IT’S A TEAM TRYOUT YEAR.
Do you have the Right Stuff?

ACHIEVING PEAK PERFORMANCE | EVERYONE CAN SKI | MAKING BREAKTHROUGHS | TEACHING = INSTRUCTORS & COACHES
We have been talking a lot about change lately and I’d like to report back to you on some change that is happening within our organization that is actually bringing a sense of progress – and allows me to sleep better at night.

As our organization evolves we must make changes to stay relevant. Well, one piece of change I’m super excited about is happening at the board level. The Board has contracted with a third-party consultant to make a comprehensive review of our governing documents. Documents such as our By Laws and Policies and Procedures Manuals are being assessed with a “fine tooth comb” to make sure we can remain in a modern state of thinking. With this comes an alteration in how we govern our organization. The board is doing its due diligence and considering, with the help of our consultant, moving to a Policy Governance model for directing our board and our operations.

To help explain Policy Governance, below is an excerpt from PolicyGovernance.com. Please visit this website if you would like to learn more.

Policy Governance®, an integrated board leadership paradigm, is a groundbreaking model of governance designed to empower boards of directors to fulfill their obligation of accountability for the organizations which they govern.

This is a big step for our board which will ensure we are functioning as effectively and efficiently as possible. This modern form of governance will also help us establish the means by which we can more effectively evaluate our operations, determine if we are meeting our own expectations and allow for ways to make sure we stay on our path.

Helping us through this process of evolving our organization is Sherry S. Jennings PhD. Sherry is the founder and principal of Sound Governance and has worked with hundreds of organizations as well as the PSIA-AASI National Organization and several other PSIA-AASI Divisions. With Sherry’s guidance and leadership the board is excited and eager for what’s to come and more importantly what it will do for our members and our footprint in this industry. More info on Sherry and what she does can be found at SoundGovernace.us.
Learning to Cross-Country Ski Through Play, in Grayling

By Carole Mueller-Brumbaugh, MBM, MEd and PSIA Level 3, CS2, X-C Examiner

There is nothing better than sharing a sport that you love than sharing it with children. Their excitement for life’s new discoveries is contagious. So, who better than to share and spend time with then kids?

For the last two winters, I have provided an after school Cross-Country Ski program to pre-school 4 year old and elementary Kindergarten through 4th grade children. Most of them attend the local preschool by Hanson Hills Ski Area, my home ski school, or at Grayling Elementary School; however, some are home schooled or attend other local schools. We want to build a supportive community, so it is open to all students who want to participate. Grayling, Michigan is a small tourism and light industrial manufacturing supported community along with the Grayling Munson Hospital and the U.S. Army Camp Grayling serving the area located in the snow-belt of the northern Lower Peninsula of Michigan. Thus, the snow is normally plentiful from mid-December through mid-March here. With normally 4 months of snow, it is a great way to get kids outside to enjoy the snow, fresh air, and have fun exercising while receiving instruction through play with their peers.

Every Tuesday and Thursday, the children arrive at a local sporting goods and cross-country ski shop, Northbound Outfitters (NBO) at about 3:00 p.m. Some are dropped off by parents, grandparents and friends, while others take the county-wide transportation bus from school. They are very excited to don their X-C ski boots and prepare for 1 1/2 hours of learning through play on their X-C skis. As the children wait for their friends to arrive, I provide books for them to read about the theme that we are going to explore that afternoon while out on the snow.

The subjects might include identifying various types of animal tracks or trees, using their imagination by looking for the “snow fairies” along the trails and sprinkle them with fair dust (glitter) when found, or actively playing a themed game of catch football, frisbee, glow squish ball or “Farther Glide” by age, “Top of Mt. NBO,” a man-made snow pile which grows as snow accumulates, and other activities.

