

## Skeletal, Craniofacial & Oral Biology Research Symposium

The annual Skeletal, Craniofacial and Oral Biology Research Symposium was held on Friday, June 16, 2017 in the Academic Rotunda for trainees from the NIH T90/R90 Skeletal, Craniofacial & Oral Biology training grant as well as students from the Skeletal Biology & Regeneration graduate program. The event began with an informal session on life in academia between the trainees and guest speaker, Dr. Ophir Klein. Opening remarks were given by SDM Dean, Dr. Monty MacNeil and Dr. A. Jon Goldberg, co-director of the T90 training grant. Oral presentations and a poster session concluded the day-long event.

The guest speaker was Ophir Klein, MD, PhD, Professor of Orofacial Sciences & Pediatrics, Larry L. Hillblom Distinguished Professor in Craniofacial Anomalies, and the Charles J. Epstein Professor of Human Genetics at the University of California, San Francisco (UCSF). Dr. Klein's presentation was entitled, "Biting into development and regeneration: insights into odontogenesis and dental stem cells."

### New Awards Announced:

Dr. Caroline Dealy spoke to the group stating that "the Skeletal Biology and Regeneration Program is announcing the establishment of two new student Awards. The first Award is the William B. Upholt Achievement Award, established in honor of the late Bill Upholt, whose contributions to skeletal biology research, graduate student education, and specifically the T90 program have significantly impacted the field of Skeletal and Craniofacial Biology. The first recipient is anticipated in 2018. The second award is the Skeletal Biology & Regeneration Travel Award, for student travel to meetings. There will be two travel awards per year.

Both awards were established thanks to generous donations from Skeletal Biology alumni and current faculty, and from Dean Monty MacNeil. Additional details concerning eligibility and application for the new awards will be released in the Fall."



From left: Dr. Lalla (Associate Dean for Research); Dr. Goldberg, (T90/R90 Co-Director); Dr. Klein and Dr. Mina, (T90/R90 Co-Director).

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## SCOB Symposium: Oral Presentations



The morning session of oral presentations (Progenitors, Gene Function, Regeneration) was chaired by Matthew Zambrello. The presenters (clockwise): **Dr. Sierra Root** (mentor: Dr. Aguila), **Dr. David Paglia** (mentor: Dr. Lorenzo), **Aundrya Montgomery** (mentor: Dr. Lauren/in/YIIP Scholar Program), and **Michelle Spoto** (mentor: Dr. Oh)

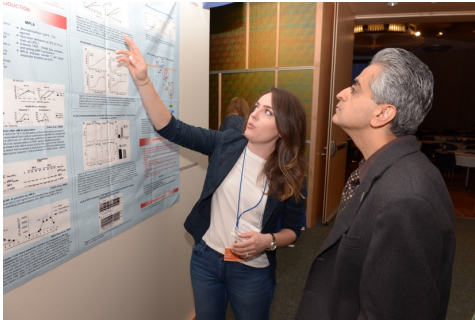


Afternoon oral presentations (Signaling) chaired by David Manz, were given by (clockwise): **Henry Hrdlicka** (mentor: Dr. Delany), **Patience Meo Burt** (mentor: Dr. Hurley), **Ryan Russell** (mentor: Dr. Maye), and **Dr. Anushree Vijaykumar** (mentor: Dr. Mina)

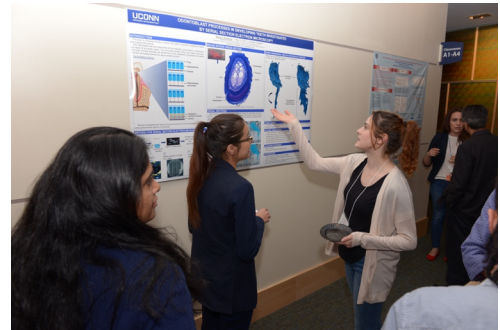


Keynote address given by Dr. Ophir Klein

# SCOB Symposium: Student Poster Presentations



Veneta Qendro (mentor: Dr. Shapiro)



