What is the National Student Research Group?
The National Student Research Group (NSRG) Roseman CODM-SJ Chapter is affiliated with the American Association for Dental Research (AADR). NSRG aims to promote student involvement in dental research and focuses on implementing evidence-based dentistry within the clinic as well as the classroom. NSRG provides support for students who are interested in research and connect them to faculty members who are doing research. NSRG offers a forum for fellow students to connect and communicate research ideas. Moreover, NSRG strives to promote inter-disciplinary advancement of research between professional programs on campus i.e. Dental, Pharmacy, and Nursing.

Stay up to date
For the most up to date information on activities, researches, or conferences held by the Roseman chapter of NSRG, please visit our website at nsrgroseman.weebly.com.
NSRG – Roseman President Wins Award in Student Research

By Rachael Wadley, Roseman Marketing Communications Specialist

Andrew Gross, third-year student at Roseman University’s College of Dental Medicine, won first-place for the second year in a row for his research that he submitted to the 2016 SCRP. He was honored by the Student Clinicians of the American Dental Association (SCADA).

“This is the first time in the 57 year history of the program where the same person has one first-place in back-to-back years,” said William Harman, associate dean for admissions and student services of the College of Dental Medicine – South Jordan. “This is such a great accomplishment considering the high-quality of research presented at the conference.”

SCADA hosts this program each year to highlight elite-level student dentists who are participating in research at their individual dental schools. This year was the 57th annual event. There were a total of 75 students – 63 from U.S. dental schools, 11 international students from Canada, Denmark, France, Germany, India, Japan, Malaysia, South Korea, Mexico, Taiwan, and Thailand and 1 American Dental Hygienist Association (ADHA) winner – who presented research in the competition.

First-, second-, and third-place winners were chosen in the categories of Clinical Science/ Public Health Research and Basic and Translational Science Research. Gross won first-place in the category of Basic and Translational Science Research for his research on chronic periodontitis.

Last year Gross’ research specifically looked at the activation and progression of Matrix-Metallo Proteinases (MMPs), which play a role in chronic and aggressive periodontitis.

Chronic periodontitis is the second most prevalent oral health disease affecting 47 percent of adults over the age of 30 and 70 percent of adults over the age of 65 in the U.S. alone. When the regular metabolic pathways for oral microbiota are disrupted, and they combine with toxins produced by bacteria in the mouth, it triggers an immune or inflammatory response that can lead to this disease.

The goal of Gross’ research is to further clarify the mechanisms behind MMP activation, regulation, and dysfunction; characterize the pathways involved; and evaluate the efficacy of potential therapeutic targets to prevent or resolve chronic and aggressive periodontitis.

“This year’s research; however, took us in an entirely different direction, as we elucidated some key mechanisms behind the progression of Periodontitis,” said Gross. “We’ve had to overcome some major set-backs this year. And with a lot of great competition coming from reputable labs, post-docs, mentors, and large programs – I’m happy Roseman received the recognition that we did. There are some great things going on here.”

(http://blog.roseman.edu/?p=3780)
“Spider Silk and Denstistry”

Roseman NSRG was pleased to have Dr. Randy Lewis present at the first General Body Meeting of the Fall 2016 Semester. At the meeting Dr. Lewis shared his groundbreaking research on Spider Silk and discussed the myriad of applications that it has, including in Dentistry. Some Dental applications discussed included the topics in Dental Bonding.

Dr. Lewis received his BS from CalTech in 1972 and his PhD in 1978 from the UC San Diego. He was a postdoctoral fellow at the Roche Institute of Molecular Biology. He was on the faculty at U. of Wyoming from 1980 until 2011. Randy joined Utah State University in 2011 as USTAR Professor of Biology.

His group has published over 140 papers and 16 book chapters. They have eleven issued patents. He has had grants totaling over $33 million. Dr. Lewis has had 19 PhD and 4 M.S. students and currently has seven PhD students and 26 undergraduates in his lab.

