

The Bright Side

WHY DO RESEARCH?

ELIZABETH GUIRADO



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STUDENT SPOTLIGHTS



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SRG NEWS

A Newsletter for UIC College of Dentistry's Dentist Scientists



The Bright Side

ELIZABETH GUIRADO | 2ND YEAR DMD/PHD CANDIDATE

At the UIC College of Dentistry, there are doors that open to worlds of possibilities. Chemicals combine, immunoglobulins precipitate, and biotechnology allows for the opportunity to see the invisible. This is a world

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where ideas flow freely, and the adrenaline and courage to innovate are as potent as a morning cup of coffee.

Behind those doors you'll find the researchers of the college. And, next to those researchers you will find their loyal graduate students. For many of the trainees of the Multidisciplinary Oral Sciences Training (MOST) Program, the love for science comes in different flavors. Nevertheless, the message is the same.

Science is about community. The research lab, with its mentors and resources, has the ability to nurture great minds and empowers students with the confidence to become pioneers of their ideas. Osama Siddiqui, currently in the Bedran-Russo lab, corroborates this fact: "Research has provided me with a community to grow and learn from, which has become a means of empowerment." Without a doubt, the human interactions within an otherwise mentally-taxing profession have the ability to revitalize spirits.

Since the times of Darwin's more than 8,500 letters and Freud's Psychological Wednesday Society, we have changed the way we communicate science. For most of the trainees, engaging in intellectual conversations with like-minded individuals in the many scientific societies is stimulus enough to maintain focus. Elizabeth Michalczyk, in the DiPietro lab, makes this assertion: "There is a certain rush when you complete a big project and get to share it with your colleagues, and this certainly motivates me to keep going." Even if your ideas are the source of contention, the opportunity to be heard and discuss science is perhaps one of the most treasured aspects of participating in research.

To demystify research, we can say that it is a constant learning process. Juhi Uttamani, from the Nares lab, couldn't have put it better: "A lot of hard work and trial runs are associated for a proposition to materialize. However, a willingness to learn and a drive to discover makes the experience worthwhile!" For researchers, failure is a constant reality. And, for many students the hardest part of the training is accepting that. It is true that it is not easy. So, why in the world would anyone submit himself or herself to such undue trouble? Because, as Osama says, "in the end, regardless of how my day goes, I'm grateful for the opportunity to hopefully contribute in whatever small capacity to a community of intellectuals."

If you would like more information about research opportunities at the college please send your correspondence to Elizabeth Guirado, eguira2@uic.edu. Thank you for reading.

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Pictured: Dr. Bedran-Russo (top), Dr. Nares (center), and Dr. DiPietro (bottom)

Research Around the School

Student Researcher of the Month

ANNETTE MERKEL | 2ND YEAR DMD/PHD CANDIDATE

MENTOR: ON ROTATIONS

My passion for research manifested from my experience as an undergraduate research assistant in a geology lab at the University of Illinois Urbana-Champaign (U of I), where I worked as a microbiologist studying the urinary microbiome and kidney stone mineralization. I became fascinated by the diversity of the human microbiome and was inspired to extend my research to other microbiomes of the body from the oral cavity to the GI tract. While at U of I, I was fortunate to continue exploring the microbiome at the Mayo Clinic in Rochester, MN. Through this research fellowship, I had the unique opportunity to observe research translated from the bench directly to the patients in the clinic. This experience showed me the importance of research in helping improve patient care and advancing the health field, and it led me to pursue a dual doctorate, DMD/PhD, at UIC College of Dentistry. I look forward to continuing my work as a dentist scientist to directly and indirectly serve patients through clinical practice and research.



Multidisciplinary Oral Science Training (MOST) Student Spotlight

PRISCILLA LAVAGNOLLI | PREDENTAL STUDENT

MENTOR: DR. SROUSSI

My name is Priscilla Lavagnolli and I am an Interdisciplinary Health Sciences Major at the University of Illinois at Urbana-Champaign. I'm going to be a senior in the Fall (wow time flies). This is my first year doing the MOST Summer Program and I am beyond excited and grateful to be here! I work in Dr. Sroussi's lab, mainly with neutrophil reactivity to a special protein known as protein kinase C eta (PKC eta). These experiments are interesting because they take a fundamental approach to understanding the complexity of several diseases, including periodontal disease. I am interested in research because it is the foundation of any field and being a part of it helps me to appreciate the importance of dentistry from a dual perspective.



“Participating at these conferences has afforded me the opportunity to further understand topics directly relevant to my project and also integrate new ideas into my own research.”



