

RESEARCH NEWSLETTER

SPRING, 2018

2018 Medical/Dental Student Research Day

Congratulations to all the students and mentors who recently participated in the annual Medical & Dental Student Research Day which was held on Monday, February 26, 2018. It was a day to celebrate the accomplishments of our dental students and their faculty mentors. It is also interesting to note that we had a total of 32 SDM students participating; our largest group yet! We would like to thank our dental judges, Drs. I-Ping Chen, Aadarsh Gopalakrishna, Arthur Hand, Melissa Landin, Frank Nichols and Sumit Yadav and also our student judges, Bekim Cela, Andrew Emery and Bailey Proft.



The invited keynote speaker this year was Dr. David Breault, M.D., Ph.D., Assistant Professor, Department of Pediatrics, Harvard Medical School; Division of Endocrinology, Boston Children's Hospital; Principal Faculty, Harvard Stem Cell Institute. His presentation was entitled, "Hormonal Regulation of Stem Cells and Lineage Development".

Keynote Speaker Dr. David Breault

(Photo: Kristin Wallace/ UConn)

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SDM Student Research Day participants (Photo: Kristin Wallace/UConn)

SDM RESEARCH NEWSLETTER SPRING, 2018



Emily Keller with Diane Peterson (Colgate-Palmolive)



Dr. Hand with Danielle Brainard



Dr. Tadinada with Lily Etemad and Dr. Lalla

Photos: Valentina Baena

We would like to acknowledge the students (and mentors) who participated in this year's event: Yumna Arif (Dr. Peter Maye), Anastasiya Badziai (Dr. Ivo Kalajzic), James Balloch (Dr. Blythe Kaufman), Joseph Barbar (Dr. Liisa Kuhn), Jillian Bernstein (Dr. Eliane Dutra), Erin Bibber (Dr. Deborah Redford-Badwal), Danielle Brainard (Dr. Aditya Tadinada), Ross Camiel (Dr. Ivo Kalajzic), Mariamma Chaluparambil (Dr. Liisa Kuhn), Henry Chen (Dr. Caroline Dealy), Tapan Dalal (Dr. Alex Lichtler), Anthony DeFilippo (Dr. Mina Mina), Anjali Dinesh (Dr. Aditya Tadinada), Callan Donovan (Dr. Aditya Tadinada), Emitria Estrada (Dr. Ernst Reichenberger), Lily Etemad (Dr. Aditya Tadinada), Brian Greco, (Dr. Frank Nichols), Lisa Harris (Dr. Keri Discepolo), Emily Keller (Drs. Kevin Dieckhaus & Aditya Tadinada), Maciej Kosakowski (Dr. J. Robert Kelly), Abraham Kwok (Dr. Archana Sanjay), Grethel Millington (Dr. Marja Hurley), Robert Morrin (Dr. Rajesh Lalla), Chidinma Okafor (Drs Sarita Arteaga & Aditya Tadinada), Juiyao Ouyang (De. Carol Pilbeam), Ashley Pacelli (Dr. Aditya Tadinada), Daniel Parisi (Dr. Peter Maye), Nicholas Pray (Dr. Keri Discepolo), Erica Quinones (Dr. Carol Pilbeam), Eric Ress (Dr. I-Ping Chen), Samuel Roh (Dr. Liansheng Song), Zachary Ward (Dr. David Banach).



Joel Montiero (Dentsply-Sirona), with Anastasiya Badziai and Dr. Kalajzic



Dr. Dealy, Henry Chen, Dr. Tadinada, Anjali Dinesh and Dr. MacNeil

Student Research Day Awards

2018 AADR Student Research Day Award

Student: Grethel Millington Mentor: Dr. Marja Hurley

2019 AADR Student Research Day Award

Student: Brian Greco Mentor: Dr. Frank Nichols

Colgate-Palmolive Student Research Award

Student: Emily Keller Mentors: Drs. Aditya Tadinada & Kevin Dieckhaus

Connecticut Holistic Health Association Award

Student: Zachary Ward Mentor: Dr. David Banach

Dean's Award

Student: Anjali Dinesh Mentor: Dr. Aditya Tadinada Student: Henry Chen Mentor: Dr. Caroline Dealy

Dental Student Research Society Award:

