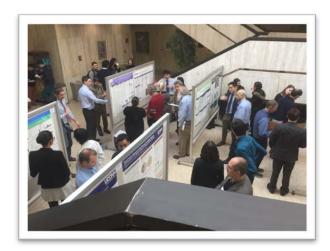


# RESEARCH OFFICE NEWSLETTER

SPRING, 2017

# STUDENT RESEARCH DAY, 2017



Medical/Dental Student Research Day was recently held on Monday, March 13. This annual event allows second-year medical and dental students to present their research from the previous summer to their peers, faculty members and invited guests. Following an afternoon session of oral presentations and poster sessions, an awards dinner capped off the event. We would like to acknowledge our dental judges for the event, Drs. Caroline Dealy, Aadarsh Gopalakrishna and Peter Maye and also our thirdyear dental student judges, Andrew Emery and John Power. Dr. Tadinada, Director of Student Research and co-director of the event, said it was a day to celebrate some commendable scientific intellectual achievements of our students and faculty mentors and also to recognize the support of the School of Dental Medicine to the student research program. Congratulations to all who participated in this event.

Dr. Joseph D. Tucker, M.D., Ph.D., Assistant Professor at the University of North Carolina was the keynote speaker this year. His presentation was entitled, "Many Medical Students or One Expert Authority? The Power of Crowdsourcing to Enhance Public Health Campaigns, Engage Communities, and Spur Action".

Recognition awards were presented to Drs. Marion Frank and Arthur Hand for their many years of dedication, mentorship and guidance for Student Research and for this Research Day event.

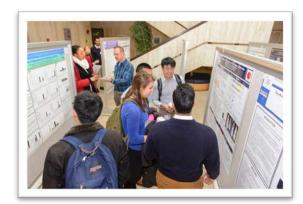


From left: Dr. Aditya Tadinada, Dr. Joseph D. Tucker and Dental Dean R. Lamont MacNeil. (Photo by Janine Gelineau)

#### IN THIS ISSUE: Student Awards 3 **Upcoming Events** 8 Carabelli Society 4 Faculty Achievements 9 Student Achievements 9 5 Recent Grant Funding IADR Conference 6 Research Dean's Corner 10

# Student Research Day Photos







Keynote Speaker, Dr. Joseph Tucker



Sunnie Chizzonite



Lora Manley

Photos: Janine Gelineau

### SDM RESEARCH DAY AWARD RECIPIENTS

Dean's Award: Bailey Proft (Mentor: Dr. Tadinada)

Associate Dean's Award: Candice Logan (Mentors: Drs. Yadav and Tadinada)
Dentsply-Sirona Student Clinician Award: Basem Gayed (Mentor: Dr. Lalla)
Colgate-Palmolive Student Research Award: Lora Manley (Mentor: Dr. Kelly)

Johnson & Johnson Research Excellence Award: Sharon Vincenty-Flores (Mentor: Dr. Nichols)

American Association for Dental Research (AADR) Student Research Day Award: Drew

Weyman (Mentor: Dr. Tadinada)

CT Holistic Health Association Award: Lisa Fredrickson (Mentor: Dr. Clark-Dufner)

Dental Student Research Society Award: Sundine Chizzonite (Mentor: Dr. Tadinada)

Gustave Perl Award: Victoria Phu (Mentor: Dr. Chen)

**University of Connecticut School of Dental Medicine – Society of Alumni & Friends Award:** 

Matthew Prezioso (Mentor: Dr. Tadinada)

Omicron Kappa Upsilon Awards: Blake Bandeff, Sean Burke, Isabella Chen, Sundine Chizzonite, Lisa Fredrickson, Basem Gayed, Lauren Gormer, Triny Gutierrez, Willan Jumbo, Candice Logan, Lora Manley, Victoria Phu, Matthew Prezioso, Bailey Proft, Sharon Vincenty-Flores, Drew Weyman and David Wiegard.



Dr. Reza Kazemi presented an OKU award to all dental students who participated in Student Research Day activities.

### The Origin of Carabelli Society

In July 2016, the student organization, Carabelli Society, was founded by 2nd year dental students: Triny Gutierrez and Akbar Khan. We started the club to introduce dental students to the implications of research and technology in clinical dentistry and the dental profession. The impetus came from our discussions on trends in dentistry and how they would affect our careers in the future. We saw that with increasing innovations in technological and dental sciences a series of revolutions would inevitably disrupt the ideal practice of dentistry. Having held these discussions in backup lab as 1st year dental students while waxing teeth, we titled the club Carabelli Society as a token of remembrance to the cusps we waxed. It became our belief that a dentist's most important characteristic in the current world is the ability to adapt and respond quickly to changes.

