

T90-R90 Training Grant Awarded

Congratulations to Dr. Mina Mina (director) and Dr. Frank Nichols (co-director) who were recently awarded a five-year, \$2.7 million training grant from NIDCR/NIH. The SDM has received federal training grant funding for more than 30 years. Please read the full article in UConn Today:

<https://today.uconn.edu/2023/08/new-training-grant-marks-over-30-years-of-federal-research-training-support-for-the-uconn-school-of-dental-medicine/>



Skeletal Biology & Regeneration Student Research Symposium

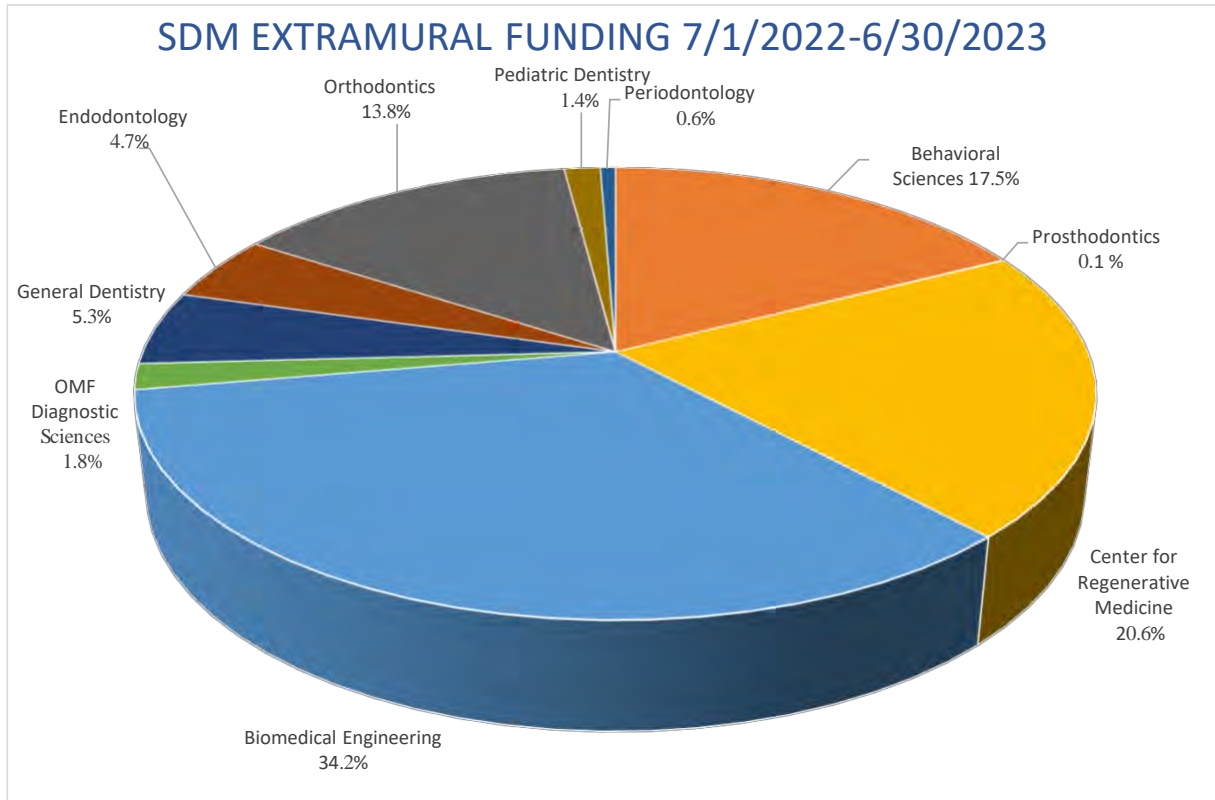
Congratulations to the students and mentors of the SBR Area of Concentration for their recent research poster session and award ceremony.

