

LSU PERIODONTICS

LSU SCHOOL OF DENTISTRY DEPARTMENT OF PERIODONTICS

July 2021

Periodontics Department Continues Tradition of Academic Excellence.

Third Year Perio Residents win the first and third place awards on Research Day!

Ronald L Young, DMD won first place for his paper, "The Effect of Oil Pulling on Inflammatory Factors in Gingival Fibroblasts In vitro. See full abstract on page 3.
Thao Nguyen, DDS won third place for her paper, "Resonance Frequency Analysis as a Prognostic Determinant for Implant Outcomes." See full abstract on page 2.



Near 100 % Success Rate of LSU Residents on ABP Exam since 2004.

The LSU postgraduate program in periodontics has a very good track record in candidates passing the ABP board exam on their first try! 44 out of 45 graduating residents since 2004 have become diplomates of The ABP. We are very proud of this academic success !!

Congratulations to Dr. Pooja Maney.

Dr. Maney was promoted to full professor effective July 1, 2021. She joined LSU on September 1st 2009 and has been involved in teaching the residents since then. She took over as post grad program director in August 2018.

Dr. Maney said, "Teaching and running a program have their own unique challenges, but the most rewarding aspect to me is when I get to see the final results and that is well-trained, capable and caring residents who I know will do great work and make a positive impact on the lives of others!"

She is committed to lifelong learning to help her grow both professionally and personally. Dr. Maney is very grateful to the LSU School of Dentistry and the LSU Health Sciences Center for the great opportunities and wonderful experiences they have provided to her. The LSU Periodontics Department is fortunate to have such a dedicated faculty member on their team.

In This Issue

- Academic Excellence Continues
- Farewell Class of 2021
- Resident Research Abstracts & Faculty Publications
- Welcome new Residents
- Thank you to all Supporters
- Photos from 2021 Graduation Dinner



Farewell to the Class of 2021 (from left, with Dr. Jerry Evans; Dr. Maney on far right)

Dr. Ronald Young- will be an associate with Dr. Paul Gibbs in Charlotte, North Carolina. He looks forward to practicing there and to recreating in an area where he is close enough to enjoy both the mountains for hiking and the seashore.

Dr. Maggie Weber- is moving back close to her home town of Park Hills, KY which is just across the river from where she will practice in Cincinnati, Ohio. Maggie will be joining Shapiro and Baker, Periodontics and Dental Implants.

Dr. Thao Nguyen- is moving to Atlanta Georgia, where she can keep on cheering for The New Orleans Saints. She will join Eagle's Landing Periodontics, with owner Dr. Ragan Faler.

We wish our three 2021 graduates great success!

Resident Research Abstracts

Resonance Frequency Analysis as a Prognostic Determinant for Implant Outcomes

Phuong Thao T. Nguyen, DDS, Panos Dragonas, DDS, MS, Pooja Maney, BDS, MPH, PhD, Thomas E. Lallier, PhD

Background: As dental implant therapy becomes a more common treatment modality to replace single or multiple missing teeth, there is an increased interest in methods to predict implant survival and failures. Using the Resonance Frequency Analysis (RFA) device Osstell ISQ is one method to measure implant stability at any stage after implant placement.

Methods: This retrospective study aims to study the correlation of ISQ values, peri-implantitis and implant failures for implants placed at Louisiana State University Post-Graduate Periodontics clinic (LSU-PGPE).

Results: A chart review was performed for patients who had received an implant placement at LSU-PGPE from between January 1st, 2015 and December 31st, 2019 with ISQ values recorded at time of placement, uncover or treatment of peri-implantitis. A total of 903 implants on 454 patients were analyzed. Six implants (0.66%) in six patients (2 male and 4 female) were treated for peri-implantitis.. The ISQ at time of placement fell in the range of 55 to 82. Statistical analysis was performed between implant outcomes with seven parameters (gender, age, length, diameter, ISQ values, brand, and anatomic site).

Conclusion: Based on Fisher's exact test, only length of implants had a significant association with implant outcomes, whereas ISQ values did not show any significant association with implant complications.

Research Report continued on next page.