NBO has rental X-C equipment, both boots and skis that it provides for the children to use. They groom their 1.5 kilometer ski trails and have an open, snow packed field behind their shop, where their customers may try on gear before purchasing it. This is also the location for our children’s program. As a Central Division Cross-Country Ski Instructor and Level 3/X-C Examiner with a Children Specialist 2 credential, I provide the instruction. I wanted to get more people involved in X-C skiing, which they can start as young children. When they can and do get out as young children, then they grow up and fall in love with cross-country skiing. My wonderful partnership with NBO provides a service to the community, where most of the children have both parents working, and many parents are working more than one job. Therefore, it is a cost FREE program as a way for both Northbound Outfitters and me to give back to the community.

continued on page 7
“Two steps forward, one step back” — it’s a maxim that we often hear, recite, and experience. Sometimes though, we employ another maxim that isn’t as inspirational- the one about babies and bathwater. I’m writing about not-learning, and how the act of not-learning can lead to breakthroughs in your skiing, riding, and teaching. Let’s consider an example.

Years ago (like more than 10 at this point), I was trying to replicate the short radius turn of an inspirational skier by following him down a steep and consistent pitch- but as each turn released, I had trouble managing the energy loaded in my skis. Before I could travel laterally as he did, I had to first absorb the rebound force pushing my skis back towards my core. My inspirational image- the skier ahead of me, didn’t have this issue- he seemed to have harnessed a different form of directional energy that launched him across the hill. I could not understand what I was doing differently, and I could not take apart the puzzle, let alone solve it.

So I went to the resort training director, and (as sometimes happens), either he didn’t understand the question, or I didn’t understand the answer. In any case, I didn’t learn how to perform the skier’s turns, and as the image eventually faded, so did my drive to master them. I resigned myself to mediocrity and gave up on acquiring those wonderful arcs.

And then something happened — I was working on an entirely different challenge- seeking to engage my edges at the top of the turn, and I began to understand something new for me- that early engagement led to earlier release of the skis. For many skiers, myself included, steering and edging were simultaneous movements — edge-left-while-steering-left, edge-right-while-steering-right. But what if I tried to perform the moves in a definite order, prioritizing first my weight transfer, then tipping, then twisting. What if it was a sequence after all? Anything “Sequential” has seemingly become so taboo in our sport. Suddenly, I discovered that (and here’s where words will fail to convey ...)

my long-held personal truth wasn’t true. If I continued to steer left, while reducing and ultimately releasing the edge, a turn emerged that was unlike any other in my repertoire — and that part of the brain that stores old memories and forgotten phone numbers made the connection to those unrealized turns from a decade ago. The turns were happening — I was steering a releasing edge, and my long ago failure became a burgeoning success.

The story I’m describing is just an example of a larger truth in my personal skiing journey — there are innumerable instances when the lesson I was trying to learn or apply wasn’t registering or achieving the results I desired- only to re-emerge (much) later in a different scenario or situation to have a dramatic impact upon my skiing. “Oh, THAT’S what he/she was trying to tell me!” I frequently exclaim. In retrospect, the cascading effect of lessons-not-learned has emerged as a central theme in my skiing breakthroughs.

As proof, there was the time I didn’t learn to apply the Schlopy-Drill as directed (because I didn’t understand the role of my femurs). Another time, I didn’t feel capable doing outside-ski-turns (because I wasn’t moving forward at transition). There was the decade in which I stopped practicing tuck-turns after a mentor suggested I was on the wrong path- but here’s a positive, I came to better understand “chambering” my inside ski as a result. On a particularly inspired walkabout, I had determined that “counter” wasn’t something I needed to add to my skiing (I can’t explain how I arrived at that conclusion, but in contrast I’ve practically become the poster-boy for Stein Erickson’s reverse-shoulder technique). Being wrong about a personal belief is oddly rewarding, because when you finally surmount it, the learning feels more powerful.
more personal, both humbling and validating at the same time.

Not-learning is akin to an old tv show called “Concentration,” where contestants had to remember the location of a matching puzzle piece. You first see the piece, and randomly guess where it’s corresponding match might lie — if you are right, both pieces are revealed. If you are wrong, both are covered again. When you do expose a match to a piece you’ve seen before, your task is to recall where that match was hidden on the puzzle and reveal both. Hopefully you see where I’m leading with this anecdote — that it’s OK to not learn something, or acquire a skill when it is first introduced, so long as you recall the existence of that elusive skill, and can “relocate” it upon recall. You placemark the experience, and the mastery not achieved, the lesson not (quite) learned. It’ll stay there, lurking in the shadows until the match is revealed.

