

MASO Journal

Spring 2021

Middle Atlantic Society of Orthodontists



The Current Faces of Orthodontic Residencies

Albert Einstein Medical Center
Howard University
University of Maryland School of
Dentistry
University of Pennsylvania
University of Puerto Rico
Rutgers School of Dental Medicine
Temple University Kornberg
School of Dentistry
Washington Hospital Center



An aerial photograph of the Wyndham Grand Rio Mar Puerto Rico Golf & Beach Resort. The resort features a large, multi-story hotel building with a curved facade and numerous balconies. It is surrounded by lush tropical landscaping, including palm trees and manicured lawns. In the foreground, there are several swimming pools with blue water and lounge chairs. A sandy beach is visible on the right side of the image, meeting the ocean. The overall scene is bright and sunny, suggesting a warm, tropical environment.

Come Join Us At . . .

2021 MASO Annual Session

November 4-7, 2021

**Wyndham Grand Rio Mar Puerto Rico
Golf & Beach Resort**

On the Cover:

Top Left:
Albert Einstein Medical Center

Residents from left to right:

Back:

Gannon Van Allen
Mordy Fried
Michael Kotecki

Front Row:

Yee Seul Chun
Madeline Pitz
Justin Middleberg

Top Right:

Temple University School of Dentistry
Temple Class of 2021, 2022 and Staff

Bottom Right:

University of Puerto Rico

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Temple Orthodontics Annual Christmas Toy Drive

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MASO Journal

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RIO GRANDE, PUERTO RICO

The MASO Journal is the official publication of the Middle Atlantic Society of Orthodontists, 400 W. Wilson Bridge Rd, Ste 120, Worthington, OH 43085, phone 1.866.748.MASO(6276), e-mail MASO@AssnOffices.com, and web-site www.MASO.org.

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The Journal is published two times a year, Spring and Autumn. Reports, articles and ads are due June 15 and December 15. The opinions expressed in the Journal are those of the authors and do not necessarily reflect those of the Association, nor does the presence of an advertisement imply endorsement by the Association.

MISSION STATEMENT

The Middle Atlantic Society of Orthodontists, a constituent of the American Association of Orthodontists, shall promote ethical and quality orthodontic care while advocating and providing a voice for our members, components and educational institutions.



PRESIDENT'S MESSAGE

Dr. Francis Picon • francis.picon1@upr.edu

As you read these words most of us will probably have received the COVID-19 vaccine. Some may say, "My God, finally!" Nonetheless, let's not forget that many have been affected and millions have passed away; maybe a friend, a family member, or, unexpectedly, someone you loved. We have been reminded of the fragility of life and the importance of friends and colleagues.

We are also reminded that MASO membership affords the opportunity to develop an enriched professional life. During this period of masked social distancing, the deprivation of social and physical contact with colleagues who normally attend meetings, teach, and serve on boards and committees, has taken its toll. No matter what our purpose in life, no journey in life is interesting when traveled alone. As you read these words, please consider reaching out to friends and colleagues simply to "check in".

On a positive note, our constituency committed to developing a strategic plan which began in the pre-pandemic era and will continue post-pandemic. As president, I give you my complete assurance that we will extract what we have learned from this prolonged event and "convert a silk purse out of a sow's ear". We will use our newly found experience into digital media to strengthen CE programs, govern more efficiently, and become a more inclusive organization. The challenge for MASO leadership is to strike a balance between the pre- and post-pandemic models.

Finally, please remember that MASO is always here to help. Blessings to all our members in 2021; a family full of friends with a common goal which is to provide the best care for those we have been given the privilege to treat. I hope this message finds you well and I wish you a bright future as we go forward on our journey. ■



TRUSTEE'S REPORT

Dr. Steven Siegel • ssiegel@aao.org

This past year has been eventful and challenging. I am happy to see its end and am hopeful for a better new year ahead.

With vaccines being administered, perhaps we can soon regain a sense of normalcy, albeit perhaps with a new normal. The Spring shutdown was especially stressful and during that period I had an opportunity to speak with many of you to discuss your concerns. The AAO formed a Covid-19 Task Force, provided resources to our members, and facilitated communication with regulatory agencies. As orthodontists we have met the challenge and implemented effective PPE and airborne infection controls that have allowed us to continue to safely treat our patients.

Due to the Covid-19 pandemic it will not be possible to hold an in-person AAO Annual Session in April as planned. We had the opportunity to reschedule the meeting for the end of June. For that reason, the AAO Board of Trustees voted to move Annual Session to June and re-design the experience with everyone's unique needs in mind. Whether you prefer the convenience of your home or office or feel comfortable traveling to Boston for the in-person event, we hope you will join us at the AAO's inaugural hybrid Annual Session, June 25-27, 2021.

The 2021 AAO Winter Conference will be a virtual meeting and take place from February 12 to 14, 2021. The topic will be "AN IN-DEPTH LOOK AT CLEAR ALIGNER TREATMENT." I hope you will be able to join us at what is sure to be an informative and worthwhile meeting.

It has been a long road this past year, but the AAOPAC has been busy! Over the past few months, AAOPAC contributors have joined virtual meetings with over 50 members of Congress to discuss issues that are important to orthodontists as small business owners and health care providers. The AAOPAC has continued to advocate for small business relief for its members in the coronavirus relief packages and to foster relationships with agencies, including the CDC, OSHA, and HHS. We have also continued advocating for legislation related to tax relief, PPP loan forgiveness, student loan reform, and coverage for craniofacial and cleft lip/palate procedures.

As I wrote in a year-end AAOPAC solicitation, with a new incoming administration and the effect of Covid-19 on our practices, it is now more essential than ever that we advocate on behalf of our profession, our patients, and small businesses. As regulatory agencies evaluate new guidelines and regulations that impact our practice, we must have a voice in the discussion. There is an adage, "If you don't have a seat at the table, you're probably on the menu."

To learn more or to make your AAOPAC contribution, please visit the AAO's website or e-mail Gianna Nawrocki, AAOPAC Treasurer, at ghnawrocki@aaortho.org.

CONTINUED ON PAGE 3

A Summary of Actions Taken at the December Meeting of The Board of Trustees Business Development Task Force - Private Practice Accelerator:

The BOT passed a motion that the AAO allocate \$341,500 from the Innovation & Transformation Fund to develop the Private Practice Accelerator in partnership with the Wharton Business School.

Most AAO members do not receive formal business training. The AAO Practice Accelerator was conceptualized to provide the training, motivation, and support to help practice owners grow revenue and reduce cost to improve practice profitability. It is envisioned that the course will be an Asynchronous-Self Guided program that can be completed on a mobile device, tablet, or computer. It will be 8 weeks in length and no more than 3 hours weekly.

Inclusion & Engagement Committee (Submitted by the Special Committee of Women Orthodontists):

The BOT passed the following motion:

That the AAO President shall appoint a Task Force for Inclusion and Engagement.

That the Task Force shall be composed of 8 diverse AAO members, a staff liaison, and a Trustee liaison. Experience in leadership is preferred but not required, whether it has been within the AAO or outside the AAO. The President shall appoint the Chair of the Task Force to serve for a one-year term in the inaugural year, and thereafter will be elected by the Task Force. Each member will serve a two-year term with an option for renewal for up to three terms. The Task Force will meet via conference calls and communicate by electronic means.

That the Task Force has the following charges:

1. Work to support and inspire diverse groups within the AAO by helping to develop tools and pathways to leadership so that many groups are contributing as AAO Trustees, Delegates and Council Members.
2. Identify obstacles for involvement in the AAO and make recommendations to encourage changes in governance, communication and recruitment that will help the unique needs and issues that diverse orthodontists face and decrease the obstacles for AAO membership among all members, but especially diverse members.
3. Identify the unique needs and issues that face diverse orthodontists and implement plans to address these needs and issues thereby increasing the value of membership for all AAO members.

Statement from the BOT Regarding the AAO At-Large Trustees:

The BOT considered the current and future status of the At-Large Trustees (ALTs). All agree that after adding Drs. Alex Thomas and Dale Anne Featheringham last June they have made valuable contributions to the board's discussions, adding new and unique perspectives which were previously missing from the BOT. In addition, they have "lightened the load" by serving on several important committees and task forces. The board is in unanimous agreement that the addition of ALTs has been a resounding success.

Going forward, the board wants to ensure additional ALTs fulfill a desired need or missing attribute, as our current ALTs have done. As we look to update our Strategic Plan in the coming fiscal year, this will be a good time to take a step back and re-evaluate the board's current makeup and where we are lacking in either experience or diversity. In short, the BOT does not want to add another board member just to be adding another board member.

Therefore, the BOT will not be planning on adding an additional ALT in FY 21-22 but will review the ATL positions as a part of our Strategic Planning process.

At-large Trustee Position in 2021: The BOT passed a motion to postpone the search for a new At-large Trustee candidate. This will be discussed at the 2021 Post Annual Session BOT meeting.

Special Session of the House of Delegates: The BOT passed a motion that a Special Session of the House of Delegates should be scheduled in April 2021 as a fully virtual event. This will be in place of the HOD meeting that would normally have taken place during the April AAO Annual Session in Boston.

Member Facebook Groups: The BOT passed a motion that the AAO approve the use of Member Facebook groups (and AAO member Facebook Groups Policy and Procedure statements) to provide avenues for creating connections and facilitating the communication of ideas across AAO member peer groups.

OSO/DSO Task Force: The BOT passed a motion that the AAO establish an OSO (Orthodontic Service Organization)/DSO (Dental Service Organization) Task Force, appointed by the President, comprised of up to six OSO/DSO leaders, a BOT liaison, and staff liaison. Its purpose is to inform the AAO of matters important to OSO/DSO ownership and help shape solutions the AAO can provide to address them. The TF will report to the August 2021 BOT meeting.

Thank you for entrusting me to serve you as your Trustee. I look forward to the time we can once again meet face to face and share the camaraderie that we have experienced in the past. Please contact me with any questions, suggestions, or concerns. ■



EDITORIAL

Dr. Normand Boucher

nsjboucher@gmail.com

"My most fervent wish is that I will not be replaced until a new president is installed."- Supreme Court Justice Ruth Bader Ginsburg, statement dictated to Clara Spera, September 2020.

Women in Orthodontics

In 2020, the United States celebrated the centennial of the 19th Amendment to the Constitution which stipulates that "the right of citizens of the United States to vote shall not be denied or abridged by the United States or by any state on account of sex."

This centennial offers an unparalleled opportunity to evaluate the role of women in all aspect of contemporary society including our world of orthodontics.

To the casual observer the demographic picture of women in dentistry has changed dramatically over the last few years. In 2018-19, 50.5% of predoctoral students were female and 49.7% of graduates of the class of 2018 were female. In comparison, the percentage of graduates who were female was 44.3% in 2008, 38.4% in 1998, and 11.2% in 1978. The percentage of female dentists continues to rise and as of 2018 was 32%. Most importantly, 60% of all practicing dentists under 44 are women.

With this trend in mind, are women afforded the leadership roles that historically have been male dominated in orthodontics?

Why is this an issue? There are reported advantages of achieving gender balance in the organizational side of orthodontics. Boards and committees that are inclusive and balanced are more likely to be effective, better able to understand their stakeholders, be open to new ideas, and have broader experience. The desired outcome is enhanced decision-making benefiting our specialty.

A nuanced view of the gender factor for all volunteer positions is that they are all the result of appointments or elections. The recruitment process leading to appointments may be highly significant since there may be a stronger tendency of males to stand for election than females.

At the highest level of leadership, it is noteworthy that the "election process" resulted in the AAO Board of Trustees being 100% male. One has to think that the CEO of the AAO, Ms. Lynn Thomas Gordon, took note of this imbalance when assessing her working relationship with the BOT. To their credit the BOT and HOD are cognizant of this imbalance and have taken steps to correct it. The recent two at-large female appointments to the BOT is a step forward. Nevertheless, an 83% male and 17% female ratio remains problematic and further remediation could be considered. For the short to moderate term it might be that merit-based appointments of females to the BOT is the best solution. For the longer term, steps like the creation of the "Special Committee on Women Orthodontists (SCWO)" could tip the balance and suggests the AAO is committed to support and inspire women orthodontists to leadership positions.

There are currently 45 volunteer positions in MASO with 59% held by males and 41% held by females. It behooves the MASO leadership to continue on a path of appropriate gender representation. On a positive note our Trustee **Dr. Steve Siegel** has championed overall diversity as a MASO board member and continues to do so as a Trustee.

The rise in younger women in orthodontics is creating a robust pipeline of potential future volunteer leaders. As the MASO Board develops its strategic plan, the needs of the women orthodontist require special consideration. Although societal norms regarding parental responsibilities are changing, the balance of work and family remains a significant challenge for women. The Covid19 rapid shift to a virtual environment has been a game changer for many working parents. This emerging virtual model could be a glimpse of a future better suited for female professionals who are poised to eventually dominate our world of orthodontics. ■

Editorials represent the opinions of the author(s) and do not necessarily reflect the views of the Middle Atlantic Society of Orthodontists or the American Association of Orthodontists.



DR. ROBERT BINDER

For over fifty years **Dr. Robert Binder** dedicated his professional life to orthodontics and will be remembered affectionately as a highly respected faculty member, beloved teacher, and excellent clinician.

A graduate of the Harvard School of Dental Medicine, where he earned both his DMD and Orthodontic Degree, Robert Binder was Chair of the Department of Orthodontics at the then College of Medicine and Dentistry of NJ until 1980. He later on served as Acting and Interim Chair when the institution in critical times of change, called again on his loyal expertise and support.

Among his innumerable achievements, including the publication of over 50 scientific articles, teaching manuals and books, Robert also served as President of the New Jersey Society of Orthodontics and the Middle Atlantic Society of Orthodontics. He was a Diplomate of the American Board of Orthodontics, an examiner for the ABO Clinical examination, and a member of the AAO Council of Orthodontic Education in 2002.

In 2018, Rob was elected Director of the Harvard Society for the Advance of Orthodontics, and then received the

Distinguished Service Award from the Angle East component. A tireless and timeless worker, he only very recently retired from his faculty position at RSDM.

Margherita Santoro
Secretary/Treasurer
Angle East Orthodontic Society



Robert Binder's passing in an extremely great loss for our society, the Dental Profession, the specialty of Orthodontics and to me personally. In addition to being a great educator for over 50 years, Rob has been my dear friend for more than 35 years. He truly loved teaching and his students and residents. In addition, since I arrived at Rutgers 8 years ago, he has been a great asset and resource to me and the Department. He was a true visionary, always looking for ways to keep the Department and program up-to-date with science and technology. It's difficult to think of this program and Department without Rob. We at Rutgers wish to express our deepest condolences to his dear wife Ruthie and the entire Binder family.

Thomas J. Cangialosi, DDS
Professor and Chair
Department of Orthodontics
Rutgers University
School of Dental Medicine ■



DR. LUIS TORO ALBARRACIN

Dr. Luis Toro Albarracin, 89, passed away on December 29, 2020.

Dr. Toro led a life of exemplary volunteerism.

He graduated from the University of Maryland School of Dentistry in 1955, completed an Army GPR in El Paso, Texas, subsequently attended the Ohio State orthodontic residency program from 1959-1961, and then returned to Puerto Rico to establish his orthodontic practice.

As a volunteer, his leadership abilities were quickly recognized and by the end of that decade he was the President of the Puerto Rico College of Dental Surgeons.

In the 1970's Dr. Toro and Dr. Jaime De Jesus Abreu were the leaders who together with a handful of local orthodontists founded SEO (Sociedad de Especialistas en Ortodoncia de PR), the PR Society of Orthodontic Specialists. He remained an active participant of SEO's Board until 2018.

Dr. Toro was the MASO president in 1992 and was the recipient of the Devlin Award in 1996. He also served as MASO Delegate to the AAO HOD.

He officially retired from active practice on March 11, 2020 in large part due to the impact of the Covid19 pandemic.

Dr. Toro's legacy in orthodontics has been carried on by his son, Dr. Luis Toro Jr., who completed his orthodontic residency program at Georgetown University in 1986, and by his granddaughter Veronica who is a 2018 graduate of the University of Washington. ■



Devlin Award recipient 1996 Williamsburg, VA

TONGUE MUSCLE SHORTENING DIFFERENCES IN GLOSSECTOMY VERSUS NON-GLOSSECTOMY PATIENTS

Anh Dah
University of Maryland

Abstract: In cancers that affect the tongue, the most common treatment is glossectomy, a procedure that can have substantial effects on a patient's intelligibility. We are seeking to identify the effect of this resection on the use of four distinct muscles: genioglossus, transverse, verticalis, and superior longitudinal, which together comprise the bulk of the tongue. Past data has demonstrated that re-sectioning of the tongue results in the formation of fibrous scar tissue in the surgical area and that the tongue tends to deviate upon protrusion to the side of the tumor when compared to controls who have not undergone glossectomy. This increased muscle shortening may be part of a compensation mechanism that allows for a greater range of function following surgery even in the presence of scar tissue.

MRI data was used to study differences in tongue muscle shortening patterns during the speech task "a thing" between patients who have undergone glossectomies and controls who have not. The "th" sound is of particular interest as it is one of the few English sounds that require protrusion of the tongue past the teeth, followed by a rapid retraction. Additionally, the "th" sound is a continuous consonant and is able to be held for several seconds with even the smooth pronunciation for the duration of the phoneme. The tongue retraction that occurs for "ng" is also uniquely one of the more posterior consonant sounds in English. Together, these distinct characteristics help to define a unique ideal speech task to study muscle shortening patterns.

Speech data was collected from 2D tagged-MRI movies and reconstructed into 3D volumes at 26 timeframes. Tissue points for the genioglossus, transverse, verticalis, and superior longitudinal muscles were extracted from 3D supervolumes using ITK-SNAP, and tagged-MRI and custom MATLAB software were then used to track the selected tissue points over 26 time-frames during the speech task in order to analyze muscle movement. Point tracking data was then calculated in Exel in order to study how the muscles were used in glossectomies vs. controls to protract and retract the tongue during "th". Preliminary data suggests a tentative trend of asymmetric shortening between the left and right muscles for both controls and patients, and that more patients potentially display a shortening pattern with muscles located at the tip of the tongue. Quantitative analysis seems to indicate that muscle shortening is greater in the genioglossus anterior muscle for glossectomy patients, and greater in the genioglossus posterior muscle for the controls. Further analysis must be completed in order to determine the significance of the discrepancies and if they can potentially reveal differential compensation strategies for patients.