Dr. Edward F. Rossomando was a guiding figure in the early stages of Carabelli Society. His appreciation of the increasing trends of technology in dentistry were instrumental in helping us establish the club. With his retirement, Dr. Aditya Tadinada took on the role of faculty advisor; his background as the Director of Student Research made him an ideal mentor.

<u>Our Goals</u>: Our mission is to develop an extracurricular educational program for dental students that will encourage exploration of the interaction between science and clinical dentistry. Our primary goal is to expand the knowledge and exposure of our members to the advancing field of Oral Health Sciences and, by extension, the ever-changing practice of dentistry. We will utilize all available resources; including current journal articles, faculty, guest speakers, and collaborations with other UCHC student organizations to achieve this goal. Insights gained from innovative research and technology prepares health professionals for the future of dentistry. Our hope is to provide students with the ability to establish a network with current health professionals who are leaders in their respective fields. Students with early exposure to aspects of dentistry beyond the classroom will have a greater appreciation of the field and enhance their ability critically evaluate literature. Carabelli Society welcomes all interested students regardless of their post-graduate plans.

What We Have Done: In December, 2016 we held a discussion hour on the implications of automation in dentistry. We gave a presentation on the current use of CAD/CAM technology and the future of 3D printing in clinical dentistry. In August, 2016, we invited Dr. Praveen R. Arany, B.D.S., M.D.S., M.M.Sc., Ph.D., Assistant Professor at the University of Buffalo, to give our students a presentation on his research using low-level lasers to activate endogenous dental stem cells and promote dentin regeneration. We worked closely with Dr. Arany over the following months to arrange his itinerary. On the day of his presentation, January 10, 2017, we had over 40 actively engaged dental students from all class years in attendance and were honored with the presence of faculty members Drs. Aditya Tadinada, Rajesh V. Lalla, and Reza B. Kazemi.

What We Plan to Do: On April 25, Dr. David M. Shafer, Residency Program Director of the Oral and Maxillofacial Surgery Division at the UConn School of Dental Medicine, will be giving our members a talk on 3D printed prosthetic condyles, the surgical placement of them, as well as upcoming trends in radiology/radiography. Our vision is to expand the Carabelli Society mission. We hope to establish Carabelli Society chapters at dental schools nationwide.

(Article submitted in March, 2017 by Triny Gutierrez and Akbar Khan)

From left: Dr. Aditya Tadinada (Faculty Mentor), Triny Gutierrez (Carabelli Society President/co-founder), Dr. Praveen Arany (Guest Speaker), and Akbar Khan (Carabelli Society Vice President/co-founder)







**Bailey Proft,** 2<sup>nd</sup> year dental student, recently traveled to Boston to present her poster at the American Association of Dental Research Boston Chapter 2017 Spring Meeting.

**Veneta Qendro,** T90 predoctoral trainee, recently attended the Keystone Symposia in Whistler, British Columbia, Canada in March, 2017.





**Dr. Meenakshi Vishwanath,** Orthodontics Resident, placed second (out of 30 participants) in the clinical category of the 2017 Charley Schultz Resident Scholar Award held at the AAO. The team consisted of research partner Dr. Po-Jung Chen and faculty guide for the research was Dr. Madhur Upadhyay.



Congratulations to our students, grad students and residents who participated in the CSDA two-day event:

#### **Dental Students**

Sean Burke, Sunnie Chizzonite, Triny Gutierrez, Willan Jumbo, Victoria Phu, Bailey Proft, Eric Strouse, Sharon Vincenty-Flores, Drew Weyman and David Wiegard.

#### **Residents/Grad Students**

Dr. Niloufar Azami, Dr. Kehinde Babalola, Dr. Po-Jung Chen, Dr. Yasas Jayaratne, Dr. Himank Gupta, Dr. Melissa Landin, Dr. Chaitanya Puranik, Dr. Ritu Mohan, Dr. Arif Salman, Dr. Nidhi Taneja, and Dr. Meenakshi Vishwanath.



Have you received a recent award, accomplishment or have some interesting news to share with our SDM Research Community?

Please forward your news to Laura Didden or Lisa Ramsdell so that it may be included in an upcoming newsletter.

