In this issue…

- Message from the President
- Notice of Annual General Meeting
- Committee Reports
- Component Society Reports
- Student Posterboards
- In Memorium - Dr. C Ronald (CR) Hill
- In Memorium - Dr. William Swanson
- Membership Milestones

Spring 2018
## PROGRAM AT A GLANCE

**Thursday, September 7, 2018**
- CCOGPD Educators’ Meeting
- President’s Welcome Reception
- Student Social
- CAO Social: Gastown Gas!

**Friday, September 8, 2018**
- Past President Breakfast
- Round Table Breakfast Presentations
- **Disruptive Innovation – An Orthodontic Dilemma**
  - Dr. Lorne Kamelchuk
- **Change Management**
  - Dr. Lynn A. Johnson
- **Progress to Success: Navigating the New Orthodontic Landscape**
  - Dr. Aaron Molen
- **New & Younger Members Luncheon ‘Modern Office Design’**
  - Mr. Joe Miller
- **Orthodontic Market Overview**
  - Mr. Chris Bentson
- **Model of Private Vs. Corporate Ownership**
  - Mr. Doug Copple
- **Panel Discussion**
  - Moderated by Lorne Kamelchuk
- **CAO President’s Banquet: THE SCIENCE LAB**

**Saturday, September 9, 2018**
- **CAO Annual General Meeting**
- **Latest Advances in Canadian Orthodontic Research**
- **Early Management of Canines**
  - Dr. Paul Helpard
- **Is There a Disconnect Between the Evidence & the Clinical Reality? Class II Malocclusion Management**
  - Dr. Carlos Mir Flores-Mir & Dr. Billy Whittleshire
- **Alumni Receptions**

[www.cao-aco.org/Conference](http://www.cao-aco.org/Conference)
**President’s Message**

Dr. Rick Odegaard  
Email: dr.odegaard@shawcable.com

The times are changing for the orthodontic specialist in Canada. Now more than ever the value and the importance of a national member services organization that represents the needs of the orthodontic specialist is evident. The items listed below are just some of the initiatives that the CAO has been undertaking on behalf of Canadian orthodontists over the past eight months.

**Proposed Federal Tax Changes** - The CAO provided information to its members regarding proposed tax changes, and provided guidance and materials for members to lobby federal politicians. The CAO formatted and circulated a petition for all members to which their signatures could be added.

**Non Insured Health Benefits** - NIHB has reached out to the CAO for assistance in developing a new protocol to determine orthodontic eligibility for its First Nations and Inuit clients. The CAO is assessing not only the criteria used for determination of eligibility but is also providing input on the overall preauthorization process.

**GST / HST and Input Tax Credits** - Early last year, there was an unsuccessful appeal by a CAO member regarding denial of Input Tax Credits (ITCs). This decision lead to a number of orthodontists being advised to not file for ITCs. The outcome hinged on the judge’s decision that the provision of orthodontic treatment is a single source of supply and is exempt from input tax credits.

In late October, the CAO was notified of another appeal. The CAO has been assisting this appeal in providing historical perspective on the Orthodontic Supply (Hick’s) Agreement, as well as facilitating contact between the legal team involved in the appeal and the Canadian Dental Association who has been providing support around taxation issues. If the outcome of the current case is not favourable consideration will be given to a further challenge or to opening negotiations with CRA to establish a new agreement.

The CAO has continued with written communication to CRA. CRA confirms that the Orthodontic Supply agreement is still in effect. CRA is of the opinion that the Agreement is in conflict with the Tax Act and that CRA wishes to rectify this discrepancy. For the time being, since CRA is willing to continue to adjudicate returns in accordance with the Agreement, orthodontists should continue to file as if the agreement is in full force but remain conservative in their claims to minimize the risk should they be challenged. Until the issue is clarified, it would be prudent to build a reserve that

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Continued...
is sufficient to be able to reimburse CRA for ITCs that were accepted but ultimately reversed.

For more detail on this issue please see the recent e-blast as well as the GST/HST resources on the member section of the CAO website.

**Insurance** - The CAO continues its efforts to establish a mechanism for electronic preauthorization and payment with insurance carriers. The insurance industry is motivated to reduce or to eliminate paper claims and to process initial and monthly payments electronically. The CAO continues to be cautious in these negotiations to ensure that this process is specific to the orthodontic specialist and to avoid the creation of multiple fee codes.

**Direct-to-Consumer Orthodontic Care** - In March, 2017, the CAO sent a memo regarding Direct to Consumer Orthodontics to the provincial registrars, the CDRAF, Health Canada, the CDA and the CDSA. The intent of the memo was to bring attention to concerns arising from direct-to-consumer services in the United States and to encourage regulators to prepare for the entrance of these companies into Canada. The CAO office did not receive any responses to this notification.

The CAO sent an additional letter to the same stakeholders in December 2017, elaborating its concerns and providing additional detail to what was transpiring in the United States. The letter informed the stakeholders that the AAO has lodged complaints of “illegal practice of dentistry” with the Dental Boards in 36 states and of the legal action that is being taken by Smile Direct Club (SDC) against the Michigan Dental Association that charges the Board for libel for their statement that SDC’s activities contravene state law.

It is the opinion of the CAO that dental regulators should be motivated to address direct-to-consumer treatment before it arrives in Canada to avoid the legal issues that are now arising south of the border.

The CAO continues to be active in the engagement of stakeholders to ensure they take the necessary steps to prevent the entrance of these systems into the Canadian market. The CAO is also in continuous communication with the AAO and its legal counsel for progress updates and advice.

**Invisalign®** - In November, Invisalign® placed an advertisement on social media that portrayed conventional orthodontic treatment as outdated technology. The ad then promoted Invisalign® as the most advanced clear aligner system in the world. Further misleading and alarmist visuals were used as part of the advertisement.

On November 27, 2017, the CAO sent a letter to Joe Hogan, Invisalign® CEO, expressing displeasure with the advertisement. Mr. Hogan apologized for the messaging and advised that it had been removed.

In early January 2018, the doctor locator section on the Invisalign® website used the line “these doctors have chosen to specialize in using Invisalign treatment to shape your smile” to describe a number of practitioners.

The CAO contacted Sian Roberts, VP and General Manager for Invisalign® Canada to express concerns regarding the use of the term "specialize", particularly when it was applied to general practitioners. Invisalign® subsequently removed the terminology from the doctor locator.

The CAO met directly with Ms. Roberts in February to convey its concerns regarding Invisalign’s misleading promotional activities.

**Consumer Awareness Program** - The first Canadian-centric consumer awareness campaign was launched in September 2017, to build brand awareness and to establish the orthodontist as the expert source for information and for treatment. The program is web-based with 100 percent digital advertising. The advertisements are directed at a target audience who search online for orthodontic information.

The theme of the initial advertisements is “Trust an Orthodontist”. The message was definitely edgy and subject to different interpretations. The strongest resistance came from organizations representing general practitioners who provide orthodontic services. The campaign has started a conversation that was not occurring with the DRA’s, the CDA or others. These organizations are now beginning to understand and to acknowledge the challenges faced by the orthodontic specialist. The metrics from the initial campaign were very good. The campaign generated strong web traffic and resulted in increased use of the “Find an Orthodontist” search function.

Digital media is agile and dynamic. The content is easily added and updated. In 2018 the campaign will move from “Trust an Expert” into a new phase: “Ask an Expert”. The web content is blog-based, with the material showcasing the expertise of our members. A recent member e-blast was sent that canvased for content ideas and contributions from members.
The new CAO website is consumer-focused, has strong content and a robust doctor locator function. It is the basis for communication with the public and stresses the importance of receiving orthodontic treatment by an orthodontic specialist.

In addition to these recent initiatives the CAO board is active in ongoing programs that support and benefit the Canadian orthodontist that includes liaison with other membership organizations, support of CFAO activities and the Annual Scientific Session.

The above summary illustrates the importance of a national voice for the orthodontic specialists. These initiatives, and the ones that are on their way, require not only the continued support of existing members but the engagement of members new to the organization.

Message de le président

Les temps changent pour les orthodontistes canadiens. Il est évident que nous ressentons tous, plus que jamais, la valeur et l’importance d’une organisation nationale, offrant des services aux membres tout en représentant les besoins de ces derniers. À cet effet, nous vous invitons à lire les points listés plus bas, qui ne sont que quelques initiatives entreprises par l’ACO au cours des huit derniers mois, au nom des orthodontistes canadiens.