EVALUATING OROPHARYNGEAL AIRWAY VOLUME IN PATIENTS WITH CLASS II DENTAL RELATIONSHIPS WITH EXTRACTION VS NON-EXTRACTION ORTHODONTIC TREATMENT

Dr. Ariana Feizi
University of Maryland

Abstract: Orthodontic treatment in adolescents often involves extraction of four premolars to improve molar and canine relationships, or to alleviate dental crowding. In recent years, a strong interest in the role of orthodontics, specifically orthodontic treatment with extractions, influences development of obstructive sleep apnea. It has been proposed that extraction of premolars decreases the space available in the oral cavity for the tongue, and thus forces the tongue back into the oropharynx, decreasing airway volume and contributing to obstruction of the airway. With the increased availability of Cone Beam Computed Tomography (CBCT) in orthodontic practices, a 3-dimensional evaluation of airway is now possible to provide us accurate information regarding airway changes after orthodontic extractions are done. Pre-treatment CBCT images and post-treatment CBCT images of extraction patients and non-extraction patients that were obtained as a part of routine orthodontic treatment planning and evaluation were analyzed to measure any changes in airway volume as a result of the extractions in patients with differing craniofacial morphologies.

RELIABILITY AND REPEATABILITY OF A PROPOSED GOLD STANDARD FOR SEGMENTATION AND QUANTIFICATION OF THE NASAL CAVITY

Emily Funk

Introduction: There is increasing interest in the role of orthodontic treatment and its effect on the airway. Treatment modalities effect not only the maxilla and mandible, but also the surrounding pharyngeal and nasal airways. Currently, there is no standard method for measurement of the nasal cavity. Methods: A proposed gold standard for measurement of the nasal cavity has been developed with the following defining borders: (1) anteriorly by the opening of the nares, (2) posteriorly center of S-PNS line, (3) inferiorly by the ANS-PNS line, and (4) superiorly in alignment with the base of the skull excluding the ostia and paranasal sinuses including frontal, ethmoidal, sphenoidal, and occipital air cells. Results: The protocol has been demonstrated and refined using Dolphin 3D semi-automatic segmentation so that practitioners can digitally produce an estimated volume of the nasal cavity. Conclusion: A tentative protocol, relying on hard tissue landmarks, has been established for nasal cavity volume measurement, but inter-and intra-examiner reliability testing is needed to verify the dependability of the current protocol.

ESTABLISH THE IDEAL AP RELATIONSHIP OF THE MAXILLARY CENTRAL INCISORS TO THE FOREHEAD IN ASIAN MALES

Jessica Kocan
University of Maryland

Statement of problem: Evaluating the anteroposterior (AP) position of the jaws is an integral part of diagnosis and treatment planning for orthodontics and orthognathic surgery. Research has established that the relationship of the upper central incisor to the forehead can be used to determine the ideal AP position of the jaws for an individual patient. However, the optimal value to quantify this relationship has only been studied in Caucasian populations; therefore, this optimal position cannot be universally applied to all ethnicities. No research has been done to establish the ideal AP relationship of the maxillary central incisors to the forehead in Asian males.

Objective: To determine an optimal AP position of the maxillary central incisors and its relationship to the forehead in adult Asian males.

Materials and Methods: Smiling profile photographs of 65 adult, Asian males were obtained. Photographs were evaluated by orthodontists and laypersons, and divided into groups based on evaluator responses. Groups included: 1) control group with optimal incisor position according to orthodontists, 2) control group with optimal incisor position according to laypersons, 3) study group according to orthodontists, 4) study group according to laypersons. The AP position of the maxillary central incisors and the forehead inclination were measured relative to glabella vertical. The differences in maxillary central incisor AP position and forehead inclination between the study and control groups will be examined. Linear regression will be used to quantify the relationship between maxillary incisor position and forehead inclination for all groups.

Results: TBD. We hypothesize that: 1) The relationship of the upper central incisor to the forehead can be used to determine the ideal antero-posterior position of the jaws for Asian males; 2) This optimal value will differ from the established optimal value for Caucasians; 3) The greater the forehead inclination, the more anterior the optimal maxillary incisor position.

Conclusion: TBD

TRANSCRIPTOMIC ANALYSIS OF ESRP1/SOX2 DOUBLE TRANSGENIC MOUSE EMBRYONIC FACIAL PROMINENCES IN SEARCH OF ESRP1 TARGETS RESPONSIBLE FOR CL/P PATHOGENESIS

Grace Lee, DDS

Abstract: Orofacial clefting disorders present a significant challenge for orthodontists seeking to achieve optimal occlusion. They also greatly affect the patient's quality of life

as several phases of orthodontic treatment are often needed, as combined with a series of reconstructive surgeries. An ideal treatment strategy of cleft lip and/or palate (CL/P) would be one that aims to intercept the disease process in utero, allowing restoration of normal development. Mice with knockout of the Epithelial splicing regulatory protein 1 (*Esrp1*^{-/-}) display 100% penetrant bilateral CL/P and are an invaluable animal model to study the complex molecular/cellular etiology of CL/P. Preliminary data showed that cleft lip in *Esrp1*^{-/-} embryos is rescued in the environment of *Sox2* haploinsufficiency in a double transgenic mouse (*Esrp1*^{-/-}; *Sox2*^{+/-}). This rescue model provides a unique opportunity for narrowing down the field of *Esrp1* targets that are critical in the upper lip formation. My hypothesis is that of the genes which expression was altered in *Esrp1*^{-/-} mice, the genes showing reversal to Wild Type expression level or splicing pattern by *Sox2*^{+/-} are involved in the CL/P pathogenesis. To test the hypothesis stated above, I will compare RNA sequencing analysis of the ectoderm and the mesenchyme of facial prominences from *Esrp1*^{-/-}, WT and Rescued (*Esrp1*^{-/-}; *Sox2*^{+/-}) mouse embryos. Outcomes of this study will establish the basis for future investigation into individual candidate genes/RNAs for their roles in CL/P formation, as well as their potentials as therapeutic targets.

TRANSVERSE MANDIBULAR BODY GROWTH IN UNTREATED CHILDREN: A LONGITUDINAL CBCT STUDY

Leanne Lin

Introduction: Classical studies have established mandibular growth patterns using two-dimensional imaging and dental casts. More recent literature has shown the superior accuracy and precision of cone-beam computed tomography (CBCT). While the anterior and posterior areas of the mandible are frequently examined, there is a lack of research on the mandibular body. Thus, the objective of this retrospective study was to assess mandibular body transverse growth patterns using parameters not possible with prior technology.

Methods: Twenty-seven untreated children with preexisting CBCTs at two timepoints (mean age 9.0 years at T1, 11.3 years at T2) were analyzed using Dolphin 3D Imaging (version 11.95). Mandibles were segmented from full-volume CBCTs and superimposed on the mandibular body. Measurements were taken on axial sections parallel to the mandibular border at the midpoint between the left mental foramen and mandibular border.

Results: Anteriorly, basal bone widths increased more at the levels of the first premolars (mean 0.8 mm/year) and first molars (mean 1.5 mm/year) than at the level of the second premolars (mean 0.3 mm/year). Posteriorly, the left ramus border–lingual symphysis–right ramus border angle

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RESEARCH ABSTRACTS

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decreased (mean $-0.2^\circ/\text{year}$), while the angle with the same vertex and endpoints on the buccal surface at the level of the second molars increased (mean $0.9^\circ/\text{year}$).

Conclusions: It was concluded that with growth (1) the mandibular body widens in an uneven manner, and (2) the inferior part of the ramus changes direction mesiobuccally and distolingually. Overall, the above previously unreported trends contribute to the existing knowledge on growth and development.

MANDIBULAR CHANGES ASSOCIATED WITH RAPID MAXILLARY EXPANSION: A RETROSPECTIVE CBCT STUDY

Justin Orr

Introduction: Rapid maxillary expansion is a common treatment used by orthodontists to correct transverse discrepancies between the maxilla and mandible. Currently there is little consensus regarding the ability of the mandibular dentoalveolar complex to spontaneously upright in response to maxillary expansion. The aim of this study was to evaluate the effects of maxillary expansion on the mandibular first molars and the alveolar and basal bone surrounding these areas.

Methods: The sample was divided into three groups: control group with no upper or lower treatment (23 total patients, 14F and 9M); expansion with lip bumper (15 total patients); and expansion with no lower treatment. Thirteen dentoalveolar measurements were taken on all patients at T1 and T2, and the changes compared between them.

Results: The experimental group was currently not available. When comparing the negative control group with no treatment to the positive control group with expansion and lip bumper, intermandibular width measured at the lingual cortex, alveolar bone angulation, first molar inclination, and intermolar width were all significantly greater in the lip bumper group. Changes in the basal bone and intermandibular widths at the buccal cortex were similar between the groups.

Conclusions: Alveolar and dental changes occurred more significantly in the positive control group compared to natural growth in the negative control group. It is expected that experimental group changes (expansion with no lower treatment) will fall between the positive and negative control group values.

THE RELATION BETWEEN THE CHANGES OF FRONTAL SINUS VOLUME AND THE VERTICAL, ANTERIOR POSTERIOR SKELETAL GROWTH: LONGITUDINAL CBCT STUDY

Mohamad Beshar Osman

Introduction: Frontal sinus has been a point of interest in orthodontics for many years. The possible use of the frontal sinus in diagnosis and treatment planning has been addressed in many studies. All of these studies have been measuring frontal sinus on 2D images. The aim of our study is to conduct a longitudinal evaluation of the frontal sinus volume growth in untreated children using CBCT imaging, and correlate the change in the frontal sinus volume with the vertical, anterior, and posterior skeletal growth pattern. The change of Nasion will be evaluated in three dimensions.

Material and methods: The sample consists of 56 CBCT images of 28 children (16 females, 12 males), with no history of orthodontic treatment, T1 mean age (9.0 y) ;T2 mean age (11.3y). The Volume of the frontal sinus airway was measured using the Dolphin Imaging 3D software (V11. 9). Semi-Automatic Segmentation was used to get 3D construction of the frontal sinus airway volume. Lateral ceph was extracted from the CBCT and measurements (SNA, SNB, ANB, Wits, FMA, SN- GoGN, gonial angle, Ant cranial base, effective Mx length, effective Md length, OJ, OB, SN-FH) were done on T1 and T2.

Preliminary results: Growth has a significant effect on frontal sinus volume ($P < 0.05$). The frontal sinus is larger in CIII Patients compared to CII and CI. There was a negative correlation between frontal sinus volume and vertical growth.

Preliminary conclusion: Males had a larger frontal sinus volume than females. There is a positive correlation between mandibular length (Co-Gn) and the frontal sinus volume. No significant correlation between FMA and frontal sinus volume was observed.

SECONDARY ALVEOLAR BONE GRAFTING TIMING COMPARISON IN NON-SYNDROMIC COMPLETE CLEFT LIP AND PALATE: A SINGLE CENTER VOLUMETRIC AND LINEAR MEASUREMENT CBCT STUDY

Puttipong Sripinun, DDS

Introduction: Secondary alveolar bone grafting (SABG) plays an integral part in the cleft lip and palate surgical treatment series as a standard of care among most cleft centers across the United States; however, this procedure's approaches are not standardized, including the precise timing to operate. Given the annotation of contradicting timepoints for this therapeutic procedure, further study is needed for a definitive conclusion to compare outcomes of early versus intermediate SABG.

Objective: The overall objective of our study is to advance our understanding in choosing an appropriate timeframe of the secondary alveolar bone graft in non-syndromic cleft lip and cleft palate that will provide the most favorable prognosis. *Aim 1:* To compare the success of alveolar bone graft between early (4 – 7 years old) and intermediate (8 – 12 years old) secondary alveolar bone graft.

Aim 2: To examine the relationship of an appropriate dental age criteria for the timing of secondary alveolar bone graft in unilateral complete cleft lip and palate.

Study Design: This is a single-center retrospective volumetric and linear measurement CBCT study in non-syndromic cleft lip and cleft palate patients regarding secondary alveolar bone grafting outcome. Both volumetric and linear measurements will be compared between two-time points: before bone grafting (T1) and at least six months postoperatively (T2) using Mimics Materialise software. The data will be quantified using Mimics software, followed by a paired *t*-test to compare T1 and T2 changes and by an independent sample *t*-test to compare differences between Group I and Group II for any statistical significance. Four weeks later 50% of the sample will be randomly selected and measurements will be repeated for intraclass correlation coefficient (ICC) by the same investigator. (*P*-value < 0.05)

Clinical Relevance and Overall Impact: With this study's outcome, we hope to establish a standardized timepoint of SABG that will provide more substantial graft success in the cleft site, which ultimately reduces the feasibility of surgical complications and improves their quality of life. Moreover, this retrospective study will lay a foundation for a follow-up prospective randomized study that will confirm this dogma and eventually become the standardized institutional treatment protocol for all cleft centers worldwide.

THE RELATIONSHIP OF POSTERIOR TEETH TO THE MAXILLARY SINUS IN DIFFERENT SKELETAL PATTERNS

Abby Syverson

Introduction: The maxillary sinus is an important anatomical structure with relevance to orthodontics because of its proximity to posterior teeth. The location and size of the sinus as it relates to the teeth is an important consideration for tooth movement, particularly intrusion, and placement of TADs. Previous studies have found there may be a correlation between vertical and sagittal skeletal patterns and size of the sinus. This study aims to clarify this relationship.

Methods: CBCTs of skeletal Class II Asian and Caucasian females were classified into high and low angle skeletal pattern groups. The volumetric size, the height, width, and length of the sinus was computed. The distance from the posterior root apices to the sinus floor was recorded and the roots were classified based on their relationship to the sinus. The alveolar width and height was also measured. Results: Preliminary data suggests that high angle female patients have a larger sinus size and greater root protrusion into the sinus.

Conclusion: The placement of TADs in high angle patients with the goal of intruding posterior teeth may be anatomically limited due to the proximity of the sinus. Further research is warranted to determine the clinical implications and complications of intruding teeth into the cortical plate of the sinus floor.

VOLUMETRIC CHANGES IN THE NASAL CAVITY AND ITS IMPACT ON FUNCTION AND GROWTH IN CHILDREN: A LONGITUDINAL CBCT STUDY

Joyce Yin

Introduction: The nasal airway is a region of interest in the field of Orthodontics and Dentofacial Orthopedics due to the impact respiration has on determining the posture of the jaws and tongue. Although an orthodontic intervention such as palatal expansion has been shown to increase the dimension of the nasal cavity, it is unclear as to how much this is related to growth. Not much is known about the relationship of the nasal cavity and its correlation with facial skeletal growth in the sagittal and vertical dimensions. Although there are current studies documenting nasal cavity changes with growth, many lacked consistencies in the use of hard tissue landmarks and provided no information indicating previous treatment. The goal of this study is to establish a Gold Standard method where measurements are made with hard tissue landmarks in 3D. This study will provide additional diagnostic information to predict nasal cavity development patterns in growing individuals.

Objectives: To evaluate the nasal cavity volumetric changes in untreated growing children and establish its correlation to skeletal sagittal and vertical dimensions using established hard tissue landmarks in cone beam computer tomography (CBCT).

Materials and Methods: A total of 28 patients (16 girls, 12 boys; 9 ± 1.6 at T1, 11.3 ± 1.8 at T2) had a CBCT taken at T1 and T2 prior to orthodontic treatment. The time interval between T1 and T2 is 2.3 ± 1.2 years. Hard tissue nasal landmarks were measured in the sagittal, transverse, and coronal planes of space on CBCT scans. Statistical analyses included paired *t*-tests.

Study Design: This is a retrospective, longitudinal volumetric CBCT study in untreated growing children. All CBCTs were standardized and oriented in Dolphin Imaging (version 11.). The three-dimensional standardization for segmentation and quantification of the nasal cavity was completed from the frontal and lateral views. The hard tissue nasal cavity landmarks in the proposed Gold Standard method have four borders. The anterior border is the nares, the superior border is the lower border of the ostia and paranasal sinuses, the posterior border is a line connecting sella (S) to posterior nasal spine (PNS), and the inferior border is the anterior nasal spine (ANS) to posterior nasal spine (PNS). The sample will be measured four weeks apart for intraclass correlation coefficient. (*P*-value < 0.05)

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UNIVERSITY OF PUERTO RICO:

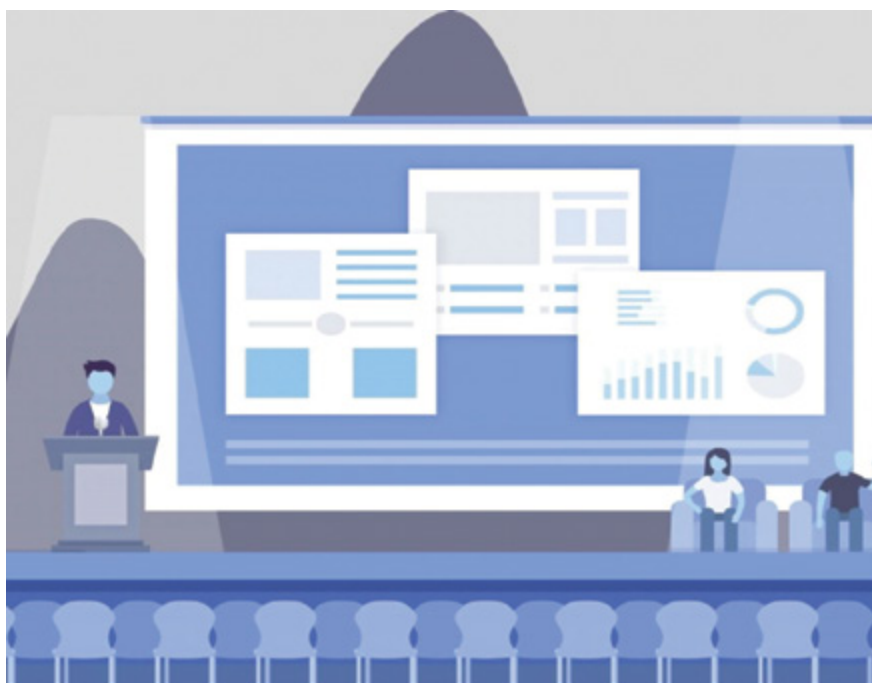
Dr. Carina Perez-Cisneros

Comparisons of the effects of microperforations and corticotomy on patients with extractions of maxillary first premolars

Dr. Paula Ortiz Bachier

Predicted versus actual Invisalign treatment time: a stage determined retrospective study ■

MEETINGS



2021 MASO CE
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Registration is online at www.MASO.org. Six (6) CE Credits are available for the workshop. Register by March 8 for the early bird rate.



