What is SRG and who gets involved?

By Joshua Padovano, DMD/PhD student

Mission: “To promote and support student research in dentistry as well as encourage and facilitate opportunities for students to share and further their research.”

Who we are: We are a group of dental students, some of which are also pursuing a PhD, who dedicate time towards making advancements in the oral health sciences. We are students that love learning. Being a part of and contributing to the wealth of knowledge that will one day translate into improving clinical dentistry is exciting to all of us. As dental student researchers, we ask how and why we do what we do clinically. Asking these questions is what inspires us to develop exciting projects, perform the work, and present our findings at engaging, scientific conferences.

What we do: Members of the student research group first and foremost create an inviting, yet informative, environment for all students actively seeking or doing research at the College of Dentistry. This is done through social events hosted on and off campus, regular SRG meetings, and hosting SRG-sponsored events. We also host informational sessions for submitting abstracts to the AADR/IADR meeting in March of each year and organize travel arrangements to the meeting for dental student researchers.

Why to join: Are you planning on specializing and want to find a mentor or project to get involved with? Are you a dental student who interested in finding out how or why clinical dentistry is changing? Do you want to get to know inquisitive people in professional and social environments? Do you want to travel to a professional conference to network with your peers? If you can answer yes to any of the above questions, what are you waiting for? Join SRG!

Experiences from former members of SRG

By Amatul Salma, DMD student

Ariel Johnson, PhD: Currently: Postdoctoral Professional Master in Bioscience Management, independent strategic marketing consulting, and Program Management at Regeneron Pharmaceuticals Roles in SRG: “Special Assistant to the NSRG President,” Kaitrin Baloue in 2010-2011, SRG Secretary, and SRG Co-President 2012-2013 Research: Wound Healing and Wound Care, specifically apoptosis in scarring and fibrosis “Being involved in SRG made it clear to me that I enjoyed encouraging student involvement in research activities. I also enjoyed the organizational part of the group, and this helped me identify that management, specifically project and program management as a good fit for my personality and skills.”

Cassandra McKenzie, DDS: Currently: Periodontal residency at the University of Missouri – Kansas. SRG involvement: “I became involved with SRG through the Summer Student Research Program as a rising D1 in the summer of 2010.” Research involvement: Stress and wound healing. “Being involved with SRG allowed me to make the most of my dental education. I was able to balance research experience with clinical activities, and I feel that has made me a more well-rounded professional. Research solidified my interest in the science behind dentistry and encouraged me to pursue additional education with a periodontal residency.”

SRG Executive Board: President: Marybeth Francis, Vice President: Amatul Salma, Secretary: Gabriella Szewczyk, Social Chair: Marc Manos
Students attend AADR Meeting
by Marybeth Francis, DMD/PhD student

In March 2014, UIC sent a delegation of students to the 43rd Annual Meeting & Exhibition of the AADR in Charlotte, NC including Ming Ding (IDDP), Marybeth Francis (DMD/PhD), Angelica Lagunas (DMD/PhD), Josh Padovano (DMD/PhD), Amatul Salma (DMD), Rama Siraj (IDDP), Gabriella Szewczyk (DMD/PhD), Mat Wietecha (DMD/PhD), Young Han Kwon (DMD) and Spencer Schneider (DMD). Dentists and researchers from around the country attended this meeting. We all kicked off the conference by attending a reception in the Great Hall at the NASCAR Hall of Fame which featured rotating displays and lively video scenes and graphics. Here, we were able to meet students and scientists from other schools that were also interested in dental research.

Over the next few days, there were poster sessions where attendees could walk through and see all the posters of submitted abstracts and speak with presenters about their research. Additionally, there were oral presentations throughout the meeting where various researchers gave formal talks on their research. During the evenings, the generous sponsors of the meeting put on dinners and networking events, where we were able to socialize with other researchers and meet students from other schools.

Every year, there are many awards given out at the AADR Annual Meeting, and this year our very own Amatul Salma from UIC won the Dentsply Award. UIC also had its own booth where we were able to talk about our program to other prospective students.