<https://today.uconn.edu/2023/10/skeletal-biology-regeneration-students-showcase-research-at-second-annual-symposium/>



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SDM Division / Unit	Direct Costs Received in FY 23	Indirect Costs Received in FY 23	Total Grant Awards for FY23
Behavioral Sciences and Community Health	1,294,971	570,837	1,865,808
Biomedical Engineering	2,373,884	1,283,958	3,657,842
Center for Regenerative Medicine and Skeletal Development	1,720,493	476,914	2,197,407
Endodontology	339,034	163,763	502,797
General Dentistry	348,769	215,887	564,656
Oral and Maxillofacial Diagnostic Sciences	121,620	75,277	196,897
Orthodontics	1,344,131	130,989	1,475,120
Pediatric Dentistry	151,665	3,261	154,926
Periodontology	49,267	15,713	64,980
Prosthodontics	5,497	460	5,957
TOTALS	7,749,331	2,937,059	10,686,390



New Grant Awards Received in FY23 (7/1/2022-6/30/2023)

NIH

Dr. I-Ping Chen, Pathogenic Mechanisms Of Craniometaphyseal Dysplasia, (R01)

Dr. Ivo Kalajzic, CGRP-CLR mediated regulation of bone healing, (R01)

Dr. Mina Mina, 14th International Conference On The Chemistry And Biology Of Mineralized Tissues (ICCBMT), (R13)

NIH Federal Passthrough

Dr. Frank Nichols, Impact Of Acid Ceramidase Activity On MIF-Mediated Migration Of Circulating Osteoclast Precursors To Periodontal Bone Lesions In Relation To Aging, (R01)

*Dr. Julie Wagner, A Multi-Level Intervention To Increase Access And Use Of Patient Portals For Diabetes Management In Community Health Centers (MAP), (R21)

DOD

Dr. Jessica Costa, Mouse Modeling of Parathyroid Carcinoma

Dr. Tannin Schmidt, Multifunctional Foam For Rapid Closure And Treatment Of Burn Injuries

American Association of Orthodontists Foundation (AAOF)

Dr. Eliane Dutra, The Effects Of FGF18 In A Mouse Model For TMJ Cartilage Degradation

Intramural Funding

OVPR

CRISP

Dr. Martin Freilich, "Pumping Mechanism for Human Scale Artificial Salivary Gland Dental Implant Device".

Dr. Rajesh Lalla, "Clinical Testing of a Novel Formulation of a Topical Anesthetic for Oral Mucositis Pain in Patients with Cancer."

REP

Dr. Dashzeveg Bayarsaihan, "Molecular Mechanisms of the Kabuki syndrome-associated KMT2D gene during early tooth formation."

*Awarded in FY22 but did not receive subcontract until FY23 and was not counted in FY22 new awards.



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!

SDM Technology Commercialization Activity Report

	FY16	FY17	FY18	FY19	FY20	FY21	FY22	FY23
Invention Disclosures Received	2	2	2	3	11	14	11	9
Patent Applications Filed	2	0	1	1	5	20	17	12

An Invention Disclosure is the inventor(s) disclosing to the University that their work has led to an advance that may be a novel invention.

The University reviews all Invention Disclosures received and files patent applications on those that are most promising for commercial application.

SDM Faculty Associated with patent applications filed in FY23

Dr. Ali Tamayol and Dr. Mohamadmahdi Samandari; 5 patent applications

Dr. Changchun Liu; 3 patent applications

Dr. Tannin Schmidt; 2 patent applications

Dr. Caroline Dealy; 1 patent application

Dr. Kshitiz; 1 patent application

Dr. Liisa Kuhn; 1 patent application

Data Management and Sharing Plans (DMSPs)

Effective January 25, 2023 and applies to all NIH funded projects that result in the generation of scientific data.

<https://grants.nih.gov/grants/guide/notice-files/NOT-OD-21-013.html>

Need help preparing your DMSP? UConn Health and the Academic Research IT have put together a tool to help you and to provide you guidance.

Webpage: Data Management and Sharing Plans (DMSPs) Quick Start Guide

<https://health.uconn.edu/aits/dmsp/>

DMPTool Training Videos

Generalist Repository Guidance

DMPTool Training Sessions will be posted



Faculty & Staff Recognition

Congratulations to Dr. Alan Lurie for 50 years of service and Dr. Ellen Eisenberg for 45 years of service to UConn Health. Congratulations on reaching this milestone!



Congratulations to Dr. Alix Deymier, recipient of the UConn Tanaka Award for student mentoring.

