



WDDS NEWSLETTER

March 2017

WASHTENAW DISTRICT DENTAL
SOCIETY

Volume 31, Issue 3

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Future Meeting Dates

March 5, 2017. "Nite at the Museum." Ann Arbor Hands on Museum. 5:30-7:30pm.

March 7, 2017. New Dentist Study Club. "Occlusion." Bob Stevenson DDS. Quarter Bistro. 6-8:30pm.

March 13, 2017. "MDA & MDA IFG more than you can imagine." Dr. Larry DeGroat. "UMSOD Update." Dr. Laurie McCauley. Weber's Inn. 6:15-8:40pm.

March 17, 2017. Legislative Breakfast. Weber's Inn. 8-10am.

April 1, 2017. GKAS Day. UMSOD, 2nd floor Blue Clinic. 8:30am-2pm.

April 26-29, 2017. MDA Annual Session. The Devos Center. Grand Rapids

May 3, 2017. New Dentist Study Club. "Dental Products." Sabiha Bunek DDS. Quarter Bistro, 6-8:30pm.

October 9, 2017. "Endo Update." Diwaker Kinra DDS, MS.

November 10, 2017. WDDS/LDDS/MDA all day meeting. Holiday Inn North. Plymouth Rd.

President's Farewell Letter

In what seems like the blink of an eye another year of WDDS meetings and events has passed. Our organization continues its strong membership participation in events scientific, philanthropic, and fun. We witnessed the continued success and Golden Apple recognition of our Sponsor-A-Student program. Our New DDS committee continued to open new avenues for participation among younger members. The newly formed Scholarship Committee created a wonderful way to support the future of organized dentistry. The Night Out event continued to deliver good food and comraderie. And the WDDS played a vital role in bringing the Chew On This and Geekiac exhibits to the Ann Arbor Hands on Museum to promote

dental awareness among the youth of the area. These accomplishments are shared amongst the board, committee members, and members at large and should be a tremendous source of pride.

It has been an honor and a pleasure to serve on the board these past few years. I would like to personally thank everyone who has played a part in these and the many other successes we have enjoyed during my tenure as president.

Yours,

Brian Meade, DDS, MS

WDDS Legislative Breakfast: March 17, 2017

Registration Deadline Approaching! The WDDS is hosting a Legislative Breakfast at Weber's Inn on Friday, March 17, 2017, from 8-10am. RSVP by March 9, 2017 to Dr. Paul C. Lopez, at paullopez@gmail.com

The Legislative Committee has contacted and invited local state representatives and senators to our annual legislative breakfast. This year, we should have once again SEVERAL state representatives, and we hope for a Senator as well. Please contact Dr. Lopez with further questions.

On Friday, March 17th WDDS members are encouraged to attend to share their insights on current and upcoming legislation. This is YOUR opportunity as a tripartite member to have face-to-face discussions with your state legislators, and possibly a US Senator, regarding political and legal issues/concerns impacting dentistry today as well as the future, all while enjoying a delicious breakfast. The topics for discussion will be open. If you have any specific topics you would like to see

addressed please bring them to Dr. Lopez's attention when you RSVP.

Lynn Aronoff, the MDA's grassroots adviser will be in attendance to facilitate discussion. The legislators are making a point to come speak with members about concerns regarding our profession. Therefore, we hope you will attend this worthwhile event. Kindly RSVP to Dr. Paul C Lopez by March 9, 2017. paullopez@gmail.com paullopez@gmail.com or (734) 678-7323 .

Regards,

2017 Legislative Committee,

Paul C. Lopez, Chair

Ken DillMike Martin

Kim Rice

Tylor Gauger (Student)

First-ever study shows e-cigarettes cause damage to gum tissue

The study, published in *Oncotarget*, was led by Irfan Rahman, Ph.D. professor of Environmental Medicine at the UR School of Medicine and Dentistry, and is the first scientific study to address e-cigarettes and their detrimental effect on oral health on cellular and molecular levels.

Electronic cigarettes continue to grow in popularity among younger adults and current and former smokers because they are often perceived as a healthier alternative to conventional cigarettes. Previously, scientists thought that the chemicals found in cigarette smoke were the culprits behind adverse health effects, but a growing body of scientific data, including this study, suggests otherwise.

"We showed that when the vapors from an e-cigarette are burned, it causes cells to release inflammatory proteins, which in turn aggravate stress within cells, resulting in damage that could lead to various oral diseases," explained Rahman, who last year published a study about the damaging effects of e-cigarette vapors and flavorings on lung cells and an earlier study on the pollution effects. "How much and how often someone is smoking e-cigarettes will determine the extent of damage to the gums and oral cavity."