# **IADR Presenters:**

#### **Students**

**Sundine Chizzonite** (mentors: Drs. Katechia, Tadinada) "Tablet-computers and Smartphones can Reliably Detect Radiographic Tooth Fractures"

Jia Liu (mentor: Dr. Shafer), "Secretome of Resolvin E-1 activated Osteoblasts"

David Manz (mentor: Dr. Suzy Torti), "Iron regulation and Prostate Cancer Metastasis"

**Bailey Proft** (mentors: Drs. Lurie, Tadinada) "Low-dose CBCT Protocol Yields Comparable Diagnostic Information as Conventional Protocols"

**Sydney Schneider** (mentors: Drs. Tadinada, Yadav) "Buccal Bone Density for Mini-implant Sites is Greater in Females:

Drew Weyman (mentor: Dr. Tadinada), "Cone Beam CT Is Superior at Diagnosing Maxillary Sinus Pathology"

**David Wiegard** (mentors: Drs. Chandhoke, Tadinada), "CBCT Analysis of Impacted Incisors: Bone and Root Parameter Differences"

#### Post-Doctoral

**Dr. Martinna Bertolini** (mentors: Drs. Dongari-Bagtzoglou, Sobue), "Development of a Mouse Model of Chemotherapy-Induced Oral Mucositis"

**Dr. Ivana Vidovic** (mentor: Dr. Mina), "FGF2 Enhances Differentiation of αSMA Perivascular Cells into Odontoblasts"

#### Dr. Anushree Vijaykumar

(mentor: Dr. Mina), "Effect of FGF2 on Wnt/β-catenin Signaling in Dental Pulp"

#### Residents

**Dr. Niloufar Azami,** *Orthodontics* (mentors: Drs. Yadav, Tadinada), "Hypo-Divergent Skeletal Group has Higher Bone Density in the TMJ"

**Dr. Kehinde Babalola,** *OMF Radiology* (mentor: Dr. Tadinada), "Metallic Scatter is the Most Common Type of CBCT Artifact"

**Dr. Joy Chang,** *Orthodontics* (mentors: Drs. Kumbar, Nanda, Yadav), "Effects of Sustained Release of RANKL on Osteoclast Activity"

**Dr. Sunil Mutalik**, *OMF Radiology* (mentors: Drs. Rengasamy, Potluri, Tadinada), "Significant Pineal Gland Calcification is Noted in Dental Implant Patients"

**Dr. Sofia Villagran,** *AEGD* (mentors: Drs. Sanchez, Tadinada, Lepowsky), "CBCT Helps Evaluate Ostium Location and Patency for Sinus Augmentation"

**Dr. Meenakshi Vishwanath**, *Orthodontics* (mentor: Dr. Upadhyay), "Force System Analysis of V-bends: The Effect of Different Archwires"

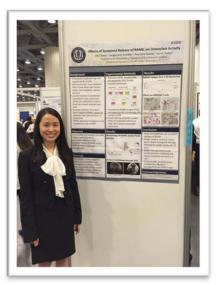
SDM RESEARCH OFFICE SPRING, 2017



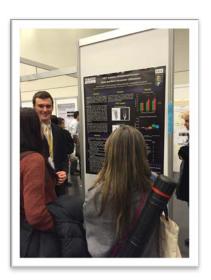
2<sup>nd</sup> year Dental Students Drew Weyman and Bailey Proft



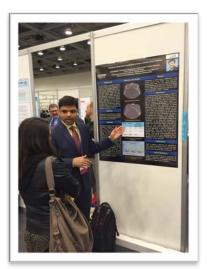
IADR Photos: Dr. Rajesh Lalla



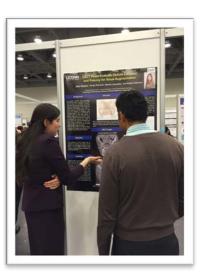
Dr. Joy Chang, Orthodontics Resident



2<sup>nd</sup> year Dental Student David Wiegard



Dr. Sunil Mutalik, OMF Radiology Resident



Dr. Sofia Villagran, AEGD Resident



Drs. Mina and Goldberg at the SDM booth



# **Faculty Presenters**

**Dr. Eliane Dutra,** "Compressive Loading Rescues the Effects of Botox Injection into the Masseter in the Mandibular Condyle" (poster)

**Dr. Effie loannidou,** "The Compensation Gap in Academia, Why it is Important and How It Affects Your Research Career" (workshop)

**Dr. Effie Ioannidou,** "Oral and Systemic Links: Where are the Confounders", (lunch and learning)

**Dr. Rajesh Lalla,** "Oral Complications After Radiation Therapy for Head and Neck Cancer" (poster)

Emeritus Professor, Cornelis Pameijer, "Vital Pulp Capping with a Bioactive Resin-based Experimental Material" (poster)

**Dr. Flavio Uribe,** "Increasing the Rate of Tooth Movement: An Analysis of the Results from Localized Surgical Insults in Animals and Humans" (speaker)

**Dr. Sumit Yadav,** "Alveolar Decortication to Increase the Velocity of Orthodontic Tooth Movement" (speaker)

### SAVE THE DATE

### **Research Seminar Series**

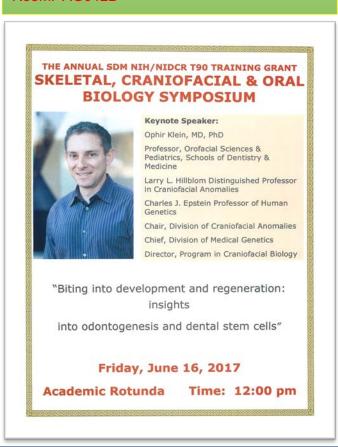
Monday, May 22 12:00 pm – 1:00 pm

**Dr. Sumit Yadav** 

"Is Botox safe and effective for TMD's?"

