UCONN RESEARCH NEWSLETTER

SCHOOL OF DENTAL MEDICINE

Summer, 2019

IADR/AADR/CADR General Session, Vancouver

The International Association for Dental Research (IADR) recently held its 97th session and exhibition from June 19-22 in Vancouver, BC, Canada together with the American Association for Dental Research (AADR) and Canadian Association for Dental Research (CADR). Students, Residents, Fellows and Faculty presented their research and

attended various seminars and poster presentations. A recent article appeared in UConn Today highlighting this event and award winners:

https://today.uconn.edu/school-stories/uconnschool-dental-medicine-representsinternational-meeting/





Standing at the SDM booth at IADR from left are: Drs. Sharon Gordon, Rena D'Souza (IADR president), Maria Ryan (AADR president), A. Jon Goldberg and Mina Mina.

Dental student, Brian Greco (mentor: Dr. Nichols), the recipient of the SDM Student Research Day AADR Research Award, presents his research. (Photo: Dr. Gordon)

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IADR/AADR/CADR Presenter Listing

Dental Students

Akosua Adzenyah (mentor: Dr. Aditya Tadinada), Anastasiya Badziai (mentor: Dr. Ivo Kalajzic), Mariamma Chaluparambil (mentor: Dr. Liisa Kuhn), Brian Greco (mentor: Dr. Frank Nichols) and Jessica Rudman (mentor: Dr. Aditya Tadinada)

Graduate Students/Residents

Dr. Martinna Bertolini (mentor: Dr. Dongari-Bagtzoglou), Dr. Po-Jung Chen (mentor: Dr. Yadav), Dr. Shivam Yogesh Mehta (mentor: Dr. Yadav), Dr. Heather O'Brien (mentor: Dr. Yadav), Dr. Ninna Shuhaibar-Pinerua (mentor: Dr. Terasaki), Dr. Akanksha Srivastava (mentor: Dr. Kelly), and Dr. Anushree Vijaykumar (mentor: Dr. Mina)

Faculty

Dr. Patricia Diaz, Dr. Vaibhav Gandhi, Dr. Sharon Gordon, Dr. Effie Ioannidou, Dr. R. Lamont MacNeil, Dr. Cornelis H Pameijer, and Dr. Susan Reisine

SAVE THE DATE

Skeletal, Craniofacial & Oral Biology Research Symposium

(Supported by the T90/R90 Training Grant from NIH)

Thursday, October 31, 2019

Academic Rotunda

Guest Speaker:

"Microbial Dark Matter and the Human Oral Microbiome"

Floyd Dewhirst, DDS, PhD

Senior Staff Member at Forsyth Institute Professor, Department of Oral Medicine, Infection and Immunity Harvard School of Dental Medicine



SUMMER. 2019



SUMMER, 2019

Summer Research Students

Congratulations to the students and their mentors who were selected to participate in our Summer Research Program. Seventeen students submitted proposals which were reviewed, scored, and awardees selected by committee. New this year, we also extended an invitation to pre-matriculation students who expressed an interest in summer research. We would also like to acknowledge and thank the PIE Program (Partnership in Innovation & Education) lead by Dr. Caroline Dealy, for their continued support.

Lauren Cardarelli (mentor: Dr. Tadinada) - PIE Program

Albert Chen (mentor: Dr. Kuhn) - PIE Program

Madison Cohen (mentor: Dr. Lurie) - PIE Program

Kathryn Forth (mentor: Dr. Chen) - PIE Program

Tyler Guido (mentor: Dr. Nichols) - PIE Program

Bhavin Gupta (mentor: Dr. Pilbeam)

Patricia Hare (mentor: Dr. Schmidt) Pre-matriculation student

Mikayla Moynahan (mentor: Dr. Deymier)

Courtney Regan (mentor: Dr. Litt)

Rebecca Salustri (mentor: Dr. Ioannidou)

Matthew Wittstein (mentor: Dr. Degollado) Pre-matriculation student

UConn Health Dental Students and Residents recently participated in the Connecticut State Dental Association's annual Charter Oak Dental Meeting held at the Mohegan Sun in Uncasville,