Here’s a closing story — I was in the resort bar one afternoon, when a guy approached and said “hey, I want to buy you a beer.” Somewhat dubious — “Ok,” I replied. The guy said “two years ago you were my instructor in a lesson and you said all I needed to focus upon was releasing my inside ski. I left that lesson thinking ‘that’s it? $135 for just that?’” He smiled and said “but I got it. It took a while but I got it, and I owe you an apology.” And a beer.

It is often when we are not looking that change comes — however softly — you have to be self-aware enough to know that you have made progress. Be willing to test your personal truths, challenge your most sacred concepts.

Go out and be OK with NOT learning something. You might be glad you didn’t.

Good Morning, Central Nation
By Brad Miller, PSIA-AASI-C, Education VP

At 5:30 a.m., on the morning of July 9th, I pulled the hospital bed covers off my head to a voice saying “Good Morning, Mr. Miller, I’m Doctor Smith.”

A hooked handle bar, a chest-plant on a stump and five broken ribs later put me in an all too familiar position of learning to adapt (to injuries). Simple things like getting out of a chair and putting on shoes and clothes produced steep learning curves — but most importantly, they enforced how important it is to adapt.

Hugging a stump at 20 mph isn’t the best way to bring on an epiphany, however it showed the omnipresence of adaption. As the 2020 snow sports season approaches I’ve begun to dwell on a few ways I will adapt as a professional.

Is my equipment cache and equipment knowledge up to date?
• Freestyle XC pole length needs to be shortened?
• I need roller skis!!

I’m up-to-date with new teaching and communication skills?
• Working on understanding and presentation of advanced V2 and Double pole kick teaching sequences.

Am I physically ready to meet the demands and requirements of teaching and coaching snow sports?
• Adapting to age (continuously) and injury.

PSIA-AASI is continuously adapting to meet our needs as professional snow sports educators. Contemporary equipment information, teaching & communication information as well as physical fitness & health information are featured on Central and National websites, in 32 degrees and the Central Line publications. Talk about Omnipresent!

Sincerely,
Brad Miller

“The art of life is the constant readjustment to our surroundings.”
— Kakuzo Okakaura
A day of teaching might begin with two cups of coffee and a bagel. Once the lessons start, it is one after another. Maybe there is no time for a break. Even though you know better, there is no time to take a drink. The only thing you drank all day were those two cups of coffee at the start of the day. That can be a big mistake.

My first day on vacation at Big Sky began well enough. We took some runs on the bluebird day. I began to feel thirsty but I was too busy having fun and didn’t want to hold up anyone. So I ignored my thirst.

At around noon I noticed my heart suddenly began racing and I felt some weakness and dizziness. I excused myself from the group and headed back to the hotel to rest. Three hours later my heart was still racing at 177 beats per minute. It was time to seek medical care. My wife and I headed for the local urgent care. They hooked me up to an EKG and told me I had Supraventricular Tachycardia or SVT. That is, the upper chambers of my heart were racing and my heart was not efficiently pumping blood. This caused the weakness and dizziness.

The cause of this was dehydration. Dehydration strains the heart because the blood thickens in the absence of water and the amount of blood circulating through my body decreased. To compensate my heart began beating faster. This caused my heart to go into tachycardia. If it had continued, I could have had a stroke, heart attack, or sudden cardiac arrest. Fortunately, I did not experience any signs of cardiac distress such as chest pain or shortness of breath.

They gave me a shot of adenosine. This is an amazing drug that essentially jump starts the heart. I experienced a brief shortness of breath and suddenly my heart rate plunged from a risky 177 beats per minute to a safer 107 beats per minute. I started feeling better. They transported me to the local ER who gave me two shots of Cardizem to slow my heart rate even more, along with two liters of saline solution. They ran a blood test and found my troponin level was slightly elevated, just over the cutoff for what would be considered normal. Troponin is an enzyme which indicates stress on the heart. A high level of troponin predicts a possible heart attack. Because it was just over the cutoff they kept me a few hours to see if my troponin level decreased.