His research focuses on spider silk proteins. They identified the proteins for all six of the different silks spiders can make. They constructed synthetic genes that make these proteins in bacteria, goats, alfalfa, and silkworms. The proteins are made into fibers, films, glues, coatings and gels. The goal of this work is to provide a method to produce materials custom designed for strength and elasticity for applications such as ligament and tendon repair, high tech clothing, parachutes, coatings for medical implants, etc. Their research has been featured on Discovery, Nova, BBC and CSI New York.

Getting to Know the Students- Carlin Cera

By Victoria Tran

Q1-What brought you to Roseman University, CODM?
When applying to dental schools, I was interested in experiencing a new place to live for a few years. Growing up my family and I always spent the summers vacationing in states out West flyfishing, white water rafting, and hiking. Utah seemed to be a perfect place to be able to enjoy the outdoors while going to school.

Q1-How have your experiences at Roseman been so far?
I have had a wonderful experience at Roseman. I have been able to meet lots of new people and develop great mentors. I am glad I
was able to pursue my dental education at Roseman.

Q3-What are some challenges you face as a student dentist?
I think one of the biggest challenges, especially being a D4 student, is getting ready to manage and start to tackle student loans. As a D1 student, it was difficult in the beginning learning how to balance didactic courses with the hands-on lab assignments and also transitioning from an undergrad testing schedule to a mastery-learning model.

Q4-When and how did you first get involved with research? Are you currently involved in any research? If so, what kind of research? I started to get involved with research in undergrad and continued to stay involved with research through Roseman’s NSRG Student Organization. Currently, I am working on a research project with Dr. Janis which is an alternative long lasting bonded bridge used for the replacement of congenitally missing maxillary lateral incisors.

Q5-How important is doing research to you and what are your opinions on the oral health research field? I was eager to get involved with the Roseman NSRG Student organization when it first started because research is an integral part in the field of dentistry. I enjoy understanding why certain techniques and procedures work, and what makes them successful. Dentistry is constantly changing and is inspired by individuals willing to figure out the why.

Q6-Do you plan on pursuing a dental specialty? And is research important in doing so?
No, I am not planning on pursuing a dental specialty; however, I am going to participate in a one year residency program for general dentistry. I only applied to one year GPR and AEGD programs and I am not sure of some of the requirements for certain specialties as far as research goes.

Q7-What do you do in your free time outside of school and the research lab?
I enjoy being outside, especially with all the fun things you can do in Utah winter or summer. Scrapbooking, playing piano, basketball, and eating at new restaurants.

Q8-What is your advice for the incoming D1 class?
I would encourage the incoming students to get involved with some of the student organizations at Roseman, it is a great way to network with doctors in the dental community and meet new people. Spend time practicing in the simlab outside of class to keep getting better with your hand skills. You can never practice too much!

NSRG Roseman Research Conference 2017

The National Student Research Group (NSRG) at Roseman University College of Dental Medicine would like to welcome all dental, pre-dental students and dentists to our annual Roseman NSRG Regional Conference. This two-day event will be held at Roseman University campus in South Jordan, Utah on Friday, January 27th - Saturday, January 28th, 2017.

The conference will consist of presentations by nationally acclaimed research speakers including Dr. Paul Casamassimo, DDS, MS. and Jon Fundingsland, Professional Service Manager at 3M Oral Care. Dentists, dental students and pre-dental students will then have the option to choose among various workshops and CE courses offered. Opportunities to receive CE credit will also be available. Our poster symposium, which will be held on Saturday, is a great opportunity for students to present their research projects and gain valuable feedback from the
audience. On Friday evening, a Networking Reception Night will be hosted by the ASDA Roseman Chapter, followed by a banquet for all the speakers, faculties, residency program directors and attendees. This will serve as a great opportunity for networking and mentorship.

On Saturday, presentations, workshops and CE courses will continue, and the winner of the poster symposium will be announced during the awarding ceremony. We invite all who are interested to visit our website at nsrgroseman.weebly.com to register for the conference and submit abstracts in order to present research at the conference.