Pictured: Gottingen, Germany (top), Dubrovnik, Croatia (center), and Los Angeles, CA (bottom)

Travel and Research

Seeing the World Through Science

MARYBETH FRANCIS | 5TH YEAR DMD/PHD CANDIDATE

Travel awards granted by the NIH/NIDCR, AADR, UIC, and the Fuller Fellowship have all given me incredible opportunities to communicate my scientific research at more formal settings including conferences, national, and international meetings. By presenting my own research, listening to other research presentations, and networking, I have formed meaningful bonds and collaborations with others. Participating at these conferences has afforded me the opportunity to further understand topics directly relevant to my project and also integrate new ideas into my own research.

Since joining the DMD/PhD program at UIC, I have presented my work in Seattle, WA; Charlotte, NC; Minneapolis, MN; San Francisco, CA; Gottingen, Germany; Boston, MA; Dallas, TX; Philadelphia, PA; Bethesda, MD; Los Angeles, CA; and Dubrovnik, Croatia. These travel experiences really give me hope and energy to keep going in this rather long program. It's exciting to take all of your data and statistics and try to turn it into an interesting story to share with others at these meetings. Spending so much time cooped up in lab and then finally being able to show what you've discovered is actually a lot of fun! I have met so many interesting people and seen so many exciting places...if this is a bribe to stay in the program, I'll take it!

American Association of Dental Research (AADR) Meeting Testimonials

ANDREW BERTAGNA | 2ND YEAR DMD CANDIDATE

Every March, the American Association for Dental Research (AADR) hosts an annual meeting where scientists from the United States and Canada present research related to the dental field. The annual meeting establishes communities of focused investigation and interest that ensures a strong foundation, which supports future exploration and growth in the field of dental-related research. Attending the annual meeting is a great opportunity to travel the US while actively participating in the advancement of your profession. It is a great chance to meet and interact with



UIC College of Dentistry students and faculty at the last AADR Meeting and Exhibition in Los Angeles, CA.

dental and orofacial experts who are groundbreakers making profound and effective advancements to dental field. The annual meeting provides a forum for students to present a poster summarizing their research while interested colleagues inquire and discuss elements of the project. Attending the annual meeting allows students and dentists to gain new insights into various advancements in dentistry while simultaneously exploring a new city. Networking with students and faculty from other dental schools and comparing experiences is another invaluable perk of attending the meeting.

My path to the annual conference began ten months prior during the summer before my D1 year. I enrolled in the summer research program for incoming D1s and was paired with Dr. David Reed, who integrated me into a project aiming to elucidate some of the pathophysiological mechanism behind degeneration of mandibular condylar cartilage. My work throughout the summer precipitated into a poster, which I presented at UIC College of Dentistry's Clinic and Research Day as well as AADR's Annual Meeting in Los Angeles.

If you are interested in attending next year's AADR Annual Meeting in San Francisco, please feel free to contact me at aberta3@uic.edu. I'll be more than happy to answer any questions.

MADISON ALLEN | 2ND YEAR DMD CANDIDATE

The AADR Meeting was a wonderful opportunity to share research with numerous faculty and dental students from around the country. I presented on the *Differences in Innate Immune Response Mechanisms Between Oral and Skin Epithelial Cells*. While presenting my poster, I was happy to meet numerous researchers conducting experiments related to the same topic, faculty who had collaborated on past projects with my mentor, Dr. DiPietro, and representatives from companies

interested in hearing about the project's findings and next steps. It was exciting to talk to people interested in the research that I had worked so hard on.

In addition to presenting my own research, it was also a great opportunity to discover research happening at different dental schools around the United States. We had nightly cocktail hours to meet and network with student researchers and faculty from different dental schools. Furthermore, my UIC College of Dentistry colleagues and I had an enjoyable time touring Los Angeles. During our free time on one of our days visiting, we hiked the Griffith Trails to the famous Hollywood sign. The opportunity to travel to present research is a unique one, and I happy that I had the chance to do so.

Please feel free to contact me at mallen29@uic.edu for more information about the annual AADR meeting and exhibition.

Upcoming Events

October 25 @ 12:30pm - Dr. Mary McDougall presents “**Open Wide: Probing Oral Health through Research**”

November 8th @ 4-6pm - **AADR SRG Social** (Get involved in Research!)

November 15th - **Lunch and Learn** (Get information about Case Cats and Clinic and Research Day)

SRG Board Members

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Have ideas for future newsletter stories? Please contact Madison at mallen29@uic.edu. Thanks for reading!