The study, which exposed 3-D human, non-smoker gum tissue to the

vapors of e-cigarettes, also found that the flavoring chemicals play a role in damaging cells in the mouth.

"We learned that the flavorings-some more than others - made the damage to the cells even worse," added Fawad Javed, a post-doctoral resident at Eastman Institute for Oral Health, part of the UR Medical Center, who contributed to the study. "It's important to remember that e-cigarettes contain nicotine, which is known to contribute to gum disease."

Most e-cigarettes contain a battery, a heating device, and a cartridge to hold liquid, which typically contains nicotine, flavorings, and other chemicals. The battery-powered device heats the liquid in the cartridge into an aerosol that the user inhales.

"More research, including long term and comparative studies, are needed to better understand the health effects of e-cigarettes," added Rahman, who would like to see manufacturers disclose all the materials and chemicals used, so consumers can become more educated about potential dangers.

Journal Reference:

Isaac K. Sundar, Fawad Javed, Georgios E. Romanos, Irfan Rahman. E-cigarettes and flavorings induce inflammatory and pro-senescence responses in oral epithelial cells and periodontal fibroblasts. *Oncotarget*, 2016; DOI: [10.18632/oncotarget.12857](https://doi.org/10.18632/oncotarget.12857)

Smoking electronic cigarettes kills large number of mouth cells

Dr. Mahmoud Rouabhia and his team at Université Laval's Faculty of Dental Medicine came to this conclusion after exposing gingival epithelial cells to e-cigarette vapor. "Mouth epithelium is the body's first line of defense against microbial infection," Professor Rouabhia explains. "This epithelium protects us against several microorganisms living in our mouths."

To simulate what happens in a person's mouth while vaping, researchers placed epithelial cells in a small chamber containing a saliva-like liquid. Electronic cigarette vapor was pumped into the chamber at a rate of two five-second "inhalations" per minute for 15 minutes a day.

Observations under the microscope showed that the percentage of dead or dying cells, which is about 2% in unexposed cell cultures, rose to 18%, 40%, and 53% after 1, 2, and 3 days of exposure to e-cigarette vapor, respectively.

"Contrary to what one might think, e-cigarette vapor isn't just water," explains Dr. Rouabhia. "Although it doesn't contain tar compounds like regular cigarette smoke, it exposes mouth tissues and the respiratory tract to compounds produced by heating the vegetable glycerin, propylene

glycol, and nicotine aromas in e-cigarette liquid."

The cumulative effects of this cell damage have not yet been documented, but they are worrying, according to Dr. Rouabhia, who is also a member of the Oral Ecology Research Group (GREB) at Université Laval: "Damage to the defensive barrier in the mouth can increase the risk of infection, inflammation, and gum disease. Over the longer term, it may also increase the risk of cancer. This is what we will be investigating in the future."

Journal Reference:

Mahmoud Rouabhia, Hyun Jin Park, Abdelhabib Semlali, Andrew Zakrzewski, Witold Chmielewski, Jamila Chakir. E-Cigarette Vapor Induces an Apoptotic Response in Human Gingival Epithelial Cells Through the Caspase-3 Pathway. *Journal of Cellular Physiology*, 2016; DOI: [10.1002/jcp.25677](https://doi.org/10.1002/jcp.25677)

WDDS BUSINESS & GENERAL MEETING MONDAY MARCH 13, 2017**WEBER'S INN**

3050 JACKSON RD

ANN ARBOR, MI 48103

“MDA and MDA IFG: More than You Can Imagine”

MDA President Dr. Larry DeGroat

and

“An Update from the Dean on the University of Michigan School of Dentistry”

Dr. Laurie K. McCauley

6:15PM REGISTRATION/SOCIAL HOUR, 7:00PM DINNER/BUSINESS MEETING & PROGRAM

PLEASE REGISTER ONLINE THRU THE WDDS WEBSITE BY MARCH 1, & RESERVE YOUR GENERAL OR VEGETARIAN ENTRÉE.

-NO COST to WDDS ACTIVE & ASSOCIATE MEMBERS-**LIFE, RETIRED AND LIMITED TIME PRACTICE MEMBERS: \$35.00****GUEST FEE: \$45 for dental team members \$100 for non-member DDS's****CE CREDITS: 1.5****Speaker Bios:**

-Dr. Larry DeGroat is the president of the Michigan Dental Association, and practices dentistry in Bingham Farms, MI