Meet the ’16–’17 Executive Board

Andy Gross - President
Tyler Bordieri – President-Elect
Nate Harward – Vice-President
Kemia Zenalia - Secretary

Josh Bullock - Treasurer
Tyler Lee - Conference Co-chair
Victoria Tran - Conference Co-chair
Stuart Mauger – Editor-in-chief

NSRG - Roseman Executive Board
Additional Board Members Randy Abdou - Marketing Chair, Zach Diamond - Marketing committee member, Marie Petersen - Conference planning committee member, Jacob Dawson - Fundraising Co-chair

Faculty Advisors - Ryan Jones, DMD, Shaleen Wilcox, Ph.D.

Student Research Tips: Making a Research Poster

**Make it visually appealing:** When you are presenting a Research Poster, you want to make sure that your poster will draw enough attention to itself that it will be noticed and encourage someone to take time to look at your poster and listen to you present it. Ways that you can make your poster visually appealing are: 1) choose colors that professional, but that will also contrast well. They may possibly be the colors of your school, 2) arrange the content in an organized fashion that doesn’t look too busy or too overwhelming. If your poster looks too wordy or too lengthy, it may discourage others from coming over to look at your poster while at a symposium.

**Keep it simple and concise:** Try to limit yourself to only information that is essential to explain the basic ideas, methods, and conclusions of your research. Think of a Research Poster as another form of an Abstract.

**Know the information well:** While at a research symposium, you’ll probably have a chance to present your poster to a panel of judges. Often you don’t have much time to present your research, so make sure that you know the information well that is on your poster and that you can present it in a concise manner. After your presentation the judges may have questions about your research. Be sure that you know your research inside and out! It can help if you include references on a note card that you carry with you, as well as include graphics on your poster that can help you to visually back up your research.

Letter From the President:

Our goal as the National Student Research Group; Roseman Chapter is to promote student interest and involvement with dental research here on campus. We recognize research as being fundamental to our profession, and hope to help foster an environment wherein students might supplement their dental education.
Although our Chapter is relatively new, our executive committee has taken strides to increase student awareness and involvement in dental research. Organizing continuing education courses, an annual Research Symposium, and hosting guest lecturers and scientists are just a few examples of how NSRG-Roseman is working to advocate for dental research.

The future is bright. Moving forward, our efforts will continue to reflect a commitment to support our peers in dental research. We will work to provide student researchers the needed platforms for networking and collaboration. We will continue to raise awareness, support opportunity, and incentivize a culture wherein students will not only recognize the vital role research plays in dentistry, but happily contribute to it.

“If dentistry loses its scientific basis, we will no longer remain a credible profession” – R. Tankersly

Andrew J Gross, DMD candidate 2018

President NSRG-Roseman
What is the National Student Research Group?
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Roseman University Dental Student Chosen as Winner of National Research Event

Courtesy of the Roseman Blog:
blog.roseman.edu/?p=2945

The Student Clinicians of the American Dental Association (SCADA) honored Andrew Gross, PhD, a second-year student at Roseman University’s College of Dental Medicine, for his research submitted to the 2015 Student Clinician Research Program (SCRP).

“This award is a great honor for any student in the competition and we are extremely proud of Andrew for his accomplishments,” said Dr. Frank Licari, dean of the College of Dental Medicine-South Jordan. “It is also meaningful for Roseman University because as a developing program we don’t expect our students to be able to compete with students from long-standing and well-established research programs at other dental schools. It speaks to the quality of our students and faculty, and the commitment we have made to excellence in education and research.”

SCADA hosts this program each year to highlight elite-level student dentists who are participating in research at their individual dental schools. This year was the 56th annual event, and there were over 70 student clinicians, representing research from 39 countries, who submitted research for the competition.

First-, second-, and third-place winners were chosen in the categories of Clinical Science/Public Health Research, and Basic Science Research. Gross was chosen as the first-place award winner in the basic science category for his research on chronic periodontitis.