Resident Research Abstracts

Evaluation of Methods to Assess Physiologic Tremor – A Pilot Study

Margaret Weber, DMD, Pooja Maney BDS, MPH, PhD, Thomas E. Lallier PhD.

Background: Physiologic tremor is one of the most common involuntary movement disorders seen in clinical practice. In order for tremor to be accurately quantified, costly equipment is needed. However, one specific methodology has not been proposed as the gold standard. While much research has included the source of physiological tremor, the ability to decrease this physiological tremor has not been researched extensively. This study seeks to determine which method to assess physiologic tremor is more accurate. Increased hand tremor could potentially affect surgical outcomes. Therefore, this study also seeks to examine the effects of the practice of mindfulness on physiological tremor in periodontal surgical residents,

Methods: Six periodontal residents were recruited from the Louisiana State University School of Dentistry. Subjects were tested for physiological tremor before and after mindfulness training using various methodologies; these included a macroscopic laser technique, a macroscopic pen tracing technique, and a microscopic pen tracing technique. All measurements were then compared using a Student's t-test (with a significance of $P < 0.05$). Assays for physiological tremor were compared using Correlation Coefficient in Microsoft Excel.

Results: Improvement was seen from baseline to post-mindfulness in the macroscopic tracing without the use of a hand rest. In contrast, increase in movement was seen from baseline to post-mindfulness in the macroscopic tracing with the use of a hand rest. Overall, improvement was seen from baseline to post-mindfulness in the microscopic tracing with hand rest. In contrast, increased deviation from the guide line from baseline to post-mindfulness in the microscopic tracing without hand rest.

It was revealed that the laser measurements do not correlate with either tracing technique. However, the microscopic tracings with and without hand resting correlate well. The macroscopic tracings do not correlate well between resting and non-resting groups. Finally, macroscopic and microscopic tracing techniques correlated well with each other. The pen tracing may not be as reliable as the laser technique. The pen tracings do not show change over time as the laser does. The laser technique shows vibration frequency but the pen tracing does not; so, while the pen tracing may show accuracy of being able to follow a guide line, it may not illustrate tremor well.

Conclusions: Based on the findings of this study, it is difficult to reach a definitive conclusion on the most valid methodology for the detection of tremor. However, within the limitations of this study, it is believed that the laser technique is a more reliable technique for the monitoring of physiologic tremor. The laser technique was repeated 3 times for each participant both before and after mindfulness training; therefore, the reproducibility was confirmed. Additionally, the laser technique was able to illustrate change over time in physiologic tremor and vibration frequency, while the pen-tracings did not. In this current study, mindfulness training did not demonstrate an overall beneficial effect on the reduction of movement. Many factors could affect the tremor recordings, such as sample size, gender, dominant hand, stress/fatigue, experience using a microscope.

The Effect of Oil Pulling on Inflammatory Factors in Gingival Fibroblasts In vitro

Ronald L Young DMD, Pooja Maney BDS, MPH, Ph.D., Thomas E. Lallier Ph.D.

Introduction: The rise of health advice from online sources and social media have increased patients access to unconventional health practices from around the world. For oral diseases such as periodontitis, ancient methods of treatment such as oil pulling have been discussed for over 3000 years. Currently, there is a lack of well-studied information on the benefits of oil pulling; therefore, the purpose of this study is to examine the anti-inflammatory effects of oil pulling on gingival fibroblasts.

Methods: Fibroblasts were exposed to 100% coconut, sesame, mineral, and vegetable oils for times ranging from 3 minutes to 24 hours and incubated for 24 hours. Cell survival was assayed using calcein-acetyoxymethyl ester for 1 hour, rinsed, and read using a microplate reader. Fibroblasts exposed to 100% oils for 1 hour were analyzed for expression of inflammatory cytokine, matrix metalloproteinase, and collagen and bone forming transcripts via RT-PCR.

Results: After 3 minutes exposure, gingival fibroblasts displayed nearly 100% survival in coconut oil, compared to only 41% in sesame oil. Coconut oil exposure for 1 hour increased IL-8 expression, while exposure to mineral and vegetable oil increased both IL-6 and IL-8. Coconut oil (as well as mineral and vegetable oils) also decrease alkaline phosphatase and osteomodulin expression, while increasing MMP1 and 3 expression.