<https://honors.uconn.edu/tanka-award-description/>



Congratulations to Dr. Rajesh Lalla who received the Distinguished Service Award from the International Society of Oral Oncology at the MASCC/ISOO international conference in Japan in June.

<https://today.uconn.edu/2023/07/dr-rajesh-lalla-recognized-with-international-distinguished-service-award/>

3-D Bioprinters To Treat Musculoskeletal Injuries

Congratulations to Dr. Ali Tamayol and his lab who have developed a hand-held device using a special "bioink" that adheres to damaged muscle inside the body without the need for suturing.

<https://today.uconn.edu/2023/10/science-in-seconds-handheld-3d-bioprinters-to-treat-musculoskeletal-injuries/>



The Clinical Research Center

A recent article was published in UConn Today spotlighted the services offered at the Lowell P. Weicker, Jr. Clinical Research Center at UConn Health.

<https://today.uconn.edu/2023/05/spotlight-on-services-clinical-research-center/>

SDM Research Integrity

Congratulations to Laura Didden highlighting her role in SDM research integrity.

<https://today.uconn.edu/2023/10/integrity-is-behind-the-school-of-dental-medicines-research-enterprise/>



Researchers Improve Efficacy and Efficiency of CRISPR Diagnostic Technology

Congratulations to Dr. Changchun Liu for his recent publication in Nature Communications highlighted in UConn Today: <https://today.uconn.edu/2023/11/researchers-improve-efficacy-and-efficiency-of-crispr-diagnostic-technology/#>

Student Recognition

Congratulations to Patricia Hare (Wendy Mok, mentor) on her recent NIH/NIDCR F30 Fellowship award entitled, "Molecular Mechanisms of Pseudomonas aeruginosa Antibiotic Persistence in Monocultures and Microbial Communities".

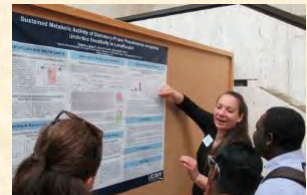


Congratulations to Dr. Adam Tanguay, (mentor Dr. Tannin Schmidt), recipient of the William B. Upholt Achievement award which was created to honor Dr. Upholt's impact on research, graduate education and his lifelong commitment to human rights, civic activism and to the environment.



Congratulations to Patricia Hare (Dr. Wendy Mok, mentor) as recipient of the 2023-24 Lepow Award which was presented at the 40th Annual Biomedical Science Graduate Student Research Day in August.

<https://today.uconn.edu/2023/09/40th-annual-biomedical-science-graduate-student-research-day-features-program-alumna/>



Congratulations to Dr. Archana Sharma, recipient of the Howard R. Raper Oral and Maxillofacial Radiology Award at the American Academy of Oral and Maxillofacial Radiology annual meeting.



Congratulations to Justin King (mentor Dr. Archana Sanjay), recipient of the Eric N. James Scholar award to honor scholarly and research achievements.



Congratulations to Stephanie Wong (Alix Deymier, mentor) for her photo of an apatite diffraction pattern under hydrostatic load which was selected as a finalist for the Artistic Odyssey Traversing Science Competition.

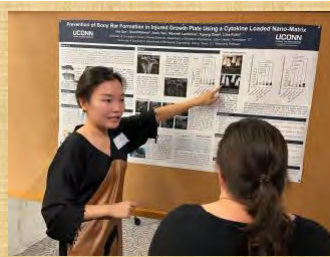
<https://france-science.com/en/photo-competition-2023/>



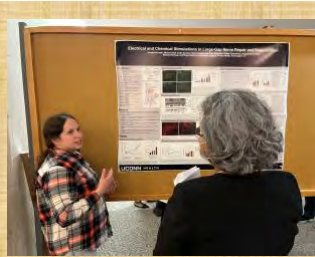
Congratulations to Emma Wentworth Winchester (Dr. Justin Cotney, mentor) for her publication in Frontiers in Dental Medicine entitled, "Integration of multimodal data in the developing tooth reveals candidate regulatory loci driving human odontogenic phenotypes". <https://www.frontiersin.org/articles/10.3389/fdmed.2022.1009264/full>



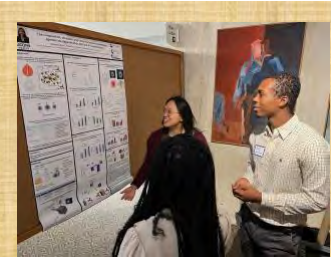
Kai Clarke



Hui Sun



Rosalie Bordett



Stephanie Wong & Taraje Whitfield

Skeletal Biology and Regeneration Poster Session

SDM Summer Research Students and Mentors

Over the summer, 31 second-year dental students were engaged in our Summer Research program. We would like to acknowledge these students and their mentors and look forward to their research presentations at our annual Medical/Dental Student Research Day event on February 23, 2024!