This coming March 2015, the IADR/AADR General Session will be held in Boston, MA, and UIC will again be sending a group of researchers to represent us at this international meeting.

Predental Undergraduate Research Symposium
By Elizabeth Razdolsky Michalczyk, DMD/PhD student

On April 5th, 2014, the UIC COD’s Student Research Group hosted its third Predental Undergraduate Research Symposium (PURS). It is SRG’s largest event hosted throughout the year and is a wonderful opportunity to bring faculty, dental students, and undergraduate researchers to share their research and educational experiences with one another. This year, ten undergraduate researchers from multiple universities as well as the SRG members presented their studies via poster presentation.

During the symposium, Dr. Harrison Mackler, periodontics resident at UIC, delivered the keynote address. He discussed his journey through Harvard’s dental school as well as his dedication to research. His studies involved immune-regulating periodontitis treatments which he did during his Howard Hughes Medical Institute Fellowship in Boston. Dr. Mackler’s ability to balance both dental school and research provided invaluable insight to the students. Following the keynote speech, students were given the opportunity to discuss their own experiences involving research and dental school during an informal lunch session hosted by SRG. The SRG is very grateful to Drs. Crowe and Pendleton for their wonderful opening remarks to the students as well as the Offices of Research and Diversity Affairs for providing their continued support. SRG hopes to continue growing the PURS in order to allow both dental students and researchers to share their wonderful experiences.
Meet our new dean, Dr. Clark Stanford
By Mateusz Wietecha, DMD/PhD student

Beginning October 1, the UIC College of Dentistry will have a new dean, Dr. Clark Stanford, who is coming to us from the University of Iowa College of Dentistry. What makes Dr. Stanford stand out from our school’s past leadership is that in addition to his DDS and certificate in Prosthodontics, Dr. Stanford has a PhD and continues to be active in basic science and clinical research. A well-known expert in his field, Dr. Stanford has published extensively, holds active research grants, was head of research at Iowa, has run research centers, and serves on several national and international committees. Dr. Stanford was recently quoted in UIC’s Word of Mouth as saying, in reference to the College’s research program, “I see an opportunity to reinvent the research enterprise, using the tools and experience I’ve had in creating bridges and connections and breaking down the silos. [...] You can create a culture, environment, and set of expectations of collaboration within and outside the walls of the building.”

To follow up on these comments, I asked Dr. Stanford to explain what he sees as his role as dean in the support of a healthy environment for student research. He answered, “My role is one of respect. Respect for the process of inquiry. Respect for the efforts and accomplishments. Respect for the student who takes on the intellectual challenge to push themselves in areas of intellectual growth they never realized they had. Respect for the transformational impacts students are having on the entire College of Dentistry.” He added, “With this understanding I will enhance the student research programs through research support, mentoring, communication and amplifying our message on campus and at national forums.” I asked Dr. Stanford to describe features of a successful student research program. He answered, “The general feature of an ideal research program for students is one of inclusive support in which all students involved in clinical or research training see the value of what research brings to the success of the College. The program should provide efficiencies and flexibilities for students to matriculate at a pace that is personally rewarding with sufficient state-of-the-art resources to support and compliment the learning process.” How would he achieve that? Dr. Stanford elaborated, “It will be important for me to hear what are the concerns and try, as much as I can, to coordinate, support, cajole or if need be, arm twist the systems to make the road of inquiry as rewarding and fun as possible!”

He added, “Life is short: we have to enjoy the journey because we all get to the same destination (some more bruised than others).” On that note, I asked Dr. Stanford what he does for fun. He replied that he enjoys “running, biking and long walks,” coffee shops, good books and good company, “celebrating the accomplishments of others,” all the while “listening to the life stories” and “observing the movement of life” around him. The Student Research Group is looking forward to working closely with Dr. Stanford to improve on our student research program so that more dental students may have the opportunity to engage in the College’s research enterprise.