Student: Danielle Brainard Mentor: Dr. Aditya Tadinada

Dentsply-Sirona Student Clinician Award

Student: Anastasiya Badziai Mentor: Dr. Ivo Kalajzic

Gustave Perl Memorial Award

Student: Callan Donovan Mentor: Dr Aditya Tadinada

Johnson & Johnson Research Excellence Award

Student: Abraham Kwok Mentor: Dr. Archana Sanjay

Omicron Kappa Upsilon - Phi Chi Chapter Award

Student: Erica Quinones Mentor: Dr. Carol Pilbeam

Research Associate Dean's Award

Student: Lily Etemad Mentor: Dr. Aditya Tadinada

University of Connecticut School of Dental Medicine Society of Alumni & Friends Award

Student: Demitria Estrada Mentor: Dr. Ernst Reichenberger

Outstanding Researcher Award for Faculty (supported by Colgate-Palmolive)

Professor Ivo Kalajzic, awarded for his outstanding research accomplishments in 2017.

Recognition Award

Dr. Monty MacNeil, Dean of the SDM, was recognized in appreciation of his vision, leadership and many years of dedicated support of the Student Research Program



Oral Presentations

Dr. Patricia Diaz

Anjali Dinesh (mentor: Dr. Tadinada)

Callan Donovan (mentor: Dr. Tadinada)

Lily Etemad (mentor: Dr. Tadinada)

Dr. Effie Ioannidou

Dr. J. Robert Kelly

Poster Presentations

Dr. Niloufar Azami (mentor: Dr. Upadhyay)

Danielle Brainard (mentor: Dr. Tadinada)

Dr. Anibal Cardenas Sornoza (mentor: Dr. Diaz)

Dr. Joy Chang (mentor: Dr. Yadav)

Basem Gayed (mentor: Dr. Lalla)

Xiaoxiao Hong (mentor: Dr. Dealy)

Grethel Millington (mentor: Dr. Hurley)

Ashley Pacelli (mentor: Dr. Tadinada)

Dr. Cornelis Pameijer

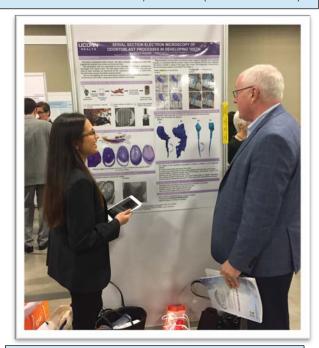
Dr. Ninna Shuhaibar Pinerua (mentor: Dr. Terasaki)

Dr. Susan Reisine

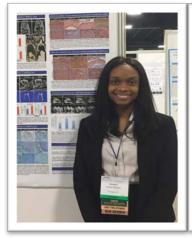
Dr. Anushree Vijaykumar (mentor: Dr. Mina)

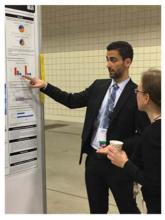


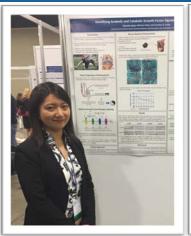
UConn Health SDM Booth at AADR with Drs. Goldberg, Mina and 2nd Year Dental Student, Ashley Pacelli. (Photo: Dr. Lalla)

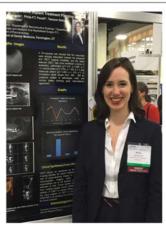


R90 post-doc trainee, Dr. Ninna Shuhaibar Pinerua with Dr. MacNeil. (Photo: Dr. Lalla)









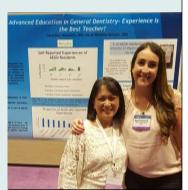
Student presenters at AADR: Grethel Millington, Basem Gayed, Xiaoxiao Hong and Ashley Pacelli (Photos: Dr. Lalla)

Recognition



Grethel Millington, a 2nd year dental student, (mentor: Dr. Hurley), recently presented both an oral and poster presentation at the Gordon Research Conference 2018 Fibroblast Growth Factor in Development and Disease, held March 24-25, 2018 in Ventura, CA.