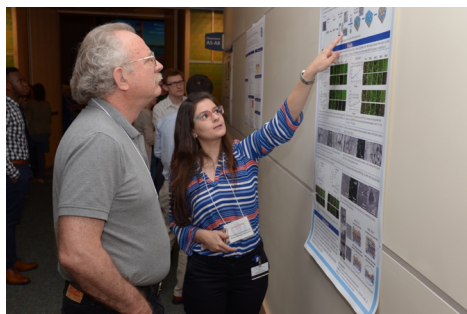
Michelle Spoto (mentor: Dr. Oh)



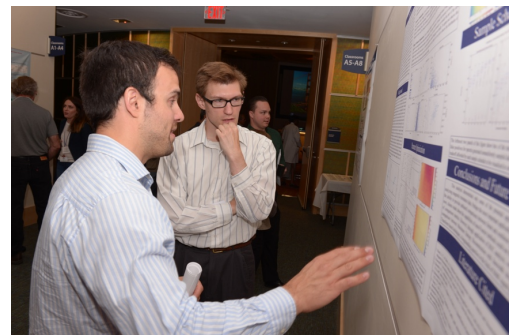
Xi Wang (mentor: Dr. Kalajzic)



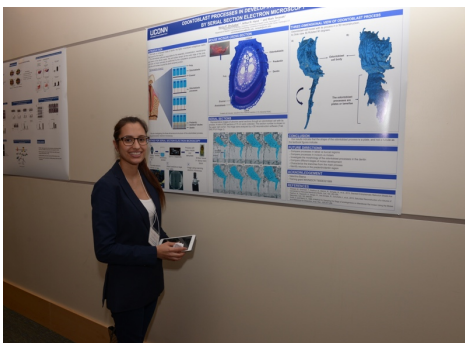
David Manz (mentor: Dr. S. Torti)



Jumana Alhamdi (mentor: Dr. Kuhn)



Matthew Zambrello (mentor: Dr. Hoch)

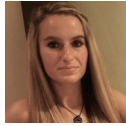


Dr. Ninna Shuhaibar Pinerua (mentor: Dr. Terasaki)

Photos on this page courtesy of Frank Barton (UConn Health).



Congratulations to **Dr. Akanksha Srivastava**, a Prosthodontics Resident, (mentor: Dr. Bidra), for placing 2<sup>nd</sup> in the poster competition at MD Anderson's Oncology Conference in Houston, TX where she presented on UConn's own DOCSAM Criteria-based maxillectomy descriptions.



**Patience Meo Burt**, a Skeletal Biology and Regeneration AoC and T90 trainee, (mentor: Dr. Hurley), was awarded the Raisz Award for Excellence in Musculoskeletal Research at the 34<sup>th</sup> Annual Graduate Student Research Day held on June 26, 2017. Congratulations!



**Ethan Cope**, an incoming dental student, participated in the UConn-TIP Fellowship Program which was founded and is directed by Dr. Caroline Dealy. Ethan conducted research for Oral Fluid Dynamics, a company set up by Drs. Robert Kelly, Martin Freilich and Doug Adams.

## Summer Research Students

We would like to acknowledge our largest group of students ever to participate in Summer Research and their mentors:

**Yumna Arif** (mentor: Dr. Maye); **Anastasiya Badzai** (mentor: Dr. Kalajzic); **Joseph Barbar** (mentor: Dr. Kuhn); **Jillian Bernstein** (mentor: Dr. Dutra); **Erin Bibber** (mentor: Dr. Redford-Badwal); **Danielle Brainard** (mentor: Dr. Tadinada); **Ross Camiel** (mentor: Dr. Kalajzic); **Mariam Chaluparambil** (mentor: Dr. Kuhn); **Henry Chen** (mentor: Dr. Dealy); **Tapan Dalal** (mentor: Dr. Lichtler); **Anthony DeFilippo** (mentor: Dr. Mina); **Anjali Dinesh** (mentor: Dr. Tadinada); **Callan Donovan** (mentor: Dr. Tadinada); **Demitria Estrada** (mentor: Dr. Reichenberger); **Lily Etemad** (mentor: Dr. Tadinada); **Mohaad Faraj** (mentor: Dr. Discepolo); **Jeremy Figueroa-Ortiz** (NIH Summer Externship Program); **Brian Greco** (mentor: Dr. Nichols); **Lisa Harris** (mentor: Dr. Discepolo); **Emily Keller** (Global Health Externship); **Matt Kosakowski** (mentor: Dr. Kelly); **Abraham Kwok** (mentor: Dr. Sanjay); **Grethel Millington** (mentor: Dr. Hurley); **Robert Morrin** (mentor: Dr. Lalla); **Chidinma Okafor** (Global Health Externship); **Huiyao Ouyang** (mentor: Dr. Pilbeam); **Ashley Pacelli** (mentor: Dr. Tadinada); **Daniel Parisi** (mentor: Dr. Maye); **Nicholas Pray** (mentor: Dr. Discepolo); **Erica Quinones** (mentor: Dr. Pilbeam); **Eric Ress** (mentor: Dr. Chen); **Samuel Roh** (mentor: Dr. Song); **Eric Salm** (Fortress Externship) and **Zachary Ward** (mentor: Dr. Banach).



Congratulations to **Dr. Satoko Matsumura**, Oral & Maxillofacial Radiology Resident (mentors: Drs. Drissi and Hansen), who was named recipient of the Radiology Centennial Scholarship from the American Academy of Oral and Maxillofacial Radiology.



**Andrew Emery**, 4<sup>th</sup> year dental student, (mentors: Drs. Lurie & Tadinada), was named the recipient of the Charles R. Morris Student Research Award from the American Academy of Oral and Maxillofacial Radiology.



## The 2017 Dental Student and Resident Research Poster Session at the CSDA Annual Meeting

In 2015, the Connecticut State Dental Association and the University of Connecticut School of Dental Medicine came together to create a collaborative platform for the students and the dentists in our community to interact with each other. At the 2016 Annual Meeting, Dr. Peter Mullin from the CSDA and Dr. Aditya Tadinada from the UConn School of Dental Medicine along with the Board of Governors and the Organizing Committee, initiated a Student Research Poster Session. The inaugural session was very well received by the attendees and the students enjoyed the interactions with the community dentists. After a successful inaugural launch of the student poster session at the 2016 meeting, based on the response of the attendees, it was decided to continue to feature this session at the annual meeting every year. The 2017 session also received a very positive response. Day one featured the work of dental students and on day two, residents and graduate students presented their work. The Connecticut Oral Health Foundation most graciously came forward to sponsor 3 awards for students and 3 awards for the residents. The students and residents found the experience very valuable, many attendees were very impressed with the quality of research being conducted by the students. Overall the 2017 student-resident poster session concluded on a very successful note.

### Award winners:



**Sean Burke**, 3<sup>rd</sup> year dental student; (mentor: Dr. Alevizos /NIDCR)



**Victoria Phu**, 3<sup>rd</sup> year dental student; (mentor: Dr. Chen)



**Triny Gutierrez**, 3<sup>rd</sup> year dental student; (mentor: Dr. Yadav)



**Dr. Meenakshi Vishwanath**, Orthodontics Resident; (mentor: Dr. Upadhyay)



**Dr. Nidhi Taneja**, Pediatric Dentistry Resident; (mentor: Dr. Litt)



**Dr. Kehinde Babalola**, Oral & Maxillofacial Radiology Resident; (mentor: Dr. Tadinada)



SDM residents gather prior to the start of the CSDA poster session with Dr. Tadinada and Dr. Peter Mullin

## Recent Grant funding

Congratulations to the following faculty on obtaining new funding:

### NIH



**Dr. Robert Aseltine (R01)** –  
“Improving the Identification  
of Patients at Risk of Suicide”



**Dr. Effie Ioannidou (R21)** –  
“Novel paradigm to improve  
inflammatory burden in  
ESRD”



**Dr. Ivo Kalajzic (STAR  
Supplement to R01)** –  
“Mechanism underlying  
commitment and  
differentiation of progenitor  
cells during bone healing”