Changements proposés en matière de taxes fédérales – L’ACO s’est montrée très proactive dans ce dossier, en fournissant à ses membres toute l’information pertinente concernant ces changements. L’ACO a également fourni l’aide nécessaire, ainsi que le matériel requis, afin que ses membres puissent sensibiliser les politiciens fédéraux. L’ACO a préparé et diffusé une pétition à laquelle tous les membres peuvent ajouter leur signature.

Avantages médicaux non-assurés – Le NIHB a demandé l’aide de l’ACO dans le développement d’un nouveau protocole qui pourrait déterminer l’admissibilité de leurs clients en soins orthodontiques. L’ACO est à évaluer non seulement les critères qui serviront à évaluer l’admissibilité d’un patient, mais aussi à fournir des suggestions en vue de ré-évaluer le processus de pré-autorisation dans son ensemble.

Crédits de taxes TPS / TVH – En début d’année 2017, l’appel d’un de nos membres concernant le refus de crédits de taxes TPS/TVH a été rejeté. Cette décision a eu pour effet qu’un bon nombre d’orthodontistes ont été avisés de ne pas présenter leurs demandes de crédit de taxes sur les intrants. Cette conclusion s’articule autour de la décision du juge, à l’effet que la fourniture de traitements orthodontiques représente une unique source de revenus et que, par conséquent, les orthodontistes ne sont pas admissibles aux crédits de taxes sur les intrants.

En fin octobre 2017, l’ACO a été informée qu’un autre appel était engagé. L’ACO s’est empressée de fournir toute la perspective historique de l’Entente Hicks, en matière de fourniture de soins orthodontiques. De plus, L’ACO a facilité les contacts entre l’équipe de juristes impliqués dans l’appel et l’Association dentaire canadienne, qui a fourni du soutien en matière d’aspects fiscaux.

Si le résultat de la présente affaire n’est pas favorable, nous envisagerons la possibilité de faire appel de cette nouvelle décision, ou encore d’entamer de nouvelles négociations avec l’Agence du revenu du Canada, afin d’en venir à l’atteinte d’une nouvelle entente.


Pour le moment, puisque l’Agence du revenu du Canada accepte de continuer à consentir aux remboursements, tel que prévu dans l’Entente, les orthodontistes doivent continuer à présenter leurs demandes, comme si l’Entente était toujours valide. Il serait toutefois sage de demeurer raisonnable dans ces réclamations, afin de minimiser le risque d’un refus. Jusqu’à ce que la question soit réglée, il serait prudent de se constituer un fonds de réserve suffisant pour être en mesure de rembourser l’Agence du revenu du Canada pour ces crédits de taxes qui auraient d’abord été acceptés, puis refusés par la suite.

Pour de plus amples informations sur cette question, veuillez vous référer au dernier bulletin d’information (e-blast), ainsi qu’aux ressources en matière de TPS/TVH, à la section Membres du site internet de l’ACO.

Continued...
Assurances – L’ACO poursuit ses efforts afin d’établir un système électronique de pré-autorisation et de paiement auprès des organismes assureurs. L’industrie de l’assurance se penche actuellement sur les moyens de réduire ou d’éliminer la production de réclamations papier et de traiter les paiements initiaux et mensuels électroniquement. L’ACO reste prudente dans ces négociations, afin de s’assurer que ce processus soit spécifique aux spécialistes en orthodontie et pour éviter la création d’une multitude de codes de frais.

Soins orthodontiques offerts directement aux consommateurs - En mars 2017, l’ACO a fait parvenir aux représentants provinciaux un mémoire concernant les soins orthodontiques offerts directement aux consommateurs. Ce mémoire fut également adressé à la Fédération canadienne des organismes de réglementation dentaire (FCORD), à Santé Canada, à l’Association dentaire canadienne et à l’Association canadienne des spécialités dentaires (ACSD). Le but de ce mémoire visait à attirer l’attention sur les entreprises américaines qui offrent des services orthodontiques directement aux consommateurs. L’objectif était aussi d’encourager les organismes de réglementation canadiens à se préparer à l’arrivée de ces entreprises sur le marché canadien. À ce jour, l’ACO n’a reçu aucune réponse à ce mémoire.

L’ACO a transmis aux mêmes intervenants une nouvelle lettre en décembre 2017. L’Association y a davantage partagé ses inquiétudes et y a fourni plus de détails en regard de la situation actuelle aux États-Unis. Cette lettre laissait savoir aux parties prenantes de ce débat que l’AAO avait déposé des plaintes formelles de « pratique illégale de médecine dentaire » auprès des Dental Boards, dans 36 états américains. De plus, cette lettre stipule que le Smile Direct Club a entrepris une poursuite judiciaire contre le Michigan Dental Association qui accuse le Dental Board de diffamation, pour avoir déclaré que le Smile Direct Club contrevenait à une loi de l’État.

L’ACO est d’avis que les organismes de réglementation canadiens doivent être encouragés à aborder la question des soins orthodontiques vendus directement aux consommateurs, avant l’arrivée de cette pratique au Canada, afin d’éviter les multiples problèmes juridiques que cette pratique encourt au sud de notre frontière.

L’ACO poursuit son objectif d’inciter les divers intervenants à prendre position, pour s’assurer qu’ils prennent les mesures nécessaires afin d’empêcher l’entrée de ces systèmes sur le marché canadien. L’ACO demeure également en constante communication avec l’AAO et ses conseillers juridiques, pour rester au courant des développements et pour obtenir des conseils judicieux en la matière.

Invisalign® - En novembre dernier, l’entreprise Invisalign® a placé, sur les médias sociaux, une publicité présentant les soins orthodontiques traditionnels comme étant une technologie désuète. La publicité présentait Invisalign® comme le système d’alignement dentaire transparent le plus avancé au monde. Des photos trompeuses et alarmistes ont également été intégrées à cette publicité.

Le 27 novembre 2017, l’ACO a fait parvenir à M. Joe Hogan, PDG de Invisalign®, une lettre exprimant notre mécontentement face à cette publicité. M. Hogan nous a répondu le 28 novembre, nous exprimant ses excuses pour cette publicité, et annonçant que la publicité avait été retirée.

Au début janvier 2018, la section « Trouver un médecin » du site internet de Invisalign® a utilisé les mots « ces médecins ont choisi de se spécialiser, au moyen du traitement Invisalign®, pour modeler votre sourire » pour décrire un certain nombre de leurs praticiens.

L’ACO a donc contacté Mme Sian Roberts, vice-présidente et directrice générale de Invisalign® Canada, pour exprimer nos préoccupations au sujet de l’usage du mot « spécialiser », particulièrement lorsqu’on fait référence à des praticiens de médecine générale. Invisalign® a par la suite retiré ce mot de la terminologie utilisée dans la section « Trouvez un médecin ».

Mme Roberts s’est montrée intéressée par une rencontre pour mieux comprendre la position de l’ACO et pour la respecter, en ce qui concerne Invisalign®. Cette rencontre s’est tenue le 12 février 2018.

Le Programme de sensibilisation du public – La première campagne de sensibilisation du public a été lancée en septembre 2017, dans le but de mieux faire connaître le domaine de l’orthodontie et pour renforcer la crédibilité des orthodontistes en tant qu’uniques experts et uniques sources d’informations et de traitements.

Le programme est visible en ligne, grâce à des publicités 100% numériques. Ces annonces s’adressent à une clientèle cible, qui cherche en ligne des informations concernant l’orthodontie. Le thème choisi pour les publicités initiales est « Faites confiance à un orthodontiste ». Le message est assez
percutant et sujet à diverses interprétations. La plus grande résistance est venue des organisations qui représentent des médecins de médecine générale, qui offrent des services orthodontiques. Cette campagne a permis de générer une discussion, ce qui n’a pas été le cas avec le l’Ordre des dentistes du Québec, avec l’Association dentaire canadienne, ni avec aucune autre association. Ces organisations commencent maintenant à mieux comprendre et à reconnaître les défis particuliers qu’affrontent les spécialistes en orthodontie. Les statistiques concernant cette première campagne de sensibilisation sont révélatrices. La campagne génère un important trafic en ligne et la fonction de recherche « Trouvez un orthodontiste » porte ses fruits.

