Therapeutic Outlook

Your Guide to Wellness Through Movement

Volume 6, Issue 2











TherapeuticAssociates PHYSICAL THERAPY

OUR FOCUS IS YOU

TAI Clinic Directors getting ready to brave the rapids at their Annual Fall Management Retreat in 2004.

60th Milestone Reflects an Investment in People

Scott Wick, TAI Director of Marketing

What's in a milestone? In celebrating our 60th year of meeting the physical therapy needs of our neighbors, I find myself contemplating the past, present, and future of our company.

People ask me all the time, "What do you do at Therapeutic Associates?" My response is simple, but lies at the heart of who we are as an organization: "We help people." The goal is simple, but is complicated by our current healthcare and economic environment. I am also asked, "How long have you been in business?" When I tell people we are celebrating our 60th anniversary (after the "Wow!"), they typically follow up with, "How is that possible?" My response is, "We invest in people."

Scott Wick

Companies that withstand the test of time have a solid set of core values they live by. Our internal definitions have evolved since our inception in 1952, but the values themselves remain the pillars of our culture. They not only dictate our business model, but also our clinical approach to patient care, and, most importantly, how we engage with our customers.

Therapeutic Associates is more than just a physical therapy company. We pride ourselves on being innovative in our profession and have developed cutting-edge treatment techniques, evidence-based treatment protocols, and quality systems to measure the efficacy of our intervention. We also pay close attention to how our patients perceive the value we provide in helping them live healthier lives.

Living our Core Values:

EXCELLENCE: "*We are what we repeatedly do… excellence then, is not an act, but a habit.*" ~Aristotle. Studies show that the best way to achieve excellence is to practice. We have spent the last 60 years practicing and improving our trade.

- **Leadership Development Program:** Our

philosophy encourages investing in people and their personal and professional growth. Since we are only as good as our people, we provide our therapists and employees the tools they need to grow and succeed as both clinicians and business leaders.

• **Quality Tools:** TAI recognized early on the importance of providing and measuring quality care for our patients. This has become more prevalent with the Affordable Care Act. However, TAI has been doing this for years. We wrote clinical practice guidelines for outpatient practices before the APTA (American Physical Therapy Association) published their guidelines. We developed an Outcomes Tool to measure the efficacy of therapeutic intervention before it was popular and have measured patient satisfaction all along.

• **Putting our Patients First:** Trust in healthcare is paramount. We believe that putting our patients first and fostering trusting relationships with them will afford us another 60 years of doing what we love—helping people.

• **Investing in New Technology/Programs:** We employ some of the most forward-thinking minds in our profession, and with that comes innovation. Our culture promotes and rewards continuous improvement. Some of the latest technology and techniques incorporated into our treatments include ASTYM, Real-Time Ultrasound, Breathworks, and Physical Fitness Exams.

INTEGRITY: Integrity is paramount to healthcare, and we take it very seriously. We recognize and accept your trust as your healthcare provider and will do everything possible to aid and accelerate the healing process so you may experience the best physical health life can offer.

STEWARDSHIP: Our current leadership has inherited an enormous responsibility. Our goal is to improve what our predecessors created for the benefit of our customers, employees, and our profession.

• **Ownership/Partnership**: The structure of our company embodies teamwork, and each of our clinics has a director/owner who runs that individual location with a common goal: success for all.

• **Program Development:** Each clinic serves a different population, and our programs are as diverse as our neighborhoods. By identifying the needs of our communities, we are able to provide value to our customers and thereby affect the overall health of our communities.

• **Cutting Edge**

Research Department: We conduct clinical trials of new treatment techniques and validity studies to prove the effectiveness of clinical intervention.We modify our treatment guidelines based on statistical outcomes and scour professional periodicals for the latest research on clinical excellence. We incorporate this information into our systems to benefit our patients.

Clinical Education Department: With a department dedicated to advancing clinical skills, we have some of the highest trained therapists in our profession. Our people are faculty members for programs like North American Institute of Orthopaedic Manual Therapy and Evidence in Motion. Each therapist entering into our company designs a continuing education plan to maximize clinical potential.

• **Expansion:** Our expansion philosophy focuses on quality. To ensure we meet our high standards, our growth is slow and methodical.

• **Relationships:** Our ultimate goal is to become your physical therapist for life, a permanent member of your medical team. Musculoskeletal health is often taken for granted until it is lost. Each individual heals and responds a little differently to various interventions. Having a trusted healthcare provider that understands your history and individual healing patterns can keep you moving pain free over the course of your life.

COMMUNITY: We invest in our communities because we live and work in them. Our clinics typically serve a given community for decades, and it is very rewarding to treat generations of neighboring families. Our goal is to become a resource and partner in the health and wellness of our communities. You can be confident that we will be there when you or a loved one needs us.

So what about the future? We all know the landscape of healthcare continues to change, but I am confident that we will be around for another 60 years. From our partners and employees to the patients and communities we serve, we will continue to focus on what really matters: relationships with people and doing what is right.

Get to know us—I think you will like what you find.

Our Core Values...

Excellence
Integrity
Stewardship
Community

David McHenry PT, DPT working with Nike sponsored runners Dorian Ulrey and Lindsay Allen. Photo by Kent Factora.

"You're a Physical Therapist?"

David V. McHenry PT, DPT, Director, TAI North Portland Physical Therapy, P.A.C.E.

I hear that question a lot, but it is posed as more of a surprise response to know the background that allows me to work with professional athletes. I am a physical therapist. I have been directing a Therapeutic Associates physical therapy clinic since 2003, and I spend most of each day treating injured athletes.

However, my training as a physical therapist has allowed me to provide a much broader service than just fixing injured people. This role was important enough to Nike to allow me the opportunity to travel with them and their athletes to last summer's London Olympics to provide a service that is not normally associated with a "physical therapist."

David V. McHenry PT, DPT

Since 2004, I have been doing rehabilitation for the Nike Oregon Project. From that point until 2010, it was my job to fix the program's runners who had fallen apart. They would break, I would fix them. They would break again, I would fix them again, and so the cycle would continue. The thing about elite athletes is that they are ALWAYS pushing their physical limits. This is what allows them to make incredible training adaptations, drives them to become the best of their sport, and consequently allows them to represent their country during the Olympic Games.

But when you perpetually push your physical limitations, you simultaneously push your physical durability. Bottom line—elite runners break down a lot from the repetitive stress of running of 100+ miles per week. This is an incredible amount of force the body needs to endure.

David working with Nike sponsored runner and Olympic 10k silver medalist, Galen Rupp. Photo by Kent Factora.

Imagine this: an average elite runner takes about 160 foot strikes per minute. Assume a runner weighs 130 pounds, averages 6 minutes per mile, and runs 100 miles per week. Research shows that for each foot strike, the body needs to absorb 3–5 times the runner's body weight per foot strike (we will use four times the runner's body weight for the sake of this example). In this example, the runner needs to absorb about 5 million pounds of force per week just from running. That is a lot of force for the body to handle, and that represents just one week of training! It's no wonder that runners are always experiencing overuse injuries.

Coach Alberto Salazar of the Nike Oregon Project program got so tired of having me fix his broken runners that in 2010 he asked me to take on a new role. Instead of fixing injuries, he wanted me to prevent them. Since then it has been my role to identify and address any and all strength and flexibility limitations, joint dysfunctions, movement imbalances, or any notable physical deficits that left his runners vulnerable to overuse injuries.

After those imbalances and deficiencies were identified and addressed, it was then my job to help them become even stronger and more durable so that their training loads were much less likely to cause an overuse injury. It was not my ability as a physical therapist to fix injures that got me a ticket to the Olympics; it was my ability to *prevent* injuries that established my value for Coach Salazar's team. As a result, I was able to play a role in Nike's ultra-successful distance running program and represent Therapeutic Associates at the London Olympics.