**Dr. Frank Nichols (R56)** –  
“Porphyromonas gingivalis  
lipids mediate bone loss  
through TLR2”

### State of CT



**Dr. Robert Aseltine (Contract)**  
“State Innovations Model –  
Scorecard”

### Foundations



**Dr. Caroline Dealy (Fund  
for Science)** “Bioactive  
Proteins in Inflammatory  
Arthritis”

### Research Excellence Program

*The Research Excellence Program is supported by the Office of the Vice President of Research (OVPR) and the Schools of Medicine and Dental Medicine.*



**Dr. Liisa Kuhn – Co-PI Dr.  
Peter Maye, (Convergence-  
Level I)** “Engineering  
embryonic-like bone matrix  
for bone regeneration”



**Dr. Julie Wagner –  
(Convergence-Level II)**  
“Remote Peer Learning for  
US-CAMBodia Community  
Health Workers Managing  
Diabetes (PLUS CamboDIA)”

## Faculty Achievements

### SDM Research highlighted in UConn Today:

A recent article appeared in the June 22, 2017 issue of UConn Today entitled, “**UConn Dental Grants Show Collaborative Nature**”.

To view the article: <http://today.uconn.edu/school-stories/uconn-dental-grants-show-collaborative-nature/>



**Dr. Avinash Bidra**, Director of Post Graduate Prosthodontics, recently invented a novel device called Cuff Protector that is meant to improve the full arch immediate loading of implants in the treatment of edentulous patients (popularly known as All on Four). The novel cuff protector is a simple and important device that can be screwed into the titanium cylinders during fabrication of immediate loaded full arch bridges and prevents any acrylic resin from flowing over the titanium cuff. Additionally, it can be used during finishing and polishing of the immediate loading prosthesis or definitive prosthesis to eliminate any risk for scratches over the metal cuff of the titanium cylinders. This allows dental laboratory technicians and clinicians to improve the quality of the prostheses and peri-implant health of the implants. This invention has been submitted for a definitive patent with the United States Patent and Trademark Office and has been licensed to an industry partner, PREAT Corporation located at Grover Beach, California who will manufacture, market and sell this product to the dental community. Congratulations!



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.



## 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 [Lalla@uchc.edu](mailto:Lalla@uchc.edu), well in advance of your submission deadline.



### SDM Research Seminar Series

Speaker: Dr. Patricia Diaz  
 Title: "Inter-species interactions and successions in oral microbial communities"  
 Date: Thursday, September 21  
 Time: 12:00 pm – 1:00 pm  
 Location: L-7040



### Statistical Support for Dental Residents in Masters programs:

Chia-Ling Kuo, PhD  
 Assistant Professor  
 Biostatistics Center, CICATS  
[kuo@uchc.edu](mailto:kuo@uchc.edu)  
 Phone: 679-2897



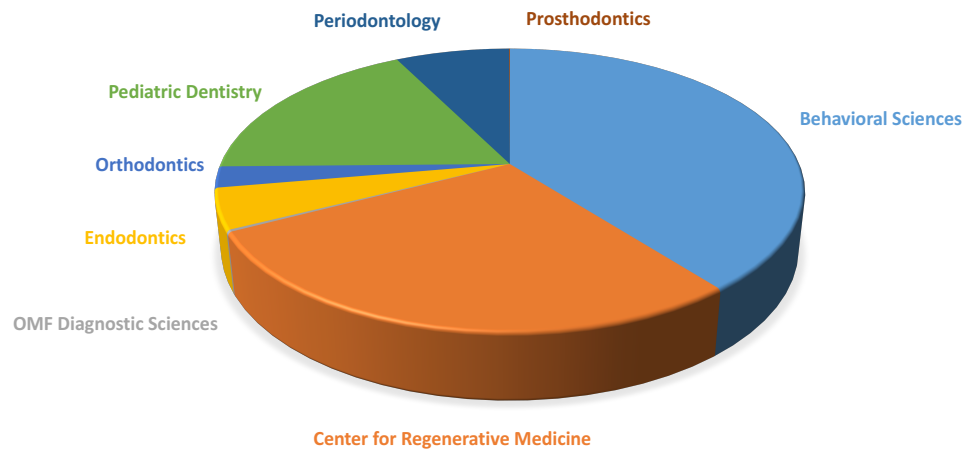
## Pen to Paper – Submitted Grant Applications

During the last 6 months of FY17, the Research Office has submitted 20 grant applications for the School of Dental Medicine. This does not include the internal grant application submissions. We would like to acknowledge all those that have submitted applications since the beginning of January 2017.