A few hours later they re-ran the test only to find my troponin level had increased a bit. Because I did not have any heart attack symptoms, they decided to discharge me with the promise to return in the morning to be retested. When I went back the next day my troponin level had returned into the safe zone. The nurse smiled and said, “you’re clear to get back on the slopes.” After that I was fine. However, my wife kept shoving glasses of water in my face and I constantly had to find trees in the glades to relieve myself.

Hydrate or Die

By Doug Waltman
I learned some interesting facts from the medical staff about what happened to me. Turns out dehydration on the mountain is a pretty common event. Young skiers have supraventricular tachycardia episodes from gulping down too many energy drinks. The high elevation and the dryness sucks water out of you. The ER asked me if I had been drinking alcohol. I had not. We all know alcohol (and caffeine) causes dehydration. The high elevation makes this worse. The ER said they regularly see vacationers develop SVT who party hardy the night before and then fail to replenish their fluids the next day. They recommended one should consume two glasses of water for every alcoholic beverage you drink.

The best advice from all this is to drink lots and lots of water, not coffee, in the morning and then drink lots more water at lunch time. It’s also a good idea to carry water with you on the slopes. You know all this. So did I. Just don’t forget to do it.

Doug Waltman is a Level I instructor at Brandywine Ski Area near Cleveland, Ohio.

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**Grayling | continued from page 3**

Our goal is to continue the program for the upcoming third winter. Working with the children has provided me, as a retiree, with enjoyment in doing what I love to do, cross-country skiing and sharing in the excitement of it. Life does not end at age 65, it starts. One just has to create a venue that warms the heart, and then in turn, one can give back to the people in one’s community. Besides, it takes a “village” to raise a child, and for me, this is my little help in being a part of that “village”.

To find out more, attend a PSIA-C Children’s Specialist X-C 1 clinic for training. You will “have a blast’ and gain information on how you can start a children’s cross-country ski program similar to this in your own community, where children can learn to love the life-time sport of cross-country skiing.

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Share your passions for skiing and teaching at a resort that’s not only one of the best in the world, it feels a lot like home (last year, over 1,200 staff members celebrated their fifth season or more at Deer Valley). Competitive wage and benefits package. Progressive ski programs with small class sizes. PSIA-accredited ski school. Looking for staff to start in December and hiring throughout the season.

Apply now at deervalley.com/jobs or call 435-645-6635 for more information.
Certified Instructors

The following members successfully achieved certification this past season. We congratulate them on this accomplishment and appreciate their commitment to advancing their education and expertise.
**Teaching = Instructors & Coaches**

By Brad Miller

Ask any Instructor or Coach the difference between an Instructor and a Coach and you will get a myriad of answers. In the World of Snowsports instruction this question is asked quite often resulting in thought provoking dialogue. My answer to the aforementioned question was more complex than I originally thought. Although non-scientific, I jotted down my personal views and reflections to come up with a common thread that wove through both Instructor and Coach fabrics.

### Responsibilities

(* indicate relevance ***** being the highest)

<table>
<thead>
<tr>
<th>Responsibility</th>
<th>Instructor</th>
<th>Coach</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teaches Specific Skills</td>
<td>*****</td>
<td>*****</td>
<td>Balance; etc.</td>
</tr>
<tr>
<td>Manages Lesson Plans</td>
<td>*****</td>
<td>*****</td>
<td>Helps student/athlete set &amp; establish goals.</td>
</tr>
<tr>
<td>Creates Learning Partnerships</td>
<td>*****</td>
<td>*****</td>
<td>Develops lessons and outcomes with Student.</td>
</tr>
<tr>
<td>Pursues Educational Development</td>
<td>*****</td>
<td>*****</td>
<td>PSIA-AASI or other education related to occupation.</td>
</tr>
<tr>
<td>Ability to Motivate Students</td>
<td>*****</td>
<td>*****</td>
<td>Help student overcome personal challenges in order to achieve goals</td>
</tr>
<tr>
<td>Ability to Incorporate Terrain</td>
<td>*****</td>
<td>*****</td>
<td>Work on or introduce skill enhancement activities on a Variety of Terrain</td>
</tr>
<tr>
<td>Length of Educational Relationship with Student</td>
<td>**</td>
<td>*****</td>
<td>A week or longer.</td>
</tr>
<tr>
<td>Management of Competitive Schedules</td>
<td>*</td>
<td>*****</td>
<td>A US Ski Team race schedule vs. a single Nastar race.</td>
</tr>
<tr>
<td>Student Management</td>
<td>**</td>
<td>*****</td>
<td>A schedule based on annual competition vs. monitoring student fatigue during a whole day lesson.</td>
</tr>
<tr>
<td>Diversified Teaching Spectrum</td>
<td>*****</td>
<td>**</td>
<td>Ability to teach beginner through advanced lessons vs. the focus on a more condensed ability zone.</td>
</tr>
<tr>
<td>Student Evaluation with a Short Time Allotment</td>
<td>*****</td>
<td>**</td>
<td>Ability to evaluate students in a one hour lesson vs. a one week or longer lesson</td>
</tr>
</tbody>
</table>
The Teacher Factor
Now, it was time to answer some key questions when it came to defining the terms “Instructor” and “Coach.” First, I had to reflect on past experience as an athlete and student which meant adding the “teacher” factor.