CT in May.	Residents/Fellows:		
Students:	Dr. Niloufar Azami (mentor: Dr. Yadav)		
Akosua Adzenyah (mentor: Dr. Tadinada)	Dr. Kruttika Bhuse (mentor: Dr. Tadinada)		
Ashley Arthur (mentor: Dr. Kelly)	Dr. Juan Alberto Cerrutti (mentor: Dr. S. Sanchez)		
Laura Borodic (mentor: Dr. Tadinada)	Dr. Varsha Kadyan (mentor: Dr. Tadinada)		
Mariamma Chaluparambil (mentor: Dr. Tadinada)	Dr. Jyoti Mago (mentor: Dr. Tadinada)		
Ayesha Ejaz (mentor: Drs. Yadav/Tadinada)	Dr. Rutvi Vyas (mentor: Dr. Tadinada)		
Satpal Jutla (mentor: Dr. Hurley)	Dr. Kayla Harris (mentor: Dr. Upadhyay)		
Julia Lafen (mentor: Dr. Lalla)	Dr. Rawan Sarsour (mentor: Dr. Yadav)		
Samuel Roh (mentor: Dr. Song)	Dr. Swati Kejriwal (mentors: Drs. Freilich/Tadinada)		
Ambika Sharma (mentor: Dr. Tadinada)	Dr. Alvaro Garcia Sanchez (mentor: Dr. S. Sanchez)		

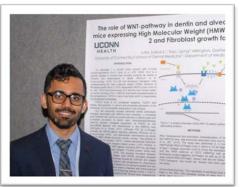
Connecticut State Dental Association



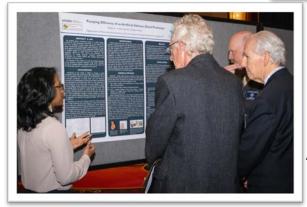
SDM Residents with Dr. Tadinada at the CSDA poster session

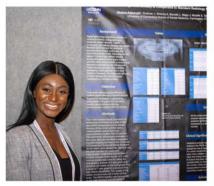


Laura Borodic

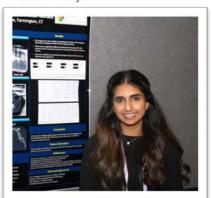


Satpal Jutla





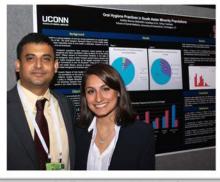
Akosua Adzenyah



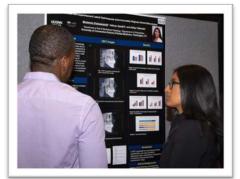
Ayesha Ejaz

Photos by: Klopfenstein Photography

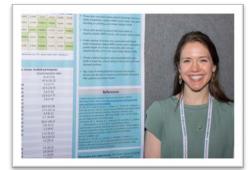
Ashley Arthur



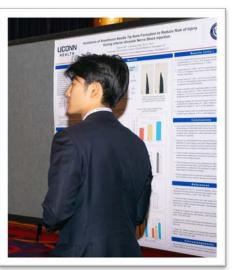
Dr. Tadinada and Ambika Sharma



Mariamma Chaluparambil



Julia Lafen



Samuel Roh

SUMMER, 2019

Recognition

Congratulations to Dr. Niloufar Azami (mentor: Dr. Yadav), for placing 2nd in the 2019 Charley Schultz Resident Scholar Award, Basic Science Research Scholarships, at the American Association of Orthodontists annual meeting. Her research was funded through the American Association of Orthodontics Foundation.

Congratulations to **Dr. Martinna Bertolini**, (mentor: Dr. Dongari-Bagtzoglou), who recently placed first in the post-doctoral category for the Hatton competition at the IADR/AADR/ CADR meeting in Vancouver, Canada.

Dr. Jessica Costa recently received the "Top Oral Presentation Award" for her presentation at MEN 2019: The 16th International Workshop on Multiple Endocrine Neoplasia, held at The University of Texas MD Anderson Cancer Center in Houston, Texas. This award was sponsored by the Association for Multiple Endocrine Neoplasia Disorders (AMEND USA). Congratulations!

