

RESEARCH NEWSLETTER

SPRING, 2022

UConn SDM maintains

Top 10 Research Ranking

For a second year, the UConn SDM has ranked 8th among all 68 US Dental Schools based on NIH research funding. This ranking does not take into account the number of faculty per school. Please see the full story at the UConn Today link below. To better understand where we stand among the top schools for research, please see the chart on Page 2.

https://today.uconn.edu/2022/03/another-recordbreaking-year-for-the-uconn-school-of-dentalmedicines-research-program/

Medical/Dental Student Research

Day

The annual Medical/Dental Student Research Day was held virtually on February 23rd to showcase the 2021 summer research performed by our 2nd year dental students. We would like to thank the students and their mentors for their hard work. The keynote address was given by Dr. Manisha Juthani, Commissioner of the CT Dept. of Public Health. We would like to acknowledge our judges for the event: Drs. Ajay Dhingra, Eliane Dutra, Aadarsh Gopalakrishna, Arthur Hand, Alan Lurie, and Takanori Sobue. The students were judged on their presentations. A photo and list of the awardees is shown on page 3.

In this Issue:

- 3 Student Research Day Awardees
- 4 Faculty and Trainee Recognition
- 7 AADOCR Presenters
- 8 Submitted Grant Applications
- 10 Research Resources
- 12 Research Dean's Corner



Rankings of US Dental Schools based on Total Direct Funding Received from NIH for NIH FY2021 Rankings from the Blue Ridge Institute for Medical Research, based on NIH data.

Rank	School of Dentistry	Direct NIH Funding FY2021
1	UNIVERSITY OF CALIFORNIA SAN FRANCISCO	\$22,033,043
2	UNIVERSITY OF MICHIGAN	\$20,379,062
3	UNIVERSITY OF PENNSYLVANIA	\$15,612,277
4	UNIVERSITY OF SOUTHERN CALIFORNIA	\$15,305,630
5	UNIVERSITY OF FLORIDA	\$11,665,314
6	UNIVERSITY OF CALIFORNIA LOS ANGELES	\$11,188,982
7	NEW YORK UNIVERSITY	\$11,150,883
8	UNIVERSITY OF CONNECTICUT	\$9,388,853
9	UNIVERSITY OF MARYLAND BALTIMORE	\$7,553,193
10	BOSTON UNIVERSITY MEDICAL CAMPUS	\$6,415,119
11	UNIVERSITY OF MINNESOTA	\$5,951,418
12	OREGON HEALTH & SCIENCE UNIVERSITY	\$5,908,767
13	UNIVERSITY OF LOUISVILLE	\$5,900,328
14	TEXAS A&M UNIVERSITY HEALTH SCIENCE CTR	\$5,791,056
15	UNIVERSITY OF ALABAMA BIRMINGHAM	\$5,346,531
16	UNIVERSITY OF TEXAS HLTH SCI CTR SAN ANTONIO	\$5,054,983
17	VIRGINIA COMMONWEALTH UNIVERSITY	\$4,871,686
18	UNIVERSITY OF IOWA	\$4,824,786
19	TUFTS UNIVERSITY BOSTON	\$4,812,195
20	STATE UNIVERSITY OF NEW YORK BUFFALO	\$4,617,158
21	CASE WESTERN RESERVE UNIVERSITY	\$4,451,262
22	UNIVERSITY OF TEXAS HLTH SCI CTR HOUSTON	\$4,329,441
23	UNIVERSITY OF PITTSBURGH	\$4,231,058
24	UNIVERSITY OF COLORADO DENVER	\$4,181,866
25	UNIVERSITY OF ILLINOIS CHICAGO	\$4,157,460
26	Columbia University Health Sciences	\$4,106,437
27	UNIVERSITY OF WASHINGTON	\$3,848,713
28	OHIO STATE UNIVERSITY	\$3,508,821
29	RUTGERS, THE STATE UNIVERSITY OF NEW JERSEY	\$3,193,384
30	HARVARD MEDICAL SCHOOL	\$2,702,678
31	UNIVERSITY OF NORTH CAROLINA CHAPEL HILL	\$2,588,979
32	NOVA SOUTHEASTERN UNIVERSITY	\$2,275,447
33	MEDICAL UNIVERSITY OF SOUTH CAROLINA	\$1,669,123
34	UNIVERSITY OF MISSOURI KANSAS CITY	\$1,079,348
35	MARQUETTE UNIVERSITY	\$918,410
36	AUGUSTA UNIVERSITY	\$892,597
37	TEMPLE UNIVERSITY	\$783,393
38	UNIVERSITY OF NEBRASKA MEDICAL CENTER	\$728,848
39	LOUISIANA STATE UNIV HSC NEW ORLEANS	\$552,725
40	UNIVERSITY OF MISSISSIPPI MED CTR	\$517,936
41	INDIANA UNIV-PURDUE UNIV INDIANAPOLIS	\$480,635
42	TEXAS A&M UNIVERSITY	\$324,886
43	UNIVERSITY OF UTAH	\$228,750
44	UNIVERSITY OF TENNESSEE HEALTH SCI CTR	\$228,000
45	loma linda university	\$173,016
46	EAST CAROLINA UNIVERSITY	\$151,000
47	UNIVERSITY OF PUERTO RICO MEDICAL SCIENCES	\$75,000