Gary P. Brigham, DDS, MSD

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CASE REPORT

LOWER INCISOR EXTRACTION TREATMENT AND PERIODONTAL CONSIDERATIONS IN AN ADULT WITH NORMODIVERGENT, MILD SKELETAL CLASS III PATTERN AND A HISTORY OF PERIODONTAL DISEASE: A CASE REPORT

Mohammad Qali, Joseph Formosa, Nipul Tanna, Normand Boucher and Eric Howard
University of Pennsylvania

INTRODUCTION: Adult orthodontic cases require a multidisciplinary approach and attention to periodontal boundaries to avoid increase in clinical attachment loss, loss of supporting alveolar bone and avoid gingival recession. In select cases a lower incisor can be extracted in order to alleviate lower crowding and it is critical to evaluate the buccal alveolar plate to determine if alveolar ridge preservation with particulate grafting material is required. A buccal plate with thickness of less than 1 mm often requires grafting in order to preserve the integrity of the socket and avoid loss of the horizontal dimension of the alveolar ridge. Choice of particulate grafting materials depends on a number of factors; the future plan for the extraction site, (i) dental implant placement, pontic site development or (ii) orthodontic space closure. When orthodontic space closure is planned, allograft materials are often preferred over xenograft materials for their favourable resorption rate. Furthermore, orthodontic therapy and activation time following tooth extraction also needs to be considered. In most cases, waiting of up to two weeks following extraction should be allowed to ensure that healing is within normal limits.

Patients with a history of previously treated and stable periodontal disease must be kept on a strict 3-month maintenance recall to ensure control of inflammation and to avoid additional bone destruction around the teeth. Soft tissues must also be evaluated and include assessment of keratinized tissue and frenum attachments that can contribute to gingival recessions. This case will review the management of patient with a history of periodontal disease, normodivergent and mild skeletal Class III pattern, with a lower incisor extraction.

Diagnosis and Etiology: A 40-year old female presented with a chief complaint of crowded and protruded lower incisors. In the frontal view the patient has equal facial thirds, facial symmetry, 100% incisor display, average smile line with filled buccal corridors and a flat smile arc. In the lateral view the facial profile was straight with normally positioned upper lip and protruded lower lip according to the E-line, nasolabial angle was acute and mentolabial angle was obtuse. Her maxillary dental midline was deviated 1.0 mm to the right and her mandibular midline with coincident with facial midline. The patient did not have any TMJ clicking / popping, no history of parafunctional habit, and a maximum incisal opening of 50.0 mm.

Intraorally, mild periodontal clinical attachment loss was observed at the mandibular anterior dentition (Stage 1, Grade A, localized molar-incisor pattern). A bilateral Class I molar relationship, right Class III canine relationship and left Class I canine relationship was found. In cast analysis, crowding was found in both arches (upper 3.0 mm and lower 14.0 mm) with a tooth-size discrepancy of the anterior teeth due to the larger maxillary central incisor prosthetic crowns. Transverse dental compensation of the posterior teeth was not observed (intermolar width: maxilla = 38.5.0 mm and mandible = 34.5).

The panoramic radiograph showed all third molars and right mandibular second molar were missing. There were multiple restorations with crowns and endodontic treatment on the maxillary central incisors and the right second premolar. There was horizontal bone loss and root proximity of the mandibular anterior teeth. Lateral cephalometric analysis indicated a mild skeletal Class III jaw relationship (ANB, 2.0°; Wits, -1.0 mm; mandibular body length, 72.5 mm) with a normodivergent pattern (SN-GoGn, 31.0°; FMA, 25.0°). The maxillary incisors were proclined (U1 to NA, 29.0°, U1 to SN, 114.0°) and the mandibular incisors were slightly retroclined and protruded (L1 to NB, 22.6°, L1 to NB, 7.0 mm, IMPA, 90.0°).

The final diagnosis was skeletal Class III malocclusion with facial symmetry (Figures 1 through 3; Table 1).

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Table 1. Cephalometric Analysis

| Measurement | Norm | Pretreatment | Progress |
|-------------------------------|-------------|--------------|----------|
| Skeletal | | | |
| SNA, ° | 82.0 ± 2.0 | 82.0 | 82.0 |
| SNB, ° | 80.0 ± 1.0 | 80.0 | 80.0 |
| ANB, ° | 2.0 ± 1.0 | 2.0 | 2.0 |
| SN-GoGn, ° | 32.0 ± 5.0 | 31.0 | 28.0 |
| FMA, ° | 25.0 ± 4.0 | 25.0 | 24.0 |
| Lower Gonial angle, ° | 72.5 ± 2.5 | 74.4 | 78.2 |
| Ramus height, mm | 40.5 ± 5.0 | 44.7 | 42.9 |
| Mandibular body length, mm | 71.0 ± 5.0 | 72.5 | 72.5 |
| Dental | | | |
| U1-SN, ° | 102.0 ± 2.0 | 114.0 | 114.6 |
| U1-NA, ° | 22.0 ± 2.0 | 29.0 | 32.9 |
| U1-NA, mm | 4.0 ± 1.0 | 7.0 | 7.0 |
| L1-NB, ° | 25.0 ± 2.0 | 22.6 | 28.8 |
| L1-NB, mm | 4.0 ± 1.0 | 7.0 | 8.0 |
| IMPA, ° | 87.0 ± 3.0 | 90.0 | 91.6 |
| Soft tissue E-line, mm | | | |
| Upper lip | 1.0 ± 2.0 | -2.0 | -2.0 |
| Lower lip | 1.0 ± 2.0 | -3.0 | 2.0 |

Treatment Objectives

The treatment objectives were as follows: (1) correct the maxillary and mandibular crowding; (2) slightly procline mandibular incisors to achieve anterior coupling; (3) correct the maxillary midline deviation; and (4) improve facial harmony.

Treatment Alternatives

Two treatment options were offered to the patient. The first option was a nonextraction treatment plan with significant interproximal reduction. However due to the adverse effects on the patient's already compromised periodontium (root proximity and loss of attachment), facial esthetics, and incisor proclination this option was rejected. The second treatment option was a combination of periodontal surgical treatment and camouflage orthodontic treatment involving mandibular incisor extraction with alveolar ridge preservation and mucogingival surgery.

Treatment Progress

Treatment was initiated with atraumatic extraction of the left mandibular central incisor, ridge preservation by placement of demineralized bone allograft (FDBA), dehydrated human

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Figure 1. Pretreatment facial and intraoral photographs.

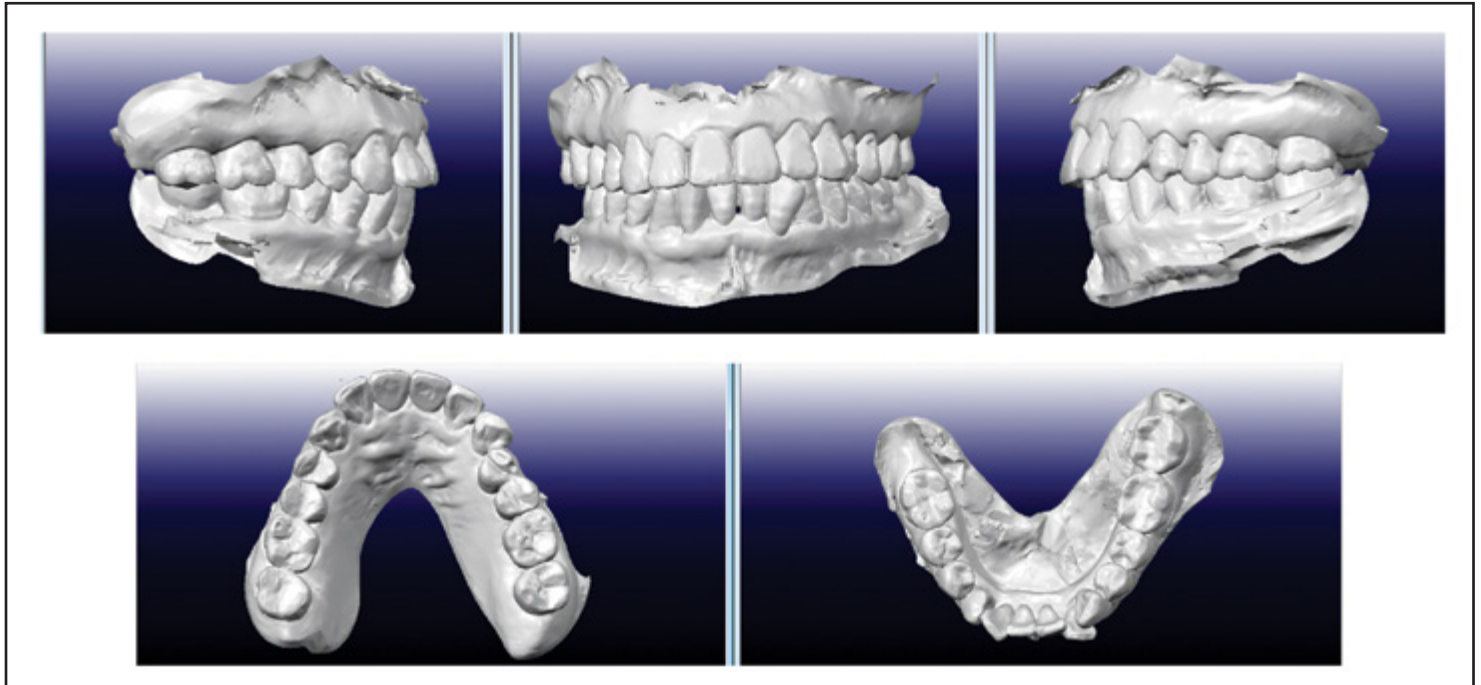


Figure 2. Pretreatment models.

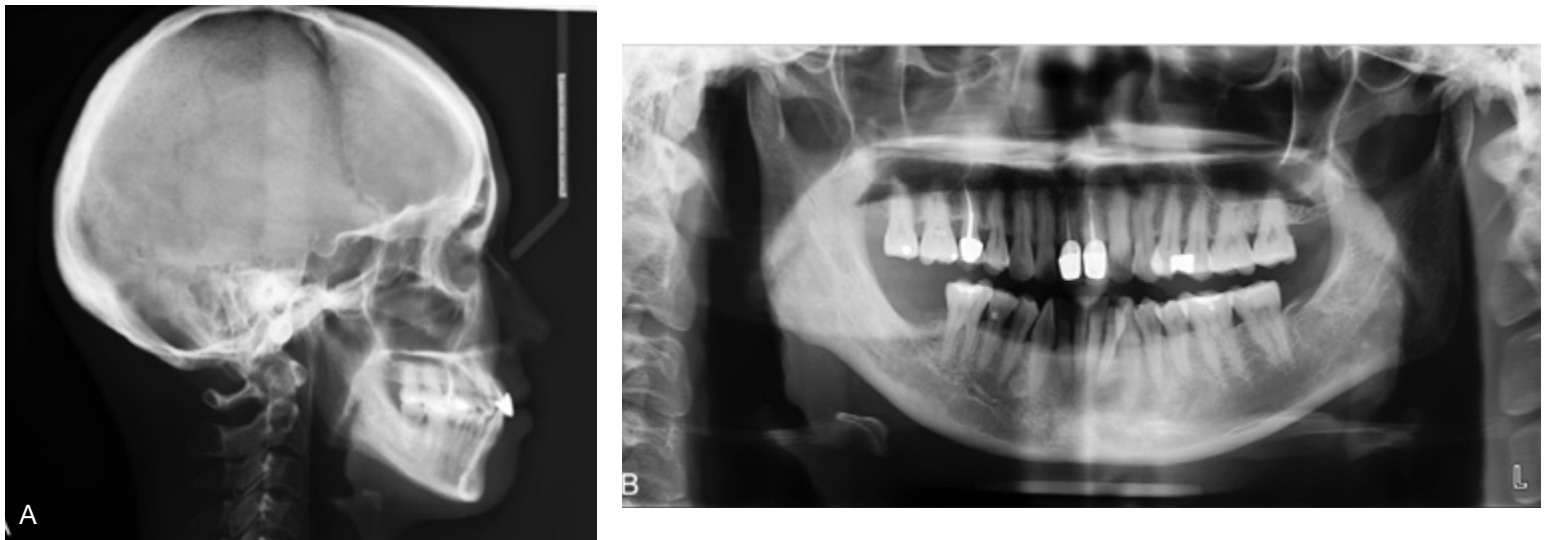
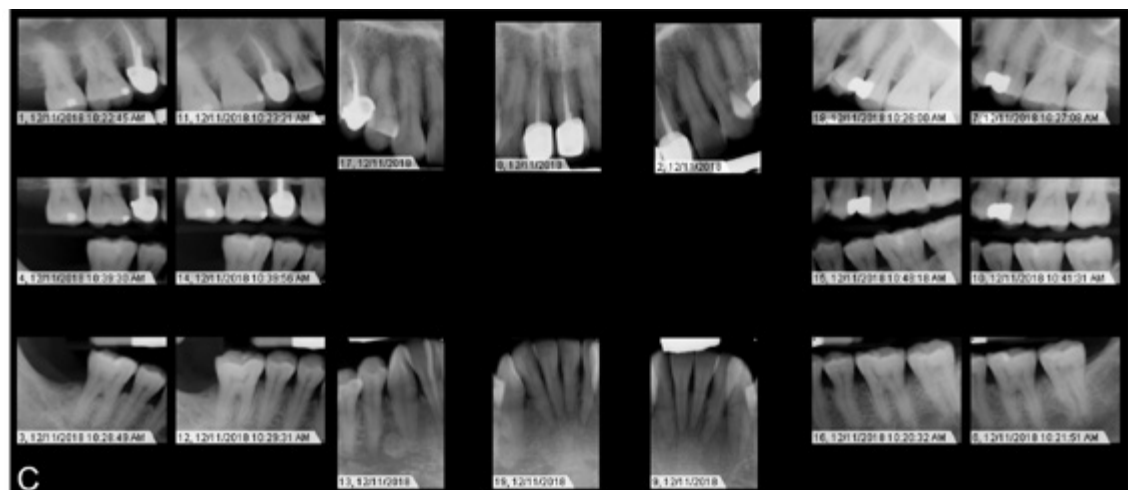


Figure 3. Pretreatment radiograph:
(A) lateral cephalogram;
(B) panoramic;
(C) FMX



RESEARCH ABSTRACTS

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de-epithelialized amnion-chorion membrane and closure with a non-absorbable PTFE suture. Orthodontic force was applied immediately after surgery using an archwire engaged into pre-adjusted brackets with an 0.022" slot (Victory Series; 3M/Unitek, MBT prescription) (Figures 4 A and B). Initial wires were 0.014-inch NiTi, 0.016-inch NiTi, 0.018-inch NiTi. Following initial wires an 0.018-inch stainless steel wire with elastomeric chains was used from the left mandibular first molar to the right mandibular lateral incisor to resolve the lower anterior crowding. At the same time a lightly activated NiTi open coil was also placed between the mandibular right first premolar and canine. The lower archwire was replaced with 0.018 x 0.025-inch NiTi and worked up to 0.018 x 0.025-inch stainless steel wire. A Warren spring was utilized to add lingual root torque to right mandibular canine. (Figure 5)

After 8 months of treatment, the incisors were coupled, the canine relationship was Class I and molar relationship was Class I. Gingival recession due to the frenum attachment was observed on right mandibular canine. Mucogingival surgery (free gingival graft and frenectomy) was performed to address the frenum pull, provide an adequate band of attached keratinized tissue, and to increase gingival thickness (buccolingual dimension) (Figure 6 A and B). Finishing and detailing is planned be completed by using clear aligners (Invisalign). A digital intraoral scanner (iTero Element2) was used to capture both arches and scans were then sent onto the manufacturer who created 23 clear aligners for the maxillary and mandibular arches (Align Technology, Palo Alto, CA, USA) (Figure 7 and 8). The maxillary teeth were reduced interproximally by means of diamond-coated finishing strips (total reduction of 1 mm). This reduction was completed at the beginning of the clear aligner treatment to retract the upper incisors. Each aligner was used for 10 days due to the history of periodontal disease. Upon completion of treatment, the patient will use a 0.5 mm thick, thermoformed templates as retainers and be instructed to wear them full-time for 1 year, followed by night-time wear for an indefinite period.

Treatment Results

The treatment duration to date has been approximately 9 months. Current progress records show that the following treatment objectives were achieved. Improvement in facial harmony and dental esthetics with correction of mandibular crowding and slight proclination of mandibular incisors to achieve anterior coupling. Favorable intercuspation and Class I molar/canine relationship was established. Orthodontic brackets were removed after 7 months, and clear aligners were selected to complete maxillary midline correction and for finishing and detailing.

The progress lateral cephalometric analysis and superimpositions showed that the inclination of both maxillary and mandibular incisors increased (U1-SN, from 114.0° to 114.6°; IMPA from 90.0° to 91.6°) during treatment.

There was uneventful healing following mucogingival surgery of the mandibular right canine (free gingival graft



Figure 4. (A) Extraction of left mandibular central incisor with alveolar ridge preservation; (B) 2-week follow-up healing prior to suture



Figure 5. Alignment of mandibular arch 7 months in orthodontic treatment



Figure 6. (A) Free gingival graft (FGG) ; (B) 5 weeks healing following FGG

and frenectomy). An increase width of keratinized tissue and increase in gingival thickness can be appreciated. A coronally positioned pedicle flap for the purpose of root coverage is planned once orthodontics treatment is completed.

DISCUSSION

Lower anterior nonextraction therapy with interproximal reduction was rejected as a possible treatment option and the left mandibular central incisor was extracted to address the mandibular crowding and improve the periodontal status of the left mandibular lateral incisor (the most labial incisor). The decision to extract the lower left central incisor was made to minimize the Bolton discrepancy and based on an orthodontic model set-up. Tal (1983) investigated the relationship between the interproximal distance of roots and the prevalence of intrabony pockets and reported an association between the thickness of bone surrounding the roots and the morphology of bone associated with periodontitis. Furthermore, Vermeylen et al (2005) observed that root proximity is symmetrical for all the inter-dental spaces in the maxilla, between the first and second molar, and between the central and lateral incisors in the mandible in the periodontal study group. They concluded that subjects with bilateral root proximity had a 3.6 times greater chance to have periodontitis. Therefore, root proximity must be taken into consideration as a risk marker for periodontal disease.

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Figure 7. (A) Debond of conventional brackets; (B) lateral cephalogram; (C) panoramic



Figure 8. Current occlusion with clear aligner attachments

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Upon extraction of lower incisor, the buccal plate thickness and topography was examined using a periodontal probe. As the buccal plate was < 2 mm in thickness, ridge preservation with FDBA and dehydrated human de-epithelialized amnion-chorion membrane was done. Seifi and Ghoraishian (2012) reported that using socket preservation, tooth movement can be immediately started without waiting for the healing of the recipient site. Also, it may provide some advantages such as enhanced rate of orthodontic tooth movement and a decreased possibility of alveolar bone dehiscence.