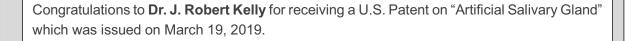
Congratulations to Dr. Patricia Diaz for her research on oral mucositis which was recently featured in the April edition of UConn Today:

https://today.uconn.edu/2019/04/dental-researchers-get-root-causes-cancer-patients-mouthsores/

A presentation of research accomplishments was given by **Dr. A. Jon Goldberg**, on June 10th entitled, "So, what have you actually been doing all this time?" to commemorate his retirement on June 30th. Best wishes Dr. Goldberg on your retirement!

Congratulations to Dr. Sharon Gordon who recently received the Alan J. Davis/SCADA Achievement Award for outstanding service to SCADA and the dental profession at the IADR/AADR/CADR meeting held in Vancouver in June.

> Congratulations to Drs. Effie loannidou and Patricia Diaz for their recent grant highlighted award in UConn Today: https://today.uconn.edu/schoolstories/better-guidelines-treat-gums/



















Congratulations to **Dr. Kshitiz Gupta** for his collaborative work to develop new technology to record cellular communication in real time which was recently published in the Proceedings of the National Academy of Sciences. See the recent UConn Today article: <u>https://today.uconn.edu/2019/06/tapping-way-cells-communicate/</u>



Congratulations to **Dr. Rajesh Lalla** for his collaborative work with the UConn School of Pharmacy and Cellix Bio as outlined in a recent UConn Today article: <u>https://today.uconn.edu/2019/03/new-therapy-targets-painful-side-effect-cancer-treatment/</u>





Congratulations to **Dr. David Rowe** and **Dr. Peter Maye** on their recent \$2.8M grant award to look at Bioinformatics and Bone Health. Their research was recently highlighted in an article in UConn Today:

https://today.uconn.edu/school-stories/new-2-8m-grant-looks-bioinformaticsbone-health/

Congratulations to **Joao Gabriel Souza** (PhD student intern in Dongari-Bagtzoglou lab), who recently competed and was selected by the Federation of European Microbiological Societies (FEMS) for a travel award to present his work at the FEMS meeting in Glaskow, UK, July 7-11, 2019.



Congratulations to **Dr. Akanksha Srivastava**, Prosthodontics Resident (mentor: Dr. Kelly), recipient of the 2019 BEHSR (Behavioral, Epidemiologic & Health Services Research), Outstanding Post-Doctoral Student Abstract award, presented at the IADR/AADR/CADR annual meeting in Vancouver, Canada.



The Connecticut State Dental Association recently presented a special citation to **Dr. Aditya Tadinada** in recognition of outstanding efforts to foster student research and innovating content of the CSDA's *Communicator* as Editor-in-Chief. Congratulations!



Congratulations to **Dr. Julie Wagner** for her collaborative research showing a strong connection between food insecurity and insulin resistance in patients with type 2 diabetes. Her research was recently highlighted in an article in UConn Today:

https://today.uconn.edu/2019/06/food-insecurity-leading-type-2-diabetes/

Congratulations to the following faculty on obtaining new funding:

<u>NIH – R01</u>

Dr. David Rowe (Co-Investigator, Dr. Peter Maye) - "Skeletal Phenotyping of Heterozygotes from IMPC Embryonic Lethal Lines"

CT Office of Healthcare Advocate

Dr. Robert Aseltine - "Race and Ethnicity"

Galera Therapeutics, Inc.

Dr. Sharon Gordon - "ROMAN: Reduction in Oral Mucositis with Avasopasem Manganese (GC4419) – Phase 3 Trial in Patients Receiving Chemoradiotherapy for Locally-Advanced, Non-Metastatic, Head and Neck Cancer".