Notes: This ranking is based on total direct funding from all NIH Institutes and Centers for NIH FY2021 and does not include subawards. These rankings are not adjusted for faculty size.

Dental Student Research Day Awards

Congratulations to the SDM Student Research Day award recipients and their mentors:

Dean's Awards: Jane Conway (Dr. Tadinada) and Maayan Schmidt (Dr. Upadhyay)

Associate Dean's Award: Jay Dalal (Dr. Deymier)

Dentsply-Sirona Student Clinician Award: Samantha Sheppard (Dr. Tadinada)

Connecticut Holistic Health Association Award: Anthony Perez-Pino (Dr. Kurup)

Dental Student Research Society Award: Katherine Peccerillo (Dr. Deymier)

Gustave Perl Memorial Award: Arvene Golbazi (Dr. Dutra)

Judges Special Award: Nathalia Hernandez (Dr. Tadinada)

Omicron Kappa Upsilon – Phi Chi Chapter Awards:

(Basic Science) Ryan Higgins (Dr. Setlow)

(Clinical Science) Caroline Thomas (Dr. Tadinada)



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 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 12th from 8:30 a.m. 5:30 p.m. (Dental Student Presentations)
- Friday, May 13th from 8:30 a.m. 3:00 p.m. (Resident Presentations)

For more information about the CSDA's Annual Charter Oak Dental Meeting go to : http://www.csdadentalmeeting.com



SDM RESEARCH NEWSLETTER

Faculty Recognition



Congratulations to Dr. Mina Mina who was selected to receive a 2022 AADOCR Presidential Citation recognizing her significant contributions to AADOCR and to dental, oral and craniofacial research. <u>https://today.uconn.edu/2022/04/faculty-receives-presidential-award-from-leading-dental-research-organization/</u>



Congratulations to Dr. Effie Ioannidou, elected Vice President of the American Association of Dental, Oral and Craniofacial Research. <u>https://today.uconn.edu/2021/12/uconn-professor-and-researcher-named-vice-president-of-the-american-association-for-dental-oral-and-craniofacial-research/</u>

Dr. Ioannidou was also selected as a Fellow by the American Association for the Advancement of Science (AAAS). <u>https://today.uconn.edu/2022/01/four-from-uconn-named-fellows-by-aaas/</u>



Congratulation to Dr. Ali Tamayol and his laboratory on their research on the development of bioinks for 3D printing of implantable scaffolds for regenerative medicine applications. <u>https://today.uconn.edu/2021/12/uconn-researcher-finds-inspiration-in-the-refrigerator/</u>



SDM RESEARCH NEWSLETTER



Congratulations to Dr. Changchun Liu for a recent article in UConn Today highlighting his development of a home COVID-19 Test. <u>https://today.uconn.edu/2022/01/uconn-researchers-home-covid-19-test-comparable-to-pcr-accuracy-selectivity/#</u>



Congratulations to Dr. Po-Jung Chen (Dr. Yadav mentor) who was selected as one of eight finalists for the AADOCR Joseph Lister Award for New Investigators.