Les médias numériques sont souples et dynamiques. Le contenu est facile à ajouter et à remplacer. En 2018, la campagne passera de « Trouvez un expert » à « Consultez un expert ». Le contenu en ligne sera présenté sous forme de blogue. Le matériel partagé sur ce blogue mettra en lumière l’expertise de nos membres. Récemment, un mémo « e-blast » a été envoyé à tous les membres, leur demandant leur idées et contributions à partager.

Le nouveau site internet de l’ACO s’adresse spécifiquement aux consommateurs. Il présente du contenu intéressant et offre une fonction permettant de rapidement localiser un orthodontiste pratiquant dans sa région. Le site vise à établir une communication efficace avec le public. On y fait la promotion de l’importance d’être sélectif et de n’accepter des soins orthodontiques que de la part d’un véritable spécialiste en orthodontie.

En plus de toutes ces récentes initiatives, le Conseil d’administration de l’ACO est actif au sein de programmes permanents favorisant et soutenant les orthodontistes canadiens, incluant le maintien de liens avec d’autres organisations associatives, le soutien des activités de la Fondation canadienne pour l’avancement de l’orthodontie, ainsi que l’Assemblée scientifique annuelle.

Ce résumé de nos activités illustre bien l’importance d’une voix portant à l’échelle nationale, pour représenter nos membres spécialistes en orthodontie. Ces initiatives, ainsi que celles qui seront bientôt mises en place, reposent non seulement sur le soutien continu des membres de longue date, mais également sur l’engagement des nouveaux membres de notre association.

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**NOTICE OF CAO ANNUAL GENERAL MEETING**

NOTICE IS HEREBY GIVEN that the Annual General Meeting of the Canadian Association of Orthodontists will be held the 8th day of September, 2018 from 8:30 a.m. to 10:00 a.m. at the Westin Bayshore Hotel, Vancouver BC.

The following matters will come before the meeting:

1.0 Call to Order
2.0 Approval of Minutes of last Annual General Meeting, September 16, 2017*
3.0 President’s Report
4.0 Reports of Officers and Directors
   4.1 Treasurer’s Report
   4.1.1 2017 Reviewed Year-end Financial Statement*
   4.1.2 Appointment of Outside Year-end Reviewers for 2018
5.0 Reports of of Committees
6.0 Unfinished Business
7.0 Nominations and Election of Officers and Officials*
8.0 Indemnification Clause
9.0 New Business
10.0 Adjournment

Rick Odegaard
President, CAO

* Reports will be posted in June on the CAO Members’ Website. If you wish a full copy of the AGM material in advance, please contact the office at cao@associationconcepts.ca.
Here are a few comments the CFAO has received from families with children who have started treatment through Smiles4Canada:

“Before Smiles4Canada my son was known as the kid with the broken smile but now he can’t stop smiling. It has also helped with his breathing...simply life changing....Thank you!” – C.P, British Columbia

“So pleased to have found Smiles4Canada...Such a wonderful program !! My daughter has only had braces on for a few months and it has already given her so much more confidence. Without their help we would not have been able to proceed with treatment. A true gift for our family!!” – L.M, Atlantic

It is now over a year since S4C has launched in British Columbia, the Prairies, and Ontario, and over two years since the pilot program began in the Atlantic Canada. The media exposure early last year generated a lot of interest in the program and in orthodontics in general.

A significant amount has been learned during the first official year, with some changes planned for 2018. The application process is being altered to a scheduled timeline. Applications for 2018 were accepted from January 15 to March 31. Decisions regarding acceptance will be made by October 10 and the deadline to submit the administration fee is November 28, 2018. It is anticipated that this schedule will streamline administrative processes, lower costs and provide more structure for those applying to and participating in the process. The new process will also allow the Regional Committees to select the most deserving applicants for the year.

Dr. Daniel Tanguay has stepped forward to volunteer as the Regional Director for Quebec and applications are now being accepted in “la belle province”. The CFAO is proud that Smiles4Canada is now a truly national program. The administrative staff and Dr. Tanguay are currently working to have the application form and the promotional materials translated into French.

The Prairies Regional committee has been split into two re-

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**Treasurer’s Report**

Dr. Don Johnston  
Treasurer  
Email: johnston.donald@gmail.com

The CAO is in a very sound position with reserves sufficient to cover any potential losses due to unforeseen circumstances. As of December 31, 2017, the CAO generated $875,187.28 of in-come with expenses of $960,232.10. The Scientific Session generated $491,010.63 of income and $492,623.25 of expenses. Although there was a loss of $87,170.35, with the inclusion of the unused special assessment from 2016 of $94,400.00, there was actually a surplus of $7,229.65.

Going forward the CAO will continue to evaluate the Consumer Awareness Program and determine the best way to fund this as an ongoing program.

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**CFAO Report**

Dr. Stephen Roth  
CFAO President  
Email: stephenroth@mac.com

The CFAO held a meeting of the Board of Directors via conference call on February 13, 2018. The silent auction in Toronto raised $5,129.00 for the CFAO. Thanks again to all the individuals and component associations that donated items to the auction.

Congratulations to the organizing committee on another successful Student Research Symposium at the 2017 Scientific Session. The CFAO was pleased to financially support this worthwhile event. Thank you to Cerum Ortho Organizers for sponsoring the tour events during the 2017 Scientific Session. Cerum Ortho Organizers has been a major sponsor of the CFAO for over 20 years and their continued support is greatly appreciated.
regions, one region consisting of Alberta and Saskatchewan, and a separate region in Manitoba. Dr. Tim Dumore has volunteered as the Regional Director in Manitoba.

The Regional Directors are contacting orthodontists in their Regions during the application period to gauge their interest in treating patients through the program. This contact will allow the Regional Committees to accept the most deserving applicants that space will allow and will reduce the number of patients on the waiting list.

Various refinements have been made to the application form. The Regional Directors and Administrators are proud of the patients who have been helped and the conversations about orthodontics the program has started. The CFAO is confident these refinements will improve the program over the course of the year.

Thanks to the Administrative Staff (Alison Nash and Kim Nash), the Regional Directors (Jeff Stewart, Sunny Leon, Tim Dumore, Gordie Organ, Daniel Tanguay, and Avi Goldberg) and all the Regional Committee Members for all of their hard work and for their dedication to Smiles 4 Canada.

**CFAO Treasurer Report**

As of December 31, 2017, the CFAO generated a net loss of $14,920.12 on income of $74,773.26 and expenses of $89,693.38. The CFAO is financially strong with reserves of $297,620.83 invested with CDSPI. With the expansion of the Smiles for Canada program and subsequent increase in activity in the CFAO, a new budgeting process will be introduced to enable closer monitoring of the finances.

**Insurance Report**

Drs. Mike Wagner & Don Johnston  
Co-Chairs, Insurance Committee  
Email: insuranceenquiries@cao-aco.org

Twenty-two active and solved investigations relating to a number of insurance-based issues have taken place since the last update. The issues include direct billing, the Alberta fee guide, predetermination and claim rejections.

With regard to codes for electronic insurance, it has been determined that an Application for License Agreement Code Book for the 2018 USC&LS must be made, then further applications for new code creation can be made. Dr. Benoit Soucy from the CDA spoke conservatively on behalf of the CAO at a national meeting with CLHIA. Dr. Soucy stated the CAO’s position as a ‘Catch-22’. That is, trying to establish a new code to present to the membership for acceptance while the acceptance of this code would be needed to be nationwide by CHLIA in order for there to be consideration of fee processing.

It is going to be a difficult challenge for the predetermination code approval as well as implementation at the insurance level. Dr. Soucy suggested to use the bartering chip of Pre-Determination code in combination with fee collection/dischbursement code.

Joan Weir is the new contact at CLHIA but she has not been contacted at the time of this writing.
digital plan and would prefer not to engage a third party for
digital placement. Although the AAO has focused on DIY ort-
thetaontics, the CAO will use blogs, banners and digital in-
formation to differentiate the orthodontist from the general
practitioner.

The CAO is waiting for the promised links and materials to be
forwarded from the AAO. These materials will be translated
and formatted with CAO information. The AAO has been using
Autotranslate to translate the material and has been advised
that this program is not acceptable to our French speaking
members.

The CAO will purchase a homepage takeover of the
CBC/RDC if a suitable day with excellent exposure is avail-
able.

