

# Patient Spotlight!

Lindsay Bracko is a Grade 10 student whose passion for hockey started at a young age! From TimBits through PeeWee she played with the Springbank Minor Hockey Association. In Bantam she moved to Girls Hockey Calgary (GHC). Lindsay is currently playing with the GHC Jr. Inferno Midget A Silver team who recently won the 2019 Esso Minor Hockey Week. For Lindsay that makes three years in a row that she's won EMHW. She and her team's ultimate goal this season is to reach Provincials!

*Congrats Lindsay!*



True North patients Lindsay Bracko and Ella Fournier were part of the winning team.

## True North Friends and Family Tubing Night!



RSVP required by email only  
[rsvptruenorth@gmail.com](mailto:rsvptruenorth@gmail.com)  
 Friday, March 8<sup>th</sup> from 4pm - 8pm  
 Solo riders must be 42" tall to ride.

## Did You Know?

**B**rittani and Katie are celebrating their 5 year anniversaries with us at True North Orthodontics! We are so lucky and thankful to have them a part of our team!

Dr. Gage recently developed an online resource for dental students to learn orthodontic diagnosis.



# What's Happening NEWSLETTER

February 2019



## 2018 In Review

2018 was a milestone year for the True North Orthodontics team. Not only did we complete renovations on our new office but we welcomed several new team members, transformed countless smiles, and with your help raised a substantial amount for KidSport Calgary through our mouthguard program. Now in 2019 we are welcoming Dr. Leigh Harfield (did you know we have the same birthday!?) to join me in our practice and will begin incorporating exciting new technology to better improve your experience in our office.

I want to sincerely thank each and every one of our patients and families who have stood by us through thick and thin and who have continued to be strong supporters of our practice and our philosophy.

Sincerely,  
*Dr. Colby Gage*

## Christmas Gift Drive

**T**hank you to everyone who donated for our toy drive to sponsor women, mothers, and their families in need with the Calgary Women's Shelter. We had some happy faces (with a few tears!) that came by to pick up the numerous donations!



## Welcome Dr. Harfield To The True North Team

**I** am thrilled to be joining the True North Orthodontics team and practicing with such an outstanding orthodontist as Dr. Colby Gage. After 20 years in Calgary practicing as an orthodontist I am excited to be able to work in a new location close to my home and family alongside a great team. I look forward to getting to know each of you in the coming months.

Sincerely,  
*Dr. Leigh Harfield*



## What's Inside...

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- New True North Smile
- Brittani and Katie 5 year

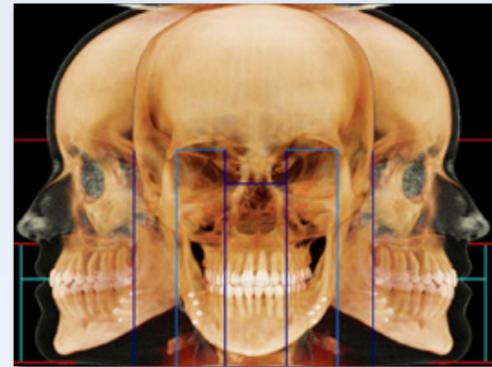


## The True North Way: Interdisciplinary Treatment

We believe that interdisciplinary care leads to the best outcomes for everyone in Calgary. That is why we work closely with many different teams, offices, and skilled practitioners to bring about the greatest results for all of the people we meet, none of which could be accomplished without an incredible focus on diagnostic skills and proper records. I am passionate that this is the single greatest benefit from a consultation in our office and I feel so strongly about this that we offer our diagnostic skills as a complimentary service to the community.

There is a constant push in medicine to discover ways to screen and detect problems in the early stages. Small changes made over a long period of time make a big difference so the hope is always to detect and initiate treatment as soon as reasonably possible when indicated. In my own research, I wanted to know if the 3D Cone Beam Computed Tomography (CBCT) images from my Icat Flx machine (which has the lowest dose imaging available) were suitable for developing an airway screening protocol for children and adults in my office.