Grade School and High School
Did all my coaches fall under the coaching category in Figure 1?

*Many of my Previous Coaches did not fall under the coaching column nor did they fall under the instructor column specifically the Ability to teach a skill and create a learning partnership (the latter was common for the time).*

Did all my teachers fall under the Instructor category in Figure 1?

*Ironically, many of my teachers fell under the coaching category, specifically the ability to teach a skill and create a learning partnership. Teachers also imparted life and character skills.*

College
Did my Instructors fall under the Instructor or Coach Category in Figure 1?

*The length and quality of the educational relationship with the student varied, however it leaned toward the instructor side. In all cases, instructors were skill specific and managed long term schedules.*

Coaches and PSIA-AASI Education Facilitators
Do my coaches meet coaching or Instructor categories under Responsibilities?

*Coaches have met the coaching category — specifically Athlete Management.*

Do my PSIA-AASI education facilitators meet coaching or instructor categories under Responsibilities?

*Education Facilitators have met the instruction category — specifically, with a short time allotment.*

Self-Evaluation
Do I fall under the coaching or instructing responsibilities?

*This is a work in progress.*

Introspective
There is a fine line between Instructors and Coaches. Both professionals incorporate instruction via interaction with students/athletes. If you learned that increasing the tempo of your V1 on steeper Cross-Country climbs improved performance in a one hour lesson you and your instructor connected for a home run. If your team Coach worked on a successful taper down training program prior to competitions which proved successful, you connected for a home run. In both scenarios an Instructor and a Coach provided successful input based on observation and the ability to incorporate a learning partnership via good communication and trust.

While the debate over the differences between Instructors and Coaches will always be part of our culture, the key denominator for both Instructors and Coaches will be the ability to teach. As both a Coach and an Instructor, I find that the words of Aristotle provide a model to practice my trades by “Those who know, do. Those that understand, teach.”

*“Contendunt optima”*

*Dedicated to my substitute 8th grade English teacher, the late Mr. Thomas, who connected with the un-connectable in a manner decades ahead of the Teaching Excellence norm.*
With the hot summer heat upon us, I find myself drifting away and thinking about the upcoming winter season and what my goals are. Quite often, my objectives on snow involve a physical component that will enable me to ski faster, ski longer, be more athletic, or just put my body in alignment with my thoughts and desires. Preparation for this starts long before the first flakes fly. I begin building and developing the muscle groups I will need to use during the summer, and let my training evolve into a maintenance program once the season hits. This article will provide you with a sample workout toward building ski fitness and a “how I get ready for my ski day” warm up and nutrition outline.

I am very fortunate to have my own personal trainer in my son Jake, a certified strength and conditioning specialist. Jake and I have discussed my goals and he has created a program for me to follow, which I feel can help most of you to achieve your goals. So often we engage in our summer activities to stay fit for skiing, but do you really TRAIN for skiing? Below is a sample workout that anyone can follow to help build the muscle groups we need to ski at peak performance. As with any work out, you should first consult your physician to be sure it is safe for you. I have a general outlook on life that applies to all of us, especially when physical activity comes into play:

Start where you are. Use what you have. Do what you can.