Mr. Joseph Miller from Joe Architects out of Colorado will be
the keynote speaker at the New and Younger Members Lun-
cheon Friday September 7, 2018 during the Annual Scientific
Session in Vancouver. Joe Architects is a popular firm when
it comes to office design and not just in the United States; Mr.
Miller and his partner Joe Church have completed a number
of notable Canadian projects.

Just in time for Mark Zuckerberg’s appearance before Con-
gress, a New and Younger Members Group Facebook page
was launched. Not to worry, no data breaches here. If you
are not a member of this group, please email
james.posluns@utoronto.ca to be sent an invitation. While this
page remains a work in progress, please check the page reg-
ularly to receive updates on happenings at the CAO that will
be of interest.

All New and Younger Members of the CAO are invited to the
first-ever designated social event at the CAO. This epic hap-
pening will take place Thursday September 6, 2018 immedi-
ately following the official opening of the Scientific Session. If
you plan to be in Vancouver, please plan on attending this
event. Grab a drink, confer with confreres and then hit the
town. Further details will follow on the Facebook page as the
date nears.

For those attending Component 2 of the National Dental Spe-
cialty Exam in Orthodontics this June, the best of success.

CCOE
Dr. James Posluns
Educators Liaison
Email: james.posluns@utoronto.ca

The educators met on Thursday May 3, 2018 during the Annual Session of the AAO
in Washington DC. The AAO kindly provided a meeting room.

With the new program commencing this year at McGill, the Pro-
gram Director-Elect, Dr. Jean-Marc Retrouvey also attended. Un-
fortunately, Dr. Claude Remise from the University of Montreal
was unable to attend.

The CCGOPD will be meeting at the CAO Scientific Session
on Thursday September 6, 2018 in Vancouver. The under-
graduate orthodontic faculty are also planning to meet on the same
day to resume discussions that were started last year in
Toronto regarding the undergraduate orthodontic curriculum
and the possibility of national oversight.

CDSA Report
Dr. Mike Wagner
CDSA Liaison
Email: wagner.cao@gmail.com

A video conference call was held on Sun-
day March 25, 2018 as an interim meeting
prior to the gathering at the CDA conference in April. The
CDA invited the CDSA to send two representatives to the
Canadian Oral Health Round Table Symposium April 19,
2018. Dr. Paul Andrews, a paediatric dentist and Dr. Jean-
Pierre Picard, a periodontist and current CDSA president were
in attendance.
The helpline committee continues to assist members from across the country. A huge thank-you goes out to all our provincial representatives who stand on high alert for the CAO should an issue require their participation to resolve. The intake office (Alison and Laura) continue to field calls and forward them where necessary. Below is a chart breaking down calls to the CAO by region since the last report in September. Fortunately, there were only two calls requiring intervention.

<table>
<thead>
<tr>
<th>Province</th>
<th>Calls (this period)</th>
<th>Calls (last period)</th>
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<tbody>
<tr>
<td>Atlantic</td>
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**Committee Reports**

**CAO Helpline**

Dr. Howard Steiman
Chair, Helpline Task Force
[Email: straightsmile@sympatico.ca]

Show some love for the CFAO!

It’s time for the 2018 CFAO Silent Auction at the 70th Annual Scientific Session in Vancouver BC!

Help the CFAO help others by donating an item for the 2018 CFAO Silent Auction in Vancouver. CFAO President, Dr. Stephen Roth, is hoping you think Globally, but give Locally...right in our beautiful backyard.

Think Green (as in money raised) through amazing items on our auction table. This year, we want people to focus on the Forget the Three R’s, we want the Three P’s for our auction: items that people want to Procure, Purchase and Pay for!! Help the CFAO support programs like Smiles4Canada through this annual event.

Please contact the CFAO office at cao@associationconcepts.ca with your donation.

We’re looking to Save the (CFAO) World with items such as:
- One of a kind art/jewelry pieces
- Use of a Resort Condo or “Time Share”
- Tickets to Sporting Events or Live Theatre
- Spa/Restaurant Certificates
- Electronic gadgets
- Wine Clubs or similar
- Sports Memorabilia (think “The Goal Heard ‘Round the World”!)

Help the CFAO help others by donating an item for the 2018 CFAO Silent Auction in Vancouver. CFAO President, Dr. Stephen Roth, is hoping you think Globally, but give Locally...right in our beautiful backyard.
2018 Consumer Awareness Campaign

15,339,416 TOTAL IMPRESSIONS

That’s how many people saw our 2018 campaign. It’s a big deal, and we’re excited about it. We wanted to build awareness with moms about the specialist nature of orthodontists, in a positive way. So we targeted them online with our new ads: on Facebook, LinkedIn, Instagram, and with display ads to get them talking. Our campaign success not only got us eyeballs and engagement, but also CAO site visits and an increased social following.

19,572 TOTAL VISITS TO THE CAO WEBSITE

Facebook & Instagram
386,000 people saw our campaign on social media.
1480 visits to the CAO website from Facebook and Instagram.

Digital Ads
15,000,000 people saw these ads.
13,300 visits to the CAO website from these ads.

Social Following
2539 people like our Facebook page.
601 connections on LinkedIn.

Don’t forget to like and share our social posts. Follow us on social media to keep our campaign momentum going.
IN MEMORIAM

Dr. William D. Swanson

It is with great sadness that the family of Dr. Bill Swanson announces his sudden passing on November 13, 2017 at the age of 83.

Bill was a graduate of the University of Alberta with a degree in Mining Engineering and a masters degree in Metallurgy. After working as an engineer, he returned to the U of A and graduated with a DDS in 1970 followed by a graduate degree from the University of Washington in Seattle with a specialty in Orthodontics.

He practiced Orthodontics for 24 years and taught in the Orthodontic Graduate Clinic at the U of A for 15 years. His time spent in practice was one of the most rewarding of his life.

Bill loved spending time with his family and at his farm near Millet. He was a passionate reader and a life-long learner. He was kind and generous and he was always available to help friends and family whenever he saw a need.

The CAO expresses their condolences to the family of Dr. Swanson, including his wife Arlene, his children Heather and Ross, and numerous grandchildren.

CFAO Donations

Since February 1, 2018

McIntyre Fellows
Dr. Rick Odegard

CAO
In Memoriam of Dr. C. Ronald (CR) Hill

CAO
In Memoriam of Dr. William D. Swanson

MARK YOUR CALENDARS NOW!

September 19-21 2019
Fredericton, NB
Delta Fredericton Hotel and Fredericton Convention Centre

September 24-26 2020
Kelowna, BC
Delta Grand Okanagan Resort and Conference Centre

September 23-25 2021
Quebec City, QC
Fairmont Chateau Frontenac Hotel
Hilton Quebec Hotel
Quebec Convention Centre

September 15-17 2022
Saskatoon, SK
Delta Bessborough & TCU Place
The British Columbia Society of Orthodontists (BCSO) continues to move forward with its CAP campaign through the potential creation of a scholarship contest.

The new advertising guidelines went into effect March 1, 2018. Along with other requirements, there are now restrictions on the use of abbreviated designations. A full description of the new guidelines can be found on the College’s website.

Recent changes to the bookings of OR times have made it challenging to have orthognathic surgery cases treated in a timely manner. The BCSO is working to bring attention to this matter to the Minister of Health.

The BCSO met on April 14, 2018. Dr. Luis Carriere was the keynote speaker. The BCSO AGM was held June 8, 2018.

The Alberta Society of Orthodontists (ASO) has had a busy fall/winter season, making its voice heard by the Alberta Dental Association and College (ADA&C). Issues include advertising within the Code of Ethics, and the new Provincial Specialists Fee Guide implemented in December by the ADA&C in response to a request to do so by the Provincial Health Minister. Discussions continue within the ASO on the most prudent approach to take with the ADA&C to ensure that the ASO can remain compliant with the CAO guidelines on the use of codes in orthodontics.

The ASO held its Annual Scientific Session and Meeting on Friday April 6 and Saturday April 7, 2018, at the RimRock Hotel in Banff. The Friday morning sessions featured Dr Donna Galante who spoke about ‘The Truth About Invisalign Teen’. Dr Budi Kusnoto kicked off the afternoon, presenting on ‘Early Treatment Using Bio Progressive Technique’, followed by Dr. Duncan Brown on the topic of, ‘Maybe it’s Time to Look at Our Fixed Appliances’. Saturday featured Dr Moe Razavi’s return to Alberta to close out the meeting. His topics included, ‘Contemporary Orthodontics for a Digital Age’ followed by ‘The Modern Orthodontist: Improving office efficiencies while putting the patient first’.

