



New Members



All members and officers express a hearty welcome to each new member and look forward to your participation in the Society

Dr. Abdelghany	Alsaidi	Dearborn	MI
Dr. Taylor	Bahn	Cape Girardeau	MO
Dr. Sonia	Belani	Aurora	IL
Dr. Jeffrey	Burke	Mequan	WI
Dr. David	Darany	Dearborn	MI
Dr. Joseph	D'Sousa	Davenport	IA
Dr. Michael	Frantman	Davenport	IA
Dr. Harry	Haralampopoulos	Oak Lawn	IL
Dr. Michael	Hull	Rockford	IL
Dr. Syed	Khalid	Bloomfird Hills	MI
Dr. Bassam	Kinaia	Sterling Heights	MI
Dr. Sangyoon	Lee	Beachwood	OH
Dr. Fadi	Masoud	River Forest	IL
Dr. Griselle	Ortiz-Ramsey	Vandalia	OH
Dr. John	Schaefer	Belleville	IL
Dr. Hector	Rios	Ann Arbor	MI
Dr. Adrian	Rivas	Racine	WI
Dr. Jonathan	Ross	Mayfield Heights	OH
Dr. Matthew	Rowe	Ft. Wayne	IN
Dr. Fred	Sakamoto	Blacklick	OH
Dr. Gail	Vittori	Glen Ellyn	IL



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Midwest Society of Periodontology 2014-2015 Officers and Executive Committee

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Mayfield Heights, OH*

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Fenton, MI*

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Iowa City, IA*

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Aurora, IL*

President's Message:

After a long winter it is great to begin to see spring, renewal, and the promise of the MSP. The MSP is a unique organization with a rich history of leadership and a bright future. Our recent annual meeting in Chicago brought out not only multiple past and future MSP leaders, but also many young and committed leaders and educators at both the MSP and AAP level. Multiple former AAP presidents were in attendance offering their support for the future of the MSP and periodontics.

I want to give a special thanks to Dr. Beth Gryss for all her hard work and leadership this past year as MSP president, and to the MSP board for another productive year. Our annual 2014 meeting was a financial and attendance success due to the hard work of our program chair, Dr. Clark Barco, our executive director, Dr. Greg Fauth, and all our committee chairs. The Student Outreach, Graduate Research, and Lunch and Learn Programs continue to be successful with the help of chairpersons Dr. Paul Luepke, Dr. Constantin Farrah, and Drs. Amar Katranji and Megan Ratliff. Dr. Fauth has made the transition to his new position with the MSP smoothly, and has been a great help to me, the board, and all our committee chairs in keeping the MSP moving ahead to face new challenges for our organization.

At our recent meeting, the MSP board ambitiously agreed to create a policy manual to assist our executive director in more smoothly accomplishing routine matters affecting our organization. The board also agreed to establish a strategic planning committee to review our structure and vision for the future. As we move forward, these projects will review and establish a solid framework for continued success of the MSP, and its ongoing responsiveness to our members.

Our February 2014 program in Chicago gave MSP members an opportunity to evaluate laser technology and continue the search to determine how and where this new armamentarium "fits" in our treatment repertoire. In recent years it has become more evident how fast periodontics and dentistry changes. We as periodontists need to continually accept new challenges, and reinforce our place in the profession as the leaders in clinical decision making and in the treatment planning of the comprehensive case in a team environment. The MSP meeting in February 2015 will focus on a perio restorative theme to stress the importance of team management of cases and the special connection between the periodontist and the restorative dentist. At our limited attendance session on Friday February 27th Dr. Danny Melker will focus on surgical crown lengthening with biologic shaping, and the perio management of the restorative case in the natural dentition. In our general sessions, on Saturday February 28th Dr. Stephen Chu will present the restorative dentist's view of how the periodontist can assist in enhancing restorative outcomes, and on Sunday March 1st Dr. Cary Shapoff will discuss immediate implant provisionalization for the periodontist, and how to help our restorative colleagues achieve esthetic outcomes with dental implants. Thanks to program chair Dr. Constantin Farrah and executive director Dr. Greg Fauth for their help in building this practice enhancing program.

Our February 2015 meeting follow two special meetings this spring and summer by the AAP that will emphasize the team management concept. We designed the 2015 MSP meeting to reinforce our commitment to our restorative colleagues and how vital we are to their success. Considering the perio restorative focus of the 2015 MSP annual meeting next February, I'd like to encourage our members to take this opportunity to invite their key restorative colleagues to participate in these impactful presentations with us in a team atmosphere. It should provide a forum to enhance your relationship with your referral base by improving the joint understanding of the perio restorative connection that influences the health of our periodontal practices.