Conclusion: Sesame oil was significantly more cytotoxic than coconut oil. However, coconut oil had no specific beneficial effects on gingival transcript expression involved with inflammation, or bone and soft tissue formation.

Visit GeauxPerio

Visit www.Geaux-Perio.com. Our website was developed with the needs of the busy periodontist in mind. Our **Journal Club** features abstracts from current articles of interest pertaining to our specialty and are presented and uploaded on a regular basis. Check it out. Full access is available to alumni donors.

LSU PERIODONTICS NEWSLETTER is published by Steven Spindler, DDS and The LSU School of Dentistry Department of Periodontics.. Contact sspin1@lsuhsc.edu

Academic Year 2020-2021 Publications from LSUSD Periodontics

Our department has been hard at work in the research arena and has published the articles listed below during the 2020-2021 academic year. Authors currently with or have been associated LSU Perio are noted in **purple**. The provided links are active and will take you directly to the abstracts.

Published Articles:

Altabtbaei K, Maney P, Murthy Ganesan SM, Dabdoub SM, Nagaraja HN, Kumar PS. The Anna Karenina principle and the subgingival microbiome in periodontitis. *Microbiome*. 2021 Apr 30;9(1):97.

Arghami A, Simmons D, St. Germain J, Maney P. Immediate and Early Loading of Hydrothermally Treated, Hydroxyapatite-Coated Dental Implants: A 7-Year Prospective Randomized Clinical Study. Submitted to *International Journal of Implant Dentistry*. *Int J Implant Dent*. 2021 Mar 10;7(1):21.

Maney P, Mascarenhas F, Schiavo JH, Dragonas P. Risk Factors For Peri-Implantitis. *Current Oral Health Reports*. July 2020, 7(3): 234- 248 (Invited review)

Dragonas P, Foote M, Yu Q, Palaiologou AA, Maney P. One-year Implant Survival Following Lateral Window Sinus Augmentation Using Plasma Rich in Growth Factors (PRGF): A Retrospective Study. *Med Oral Patol Oral Cir Bucal* 2020 Mar 6. Online ahead of print.

Dragonas P, Prasad H, Yu Q, Mayer E, Fidel, P. Bone regeneration in maxillary sinus augmentation using Advanced-platelet rich fibrin (A-PRF™) and plasma rich in growth factors (PRGF®): A pilot randomized controlled trial (Accepted for publication in the *International Journal of Periodontics and Restorative Dentistry*)

Katsaros T, Dragonas P. The use of PRF for Hard and Soft tissue grafting. *Current Oral Health Reports* 7, 216-221(2020)

Katsaros T, Mayer E, Palaiologou AA, Miguel Romero-Bustillos M, Evans GH, Lallier TE, Maney P. Effect of Different Concentrations of Commercially Available Mouthwashes on Wound Healing Following Periodontal Surgery: A Randomized Controlled Clinical Trial. *Clin Oral Investig* 2020 Oct; 24(10):3587-3595

Ginaldo TP, Owens J, Andrieu SC, Mercante DE, Schiavo JH, Zorek JA. Assessing dental student perceptions after engaging in a longitudinal interprofessional education curriculum: A preliminary study. *Eur J Dent Educ*. 2020 Dec 2. doi: 10.1111/eje.12639. Epub ahead of print. PMID: 33269533.

Full-Time Faculty Committee Assignments

Jerry Evans, DDS– Professor. Department Chairman, and Chairman of the Appointments, Promotions, and Tenure Committee

Pooja Maney BDS, MPH, PhD – Professor. Dr. Maney was promoted to full professor this year in July. She is Director of Advanced Education Program in Periodontics. Within LSUSD, she currently serves on the Promotion & Tenure Committee, the Advanced Education Committee, the Academic Performance Advancement Committee for the Programs in Advanced Education (APAC-Adv. Ed), the Implant Committee, as a member of the LSUHSC-NO Institutional Review Board and as President Elect of Omicron Kappa Upsilon Honorary Society. Outside of LSU, she serves as Chair of the Scientific Affairs Committee of the Southwest Society of Periodontists and as a judge for the SWSP Prichard Prize Research Competition.