Over the past year I've worked with 16 different Olympic athletes from the United States, Great Britain, Israel, Kenya, Australia, and Ireland. Several of them returned home medal winners. These athletes included: Mo Farah: 5k and 10k gold medalist; Galen Rupp: 10k silver medalist; Dathan Ritzenhein: 3-time Olympian; and Matt Centrowitz: 4th place in the 1500m.

Is this a unique ability that only I possess as a physical therapist? Absolutely not! The skills learned in physical

David working with NY Yankees pitcher, Zac Varce. Photo by Kent Factora.

therapy graduate programs to assess and treat injured bodies are the same skills used to assess and treat healthy bodies to make them more resilient to physical challenge.

As indicated in the ageless adage, "an ounce of prevention is worth a pound of cure." If you are waiting to break down to call your physical therapist, then you

It was David's ability to prevent injuries for the Nike Oregon Project athletes that got him a ticket to the 2012 Olympic Games in London. Photo by Kent Factora.

might be missing the boat. If you feel great right now and have no aches and pains, call your physical therapist and allow us to help keep you that way!

Physical therapists are best known for their prescription of detailed exercises that help improve body function. Photo by Dan Rogers, Rogue 6 Productions.

Performance Enhancement: What Can PT Do For You?

Matthew Rogers PT, DPT, Director, TAI Oregon City Physical Therapy

Whether you are a high school athlete gearing up for the 2016 Olympics, or you just want to stay healthy and active, physical therapy can help. Now more than ever, highly skilled physical therapists are trained to not only help heal an injury, but to enhance performance at all levels of sports and activities. They are also experts in helping you maintain a healthy body and promoting wellness for all ages.

Matthew Rogers PT, DPT

Why PT for performance enhancement?

Performance enhancement is a fundamental principle for athletics or recreational activities to maximize the potential of the human body and mind. Physical therapists specialize in assessing and correcting problems that can hinder performance. A physical therapist is:

- Experienced in prescribing programs to train patients in a wide range of sports and activities.
- An important liaison among physicians, parents, coaches, and athletic trainers to help provide comprehensive care.

- Educated in research-based testing to help determine how to safely and successfully train patients for athletic and recreational activities.
- Highly skilled in manual therapy techniques to assist the body in moving more effectively.
- Able to prescribe activities that influence multiple body systems to maximize performance, including cardiovascular, neuromotor, cognitive, musculoskeletal, and dietary.

Physical therapists are best known for their prescription of detailed exercises that help improve body function. This is especially true for athletic performance enhancement, as there are a lot of factors to consider for each individual to meet their goals.

Exercises will vary depending on injuries (old or new), body type, and the patient's abilities and needs. Other factors to consider include the patient's sport or activity, level of difficulty, and timing (in-season vs. off-season).

The physical therapist and patient relationship can be analogized to that of a mechanic working with a finely-tuned car. Sometimes all that is needed is a small change in tire pressure while other times repairs may be needed to an entire structural component of the car.

Let's look at an example. For the past few years a marathon runner has had difficulty meeting her goal of breaking 3 ½ hours at the Portland Marathon, but she is determined this year! She goes to see her local PT and finds that she has a mechanical problem with her hips, which causes her feet to overpronate, when the foot rolls inward more than the average after the heel makes the initial ground contact. The PT figures out that this has been contributing to knee pain and limiting the patient's training runs. Her PT recommends a more supportive pair of shoes and builds her an exercise program that is specific to controlling pronation during running. Are there other factors contributing to the patient not reaching her goal? The PT discovers that she runs an appropriate amount of miles per week, but she is not doing any speed training to help fine tune her stride and get her nervous system and muscles adapted to running at a faster pace. The PT then designs a training program that incorporates speed workouts.

What else can help her meet her goal? She now runs efficiently and has a more comprehensive training routine, but she needs strategies to help her run longer at her new pace and recover faster after hard runs or workouts. Recommendations could include stretching and foam rolling programs, consistent strengthening exercises to maximize her total body's potential, and education on what kind of foods help maximize performance and when to eat them. These are just some examples of how your physical therapist can help you meet your performance-based goals.

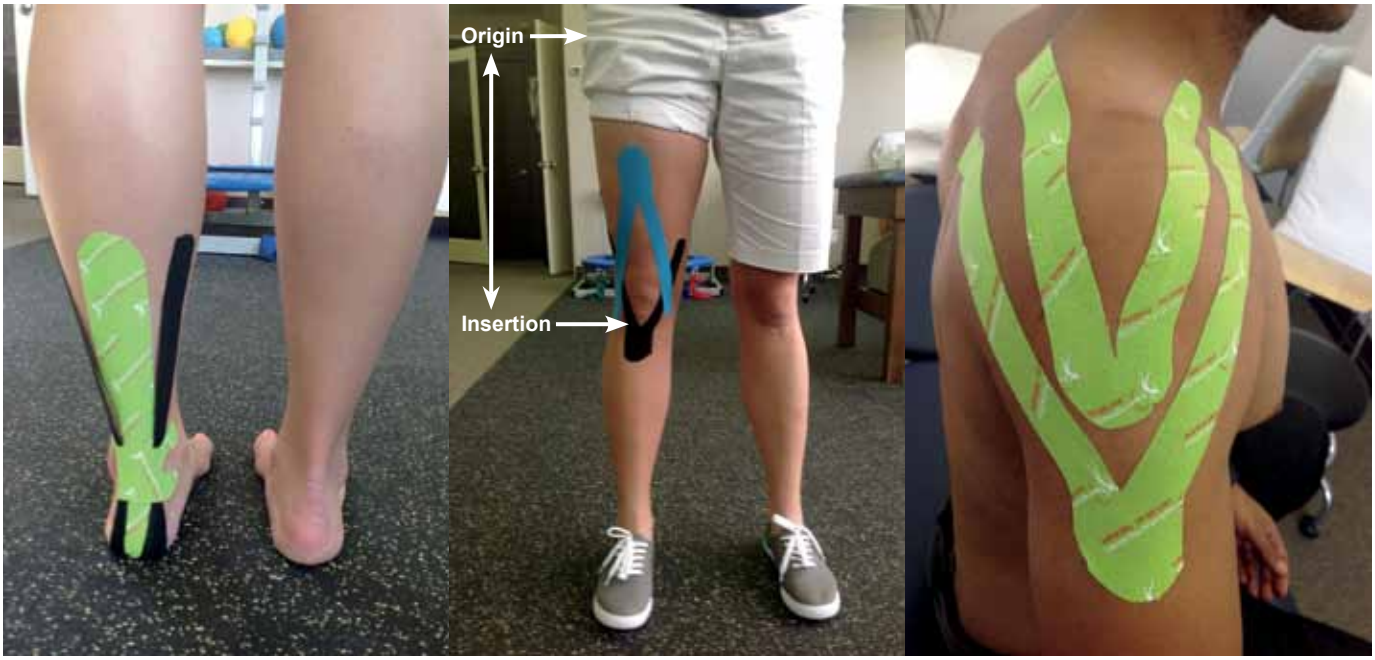
Now more than ever, highly skilled physical therapists are trained to not only help heal an injury, but to enhance performance at all levels of sports and activities. Photo by Dan Rogers, Rogue 6 Productions.

Who can benefit from PT?

Physical therapy is beneficial for anyone interested in athletic performance or people who want to stay healthy and active. People often limit their activity due to pain, stiffness, or weakness, and a physical therapist specializes in correcting these issues to get you back to doing the activities you love. You may already have an exercise program but need some guidance to ensure you are staying safe and progressing appropriately. If you are not sure, contact your local PT and find out if you are a good candidate for physical therapy.

How can you work with a PT for performance enhancement?

Performance enhancement programming is often incorporated into the goals of standard physical therapy, however many of our clinics offer specialty cash programs designed to prevent injury and impact performance. For more information or to find your local physical therapist, please visit our website at *therapeuticassociates.com.*



Athletes in the 2012 Olympic Games used brightly colored Kinesiology Tape for function, not for fashion.

Is Colored Tape the Latest Athletic Accessory?