Specifically, Gross’ research looked at the activation and progression of Matrix-Metallo Proteinases (MMPs), which play a role in chronic and aggressive periodontitis.

Chronic periodontitis is the second most prevalent oral health disease affecting 47 percent of adults over the age of 30 and 70 percent of adults over the age of 65 in the U.S. alone.
Taking a Look Back

Joel N. Janis, DDS

When I graduated from the University of the Pacific School of Dentistry in 1961 dentistry was quite different than it is today. We are very fortunate to have much improved technology, dental materials, and knowledge to provide preventive and restorative procedures for our patients that did not even seem possible in the 60’s.

In the 60’s and 70’s we were using “cold sterilization” instead of autoclaving hand-pieces and instruments. With the discovery of AIDS in the early 80’s we began to wear gloves, masks and eye protection which is now the profession’s standard of care. The “good old days” were actually not that good for our patients. We owe a lot to those in our profession that dared to think outside the box to conduct research and to pursue ideas to improve things.

I took the opportunity to attend continuing education courses on a regular basis and read several journals to keep up with the new advances. Staying on the cutting edge is absolutely essential for us to give our patients the best treatment that we can offer. If we try something on our own and it works, why not conduct some research to find out why it works and then share it with others by getting it published. This is a philosophy that I have personally followed over the years and will continue to do until I am forced to hang up my hand-piece for the last time. Research and pursuing excellence is definitely the way to go.

Roseman University Dental Student Chosen as Winner of National Research Event

Continued from the front page

Gross will also explore the possibility of working with researchers from Roseman’s pharmacy program to develop potential treatment options based on the research.

“My project was up against well-funded, well-known labs,” said Gross. “To know that we have done this with a new program, it feels good and helps legitimize Roseman University as a research institution.”

Gross received the award at a reception on November 7 at the Newseum in Washington, D.C. during the ADA’s annual session. As a first-place winner, he also got $750 and a travel package to present his research at the Hinman Dental Meeting in Atlanta, Ga. in March.

The SCRP began in 1959 at the centennial session of the American Dental Association (ADA) in New York City as a way to promote student research and encourage student participation in organized dentistry, and has remained a joint venture between the ADA and DENTSPLY International since that time. Initially it was a simple table clinic presentation where students could demonstrate new techniques, but today it has expanded to include more than 7,000 students participating in clinical and basic science research.

Students who present research at the national level become members of SCADA, which means they may be eligible for fellowship funding that will help support their graduate education. More information about SCADA is available at www.scadaresearch.org.
Roseman University to hold Inaugural Roseman National Student Research Group Regional Conference

Stefanie Wang, PhD (‘17)

The first annual Roseman NSRG Regional Conference will be proudly hosted by the National Student Research Group (NSRG) on February 19-20th 2016 at Roseman University College of Dental Medicine. It is a two-day event targeted at promoting student involvement in research at both the pre-doctoral and doctoral levels, and to enrich the student education through research.

The conference will consist of presentations by nationally acclaimed research speakers including Rella Christensen, PhD, RDH (Co-founder of CRA Foundation and the team leader of TRAC Research), and Neil Jessop (Vice President of Research & Development of Ultradent Products, Inc.). Dentists, dental students and pre-dental students will then have the option to choose among various workshops and CE courses offered.

ADEA Networking Reception Night will be hosted by ADEA Roseman Chapter on Friday evening, for all the speakers, faculties, residency program directors and attendees. Richard W. Valachovic, DMD, MPH (President and CEO of ADEA) will be the keynote speaker for the reception. This will serve as a great opportunity for networking and mentorship.

Our poster symposium, which will be held on Saturday, February 20th, is a great opportunity for students to present their research projects and gain valuable feedback from the audience. Presentations, workshops, and CE courses will continue on Saturday, and monetary awards will be given to the winners of the oral/poster presentations.