Congratulations to the following who presented posters at the recent ADEA meeting which was held March 17-20, 2018 in Orlando, FL:



Drs. Geraldine Weinstein and Maria Vallejos Castillo

Dr. Maria Vallejos Castillo, (AEGD fellow), "Oral Health and Pregnancy through Interprofessional Training"

Geraldine Weinstein, Maria Vallejos Castillo, Carlos Degollado, and Sergio Sanchez "Advanced Education in General Dentistry – Experience is the Best Teacher!"



Congratulations to **Angela Thompson** who recently received PAWS Award for "aoina above and beyond the call of duty" for taking care of the 6th floor autoclave maintenance. The PAWS nomination was submitted by Dr. Dongari-Bagtzoglou.





Congratulations to **Dr. Martinna Bertolini** (mentor: Dr. Dongari-Bagtzoglou), who was named a travel award recipient to attend the American Society for Microbiology Conference, recently held in Providence, RI.

Upcoming Events

Please mark your calendar to attend the Skeletal, Craniofacial & Oral Biology Research Symposium which will be held on Tuesday, September 25 in the Academic Rotunda.



Invited guest speaker will be Dr. Julia Oh.

"The human microbiome: from metagenomes to therapeutics"

Additional details will follow.



Connecticut State Dental Association in Collaboration with the University of Connecticut School of Dental Medicine Proudly Presents: The Dental Student & Resident Research Poster Session



Each year dental students and residents at the UConn School of Dental Medicine conduct research projects under the mentorship of UConn Health Center faculty. These projects range from basic science experiments and clinical studies to translational research. The results of this work often lead to projects of greater scope and to publications in peer-reviewed journals. We are proud to invite you to this year's poster session where the students and residents will present the results of their research projects.

Come Support the Future of Dentistry!

Where and When: CSDA's Annual Charter Oak Dental Meeting at The Mohegan Sun in Uncasville, CT

- Poster Presentations will be displayed in the Exhibit Hall
 - Thursday, May 10th from 8:30 a.m. 5:30 p.m.
 - Friday, May 11th from 8:30 a.m. 3:00 p.m.
- ➤ For more information about the meeting go to : http://www.csdadentalmeeting.com



Upcoming SDM Research Seminars:



Dr. Yanjiao Zhou

"Characterization of the oral microbiome in full-fixed appliance orthodontic patients"

Date: Monday, May 14, 2018

Time: 12:00 pm - 1:00 pm

Room: Patterson Lecture Hall (AG-042A)



Dr. Flavio Uribe

"Can we shorten orthodontic treatment duration: not so fast – results from rodent and human studies."

Date: Monday, May 21, 2018

Time: 12:00 pm - 1:00 pm

Room: L-7040

Faculty Spotlight



Dr. Liisa Kuhn, was inducted into the American Institute for Medical and Biological Engineering (AIMBE) at the National Academy of Sciences in Washington, D.C. on April 9. Congratulations on this prestigious honor!

Please see the full announcement in UConn Today:

https://today.uconn.edu/school-stories/uconn-healths-liisakuhn-inducted-medical-biological-engineering-elite/



Congratulations to **Drs. J. Robert Kelly, Martin Freilich and Douglas Adams** who have recently received a U.S. patent for their artificial salivary gland design. Please view the full article in the March 7 edition of Dentistry Today:

http://www.dentistrytoday.com/news/industrynews/item/3020-artificial-salivary-gland-gains-patent



Congratulations to **Dr. Caroline Dealy** for her recent PITCH program project award to study a novel protein having potential as a new treatment for rheumatoid arthritis. To view the recent UConn article: https://innovation.uconn.edu/news/283/



Congratulations to **Dr. Ivo Kalajzic**, who received the Outstanding Researcher Award for outstanding research accomplishments in the previous calendar year. The award was presented by Dr. Lalla and Ms. Diane Peterson of Colgate-Palmolive, who supported the award. (Photo: Valentina Baena)



Dr. MacNeil was recognized for his vision, leadership and many years of dedicated support to student research at the recent Student Research Day awards ceremony on February 26. (Photo: Valentina Baena)

Research Resources

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 <u>Lalla@uchc.edu</u>, well in advance of your submission deadline.