Zhylich et al (2011) reported in a systematic review that mandibular incisor extraction can be effectively used for the resolution of crowding and identified several factors describing the case type where this treatment plan is most appropriate. This includes mild-to-moderate Class III malocclusion, a mild edge-to-edge anterior occlusion or anterior crossbite, a mild anterior mandibular tooth size excess, and mild anterior open bite tendency. The review continued and advised that clinicians should be careful to avoid poor outcomes such as gingival recession, open interproximal gingival embrasures, increased overjet and overbite. Free gingival graft on the right mandibular canine was completed to provide the tooth with an increased band of keratinized tissue and gingival thickness (buccolingually) and to decrease the progression of gingival recession long-term. Chambrone and Tatakis (2016) found that untreated recession defects in individuals with good oral hygiene have a high probability of progressing during long-term follow-up. Agudio et al (2016) found that 83% of treated sites showed recession reduction, whereas 48% of untreated sites experiences increase in recession.

Sernino et al (1994) reported a 3-mm recession site worsened 67% of the time and a 4 mm recession site worsened 98% of the time. It is imperative to identify and address frenal pulls as contributing factors to gingival recession. A periodontal referral/consultation is recommended.

Significantly rotated teeth were addressed initially with conventional brackets and archwires. Clear aligners were then recommended to complete finishing and detailing. Cortona et al (2020) reported that initial lower premolar rotations of 0.200 per aligner was obtainable on average with vertical rectangular attachments and that it is reasonable to prescribe no more than 1.20 of rotation per aligner in order to maintain good control while rotating round teeth. These parameters were applied to the clear aligner prescription used in this patient's case.

Throughout treatment the patient was placed on a strict 3-month periodontal recall for maintenance of inflammation and probing depths as patients with a history of periodontal disease are more susceptible to increasing probing depths and loss of clinical attachment. Furthermore, An et al (2018) emphasized the high incidence of open gingival embrasures following orthodontic tooth movement and attention should be paid to the contributing factors to prevent or reduce the occurrence of open gingival embrasures. Therefore, the patient was informed prior to commencing treatment for the need of resin bonding restorative solutions to address the black triangles.

CONCLUSIONS

- A multidisciplinary approach is essential in adult orthodontic cases and requires attention to periodontal boundaries to avoid increase in clinical attachment loss, loss of supporting alveolar bone and gingival recession.

CASE REPORT

- Root proximity must be considered as a risk marker for periodontal disease and can downgrade the prognosis of teeth.
- Lower incisor extractions are effective in cases of mild-to-moderate Class III malocclusion, an edge-to-edge anterior occlusion or anterior crossbite with mild anterior mandibular tooth size excess and minimal open bite tendencies
- Alveolar ridge preservation following lower incisor extraction ensured maintenance of the alveolar ridge, soft tissue volume and decreased soft tissue complications

REFERENCES

- Serino G, Wennström JL, Lindhe J, Eneroth L. The prevalence and distribution of gingival recession in subjects with a high standard of oral hygiene. *J Clin Periodontol* 1994;21:57–63.
- Tal H. Relationship between the interproximal distance of roots and the prevalence of intrabony pockets. *J Periodont* 1984;55:604-607
- Vermeylen et al. Root proximity as a risk marker for periodontal disease: a case-control study. *J Clin Periodontol* 2005; 32: 260-265
- Chambrone L, Tatakis DN. Long-term outcomes of untreated buccal gingival recessions: A systematic review and meta-analysis. *J Periodontol* 2016;87:796–808.
- Agudio G, Cortellini P, Buti J, Pini Prato G. Periodontal conditions of sites treated with gingival augmentation surgery compared with untreated contralateral homologous sites: An 18- to 35-year long-term study. *J Periodontol* 2016;87:1371–1378
- Seifi M, Ghoraishian S. Determination of orthodontic tooth movement and tissue reaction following demineralized freeze-dried bone allograft grafting intervention. *Dent Res J* 2012; 9(2): 203-208.
- Contona et al. Clear aligner orthodontic therapy of rotated mandibular round-shaped teeth: a finite element study. *Angle Orthod.* 2020; 90: 247-254.
- Zhylich D, Suri S. Mandibular incisor extraction: a systematic review of an uncommon extraction choice in orthodontic treatment. *J Orthod.* 2011; 38(3): 185-195.
- An S et al. Risk factors associated with open gingival embrasures after orthodontic treatment. 2018; 88 (3):267-274 ■

AAO BUSINESS

AAO COUNCIL REPORTS



COUNCIL ON MEMBERSHIP, ETHICS & JUDICIAL CONCERNS

Dr. Luis Toro

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The Council on Membership, Ethical and Judicial Concerns had two virtual meetings after the 2020 AAO annual session. The first meeting was on July 1 and the second on October 26.

During our July 1 meeting, Dr. Steve Belli, Council chair, reviewed the AAO's Strategic Plan to help guide the council's activities throughout the year, with particular emphasis on the following goals:

1. Promote and defend our specialty
2. Engage and delight our members
3. Drive transformation and innovation

The Special Committee on Women Orthodontists (SCWO) contacted COMEJC asking for insights on obstacles pertaining to women, new and younger members, or other groups in areas related to membership, practice management, career development, and leadership. During the meeting, council members discussed information that could be provided to the SCWO, including:

- Member retention and market share data
- COMEJC's desire to seek feedback from non-renewing female members as to the reasons why for their decision.
- A reminder that COMEJC passed a resolution in 2019 to adopt a "primary caregiver" dues waiver for members who take time out of practice to care for immediate family members, such as newborns. All members need to be made aware of this relatively new waiver.
- COMEJC believes that AAO leadership should encourage constituents and components to seek diverse leaders within their respective groups.

COMEJC 2020 HOD Resolutions:

Two resolutions that were submitted by COMEJC to the 2020 HOD resolutions did not move forward:

1. Moving up the renewal deadline from December 31 to October 31 – The council decided to withdraw the resolution because of the obvious struggles caused to everyone by the COVID-19 pandemic. The resolution will be reconsidered by COMEJC at our January 8, 2021 meeting and probably resubmitted to the 2021 HOD.

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COUNCIL ON MEMBERSHIP, ETHICS
& JUDICIAL CONCERNS

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2. Establishing a non-orthodontist educator membership category – The council believes that the HOD needs to be better informed on the difference between the proposed non-orthodontist educator category (rules and purpose) and honorary membership (which is already established) as some delegates believe the honorary category would suffice (UPDATE: Dr. Jeff Rickabaugh, Speaker of the House, confirmed that the non-orthodontist educator membership category resolution was postponed by the HOD for 2020 due to the virtual nature of the HOD meeting but was not formally withdrawn or rejected. The intent is to reconsider the resolution in 2021.).

The council's second 2020 Zoom virtual meeting was on October 26. The council's meeting agenda was to review and provide feedback on a possible tiered membership model prepared by AAO staff. COMEJC studied the tiered membership concept, which was first explored as a three-tier structure (base, core, and premium tiers) in 2019. The council determined during the summer of 2019 that a three-tier design was not a strong option for the AAO or its members. However, during the January 2020 meeting, COMEJC expressed interest in further investigating a two-tier structure (core and premium, or "AAO Plus").

Upon review of the two-tier draft model submitted by AAO staff, the consensus among the council members was that a comprehensive two-tier structure encompassing all areas of the association would not be desirable, as value is mostly concentrated on CE products and there are too many options for members to keep track of otherwise. Further, the existing CE Passport bundle (comprising all live AAO webinars, online lectures access, and Orthodontic Staff Club membership) already provides a high level of value to our members. Therefore, it was discussed that the AAO could consider expanding the existing CE Passport bundle to provide additional value or rebrand the CE Passport plus include a few other non-CE offerings.

COMEJC Chair Dr. Stephen Belli established a council subcommittee to explore the AAO Plus tier further to determine which upgrades may or may not be valuable and make a recommendation to COMEJC on how it should proceed.

The tiered membership committee of COMEJC met via conference call on Monday, November 2, 2020. The purpose of the call was to expand upon the discussion from the October 26, 2020, COMEJC conference call regarding the draft tiered membership model. The committee agreed that COMEJC should not make a formal recommendation to alter the CE Passport but forward its feedback to AAO Education Department staff to consider expanding the bundle with other CE programs.

2020-21 Member Renewal Update:

The AAO's 2020-21 membership renewals have been outstanding despite the apparent problems caused by this historic COVID-19 pandemic. Below are updated member renewal percentages through October 31, 2020, for several member categories and segments; it includes comparisons to goals that were set for FY21. **Active member renewals finished October 6.1% ahead of goal**, which translates to 516 members.

| Member Type | % Goal (thru Oct.) | % Renewed (11/1/20) | % Diff. from Goal | # Diff. from Goal |
|------------------|-----------------------|------------------------|-------------------------|-------------------------|
| Active (US/Can) | 77.8% | 83.9% | 6.1% | 516 |
| Active (US)* | 78.0% | 84.7% | 6.7% | 538 |
| Active (Can) | 75.0% | 68.8% | -6.2% | -26 |
| Life (U.S./Can) | 78.0% | 84.4% | 6.4% | 93 |
| Active (US) | 78.0% | 84.9% | 6.9% | 95 |
| Active (Can) | 78.0% | 74.2% | -3.8% | -2 |
| Student (US/Can) | 80.0% | 87.0% | 7.0% | 86 |
| Student (US.) | 80.0% | 86.9% | 6.9% | 78 |
| Student (Can) | 80.0% | 89.7% | 9.7% | 8 |
| International | 70.0% | 64.5% | -5.5% | -167 |
| | | | | |
| NYM (0-4 Years) | 72.0% | 73.3% | 1.3% | 22 |
| NYM (5-9 Years) | 80.0% | 84.0% | 4.0% | 56 |
| Women Active | 78.0% | 81.1% | 3.1% | 89 |

Following a two-month programmed delay in invoicing members, which began in August 2020, renewal activity has been pacing strong, which has helped close the gap compared to 2019 renewals. The table below contains a month-by-month progression of activity for **Active members** (the US and Canada) with a year over year comparison included. Through October 2020, Active member renewals are 2.8% (235 members) behind October 2019 results. However, this number has significantly decreased each month since the renewal cycle began.

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| Period Thru | % Renewed 2020 | % Renewed 2019 | % Difference |
|-------------|----------------|----------------|--------------|
| July | 9.6% | 68.3% | -58.7% |
| August | 51.5% | 77.9% | -26.4% |
| September | 75.9% | 83.3% | -7.4% |
| October | 83.9% | 86.7% | -2.8% |

Other highlights through October 2020 include:

- 7.6% of renewed US Active members have paid by ACH (electronic transfer) rather than credit card or check. This translates to nearly 500 US Active members who have used the ACH payment method, compared to just 111 all FY20.
- 11.7% of all members who have renewed have opted to auto-renew their membership next year. This includes 10.5% of US Active members, 10.7% of Canadian Active members, and 18.7% of International Members. In FY20, 5.4% of all members enrolled in auto-renew.
- 88.9% of AAOIC insureds have renewed, compared to 91.5% through October 2019. The remaining 11.1% are at risk of losing their eligibility for coverage if they do not renew their AAO membership.

Resident Recruitment Results:

The table below provides recruitment results for the past four years of incoming residents, according to the program start date, through October 31, 2020. The "Prior Year Comp." column shows recruitment results for the previous year's incoming class as of the same point in time. For example, the "Prior Year Comp." cell in the 2020 row shows results for 2019 incoming residents through October 31, 2019.

| Incoming Class | Total Residents | AAO Members | %AAO Members | Prior Year Comp. |
|----------------|-----------------|-------------|--------------|------------------|
| 2020 | 406 | 319 | 78.6% | 83.7% |
| 2019 | 405 | 400 | 98.8% | 93.8% |
| 2018 | 401 | 391 | 97.5% | 97.3% |
| 2017 | 410 | 403 | 98.3% | 99.3% |

In September 2020, the AAO launched a contest among Resident Champions to encourage their classmates to join, reinstate or renew with the AAO. Programs that were current on 100% of their residents' memberships by the October 15 deadline were entered into a drawing for a Visa gift card to be used for a resident celebration of their choice. The contest helped boost resident recruitment

and retention efforts substantially. Before the contest began, one program was 100% current on their residents' AAO memberships. After the contest, 43 programs were current (compared to 34 in 2019).

A factor of lower recruitment of 2020 incoming residents compared to last year (78.6% vs. 83.7%) was the lack of opportunities to recruit residents who participated in GORP (leading up to, during, and following the event). Despite being lower than 2019, the 2020 number still exceeds two years prior (72.8% through October 31, 2018).

Active Member Recruitment:

The table below provides recruitment results for new and former Active members for the previous quarter of FY21. Year-to-date results for FY20 are also included for comparison. Overall, Active member recruitment is down slightly year over year despite multiple targeted recruitment campaigns being completed.

| Aug 2020 | Sep 2020 | Oct 2020 | 2020-21 YTD | 2019-20 YTD |
|----------|----------|----------|-------------|-------------|
| 7 | 3 | 7 | 40 | 50 |

Reminders of Existing Programs and Benefits

- Student Members are now allowed to have a listing in the Find an Orthodontist Locator (via www.aaoinfo.org). Student members who are past their graduation date and have submitted proof of graduation.
- The council now oversees two programs delivered at orthodontic residency programs on an ongoing basis: Resident Vitals and Financial Management for Residents. These programs reach hundreds of orthodontic residents each year. In early August, every year, the AAO sends invitations to participate to program chairs and directors.

Transition from Residency to Practice

Active membership discount scale for recent graduates:

- Year 1: 90% discount – students who graduate between January and May 31 and elect to extend their Student Member eligibility the extra year they have available will transition directly to year two after Student Member eligibility ends.
 - Year 2: 75% discount
 - Year 3: 50% discount
 - Year 4: 25% discount ■

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**COUNCIL ON
GOVERNMENT AFFAIRS**

Dr. Douglas Harte
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2020 has been a year that I think few of us will ever forget. But we are now in 2021 and COGA is hard at work again preparing to protect our orthodontic interests on the Federal level. The Presidency, House and Senate are now in control by the democratic party but since the Senate is split 50/50 there will have to be compromise to get bills through. As always, there will be opportunities to move our agenda. In fact, one of President Biden's first actions was to extend the pause on federal student loan payments and collections and keep the interest rate at 0%.

This year has posed many challenges for us and we have adapted with the times. I was elected Chair of the Council to replace Dale Anne Fetheringham who became a Trustee at Large to the AAO. Our recent meetings have all been virtual and as such, we are preparing for the Advocacy conference on February 22 and 23 in a totally new format with groups "visiting" the Congressmen in a virtual setting on Zoom during their lunchtimes in their own time zone. Who knew we could be so creative?

Some housekeeping announcements:

Rob Kent has been named AAO VP, and Advocacy and General Council.

Dr Richard Williams is the current Board of Trustee liaison.

Dr Valery Martone and Dr Defay are our new COGA members.

We have continued our meetings with Congressman virtually last October. Virtual meetings were held with Rep Vincente Gonzalez TX, Rep Van Drew NJ, Rep Paul Gosar AZ, Rep Mike Simpson ID, and Rep Buddy Carter GA and members of COGA, AAOBOT, AAOPAC. Topics involved Dentists being recognized as Essential Health Care Workers, student debt, access to PPE supplies, tax relief etc.

Our continuing legislative priorities for the 2021 cycle will continue to include:

1. Ease the burden of student debt
2. Support the growth of small businesses
3. Improve Healthcare policy
4. Protection of the society from outside agencies
5. Support of the Raise Act and support of the Everlasting Smiles Act
6. Continue to support AAO state legal and legislative initiatives
7. COVID 19 issues, PPE, PPP, OSHA
8. Continued outreach to the FDA and FTC
9. Continued outreach to Senators and Congressman on applicable committees in the AAO's interest.
10. Working in conjunction with our lobby group Cozen O'Connor
11. State Advocacy Update

2020 Session

1. Introduced legislation in 4 states
2. Supported legislations in 4 states
3. Opposed legislation in 6 states
4. State legislators received letters or phone calls from over 500 AAO members.

2021 Session

1. Development of an Advocacy Ambassadors program with the goal of identifying 15-20 "AAO members to act as the "go to" people in their respective states to testify at state capitals, attend state meetings (either in person, phone, or virtual), and write letters, etc.
2. Continue to use Voter Voice for Calls to Action as well as send newsletters and updates targeted to individual members' states, districts, etc.
3. Continued activity regarding legislative issues in CA, TX, MT, and KS.

There has been discussion of the Role of COGA and the Federal vs. State Advocacy.

Historically, COGA's focus has been on federal advocacy; however, activity on the state level has increased significantly during the last few years. COGA/PAC offered the following comments:

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1. Tele-dentistry issues are state regulated and need AAO member involvement in specific states.
2. COGA's primary focus should still reside on federal issues while being used in an advisory capacity for state issues.
3. PCSO developed a structure to have "boots on the ground" in each state within their constituency to recruit and have discussions with potential state contacts. Additional staff support would be needed to develop such a structure for all states.
4. Component Legal Support Fund is critical for all issues at the state level. COGA is in favor of allocating more funds to increase staff support. The order of importance is as follows: State Action, Administrative support, Federal Advocacy
5. AAO needs additional resources for staffing so it can be more proactive regarding states issues.
6. COVID-19 will influence how things are done going forward. We will not have the same face-to-face opportunities in the past. Fundraising will be different.
7. It is difficult to get people involved in their states. Virtual contact with Congressional members is not nearly as effective as in-person.
8. Federal issues happen slowly. Getting the win on a local level is faster.
9. Federal Advocacy is important and PAC dollars can only be used on the federal level.
10. Engage state orthodontic organizations as a resource. Identify lobbyists in each state.

2021 Professional Advocacy Conference.

Considering the uncertainty going into 2021, options were discussed regarding the conference. Discussion involved:

1. A day of virtual meetings with targeted members in February.
2. Lunchtime sessions during a specific week in Feb.
3. Follow-up after May with in-person Hill visits. COGA and AAOPAC were asked to consider these options and forward suggestions to the Professional Advocacy Committee which consists of Drs. Williams, Harte, Beckwith, Rob Kent and Trey Lawrence so a plan could be developed.

Council Chair Nominations

Dr. Harte's term as council chair came to an end this year. Dr. Frank Beglin was elected to serve as the new Council chair beginning April 26, 2021. The next meeting will be held virtually on Monday, February 22, 2021 in conjunction with the virtual federal advocacy conference.

- Monday, February 22

COGA/AAOPAC had an all-day business meeting. At the end of the day, they held a session open to additional invitees. The Cozen team gave their assessment of the Washington environment; followed by a guest speaker (member of Congress) who also provided their assessment; with both highlighting the impact of the environment on the AAO's federal priorities.

- Tuesday, February 23

Targeted meetings were set up with members of Congress. These meetings were organized as closely as possible to the in-person format traditionally utilized for the Advocacy Conference (groups of members meeting with members of Congress from their home state or nearby states), and the meetings were set at times that accommodated the time differences across the different time zones. Our goal was to make the meetings as close as possible around lunch time breaks in the different time zones, as well as allow for AAO members' office schedules.