These meetings and conferences by the AAP and the MSP are aimed at demonstrating to our referral base our special ability to help them grow their practices with ours by establishing treatment plans that best benefit the patient over the long term. Take advantage of these opportunities to enhance our specialty, your practice, the treatment of our patients, and the practices of our referring doctors. . Mark your calendars to alert and invite your perio and restorative colleagues to attend the 2015 MSP meeting February 27th through March 1st, 2015 in Chicago.

I anticipate a bright future for periodontics and the MSP. I hope to see you at an upcoming meeting, and for sure at the MSP annual meeting from February 27th through March 1st 2015 in Chicago.



Dr. Paul Ricchetti, President

RESERVE THESE DATES!!
Midwest Society of
Periodontology
58th Annual Meeting
February 27 - March 1, 2015

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Award to the Past President



Dr. Paul Ricchetti (R), Mayfield Heights, OH, President Midwest Society of Periodontology presents Dr. Elizabeth Grys (L), Brookfield, IL Immediate Past President with a plaque of appreciation.

AAP Elections

District 4 needs to elect one Trustee this year for a three year term.

The nominees are Tim Walsh from Illinois, and Paul Ricchetti from Ohio.

AAP elections will be held in the month of June. Each member will receive a post card with log-in information to vote. Material will be sent in the mail to vote and will include instructions as well as the candidate's bio's. Candidate information is also listed on the AAP website, perio.org.

GENERAL MEETING SUPPORT

We want to express our thanks to the exhibitors who support the Midwest Society of Periodontology by participating in our annual meeting. We appreciate their support of our Society.

BioHorizons
 Biomet 3i
 Colgate Oral Pharmaceuticals
 ConeScan
 Community Tissue Services (CTS)
 Dentium USA
 Dentsply Implants, North America
 DoWell Dental Products
 Geistlich
 G. Hartzell & Son
 Glustitch, Inc.
 Hiossen, Inc.
 HuberMed, Inc.
 Keystone Dental, Inc
 Medtronic
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 Millennium Dental Technologies
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 Osada USA
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 Predictable Surgical Technologies (PST)
 Salvin Dental Specialties, Inc.
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 Treloar & Heisel, Inc.
 Zimmer Dental

THANK YOU!

RESERVE THESE DATES!!
 Midwest Society of
 Periodontology
 58th Annual Meeting
 February 27 – March 1, 2015

Graduate Student Research Forum

At the February meeting of the MSP in Chicago the finalists of the Graduate Student Research Forum were all presented plaques and \$500 checks at the awards ceremony and reception. The Research Forum and awards ceremony are supported by a generous grant from Sunstar Americas, Inc. Dr. Constantin Farah, Chairperson of the Research Forum stands next to Dr. Ebone' Jordan, First Place Award Recipient. On the far left is Mark Carlascio from Sunstar Americas who stands next to Dr. Harrison Mackler. Dr. Shahir Abdul-Malek is pictured to the left of Dr. Farah



Midwest Society of Periodontology Graduate Student Research Forum

First Place

Dr. Ebone' Jordan - University of Michigan
 "The Influence of Vitamin D Satus on Periodontal Surgery Outcomes: A Prospective Analysis"

Honorable Mention

Dr. Harrison Mackler - University Of Illinois at Chicago
 "Adenosine Receptor Activation Inhibits Bone Loss in Periodontitis"

Dr. Shahir Abdel-Malek - Case Western Reserve University
 "Effect of Periodontal Disease on Kaposi's Sarcoma Virus Replication"

The Midwest Society Wishes to Acknowledge

Sunstar Americas, Inc. sponsored the Graduate Student Research Forum and the Awards Ceremony.

The Friday limited attendance program, "An Evolving Understanding to Regenerative Algorithms for Your Patients" featured Dr. Paul Rosen. Dr. Rosen was sponsored by **SUNSTAR AMERICAS, INC., GUIDOR DIVISION**

THANK YOU!