-Laurie K. McCauley is the William K. and Mary Anne Najjar Professor and Dean of the School of Dentistry, and Professor in the Department of Pathology at the Medical School at the University of Michigan. Dr. McCauley earned her B.S., D.D.S., M.S. and Ph.D. (Veterinary Pathobiology) all from The Ohio State University. She has had several visiting scientist/professor appointments including the Institut de Genetique et de Biologie Moleculaire et Cellulaire, the École Normale Supérieure de Lyon, and the Center for Experimental Therapeutics and Reperfusion Injury, Brigham and Women's Hospital, Harvard Medical School. Dr. McCauley is a diplomate of the American Board of Periodontology, a fellow in the American Association for the Advancement of Science, a former council member of the American Society for Bone and Mineral Research (ASBMR), former Associate Editor of the Journal of Bone and Mineral Research (JBMR), a Fellow in the American College of Dentists and the International College of Dentists, and also served on the National Institutes of Health, National Advisory Dental & Craniofacial Research Council. For more than twenty years,

Dr. McCauley has led an active research program in hormonal controls of bone remodeling, parathyroid hormone anabolic actions in bone, and prostate cancer skeletal metastasis. Among her many recognitions are the inaugural Paula Stern Achievement award from the ASBMR, a distinguished scientist award from the International Association for Dental Research, The Ohio State College of Dentistry Distinguished Alumnus award, and membership in the National Academy of Medicine.

Course Overviews: Dr. DeGroat will present the MDA and MDA Insurance and Financial Groups variety of programs and services that are beyond your imagination. This presentation will highlight the many benefits focused on helping member dentists succeed as well as the hot topics that impact our profession.

Attendees will learn:

-average member savings through participation in MDA programs

-current legislative advocacy topics

-breakdown of MDA Insurance and MDA Services benefits

Dean McCauley will give an overview of the University of Michigan School of Dentistry including the following topics: 1) teaching and learning; 2) research and discovery; and 3) patient care. The objective of this presentation is to provide an update to the members of the Washtenaw District Dental Society. Participants will gain an understanding of the overall mission of the School of Dentistry with an emphasis on dental education, research foci, and recent accolades.

ADA C.E.R.P.[®] | Continuing Education
Recognition Program

The Washtenaw District Dental Society is an ADA CERP recognized provider. ADA CERP is a service of the American Dental Association to assist dental professionals in identifying quality providers of continuing dental education. ADA CERP does not approve or endorse individual courses or instructors, nor does it imply acceptance of credit hours by boards of dentistry. The Washtenaw District Dental Society designates this activity for 1 continuing education credit.

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Dreading your next trip to the Dentist?

Cameron Randall and Daniel McNeil report that dental care-related fear and anxiety is due, in part, to genetic influences inherited from parents. The study is one of the first to suggest that genetics, in addition to environmental factors, can be a basis for patients fearing dental treatment.

The study demonstrates that fear of pain, a problem related to but separate from dental fear, is heritable, too. The authors found that some of the genes that influence fear of pain likely also influence dental fear. This finding provides new information that clarifies how fear of pain may contribute to the development of dental fear.

Randall, a doctoral candidate in WVU's Department of Psychology, says the study provides a more comprehensive conceptualization of dental care-related fear, an understanding that may improve dental care in the future.

"The most important conclusion of this study is that our genes may predispose us to be more susceptible to developing dental fear, perhaps through pain-related variables," Randall said.

The study used a novel approach to study dental fear heritability in a large

participant sample, with family-based cohort data collected through the NIH-funded Center for Oral Health Research in Appalachia. The study was completed in collaboration with the Anxiety, Psychophysiology and Pain Research Laboratory in the Eberly College of Arts and Sciences, which McNeil directs.

Dental care-related fear is relatively common, with significant fears affecting 10 to 20 percent of U.S. adults. At high levels, it can result in delays or complete avoidance of dental treatment, which has consequences for individuals' oral and overall health. As a result, researchers are aiming to understand the causes and cures of this public health problem.

"This information, along with a well-documented understanding of the important role of prior experiences and environment in causing dental fear, may help us develop new ways to treat dental fear and phobia," Randall said.

Journal Reference:

Cameron L. Randall, John R. Shaffer, Daniel W. McNeil, Richard J. Crout, Robert J. Weyant, Mary L. Marazita. *Toward a genetic understanding of dental fear: evidence of heritability.* *Community Dentistry and Oral Epidemiology*, 2016; DOI: [10.1111/cdoe.12261](https://doi.org/10.1111/cdoe.12261)

GKAS

This year's Give Kids A Smile event will be Saturday, April 1 from 8:00am -12:00pm at the UM School of Dentistry. Registration will begin promptly at 8am. We'll be seeing the first 100 children ages 4-14 on a first-come, first-served basis. Parents or legal guardians of each child must be present. We will be providing dental cleanings, limited exams, x-rays, sealants, fillings, and extractions.

Pre-registration by email at umsodgkas@gmail.com or by phone at [734-430-9545](tel:734-430-9545)