Maren Bisson PT, MPT, Director TAI Madison Park Physical Therapy

Anyone who watched the 2012 London Olympic Games more than likely noticed athletes wearing that bright colored tape. What is it, and why are athletes wearing it?

Kinesiology Tape has been around for approximately 30 years. It was originally developed in 1979 by Dr. Kenzo Kase, a Japanese practitioner licensed in chiropractic medicine and acupuncture. It gained popularity in the 2008 Beijing Olympics with Sumo wrestlers, but skyrocketed in exposure during the recent London games (tape was worn by divers, volleyball players, and track athletes).

Although the efficacy of Kinesiology Tape is not scientifically proven, current theories suggest that the elastic tape lifts the skin to assist in blood flow and lymphatic flow (our lymphatic system is part of our immune system that aides in removing excess fluids and waste products, such as dead blood cells, toxins, and cancer cells). Some practitioners suggest that this phenomenon keeps the muscles surrounding the joint warm, which can decrease risk of injury or strain. In 2004 the International Kinesiology Taping Association was formed to further the scientific research of physiological effects of Kinesiology Tape.

Maren Bisson PT, MPT

Traditional athletic tape worn by athletes surrounds the joint, providing stabilization and support. This type of tape is warranted for certain conditions, but it tends to obstruct blood flow and lymphatic fluids. Kinesiology Tape allows for full range of motion and works to unload the fascia, or connective tissue, and aids in blood flow. It is also latex-free, and many feel it is easier on the skin than traditional athletic tape.

Kinesiology Tape can be used for facilitation (to support or to cue the muscle) or for the relaxation of muscles. Functionality of the tape is determined by the direction in which the tape is applied. To facilitate the muscle, tape is applied from origin to insertion (end). For muscle relaxation, the tape is applied from insertion to origin. (See center photo above.) Physical Therapists have extensive knowledge in the musculoskeletal system, including where a muscle originates and ends. To ensure the greatest benefit of Kinesiology Tape, an understanding of anatomy is essential.

For more information on Kinesiology Tape, contact of any one of our Therapeutic Associates Physical Therapy locations.

Continuing Our Legacy through Commitment to Our Communities

By Stephen E. Anderson PT, DPT, CEO, Therapeutic Associates

How does a company continue to grow and thrive after 60 years? The answer is, without hesitation, "The people."

Throughout this magazine you will see stories that highlight our history and pride in lasting the test of time. Successful companies are made up of people who believe in a common cause and build a culture that supports strong core values. The biggest risk of growth is losing that supportive culture as the numbers increase.

Stephen E. Anderson PT, DPT, CEO

On the other hand, if everyone takes responsibility to live by cultural values and holds themselves and others accountable to those ideals, growth can actually add to the diversity and strength of the company. From our founder, Jim McKillip, to our newest employee, success depends on how well we individually contribute to the whole. I'm not shy in saying we have exceptional people with big dreams and accomplishments that build TAI.

We have been recognized many times with awards from our professional associations. Many of our physical therapists have received the highest awards offered in their area of expertise. We also contribute to our communities outside the walls of our clinics.

In this volume of Outlook you will read about David McHenry, PT, DPT, who is both the team PT, and the strength and conditioning coach for elite athletes coached by the legendary marathoner, Alberto Salazar, through the Nike Oregon Project. David's athletes, Mo Farrah and Galen Rupp, finished first and second,

David McHenry PT, DPT with Nike sponsored runner and 10K Olympic silver medal winner Galen Rupp.

respectively, to win gold and silver in the 10,000 meters running event at the London Olympic Games.

Galen's accomplishment is especially noteworthy, as he is the first American to win an Olympic medal in a long distance running event in 50 years! Obviously Alberto and David are doing something right with those kinds of results. At every level in TAI our people are doing great things for our communities.

Also in this volume of Outlook you can read about Crissy from our clinic in the Madison Park neighborhood of Seattle, who helped a high school student realize a dream. Crissy showed compassion, perseverance, and personal sacrifice by taking a young woman student/athlete in need across the country to attend college and be the first in her family to achieve that goal. We celebrate that example of helping others and giving back to the communities of which our clinics have become a part.

Chrissy Kirklin with Chantier Johnson.

Our ranks include those who have gone on humanitarian missions, served their communities by holding leadership positions in social service agencies, and supported activities and programs that help those in need.

TAI has been a lead sponsor for Cycle the WAVE (Women Against Violence Everywhere) from its inception. In September they just completed their fifth annual all-women's cycling event to raise money for domestic violence victims. They have grown steadily each year and celebrated with over 1,300 riders and over $150,000 raised for victims of domestic violence. They have partnered not only with TAI, but also REI and Starbucks. We support their mission of "breaking the cycle" and increasing awareness of this invisible evil that exists in our society.

Cycle the wave participants L to R: Chelsea Burns; Maren Bisson PT, MPT, Director TAI Madison Park PT; Jennifer Lesko PT, MS, Director TAI Queen Anne PT.

TAI is a legacy company and we plan to continue on for another 60 years. We are proud of who we are and what we do for the people in the communities we serve. Our many physical therapy clinics treat thousands of patients each year, but you'll also find us out supporting our neighborhoods with our resources and efforts to pay it forward to help improve the health of our communities.

We are a company that understands that together we can create much more than we can individually. We believe in community. Leaving a legacy for others is in our genetic makeup.

Those who have suffered "whiplash" from a car accident or who experience daily neck strain working on a computer understand the life impact neck and back pain cause. Photo by Jason Ganwich.

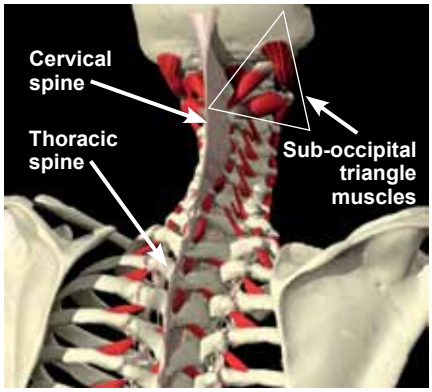
Anatomy of the Cervical and Thoracic Spines

By Brent McLeod PT, DPT, Staff Therapist, TAI Sherwood Physical Therapy

Injuries often help us appreciate the complexity of the human body. Those who have suffered "whiplash" from a car accident or who experience daily neck strain working at a computer understand the life impact that neck and back pain cause. The complex anatomy of the neck (cervical spine) and upper back (thoracic spine) allow incredible function, but can also predispose us to many injuries.

Brent McLeod PT, DPT

The human neck (cervical spine) is made up of seven individual vertebrae that connect the head to the torso. The primary purpose of the neck is to move and control our head for interaction with our environment. It allows us to perform the seemingly simple tasks of turning our head to check the blind spot when changing lanes on the highway or to follow the flight of an airplane across the sky. Each vertebra of the neck (and rest of the spine) is connected through overlapping joints to the adjacent vertebrae above and below. The first two vertebrae of the neck are a key area of motion, as these joints are responsible for the greatest amount of head movement. This is also where many injuries occur from poor posture, muscle tightness (tension headaches), and joint stiffness, all of which limit the ease of head motion. In between each vertebra lies the intervertebral disc, which acts to absorb force and limit motion of the spine. The neck also provides a protective

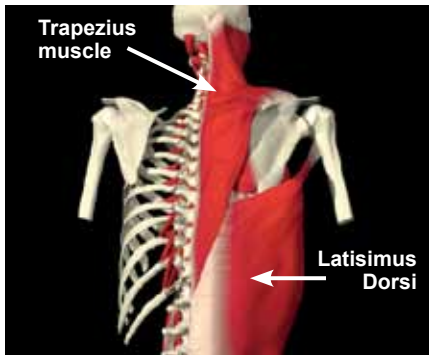


The sub-occipital muscle triangle is a common source of muscle tension headaches. © Primal Pictures LTD

structure for major blood vessels to the brain and spinal cord.