RESEARCH FORUM ABSTRACTS

THE INFLUENCE OF VITAMIN D STATUS ON PERIODONTAL SURGERY OUTCOMES: A PROSPECTIVE ANALYSIS

Ebone' Jordan, DDS
University of Michigan, Ann Arbor, MI

INTRODUCTION: Periodontal disease is characterized by alveolar bone loss induced by the host immune response to bacterial insult. Since vitamin D plays a crucial role in bone maintenance and immunity, there is biologic rationale to suggest that a vitamin D deficiency may negatively affect periodontal treatment outcomes. The purpose of this double-masked, prospective observational study was to evaluate the influence of vitamin D levels on outcomes of periodontal surgery.

METHODS: Sixty-five patients with localized or generalized chronic periodontal disease received periodontal flap surgery. Specifically, patients were included in the study if they were aged 30-85 years old and had at least one tooth with pocket probing depth (PPD) ≥ 6 mm and bleeding on probing (BOP); this site was later designated as the site for study analysis. Heavy smokers and patients with uncontrolled diabetes were excluded from participation. Immediately prior to surgery, serum 25-hydroxyvitamin D samples were obtained from the patient and sent for laboratory analysis. Additionally, gingival crevicular fluid (GCF) samples from the surgical (diseased) site and a contralateral healthy site were collected from each patient and analyzed by ELISA for CRP, IGF-1, IL-10, IL-1 β , IL-6, IL-6 sR, MCP-1, MER, OPG, SDF-1, SOST, TGF- β 1 and TRANCE. Clinical parameters including PPD, clinical attachment level (CAL), and BOP were recorded immediately prior to surgery (baseline), 3 months, 6 months and 12 months after periodontal surgery. Radiographic bone level was evaluated at baseline and at 12 months. After laboratory analysis of serum 25-hydroxyvitamin D, patients were divided into vitamin D deficient (DEF, <20 ng/mL) and vitamin D sufficient (SUF, ≥ 20 ng/mL) groups. Treatment outcomes between groups were compared using two-sample t-tests and generalized estimating equations.

RESULTS: A total of 45 patients returned for the 12-month follow up. Twelve patients were vitamin D deficient (26.7%) and 33 were vitamin D sufficient (73.3%) at baseline. No significant differences between the groups were noted at baseline for any parameter studied. For all time points, vitamin D deficient patients experienced significantly less probing depth reduction than vitamin D sufficient patients. At 3 months, vitamin D sufficient patients had a 3.1 \pm 1.0 mm PPD reduction compared to only 1.2 \pm 1.8mm observed in the deficient group ($p=0.01$). Similar results were noted at the 6-month time point, with an observed 3.0 \pm 1.3 mm vs 1.6 \pm 1.0 mm difference between groups ($p = 0.01$). This effect was sustained through 12 months (2.9 \pm 1.3mm vs 1.8 \pm 1.1mm, $p = 0.01$). No significant differences were noted for any other clinical parameter. When comparing healthy to diseased sites, IL-1 β ($p<0.01$), VEGF ($p<0.05$), and IL-6sR ($p<0.01$) were significantly higher in diseased sites. At the diseased sites, vitamin D deficient patients had significantly lower levels of the phagocytosis pathway biomarker MER ($p<0.05$).

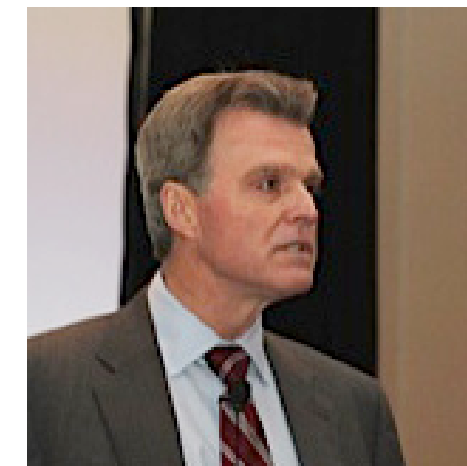
CONCLUSION: These results suggest that a deficient vitamin D level at the time of periodontal surgery negatively affects clinical outcomes for up to 1 year.



Dr. Constantin Farah was this year's chairperson of the Graduate Student Research Forum for the MSP.



Dr. Ray Yukna, presented New Directions in Periodontitis and Peri-implantitis Treatment with LANAP on Saturday morning.



Dr. Mark Reynolds, presented on "Periodontal Regeneration in the Era of Lasers, Proteins and Stem Cells" on Saturday afternoon.



Dr. Paul Luepke was the chairperson of the Graduate Program that discussed transitioning into private practice for newly graduating residents as well as for the established Periodontist.