Take a look at the exercises below and see if they will work for you.

**Squats – High Volume**
- 3-6 sets of 15+ reps at a weight that makes the last rep challenging
- Focus on keeping lower leg perpendicular to floor and driving through midfoot-heel area. Knee will bend to 90 degrees.
- Can be done with body weight, dumbbells, barbells, and kettlebells. Try single leg squats for a challenge.

**Single Leg Deadlifts (RDLs) – High Volume**
- 3-6 sets of 15+ reps at a weight that makes the last rep challenging
- Bring weight to one leg and lower weight to mid-shin before returning to standing start position.
- Focus on keeping knee at same degree of bend through the entire movement. Keep hips square, don’t twist.
- Can be done with body weight, dumbbells, and kettlebells.

**Lunges – High Volume**
- 3-6 sets of 15+ reps.
- Keep your weight on midfoot-heel; lower leg stays perpendicular to floor; knee bends to 90 degrees if possible.
- Can be done with body weight or dumbbells.
- Try forward lunges, lateral lunges, and reverse lunges for a well-rounded workout.

**Squat Jumps – High Volume**
- 3-6 sets of 15+ reps
- Use same form as a squat, except you fire your muscles as hard as you can at the bottom so that you shoot upward into a jump. As you land from your jump, let your momentum carry you into your next squat. Do these continuously for the best workout.

**Line Hops – High Volume**
- 3-6 sets of 15+ reps
- Hop over a line on one foot. Do one set of side-to-side jumps and one set of forward-to-backward jumps per leg.

**Lateral Bounds – High Volume**
- 3-6 sets of 15+ reps
- Push off of one leg and jump sideways and land on the other leg. Use the momentum to load up the plant leg and jump back to the other side.

**Front Planks**
- 3-6 sets of 30+ seconds
- Keep hips in line with rest of body.

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**Achieving Peak Performance in Your Skiing**

By John Hamaker, Alpine Education Staff; Jake Hamaker, C.S.C.S.
Russian Twists
• 3-6 sets of 15+ reps
• In a seated position with legs bent and slightly off the ground, lean back and tap the floor with both hands on one side, then rotate to the other side holding your core tight.
• Try using a medicine ball for a challenge.

So, now that the season is here and you are physically prepared to meet your goals, how do you approach your ski day? Too many times, I have seen skiers show up to ski without eating breakfast, hop directly on the lift to the top, and take a “warm up run” to get things moving. This same skier goes in for lunch, has a huge slice of pizza and some nachos, and then heads back out and up to the top. This is a recipe for injury and subpar performance. We need to properly fuel the body and muscles we will be using, as well as activating the muscle groups, so they function properly. At the end of our ski day, a few simple choices to aid in our recovery will help tomorrow to be an awesome ski day, especially when we are at altitude. Below is an outline of my “ski day routine” that Jake and I developed, as well as some of his nutritional suggestions that help my body to function properly and provide my muscles with the energy and mobility that I demand. Again, this is a sample outline, please consult your health professional to be sure that any of this will be ok for you.

Before Skiing
• It is important to complete a dynamic warmup before skiing in order to get the leg muscles opened up and activated.
  - Example warmup exercises
    ○ Knee pulls
    ○ Quad pulls
    ○ Lunges
    ○ Figure 4 pulls
    ○ Frankenstein kicks
    ○ Squats
    ○ Calf raises
    ○ Toe raises
    ○ Shoulder circles (forward and backward)
    ○ Lateral leg raises (while standing)
    ○ Glute bridges (on ground)
  - Overall, spend 5-10 minutes preparing your body for skiing. The more muscles you activate in your warmup, the more muscles can be used during your ski day. The more muscles you utilize during your ski day, the more control you will have over your movements.
• It is equally as important to eat quality foods before skiing that will help you stay sharp mentally and physically during the day.
  - Example breakfast foods
    ○ Complex carbohydrates like oatmeal, whole grain toast, whole grain bagels, and potatoes
    ○ Simple sugars like fruits and 100% fruit juices
    ○ Protein in the form of yogurt, eggs, cheese, cream cheese, milk, and peanut butter
  - Example meal combinations
    - Whole wheat bagel with cream cheese/peanut butter
    - Oatmeal with fruit and yogurt
    - Eggs and whole wheat toast with jelly on it
    - Breakfast potatoes and eggs
  - Try to blend complex carbs, simple sugars, and protein in your breakfast choices in order to give you energy and strength throughout the day.

