

Student Research Group

Stony Brook University School of Dental Medicine

Welcome to the first SRG Newsletter!

Research is not new to the dental school at Stony Brook with leading researchers like Dr. Lorne Golub, Dr. Israel Kleinberg, and Dr. Steven Engebretson. Dr. Golub is known for development of the first oral medication for periodontal disease, Periostat, Dr. Israel Kleinberg's several patents and inventions are well recognized by the dental and medical communities, and Dr. Engebretson has brought new attention to Stony Brook with his new five-year-study on diabetic patients. With all of these well-known and respected faculty, it is no surprise that Stony Brook dental students are eager to get involved with research. Over the past few years, the dental research by Stony Brook students has become recognized locally and nationally at meetings like Hinman Symposium, IADR/AADR, and the New York Academy of Dentistry.

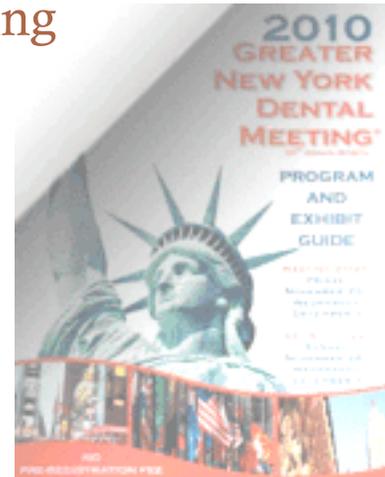
The Office of Research members responsible for organizing this student program are Dr. Christopher W. Cutler, Associate Dean for Research along with and Ms. Elizabeth Schroeder, Senior Staff Assistant. Dr. Steven Engebretson, Director of Patient Oriented Research Center and Ms. Ruth Tenzler, Clinical Research Coordinator are responsible for all clinical research activities.

This newsletter serves to recognize and highlight dental student research achievements. We applaud all of our students for their hard work and dedication to making Stony Brook a leading clinical and research institution.

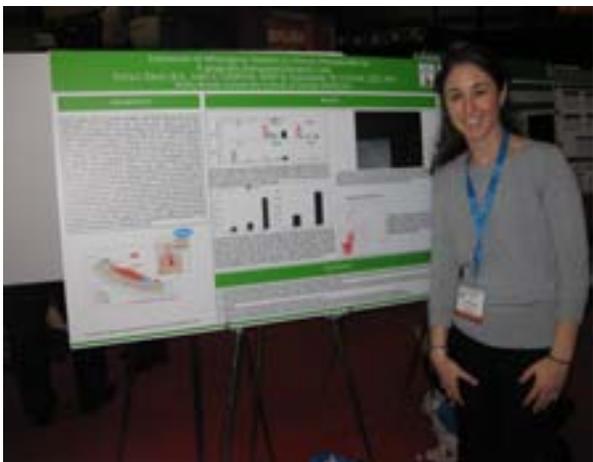
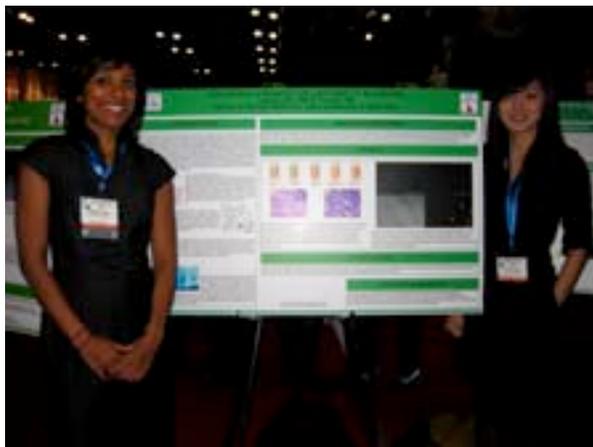


Stony Brook at Greater New York Meeting

The 2010 Greater New York Dental Meeting took place at the Javitz Convention Center in New York and four Stony Brook dental students participated in the Students' Table Demonstrations. 1st year Tina An and 2nd Year Lauren Jain presented their poster titled "Colocalization of Dendritic Cells with ICAM-2 in Periodontitis." 3rd Year student, Erica presented her work "Expression of Atherogenic Markers in Chronic Periodontitis by P. Gingivalis Stimulated Dendritic Cells." All three students' research was done under the mentoring of Dr. Christopher W. Cutler and Dr. Julio Carrion. 4th Year student, Leiby Tropper, presented his poster, "Regional Odontodysplasia Across the Midline" and he worked with Dr. George Bruder, Dr. Fred Ferguson, and Dr. Dawn Sosnick.