Statistical Support for Dental Residents in Masters Programs

Chia-Ling Kuo, PhD

Assistant Professor

Biostatistics Center, CICATS

kuo@uchc.edu



Lincus Software

The Office of Vice President of Research has developed a software program for UConn faculty, staff and students that allows you to easily search the research topics and publications of our faculty. This requires the use of your Net ID and password to enter the system. Please try it out since it could be invaluable for helping you to locate existing equipment and expertise here at UConn that might further your own research. It's kind of fun because you get a map of who you have published with and a list of keywords associated with your research as shown below. To access the program:

http://lincus.uconn.edu

Have you received a recent award, accomplishment or have some interesting news to share with the SDM Research Community? Please forward your news to Lisa Ramsdell so it may be included in our next newsletter.



Recent Grant Funding

Congratulations to the following faculty on obtaining new funding:

<u>NIH</u>

Dr. Anna Dongari-Bagtzoglou, Dr. Reinhard Laubenbacher, Dr. Haluk Resat (MPI) - "Control of Heterogenous Microbial Communities Using Model-Based Multi-Objective Optimization". (R01)

HARVARD / NIH

Dr. Ivo Kalajzic - "PTH Resistance and Marrow Adipogenesis". (R01 subcontract)

American Association of Orthodontists Foundation (AAOF)

Dr. Niloufar Azami (Resident) / Dr. Sumit Yadav (Mentor) - "The Effects of Biologics on Retention in an Orthodontic Relapse Model". (Research Aid Award)

Dr. Eliane Dutra – "Therapeutic Effects of I-PTH in Temporomandibular Joint Degradation". (Orthodontic Faculty Development Fellowship Award)

Dr. Sumit Yadav - "Mechanism of Anti-TGE Beta for the Treatment of the Mandibular Condylar Cartilage in Osteogenesis Imperfecta". (Biomedical Research Award)

IADR

Dr. Rajesh Lalla – "Novel Long-Acting Topical Anesthetic Product for Oral Mucositis Pain".

(Innovation in Oral Care Award)

VIGILANT BIOSCIENCES, INC

Dr. Rajesh Lalla – "Clinical Evaluation of the OneAlert Rapid in Subjects Presenting for Evaluation and/or Initial Biopsy: Impact on Decision-Making". (Clinical Trial)

YALE / CT INNOVATIONS

Dr. Caroline Dealy – "Proof-of-Concept Efficacy and New-End-Stage Development of a Novel Biologic Targeting the EGFR axis". (Program in Innovative Therapeutics for CT's Health - PITCH)

INTERNAL AWARDS

Dr. Caroline Dealy – "A Personalized Medicine Approach to Rheumatoid Arthritis Treatment" (SPARK Technology Commercialization Fund)

Dr. Eliane Dutra – "Anabolic Responses of Intermittent PTH Treatment in the Mandibular Condylar" (2018 CICATS Pre-K Career Development Award)

Research Dean's Corner

Dear Colleagues,

Welcome to the Spring issue of the SDM Research Newsletter. Much of this issue is dedicated to celebrating the research achievements of our students and trainees. At Student Research Day, we had 32 dental students presenting their research, which is a significant increase from previous years. At the AADR annual meeting in Fort Lauderdale, the UConn SDM had a robust presence with several students and faculty presenting oral



or poster presentations. I hope you enjoy some of the pictures of these events in this issue. Congratulations to all the student presenters, their faculty mentors, and our Director of Student Research, Dr. Aditya Tadinada.

Just as we recognize our student researchers with awards, I believe it is also important to recognize the research efforts of our faculty. As one way of doing this, we have instituted a new annual award, the Outstanding Researcher Award (for SDM faculty). This award recognizes outstanding research accomplishments in the previous calendar year. It includes a certificate and a monetary award of \$1,000 for academic enhancement. It was a pleasure for me to announce Professor Ivo Kalajzic as the inaugural recipient of the Outstanding Researcher Award at the Student Research Day awards ceremony. Thanks to Diane Peterson at Colgate-Palmolive, who generously agreed to support this new award.

Also at Student Research Day, Dean MacNeil was recognized for his vision, leadership, and support of student research. As he approaches the end of his Deanship, I take this opportunity to thank him for his strong and unwavering support of the overall SDM Research program.

Best wishes,

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

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Dr. Rajesh Lalla - Associate Dean for Research

Dr. Effie Ioannidou - Director, Dental Clinical Research Center

Dr. Aditya Tadinada - Director of Student Research

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Laura Didden – Manager, SDM Research Office

Annmarie Martin, Lisa Ramsdell and Robin Tiso