I employed a double blind retrospective study where we analyzed the minimal cross-section areas, or area of greatest constriction of the upper airway, and the total airway volume using 3D mapping of 65 patients, including controls. The patients who were tested in this study were previously diagnosed by their physician by an overnight sleep study with moderate sleep apnea or confirmed as healthy controls via an at home sleep test and a negative result health questionnaire.



3D Images from our state of the art machine.

From this research I discovered that the minimal cross-section area in individuals with confirmed sleep apnea was LESS THAN HALF compared to those who did not have sleep apnea. Interestingly, these patients presented with a wide range of bites and dental crowding. As I have began to study this in more detail I have come to appreciate what a powerful tool this is in our orthodontic office for being aware of and screening for airway problems while we continue learning even more. This information has helped me look at my patients with fresh eyes and discover for myself the difference than an orthodontic consultation can make.

*- Dr. Colby Gage*



ICAT FLX V-17



## Diamond Invisalign Achievement

Dr. Colby Gage is super proud to have achieved the status of Diamond Invisalign Provider in 2018! Please call us to discuss how Invisalign clear aligners can be the solution for your new smile!



## New Joke Book

Dr. Gage recently compiled favorite jokes and puns from orthodontists around the world to include in his recent book titled "The Best Orthodontic Joke Book: Volume 1". Dr. Gage loves sharing corny jokes and puns with patients during their visits to lighten the mood and catch a smile in its natural habitat. Be sure to check it out in our waiting room or pick up a copy on Amazon!



## True North Orthodontics: An Airway Aware Practice

### By the numbers

Perhaps you have heard of obstructive sleep apnea (OSA) or have a family member or friend who has had a sleep study to test for this disease. If you are one of these people you are not alone as the most recent statistic shows that 10% of the population (or about 400,000 Albertans) has been diagnosed with a sleep disorder. Those with sleep disorders may experience decreased oxygen delivery to the brain causing the person to either disrupt their sleep in an attempt to breathe or to never achieve the deep sleep cycles that are needed for restful sleep. In many cases this disease goes undiagnosed but more and more adults are becoming aware of this issue.



Children may also suffer from sleep disorders with the most common causes being enlarged tonsils and adenoids (lymph tissue in the upper airway) and obesity (1). Recognizing this disorder can be difficult as children may not appear tired but rather show signs of mouth breathing, hyperactivity, irritability, poor athletic performance, bed wetting, or the inability to focus at school. At my most recent trip to Western University to instruct dental students on orthodontic diagnosis, some of the most common questions asked by dentists and students related to sleep apnea and orthodontics - clearly many people are concerned about this issue!

### What can be done to detect sleep disorders in children?

As an orthodontic specialty practice, we have a large number of children that my team and I see and observe everyday. This places us in a unique position to screen for the signs and symptoms of many diseases including sleep disorders and make an appropriate referral to diagnose the issue.

In order to determine if a referral to a specialist should be made, patients with a suspected airway issue are examined intraorally. Some of the intraoral signs of possible airway issues might include a high shaped palate, narrow dental arches, the presence of a dental crossbite, and certain jaw growth patterns (1). In these instances early or two phase orthodontic treatment with dental expansion has been documented to decrease nasal airway resistance as well as treat some jaw growth patterns but this may or may not be the cause of an individual's sleep disorder (2)(3). Early orthodontic treatment is not intended as a catch all for treating sleep disorders however many of our young patients experience benefits that improve their sleep and breathing patterns. Our practice is also able to take imaging in our consultation of the upper airway recommended by Calgary Children's Hospital to screen for enlarged adenoids (lymph tissue at the back of the upper airway). This further empowers us to make an informed referral to the appropriate medical professional and also initial orthodontic treatment in a timely manner if indicated.



**You have brains in your head. You have feet in your shoes. You can steer yourself any direction you choose. - Oh, The Places You'll Go! by Dr. Seuss**



This past December Dr. Gage spent time with the graduating residents at A.T. Still University in Gilbert, Arizona that he had a hand in instructing over the past 3 years. Dr. Clifford Running (far right), a fond mentor of Dr. Gage's in residency, gave the keynote address during the evening.