

Winter 2014

# SPORTS TALK

Journal of the ACA Sport Council



## Why Athletes Need Sports Chiropractors

by Scott Gillman, DC, DACBSP

Sports chiropractors are integrated into many high level venues, from CrossFit competitions to Olympic events. I wrote this article while providing care at the 22nd Central American and Caribbean Games in Veracruz, Mexico. The athletes greatly appreciated us, but not everyone on the healthcare team really understood why our procedures made physiologic sense. Here is an explanation.

Athletes cannot perform at their best if they feel pain when they move or exert themselves. Pain causes a reflex response that shuts down muscles. Limping after straining a knee is an example. A malfunctioning joint that is stressed in some way can also cause the same reflex response. Called “reflex inhibition” or “arthrogenic inhibition,” it is caused by pain or malfunction.<sup>1</sup> Rolling an ankle during mundane walking, or a knee buckling when going down stairs are examples of this phenomenon occurring without a pain trigger. Athletes need to avoid this.

To perform optimally, athletes need to exert themselves with strength, stability, and a full range of motion. Strength against a forceful load depends on full muscular engagement. If an athlete needs to press weight overhead and cannot withstand the load because of reflex inhibition, then the athlete must either drop the weight or risk straining and injuring the body.

(continued on page 4)

# President's Message

We had a great weekend in Portland this year for our annual ACA Sports Council symposium. The highlight of the weekend for me was being handed the reins as I became the new President of the Sports Council. It has been many years of hard work that has gotten me to this point, and I'm excited to keep working hard to make this organization grow and thrive for you! At the luncheon I was able to address the assembly and I



charged the attendees to share with me their vision for the Sports Council. I extend this to each and every one of you! I want to be the Executive Committee that works for you, and I want to know what you want and need from us and from the Sports Council. What is your vision for us as an organization? What can I do, what can you do, what can WE do to make the vision a reality?

My focus in the months ahead is to work on growing our membership. In numbers we have strength, and a larger voice to promote and defend our profession. In the days following the symposium, the words that kept rattling around in my head were "cultural authority". I heard this mentioned in multiple ways over the weekend of the symposium, and my thoughts about it have lingered. I heard it said that sports chiropractic has become the cultural authority for the entire profession. We are setting the standards for care, for education and for multi-disciplinary involvement. This is a big job, and with growing membership we can all continue the good

work!

At the luncheon, we said good bye to outgoing Executive Committee members Dr. Bill Bonsall and Dr. Michael Lord, as well as our hard working (now) Past President Dr. Sherri LaShomb. We all thank them for their commitment and time given to the ACA Sports Council. We are pleased to welcome new faces to the Executive Committee – 2<sup>nd</sup> Vice President Michael Tunning from Iowa and Secretary Norm Eng from Georgia. We are happy to have re-elected our Treasurer Karlie Steiner-Bailey from Washington. I am also pleased to announce that I appointed Shane Espinoza to the 1<sup>st</sup> Vice President position; Dr. Espinoza has been with us before on the ExCo and we are excited to have his expertise again. I have also appointed our Past President Dr. Guillermo Bermudez to the Presidential Advisor position, and we are lucky to have the continued service of Dr. Ed Feinberg as Faculty Advisor and Dr. Mike Simone as our ACA advisor. All of these individuals are hard-working and dedicated doctors who are willing to donate their time to this organization and I'm grateful to be able to work them in the months ahead as we strive to improve and grow the ACA Sports Council. For more details about the Symposium, check your next issue of ACA News for a recap of the exciting weekend!

I want to personally thank all of the members who have and are currently serving on a committee. We could not do it without you! We are always looking for volunteers for committee work to help you get more involved and learn more about the work we do. Please contact me if you are interested in being on a committee. As I stated, I also want to hear from you if you have a vision to share. My "door" is always open and I'm honored to serve you in the position of President of the ACA Sports Council. I look forward to hearing from you.