The Saskatchewan Society of Orthodontists held its Annual General Meeting on June 1, 2018, in Regina. The meeting was sponsored by Invisalign® with speaker Dr. David Walt lecturing to doctors and treatment coordinator Shelby Cook speaking to team members.

The fall Manitoba Orthodontic Society (MOS) dinner meeting was held October 27, 2017. The business meeting was followed by a continuing education lecture provided by Dr. Shalin Shah, sponsored by Dentsply Sirona.

The Winnipeg dental and orthodontic communities welcome Dr. Matthew Kotyk and Dr. Alvaro Salles, both recent graduates of the University of Manitoba Graduate Orthodontic Program.

The Manitoba Chapter of the Smiles for a Lifetime program continues to match participating Manitoba orthodontists with
low-income families to ensure that deserving children can continue to receive orthodontic care. At the most recent meeting of the Board of Directors in the fall of 2017, five applications were approved and assigned to practitioners. To date, 55 families have received care since 2015. Manitoba is pleased to partner with the CFAO’s Smiles4Canada program to reach more families who would benefit from treatment. Please support the CFAO with your time and skills to continue helping families in need.

Please welcome Dr. Ines Guedes as your new Manitoba representative on the CAO Board of Directors. I extend a big “thank you” to everyone at the CAO office and the Board, past and present, for welcoming me to the table for nearly 10 years. It has been my pleasure and honor to serve as the Manitoba representative and I look forward to continuing to seeing everyone at future CAO meetings.

Ontario

Dr. J. Eric Selnes
Email: str8smiles@sympatico.ca

The Ontario Association of Orthodontists (OAO) has been busy monitoring the increased attention on infection control standards and the proposed revisions to healthcare professional corporations (HPCs) by ensuring that an OAO Executive member regularly attends the RCDSO Council meetings. The OAO will continue to follow and to offer input on infection control and the potential impact of the Smile Direct Club.

Advocacy continues: The OAO has once again filed formal complaints (3 to 4 ongoing investigations) with the RCDSO against dentists falsely advertising as specialists and continues to monitor these types of issues with continued input from the membership.

There have been over 30,000 hits to the OAO website and over 10,000 hits to Doctor Locator site since the OAO Public Relations program was started mid-2016.

There are approximately 410 orthodontists in Ontario, of which 55 percent are OAO members. The OAO is investigating ways to engage membership and to garner interest in the organization. The OAO runs a balanced budget year over year, outside of the current CAP. $25,000 of its reserves have been spent on the CAP program to date and the plan is to continue this program at least until May, 2018.

The OAO Scientific Session was held in Niagara-on-the-Lake June 8 to 10, 2018.

Quebec

Dr. Giovanni (John) Scalia
Email: johnny.scalia@gmail.ca

The Quebec Association of Orthodontists (QAO)’s new website will be released this spring 2018. The update includes geo-localization and a user-friendlyer interface.

The QAO is actively working to target false representation by professionals claiming to be orthodontists. The goal of the program is to ensure the public is well-informed about orthodontic treatment by an orthodontist. Techniques that are being applied include rogue phone calls, direct phone calls to the clinicians, letters, and formal notices.

The QAO is proud to participate in a joint conference with the oral and maxillofacial surgeons as part of the annual scientific session of the Journée Dentaire Internationales Dentaires du Québec.

The QAO is proud to be an active member of the Federation of Dental Specialists of Quebec and an active participant of the direct-to-consumer marketing campaign.

Rapport de la province de Québec

Le nouveau site Internet de l’Association des orthodontistes du Québec (AOQ) sera en ligne à compter de ce printemps 2018. La mise à jour de ce site inclut la fonction de géolocalisation, ainsi qu’une interface simple et facile à utiliser.

L’Association des orthodontistes du Québec travaille activement à repérer les fausses représentations faites par des professionnels qui se présentent comme orthodontistes. L’objectif de ce programme est de s’assurer que le public soit bien informé à propos des traitements offerts par les véritables orthodontistes. Les techniques utilisées vont de l’appel téléphonique à numéro caché, aux appels directs aux cliniciens, en passant par les lettres et les mises en demeure aux personnes fautives.

Continued…
Component Society Reports

L’Association des orthodontistes du Québec est fière de prendre part au colloque conjoint des spécialistes en chirurgie buccale et maxillo-faciale, dans le cadre de l’Assemblée scientifique annuelle des Journées dentaires internationales du Québec.

L’Association des orthodontistes du Québec est fière d’être un membre actif de la Fédération des dentistes spécialistes du Québec. De plus, elle participe activement à la campagne de marketing destinée spécifiquement aux consommateurs.

Atlantic Report

Dr. Stuart A. Matheson
Email: smatheson1@mac.com

The annual meeting of the Atlantic Provinces Orthodontic Association (AOA) was held in Halifax on April 7, 2017. Presentations by Drs. Curtis Gregoire and Dan Stuart were about orthodontic preparation for orthognathic surgery. A business meeting followed the continuing education presentation. The evening was capped off with a social for members and guests at Dr. Stuart’s home.

Participation in the AAO Consumer Awareness Program matching grants was the issue that received the most discussion. The group assembled was in favor of participation but there were inadequate numbers at the meeting to make a decision for the entire association. As a result, it was decided to establish a private Facebook group to further discuss the issue. The AOA is aware of impending changes at the AAO and was unsure about how the program will look forward. With the onset of summer, plans were placed on the backburner, but there is a volunteer ready to establish the Facebook group and to distribute information to the membership soon.

A meeting of the AOA was held in Halifax on April 13, 2018.

IN MEMORIAM

Dr. C. Ronald (CR) Hill

July 5, 1929 - November 6, 2017

November 6th marked the passing of Dr. C. Ronald Hill. “CR” as he was known in the dental community, was a legend in dentistry in Saskatchewan. CR graduated from the University of Alberta in 1954, the same year he married his long term sweetheart Shirley. Ron and Shirley settled in Sherbrooke where CR practiced general Dentistry until 1965. He then entered the Orthodontic Residency at the University of Toronto, receiving his Diploma Orthodontics in 1967. He and Shirley returned to Saskatchewan where a practice in Orthodontics was established, one of three in Saskatchewan at the time.

Over the years he joined Dr. P.D. Henderson and later Dr. Jim Horn to form Saskatoon Orthodontic Group. The group remained intact until 1995 when CR retired. During his time in practice CR was extremely active in dental politics and education. He served as President of the College of Dental Surgeons of Saskatchewan and CDSPi. He was a Clinical Adjunct Professor in Orthodontics from 1971-1994 at the University of Saskatchewan. He had a passion for cleft palate treatment and served on the Cleft Palate Clinic team at Royal University for 10 years. One of Ron’s favorite duties was to dress as Santa Claus at the Dental Society Christmas parties for many, many years.

Upon retirement in 1995, Ron and Shirley relocated to Parksville, BC where many happy years of golf, RVing, and committee work at the local Church. After a long battle with Parkinsons, CR passed at Qualicum Manor, in Qualicum Beach, BC. He is survived by his wife Shirley, his children Sharon, Craig and Bruce and six grandchildren.

His robust and jovial personality will be missed but will live on in the hearts of those he touched.

The CAO offers our condolences to his family.
University of Alberta
CLINICAL TRIALS WITH INAPPROPRIATE INFLUENCE OF FUNDERS EXAGGERATE THE EFFECTIVENESS OF TREATMENTS: A METHODOLOGY STUDY

Authors: Hugh Saltaji,1* Susan Armijo-Olivo,2 Greta G. Cummings,3 Maryam Amin,1 Carlos Flores-Mir 1*

* CAO member Orthodontic Faculty
1 Orthodontic Graduate Program, School of Dentistry, University of Alberta, Edmonton, Alberta, Canada;
2 Faculty of Rehabilitation Medicine, University of Alberta, Edmonton, Alberta, Canada;
3 Faculty of Nursing, University of Alberta, Edmonton, Alberta, Canada; Division of Pediatric Dentistry, School of Dentistry, University of Alberta, Edmonton, Alberta, Canada.

BACKGROUND: There is emerging evidence that randomized trials are subject to biases. Flaws in the design of such trials can result in over- or underestimation of the effectiveness of treatments.