During Skiing
• Bring snacks to keep your energy high while you are out on the hill.
  - Examples of snacks are granola bars, protein bars, beef jerky, dried fruit, and trail mix (cheerios, raisins, almonds, etc.)
    ○ Keep yourself well hydrated; drink enough water where it causes you to go to the bathroom multiple times.
    ○ If you get stiff and cold, warm your muscles back up by doing a few squats or leg raises/kicks in any direction. Keep your shoulders loose by continuing to do arm circles throughout the day. Keep your core engaged by doing a few upper body/lower body rotations before getting back at it.

After Skiing
• It is important to help your body recover after skiing.
  - Example recovery meals
    ○ Pick similar foods to your breakfast; complex carbs, simple sugars from fruits, and protein.
  - Drink lots of fluids. Things that can dehydrate you are coffee, alcohol, and cold weather. In order to rehydrate yourself, you will need to take in

continued on page 14
electrolytes (sodium and potassium) as well as water, so that the water you drink has something to help it get absorbed into the body.

- Stretch the same muscles you warmed up earlier in the day
  - Example stretches
    - Standing toe touch (hamstrings)
    - Kneeling lunge (hip flexors)
    - Quad pull
    - Calf stretch on stair
    - Sitting V (adductors)
    - Lat stretch (grab handle and try to pull arm out of socket, stretching the back)

- Foam roll your lower body muscles to stretch them out and help clear out the byproducts of use
  - Areas to foam roll
    - Glutes
    - IT bands
    - Quads
    - Hamstrings
    - Calves

By taking care of your body before, during, and after skiing, you will be able to get more out of it in terms of performance and overall feeling of well-being. We hope this article has provided you with a training pathway and “game day” plan to help you enjoy your ski day to its fullest potential.

See you on the slopes!!!

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**Performance | continued from page 13**

Have you seen the new Tetraski? It is a joystick and sip/puff controlled sit-ski that allows those with extremely limited mobility to get out onto the slopes. It was designed at The University of Utah.

For the first time, this ski was leased to seven adaptive ski programs across the country. Adaptive Adventures — Midwest had the privilege of being chosen as one of the seven testing groups. Those with high spinal cord injury, cerebral palsy, or other disabilities that require the use of a power wheelchair had the opportunity to give this new adaptive equipment a try.

The on-board computer can put the skis in four positions – from parallel to 3 sizes of wedge. To make a turn, servos and an actuator will flatten one ski to allow the shape of the edged ski to engage. For safety, the lead instructor is tethered to the unit with a climbing belt, locking carabiner, rope and has a remote control that can override the ability of the participant to control the unit.

In beginner mode, the skier can only initiate turns while the instructor controls the size of the wedge. The advanced mode allows the skier to determine wedge size and when to turn.

This ski has one additional feature. For those individuals that don’t have the ability to use their hands, this ski also has Sip/Puff technology. A small tube connected to the computer allows the skier to turn right by puffing into the straw and turn left by puffing.

Now, individuals with high levels of disability can get outside, enjoy winter, and take a few runs with family and friends. More info on this ski can be found at [www.tetradapt.us](http://www.tetradapt.us).

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**Season Kickoff**

via **LIVE WEBINAR**

Save the Date: Login Sunday, September 22nd
Starts 8pm Eastern Time (7pm Central)

Free for PSIA-AASI Central Members

*More Info online at psia-c.org*

**BE “CONNECTED” to CENTRAL**

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**Everyone Can Ski!**

By Nancy Wilder
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All articles and photographs intended for publication in The Central Line should be submitted to the Editor.
A Tale of Two Skiers – What Do You See and Why?

Click on the barcode below for a link to a blog.


Save the Date!
Boyne Highlands, MI
December 7 & 8, 2019

A great event for the entire family.

Watch the Central Division website and your email for details of this event, include sessions to be offered, lodging discounts, and much more.

MiniAcademy/Ski with the D-Team.