Thomas Acquista, mentor Dr. Ali Tamayol
 Nora Akila, mentor Dr. Alix Deymier
 Kainat Altaf, mentor Dr. Ali Tamayol
 Mitchell Andrea, mentor Dr. Martin Freilich
 Jaelon Blandburg, mentor Dr. James Watras
 George Bloom, mentor Dr. Marc Hansen
 Sherrill Brantley, mentor Dr. Prazwala Chirravur
 Pasquale Cannata, mentor Dr. Aditya Tadinada
 Erin Carroll, mentor Dr. Aditya Tadinada
 Elmi Hebaq, mentor Dr. Afroditi Pita
 Vlad Ilies, mentor Dr. Martin Freilich
 Cody Johnson, mentor Dr. Foteini Touloumi
 Kathryn Kwochka, mentor Dr. Alix Deymier
 Morgan Lamb, mentor Dr. Sharon Smith
 Desirae Lee, mentor Dr. Sarita Arteaga
 Wesia Malik, mentor Dr. Sharon Smith
 Max Marks, mentor Dr. Niloufar Azami
 Jadon Melecio, mentor Dr. Lan-Lin Chiou
 Sarah Mozdzierz, mentor Dr. Dong Zhou
 Michaela Murdock, mentor Dr. Aditya Tadinada
 Ekene Nnadika, mentor Dr. Takanori Sobue
 Thomas Perkins, mentor Dr. Ajay Dhingra
 Evan Perloth, mentor Dr. Frank Nichols
 Luis Romero, mentor Dr. Aditya Tadinada
 Lenka Serdar, mentor Dr. Aditya Tadinada
 Makara Sorel, mentor Dr. Aditya Tadinada
 Princess Stark, mentor Dr. Caroline Dealy
 Demitria Tsitsopoulos, mentor Dr. Bina Katechia
 Kavya Uddararaju, mentor Dr. Frank Nichols
 Vivian Van, mentor Dr. Aditya Tadinada
 Lingli Zou, mentor Dr. Niloufar Azami



Medical / Dental Student Research Day will be held on Friday, February 23, 2024. Additional information to follow.



We would like to acknowledge the presenters representing the School of Dental Medicine at the recent American Society for Bone and Mineral Research annual meeting:

Dr. I-Ping Chen
 Li Chen
 Kai Clarke
 Dr. Jessica Costa-Guda
 Dr. Alix Deymier
 Ayano Hatori
 Seung-Hyun Hong
 Dr. Ivo Kalajzic
 Sobhan Katebifar
 Dr. Liisa Kuhn
 Dr. Christy Lottinger
 Dr. Peter Maye
 Dr. Sanja Novak
 Natasha Patel
 Dr. Ernst Reichenberger
 Dr. Sierra Root
 Dr. David Rowe
 Hitoshi Tanigawa
 Dr. Xiaonan Xin
 Zhihua Wu

Skeletal Biology & Regeneration Poster Presentations

Rosalie Bordett; mentor Dr. Kumbar
 Cooper Cassells; mentor Dr. Scanlon
 Kai Clarke; mentor Dr. Deymier
 Reinier A. Gonzalez Heredia; mentor Dr. Nair
 Fatemeh Hosseini; mentor Dr. Laurencin
 Justin King; mentor Dr. Sanjay
 Erick Orozco Morato; mentor Dr. Nair
 Noah Pereira; mentor Dr. Tamayol
 Hui Sun; mentor Dr. Kuhn
 Dr. Adam Tanguay; mentor Dr. Schmidt
 Prachi Thakore; mentor Dr. Delany
 Steven Toro; mentor Dr. Tamayol
 Travis Wallace; mentor Dr. Kuhn
 Taraje Whitfield; mentor Dr. Laurencin
 Stephanie Wong; mentor Dr. Deymier
 Sharon Yaqoob-Krysztofiak; mentor Dr. Arnold



The Connecticut State Dental Association in collaboration with the UCONN School of Dental Medicine held a poster session in May. After a successful inaugural launch of the student poster session at the 2016 meeting, the poster sessions have become a regular feature at its annual meeting.