<p><b><u>NIH R01</u></b> Patricia Diaz Frank Nichols Ernst Reichenberger David Rowe Tannin Schmidt (subcontract)</p> <p><b><u>NIH R15</u></b> Ivo Kalajzic (subcontract)</p> <p><b><u>NIH R21</u></b> Mina Mina Sumit Yadav</p> <p><b><u>NIH R34</u></b> Effie Ioannidou</p> <p><b><u>NIH U01</u></b> Rajesh Lalla (subcontract) David Rowe</p> <p><b><u>NIH STTR</u></b> J. Robert Kelly (subcontract)</p> <p><b><u>NIH Supplement</u></b> Ivo Kalajzic</p>	<p><b><u>State of CT office of Healthcare Advocate</u></b> Robert Aseltine</p> <p><b><u>The Dr. Charles J. Burstone Foundation</u></b> Ravindra Nanda/Sumit Yadav</p> <p><b><u>Dentsply</u></b> Sumit Yadav</p> <p><b><u>Fund for Science</u></b> Caroline Dealy Caroline Dealy</p> <p><b><u>Renaissance Health Service</u></b> Robert Aseltine</p> <p><b><u>Unity Through Knowledge Fund (UKF)</u></b> Ivo Kalajzic</p>	<p><b><u>Intramural Funding: UConn Health Research Excellence Program</u></b></p> <p><b><u>Stimulus</u></b> Angela Bermudez-Millan Reza Kazemi</p> <p><b><u>Convergence I</u></b> Liisa Kuhn (Peter Maye, Co-PI) Syam Nukavarapu (David Rowe, Co-PI) David Pierce (Caroline Dealy, Co-PI)</p> <p><b><u>Convergence II</u></b> Julie Wagner</p>
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# SDM Funding 7/1/2016 - 6/30/2017

## FY 17 AWARDS



## Total SDM Research Awards over time

Fiscal Year	SDM Research Awards (Total Costs)
2012	\$7.62 M
2013	\$7.02 M
2014	\$9.44 M
2015	\$8.62 M
2016	\$8.93 M
2017	\$8.61 M

## Research Dean's Corner

Dear Colleagues,

In this issue of the SDM Research Newsletter, we present data on our extramural research grant awards for fiscal year 2017 (7/1/2016 – 6/30/2017). I am pleased to report that SDM grant funding levels have held steady at about \$8.6M to \$9M per year over the past 3 years, despite the increasingly competitive landscape and political uncertainty related to NIH budgets. These levels represent significant growth compared to just a few years ago. This is a testament to the hard work and excellence of our faculty, students, and trainees. On behalf of the SDM, thank you for all that you do!

A faculty committee chaired by me is currently working on Research Goals for the next SDM Strategic Plan. Some overall objectives are to further expand the SDM Research portfolio, increase support for research efforts, and enhance our research environment and recognition for research efforts. My vision is that the establishment of the new BME department, continued success of our research engines in Behavioral Sciences and the Center for Regenerative Medicine, and the expansion of research efforts of our clinical faculty, will all come together to propel the SDM Research Program to the next level. This will require careful planning and strong support for our researchers, which I am committed to providing.

Congratulations to all faculty who have secured new funding, especially Dr. Robert Aseltine, Division of Behavioral Sciences, who has recently been awarded two major awards- an NIH R01 grant and a large research contract from the State of CT!

Sincerely,

Rajesh V. Lalla, DDS, PhD

Associate Dean for Research



### SDM – Research Office

263 Farmington Avenue  
Farmington, CT 06030-3915

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 and Lisa Ramsdell