As a personal aside, there has been a "**Harte**" serving the AAO on the Council of Government Affairs for the last 18 years or so. My dad, Larry, and I have lived and breathed and thoroughly enjoyed serving on behalf of the AAO at the federal level. My time of service as your MASO representative and as COGA Chair will come to an end at the end of this year's House of Delegates meeting. My greatest regret is to not be able to personally thank the many people and close friends I have made over the years in person due to Covid19. I want to thank Kathy DiPrimo, Gianna Nawrocki, Rob Kent, Trey Lawrence, Dr Richard Williams and AAO president Chris Roberts without whom COGA could not be as effective as it is.

But most importantly, I wish to personally thank the members of MASO and the MASO board of directors for your years of support. Great things are ahead in 2021 and many opportunities for the AAO I feel will be within reach at the federal level. ■

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COUNCIL ON NEW AND YOUNGER MEMBERS

Dr. Lauren Wiese
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The Council On New and Younger Members is looking forward to 2021, in hopes of achieving a bit more normalcy compared to last year.

First, we welcome our newest members: AAO Trustee and Board Liaison **Dr. Steven Siegel**, Dr. Mary Lanier Zaytoun Berne (SAO representative from Raleigh, North Carolina), Dr. Mary Hoffman (PSCO representative from Boise, Idaho), **Dr. Lauren Wiese** (MASO representative from Voorhees, New Jersey), Dr. James Gordon (resident representative from University of Colorado), and Dr. Lisa Kwarteng (resident representative from Howard University). Special congratulations to our new council Chair, Dr. David White.

We convened for our annual face-to-face meeting in February 2020 prior to the AAO Winter Conference in Austin, Texas.

CONYM members discussed their coordination with COMEJC regarding membership recommendations impacting new and younger members of the AAO. Consideration was given to the unique financial challenges facing new and younger members and how that can impact their decisions to join or renew their membership. While CONYM advised against any major changes in the dues structure at this time, ideas and suggestions are being considered for the future.

The House of Delegates approved a resolution in May 2020 to appoint a CONYM or new and younger member with full voting rights to all AAO councils and committees. The BOT has expressed confidence in our demographic with the appointment of new and young member, Dr. Alex Thomas, to the position of an At-Large Trustee. Our colleagues are excited about the challenge and responsibilities associated with these appointments.

CONYM oversees the online AAO Mentoring Program to support the professional development of new and younger AAO members. Consideration was given to transition to an alternative platform for a 12-month trial. However, in light of the financial impact of COVID-19, our council agreed to suspend the program for one year followed by a reevaluation of our strategies in the summer of 2021. This decision will result in substantial savings.

Membership renewal notices were delayed by two months to help alleviate the financial burden from COVID-19.

During the Fall and early Winter of 2020, CONYM members were busy supporting the AAO's membership renewal efforts by conducting outreach to colleagues within their constituencies who had not renewed their AAO memberships. Council members contacted more than 700 non-renewed members, 70% whom renewed their memberships. CONYM will continue to make this outreach an annual initiative.

During the AAO Annual Sessions, CONYM typically hosts two events: The New Orthodontist & Resident Conference and the AAO Members/Leaders Roundtable. Members voted unanimously to discontinue the two separate events and instead consolidate them; this will allow expanded roundtable discussions to include subject-matter experts and experienced orthodontists as moderators for different early career transition and practice management topics. The motion was approved by the Board of Trustees and the Council is looking forward to implementing this at the Annual Session in 2021 in Boston.

The Council met in virtual sessions in June and November 2020 and discussed the four topics of highest priority for the AAO this year: clear aligners, financial management, practice management, and all things digital. The brainstorming was productive and subcommittees were created to begin working on new initiatives.

The AAO currently has an online career path comparison tool, which comprises a of checklists to help members identify and pursue their chosen path in orthodontics. CONYM members helped review and update the content to ensure accuracy. This helpful resource can be accessed at <http://pm.aaoinfo.org>.

In past years, CONYM has had representation at the GORP and ASDA meetings. During GORP, a member addresses resident attendees on the CONYM initiatives and how the council represents their interests. At the ASDA Annual Session, a council member represents the AAO at an exhibit booth with an AAO staff member. While this was not possible during 2020 due to the pandemic, CONYM is looking forward to resuming these tasks when in-person meetings are possible.

CONYM members are looking forward to our annual meeting, which will be held virtually on Saturday, February 6, 2021. We welcome outreach at any time with questions, comments, or suggestions. On behalf of our committee I wish you good health and encourage you to remain optimistic as we move beyond this difficult period. ■

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COUNCIL ON ORTHODONTIC EDUCATION

Dr. Anil Ardeshtna

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Hello to all my dear friends and colleagues in MASO. The Council on Orthodontic Education met virtually for its annual meeting on October 26, 2020. Typically, this would have been a whole day event at the AAO headquarters in St. Louis.

Duties of the Council are to study and make recommendations on all matters relating to orthodontic education; consult with all appropriate dental, educational and governmental organizations concerning orthodontic education.

SUMMARY OF ACTIVITIES:

Dr. John Callahan, the AAO Board of Trustee, provided a report on the Board of Trustees recommendations. The AAO will continue its support of the Full-time Faculty Teaching Fellowship Award Program. This is gratifying as it displays the AAO's commitment and ability to support Orthodontic programs. These awards advance the specialty by creating a pipeline of quality educators. The COE also recommended that support for the Craniofacial Anomalies Award be continued. Dr. Kelton Stewart of the GLAO chairs the selection committee and the deadline for application for the next cycle is February 1, 2021.

The SOE conference program at the 2021 AAO annual meeting in Boston will be reduced to a morning half day to avoid conflict with the start of other AAO sessions. The return to a full day schedule is expected in 2022. Due to the cancellation of the SOE meeting, Dr. Carla Evans, the 2020 honoree will be acknowledged at the 2021 session.

Dr. Foley of the ABO reported on ABO testing moving to Scantron testing sites throughout the United States and Canada in 2021. The examination no longer requires travel to St. Louis. These changes were accelerated due to travel restrictions in 2020. There was discussion on the AAO and ABO jointly recommending test standards to all orthodontic programs that mirrors ABO examination standards.

While the 2020 ADEA conference was cancelled, the 2021 Annual Session will be conducted virtual from March 13-16 with the theme of "We". ADEA Orthodontics Student Travel Awards were given to two students. This award encourages dental students with an interest in orthodontics to do a poster or presentation at the ADEA Annual sessions. There was some discussion of increasing the award level for future meetings.

Dr. Ardeshtna and Dr. Stewart (GLAO) reported on the Partners in Research process. There was discussion regarding potential sharing of the survey findings and/or abstracts with AAO and SOE. The team will evaluate level of interest, feasibility, and potential process of posting data next year.

The BOT had requested review and feedback on four area of focus - Aligners, Digital, Financial, and Practice Management.

ALIGNERS - It was felt that education and training was necessary in light of the current trends with treatment therapy. With the current plethora of commercial products and technological advances, it was difficult to differentiate between marketing and scientific facts. Many of the current and recent graduates were paying for external CE programs which were costly. A suggestion was to pool resources and create a hybrid offering that all programs could leverage, then publish this in a central location for all programs to use.

DIGITAL - What technology needs are anticipated in 2025 to ensure our programs are state of the art in order to prepare residents for practice? Discussion revolved around intraoral scanners and that all residents should be instructed on this.

FINANCIAL - Discussions continued regarding the impact of crushing student debt on orthodontic programs and the future of the financial management course. COE recommended the Council on New and Younger Members (CONYM) undertake the review of the Financial Management series and provide suggestions for to improve the content. COE thought it best for CONYM to do this since they are "closer" to the material than COE in terms of evaluating its relevance.

PRACTICE MANAGEMENT - Are educators aware of the resources, do they use them, and do they feel there are additional resources needed to support residents? The position of COE is the AAO has existing courses in the form of the Business of Orthodontics series. The Financial Management and Practice Transition seminars fill this need.

AAO Trustee, **Dr. Steven Siegel**, submitted a proposal to the Council this summer to look into the value and possibility of creating a speaker clearing house. In light of the current pandemic crisis, having such a central repository would be advantageous to all programs by creating, sharing and disseminating supplemental information particularly on ancillary topics such as technology and business. The COE created a subcommittee of Drs. Glenn Sameshima, Sercan Akyalcin and **Anil Ardeshtna** that met on December 7, 2020. This concept was discussed and a report submitted to the full committee for further discussion at its spring meeting.

Dr. Glenn Sameshima's (PCSO) term as chair of the COE will come to a conclusion after the 2021 AAO Annual Session. Dr. Kelton Stewart (GLAO) will be appointed as the new chair.

The COE proposed budget for 2021 - 2022 was discussed and accepted. The next meeting will be on October 25, 2021 at the AAO Headquarters, St. Louis, Missouri.

This has been a hard year, but we have also made it a triumphant year by our spirit of resolve. I wish you all a healthy and joyous New Year, and look forward to seeing you in person in 2021. ■

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COUNCIL ON ORTHODONTIC HEALTH CARE

Dr. Richa Dutta

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Roller Coaster – I am sure most of you agree that this year has been one heck of a roller coaster ride for a lot of us!

Professionally, personally and for many even emotionally it has been a year that feels like a ride without the safety belt on. For everyone who has suffered a loss, our prayers go out to you for continued strength.

COHC took the opportunity to re-evaluate and push ahead this year to work towards 3 main goals:

- 1) Work on simplifying the CDT codes – even though Orthodontics has the fewest codes of all the different specialties, it is evident from the questions the help desk receives that there is still a lot of confusion about correct use of coding for insurance benefits. The Code Maintenance Committee has started working on simplifying the CDT codes and based on a survey sent to the AAO membership in fall, COHC proposed the following changes to the BOT:

- a) Delete Interceptive Orthodontic Treatment sub-category nomenclature, descriptor, and codes D8050 and D8060

- b) Revise Limited Orthodontic Treatment descriptor
- c) Delete D8690 “orthodontic treatment (alternative billing to a contract fee)”

- 2) To create a resource that assists members with insurance.

The purpose of this is to assist members with billing and coding FAQ's, explain the issues to look for when reviewing contracts with Dental insurers – this is especially a concern for new and younger members whose practices are in network when they start to market their practices to their communities and to create training resources for our members

- 3) Be a leader in the surveillance of tele-dentistry issues with Third-Party Payers.
- 4) Bring awareness of aligner therapy differences and work to clarify reimbursement with Third-Party Payers.

As a council, our aim is to continue working toward making the practice of orthodontics easier for all our members.

If you have any suggestions or questions, I would love to hear from you – our MASO members.

Wishing everyone an amazing 2021! ■



COUNCIL ON ORTHODONTIC PRACTICE

Dr. Lara Minahan

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GENERAL: These have been exciting and busy months for COOP; since the last report, COOP has convened virtually on July 11,

2020 and face-to-face on October 31, 2020. Dr. Stephen Robirds served as the BOT liaison. COOP would like to thank the 2020-21 Executive Board, BOT and AAO staff for its notable support.. This New Year promises to bring many initiatives to fruition.

BUSINESS OF ORTHODONTIC RESOURCES: A review of existing AAO Orthodontic Office Design material has led to the BOT support of a significant update and development of a novel Orthodontic Business Design and Business Planning on-line lecture series with downloadable handouts and guides. Stay tuned!

GUIDELINES ON TRANSFERRING PATIENTS IN ACTIVE TREATMENT: In light of recently voiced concerns to the

AAO by both practitioners and patients regarding the transfer of active patients between practitioners, we asserted the importance of remaining as transparent as possible. Transitions are implicitly emotional occasions, exacerbated by the addition of financial issues. The AAO wishes to take great care to not dictate fees but rather recommend clarity of the financial structure of care early in one's discussion with the prospective patient, thus minimizing future misunderstandings.

ORTHODONTIC STAFF APPRECIATION DAY: Following approval by the Board of Trustees, in honor of our hard working supporting staff, the first Wednesday in June has been designated as the “AAO Staff Appreciation Day”. This opportunity to recognize our staff comes as a request expressed in the 2019 AAO membership survey. Team celebrations may, of course, extend as long as your individual practice wishes!

PRACTICE TRANSITION SEMINAR: In lieu of the traditional Practice Transition Seminar held in-person at the AAO Annual Session, the BOT voted to transform and expand this program to a year-round practice transition resource via the AAO member website. Transition categories will continue to

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include: practice sales, start-ups, partnerships, associateships, OSO/ DSO opportunities and beyond.

PRACTICE OPPORTUNITIES AND CAREERS PROGRAM

(POC): In part due to the COVID19 pandemic, there has been increased participation with the POC program. This confidential on-line program aims to match members searching for associateships, partnerships, sales, etc. Job postings and a resume critique service is available. In addition, member and non-member employers may post orthodontic staff positions. Please note that members who use the program and achieve a match are encouraged to notify the AAO POC so that the site may remain current. Thank you!

REVIEW OF ADA-CERP AAO WEBINAR EDUCATION

RESOURCES: Content review of on-line self-paced learning activities delineated the subgroup of lectures relevant to CE status: lectures published within the last 36 months will remain in the CE library; lectures 4-5 years old will be kept in the CE library if they are within the top 50 lectures viewed;

other lectures over 5 years old will be archived (excluded from CE status) ; a comment box was recommended to assist in post-lecture assessment of content.

ORTHODONTIC STAFF CLUB (OSC): Doctors are encouraged to promote the Specialized Orthodontic Assistant program as well as clarify the benefits of membership (website access, fee discounts, and the like). The AAO Orthodontic Facebook page energizes communication by both Doctors and Staff alike while posting information/ education opportunities relevant to all parties. Please join in!

The next COOP face-to-face meeting is scheduled to take place on November 5-6, 2021, at the AAO Headquarters in St. Louis.

As always, I welcome all questions or comments that I may share with the Council throughout the year. In the meantime, I truly thank you for allowing me this opportunity to serve you. Do stay well and may we meet in Boston this summer! ■

**COUNCIL ON SCIENTIFIC AFFAIRS**

Dr. Dina Sanchez

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The Council on Scientific Affairs (COSA) met via video-conference on January 8, 2021.

COSA reviewed 30 applications for the Hellman, Sicher, and Graber Awards. The following are the 2021 AAO Research Awards winners:

Milo Hellman Research Award to Dr. Aline Petrin from the University of Iowa for research titled: *Epigenome-wide analysis of DNA methylation in monozygotic twins discordant for orofacial clefts*

Harry Sicher Research Award to Dr. Timothee Cousin from the University of Washington for research titled: *Validity and reliability of HLD treatment need indices currently used in the United States*

Thomas M. Graber Awards of Special Merit to:

Dr. Parul Sangwan from Texas A&M University for research titled: *The effects of periodontal distraction on tooth vitality and bone quality/quantity: a split-mouth experimental design*

Dr. Lauren Flynn from Texas A&M University for research titled: *The efficacy of fluoride varnish versus a filled resin*

sealant for preventing white spot lesions among orthodontic patients

Dr. Khalid A. Alamoud from Boston University for research titled: *Gsalph deficiency in osteocytes alters craniofacial growth and enamel mineralization*

Dr. Michele Kaplan from Columbia University for research titled: *Effect of osteocyte apoptosis on orthodontic tooth movement, periodontal ligament, and alveolar bone: a pilot study in mice*

The 2022 Hellman, Sicher, Graber online application will be available on March 15, 2021. The deadline to apply is October 1, 2021.

COSA accepted 11 Oral Research applications, 205 E-Poster applications and 22 Table Clinic applications to be presented for the 2021 AAO Annual Session. During the January meeting, COSA discussed how they were going to do their programs at Annual Session. The Oral Research program will be pre-recorded presentations that will be posted on the Annual Session website. The Table Clinic program will become part of the E-Poster program. There will be no hard copies of Posterboards displayed at Annual Session. E-Posters will be available for viewing during Annual Session and until July 31, 2021 on the AAO website. The William R. Proffit Resident Scholar Award judging will be held prior to Annual Session.

COSA meets every January by videoconference. The next video meeting is scheduled for January 7, 2022. ■



AAOF UPDATE

Dr. Orhan Tuncay

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- We invite all AAO members to support the foundation by making an annual donation, or sign-up for the Century Club to give in small amounts.
- The AAOF Awards Program will announce 2021 winners in March.
- The 2021 Jarabak Award winner is Dr. Laura Iwasaki of PCSO.
- The 2021 Blair Award winner is Dr. Lee Graber and the Graber Family Foundation of MSO.

2021 AAOF AWARDS PROGRAM

The Planning and Awards Review Committee (PARC) will meet virtually in January 2021 to review the grant applications for funding that were received in November. In March, the awardees will be notified. We look forward to telling all AAO members about the exciting research that will be funded by the AAOF in the coming year. Please watch for more details this spring!

UPDATE ON NEW INITIATIVES

The AAO Foundation Board of Directors has voted to continue to offer the Resident Gift Program. The AAOF believes in education and research, and the Annual Session

is a wonderful way for residents to be exposed to some of the best current orthodontic research and education that is available. We thank our many donors who helped make this program possible. To learn more about this program, please visit the Resident Gift Program. This will be available to current orthodontic residents who are AAO student members who register to attend the meeting and visit the AAOF booth in the exhibit hall to confirm their attendance.

The AAO Foundation Board of Directors recently approved a new program entitled **Accelerated Funding of Proposals**. This will be an additional opportunity for grant funding through the AAO Foundation. These urgent applications will be reviewed and funded faster by employing a rolling application deadline. Please stay tuned for more information.

REMEMBER THE AAO FOUNDATION IN YOUR CHARITABLE GIVING

The AAOF website can now accept online donations! Please consider making an online donation to the foundation in 2020 by visiting our website. To learn more about the AAO Foundation and how you can personally support this specialty by giving back to the AAOF, please visit our newly redesigned website, <https://www.aaofoundation.net>, like us on Facebook or follow us on Twitter.

FOR MORE INFORMATION

If you should have any questions or concerns, please call Jackie Bode, AAOF Senior VP, at 314-292-6546 or by email jbode@aaortho.org. ■



AAO HOUSE OF DELEGATES

Dr. Richa Dutta

richadutta@gmail.com

As the newly appointed delegation chair to MASO, I would like to thank all the delegation members and the MASO Board for placing their trust in me to represent MASO and AAO. I hope to continue with the legacy of excellence that Dr. Luis Toro and others have created to represent MASO members and have their concerns addressed at the AAO level.

The 2021 House of Delegates will be a virtual meeting held from April 23-25, 2021. As you all may have read – the Annual Session has been postponed to June 25-27, 2021. Although this is a busy time of the year for all our practices, the temptation that AAO members may be able to attend in person was so great that the decision was made to have the meeting in late June.

The deadline for submitting any resolutions for this year is March 24, 2021. MASO's delegates will have their ad interim meeting on March 13, 2021 at which time all the resolutions will be discussed and prepared for submission to the AAO.