The Students' Table Demonstrations featured dental students, dental hygiene students, post-doctoral students and dentists from New York schools and practices. Students presented their research to visiting dentists, students, and guests in an informal question/answer session.



Clockwise from Left: Lauren Jain and Tina An, Leiby Tropper, Stony Brook dental students, Erica Ravin



Meet Stony Brook's First DDS/PhD Student

Elizabeth Scisci is the first student in the new Stony Brook School of Dental Medicine combined DDS/PhD Program directed by Dr. Christopher W. Cutler. She worked as an undergraduate in Dr. Cutler's laboratory and when she was accepted to the DDS program, she thought about having a career both in clinic and academics. The program will allow her to complete her DDS/PhD in seven years where most PhD degrees take at least five years to complete. As of now, she completed the first year of the DDS program and she will focus on the PhD portion for the next three years. Following her PhD defense, she will continue on in the DDS component for the fifth to seven years of the program and then will be granted both degrees at graduation. Currently, she is enrolled in a mixture of both dental and graduate coursework, but her primary concentration is on her lab work.

Her research focuses on pathogen trafficking potential of myeloid dendritic cells and how that may play a role in the pathophysiology of patients with chronic periodontitis as well as atherosclerosis. Liz is working with Dr. Julio Carrion on developing an *in vitro* model for his patients involved in clinical

trials and she hopes to eventually begin her own clinical study.

With only her second year in the dental school, Liz has already accomplished a lot with her research. She is currently working on a proposal for a new clinical study involving the periodontal status of an elderly population. She has already presented her research at the Leo Sreebny Research Symposium at Stony Brook and the Hinman Symposium in Memphis, Tn. This March she will be presenting a poster at the AADR meeting in San Francisco. Lastly, she is a co-author for a paper in the Journal of Bacteriology.

When asked what advice she has for other students possibly interested in this combined program she says, "Seven years seems like a very long time, but I can see that, even in only the second year, that I'm learning problem solving, analytical and critical thinking, time management, peer collaboration and other invaluable skills, as well as getting to travel and meet dental professionals and students from all over." She is fully committed to her research and academic studies and she is already on her way to making a name for herself in the research and academic communities.

Stony Brook Summer Research Selective

Stony Brook entering first year and second students participated in the Summer Research Program offered at the Dental School. The selective started in the summer of 2008 and since then over 20 students have been selected to work in a laboratory over the summer, perform research with a selected mentor, and present their work at a local or national research meeting. Students who were selected received a stipend and will present their work at the 2011 Leo Sreebny Student Research Symposium.

Summer 2010 Student Participants and their mentors:

Year 1: McKenzie Clemens, Nicole Napolitano: Dr. Ying Gu, Hee Gi (Tina) An: Dr. Julio Carrion

Year 2: Rose Katz: Dr. Dan Colosi, Alena Sergaeva: Dr. Lucille London, Elizabeth Scisci: Dr. Christopher W. Cutler, Robert Sonn: NIH Fellowship, Hao Wang: Dr. Dolores Cannella, Allyson Won: Dr. Alice Urbankova



First year students L-R: Tina An, Nicole Napolitano, McKenzie Clemens

Dental Students Accomplishments

- **Elizabeth Scisci publishes!** Zeituni, A.E., W. McCaig, E. Scisci, D.G. Thanassi, and C.W. Cutler. 2010 Native 67 kDa minor fimbriaw of *Porphyromonas gingivalis*: a novel glycoprotein and DC-SIGN- targeting motifs. *J Bacteriol*
- **Second Year students, Jason Cho and Robert Sonn:** Selected to do research at the National Institute of Dental and Craniofacial Research in the Summer 2010.
- **Fourth Year student, Adam Bear:** had a research poster at the IADR General Session in 2010 titled "Blood dendritic cells in cardiovascular disease risk." Adam was recently accepted into the residency program in the Department of Periodontology and Implant Dentistry at Stony Brook. He will continue to do research throughout his residency. Congratulations Adam!
- **Undergraduate students:** Shuang Guo and Sarah Ordonez are working with Dr. Dolores Cannella. Sonia Sood is working with Dr. Dan Colosi. Erik Roos and Eunbee Cho are doing research with Dr. Steven Engrebretson, and Philip Moussazadeh is working with Dr. Cutler's laboratory.