The upper/middle back (thoracic spine) shares similarities with the neck but acts much differently in its role with everyday function. Twelve individual vertebrae comprise the thoracic spine and bridge the neck and lower back. As in the neck, vertebrae are connected above and below by two spinal joints called facet joints, which allow us to move in every direction. Joint stiffness caused by poor posture is a common problem in the thoracic spine. Intervertebral discs between the vertebrae serve the same force-absorbing function as in the neck. In contrast to the cervical spine, the thoracic spine joins the ribs through the costo-vertebral joints on each side at all twelve levels. This connection allows our ribs and chest to expand when we inhale and exhale. The thoracic spine moves much less freely compared to the cervical spine, but it still provides movement for our upper body. Everyday movements, such as turning to look behind us, reaching overhead, or bending over to tie our shoes all require movement in our thoracic spine.

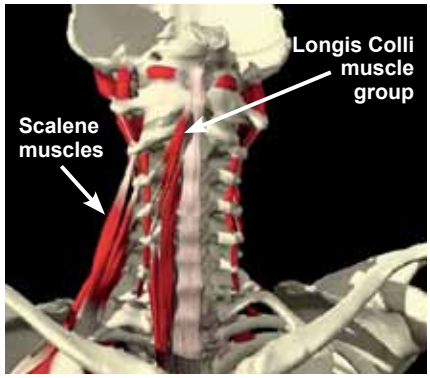
Many layers of muscle overlay the cervical and thoracic spines and provide the force for movement of the human body. Some muscles are extremely large and powerful, such as the trapezius muscle. As shown, this trapezoid-shaped muscle connects the cervical spine to the scapulae (shoulder blades) and then broadens to attach to the whole thoracic spine. Based on size and attachments, it is easy to see why the trapezius plays a huge role in human movement. This muscle exerts force to move the shoulder blades with



Two major muscles of the neck and back. The trapezius muscle consisting of upper, middle and lower fibers. The latissimus dorsi connects to the upper arm.
© Primal Pictures LTD

arm motion, controls head and neck motion, and supports and moves our trunk. Other key muscles of the cervical spine include the sub-occipital triangle, which consists of four small muscles that attach from the upper neck to the base of the skull. As noted previously, this is a common area for dysfunction and overuse, resulting in muscle tension headaches and poor posture of the head and neck. The scalene and sternocleidomastoid muscles located in the front of the neck serve to move the cervical spine in side-bending and head rotation. Key muscular support of the thoracic spine comes from support of the erector spinae muscle group, comprised of three individual muscle groups that travel the length of the spine. The Illiocostalis Thoracis, Longissimus Thoracis, and Spinalis Thoracis function as a unit to control the motion of the thoracic spine, most notably through extension (backwards bending) and side-bending. Finally, the multifidus muscles are important spinal stabilizers that control motion at individual segments and exist in all three regions of the spine.

The cervical and thoracic spines are incredible, complex structures that contribute significantly to everyday human movement. Approximately 25–30 percent of patients seeking care from a physical therapist experience neck and/or upper back pain (Bovim G., 1994). The functional impact of neck pain can be significant, yet most injuries can be fully corrected with the proper treatment and home exercise program. It has been shown that orthopedic manual physical therapy is effective in reducing short- and long-term neck pain (Walker, 2008).



The longus colli and scalene muscle groups help support the neck and are important for proper posture.
© Primal Pictures LTD

If you are experiencing neck or back pain, contact the Therapeutic Associates Physical Therapy clinic nearest you. *www.therapeuticassociates.com/locations.*

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Walker, M. J. (2008). The Effectiveness of Manual Physical Therapy and Exercise for Mechanical Neck Pain: A Randomized Clinical Trial. Spine, 33 (22), 2371-1378.

Because the neck is such a mobile portion of the spine, it is vulnerable to a wide variety of injury mechanisms. Photo by Kent Factora.

Keys to a Healthy Neck

Gale Anderson PT, MS, Director, TAI Mt. Spokane Physical Therapy

Neck and upper back pain is a reality for virtually everyone at some point. Studies show that 48% of women and 38% of men report chronic and persistent neck pain, with or without upper extremity pain. Individuals over the age of 65 are at the greatest risk of developing wear and tear changes. A multitude of sensitive structures exist in the neck, upper back, head, and arms. These muscles, nerves, bones, joints, ligaments, and discs all have the capacity to generate pain from strain or wear due to the normal aging process. Discs become thinner over time, causing the space where the nerves exit to narrow. Bones can develop spurs that may encroach on the nerves as they exit the spine, and the muscles can increase their tone to protect these painful areas.

Because the neck is such a mobile portion of the spine, it is vulnerable to a wide variety of injury mechanisms. Sleeping position, poor posture, or auto accidents can cause neck, upper back, and/or arm pain. Simply stated, the neck is susceptible to pain with lack of motion (such as sleeping position), prolonged poor position (while sitting at a computer), or excessive motion (during auto accidents and falls).

Gale Anderson PT, MS

So what can be done? First, realize that your neck is a small part of your entire musculoskeletal system, and what is good for the rest of your body is generally good for your neck.

Smoking: If you smoke, begin taking steps to stop. Smoking increases carbon monoxide in the blood which causes blood vessels to become smaller. This decreases the oxygen needed for healing tissue.

Exercise: Exercise for 30 minutes every day on average. This will improve your body's ability to deliver oxygen to tissues and maintain good cardiovascular health.

Eat right: Proper nutrition provides your body with the vitamins and minerals it needs to build/rebuild muscle tissue and also gives you fuel to complete your daily workout.

Second, exercise regularly to help maintain a healthy neck. In addition to exercise, the simplest way to keep your neck healthy is to manage your posture and improve your postural awareness. Good postural alignment is critical to a healthy neck, as it places the structures in a balanced

(Figure 1)

position. This minimizes stress on soft tissues and joints. While sitting in a chair with back unsupported and feet flat, raise your sternum (breast bone) so that it is tilted backward. If you find yourself looking up, drop your chin. Gently pull your shoulders back (Figure 1). Your chin should be level and your ears in line with your shoulders. Work on holding this position for up to 2 minutes. You may be surprised at how easily gravity pushes you out of this position

Monitor your sleeping position at night and make corrections before you fall asleep. You should try to stay in correct alignment as much as possible, similar to the description above. Your head should not bend toward the ceiling (Figure 3) or toward the pillow (Figure 4). Think about keeping your head in alignment such that your nose is on a line drawn down the center of your body (Figure 2).

Whenever you wake at night or change sides, make an effort to maintain correct alignment.

(Figure 2, good positioning)

(Figure 3, pillow too big)

(Figure 4, pillow too small)

Here are some useful strengthening exercises to aide in maintaining good posture. No pain should be experienced while completing these exercises.

Prone Head Lifts

Start in hands and knees position with your head in alignment as described above. Hold your head in this position, raise one arm, and hold for 5 counts. This will help strengthen the upper back to help improve your posture. Start with 10 lifts on each side (Figure 5).

(Figure 5)

Head and Arm Lift Off a Table

Lying on your stomach, keep your head in alignment and chin down (don't look forward). Lift the back of your head and arms (palms up) straight toward the ceiling and hold for 3 counts. Do 15 reps (Figure 6).

(Figure 6)

Chin Nod with Head Lift

Lying on your back, tuck your chin toward your neck. Hold this position and lift your head up about two inches toward your feet. Hold for 4 counts. Do 12 reps (Figure 7).

(Figure 7)

Isometric

Sitting or standing in upright position, place your hand (wide contact) on the side of your head. Attempt to push your head directly to the side and use your hand to keep your head in place. Hold for 5 counts. Do 10 on each side (Figures 8–9).

(Figure 8) Isometric, to the Left

(Figure 9) Isometric, to the Right

Last, if you are experiencing pain in the neck, upper back, or arms it may be time to seek care from a professional. A physical therapist is uniquely qualified to evaluate each structure of your neck, determine the cause of your dysfunction, and provide a specialized program to meet your needs. You may require specific treatments to your neck, including trigger point massage, joint mobilization, postural education, or strengthening/mobility exercises. A physical therapist can also determine if your condition requires additional diagnostic testing to rule out more subtle issues.