Yours in health,  
Kelly Lange, DC, CCSP

JOIN THE ACA SPORTS COUNCIL AND DR. PHIL PAGE IN PRESENTING:

# THE JANDA APPROACH TO MOVEMENT DYSFUNCTION AND FUNCTIONAL EXERCISE PROGRESSIONS

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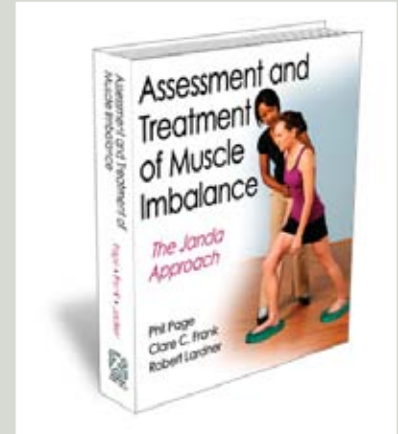
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Dr. Vladimir Janda was a pioneer in muscle imbalance syndromes and chronic musculoskeletal pain. His research and teachings have a profound influence on today's rehabilitation professionals as well as strength and conditioning experts. Janda noted several guiding principles in human movement based on the interaction of the sensory and motor systems, including the neurodevelopmental basis for human movement and influence of muscular chains. These principles also apply to assessment and management of movement



dysfunction. This lecture will introduce Janda's principles of functional movement, as well as his "Crossed Syndromes," and establish a framework for addressing movement dysfunction through a "Functional Exercise Progression."

### THE OBJECTIVES OF THIS 4-HOUR, HANDS-ON WORKSHOP ARE:

1. Explain principles of functional movement according to Janda
2. Describe Janda's crossed syndromes and movement pattern dysfunctions
3. Describe the Functional Exercise Progression™ and T<sup>4</sup>

concepts

4. Integrate the TheraBand CLX in functional exercise techniques using:
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  - e. Chains and Spirals

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### INSTRUCTORS:

Andre Labbe, PT, MOMT (Total Package Performance, New Orleans, LA)

Phil Page, PhD, PT, ATC, CSCS, FACSM (Performance Health/ LSU, Baton Rouge, LA)





Good muscle function depends on healthy fascia. Fascia is a proprioceptive and pain-generating organ system.<sup>2,3</sup> Soft tissue injury and repair, as well as hypoxia from lack of movement, each cause fibrosis, adhesions, trigger points, taught-tender fibers and other snags. Injury, hypoxia and tissue stagnation are associated irritating cytokines that promote this formation.<sup>4-7</sup> Fascia guides body movement and it adds to muscle force transmission.<sup>8</sup> Fascial lesions cause stiffness, alterations in muscle fiber firing and control, and also reflex inhibition.



Malfunctioning joints with abnormal motion can cause pain, limited range of motion, and also reflex inhibition.<sup>9</sup> Previously injured joints can malfunction without pain, for example the previously sprained ankle that becomes functionally unstable, easily giving way and being susceptible to another joint sprain.<sup>10 11</sup> Degenerated tendons and indurated ligaments can all add to pain and/or malfunction.



The milieu of soft tissue adhesion, tendinosis, ligament lesions, joint segment stiffness, tenderness and dysfunction all make the perfect formula for reflex inhibition. Athletes must be free of reflex inhibition in order to effectively complete their task with strength and stability. The alternative is an athlete at risk for injury. It is well established that the greatest risk factor for an ankle sprain is having a malfunctioning ankle from a previous ankle sprain.<sup>12</sup> We observe similar scenarios when watching athletes failing to haul weight overhead, with one arm abruptly failing, or the sudden painful buckling at the knee when running. For example, altered thigh muscle hamstring/quad muscle fiber engagement based on EMG study of knee loading, is associated with knee ACL tears,<sup>13</sup> We sports chiropractors can fix this.

Research shows that skilled joint manipulation improves joint motion and reduces pain.<sup>14-17</sup> Skilled joint manipulation has a host of neurophysiologic attributes, including turning off reflex inhibition.<sup>18-22</sup> NSAIDS and ice packs offer no healing benefit beyond merely killing pain, and with many undesirable side effects. While ice can alleviate pain temporarily, it offers no long-term solution, and does little to improve the quality of muscles, tendons, or ligaments. Ice applied to injured areas can impair the body's ability to heal. Yet ice has been applied mindlessly to athletes for decades. Bead-roller sticks simply feel nice. Static stretching can inhibit the ability of a muscle to initiate force,<sup>23,24</sup> and is now often avoided before sport. Key interventions for turning off reflex inhibition are: soft tissue therapy and joint manipulation.

Most trainers and healthcare providers don't know about a sports chiropractor's skillset.<sup>25,26</sup> It is our job to be good role models by demonstrating to other healthcare providers what we do and why we do it, and by describing it with universally understood terms. This also demands that we obtain advanced certifications and field hours to benchmark ourselves as authorities. Any chiropractor can work on an athlete, but athletes and their healthcare team deserves sports chiropractors with the advanced training and the clinical experience.