OBJECTIVE: To quantify the extent of bias associated with sponsorship bias in randomized clinical trials of dental interventions.

METHODS: We selected all dental meta-analyses that included a minimum of five randomized controlled trials. We extracted data, in duplicate, related to influence of the trial sponsor (sponsorship bias). We quantified the extent of bias associated with influence of funders on the magnitude of effect size estimates using a two-level meta-meta-analytic approach with a random effects model to allow for intra- and inter-meta-analysis heterogeneity.

RESULTS: We identified 540 RCTs, included in 64 meta-analyses, analyzing 137,957 patients. The influence of the trial sponsor was assessed as being unclear in 72.8% (n = 393) of the trials, while it was assessed as appropriate in 16.7% (n = 90) and as inappropriate in 10.6 (n = 57) of the trials. We identified significantly larger treatment effect size estimates in trials that had inappropriate influence of funders (difference in treatment effect size estimates = 0.10; 95% confidence intervals: 0.02 to 0.19) than in trials that had appropriate influence of funders.

CONCLUSIONS: We found significant differences in treatment effect size estimates between dental trials based on lack of appropriate influence of funders. Treatment effect size estimates were 0.10 larger in trials with lack of appropriate influence of funders. Investigators of dental systematic reviews should perform sensitivity analyses based on appropriateness of influence of funders in included trials.

University of Alberta
DENTAL AND SKELETAL CHANGES ASSOCIATED WITH THE DAMON SYSTEM PHILOSOPHICAL APPROACH

Authors: *Nam, Dr. Hye Jin

OBJECTIVES: To compare the dentoalveolar changes produced by the Damon system’s treatment philosophy to traditional orthodontic treatment techniques.

METHODS: An electronic search in three major databases was completed: Cochrane, PubMed, and EMBASE on March 17th, 2017. Randomized controlled trials, prospective and retrospective controlled clinical trials were included in this systematic review. The quality assessment of individual studies was done using two different tools: The Cochrane Risk of Bias Assessment Tool (RCTs) and The Methodological Index for Non-Randomized Studies (MINORS) (non-RCTs).

RESULTS: Seven studies were included for this qualitative analysis. Six studies compared the Damon system to various types of conventional (non self-ligating bracket) system as a comparison group. One study used a quad helix as a comparison for a few months before a full bonding appointment with conventional brackets. The majority of studies found an increase in maxillary intercanine, interpremolar, and intermolar distance after the treatment in both the Damon and comparison groups. Yet, all studies concluded that there is no significant difference in the final transverse dimension between two groups. One study also found that the transverse expansion...
was achieved mainly by tipping movement of posterior dentition, and a decrease in the posterior buccal bone area was evident in both groups after treatment.

CONCLUSION: There is not enough evidence to support the claim that the Damon system allows additional arch expansion with better tipping control than with traditional techniques.

University of Manitoba

EFFECT OF FIXED ORTHODONTIC APPLIANCES ON THE PRESENCE OF CARIOGENIC BACTERIA

Authors: Paige Kozak*, Robert Drummondb, Robert Schrothc, Kangmin Dun

* Graduate Resident, Division of Orthodontics, University of Manitoba  
b Professor, Clinic Director, Department of Orthodontics, University of Manitoba  
c Associate Professor, Department of Preventive Dental Science (College of Dentistry) and Department of Pediatrics & Child Health (College of Medicine), University of Manitoba  
d Associate Professor, Department of Medical Microbiology and Department of Oral Biology, University of Manitoba

INTRODUCTION: The purpose of this study was to use a chair-side saliva test to determine the overall prevalence of high Streptococcus mutans levels in orthodontic patients and to determine the prevalence of high S. mutans levels as a function of dental crowding and bracket type at four time-points throughout orthodontic treatment.

METHODS: 100 patients undergoing orthodontic treatment were selected, among which 35 used conventional brackets and 65 used self-ligated brackets. The chair-side saliva assay Saliva-Check Mutans was used to measure each subject at four time-points: immediately prior to bonding - baseline (T0), and at 3 months (T1), 6 months (T2) and 12 months (T3) into treatment. Bacteria levels as well as the amount of crowding were recorded at each time-point. Of the 400 anticipated data collection points, 8 were not recorded due to 6 patients being lost to follow up. A repeated measures model was used to investigate the relationship between bracket type, crowding, and the risk of high bacteria levels. Specifically, a generalized linear mixed-effects model (GLMM) was used to account for the fact that the risk of high bacterial levels intrinsically varies between patients.

RESULTS: Bracket and crowding effects on bacteria levels were found to be non-significant (P>0.05). Only the effect of time was found to be significant, specifically, that 12 months (T3) was different from T0, T1 and T2 (P<0.0007). The overall prevalence of high S. mutans levels was found to be 81% at baseline (T0), 78% at 3 months (T1), 68% at 6 months (T2) and 47% at 12 months (T3).

CONCLUSIONS: The overall prevalence of high S. mutans levels immediately prior to bonding orthodontic brackets was 81% using the Saliva-Check Mutans chairside saliva assay. This prevalence decreased as orthodontic treatment progressed with a statistically significant drop at the 12 month time-point. The effects of bracket type and crowding on high bacteria levels were found to be non-significant. The Saliva-Check Mutans chairside saliva assay may be an effective tool to measure an orthodontic patients’ S. mutans level prior to treatment.

University of Western Ontario

FRIC TIONAL RESISTANCE IN CONTEMPORARY SELF-LIGATING APPLIANCE SYSTEMS

Authors: M. Greene, A. Mamandras, A. Rizkalla, A. Tassi  
Division of Graduate Orthodontics, Schulich School of Medicine and Dentistry, Western University, London ON

BACKGROUND: Resistance to tooth movement is multifactorial, with friction one of many important components. There is limited data comparing contemporary passive and active self-ligating bracket (SLB) systems in terms of friction created by arch wire engagement.

AIM: To compare static and kinetic friction in contemporary passive and active SLB systems in vitro.

HYPOTHESIS: Active and passive SLB systems produce different degrees of friction and in differing amounts on varied arch wire sizes and dimensions.

MATERIALS & METHODS: Nine bracket systems of .022 in slot size were tested; control (3M Victory with elastic ligature); passive SLB (Ormco Damon Q, Ortho Classic H4, HS Carrier SLX, RMO Altitude SL, AO Empower2 passive); active SLB (AO Empower2 active, 3M Victory SL, Speed System Orthodontics Speed). Single upper right central incisor brackets were mounted on a custom metal fixture allowing an .0215 x .025-in SS wire to passively fit. Straight sections of various round and rectangular Nickel Titanium (NiTi) arch wires (.016, .018, .018 x .018, .020 x .020, .016 x .022, .017 x .025, .019 x .025, and .021 x .025-in) were ligated to the bracket and resistance to sliding was measured with an Instron Universal
Testing Machine. Ten unique tests utilizing a new bracket and new arch wire were conducted for each group in the dry state. A two-way ANOVA with Bonferroni adjustment for multiple comparisons was used to compare significant differences between groups.

RESULTS: Friction was significantly different between control, passive SLB and active SLB systems. Passive SLB groups had close to zero friction with no significant differences between bracket systems regardless of the arch wire. However, active SLB groups exhibited significant differences in friction depending on the bracket system and arch wire shape and dimension.

CONCLUSIONS: Friction between the arch wire and bracket slot differs significantly between passive and active SLB systems. Understanding the different bracket-wire interactions of SLB systems helps the clinician understand and plan biomechanics with the bracket system of their choice.

University of Western Ontario

CAN EXPOSURE TO FLUORIDE SOLUTIONS CHANGE THE SURFACE OF ORTHODONTIC BRACKETS?