Resident/Student Poster Presenters

Students

Samira Abdelrehim; mentor Dr. Eric Bernstein
 Dedrian Barrett; mentor Dr. Aditya Tadinada
 Julia Clapis; mentor Dr. Frank Nichols
 David Cruzate; mentor Dr. Alix Deymier
 Jason Deck; mentor Dr. Liisa Kuhn
 Samantha DePalma; mentor Dr. Jean-Denis Beaudoin
 Olivia Dort; mentor Dr. Mary P. Guerrero
 Gosia Fryc; mentor Dr. Alan Lurie
 Tudor Ilies; mentor Dr. Aditya Tadinada
 Tyler James; mentor Dr. Aditya Tadinada/Dr. Sumit Yadav
 Kolbe Laing; mentor Dr. Christy Lottinger
 Thomas Nelson; mentor Dr. Aditya Tadinada
 Christine Schiller; mentor Drs. Aditya Tadinada
 Michael Truhlar; mentor Dr. Alix Deymier

Residents

Eirini Boutiou; mentors Drs. Steve Ruiz & Afroditi Pita
 Angie Cure Urrego; mentor Dr. Afroditi Pita
 Paola Alvarez Mora; mentor Dr. Afroditi Pita
 Gaston Cavada; mentor Dr. Esther Ordonez
 Hans Contreras-Ayala; mentor Dr. Esther Ordonez
 Maryam Buholayka; mentor Dr. Aditya Tadinada
 Huong Ho; mentor Dr. Aditya Tadinada
 Rama Zouabi; mentor Dr. Aditya Tadinada
 Santiago Cobos; mentor Dr. Aditya Tadinada
 Archana Sharma; mentor Dr. Aditya Tadinada

CSDA Student Awards

1st Julia Clapis
 Mentor: Dr. Nichols



2nd Samantha Depalma
 Mentor: Dr. Beaudoin



3rd Olivia Dort
 Mentor: Dr. Guerrero



CSDA Resident Awards

1st Dr. Rama Zouabi
 Mentor: Dr. Tadinada



**2nd Dr. Angie Cure
 and Dr. Paola Alvarez**
 Mentor: Dr. Pita



3rd Dr. Maryam Buholayka
 Mentor: Dr. Tadinada



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 ldidden@uchc.edu. For proposal development services and proofreading services offered through the Office of the Vice-President for Research (OVPR), please see <https://ovpr.uconn.edu/services/research-development/services/>.



Prospecting for funding opportunities

Pivot-RP is a comprehensive search engine and database for grant funding opportunities available through state, federal, corporate, non-profit, and foundation sponsors. All current UConn faculty, trainees and staff have access to this database through an institutional subscription. This enables you to identify potential funding opportunities, including research grants, as well as fellowships and training grants. It can be especially useful to identify funding opportunities from scientific societies, foundations, and other non-profits. You can also receive weekly alerts with relevant opportunities based on your profile. For additional information and to set up your account, please see this link: <https://guides.lib.uconn.edu/grants/Pivot>

If you would like SDM Research Office staff to help you look for funding opportunities, please contact Laura Didden at ldidden@uchc.edu

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@uchc.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 questions online using the submission form at the link below: <https://statsconsulting.uconn.edu/ask-online-sdm/>
3. Fully Supported Project Engagement: If more in-depth assistance is needed, it will be supported by the SDM, if there 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>. 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: <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/>

Lincus

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: <https://lincus.uconn.edu/lincus/cas/landing>

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 the SDM Research Webpage at <https://dentalmedicine.uconn.edu/research/> and the OVPR Website at <https://ovpr.uchc.edu/>

UConn Health Sciences Library Updates

Did you know? The UConn Health Sciences Library has updated our library catalog to include Article Galaxy Scholar, a new system to get you quicker access to select articles.