The team of MASO delegates that will represent MASO this year are:

- Dr. Tarun (Ty) Saini, tysaini@yahoo.com
- Dr. Richard D. Isaacson, drstr8n@aol.com
- Dr. Jean Edouard Asmar, jeanasmar@aol.com
- Dr. Richard (Rick) H. Albright III, rick_albrightiii@yahoo.com
- Dr. Doug S. Harte, drbraces@msn.com
- Dr. Kathy Marshall, k_marshall@howard.edu

Alternate delegates are: Drs. Francis Picon, francis.picon1@upr.edu; Madeleine Goodman, madeleine.goodman@gmail.com; and Anne O'Day, odayortho@yahoo.com.

All AAO members are invited to participate in the virtual Reference committee hearings on April 23 2021 from 2:30 pm EST. I look forward to seeing you. ■



AAO PAC UPDATE

Dr. Massimo Verduci

mvfirenze@gmail.com

As we all know, 2020 has been an unprecedented year between the COVID-19 pandemic as well as our election year. First of all the COVID-19 pandemic has brought an enormous amount of challenges to each and every one of us. Specifically, it has affected our children's education, people's ability to work, our national economy, and the presidential elections. In addition, close to home, it has affected and continues to affect our orthodontic practices on a daily basis. From a political perspective, 2020 brought us the Presidential election as well as 435 House of Representative and 35 Senates races. As we all know when times are uncertain and difficult, leaders need to lead. As orthodontists we found ourselves, while our practices were closed, getting updated daily with new information so that we could communicate the latter to our staff and prepare our practices to reopen. So too has the AAO continued to lead by going forward with its' efforts on a federal level to advocate for its members.

The AAO has participated in policy discussions to make sure orthodontists' concerns are understood by regulatory agencies (OSHA, CDC, HHS) in order to allow orthodontists to make decisions which are safe for operating their businesses. The AAO's federal lobbying firm, Cozen O'Connor Public Strategies, began working with the AAO in March and has been very important in building relationships between the AAO and regulatory agencies throughout the pandemic. Recently the AAO, as a result of support from AAOPAC, has been obtaining successful results which support our AAO members as both health care professionals and business owners. Some of these efforts on the federal level are as follows:

- In January, 2020, 9 members of Congress (5 dentists and 4 physicians) sent a letter to the FTC and FDA to express their concerns regarding the SmileDirect Club
- Advocating for small business relief for our members in the form of coronavirus relief packages
- Creating a COVID-19 task force
- Meeting with OSHA representative to obtain clarification regarding guidance for dentistry

- Hosting a webinar in March with our lobbying firm to forward information regarding the PPP loan
- Inclusion of a regulation from Secretary of Labor that employers with less than 50 employees may be exempt from emergency paid sick leave requirements
- Urging members of Congress to support legislation to increase funding for PPP and EIDL program
- Participating in over 50 virtual meetings with members of Congress since May
- Participating in policy discussions to make sure orthodontists have a seat at the lawmaking table
- Providing an avenue for members to contact their legislators via Voter Voice
- Collaborating with the ADA and FEMA to secure PPE for dentists across the country
- Working to support the Ensuring Lasting Smiles Act, a bipartisan bill that would ensure that health plans cover medically necessary dental procedures as a result of congenital anomalies
- Meeting with CDC to receive updated guidance for clarification on dental settings during COVID-19 response
- Providing members with information about HHS Provider Relief Funds
- Meeting virtually with all five members of Congress that are dentists
- Advocating before the CDC concerning PPE and COVID-19 assistance

Please note that for more information, visit the AAO's member website and click "News" <http://www1.aaoinfo.org/news-publications/>

As we can all see the AAO has been working very hard for its' members during this very difficult time. As members of the AAO, we need to continue to support our PAC so that we can continue to nurture our relationships with legislators. Please note that our Professional Advocacy Conference will be virtual in 2021. Please continue to look for more information pertaining to this conference in the coming weeks. **Dr. Steve Siegel**, our MASO Trustee, is doing a match program this December. If you contribute to the AAO PAC now, your contribution will be doubled! To learn more about AAO PAC, contact AAO's Government Affairs Associate, Gianna Nawrocki at ghnawrocki@aaortho.org. ■



SOCIETY OF EDUCATORS

Dr. Vanessa Morenzi

morenziv@einstein.edu

The SOE leadership council is planning the 2021 Carla A. Evans Educational Leadership Conference. The half day program will be live with three exclusive virtual sessions. Dr. Carla A. Evans will be the keynote speaker. Further information will be released in the coming months.

The SOE recently completed a member survey to better understand the value of educational content within different residency programs. SOE leadership is compiling the results which will be shared with the membership in the next few months.

The SOE newsletter will be released in the first quarter of 2021.

The SOE leadership council, under the direction of President **Padma Mukherjee**, is confidently looking forward to a productive year. ■



ABO UPDATE

Dr. Roberto Hernandez-Orsini

hernandez-orsini@americanboardortho.com

The ABO is committed to upholding our mission to elevate the quality of orthodontic care for the public by promoting excellence through certification, education and professional collaboration. We believe the increase in orthodontists achieving board certification strengthens the specialty and provides an opportunity for us to come together to address non-specialists practicing orthodontics.

ABO Yearly Update:

- **Clinical Exam Update:** The ABO conducted Clinical Examinations in February and November 2020. A total of 203 examinees were certified or recertified at the February examination. A complete listing of names by constituency is located on the ABO website. Results of the November examination will be announced in January 2021. The ABO currently represents 49 percent of AAO membership.

The February 2020 Clinical Examination was held in St. Louis in the Scenario-based Oral Clinical Examination format. However, in response to safety requirements recommended by the CDC due to COVID-19, an alternative testing option for the Clinical Examination was identified and announced in July 2020. The July 2020 Clinical Examination was cancelled, with examinees having the opportunity to reschedule to a future examination.

Due to COVID-19 World Pandemic, The Board of Directors of The American Board of Orthodontics made the decision to adapt the Clinical Examination to the current situation we are experiencing. Beginning with the November 2020 Clinical Examination and for 2021 Clinical Exams scheduled in February, July and November, the examinations will take place at Scantron Testing Centers Worldwide. Travel to St. Louis will not be required. The examination will continue to be administered in a scenario-based format with the same exam components and testing criteria. The Clinical Examination will comprise the same four Domains that we have defined. The proportions contained will be also the same each weighting

25%. The validity of the exam will be maintained with changes only made to accommodate how answers are submitted. Exams will continue to be scored by multiple ABO examiners to ensure accuracy and consistency for each exam section.

To date, all future examinations are full with wait lists, with the exception of the November 2021 date which is currently open. Complete details regarding the Clinical Examination, study materials and how to prepare can be found on the ABO website.

- **Certification Renewal:** Certification renewal is an important component of the board certification process, requiring ongoing proficiency in orthodontics and a commitment to life-long learning. In order to maintain an active board certification status, certification renewal is required every 10 years. Individuals may register for this exam up to two years prior to their expiration date. Please view this Motion Graphic Video created to outline the certification renewal process. Additional details and requirements for completing this examination are located on the ABO website.
- **Written Examination Update:** The ABO Written Examination was administered to 409 examinees throughout the United States and Canada on June 5 and 6, 2020. The reliability of the exam was 87% with a 99% pass rate.

Due to COVID-19 restrictions, the original April 7, 2020 testing date was rescheduled. This exam could not be conducted at any Center as they were all closed due to established distancing. The written exam format was conducted through a live, online-proctored test, administered through Scantron/Examity. This change allowed examinees to complete the exam from their personal computer with strict security measures in place. Every candidate was closely monitored by assigned security expert personnel.

Registration is now open for the next Written Examination scheduled on April 6, 2021 at Scantron Testing Centers throughout the United States and Canada. Examination eligibility requirements and exam resources can be found on the ABO website. An important reminder that once the Written Examination is successfully completed, it never expires and does not need to be retaken.

• **The College:** Due to COVID-19, the College cancelled in-person prep courses for the ABO Scenario-based Clinical Exams. Virtual presentations are being considered with the next in-person prep course being offered during the 2021 AAO Annual Session in Boston, MA, pending COVID-19 restrictions. The ABO and College continue to collaborate to ensure all CODA accredited orthodontic programs in the United States and Canada have at least one assigned volunteer advocate to promote board certification.

• **GORP:** GORP 2020 was cancelled due to COVID-19. Plans are underway for ABO's participation during the 2021 event.

• **WFO:** ABO directors were invited to present at the 9th International Orthodontic Congress 2020 meeting, originally scheduled in Yokohama, Japan, however, the physical meeting was cancelled and held virtually. In response, the ABO directors participated in the virtual meeting and presented information on board certification. Additionally, the ABO directors submitted an article for inclusion in the Journal of the WFO, titled "Introduction to the American Board of Orthodontics Scenario-based Clinical Examination".

Educational Update:

The ABO continues to develop study materials to assist in preparing for the Scenario-based Clinical Examination which include a study guide, sample cases, and videos. Additionally, the ABO is working closely with examiners and orthodontic program educators requesting their feedback and assistance with the new exam format and item writing process.

ABO advocates continue to be appointed for each orthodontic program as a resource to residents interested in additional information on board certification.

To add value to board certified orthodontists, the ABO is proud to introduce an orthodontic specialty video on the importance of using a specialist. This professionally created video was developed specifically for board certified orthodontists to feature in lobby or patient waiting areas, on websites and social channels and during patient consultations. The ABO continues to offer online educational materials to allow board certified orthodontists to speak in a unified voice to include an Educational Toolkit, Brand Standards Guide, sample website wording, press release, pathway graphic, window clings, and consumer brochure. Board certified orthodontists also have access to a personal, online dashboard, where enhanced software allows for improved functionality on the ABO website to include an orthodontist locator with the ability to list multiple offices, user-specific dashboard notifications, print complimentary verification letter and track personal CE credit hours.

The ABO's April 2020 Educators Symposium, "The Change is Here – Are You on Board?", honoring Dr. Katherine Vig, was cancelled due to COVID-19. In lieu of the physical meeting in St. Louis, a PowerPoint presentation with important examination information and updates was distributed to Department Chairs and Program Directors of CODA accredited orthodontic programs

in the United States and Canada. The ABO will announce plans to reschedule the symposium in the fall of 2021.

Complimentary ABO measuring gauges were distributed to first year residents at requesting CODA accredited orthodontic programs.

In preparation for the AAO's 2021 Annual Session, the ABO plans to again host an Educator/Advocate Workshop as well as an ABO Open House/Info Session to share updates, answer questions and provide educational information on the Written and Clinical Examinations. In addition, the ABO will have an informational booth located in the Convention Center to provide information on the board certification process.

ABO Award Recognition:

Due to the cancellation of the 2020 AAO Annual Session meeting, the award ceremonies honoring the 2020 recipients could not take place. Therefore, these individuals will be recognized during the 2021 Annual Session in Boston, MA during a newly established ABO Awards Night. No additional award recipients will be identified for 2021.

The following 2020 ABO award recipients who will be recognized in 2021 include:

- Albert H. Ketcham Memorial Award: Dr. Rolf G. Behrents
- Dale B. Wade Award of Excellence in Orthodontics: Dr. Carla Evans
- Earl E. and Wilma S. Shepard Distinguished Service Award: Dr. Perry Opin
- O.B. Vaughan Special Recognition Award: Dr. John Kanyusik

Please visit the ABO website for information on all award honorees.

ABO Directors 2020-2021:

The ABO Directors for the 2020-2021 year are as follows:

Dr. Valmy Kulbersh, President, representing the Great Lakes Association of Orthodontists

Dr. David Sabott, President-Elect, representing the Rocky Mountain Society of Orthodontists

Dr. Patrick Foley, Secretary/Treasurer, representing the Midwestern Society of Orthodontists

Dr. Timothy Trulove, Director, representing the Southern Association of Orthodontists

Dr. Jae H. Park, Director, representing the Pacific Coast Society of Orthodontists

Dr. Roberto Hernandez-Orsini, Director, representing the Middle Atlantic Society of Orthodontists

Dr. Stephen McCullough, Director, representing the Southwestern Society of Orthodontists

Dr. Nicholas Barone, Immediate Past President, representing the Northeastern Society of Orthodontists

The AAO House of Delegates confirmed Dr. Emile Rossouw as the new ABO Director, representing the Northeastern Society of Orthodontists.

Congratulations to Dr. Valmy Kulbersh who serves as the first female ABO President. ■

MASO BOARD WORKING TO IMPLEMENT NEW STRATEGIC PLAN

At its January 2020 Board Conference Call, the MASO Board of Directors voted to approve a new Strategic Plan for 2020 – 2023. The plan began with a survey completed by all Board members in the summer 2019 on their perception of MASO's strengths, weaknesses, threats and opportunities. A strategic plan working session then took place in September at the first Board and Delegate meeting of the Annual Session with Kate Brunswick, CEO of Accent on Management, facilitating. The plan took shape in October and was presented to President **Ty Saini**, then to the entire Board during a conference call in December. The Board voted to approve a new mission statement, seen in the plan below. (The Mission Statement was presented at the Annual Membership Meeting in September 2020 in Baltimore for official ratification.)

In January the plan was approved and Champions for each of the goals were assigned. Objectives to accomplish the goals were established in the planning sessions, and will now be reviewed - in some cases modified- and then put into action for implementation by the Champions and their committees.

Dr Madeleine Goodman will resume discussion of the strategic plan at the next Board meeting on March 13, 2021.

Proposed changes submitted by the Champions of "Enhance Communication to members" section of the Strategic Plan: **Dr. Normand Boucher** **Dr. Omid Rajaei**

We are following the trend towards an increase in digital content (Spring Journal - hard copy & Fall journal - digital)

- Opening an instagram account for MASO and connecting that to a Facebook

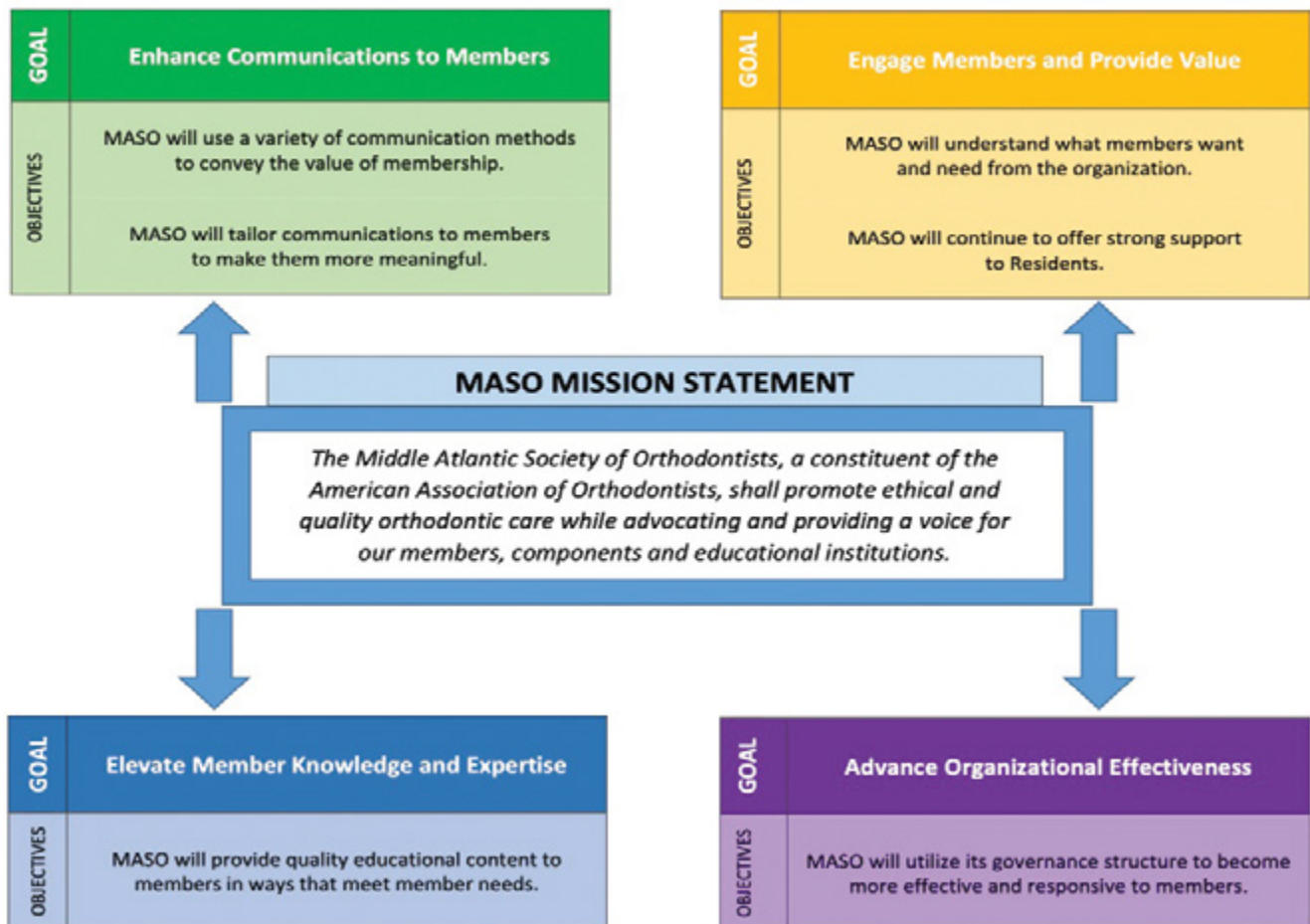
page for MASO (this will help when posting as any instagram posts can be made to also post to FB automatically)

- Instagram and FB pages would be public and would help reach a wider audience both domestically and internationally
- We can use the digital content (images, brief narratives etc) from the journal and our website to be posted on Instagram
- Any case presentations provided to the journal can also be posted to the social media accounts with brief descriptions, photos, tags, links etc.
- Instagram and FB can be used to market and promote our annual meetings and any other local meetings/events in our constituency
- Guidelines should be established with respect to content that can be posted. Absolutely no political material.
- Recruiting an associate editor from each of the MASO residency programs to ensure the journal content includes all residency programs. The following MASO members have volunteered: **Dr. Jose A. Bosio** (University of Maryland)-case reports; **Dr. Michael Roth** (Albert Einstein Medical Center)-MASO AJODO Journal Club; **Dr. Hyeran Helen Jeon** (U of Penn)-MASO Angle Orthodontist Journal Club; **Dr. Chenshuang Monica Li** (U of Penn)-Structured Abstract Editor; **Dr Omid Rajaei** -Digital Content Editor

Reporting on progress made on the Strategic Plan will occur during each Board meeting. More reports will be given to members as the year progresses.