**New Location:** 

Friends of the School of Dental Medicine Hall Room: AG042B



# **Pre-submission Reviews of Grant Proposals**

UConn has a contract with a research consulting firm called Hanover Research. They provide a range of services including pre-submission reviews of grant proposals and helping faculty incorporate feedback for resubmission. They work on one project at a time for the University so requests are prioritized based on strategic needs and deadlines. SDM faculty are encouraged to consider applying to utilize their services.

If interested, please email Dr. Lalla at Lalla@uchc.edu, well in advance of your submission deadline.

# **Faculty Achievements**



Dean MacNeil Assumes
National Leadership Role as
chair-elect of the American
Dental Education
Association Board of
Directors.

To read the complete article in the April 13, 2017 edition of <u>UConn</u> Today:

http://today.uconn.edu/schoolstories/macneil-adea-chairelect/



**Dr. Sumit Yadav** was recently awarded the B.F. Dewel Memorial Research Award - Most Meritorious Research Award by the American Association of Orthodontists.



**Dr. Effie loannidou** was featured in the May 11, 2017 issue of the <u>AADR</u> <u>Science Advocate</u>. The full article may be viewed at:

http://newsmanager.co mmpartners.com/aadr/i ssues/2017-05-11/17.html

# **Recent Grant Funding**

Congratulations to the following faculty and residents on obtaining new funding.

### **NIH**



**Dr. Ivo Kalajzic (R01)** – "Growth Factor Based on Enhancement of Bone Repair"

**Dr. Sumit Yadav (K08)** – "Mechanism of BMP2 regulation of Mandibular Condylar Cartilage Growth"

#### **Associations / Foundations**

**Dr. Sumit Yadav (AAOF**) – "PTH mediated regulation of the chondrogenic lineage in the Mandibular Condylar Cartilage"

**Dr. Eliane Dutra (AAOF)** – "Long-term effects of Botox injections into the muscles of mastication in the mandibular condylar cartilage"

**Dr. Joy Chang (AAOF)** – "Effects of sustained release of RANKL on orthodontic tooth movement"

### Clinical Trial - Pharmaceutical

**Dr. Rajesh Lalla (Galera Therapeutics, Inc.)** – "A Phase 2, Randomized, Double-Blind, Placebo-Controlled, Multi-Center, Trial of the Effects of Intravenous GC4419 on the Incidence and Duration of Severe Oral Mucositis (OM) in Patients Receiving Post-Operative of Definitive Therapy with Single-Agent Cisplating plus IMRT for Locally Advanced, Non-Metastatic Squamous Cell Carcinoma of the Oral Cavity of Oropharynx"



### Research Dean's Corner

Dear Colleagues,

One of the goals of our research programs is to offer opportunities for our trainees to be engaged in research. In this issue of the SDM Research Office Newsletter, we highlight the research achievements of our trainees by covering their participation in two major events on our research calendar: the Medical/Dental Student Research Day and the AADR/IADR conference. As can be seen from these pages, trainees at all levels are doing us proud,

including dental students, residents, graduate students, and postdoctoral fellows. It is only fitting that we reward their accomplishments through awards and recognition in this and other forums. In addition, a big thank you to all the faculty who have served as Mentors for these trainees. None of this would be possible without you.





On Student Research Day, we recognized two SDM faculty who have made enormous contributions to our Dental Student Research Program over the years: Dr. Arthur Hand who served as Director of Student Research until 2015, and Dr. Marion Frank, who has consistently served as research mentor to a few dental students each year for a very long time. A sincere thanks to both of them on behalf of the SDM. I also want to acknowledge the current Director of Student Research, Dr. Aditya Tadinada, who has made significant efforts in expanding research opportunities and support for our dental students.

On a different note, Congratulations to all faculty who have recently received grant awards, especially Dr. Ivo Kalajzic (R01) and Dr. Sumit Yadav (K08).

Sincerely, Rajesh V. Lalla, DDS, PhD Associate Dean for Research

# SDM - Research Office

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Dr. Effie Ioannidou Director, Dental Clinical Research Center

Dr. Aditya Tadinada Director of Student Research

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