Dr. Chen also recently received the Thomas M. Graber Award of Special Merit from the American Association of Orthodontists.



Congratulations to Dr. Shivam Mehta (Dr. Yadav mentor) who was the recipient of the Thomas M. Graber Award of Special Merit from the American Association of Orthodontists.



Congratulations to Dr. Douglas Peterson who was recently recognized internationally for his work in Oral Medicine and Oral Oncology.

https://today.uconn.edu/2022/04/dental-faculty-recognized-internationally-for-work-in-oralmedicine-and-oncology/



Welcome back Dr. Vanessa Scanlon! Dr. Scanlon is a new Assistant Professor in the SDM Center for Regenerative Medicine and Skeletal Development. Please see her introduction below:

https://medicine.yale.edu/news-article/whyicellbio-special-meet-dr-vanessa-scanlon-phd/

Trainee Recognition



Congratulations to Emma Warren (Dr Tadinada, mentor and Dr. Vaddi, collaborator), who recently placed 2nd at the SCADA student competition in the Basic and Translational Science Category.

https://www.iadr.org/about/news-reports/press-releases/aadocr-announces-winners-2022student-competition-advancing?msclkid=02a3560fab6111ecac61fd632000e3f1



Congratulations to Shakthi Boobalan who secured a UConn Summer Undergraduate Fellowship (SURF) award to conduct her honors thesis research in the lab of Dr. Vanessa Scanlon this summer.



Congratulations to Dr. Ahmad Ahmida, (Dr. Yadav mentor) the first place winner of the 2021 Second Annual Northeastern Society of Orthodontics NESO Cup.



Congratulations to John Nelson (Dr. Tadinada mentor), 2021 SDM Dean's Award recipient, who presented his research at the Hinman Student Research Symposium.



Congratulations to Samuel Ratcliffe (Dr. Nichols mentor), 2021 SDM Associate Dean's Award recipient, who presented his research at the AADOCR annual meeting last month.



Congratulations to Jonathan Leonard (Drs. Freilich and Taxel mentors), recipient of an Osseointegration Foundation travel grant award.

AADOCR Presenters

The American Association for Dental, Oral, and Craniofacial Research held its annual meeting in Atlanta last month. We would like to acknowledge our presenters:

Dr. Eric Bernstein

John Bryck (Dr. Tadinada mentor)

Dr. Maryam Buholayka (Dr. Tadinada mentor)

Dr. Po-Jung Chen

Dr. Vaibhav Gandhi

Arvene Golbazi (Dr. Dutra, mentor)

Dr. Effie Ioannidou

Samuel Ratcliffe (Dr. Nichols, mentor)

Dr. Shivani Suvarna

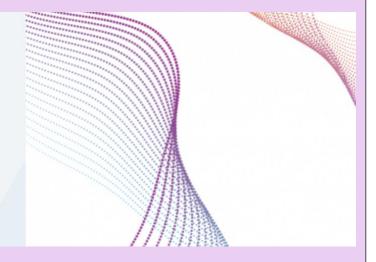
Emma Warren (Dr. Tadinada, mentor)

DISCOVER • NETWORK • ADVANCE

2022 AADOCR/CADR Annual Meeting & Exhibition

MARCH 21-26, 2022 ATLANTA, GEORGIA

51st Annual Meeting & Exhibition of the AADOCR 46th Annual Meeting of the CADR



Pen to Paper – Submitted Grant Applications

The Research Office has submitted 86 grant applications for the School of Dental Medicine during the 2021 calendar year. We would like to acknowledge all those that have submitted applications during that time period.