As approved by the MASO Board of Directors, see below for the 2020 – 2023 MASO Strategic Plan. ■

MASO Strategic Plan 2020-2023





TREASURER'S REPORT

Dr. Dave Harmon

hyrax3@aol.com

CURRENT ASSETS AS OF DECEMBER 31, 2020

| | |
|----------------------|---------------------|
| Savings/Cash | \$209,442.13 |
| Reserve Account | 565,957.32 |
| Other Current Assets | 34,901.08 |
| TOTAL ASSETS | \$810,300.53 |

| INCOME | Year-End 2020 | 2021 Budget |
|--------------------------------------|-------------------|-------------------|
| Dues-Active / Reinstatement | \$131,878.26 | \$128,350.00 |
| Newsletter Advertising | 0.00 | 1,900.00 |
| CE Course | 31,995.00 | 30,000.00 |
| Net Annual Session ('20 Baltimore) | (6,143.71) | 0.00 |
| Net Annual Session ('21 Puerto Rico) | 0.00 | 30,000.00 |
| OTHER INCOME | | |
| Interest/Dividends | 8,226.35 | 6,000.00 |
| Contribution from Reserves | 0.00 | 0.00 |
| TOTAL INCOME | 165,955.90 | 196,250.00 |

| EXPENSES | Year-End 2020 | 2021 Budget |
|--------------------------------|-------------------|-------------------|
| OPERATING EXPENSES | | |
| AAO Dues Billing Fee | 2,933.70 | 2,900.00 |
| President Honorarium | 1,000.00 | 1,000.00 |
| President Component Visits | 0.00 | 1,500.00 |
| AS Board Stipend (\$400 ea) | 0.00 | 4,000.00 |
| Management Fee | 81,280.00 | 82,580.00 |
| Office Supplies | 1,010.50 | 1,400.00 |
| Accounting | 660.00 | 660.00 |
| Subscriptions | 314.37 | 700.00 |
| Stationary & Envelopes | 42.89 | 200.00 |
| Copying | 141.52 | 400.00 |
| Postage/Mailing House | 246.47 | 240.00 |
| Telephone/Fax | 1,179.20 | 2,000.00 |
| Office/File Storage | 149.16 | 360.00 |
| Journal Editor - Honorarium | 1,000.00 | 1,000.00 |
| AS Scholarships | 0.00 | 24,000.00 |
| Awards | 3,058.72 | 3,500.00 |
| Website Development | 468.00 | 500.00 |
| Journal Publication/Mailing | 17,200.76 | 10,000.00 |
| BOD - Travel Del-Mar Caucus | 792.92 | 0.00 |
| BOD - Meals/Room/AV - Del Mar | 3,058.40 | 0.00 |
| BOD-AS Bus Mtg (Sep) | 0.00 | 200.00 |
| BOD- AS Bd Mtgs (Sep) | 883.21 | 1,500.00 |
| BOD -Strategic Planning Mtg | 0.00 | 2,000.00 |
| Website-maint, network solutns | 124.99 | 500.00 |
| CE Course | 21,787.00 | 23,000.00 |
| CE Board Dinner | 2,957.52 | 0.00 |
| NATIONAL ANNUAL MEETING | | |
| Leadership/Gov Affairs Conf/EL | (195.78) | 200.00 |
| AAO-Caucus Mtg Meals | 0.00 | 0.00 |
| AAO-Del(7) Alt (3)Room & Misc | 0.00 | 12,500.00 |
| AAO-Delegates And Alt Airfare | 0.00 | 2,500.00 |
| AAO-Exc Dir Attendance | 282.80 | 2,300.00 |
| AAOF Contribution | 5,000.00 | 5,000.00 |
| AAO - Travel Expense | 0.00 | 0.00 |
| GORP Program | 0.00 | 4,200.00 |
| OTHER EXPENSES | | |
| Credit Card Fee | 923.79 | 1,200.00 |
| Bank Service Charges | 125.00 | 150.00 |
| Prior Year Expense | (1,300.00) | 0.00 |
| Miscellaneous | 146.88 | 200.00 |
| Liability Insurance | 1,124.00 | 1,200.00 |
| Audit Expense | 7,500.00 | 0.00 |
| Tax Filing | 1,040.00 | 1,400.00 |
| TOTAL EXPENSES | 154,936.02 | 194,990.00 |

| | | |
|----------------------------|--------------------|-------------------|
| Unrealized gain/loss | 76,665.65 | |
| NET REVENUE/EXPENSE | \$87,685.53 | \$1,260.00 |



EDUCATION/RESEARCH COMMITTEE REPORT

Dr. Vanessa Morenzi

morenziv@einstein.edu

Kress Award

Deadline: March 31, 2021

The Committee encourages all 2020-2021 graduates to apply for the 2020 Kress Award which will be granted to the most outstanding research thesis by a graduating resident within MASO's geographic area. The Award will be presented during the MASO Annual Session, November 4-7, 2021 at the Wyndham Grand Rio Mar resort in Rio Mar, Puerto Rico. The recipient will receive a \$1,000 check, an award plaque, complimentary registration to the Annual Session at the Wyndham, and a 30-day advance coach fare reimbursement.

Submissions must be received in the MASO office by March 31, 2021 to be considered for the award. The abstract of the award-winning thesis will be published in the MASO *Journal*.

To qualify, residents are required to submit an application, thesis, and publication manuscripts (in Word or PDF format) by choosing one of the following options:

- Online at: aom.formstack.com/forms/masokress
- Or you may mail a CD or flash drive to: MASO-Kress Award, 400 W. Wilson Bridge Rd., Ste 120, Worthington, OH 43085. No photos need to be included of the person submitting the application.

GORP Scholarship

Deadline: August 31, 2021

A \$100 MASO Scholarship is available for each orthodontic resident attending the GORP conference. If a program's resident participates in GORP, the department chair or program director should fax the attendee's names (on school letterhead) to (614) 221-1989, or scan and send them to maso@assnoffices.com after the conference. Individual checks will be mailed directly to the school in care of your office for all those received in the MASO office by August 31, 2021.

MASO ANNUAL SESSION

MASO will award a \$600 Robert L. Vanarsdall Jr. scholarship for registration and travel expenses to the post-graduate chair or program director, plus one full-time faculty member of a MASO area university, all of whom must be AAO members and attend MASO's Annual Session in Rio Mar, Puerto Rico November 4-7, 2021. In

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EDUCATION/RESEARCH COMMITTEE

CONTINUED FROM PAGE 31

addition, MASO will provide a \$600 scholarship to each MASO resident who is an AAO member from the MASO region. These recipients must attend MASO's Member/Business Meeting, sign the registration form outside the meeting room, and attend all scientific sessions. Chairs or Program Directors, and full time faculty, must participate in the Educators Meeting and the Member/Business Meeting to receive the reimbursement. Checks will be issued following the Annual Session. For 2021, \$24,000 has been budgeted for these scholarships. ■



GOVERNMENT AFFAIRS COMMITTEE REPORT

Dr. Kathy L. Marshall
k_marshall@howard.edu

Dr. Doug Harte is in his last year of service as the MASO COGA representative. We wish to express our deep appreciation for the years of service he provided to support our constituency on COGA, as a member of numerous committees, as a Board member, and as a great MASO President.

As the Chair of the MASO Government Affairs Committee, I would like to take this opportunity to enthusiastically recognize the Committee members:

- Dr. Normand Boucher, PA
- Dr. Robert Mensah, MD
- Dr. Adrienne Perry, MD
- Dr. Chelesa Phillips, DC
- Dr. Milton L. Matos Roman, PR

The Committee reports on state and national legislative efforts of interest to orthodontics and dentistry and relays information regarding any legislation affecting orthodontic care within the component jurisdictions of MASO. Currently, the annual AAO Advocacy meeting in Washington DC is by invitation only and will be held on February 25-26, 2021. Orthodontists are encouraged to attend state dental association meetings for government affairs in: DC, DE, MD, NJ, PA, PR and VI. The AAO's 2021 Professional Advocacy Conference will focus on the following issues:

- a-HR 4674 College Affordability Act
- b-HR 1418 Competitive Health Insurance Reform Act
- c-HR 1379 Ensuring Lasting Smiles Act
- d-Protecting the public from dentists practicing without a license in the jurisdiction

Going forward our committee will develop "Global Advocacy Task Force" recommendations.

The committee discussed the **Special Committee on Women Orthodontists** which works to create opportunities for leadership and advocacy for women's issues in orthodontic practice including access to financial and management resources. Additionally, they promote educational seminars regarding private practice stress, burnout, and work-life balance. Collaborations with COMEJC produced the AAO update regarding practice leave and return to practice. The committee's work towards creation of a committee on Inclusion and Engagement has resulted in an **AAO Taskforce on Inclusion and Engagement**. Committee members also considered how **Residency programs** across the country have had to "pivot" to provide patient care. With each wave of exposures through the country, there was an ebb and flow for access to care causing a variation in the ability to provide onsite patient care opportunities for residents. Residency programs across MASO have dealt with a spectrum of disparity in patients served, PPE access, educational facility adaptations, and governmental regulation guidelines. Howard University resides in Washington, DC and is affected by the federal government and the District of Columbia's mayor. Government shutdowns directly impacted the ability of the university to maintain daily functions. During the extended COVID-19 closure, available faculty obtained hospital privileges to provide emergency care for patients using Howard University Hospital during the university's closure. Alumni supported their regional programs and the need remains as the crisis persists. ■



NOMINATING COMMITTEE REPORT

Dr. Russell Sandman
doctorbrace@yahoo.com

Your MASO Nominating Committee will meet via conference call in early 2021 to nominate candidates for the 2021-2022 period.

A final committee report will be submitted to the MASO Board of Directors for discussion during the June 2021 meeting. If you are interested in participating in your profession's leadership, there is no better time to volunteer than right now! The MASO committees are as follows: Communication and Publication, Education/Research, Government Affairs, and Member Services. Any active member who is interested in serving as a committee member, Board member, or as a Delegate to the AAO House of Delegates, should contact his or her Component President. If you have any questions, please contact me at doctorbrace@yahoo.com or call me at (201)768-4121. You can also call the MASO office at (866)748-6276 and speak to our executive director, Ms. Jane Treiber. MASO is only as strong as its membership and volunteer leaders! Serving on a committee, as a delegate, or on our Board of Directors will be a very rewarding experience! We look forward to hearing from you by March 13, 2021. ■

COMMENTARY ON THE ENVIRONMENT BY TEENAGE ORTHODONTIC PATIENT

Sarah-Ann Chiara

Publish in the *Town Crier*, Plymouth Whitemarsh High School • Plymouth Meeting, PA

On the week of September 20 to September 27, 150 countries participated in a global climate strike consisting of 4,600 protests. Over 7.6 million people flooded the streets of cities all over the world from Istanbul, Turkey to Montreal, Canada to New York City. Holding signs and banners ranging from humorous phrases such as “this planet in getting hotter than my imaginary boyfriend” to serious demands like “save our only home,” the next generation is expressing their worry of the decreasing guarantee of a habitable planet.

Feeling angry and not listened to, young people made their voices heard by participating in this global event. When asked how she felt the climate strikes were impacting the way people view climate change, sixteen-year-old Naysa Harraway, an attendee of the New York strike responded, “I feel the climate strikes are especially impacting those of a younger audience. It gives us empowerment and a wake-up call that action needs to happen and we are a part of the process to take that action.” Evidently, children and teens feel that lawmakers and political leaders are not doing enough to stop this global crisis. The recent global strikes act as a message that youth will do everything in their power to get older generations to listen.

PW student Maya Hoffman ('22) says “the US is not doing enough to stop climate change. I think that the next big step is solar power housing and to plant and protect the trees.” Young people want to

see a greener community. They fear that because of the decisions of older generations, they might not be able to have a happy future on this planet. Climate strikes are not only an act of speaking out, but also an angry demand to save the planet and every living thing on it. PW graduate Teddy Chiara ('18) and attendee of the Montreal climate strike says “I thought that the climate strike was absolutely unbelievable. So many people missed work and school to protest this issue. It spread awareness and showed that this is something people believe in and something the government better start listening to if they want to stay in power.”

With millions around the globe speaking out, there are also millions that don't believe in climate change. They believe that it isn't a real issue and that countries should not spend their money on a greener society but instead on economic and industrial needs. As former President Donald Trump made claims about climate change being a hoax, it was increasingly difficult for the American people to get what they've been asking for. However, many activists such as Greta Thunberg believe that the power of one's voice and mind can overcome challenges that the government has in store for them. It is pretty clear that activist and protesters will not stop fighting until they see green. The change will take a lot of convincing in order to make others feel motivated to re-think their lifestyle, but the strikes are definitely a step in the right direction. ■

2021 MASO Annual Session Looks Forward to Puerto Rico in November

MASO very much welcomes the New Year and is looking forward to being able to connect on a personal level with members again. We are hopeful that the 2021 Annual Session in Puerto Rico will be such an opportunity! Scheduled for November 4 – 7 (at the end of hurricane season), temperatures will be in the 80's, and COVID-19 should be just a very bad memory with the majority of the population vaccinated. It's time to get together MASO!

Offering three outdoor swimming pools and a spa and wellness center, **Wyndham Grand Rio Mar Beach Resort & Spa** is located in Rio Grande, with access to beautiful beaches and two golf courses. This resort is 24 miles from Luis Munoz Marin Airport, and about 45 minutes from the San Juan Airport.

At The Wyndham Grand Rio Mar you will find 10 restaurants, a one-mile stretch of beach, 13 tennis courts and a fitness center. Other facilities offered at the property include two golf courses, a shared lounge and a laundry. MASO guests can enjoy a variety of water sports, dance lessons, and seasonal activities -- like Iguana feeding!

The MASO Program Committee is hard at work putting together a meaningful program for doctors and staff. Members of the committee are: President and General Chairperson – **Dr. Francis Picon**; Program Chair – **Dr. Luis Toro, Jr.**; Sponsor/Exhibits Co-Chairs – **Drs. David Harmon** and **Omid Rajaei**; and Social/Lifestyle Chair – **Dr. Lynette Garcia**.

Activities begin on November 4 with the MASO Golf Outing and an evening welcome reception. Doctors and staff programs begin Friday morning until mid-afternoon, still allowing time to enjoy all the amenities of the hotel and the surrounding area. Visit with exhibitors during breakfast and lunch on Friday and Saturday, and all morning on Sunday. Saturday's programs begin early and end mid-afternoon also, then the MASO dinner takes place Saturday evening. Sunday's program is abbreviated, with joint doctor/staff sessions, then the rest of the day is free to explore.

Registration will open in June for the 2021 MASO Annual Session. We hope we can see your faces in person rather than on Zoom! In the meantime, stay healthy and wear a mask. ■





Delaware State Orthodontic Society

Dr. Brienne M. Flagg

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We were pleased to host the MASO Spring CE event in Delaware of March 13, 2020 at the historical and beautiful Hotel duPont. This meeting was held in person but last minute arrangements were made to also allow members and residents to attend virtually. Drs. Chris Teeters and Brian Anderson delivered orthodontic pearls from the Orthodontic Pearls Facebook Forum that were applicable to clinical practice, business,

and life. It was a fun, fast-paced, educational lecture that provided actionable tips for all who attended.

Shortly thereafter, due to COVID-19 pandemic, orthodontic offices in Delaware were closed for 8 weeks. While we have yet to have our Delaware State Orthodontic Society meeting, much of our focus has remained on providing a safe healthy environment for our patients and staff while adapting to practicing in unprecedented times.

In this time of change, we appreciate the many opportunities to further our education virtually and look forward to in-person collaborations. ■



Maryland State Society of Orthodontists

Dr. Anna Muench

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The MSSO was able to have its first ever virtual meeting on Friday, October 30 with the help of the MSDA and their virtual platform. It was an all-day meeting featuring three amazing speakers who discussed the diagnosis and management of TMD. Our speakers were Dr. Vanessa Benavent, a Diplomate of the American Board of Orofacial Pain and a Fellow of

the American Academy of Orofacial Pain; Dr. Michelle Finigan, a physical therapist and the owner of ProMOVE PT Pain Specialists; and Dr. Kelly Donahue, a clinical health psychologist and mind-body health expert. We had roughly 70 members and residents from the University of Maryland, Howard University, and Washington Hospital Center in attendance. We were unable to have our cherished meeting which was planned for the first week in April due to the pandemic stay at home orders. The 2021 board members are **Dr. Brandon Hagan** (President), **Dr. Ejiro Esi** (President Elect), **Dr. Richa Dutta** (Secretary/Treasurer), and **Dr. Christopher Scott** (Director). ■



New Jersey Association of Orthodontists

Dr. Jennifer Morrison

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2020 was an extremely challenging year for everyone, both professionally and personally. Many in New Jersey have been affected, directly or indirectly, by the COVID-19 pandemic and, sadly, some of our colleagues have even lost loved ones. We enter 2021 however, with a sense of cautious optimism and hope. Fortunately, many of our members have already begun the vaccination process as well.

We wish to acknowledge the efforts of our outgoing President, **Dr. Chris Overcash** for his assistance during these unprecedented times. We also appreciate the continued efforts of the New Jersey Dental Association (NJDA) who we have been working with very closely. The increased communication and additional meetings hosted by NJDA

president **Dr. Mitchell Weiner** during these uncertain times were greatly appreciated by our membership.

Dr. Weiner also petitioned the NJDA to allow extra seats for specialty societies on NJDA Councils. As a result, **Dr. Karen McCarthy** will now serve as a first NJAO liaison on NJDA Government and Public Affairs Council. **Dr. Peter Clemente** will continue as NJAO liaison on the Dental Benefits Council.

We are also pleased to announce the 2021 Executive Board members: **Dr. Jennifer Morrison** (President), **Dr. Michael Perillo** (Vice President), **Dr. Shalin Shah** (Treasurer) and **Dana Foster-Williams** (Executive Secretary).

During Spring 2021, we will be offering a Financial Webinar Series as well as the NJAO Annual Session on practice management, both in virtual format.

I look forward to meeting my colleagues in person once again in the near future. ■



Pennsylvania Association of Orthodontists

Dr. Alfred de Prophetis
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As President Elect of the PAO, **Dr. Tejy Thomas** and I had the opportunity to attend the Leadership and Dental Workforce Task Force meeting in Austin, Texas. A goal of the meeting was to raise interest in the AAO and to inform attendees of the many activities and resources available through the AAO for our members. It was suggested that we reach out to our members to routinely open emails from the AAO so that they may better appreciate the resources provided. Greater diversity within the leadership was one of the highlighted goals. An entertaining demonstration of parliamentary procedure was acted out. The AAO Foundation was discussed. This important foundation

helps fund residency programs and helps defer the cost of residents attending professional meetings. The CAP (Consumer Awareness Program) initiatives were described. This program is raising awareness of the high correlation between bullying and poor dental esthetics.

On July 21, I participated in an on-line conference of the Dental Workforce Task Force. It highlighted the need to determine and quantify the demand for dental treatment in rural and other underserved populations.