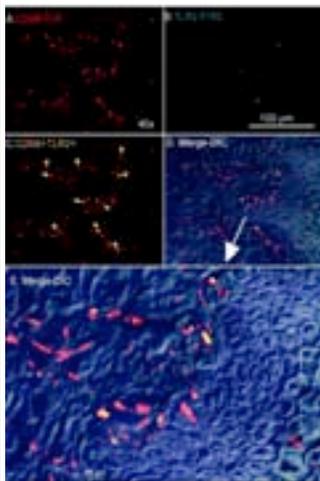
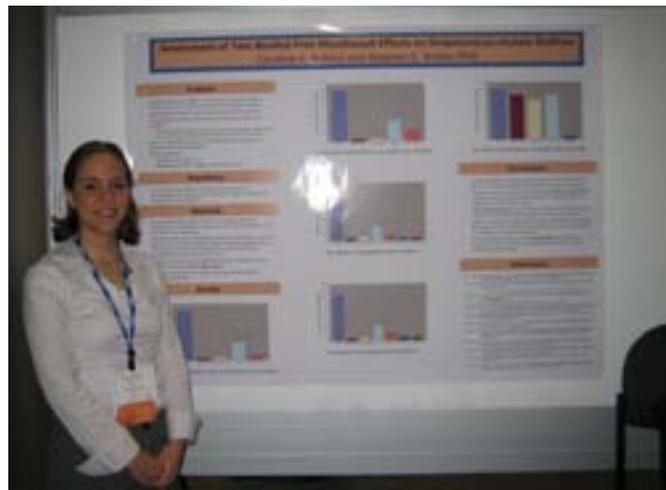


Adam Bear, SDM '11

Caroline Rubino Presents at 2010 ADA/DENTSPLY Student Clinician Research Program

Third year dental student, Caroline Rubino presented her research on the effects of alcohol free mouthwash on *Streptococcus mutans* biofilms at the 51st Annual ADA/DENTSPLY Student Clinician Program during the 2010 ADA Annual Session. Caroline worked under the guidance of Dr. Stephen Walker in the microbiology department at Stony Brook. Caroline presented her work at the 2010 Leo Sbrebny Student Research Symposium as a second year student and she was awarded first place, earning her a chance to represent Stony Brook at SCADA.

The convention took place in Orlando, Florida in October and collaborated more than 70 student clinicians representing more than 35 countries. Students presented their results of clinical, public health, behavioral and basic science research and competed for awards presented at the reception.



Upcoming events at Stony Brook University School of Dental Medicine

- Deans Seminar – March 2, 1011 – Dr. Pamela J. Hughes from the University of Minnesota School of Dentistry

- Student Research Day/Leo Sreebny Distinguished Lectureship – May 3, 2011

- [SRG Meeting: January 12, 2011](#)

- Check out additional research from Stony Brook faculty and students on the new Office of Research website:

<http://www.stonybrookmedicalcenter.org/dentalresearch>

Undergraduate Student Excels in Dental Research

Monica Chan is a Penn State University alumnus who has been actively involved in the Stony Brook community for the past two years. She is completing her post-baccalaureate education in preparation for next year's dental school curriculum. Her dental research experience spans over various areas of dentistry including dental education, fluoride usage, and oral hygiene in adolescents. She is most involved in the Case Presentation study, which examines the performance of dental students in various dimensions of their case studies. She currently works with Dr. Fred Ferguson in the department of Children's Dentistry.

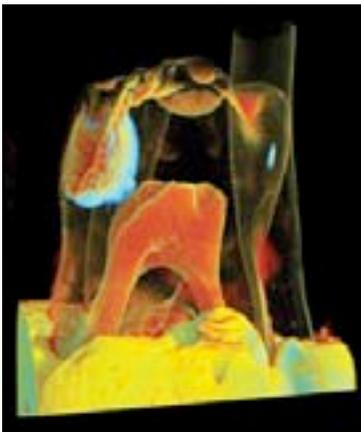


When Monica isn't working in a dental office, she enjoys spending time with her family and friends. Figure skating, traveling and horseback riding are among her favorite hobbies.

Monica is currently deciding on which dental school to attend for the Class of 2015.

To join the American Association for Dental Research, go to <http://www.aadronline.org>

Interested in dental research at Stony Brook, please contact Christopher.Cutler@stonybrook.edu



* There are two photos in the newsletter published in dental journals – on page 5 and page 6. If you can figure out where they are published, you can win a small prize from the Office of Research.

* Thank you to all research students for your hard work and contributing to this first issue of the Student Research Group Newsletter. If you are interested in writing an article for the next newsletter coming out in the Spring 2011, please contact EricaRavin@Gmail.com

Newsletter by Erica Ravin, SDM '12