Intramural Awards

Research Excellence Program (REP)

Dr. Dashzeveg Bayarsaihan / Dr. Dong-Guk Shin (Storrs) - "Delineating the molecular basis of odontoblast differentiation"

Dr. Effie loannidou / Dr. Patrica Diaz - "Treat to target and personalized approach to periodontal therapy"

Dr. Peter Maye - "Paraxial Mesoderm Formation from Pluripotent Stem Cells"

START Preliminary Proof-of-Concept (START PPOC)

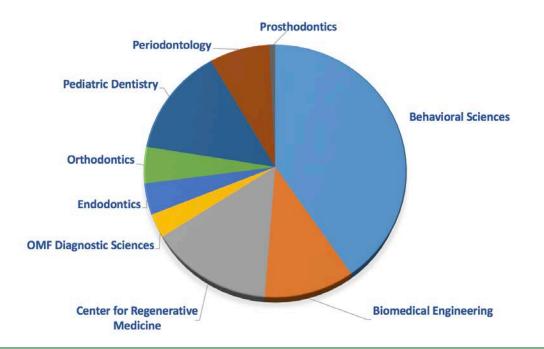
Dr. Liisa Kuhn - "Esophageal Regeneration Device"



Total Research Funding to the School of Dental Medicine

*Graph represents total costs awarded for use in that particular fiscal year.

SDM Funding 7/1/2018 - 6/30/2019 FY 19 AWARDS



SDM Funding 7/1/2018 - 6/30/2019

SDM Division / Unit	Direct Costs Received in FY 19	Indirect Costs Received in FY 19	Total Grant Awards for FY19
Behavioral Sciences	3,478,894	584,358	4,063,252
Biomedical Engineering	671,932	415,808	1,087,740
Center for Regenerative Medicine and Skeletal Development	967,254	509,052	1,476,306
Endodontology	250,000	148,750	398,750
OMF Diagnostic Sciences	212,869	91,424	304,293
Orthodontics	445,381	22,910	468,291
Pediatric Dentistry	1,269,519	139,996	1,409,515
Periodontology	557,696	211,171	768,867
Prosthodontics	53,861	22,553	76,414
TOTALS	7,907,406	2,146,022	10,053,428

Research Resources

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. To access the program: <u>https://lincus.uconn.edu</u>

Center for Open Research Resources & Equipment (COR²E)

Looking for a piece of equipment or a Core service? Check out <u>https://core.uconn.edu</u> for a listing of Core services and shared equipment available across our University.



Statistical Support for Dental Residents in Masters Programs

Chia-Ling Kuo, PhD Assistant Professor Biostatistics Center, CICATS <u>kuo@uchc.edu</u>

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.



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 (<u>ramsdell@uchc.edu</u>) so it may be included in our next newsletter!

Research Dean's Corner

Dear Colleagues,

In this issue of the School of Dental Medicine (SDM) Research Newsletter, we present data on our extramural research funding for the period 1 July 2018 to 30 June 2019 (Fiscal Year 2019 (FY19)). On page 7, you can see our total research funding over the last several years. It is wonderful to see that our total research funding has increased to \$10.05M for FY19, as compared to \$9.18M for FY18 and \$8.61M for FY17. Looking back a few more years, we were at \$7.62M in FY12. Thus, there is a clear upward trend. It is not easy to get extramural funding in this very competitive climate where



success rates are often below 15%. The number of grant submissions from the SDM has grown steadily, with 85 grants submitted in FY19, as compared to 61 in FY18 (a 39% increase). My sincere thanks and appreciation to all our investigators for their hard work in applying for research funding and to all those who contribute, including students, postdoctoral fellows, and staff.

Our success is also reflected in our national rankings for research. The most recently available rankings are for FY18. Of 66 US dental schools, the UConn SDM is ranked 12th for FY18 based on total NIH funding (Blue Ridge Institute rankings, based on NIH data). Of our total \$9.18M research funding in FY18, only \$3.06M was from the National Institute of Dental and Craniofacial Research (NIDCR). Reflecting our broad and multidisciplinary areas of research expertise, much of our NIH funding comes from other institutes at NIH. Accordingly, looking only at funding from NIDCR in FY18, the UConn SDM ranks 19th of the 47 dental institutions that received any funding from NIDCR.

Research funding is important because it results in the creation of new knowledge, additional training opportunities, and a stronger institutional profile. With the recent recruitments in BME and other strategic initiatives, we are poised for further growth and continued success.

Sincerely,

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

SDM – Research Office

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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

Office Staff:

Laura Didden – Manager, SDM Research Office

Annmarie Martin, Lisa Ramsdell, Robin Tiso and Caibin Zhang