Authors: Maria Pia Canales, Karla T. B. Crosara, Camila Martins, Antonio Mamandras, Walter L. Siqueira

ABSTRACT: A concern in the orthodontic clinic is the high prevalence of active caries lesions in orthodontic patients. Treatment of tooth enamel with fluoride not just reduces the solubility of enamel to acids, but also modulates the acquired enamel pellicle (AEP) formation, with consequent influence over the biofilm composition. Little information is known about the impact of fluoride solutions on the surface of orthodontic brackets, and the consequent pellicle formation. Here, we investigated the changes on the bracket surface after exposure to fluoride solutions. X-ray Photoelectron Spectroscopy (XPS) was used to atomically analyze the composition of orthodontic stainless steel and ceramic brackets before and after their incubation in fluoride and non-fluoride solutions for 2 hours at 37°C. Hydroxyapatite discs were used as control. Interestingly, fluoride was not identified on the surface of neither metallic nor ceramic brackets, suggesting that fluoride does not bind strongly to the tested brackets. Contrarily, fluoride was identified in the control group confirming that fluoride strongly binds to the hydroxyapatite discs. The binding of fluoride to the hydroxyapatite is often attributed to the positive charge of calcium sites on the enamel. Therefore, absence of fluoride on bracket surfaces may be related to a predominant negative charge on the surfaces of alloys and ceramics brackets. This suggestion is reinforced by the XPS identification of positive-charged elements on the brackets. Differences were noted among the tested groups suggesting that modulation of the bracket pellicle via surface changes with mouthwashes is a possibility. This study opens avenues on the not yet characterized changes on the bracket surface and the possible ways to modulate the acquired bracket pellicle.

University of Toronto

LONG-TERM EFFECTS OF NASOALVEOLAR MOLDING IN PATIENTS WITH COMPLETE UNILATERAL CLP


BACKGROUND: Nasoalveolar molding (NAM) is a popular approach of infant orthopedics, the effects of which have not been adequately studied.

PURPOSE: To investigate the long-term nasolabial esthetic outcome of NAM in comparison to traditional infant orthopedics (TIO) and no IO for patients with complete unilateral cleft lip and palate (CUCLP) between the ages of 10 and 14 years.

RESEARCH DESIGN: Three samples were retrospectively collected, each having been treated with a different infant protocol, namely NAM (n=37), TIO (n=39), and no-IO (n=33).

Continued...
Nasolabial esthetics were assessed based on photographs using the Q-Sort modification of the Asher-McDade method. The Kruskal-Wallis test was used for statistical analysis.

RESULTS: NAM and TIO resulted in significantly superior results in vermilion border and frontal nasal form when compared to no IO. TIO led to significantly more esthetic nasal profiles compared to NAM or no IO.

CONCLUSIONS: IO may have long-term benefits for patients with CLP.

University of Toronto
MECHANICAL PROPERTIES OF GRADED THERMODYNAMIC NICKEL TITANIUM ARCH WIRES IN TORSION

Authors: Ouliana Ogienko*, Craig A. Simmonsbc, Cari Whyne, Sunjay Sun

*Graduate Program in Orthodontics, Faculty of Dentistry, University of Toronto, Toronto;
bc Matrix Dynamics Group, Faculty of Dentistry, University of Toronto, Toronto;
c Department of Mechanical & Industrial Engineering, Faculty of Applied Science & Engineering, University of Toronto, Toronto;
d Orthopaedic Biomechanics Laboratory, Sunnybrook Health Sciences Centre, Toronto;
e Division of Orthodontics, Hospital for Sick Children, Toronto

INTRODUCTION: Obstructive Sleep Apnea (OSA) is common in children and leads to significant morbidity if left untreated. Risk factors for childhood OSA include adenotonsillar hypertrophy, obesity, and genetic diseases associated with craniofacial abnormalities such as Trisomy 21 (T21). Craniofacial characteristics have been suggested to contribute to OSA in children. The literature regarding the role between craniofacial morphology and OSA is deficient, partly due to limited access to polysomnography (PSG), the gold standard for diagnosing OSA. Presently, a formal orthodontic evaluation is not standard of care for children referred for PSG query OSA. The aim of this study is to compare the prevalence of craniofacial abnormalities in children with suspected OSA who have been referred for a PSG.

METHODS: This was a cross-sectional study of children between the ages of 5 and 18 years with a diagnosis of obesity or T21 who were referred for PSG at The Hospital for Sick Children in Toronto. Participants underwent an orthodontic evaluation, PSG, and lateral cephalogram. Participants also completed two sleep questionnaires: 1) Spruyt and Gozal Sleep Questionnaire, and 2) Pediatric Sleep Questionnaire, Sleep-Disordered Breathing Subscale. Research Ethics Board approval was obtained at both The Hospital for Sick Children and the University of Toronto.

RESULTS: Twenty-five children (18 M, 7 F) between the ages of 5 and 18 (mean = 11.3) participated in the study. Thirteen (52%) had obesity and 12 (48%) had T21. 83% (n = 10) of T21 patients had mild, moderate, or severe OSA compared to 46% (n = 6) of obese patients, (p = 0.053). T21 patients had less overjet compared to those with obesity (OJT21 = -0.20 mm, OJOb = 2.31 mm, p = 0.003). A greater proportion of T21 patients had a narrow palate (T21 = 66.7%, Ob = 15.4%, p=0.009) and macroglossia (T21 = 66.7%, Ob = 15.4%, p=0.009).

CONCLUSIONS: A diagnosis of OSA was more common in patients with T21. A retrognathic maxilla, decreased overjet, a narrow palate, and macroglossia may be associated with a diagnosis of OSA.

Canadian Association of Orthodontists
UPCOMING ORTHODONTIC MEETINGS

2018
September 6-8 ….CAO 70th Annual Scientific Session, Vancouver, BC
September 13-16 ….GLAO/MASO Annual Meeting, Toronto, ON
September 21-22 ….MSO Annual Meeting, Bloomington, MN
October 11-14 ….PCSOS Annual Meeting, Monterey, CA
November 2-3 ….NESO Annual Meeting, Uncasville, CT

2019
May 3-7 ….AAO Annual Session, Los Angeles, CA
September 12-15 ….GLAO/MASO Annual Meeting, St. Thomas, USVI
September 19-21 ….CAO 71st Annual Scientific Session, Fredericton, NB
September 26-29 ….NESO Annual Meeting, Boston, MA
October 3- ….PCSO Annual Meeting, Honolulu, HI
October 25-26 ….MSO Annual Meeting, Branson, MO

2020
May 1-5 ….AAO Annual Session, Atlanta, GA
September 24-26 ….CAO 72nd Annual Scientific Session, Kelowna, BC
October 2-3 ….MSO Annual Meeting, Chicago, IL
October 4-7 ….WFO International Orthodontic Congress, Yokohama, JAPAN
October 22-25 ….PCSOS Annual Meeting, Calgary, AB
November 5-8 ….NESO Annual Meeting, Montreal, QC

*LACOR presenter
Membership Milestones

Congratulations to the following members celebrating milestones in their CAO membership for the 2018 Membership Year!

60+ Years of Membership
Dr. Douglas N. Allen
Dr. Gerald P. Copeland
Dr. Arthur A. Fraser
Dr. Frank J. Furlong
Dr. Rowland D. Haryett
Dr. Jack Alan Langmaid
Dr. Ronald P. Mullen
Dr. Robert M. Perry
Dr. T. Edward Spracklin
Dr. Morris Wechsler

50 Years of Membership
Dr. Barry S. Cutler
Dr. Gavin Alex James
Dr. Eric Luks

40 Years of Membership
Dr. C.R. Lee Brown
Dr. Terry D. Carlyle

35 Years of Membership
Dr. Jean D. Cassar
Dr. Alain Chaumont
Dr. Betty Cragg
Dr. Lee Erickson
Dr. Douglas L. Haberstock
Dr. John Kalbfleisch
Dr. V. Wallace Kuzmicz
Dr. Margaret G. McGillis
Dr. Cheslea P. MacNeil
Dr. Antonios H. Mamandras
Dr. Stephen P. Mansour
Dr. Ronald McWade
Dr. K. Ross Remmer
Dr. William Ring
Dr. Robert Yelle
Dr. J.D. Wilcox

30 Years of Membership
Dr. Mark Antosz
Dr. Francois Bouchard
Dr. Paul J. Bourque
Dr. Duncan Y. Brown
Dr. Leonard Chumak
Dr. Brian John Clarke
Dr. Claude Gariepy
Dr. Diane de Guise
Dr. Graeme R. Hibberd
Dr. Bruce D. Hunt
Dr. Donald Johnston
Dr. William P. King
Dr. Hermann K. Lee

25 Years of Membership
Dr. Jules E. Lemay III
Dr. Anthony Mair
Dr. Paul R. Pocock
Dr. Daniel Polit
Dr. Charles Rodrigue
Dr. Martin Rousseau