For up-to-date information about the Roseman NSRG Regional Conference, please visit us at: nsrgroseman.weebly.com/roseman-nsrg-regional-conference

If you are interested in presenting a poster or doing an oral presentation, please submit an abstract to: nsrgroseman.weebly.com/abstract-submission

The deadline for abstract submission is January 15th, 2016.

For further information or questions/concerns please email: nsrgroseman@gmail.com

We look forward to seeing you at the conference!

Sponsors:

Letter from the Editor

As the school year progresses, Roseman’s NSRG Chapter continues to bring in guest speakers to enlighten students with research occurring in the field of dentistry. The Roseman NSRG Regional Conference adds to this by bringing research from across the nation closer together. If you are interested in submitting an article for Continuum Vitae, or have any questions or comments, feel free to contact me at kyu@student.roseman.edu. Thank you for reading!

Sincerely,
Kevin Yu, BA, BS (‘17)
NSRG Roseman Chapter Editor-in-Chief
Getting to know the Students: Chaz Gibbons

Lee Mai, MS ('18)

“Having research under your belt shows that you are a critical thinker and learner, not just a memorizer of facts.”
- Chaz Gibbons, BS ('18)

Q1: What brought you to Roseman University, CODM?
I really wanted to go to Roseman over University of Utah. I was engaged by the block system and the non-ranking system, and I liked how there wasn’t a competitive atmosphere among the students. I was thrilled about it. I was excited about Friday testing to have weekends off to spend with family. It’s a local school for me and I’d have time to spend with my family.

Q2: How have your experiences at Roseman been so far?
I think my experiences at Roseman have been positive. I’ve learned a lot. I’ve had a lot of exposure to new people and new friends. I’ve had opportunities to get in on the ground floor of different programs. Since Roseman is a new school, it’s constantly changing and I get to be a part of those changes to better the school, whether it’s participating in surveys, interacting with the faculty, or being part of MBA and research programs. It’s also great interacting with classmates and creating a positive culture.

Q3: What are some challenges you face as a student dentist?
Time management is a challenge. Having four children and a wife at home who desperately love me and want me to be around and also doing research, dental school and MBA- this makes time management a top priority. I don’t have too much spare time for all the other fun activities I could be participating in during dental school. I feel a little bit more focused when I’m in class and working after hours.

Q4: Are you involved in any research? If so, what kind of research?
Yes. I’ve worked on a number of projects at BYU and Roseman. I currently work on a project looking at inflammation factors and pathways in diseased periodontal tissue and human gingival fibroblasts. This project was recently accepted to be presented at the AADR Conference this coming March.

Q5: How important is doing research to you and what are your opinions on the oral health research field?
I have a laboratory background; I worked in one for 4 years. I understand how testing of patients can be very personal, but it’s critical. As we do research we can develop technologies and understanding to allow for future testing that can be lifesaving and of critical importance. Oral health research is amazingly open for new R&D. I remember from our microbiology class, we only can grow about 50% of the bacteria that are in the mouth. That means we only know about 50% of the bacteria in the mouth, and there is so much still unknown. The better we understand what's known to us, the more we can focus on demystifying the unknown and move forward towards knowledge applicable to people and resolving their oral health issues.

Q6: Do you plan on pursuing a dental specialty? And is research important in doing so?
In pursuit of a dental specialty, research is one of the most important things you can add to your applications. I’ve heard from my colleagues and a variety of dentists that having background in research is one of the biggest factors residency programs look at. It is something that will set you apart. Having research under your belt shows that you are a critical thinker and learner, not just a memorizer of facts.

At this point, I am interested in endodontics. I know it is competitive but I feel that with my research background, I would have a better chance than without.

Q7: What do you do in your free time outside of school and the research lab?
When I have free time and I’m not spending it with family or friends, I like to read books. Cryptonomicon is the latest book I have read. It’s a pretty entertaining book on technology, information use, and privacy; it’s all about cryptography and encryption.

Q8: What is your spirit animal?
It would have to be the orca whale, AKA the killer whale. 😊