Here's how Article Galaxy Scholar works within our catalog:

- Once you've typed into the search bar - title, author or keyword(s), you may only see an option to 'Check for Request Options.' Select that button.
- Click on 'UConn Health Network Logon Users' if you are a student, faculty or staff. Otherwise, select the appropriate option, sign on with your credentials if prompted.
- If the item is **available** through Article Galaxy Scholar, click the 'Request PDF' option. Your article will typically arrive within the hour to your email!
- If the title is not available through Article Galaxy Scholar, your next option would be an interlibrary loan (ILL) request, which will take one to three days.

Not bad for requesting a title!

Helpful Links:

- Access the library's [OneSearch Catalog](#)
- [OneSearch Catalog Help](#)
- [Article Galaxy Scholar Demo](#)

Pre-submission Grant Review Program

Rationale:

Since extramural grant funding is highly competitive, pre-submission reviews of grant applications can increase chances of success. Many PI's obtain such feedback from their colleagues and contacts both internal and external to UConn. This includes discipline-specific internal programs (such as those run by the UCH Bone group and BME) that provide such feedback to applicants. However, some applicants, especially junior faculty, may not have access to an appropriate reviewer for such pre-submission reviews in a particular area of expertise. This **voluntary** program is intended to help such applicants obtain such pre-submission scientific reviews for extramural grant applications to funding agencies such as NIH, NSF, DoD, etc.

Program Description:

1. The PI contacts the SDM Research Office approx. 90 days before the submission deadline, with a request to participate in this program, a draft abstract of the grant application, and names of suggested internal or external reviewers, who may be suitable for the planned grant application.
2. The SDM Research Office will contact the potential reviewers and identify one who is agreeable to review the grant within the requested time-frame.
3. The PI submits the scientific section(s) of the draft grant application to the SDM Research Office approx. 45-60 days before the submission deadline. The SDM Research Office will forward the draft to the identified internal or external reviewer, with a request to provide the review within 15 days.
4. After the review is received, the SDM Research Office will send the review to the PI, ideally about 30 days or more before the submission deadline, so there is time to make any changes in response to the review.
5. For reviewers that are external to UConn, the SDM Research Office will offer them a stipend to conduct the review.

Research Dean's Corner

Dear Colleagues,

In this issue, we celebrate the renewal of our institutional T90/R90 training grant for another 5 years. Our School has had such federal support for research training for over 30 years. The training grant supports our DMD/PhD students, as well as PhD students and postdoctoral fellows in Skeletal Biology and Regeneration. This is a very important grant for our School, with high impact on the research environment and training opportunities at UConn Health in general. Thanks to Dr. Mina Mina (Director) and Dr. Frank Nichols (Co-Director) for their efforts that led to this successful grant renewal. Ms. Lisa Ramsdell and Ms. Laura Didden in the SDM Research Office provided excellent administrative support for the grant application. It is also a good time to remember the contributions of those who led the training grant in the past. They include Drs. Jon Goldberg, Alan Lurie, and William Upholt (deceased).



Also on the first page, we highlight the recent annual symposium of the Skeletal Biology and Regeneration program. This multidisciplinary program offers training opportunities in over 25 research labs across the Schools of Dental Medicine and Medicine. It supports and reinforces the position of UConn Health as a leader in this area of science. Thanks to the current Program Director Dr. Rosa Guzzo and Co-Director Dr. Lakshmi Nair. Past leaders of this program (previously called the Skeletal, Craniofacial, and Oral Biology program) include Drs. Caroline Dealy, Anne Delany, Gloria Gronowicz, Alan Lurie, Peter Maye, Archana Sanjay, and William Upholt (deceased). Together, the leaders of the training grant and Skeletal Biology and Regeneration program have enabled research training opportunities for several generations of trainees. Thanks also to Ms. Lisa Ramsdell who has provided administrative support for the training grant and program for more than a decade.

Wishing you a peaceful and healthy holiday season and new year ahead.

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

SDM – Research Office

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Dr. Rajesh Lalla - Associate Dean for Research

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

Office Staff:

Laura Didden - Manager, SDM Research Office

Annmarie Martin, Brandon Mulcunry, Lisa Ramsdell,

Gina Saccone, Kamal Sahoobah and Caibin Zhang