20 Years of Membership
Dr. Gail M. Burke
Dr. Shereen Caisley
Dr. Joselyn S. Chua
Dr. Peter Duncan
Dr. Robert W. Elliott
Dr. Timothy Foley
Dr. Catia Giambattistini
Dr. Benoit A. Hebert
Dr. Maxine Herbert
Dr. Guy M. Lacoste
Dr. Ritchie Mah
Dr. Walter Nider
Dr. Glenn J. Paleczny
Dr. Cecil Sharp
Dr. Ronald Sperber
Dr. Michele Wang
Dr. Barry White

10 Years of Membership
Dr. Devon Anholt
Dr. Andrew Bernas
Dr. Frederick Cheung
Dr. Girish Deshpande
Dr. Audrey Dubois
Dr. David Gold-Gosselin
Dr. Neville Jeannotte
Dr. Gerald Kersten
Dr. Sandra Labbe
Dr. Todd Moore
Dr. Sharon Nguyen
Dr. Cherie Nicolucci
Dr. Lilya MacKenzie
Dr. Matthew MacLeod
Dr. Lisa McGrath
Dr. Derek Pollard
Dr. Joanie Roy
Dr. Alison Stefanuto
Dr. John Todd
Dr. Robert John Voth
Dr. Brent Yaremko

Helpline Numbers Available for Member Assistance Programs (MAP)

This list of contact numbers will provide support to any CAO member who might need or seek additional support in a crisis situation affecting their personal lives. These are anonymous contacts and will provide support and resources for a variety of situations.

Nova Scotia Professional Support Program (PSP) - 902-468-8215

Quebec (Medi-Secours) - 514-440-4520

Ontario and Manitoba (CDSPI) -
  English - 1-800-265-5211
  French - 1-800-363-3872

Saskatchewan (PAR Consulting) -
  Saskatoon: 1-800-978-8282 or 306-652-3121
  Regina: 1-877-352-0680 or 306-352-0680

Alberta (Confidential Assistance Program – CAP) -
  1-800-226-6433

British Columbia (CDSPI) -
  English - 1-800-265-5211
  French - 1-800-363-3872
  or Dental Professional Assistance Plan (DPAP) -
  1-800-661-9199
From the Editor

I think people are aware now of the power imbalance. It’s led to abuse in our own industry. It’s in the military, it’s in congress, it’s everywhere.

– Meryl Streep. Golden Globes, 2018

There is an old joke in dentistry. When looking to hire an assistant, interview three prospective applicants. Ask each of them some difficult questions. Then hire the one with the best figure (or something along those lines, not nearly as polite).

When I heard this joke the first time, yeah, I admit I thought it was somewhat amusing. But that was in 1991. Today, the joke isn’t just stupid, it’s offensive.

The beginning of the end of any sort of tolerance to sexual harassment in the workplace started in Washington, the day after the 2016 inauguration. It gained power in Hollywood in 2017, with the expungement of Harvey Weinstein. In 2018, the movement made its way throughout all aspects of society. And it will continue to move its way throughout every occupation and profession to which we are acquainted including the profession of dentistry.

In spite of the well-known, but continually ignored long history of dentists acting inappropriately with staff, there is understandably little research on the subject. Pennington et al, (2000) surveyed 540 dental hygienists in and around the state of Virginia. 54 percent of respondents reported that they had experienced sexual harassment in the workplace. The perpetrators of the harassment were reported to be either male dentists (73 percent) or male clients (45 percent). Less than 10 percent reported being harassed by women. While 70 percent of the sexually harassed respondents indicated that filing formal complaints was an effective strategy for managing sexual harassment, less than 1 percent actually followed through.

Sexual harassment happens in the orthodontic office. In 1993 Gerald Nelson published an article in the American Journal of Orthodontics and Dentofacial Orthopedics. The article opens with a mention of the decades-old Anita Hill-Clarence Thomas case and how sexual harassment has been in the media of late. That was 25 years ago. I am dumbfounded that this movement has taken as long as it has.

Dr. Nelson mentions examples of sexual harassment in the orthodontic office based upon conversations with orthodontists at an AAO Annual Session he attended. An orthodontist reported that he had knowledge of male patients, or the fathers of patients, bothering female assistants. Another orthodontist reported seeing another orthodontist suggestively touching one of his staff in a movie theater. (Now what the heck were they all doing in a movie theatre anyway but let’s put that aside for a moment shall we?) Dr. Nelson heard of a delivery person making inappropriate remarks to a staff member on the premises and of a female staff members sexually teasing male patients, but curiously, he heard nothing of the orthodontist acting inappropriately in his or her own office. But then again, why would he, considering the nature of his investigation?

What exactly is sexual harassment? The Ontario Human Rights Code and the Occupational Health and Safety Act (1990), define harassment as engaging in a course of vexatious comment or conduct that is known or ought reasonably to be known to be unwelcome. Examples range from the verbal (unwelcome comments or jokes) to the physical (touching or hugging) to outright abuse of power (asking for sex in exchange for a benefit or favour).

With this definition in mind, the law of averages would suggest that since sexual harassment is so widespread in society, it must be happening in the orthodontic office. The first step to solving a problem is admitting that there is a problem. If we as orthodontists can make this admission, then we as leaders of our field can step up and do something about it.

In Ontario, according to the Occupational Health and Safety Act (1990), any employer with more than five employees must have a written policy on workplace violence and harassment and this policy must be reviewed annually. It is incumbent on each one of us to ensure that besides simply meeting the re-
requirement of the Act, we actually uphold the principles contained within and that we hold ourselves to a higher standard.

We also need to recognize when harassment is occurring and to encourage reporting through the proper channels. Knowledge is power. When inappropriate behavior is identified, victims need to be supported and those at fault need to be held accountable. Our profession has outwardly supported a zero-tolerance approach to sexual harassment and workplace violence. We as orthodontists must each adopt this position wholeheartedly and act proactively when witness to any form of misconduct.

Sexual harassment in the orthodontic office is an incredibly difficult topic to write about. While I am never one to want to come across as preachy or judgmental, it’s impossible not to when broaching the subject on paper. Truth be told, can any one of us say that we haven’t told an off-colour joke, made an inappropriate comment or looked at someone in a less than professional manner? To err is human and it is particularly challenging to know exactly when one has crossed the line when the line itself is a moving target as it seems to be at present. But it is our duty to know where that line is at all times. Our key responsibility as professionals is a continued self-awareness of our position, our power and our effect on everyone who enters the office be it a patient, parent or member of staff.

So now just imagine the enlightened orthodontist being asked about his hiring policies in 2018.

“So Doctor, how do you hire an assistant for your office?”
“Well, I select three applicants and then I ask each a number of challenging questions.”
“And then what do you do?”
“I go with the one who will give me the biggest bang for my buck”.

For real? We have some work to do.

Jimmy P

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From the Editor

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Diversions and Distractions

You are in a cookie factory, and need to make a huge batch of chocolate chip cookies. The recipe calls for exactly 4 cups of sugar. Problem is that you have two buckets. One bucket holds 5 cups, the other 3 cups. Using these buckets, how can you measure exactly 4 cups of sugar?

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From https://icebreakerideas.com/brain-teasers/#Longer_Brain_Teasers_for_Adults

Solution 1: Fill the 3-cup bucket and pour it into the 5-cup bucket. Fill the 3-cup bucket again, and pour it into the 5-cup bucket until the 5-cup bucket is full. That will leave exactly 1 cup of sugar in the 3-cup bucket. Dump out the 5-cup bucket, and dump the 1 cup from the 3-cup bucket into the empty 5-cup bucket. This leaves 1 cup in the 5-cup bucket. Now fill the 3-cup bucket again and add it to the 5-cup bucket. Now you have exactly 4 cups of sugar in the 5-cup bucket.

Solution 2: Fill the 5-cup bucket. Pour it into the 3-cup bucket. This leaves 2 cups in the 5-cup bucket. Now pour the 2 cups from the 5 cup into the 3 cup. Refill the 5 cup. Now pour the 5 cup from the 5 cup into the 3 cup. This leaves 4 cups in the 5-cup bucket.

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Straight Shooters

The Carriere Appliance is the ‘coolest’ appliance around.

Does a ‘headgear’ have to be removed when the national anthem is played?

Why are orthodontists so trustworthy?

Because they are always on the level.

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Puzzle Answer from above.

This is possible, and there are two ways to do it:

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Diversions

and Distractions

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