TAI is committed to staying at the forefront of physical therapy by using an Evidenced Based Medicine (EBM) approach to patient care. This includes reviewing current research as it relates to conditions we treat, and being active participants in research studies that provide substantiating evidence of improvements to our treatment approaches.

Cervical Stabilization Research Evaluation Process

Chris Hoekstra PT, DPT, Director, TAI Sherwood Physical Therapy and Director of TAI Clinical Research Department

Therapeutic Associates prioritizes the evaluation of current research to ensure our therapists are on the forefront of effective, evidence-based treatments for our patients. Below is an example of the process TAI therapists take when evaluating research support for a clinical intervention (treatment). In making these decisions, therapists must combine their clinical experience, the patient's perception of their condition, and recommendations from current research. Only by combining all three of these factors can PTs provide the best in comprehensive patient care.

Effects of cervical stabilization on chronic neck pain and headaches

Jessica Smith-Blockley, PT, DPT

Clinical Question: Are cervical (neck) stabilization exercises effective in treating chronic (long-term) neck pain and headaches?

Patient/Population: Individuals with chronic neck pain, including headaches with a cervical origin

Intervention: Cervical stabilization exercises

Comparison: Manual therapy

Outcomes: Pain and function

Clinical bottom line: Both manual/manipulative therapy and cervical stabilization training (low-load endurance exercises for muscle control, focusing on the deep neck stabilizer muscles) are effective individually and in combination for reducing chronic neck pain and headaches with a cervical origin. Effects are maintained at 12-month follow-up. When used in combination, there is a 10% greater chance of achieving a good or excellent result (>50% reduction in symptoms).

Citation: *Jull G, Trott P, Potter H, et al. A randomized control trial of exercise and manipulative therapy for cervicogenic headache. Spine 2002, 27(7):1835-1843.*

Evidence:

• Headache frequency, intensity, and neck pain: Significant reduction was noted at the end of the 6-week treatment session, and improvements were maintained at 12-month follow-up. There was no statistically significant difference between the three active treatment groups in these measures.

• Headache duration: Only the combination of manual therapy and exercise group showed significant decrease.

• Photographic measurement in forward head posture: No change was noted in any group.

• A "good or excellent" result (good = 50% or greater reduction in symptoms; excellent = 80-100% reduction in symptoms) was 10% more likely to be attained with combination treatment, when compared to either treatment alone.

Visit our Evidenced Based Medicine page on our website for more information on literature reviews by condition and additional studies: *http://www.therapeuticassociates.com/education/library/evidence-based-medicine/*

Team and Program Sponsorship

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Leukemia and Lymphoma Society Team in Training (W. Wash)
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Portland Bethany Summer Concerts
Portland Triathlon Club (Portland)
Redmond High School Basketball
Relay for Life (Grants Pass)
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TAI Cycling Team
Tualatin Youth Baseball
Word Motorsports (Grants Pass/ Medford)
XC Oregon (Bend)

Committed to Leadership

We are proud of the leadership our employees show as part of their Physical Therapy Community.

PTWA (Physical Therapy Association of Washington) Emerging Leader Award

Bart Hawkinson PT, DPT
TAI North Lake PT

Chantier Johnson

Crissy and Chantier on the road.

The Trip of a Lifetime

Crissy Kirklin, Physical Therapy Aide, TAI Madison Park Physical Therapy

Thanks to Therapeutic Associates' commitment to providing integrated health opportunities for their community, an inspiring young woman named Chantier Johnson was able to overcome the odds and begin her journey toward a college degree.

Starting as Chantier's high school basketball coach two years ago, I have been able to walk with her through the ups and downs of a turbulent home life. Despite homelessness, seeing family members in and out of prison, and the responsibility of helping hold a family together, Chantier has maintained a positive, joyful outlook that is contagious to those around her. College seemed like an unattainable goal for Chantier. However, she knew that in order to change her path, further education was required.

When Chantier was accepted to her first choice school, she did not know how she would afford a cross-country move. It didn't take us long to decide a road trip was in order. Agnes Scott is a prestigious, all-women's liberal arts school in Decatur, Ga. Chantier was drawn to Agnes Scott by its focus on engaging with the intellectual and social challenges of current times. She knew she could receive a well-rounded education while gaining the knowledge and experience to understand a variety of ideological backgrounds.

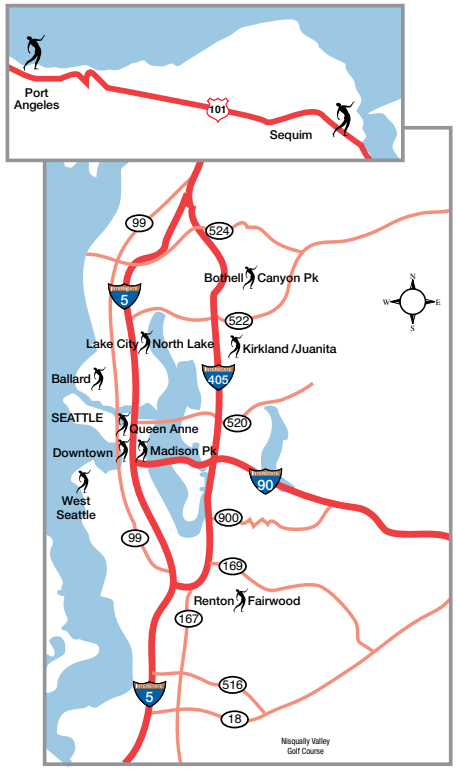
Crissy Kirklin

Through substantial donations from TAI and others, we were able to rent a car and adventure 3,000 miles across the United States. From Denver, Colo. to Topeka, Kan. to Memphis, Tenn., we experienced the unbelievable hospitality of complete strangers and experienced a wide range of new landscapes, food, and cultures. Not only was this trip educational, eye-opening, and moving, it was incredibly fun; truly the trip of a lifetime.

It has been a privilege to be part of this significant step in Chantier's story. To witness a young person persevere with such determination and positive attitude has had a profound impact on my life. It is great to be part of a team who lives out their mission statement. Therapeutic Associates has truly been an integral part of Chantier's journey toward holistic health and wellness.

If you'd like to read about our cross country adventure, visit our blog at *http://kirklinc.wordpress.com/*

Team TAI Fairwood PT at the 2012 Oyster Urban Adventure Race in Seattle. L to R: Cole Weyenberg; Jonika Brakstad, PT Aide; Laura Flaherty PT, DPT, Staff Therapist; Jackson Clemmons; Ruthe Graham PT, DPT, Staff Therapist; David Hall.



Western Washington

SEATTLE AREA

therapeuticassociates.com/Seattle

BALLARD PT
Julie Dresch PT, MS, OCS, CMPT, Director
206-789-7975
TPI Certification

LAKE CITY
North Lake Physical Therapy
Chuck Hanson PT, OCS, Director
206-361-4745
TPI Certification

RENTON
Fairwood Physical Therapy
Nicole Smyth Macaluso PT, DPT, OCS, Director
425-272-0252
New Location

BOTHELL
Canyon Park Physical Therapy
Christopher Leck PT, DPT, SCS, CSCS, Director
425-489-3420

MADISON PARK PT
Maren Bisson PT, MPT, Director
206-324-5389

SEATTLE PT
Megan Houser PT, DPT, OCS, Director
206-623-4570
TPI Certification

KIRKLAND
Juanita Physical Therapy
Ben Kingan PT, DPT, CSCS, Director
425-823-8119
New Clinic

QUEEN ANNE PT
Jennifer Lesko PT, MS, Director
206-352-0105
TPI Certification

WEST SEATTLE PT
Erica Clark PT, DPT, Director
206-932-8363
TPI Certification

PORT ANGELES AREA

therapeuticassociates.com/OlympicPeninsula

PORT ANGELES AREA
Beth Sandoval PT, DPT, OCS
Director

PORT ANGELES
360-452-6216

SEQUIM
360-683-3710

CREDENTIAL KEY:

ATC-Athletic Training Certification, CMPT-Certified Manual Therapist (NAIOMT Level III), CMP-Certified Mulligan Practitioner, COMT-Certified Orthopaedic Manual Therapist (NAIOMT Level IV+), CPI-Certified Pilates Instructor, CSCS-Certified Strength & Conditioning Specialist, FAAOMPT – Fellow of the American Academy of Orthopaedic Manual Physical Therapy, LAT-Licensed Athletic Trainer, MTC-Manual Therapy Certification, OCS-Orthopaedic Certified Specialist, SCS-Sports Certified Specialist

Spokane

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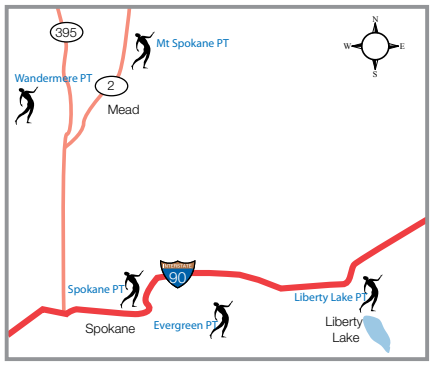
LIBERTY LAKE PT
Steve Allen PT, OCS, FAAOMPT, Director
509-891-2258

MEAD
Mt Spokane Physical Therapy
Gale Anderson PT, MSPT, OCS, FAAOMPT, Director
509-468-4861

NORTH SPOKANE
Wandermere Physical Therapy
Jim Moore PT, OCS, ATC, FAAOMPT, Director
509-466-4379

SPOKANE VALLEY
Evergreen Physical Therapy
Jeff Bresnahan PT, DPT, Director
509-926-5367

DOWNTOWN SPOKANE
Spokane Physical Therapy
Bill Olson PT, CMPT, Director
509-624-4035



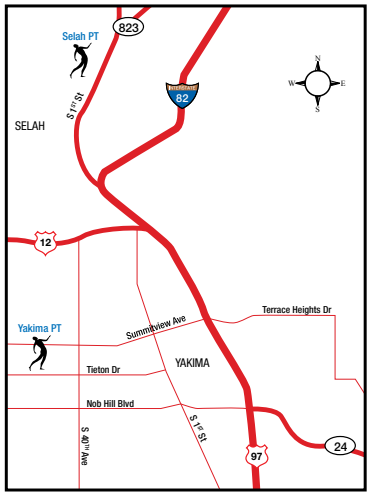
Yakima Valley

therapeuticassociates.com/Yakima

YAKIMA VALLEY
Robb Jacobs PT, DPT, Director

SELAH PT
509-697-9109
NEW LOCATION!

WEST VALLEY PT
Formerly Yakima PT
509-453-3103
NEW LOCATION!



Tri Cities

therapeuticassociates.com/TriCities

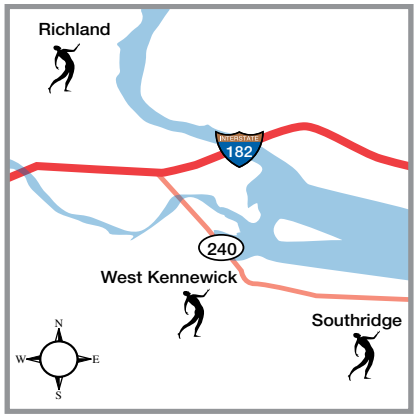
RICHLAND PT
Lee Ann Carlson PT, Director
509-946-8497

RICHLAND PT
Christine Taylor PT, Director
509-946-8497

KENNEWICK
Kenneth Call PT, DPT, Director

WEST KENNEWICK PT
509-783-1962
TPI Certification

SOUTHRIDGE PT
509-783-5644
NEW CLINIC!



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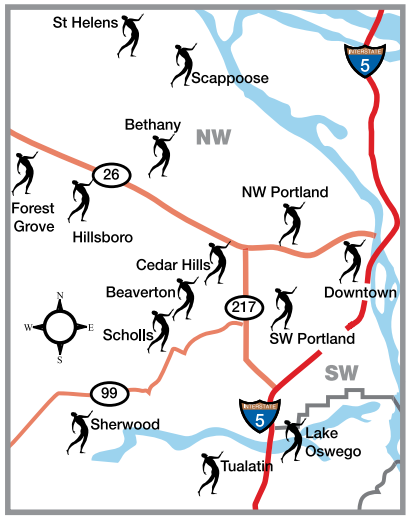

Hippie Chick Half Marathon participants L to R: Jessica Dorrington PT, MPT, Director of TAI Bethany PT; Kelly Reed PT, Director of TAI Cedar Hills PT; Jessica Groff, Physical Therapy Aide at TAI Cedar Hills PT with her mom, Carolyn Sojka.

Portland Metro Area

therapeuticassociates.com/Portland

WEST PORTLAND

BEAVERTON PT
Zachary R Jones PT, DPT, Director
503-644-3311

DOWNTOWN
Tony Rocklin PT, DPT, COMT, Director
503-450-0591

NW PORTLAND PT
Todd J Cruz PT, MPT, Director
503-227-3479
TPI Certification

SCHOLLS PT
Amy Shepro Tanous PT, DPT, Clinic Director
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New Clinic

BETHANY PT
Jessica Dorrington PT, MPT, OCS, CMPT, Dir.
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TPI Certification

FOREST GROVE PT
Scott Hein PT, DPT, Director
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ST HELENS PT
H. Patrick Corrigan PT, Director
503-397-1914

SCHOLLS PT
Zachary R Jones PT, DPT, Director
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New Clinic

CEDAR HILLS PT
Kelly Reed PT, OCS, COMT, Director
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HILLSBORO PT
Timothy O Brinker PT, OCS, FAAOMPT, Director
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SCAPPOOSE PT
Olya Kurkoski PT, DPT, Director
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SW PORTLAND PT
Darin Borter PT, DPT, OCS, COMT, Director
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CEDAR HILLS PT
Aimee Jackson PT, MSPT, Director
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LAKE OSWEGO PT
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TPI Certification

SHERWOOD PT
Chris Hoekstra PT, DPT, OCS, COMT, FAAOMPT, Director
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TUALATIN PT
Stephen A Barsotti PT, Director
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TPI Certification

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EAST PORTLAND

CLACKAMAS PT
Mark McCurdy PT, MPT, COMT, Director
503-659-9155

EAST PORTLAND PT
Jennifer Hammond PT, DPT, Director
503-253-0924
NEW LOCATION!

GRESHAM PT
John Parr PT, CMPT, Director
503-666-7644
TPI Certification

N PORTLAND PT P.A.C.E.
David V McHenry PT, DPT, SCS, Director
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NE PORTLAND PT
Aubree Swart PT, DPT, Director
503-493-4463

OREGON CITY PT
Matt Rogers PT, DPT, OCS, Director
503-655-4877
New Clinic Opening Oct. 2012

SE PORTLAND PT
Daniel Renelt PT, DPT, Director
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SW WASHINGTON

VANCOUVER PT
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TPI Certification

Salem

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SALEM NORTH
Valley Physical Therapy
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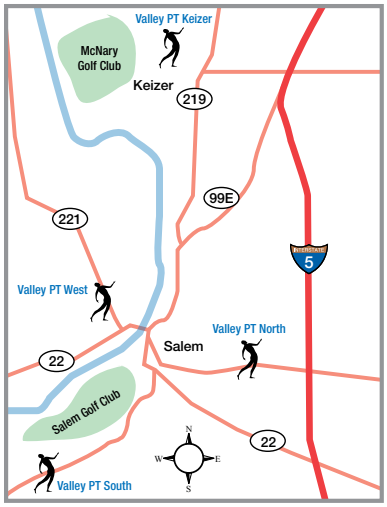
SALEM SOUTH
Valley Physical Therapy
Jeffrey R Blanchard PT, MS, OCS, Director
503-585-4824

KEIZER
Valley Physical Therapy
Ashleigh Young PT, DPT, Director
503-463-4221

SALEM WEST
Valley Physical Therapy
Gina Paine PT, DPT, Director
503-363-6770



Mid-Willamette Valley

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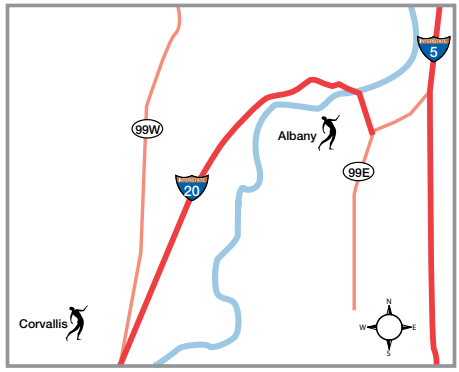
ALBANY
Mid Valley Physical Therapy
Gregory Pick PT, OCS, Director
541-967-1224

CORVALLIS
Angela Lewis PT, DPT, OCS, ATC, Director
541-757-0878



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Eugene area clinic Directors, staff, and family members at the 2012 Truffle Shuffle.