RESEARCH FORUM ABSTRACTS

ADENOSINE RECEPTOR ACTIVATION INHIBITS BONE LOSS IN PERIODONTITIS

Harrison Mackler, DMD
University of Illinois at Chicago, Chicago, IL

Background: Over-activation of the Th1-type immune response can result in inflammatory periodontal bone resorption due production of receptor activator of NF- κ B ligand (RANKL), a potent inducer of osteoclastogenesis. Therapeutic approaches aimed to control this immune-mediated pathogenesis in periodontitis, however, are not available. Extracellular adenosine generated by FoxP3+ T-regulatory lymphocytes (Tregs) is implicated as a down-regulatory factor for inflammatory and immune responses. Given this, we evaluated the osteoimmunological responses of the adenosine receptor agonist 5'-(N-ethylcarboxamido)adenosine (NECA) using a periodontitis mouse model, which is triggered by a hyper-immune reaction to oral bacteria after systemic treatment with cross-reactive *Aggregatibacter actinomycetemcomitans* (Aa).

Methods: 8-week-old female mice were placed into three groups: 1) untreated negative controls (n=7), 2) positive controls receiving Aa treatment alone (n=7), and 3) Aa treatment + 0.01mg/kg/day systemic NECA (n=7). After 30 days, mice were sacrificed and horizontal alveolar bone loss was measured on defleshed maxillae and visualized with MicroCT. Gingival tissue inflammatory cytokine expression and serum antibody response to Aa were profiled using ELISA. Osteoclast response to NECA on alveolar bone was demonstrated with tartrate-resistant acid phosphatase staining.

Results: Administration of NECA suppressed all linear and volumetric bone loss induced by Aa-treatment (p<0.001). NECA treatment also reduced the elevated levels of TNF α , soluble RANKL, and IL-1 β found in Aa-only mice to the levels of negative controls (p<0.001). Aa treatment of mice significantly increased anti-Aa antibodies; however, NECA treatment suppressed the levels of anti-Aa IgG2b antibody (p<0.05), suggesting a down-modulation of Th1 response. Histologically, numbers of osteoclasts were reduced on the surface of alveolar bone in NECA-treated mice.

Conclusion: Systemic NECA administration resulted in suppression of immune-mediated periodontal bone destruction through suppression of Th1 responses, indicating that strategies aimed to increase extracellular adenosine may lead to the development of novel therapeutic regimens for periodontitis.

RESEARCH FORUM ABSTRACTS

EFFECT OF PERIODONTAL DISEASE ON KAPOSI'S SARCOMA VIRUS REPLICATION

Shahir Abdel-Malek, DDS
Case Western Reserve University, Cleveland, OH

Objective: Previous studies indicated an association between periodontal disease and herpesviral replication. We hypothesize that the metabolic by-products short chain fatty acids (SCFAs) from periodontal pathogens promote viral replication. The objectives of this study are: 1) measure and compare the levels of SCFAs from patients with chronic periodontitis (PD) and healthy controls; 2) examine if SCFAs indeed induce replication of Kaposi's sarcoma-associated herpesvirus (KSHV); and 3) investigate the mechanisms of SCFAs induction of KSHV replication.

Method: Saliva from PD and controls was collected and levels of SCFA were determined by Gas phase chromatography. KSHV-latently infected lymphoma cell lines and human oral epithelial cells (HOECs) were treated with SCFAs and/or saliva for induction of viral gene expression. Viral mRNAs and proteins were measured by real-time RT-PCR and Western blot analysis. Histone deacetylases (HDACs) and lysine methyltransferases, histone acetylation, and histone methylation were measured by western blot analysis.

Result: We found significantly 5, 10, and 3 times higher levels of butyric acid, isobutyric acid, and propionic acid from the saliva of PD than controls. The saliva from PD induces KSHV gene expression much more efficiently. SCFAs treatment of the KSHV-latently infected lymphoma cell lines and HOECs resulted in induction of viral mRNAs and protein expression in a dose-dependent and synergistic manner. Mechanistically, we found that SCFAs not only inhibited the activity of the class-1/2 HDACs but also down regulated expression of the class-3 HDAC SIRT3 and the histone methyltransferase EZH2, leading to increased levels of histone acetylation and decreased level of suppressive histone methylation at specific viral chromatin to induce viral gene expression.

Conclusion: High levels of SCFA in PD promote KSHV replication and might be risk factors for oral Kaposi's sarcoma (KS). SCFAs impact multiple components of the host epigenetic regulators to transactivate viral genome to promote viral replication.