Midwest Regional Dental Student Research Conference
By Gabriella Szewczyk, DMD/PhD student

This past spring, UIC students and faculty attended the 2014 Midwest Regional Dental Student Research Conference hosted by the University of Minnesota School of Dentistry. This annual conference brings together student researchers from dental schools throughout the Midwest. Over 90 students from the Universities of Illinois, Iowa, Minnesota and Colorado got the chance to meet and discuss their research topics, during the course of two poster sessions. Attendees were also treated to outstanding CaseCAT presentations by University of Minnesota dental students along with Dr. Conrado Aparicio’s presentation regarding the biofunctionalization of surfaces with synthetic biomolecules for improving bioactivity and antimicrobial properties of different dental biomaterials. Dr. Aparicio aims to develop novel mechanical and microbiological tests to evaluate degradation of biomaterials in oral environments. A dinner reception overlooking the stunning Minneapolis skyline concluded the conference. Next year, UIC College of Dentistry will be hosting the conference. We are looking forward to a great turn out!
Introducing the Summer Research Students!
By Marc Manos, DMD student

The Summer Student Research Program is a unique opportunity designed for students to plan and perform a research project while receiving mentoring by selected leading research faculty. While many undergraduate students applied for the program, only ten individuals were selected to receive a stipend for their efforts in pursuing individual research interests. Projects encompass a range of disciplines, all relevant to the future practice of oral health care. I would like to use this column to introduce our summer student research group members and the interesting work they are engaged in over the 10 week program.

Michael Boyle: “I am studying dental pulp regeneration and the impact of endodontic materials on the process of regeneration using an in vitro model.”

Meg Eber “I am studying dental pulp stem cells and tissue regeneration. My involvement focuses on analyzing various gene expressions in dental pulp tissues exposed to caries.”

Osama Siddiqui: “I am studying the effects of a matricellular protein, peristin, in the context of tooth movement in mice.”

Jonathan Liu: “I am studying diabetes, my involvement includes lab work, data analysis, assisting in animal experiments, collecting tissue samples.”

Erica Nahin: “I am studying how laser and stem cell therapies for renal fibrosis affect the expression and inhibition of a few different genes. My involvement includes literature reviews, lab work, and data analysis.”

Joe Powers: “I am studying the unopposed molar model and the relationship between unloading and wnt signaling.”

Tautvydas Shuipys: “I am studying the effectiveness of Triclosan on mutant saFabI. My role involves conducting lab work.”

Aziz Susarry: “I am doing lab work, literature review, and data analysis in the context of cancer research.”

Dr. Ana Bedran-Russo named Director of the MOST Program
By Prashant Bommi, PhD student

Dr. Ana Bedran-Russo has been appointed Program Director of the Multidisciplinary Oral Science Training Program (MOST) supported by a T32 NIH Training grant. The MOST training program prepares students for research in clinical, basic and translation sciences in Cranio-Facial-Dental research. “It is truly an honor to become the new Program Director of the MOST! The timing was perfect, Dr. DiPietro successfully renewed the T32 grant a year ago and therefore puts me in a great position to keep the ball rolling and grow the program. What I learned as a grad student and still believe is that an excellent program is built on great students and excellent environment. We have an amazing group of students in the MOST program, which makes half of my job easy. My major work as PD is to offer an outstanding training environment.” –Dr. Bedran Russo

Vision of Research: Research has many faces and tremendous advances has been done on individual sciences, it is now time to increase collaborative research in a true inter-disciplinary environment. It really takes a group to forward sciences that will ultimately affect the quality of life. I believe training programs must foster environment that promote inter-disciplinary research/collaboration, exposure to cutting-edge and innovative research tools and sciences and, of course, sustain a collegial environment. In the past it was expected that a long post-doctoral training was needed, today things have changed and training programs need to work closely with the students to assist and prepare trainees for life after grad school. For instance, there are amazing initiatives from NIH to provide large grants for early career investigators and expedite transition from a post-doctoral period to a tenure track faculty.