The PAO held a board meeting on October 24 at the Bedford Springs Omni Hotel. The PAO Continuing Education Program planned as an in-person meeting in April was cancelled because of the COVID-19 pandemic and will be converted to a virtual meeting with the same speakers. Appointments were made to PAO committees. **Dr. Tejy Thomas** was awarded a plaque in recognition of his fine service to the organization. ■



Puerto Rico Society of Orthodontists

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The Puerto Rico Society of Orthodontists celebrated its annual assembly in December. Due to the current COVID-19 situation it was a virtual Zoom meeting. During this virtual gathering a new board was elected. The new board is composed of:

Dr. Jimmarie Ramos, President
Dr. Bruni Ortíz-Giuliani, President-Elect
Dr. Juan Carlos Vazquez, Treasurer
Dr. Andrea González, Secretary
Dr. Jose A. Morales, Public Awareness
Dr. Ricardo Santana, Continuing Education

Our new board pledged to continue the work necessary to strengthen our society despite the current challenges. Their agenda includes continuing the social media public awareness campaign, promoting involvement of the new and younger members and strengthening the camaraderie within our society. During the assembly, we expressed gratitude to our outgoing Immediate Past President, Dr. Jose Vicens. Having served our board for 12 years in different capacities, Dr. Vicens can be credited with greatly improving the finances of our society during his time as treasurer and president.

In September, our society had a successful virtual CE course where, direct from Brazil, Dr. Flavia Artese, discussed "Open Bites: Are we Treating the Right Causes". Dr. Artese's warmth and graciousness were an appropriate complement to her strong and insightful presentation.

It is with great sadness that we report the passing of **Dr. Luis Toro, Sr.** He was a past president and founder of our society. His tireless defense of our specialty was admirable, serving as a model for our future leaders. His "bon vivant" spirit was always cherished at our activities. His immense contribution to our specialty and our society will be missed. He lives on through **Dr. Luis Toro, Jr.** and **Dr. Veronica Toro**, his son and granddaughter respectively, who continue contributing to our specialty. Our deepest condolences to his family on behalf of grateful colleagues.

It has been a challenging year for the world, and everyone looks forward to the day that we put the pandemic behind us. The help and solidarity provided by our AAO and MASO colleagues served to strengthen the bonds that unite us. It has certainly changed the way we practice our specialty and some of the changes will prove to be long-lasting. In a sense, we can only accept the challenges while realizing that some changes are going to have a positive impact in the long run. With regards to the pandemic, we can only hope and pray that this too shall pass. We hope that the hardship and suffering in these United States finishes soon. The toll taken so far seems sometimes unbearable and our condolences go out to those affected in this struggle. ■

GRADUATE PROGRAM REPORTS



ALBERT EINSTEIN MEDICAL CENTER

Dr. Vanessa Morenzi
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Resident Activities

Our second-year residents, **Drs. Yee Seul Chun, Michael Kotecki** and **Gannon Van Allen** are doing very well clinically, are tweaking their research projects, and are preparing for their ongoing PGY2 Mock Boards evaluations. Our first-year residents, **Drs. Mordechai (Mordy) Fried, Justin Middleberg** and **Madeline Pitz** have acclimated well to their clinical and academic studies and have presented their research proposals to the faculty leadership.

Faculty Activities

Dr. Paul Adams recently completed his term as President of the Greater Philadelphia Society of Orthodontists (GPSO). Also serving on the Board of Directors are fellow Einstein faculty members **Drs. Steven Cohen, Mark McDonough**, and **Matthew Etter**.

The more-recent adoption of the Scenario-based Certification examination by the ABO prompted two of our valuable part-time faculty members to seek certification. We are pleased to announce that **Dr. Paul Adams** and **Dr. Adam Weiss**

are both now Board Certified! Congratulations to them both for their accomplishments and to the ABO for their efforts to increase the ranks and numbers of specialty-trained, board-certified orthodontists providing care to the public.

We thank each of our volunteer and part-time faculty for their invaluable support and dedication to our program and for the education of our residents. Without the valued commitment of the part-time faculty, it would be nearly impossible to provide a quality educational experience. Program leadership is indebted to the many community-based clinicians who give of their time to teach and mentor our residents.

We are also indebted to our orthodontic colleagues - near and far- for reaching out to our program to offer educational opportunities, virtual seminars, webinars and other educational support during this ongoing pandemic. These wonderful opportunities allow the residents to hear pre-eminent speakers that they have missed seeing due to the cancellation of our annual sessions and regional meetings. Please do not hesitate to reach out to me if you have additional ideas to enhance resident education.

All are welcome to come and visit us at Einstein Ortho - even virtually! We are celebrating the 100th anniversary of our Dental Department, and its dedicated service to our community, this year. We are proud of our legacy and of the residents that we are educating today who will become tomorrow's clinical and professional leaders. ■



HOWARD UNIVERSITY

Dr. Kathy L. Marshall
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We congratulate those matched to our program for entry in July 2021. We welcome:

Dr. Brionna Anthony, from Virginia Commonwealth University

Dr. Natasha Bharucha, Howard University International Dentist Program

Dr. Jillian Pailin, Howard University

Dr. Samuel Harris, Meharry Medical College

Dr. Brandon Thompson, Meharry Medical College

Dr. Rochelle Watson, University of the West Indies

Congratulations to our awarded graduates **Drs. Trenton Davidheiser** and **Bianca Frederick** for their dedication as Chief Resident and Outstanding Research; and to **Dr. Omosede Osagiede** for receiving the **Dr. Jerry Thomas Biomechanics Award**.

Our continuing residents in the first and second year have adapted well to the clinical safety protocols, clinic realignment and weekly COVID testing. Our Chief Resident, **Dr. Briana McRae**, Co-Chief

Resident, **Dr. Lisa Kwarteng** and First Year Representative, **Dr. Donna Nichols** work hard to ensure communication between the residents and administration as updated COVID protocols are implemented in the College and in the DC Area.

We would like to thank the Howard University Orthodontic Alumni Association for donations this past year including extraoral evacuators for the clinic, lectures to the residents, and equipment for teleconferencing in our conference room. The alumni association provides annual support to the graduating residents by offsetting the cost of the ABO Written Examination to ensure all Howard graduates continue to pursue ABO Board certification.

Finally, important faculty updates include the retirement of our former Chair, **Dr. Avadis Abrahamian**. Dr. Abrahamian gave nearly forty years of dedicated service to Howard University and the Orthodontic Department. Dr. Abrahamian has impacted the professions of hundreds of orthodontic graduates. Dr. Abrahamian, **Thank You** for the legacy you leave, and the challenge to all residents and alumni to strive for the highest level of achievement in orthodontics and in their personal development.

In December, faculty and alumni were saddened by the passing of **Dr. Arnett Anderson**, an extremely supportive Washington, DC area orthodontist to our Pediatric Dentistry and Orthodontic Postdoctoral Programs. A scholarship fund is set up in his name. ■

GRADUATE PROGRAM REPORTS



RUTGERS SCHOOL OF DENTAL MEDICINE

Dr. Thomas Cangialosi
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As everyone is aware, the past year has been a great challenge to the educational process as well as to all of us personally. From March until June, our clinic was open only for emergency care and then resumed routine patient care at half capacity. As the pandemic worsened, we continued to use only half of our available units and required some creative scheduling to get patients treated and students into the clinic. This has had a severely negative impact on our budget. Like everyone else, we have taken great precautions with PPE and limitation of aerosol spray in our clinic. All of our lectures and case conferences have been conducted remotely on WebEx or Zoom and we participated in lectures provided by the Eastern

Component of the Angle Society, which were graciously made available by the membership to our students and faculty.

Another challenge was the interview and admission process. As most programs did, we conducted interviews remotely on Zoom and were surprised and pleased that they went quite well. We were able to recruit an excellent class which includes **Dr. Peter Chyun** from Columbia University, **Dr. Brennan Feldman** from New York University, **Dr. Kayleigh Friedman** from Boston University, **Dr. Kumpal Patel** from Rutgers University and **Dr. Priyanka Srivastava** from the University of California, San Francisco. They will begin the program on July 1, 2021.

That we were able to graduate our class in May on time and continue the educational process is only because of the extreme cooperation and dedication of our faculty and students. We are now in the process of getting our students and faculty vaccinated and are hoping for a great 2021. ■



TEMPLE UNIVERSITY

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Happy New Year's from Temple University Kornberg School of Dentistry Department of Orthodontics. We are very excited about our astounding achievements during these last months. Unfortunately, due to COVID-19 restrictions we were unable to hold our usual graduation celebration for the Class of 2020. But I am glad to share that the residents have all successfully spread their wings and left the nest. We look forward to seeing their contributions back to the orthodontic profession, and their communities. They were: **Drs. Fred Arino, David Carpinello, Allison Clark, Alex Rosner, Noor Tarazi and Brandon Zipper.**

Meanwhile, the Class of 2021 is eagerly working to complete their MS degree and their patients in anticipation of their graduation in August 2021. These young professionals are looking forward to their future as orthodontists and to carry on our wonderful profession. They are: **Zachary DiSpirito, Patrick Moran, Lisa Jolly, Stephen McCown, Lauren Pinkus and Lori Herman.**

Also, the Class of 2022 joined us in July and started their journey into the exciting world of orthodontics. They are: **Ashtyn Goodreau, Ashima Sharma, Michael Karp, Rebecca Avigael Lerman, Justyn Park and Sara Zadmehr.** They are looking forward to attend and meet all MASO members at the upcoming meetings and are enthusiastically preparing for the TWEED course next year in Arizona.

In addition, our residency program received well over 275 applications this year. We invited 40 candidates for an interview and matched 6 great residents: **John Nuveen, Caroline Terry and James Henderson** from Temple University, **Daniel Chenman** from Rutgers University, **Michael Kirshblum** from University of Pennsylvania and **Carolyn Serio** from University of Pittsburgh. We are extremely thrilled of our success and looking forward to the arrival of Class of 2023 next year.

Temple Orthodontics continues to have a presence in orthodontic research. Six senior residents will be representing Temple Orthodontics at the 2021 AADR meeting in Boston, MA. Each will be presenting their original research at the meeting. We thank each faculty member who has dedicated their time and efforts into working with the residents on their research studies.

Furthermore, we continued with our focus on innovation and technology. The Podray Clinic has two 3-D Printers and seven digital intraoral scanners. We take special pride in our strong clinical focus and advanced technology. Our residents are excited and looking forward to their continued engagement into digital orthodontics.

Finally, our Department would like to express our appreciation to the outstanding group of adjunct faculty and alumni, that has helped make this difficult and unpredictable year possible. Their continued enthusiasm and dedication to participate in the education of our residents and success of our program is remarkable.

We hope to see you during the 2021 AAO Annual Meeting again this year. If the safety and COVID-19 regulations permit we will hopefully be hosting our Annual Alumni Reception this upcoming April. ■



UNIVERSITY OF MARYLAND

Dr. Jose Bosio

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Hello from the University of Maryland School of Dentistry (UMSOD).

We hope everyone had a great end-of-the-year holidays, despite the craziness happening in this country and around the world. After being closed for three months, our clinic reopened on June 29, operating at 2/3 of capacity. It took us three months to get all patients back into the building.

And as hard as it was, UMSOD managed to create an online graduation celebration. **Drs. Atefeh Boroun, Sheng Ge, Hyun San Lee** and **Elizabeth Ottey** were able to engage on their online graduation, give their final remarks, and receive their well-deserved certificates in Orthodontics and their Master's degrees. Drs. Ge and Boroun remained in the DMV (DC, MD, VA) area. Dr. Ottey moved to North Carolina, and Dr. Lee returned to her homeland Korea. They are all pursuing their ABO certification.

All 3rd year residents, **Drs. Anh Dao, Ariana Feizi, Jessica Kocan** and **Natalie Miller** passed their ABO examination with great scores. We are very proud of them. And I'm certain our 2nd year residents, **Drs. Elise Tigani, Kelsea Ashton, Syed Hussain** and **Matthew Vumback** are preparing well under the guidance of **Dr. Eung Pae** and will obtain the same high scores. Our 1st year residents **Drs. Jeremy Dock, Sabrina Dorfmann, David Greene** and **Katie Garrett** started slowly (due to COVID-19) but each managed to receive about 35 new patients assigned thus far. Their clinical experience remains strong.

UMSOD was very happy with the residents matched for the graduating class of 2024. They are student doctors **Kevin Barnes** and **Lindsay Diaz** (UMSOD), and **Drs. Vicente Telles da Silva** (from UPITT) and **Xuan (Emily) Wu** (Harvard).

We want to thank our full-time and part-time faculty for continuing to support our program. The commitment of these educators helped to maintain our clinic opened, despite the fear and challenges of the Covid-19 pandemic. Thank you, **Drs. Dina Sanchez, Jeff Jarvis, Monica Schneider, Gordon Groisser, Scott Jenkins, David Harmon, Ed Morris, Steven Siegel, Marston Jones, Christopher Liang, Viney Saini, Ty Saini, Byron Bonebreak** and **Paul Thomopoulos**. The determination of these individuals to continue providing orthodontic education to our resident was fundamental for the sustainability of our clinical program.

We also want to announce that two new part-time faculty members will enhance our ability to provide clinical services in our program. **Drs. Stephen Tigani** and **Neil Kravitz** have been approved as Dean's faculty. They should start in early 2021. And we are also hopeful that we can announce in the next bulletin another great faculty acquisition with a 50% dedication to the program. The selection process is ongoing and should be completed by early 2021. Looking forward to having some more helpful hands in the clinic.

The expected 2020 MASO Annual Meeting, led by our great faculty and MASO president **Ty Saini**, was supposed to be hosted in Baltimore in September, but had to be canceled. However, the presential meeting was substituted by an online series of lectures, which gave us a taste of knowledge. Thank you, Dr. Ty for making it happen.

We, at UMSOD, wish each and every one a great 2021. ■



UNIVERSITY OF PENNSYLVANIA

Dr. Chun-Hsi Chung

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Our comprehensive clinic and didactic Orientation Program began on July 6, 2020 as we welcomed our incoming class:

26-month Certificate Program: **Dr. Nicholas Batastini, Dr. Stephanie Chen, Dr. Marie-Elena Cronin, Dr. Olivia Griswold, Dr. Jingyi Wang** and **Dr. Erica Weinberg**

3-year Certificate/MSOB Program: **Dr. Alex Jia Hong Lin**

5-year Certificate/DScD Program: **Dr. Wenjing Yu**

Perio/Ortho Program: **Dr. Nour Hobani**

Due to the pandemic the Annual Graduate Orthodontic Residents Program (GORP) was cancelled.

On August 27 a virtual graduation ceremony took place for our graduates of the 26-month postdoctoral program in Orthodontics and Dentofacial Orthopedics. Receiving their certificates were, **Dr. Anthony Albert, Dr. L Bui, Dr. Michael Hayes, Dr. Rebecca Lee, Dr. Nishat Shahabuddin** and **Dr. Yoonhee Wang**.

For the first time, our 67th J. Henry O'Hern Annual Orthodontic Alumni Day was held virtually on October 28 and 29. Our speakers were Dr. Peter Ngan (GD'84) and Dr. David Musich. We also held a virtual Cocktail Party on the 28th which was a huge success.

GRADUATE PROGRAM REPORTS

The new class of our Postdoctoral Orthodontic Program has been selected and we are looking forward to welcoming our new residents in the summer of 2021:

26-month Certificate Program: **Nicolette Almer, John Davies, Herta Granado, Grace Nguyen and Jamie Silverberg**

3-year Certificate/MSOB Program: **Mary Contreras, Brianna Tucker**

5-year Certificate/DScD Program: **Leena Baeesa**

Perio/Ortho Program: **Jason Poon**

The Penn Ortho Department will be holding a series of virtual CE sessions beginning December 7. For more information and to register for these sessions please visit our Penn Department of Continuing Education <https://www.dental.upenn.edu/continuing-education/>

Warm wishes for a Happy Holiday Season and as always, we would be honored to have you visit with us at UPENN! ■



UNIVERSITY OF PUERTO RICO

Dr. Jose Morales-Diaz
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Greetings from the University of Puerto Rico!

The University of Puerto Rico (UPR) Orthodontic Graduate Program has had a busy and successful semester despite the challenges due to the pandemic. Our recent graduates' orthodontists **Dr. Carina Perez-Cisneros** and **Dr. Paula Ortiz Bachier** presented and successfully defended their respective Master's thesis: "Comparison of the Effects of Micro-Perforations and Corticotomy on Patients with

Extractions of Maxillary First Premolars" and "Predicted Versus Actual Invisalign Orthodontic Treatment Time: A Stage Determined Retrospective Study." Our second-year residents **Dr. Ambar Mier** and **Eric Torres** took and approved the written ABO Examination. Last October, our program had the privilege to present The School of Dental Medicine Grand Round. **Drs. Christina Cushman, Natalia Llaurador, Angelica Herrera, Antonia Alonso, Ambar Mier and Eric Torres** lectured "The Effective Treatment Planning for the Orthodontics-Periodontics Patient." I would like to congratulate our senior resident **Dr. Ambar Mier** for her outstanding job as chief resident during this exceptional difficult time. We continue with our institutional commitment for humanistic education, service and research following all the indicated rules and protocols during this exceptional time. ■

Come Join Us At...

2021 MASO CE A Virtual 1-Day Workshop

UPDATING PRACTICE ACCELERATION: STRATEGIES WITH MICRO OSTEOPERFORATIONS (MOPS) & HIGH FREQUENCY VIBRATION (HFV)

MARCH 12 • 9:00 AM - 4:00 PM
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Register at www.MASO.org

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Join the Middle Atlantic Society of Orthodontists on

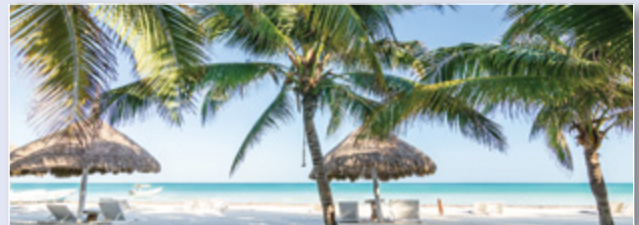
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To contribute material to MASO's Facebook page, please contact MASO at maso@assnoffices.com.

UPCOMING EVENTS



June 25-27, 2021
AAO Hybrid Annual Session
BOSTON, MA



November 4-7, 2021
MASO Annual Session
WYNDHAM GRAND RIO MAR • PUERTO RICO



April 30-May 3, 2022
AAO Annual Session
HONOLULU, HI



September 22-24, 2022
MASO / NESO Annual Session
MARRIOTT PHILADELPHIA • PHILADELPHIA, PA



APRIL 22-25, 2023
AAO Annual Session
CHICAGO, IL



2023
MASO Annual Session
WASHINGTON, D.C.