Jessica Owens, DMD- Associate Professor. At the LSU School of Dentistry, she is Director of Undergraduate Studies in Periodontics, President of the General Faculty Assembly and Director of the Predoctoral Objective Structured Clinical Examination. Outside of LSU she serves on The AAP Education Committee, The AAP In-service Committee and The ADA Dental Licensure OSCE as a Test Constructor for the Periodontal Section.

Panagiotis Dragonas, BDS- Assistant Professor and serves on The Committee on Dental Admissions and Strategic Plan Implementation Committee

David Simmons, DDS– Associate Professor, Director of the Implant Restorative Fellowship

Eswar Kandaswamy, BDS– Assistant Professor and secretary for The ADEA Section of Advanced and Graduate Education and is The AAP Foundation ITL scholar recipient for 2021.

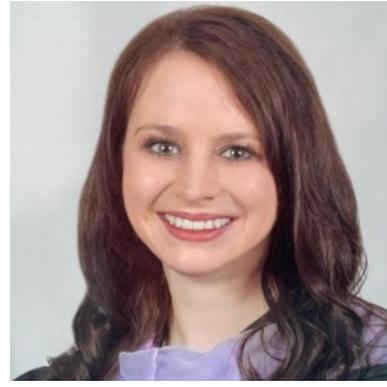
Join Us In Welcoming Our New: First Year Perio Residents



Dr. Trish Nguyen-Luu



Dr. Erin Schwoegl



Dr. Brook Thibodeaux

Dr. Trish Nguyen-Luu is from Mississauga, Canada. She attended college at the University of Western Ontario. She earned her DDS degree from the University of Detroit Mercy School of Dentistry. She enjoys painting snowboarding and home renovations. She is undecided as to her plans following the residency.

Dr. Erin Schwoegl is from Pittsburgh PA. She attended college at the Ohio State University in Columbus OH. She returned to Pittsburgh and earned her DMD. She enjoys hiking, running outside, and yoga. She hopes to enter private practice following completion of her residency in a still to be determined location.

Dr. Brook Thibodeaux is from Lafayette, LA. She attended college at LSU in Baton Rouge and earned her DDS degree from the LSU School of Dentistry. She enjoys music, listening to podcasts walking with her dogs and spending time with her family. She also is undecided as to where she may practice following the residency.

We Greatly Appreciate Your Support

Through the years, numerous alumni of our residency program have contributed to our department on a regular basis and at a high level. The LSU School of Dentistry deeply appreciates the steadfast support of our donors. Numerous individuals have stepped up with generous contributions.

Contributions to our LSU Health Foundation Perio Research and Education Fund go directly toward activities supporting our residents' education, such as attending The AAP and The Southwest Society of Periodontists Annual Meeting for third year students and funding their research. Contributions to The Perio Support Fund are unrestricted and help the Department Chairman take care of immediate needs for the whole department. We greatly appreciate all of our donors.

At the present time, we are aiming for a level in our Research and Education Fund where the State of Louisiana will provide a match, such that our fund becomes an endowed fund. At that time it will spin off regular proceeds to support resident education. We are only \$20K short of the match level due to your prior generous contributions. Please keep this goal in mind. As always, we deeply appreciate and need your continued support! To contribute, [click here](#).

We also wish to thank our **corporate sponsors** for their generous support of our Advanced Education in Periodontics program. Their contributions, whether it be materials and equipment, financial, or advanced clinical training, have enabled us to provide the highest level of education possible. Their commitment to our residents is greatly appreciated!



LOUISIANA SOCIETY OF PERIODONTISTS

LSU Perio Graduation Dinner, Galatoire's, June 18, 2021



From Left: Drs. Evans, Nguyen, Weber, Maney and Young



Drs. Al-Zaibak, Simmons and Nguyen



From Left: Dr. Langlois and Ha Nguyen



Dr. Thao Nguyen and Dr. Weber



Drs. Alyssa and Ron Young and Ron's father



Drs Maney & Evans, Madeleine & Brian Meissner, Drs Steve & Aymee Spindler



Drs. Kandaswamy, Simmons, McCabe, and Dragonas



Jeanne and Andrew St. Germaine



John and Liz Mayer