NIH K99/R00

Wenqiang Du

<u>NIH R01</u>

Robert Aseltine Robert Aseltine I-Ping Chen I-Ping Chen (subcontract) Anna Dongari-Bagtzoglou (subcontract) Ivo Kalajzic Ivo Kalajzic Ivo Kalajzic Ivo Kalajzic Mark Litt Mina Mina Tannin Schmidt Tannin Schmidt Tannin Schmidt Tannin Schmidt Ali Tamayol Ali Tamayol (subcontract) Ali Tamayol (subcontract) Sumit Yadav Sumit Yadav Sumit Yadav Sumit Yadav Sumit Yadav (subcontract)

NIH R03

Po-Jung Chen Alix Deymier

<u>NIH R21</u>

Dashzeveg Bayarsaihan Dashzeveg Bayarsaihan Liisa Kuhn (subcontract) Changchun Liu (subcontract) Changchun Liu (subcontract) Ali Tamayol (subcontract) Julie Wagner (subcontract) Julie Wagner (subcontract) Julie Wagner (subcontract)

NIH R21/R33 Julie Wagner

NIH RM1

Ali Tamayol

NIH Supplement

Peter Maye David Rowe David Rowe

<u>NIH STTR</u> Ali Tamayol (subcontract)

NIH T90/R90 Mina Mina

<u>NIH U01</u> Rajesh Lalla Changchun Liu

NIH U54 David Rowe

NIH UG3/UH3

Effie Ioannidou Sumit Yadav Sumit Yadav (subcontract) Sumit Yadav (subcontract) Sumit Yadav

NIH UH2/UH3

Sumit Yadav

Department of Defense

Tannin Schmidt Ali Tamayol

Environmental Protection Agency Changchun Liu (subcontract)

American Association of Orthodontists Foundation

Po-Jung Chen Po-Jung Chen Eliane Dutra Madhur Upadhyay (subcontract) Sumit Yadav

American Diabetes Association

Sayed Alireza Hassani Najafabadi

<u>American Heart Association</u> Kshitiz

<u>Arthritis National Research Foundation</u> Sanja Novak

Arthrex, Inc Caroline Dealy

<u>American Society for Bone and Mineral Research</u> Eliane Dutra

<u>Chateaubriand Fellowship</u> Stephanie Wong (Alix Deymier)

<u>Good Food Institute</u> Mohamadmahdi Samadari

ITI Straumann Martin Freilich

Northeastern Society of Orthodontists Ke Wang

<u>New Harvest</u> Mohamadmahdi Samadari

<u>Novartis</u> Tannin Schmidt

<u>UCHU Biosensors</u> Flavio Uribe

Internal*

Research Excellence Program

Dashzeveg Bayarsaihan Dashzeveg Bayarsaihan Caroline Dealy Kshitiz Ivo Kalajzic Peter Maye Peter Maye Frank Nichols Tannin Schmidt Ali Tamayol

*Since not directly submitted through SDM Research Office, information is based on what was reported to us.

SDM RESEARCH NEWSLETTER

Research Resources

Students, residents, postdoctoral trainees and faculty at the UConn School of Dental Medicine (SDM) have access to a wide range of research resources through the School, UConn Health, and UConn Storrs campus.

Proposal Development Services

The SDM research community can access scientific editing and other proposal development services through arrangements at the School and University level. For scientific editing support, please contact Laura Didden at Ididden@uchc.edu. For proposal development services and proofreading services offered through the Office of the Vice-President for https://ovpr.uconn.edu/services/research-Research (OVPR), please see development/services/

Grantwriting Training and Resources

Periodic training on grantwriting for various types of grants is offered by the OVPR. For details, please see: https://ovpr.uconn.edu/services/research-development/grantwriting/

Statistical Support

For statistical support for dental residents in Master's degree programs, please contact Dr. Chia-Ling Kuo at kuo (auchc.edu

For all other statistical support needs for SDM students, residents, and faculty, assistance is available through the UConn Statistical Consulting Services, through one of the following options:

- 1. Free Walk-In (Virtual): For quick questions about statistical issues that can be handled in a 20 minute consulting session. https://statsconsulting.uconn.edu/walk-in-schedule/
- 2. Free Ask Online: Alternatively, you can submit guestions online using the submission form at the link below: https://statsconsulting.uconn.edu/ask-online-sdm/
- Fully Supported Project Engagement: If more in-depth assistance is needed, it will be supported by the SDM, if there 3. is no funding available for the project. Please complete the form at the link below to request such assistance: https://statsconsulting.uconn.edu/project-engagement-sdm/

For any questions about support through UConn Statistical Consulting Services, please contact Dr. Timothy Moore at timothy.e.moore@uconn.edu

Internal Funding Opportunities

A variety of internal funding opportunities are open to SDM faculty including the Research Excellence Program, Convergence Awards for Research in Interdisciplinary Centers (CARIC) and the SPARK Technology Commercialization Fund. For details and deadlines, please see: https://ovpr.uchc.edu/services/research-development/funding/

Core Facilities

To see all the Core Facilities available to the SDM Research community, please visit https://core.uconn.edu/resources. This page allows you to choose to see all the Core resources at UConn Health, as well as at the Storrs and Avery Point campuses.

Sample Language describing UCH Core Facilities

SPRING, 2022



https://medicine.uconn.edu/research/core-facilities/

Health Center Research Advisory Council (HCRAC) programs

- Research Equipment support (includes repair/replacement support and new capital equipment support)
- Emergency Grant Program
- Exploratory Project Transition Award
- Travel Grants for Graduate Students and Postdoctoral Fellows

For information on the above programs, please see the HCRAC website at:

https://ovpr.uchc.edu/services/research-development/research-advisory-groups/hcrac/

<u>Lincus</u>

Looking for collaborators at UConn? Try Lincus, which tells you which faculty at UConn are working on topics of interest to you. Log in with your UConn Net ID at <u>https://lincus.uconn.edu/lincus/cas/landing</u>

Technology Commercialization Services (TCS)

TCS helps the UConn research community move their research towards practical application. For details, please see https://innovation.uconn.edu/

Additional Information

For more information and resources, please see https://ovpr.uchc.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 (ramsdell@uchc.edu) so it may be included in our next newsletter!

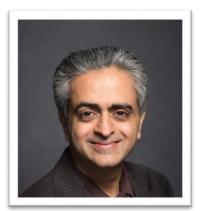
Research Dean's Corner

Dear Colleagues,

Happy Spring! I hope this season brings you rejuvenation and optimism.

In this issue, we celebrate our School maintaining its top 10 ranking for research funding among all US dental schools. These rankings are based on total direct research funding from NIH. This is especially notable considering the relatively small size of our faculty in comparison to some of the other schools in the top 10 (listed on page 2). Thank you to all of you for your hard work and support for our research efforts.

We also celebrate and recognize several students, residents, and faculty, who have been recognized for research-related accomplishments at the local, national, and international levels. The list of accomplishments on these pages is truly impressive and demonstrates the exceptionally high caliber of our research community.



Please also take a minute to review the research resources available to you, listed on pages 10 and 11. This includes scientific writing support for grants and manuscripts, as well as statistical support. We are always looking to enhance the support we offer to the SDM research community Stay tuned for an announcement about help with finding new funding opportunities, coming in the days ahead.

Best wishes,

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

SDM – Research Office

263 Farmington Avenue

Farmington, CT 06030-3912

Dr. Rajesh Lalla - Associate Dean for Research

Dr. Aditya Tadinada - Associate Dean for Graduate Research, Education & Training

Dr. Effie Ioannidou - Director, Dental Clinical Research Center

Office Staff:

Laura Didden - Manager, SDM Research Office

Annmarie Martin, Brandon Mulcunry, Lisa Ramsdell,

Kamal Sahoobah, Robin Tiso and Caibin Zhang