Eugene

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WEST EUGENE PT
Bradley Schwin PT, MS, OCS, Executive Director
541-484-9632

SPRINGFIELD
Gateway Physical Therapy
Josh Hagemeyer PT, DPT, Director
541-736-8870
New Director

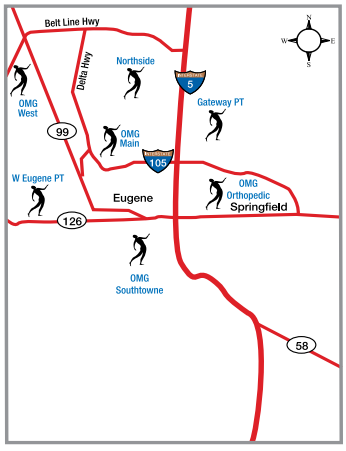
OMG NORTHSIDE
Valerie Hilton PT, DPT, OCS, Director
541-688-9140

OMG MAIN
John Nielsen PT, DPT, Director
541-242-4172
New Director

OMG ORTHO AND SPORTS MEDICINE
David Dowd PT, MS, Director
541-242-4870

OMG SOUTHTOWNE
Hannah Shallice PT, MSPT, Director
541-242-4470

OMG WEST
Amy Temes Clifton PT, DPT, OCS, Director
541-463-2191



Southern Oregon

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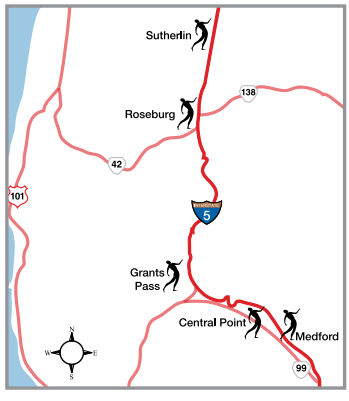
ROSEBURG
Central Physical Therapy
Jeffrey S Jones PT, Director
541-673-1808

GRANTS PASS PT
Eric Medley PT, MSPT, CSCS, Director
541-479-0765

CENTRAL POINT PT
David B Standifer PT, Director
541-664-2800
New Location

MEDFORD PT
Jay A Ruettgers PT, DPT, ATC, CSCS, Director
541-779-1041

SUTHERLIN PT
Dan Hirtle PT, Director
541-459-8459



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Karen Walz PT, MA, Director of TAI Redmond PT, and Matt Kirchoff PT, DPT, Director of TAI Bend in the Athletic Club with Roxie at the 2012 Oyster Urban Adventure Race in Bend.

Central Oregon

therapeuticassociates.com/CentralOregon

BEND PT
Chuck Brockman PT, MPT, OCS, CSCS, Director
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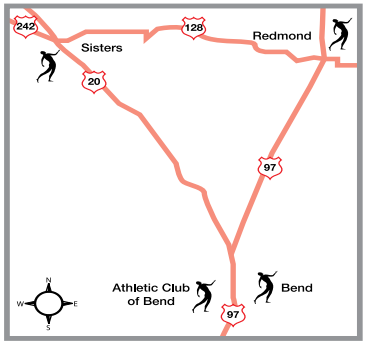
REDMOND PT
Karen Walz PT, MA, OCS, COMT, FAAOMPT, Director
541-923-7494

BEND IN THE ATHLETIC CLUB
Laura Cooper PT, DPT, CSCS, Director
541-382-7890
TPI Certification

SISTERS IN THE ATHLETIC CLUB
Matt Kirchoff PT, DPT, Director
541-549-3574
New Director



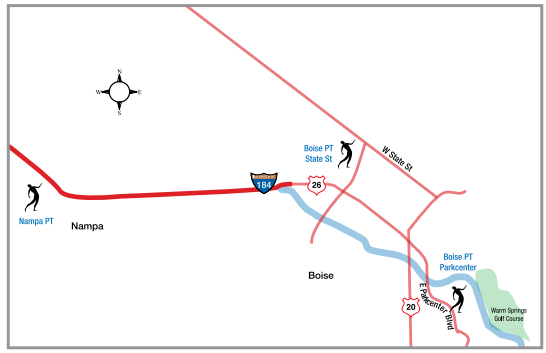
Southern Idaho

therapeuticassociates.com/Idaho

BOISE PT
Park Center
Matt Booth PT, DPT, OCS, Director
208-433-9211
TPI Certification

BOISE PT
State Street
Robert Barnes PT, DPT, OCS, Director
208-336-8433
TPI Certification

NAMPA PT
Derek Stiegemeier PT, DPT, Director
208-442-0577



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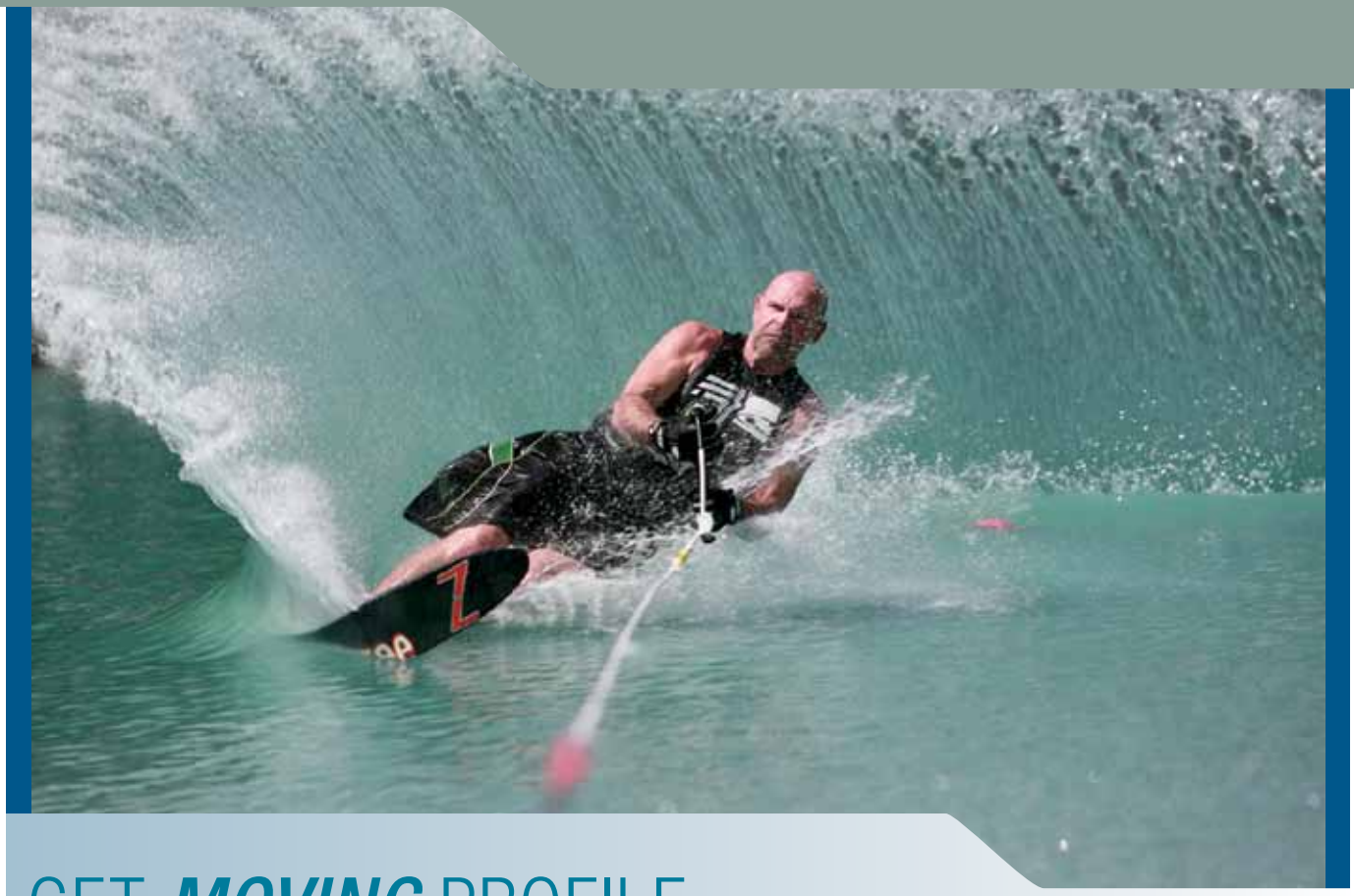