We are unique providers. As doctors, we perform thorough musculoskeletal examination and differential diagnosis, but then we effectively switch roles, becoming a body-worker and performing the expert hands-on procedures that athletes need and desire, as well as offering modalities such as kinesiology taping, low level laser, exercise, and foot orthotics, for example. This multimodal package of care is valuable prior to play and also for rehabilitation after injury. By helping to reduce adhesions, promote good healing of soft tissues, and improve joint motion and function, there is less chance of reflex inhibition, and possibly less chance of injury. It may also help optimize performance.<sup>27</sup>

We have always known that athletes feel better and move with less pain following our care, but we can now explain why our package of diagnostic and therapeutic care is beneficial and why athletes really need us. It is my hope that more medical providers, trainers, coaches, and sports team officials will learn about the important role sports chiropractor play and how we can enhance a healthcare team. They can get the best information by visiting: the American Chiropractor Board of Sports Physicians ([www.ACBSp.com](http://www.ACBSp.com)); the American Chiropractic Association Council on Sports Injuries and Physical Fitness ([www.ACASC.org](http://www.ACASC.org)), and FICS ([www.fics-sport.org](http://www.fics-sport.org)). In the end, it is all about what the athlete needs and desires. They should have access to all avenues of care – for their benefit and not ours!

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## The View from the Ivory Tower

Stephen Perle, DC, MS

Everyone has heard some variation on the aphorism about people forgetting where he or she came from. Sometimes private practice doctors will accuse us in academia of forgetting what it was like when we weren't in the Ivory Tower of academia. I've been in that tower for 23 years, but fortunately I have a very very good memory.

When it comes to understanding clinical research and being aware of the state of our evidence base I have a deep recollection of where I was in that regard when I graduated from Texas Chiropractic College in 1983. I got a great education at TCC but like most scientifically oriented chiropractic colleges of the day we really weren't taught to think about clinical research nor was there

much clinical nor basic science research regarding what we did as chiropractors. I know because our new research director hired me a research assistant and my job was to find out what research there was about chiropractic and our care. The very little I found was not known by our faculty, it just wasn't really the way things were done, then.

After a couple of years in practice I made the decision to go back to my roots (I'd been an athletic training all though high school and college) and become a sports chiropractor. There wasn't that much more research about chiropractic care by then and even less about our specialty.

When I came to University of Bridgeport in 1991 one of my mentors into the ways of academia was a physicist, who described our jobs like this: "We have been given a unique opportunity in life. To do nothing more than learn and to share that with others." For someone who loves, as academia is called, the life of the mind, it really has been a great opportunity. And yet I do recall what it was like to have as patients, children with Olympic dreams and Olympians who dreamed of another gold medal or world record. So I empathize with my colleagues who everyday have to help athletes recover from injuries, try to prevent them from having injuries and need to find ways to help the athlete perform at their highest level.

As the Chair of the Research Commission of *Fédération Internationale de Chiropratique du Sport* I get many emails asking me, "what's the evidence for \_\_\_?" Usually I dig through my personal database of published papers and try to find the answer. However, the past two decades has seen an exponential growth in our evidence base. While at one time I might have been able to rattle off from the top of my head all the clinical trials of chiropractic care that were methodologically reasonably strong, that isn't the case anymore. That's a very good thing, but it creates real problems. It is time consuming trying to retrieve that information, even when one is proficient at searching PubMed. **And** I really don't have the time to be everyone's personal research assistant.

The Chair of the WFC Research Council is my good friend Dr. Greg Kawchuk. He and another friend Dr. Michael Schneider brainstormed a solution. We have created a mind map of many the domains of research the profession might be interested in. We put together a seed document with all the papers we knew in those domains. Then we recruited "curators" who have recruited teams of content experts to improve upon the seed document. The result will be a reading list in these various areas. It is not yet completed but we anticipate it being done soon and freely available to the profession to use. We see this as a first step and hope to make it more robust in the future. As my mentor said our purpose in the ivory tower is to share what we learn. When the reading list is done we will announce it widely and hope that everyone will use it and link to it.



# Joint Commission on Sports Medicine & Science (JCSMS) 2014 Annual Meeting Report

by Ted Forcum, DC, DABCBS

The JCSMS has a mission statement which is “To advance sports medicine by lacing together, through informal liaison and joint ventures, the nation’s leading organizations in sports medicine and sports science.”

The ACA Sports Council is the professions representative to the JCSMS which has 37 member organizations ranging from sports dentistry, podiatric, physical therapy, psychology, Centers for Disease Control, athletic trainers, NCAA, USADA, and the United States Olympic Committee.