GET ***MOVING*** PROFILE

STILL SKIING **BUT NOW PAIN FREE!**

Tom Carey, Patient of TAI Cedar Hills Physical Therapy

I have been passionate about waterskiing for most of my 59 years. When you talk about waterskiing, most people picture someone on two skis cruising down the lake. When you add competition to the equation, things get intense.

Slalom waterskiing is very demanding. When I was in my 20s, I broke my knee and tore most of the knee ligaments. After having reconstructive surgery, it was never the same. As I got older, it got progressively worse.

In 2005, an orthopedic surgeon did arthroscopic surgery to repair what was left of the meniscus. After the surgery, he told me I would eventually need a total knee replacement. I actually came close to making the appointment until my son told me about a new procedure he and the doctors at the Reflex Clinic were doing. It was non-surgical and should help reduce the pain. I hoped it would work, because it was getting to the point where skiing was no longer an option.

The procedure worked unbelievably well. Within four weeks, the pain that I had dealt with for 25 years was almost gone. However, although the pain was much better, I still walked with a noticeable limp. I also found that after so many years of knee pain my hips had started to hurt most of the time. Reflex recommended that I schedule a visit with Kelly Reed at Therapeutic Associates and have her do an assessment.

When I met with Kelly she immediately noticed the limp and determined that the length/tension relationship of the muscles in both legs was out of whack. After so many years of compensating for the pain, I wasn't recruiting the correct muscles for most movements. Some muscles were tight and short and others were atrophied from lack of use.

In addition to aggressive stretching, Kelly started a procedure I had never heard of called ASTYM. This procedure identifies knotted muscles and over time, releases them. Within three visits, my legs started to feel stronger even though I had not changed my workout routine. I could actually feel the muscles release during the procedure. My range of motion improved every visit.

I remember after the fifth visit I went for a bike ride. The 18-mile loop I ride usually took me about an hour and 20 minutes, but that day I did it in an hour and five minutes. I couldn't believe how strong my legs felt. Instead of pedaling with one leg, I was finally able to use both legs.

It is amazing to me that after years of dealing with severe pain and almost giving up any idea of skiing competitively again, I am pain-free and gaining strength without surgery or drugs.

I would like to thank Kelly and the staff at Cedar Hills Physical Therapy for everything they have done.

TherapeuticAssociates PHYSICAL THERAPY

Whiplash Injuries in Sports

By Nate Allen PT, DPT, Staff Therapist, TAI Nampa Physical Therapy

How many times have you seen a football quarterback (QB) get blind-sided by a defensive opponent? Fans always cheer for these unexpected hits and pay little attention to the QB that is writhing on the field after a crushing blow. When viewing the replay, it literally looks like he got ran over by a truck. The quarterback takes a hit to the middle of his back, snapping his head back, followed by his head and body being catapulted forward to the ground.

This is commonly known as whiplash, and these injuries can be season altering to many athletes in a variety of sports, such as soccer, baseball, and hockey.

Whiplash, or cervical acceleration/deceleration injuries happen when the neck experiences forced hyperextension (extending backward beyond the normal limit) and hyperflexion (flexing forward beyond the normal limit). This can cause damage to many structures in the neck, including the muscles, ligaments, tendons, bones, nerves, and intervertebral discs.

Neck hyperextension causes damage to the structures in the front of the neck and hyperflexion causes damage to the structures in the back of the neck. Depending on the injured structures, the injury can present with different signs and symptoms. Most commonly, athletes with whiplash injuries will experience neck pain, stiffness, and limited motion.

Nate Allen PT, DPT

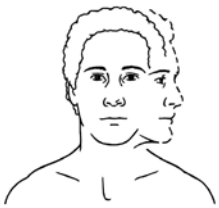
Once you have been successfully screened for serious injury by a health care professional, early mobilization for a strained and/or sprained neck after whiplash can help with recovery and healing. Stretching and strengthening exercises will help strengthen muscles, increase neck mobility and motion, decrease pain, and reduce muscle spasms.

In the end, timely therapeutic intervention will help get athletes back to their sport quicker with less chance of long-term neck complications.

Below are a few exercises to address neck soft tissue sprain and/or strain as a result of a whiplash injury. During the acute phase of injury, combine these exercises with rest and ice to help control inflammation. Ice for 15–20 minutes at a time throughout the day with 40–60 minute breaks without ice in between.

It is important to get checked out after a whiplash injury to rule out neurological deficits, fracture, and concussion before proceeding to these exercises. If you are having long-term effects from a whiplash injury, consult with your physician or physical therapist. You can also find some additional information about whiplash on our website at *www.therapeuticassociates.com.*

CERVICAL SPINE - 1 AROM: Neck Rotation



Turn head slowly to look over one shoulder, then the other.
Hold each position __5__ seconds.

Repeat __10__ times per set. Do __2__ sets per session.
Do __2__ sessions per day.

CERVICAL SPINE - 26 Flexibility: Neck Stretch

Grasp arm above wrist and pull down across body while gently tilting head same direction. Hold __30__ seconds. Relax.

Repeat for both left and right sides.

Repeat __2__ times per set.
Do __1__ sets per session.
Do __2__ sessions per day.

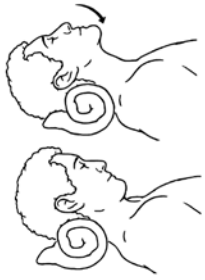
CERVICAL SPINE - 24 Flexibility: Corner Stretch

Standing in corner with hands just above shoulder level and feet __8__ inches from corner, lean forward until a comfortable stretch is felt across chest.
Hold __30__ seconds.

Repeat __2__ times per set.
Do __1__ sets per session.
Do __2__ sessions per day.

CERVICAL SPINE - 43
Upper Cervical Flexion Mobilization

Lying with neck supported on towel roll and back of head resting on surface, gently nod head by bringing chin toward throat. Try to maintain surface contact with back of head.



Repeat __10__ times per set.
Do __2__ sets per session.
Do __2__ sessions per day.

Have a question?
Visit us online and ask your Physical Therapist, the musculoskeletal expert!
http://www.therapeuticassociates.com/education/ask-the-experts/

Contact us at:
Therapeutic Associates, Inc.
7100 Fort Dent Way, Suite 220, Seattle, WA 98188
206-241-8488 phone • 206-241-0028 fax
Dorothy Klemetson x2200 | dorothyk@taiweb.com
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