I’ve been privileged to represent the ACA sports council at these meetings dating back to 2006. Last year I was voted on to the board of the JCSMS. This is the first time a chiropractor has been selected in this position. This year’s event coincided with the developing the Healthy Youth Athlete Summit as part of the Youth Sports Safety program sponsored by ESPN, Disney’s Wide World of Sports Institute, and the Aspen Institutes Sports & Society Program.

The 2014 JCSMS was held February 13-16, 2014 in Orlando, Florida. Below are summaries of some of the presentations.

## **5 minute and 5 power point slides presentations.**

The meeting kicks off with an abstract program of 9 speakers giving 5 minute presentation using only 5 power point slides. Randy Dick presented on an award winning video on Athletes And The Arts (AATA). If you have a pulse you are guaranteed to enjoy the 3 minute video the illustrates the commonalities of athletes and artist in a striking collaboration <http://vimeo.com/67806662>.

I presented on fascial function in a lecture titled “The Other Half: Muscles and tendons are half the story of power and performance” Also in this program I had the honor to introduce a special guest speaker, Rajesh Durbal <http://rajeshdurbal.com/>. As a triple amputee, Raj is an inspiration having finished the Hawaii Ironman in 14 hours, 19 minutes and 12 seconds. Kind of a big deal, right?! Never before had anyone attempted such a feat. During his talk he discussed his healthcare needs for his Ironman train. Chiropractic was front and center in his discussion. We were also fortunate to have Raj’s chiropractic physician, Nicole Ingrando, DC, in the house for the program. Immediately after his talk, Raj departed to climb Killimanjoro, but not before the JCSMS presented him with a \$2,500 check for Live Free. Live Free, a non profit organization who mission is to help as many people that are lost and suffering, with no hope in life. Through Live Free Rajesh encourages, motivates and inspires millions of people around the world to live their best life now. Durbal is the Founder and CEO.

**Sport-Related Concussion: Legitimate Concern vs. Paranoia?** Kevin Guskiewicz, PhD, ATC [http://en.wikipedia.org/wiki/Kevin\\_Guskiewicz](http://en.wikipedia.org/wiki/Kevin_Guskiewicz) pointed out that chronic traumatic encephalopathy, CTE, is only diagnosed on autopsy with tau proteins. There may be other inconclusive mechanism to determine CTE, but tau proteins are the gold standard. Acute concussion treatment suggests that Omega 3, Hyperbaric and Progesterone maybe helpful.



### **Collaboration & Partnership Expo**

The organizations were divided up into 4 groups to tackle different sports related public health issues

1. Youth Physical activity, Sports and Health
2. Interdisciplinary Sports Medicine Teams – I proctored this group with Jon Halperin, DO
  - a. HR 3722 is to provide protections for certain sports medicine professionals who provide certain medical services in a secondary State.
    - i. Provides that for purposes of medical professional liability insurance or civil and criminal malpractice liability determinations, a physician or athletic trainer (covered sports medicine professional) who is authorized to practice medicine in a state (primary state) and who provides medical services to an athlete or athletic team in a state where such professional is not authorized to practice (secondary state) shall be deemed to have provided such medical services in the primary state, provided that prior to providing the covered medical services such professional has disclosed the nature and extent of such services to the entity that provides such professional with medical professional liability insurance in the primary state.



3. Specific Sports Issues – Concussion
4. Opportunities with ESPN Wide World of Sports

**Reimagining Youth Sports in America** Tom Farrey and Michael Bergeron, PhD, FACSM. I think this video sums up their presentation from ESPN's Outside the Lines. [http://espn.go.com/espn/otl/story/\\_/id/10420535/new-york-city-council-member-wants-law-require-doctor-every-youth-football-game-trainer-practices?src=mobile](http://espn.go.com/espn/otl/story/_/id/10420535/new-york-city-council-member-wants-law-require-doctor-every-youth-football-game-trainer-practices?src=mobile)

**Impact of Health Care Reform on Athlete Care** Aaron F. Hajart, MS, ATC and Steven Allen Adams, MCS, CPC, CPC-H, CPC-I, PCS, FCS, COA (The Coding Educator)

The value of medical sponsored (pay to be team doc) team physicians should reduce as athletes will not as likely have a choice on what physician they can see under the ACA.

Other tips were related to the conversion to ICD-10.

1. ICD-10 is available free online at CDC website.
2. Encoder Pro was recommended as a ICD9-10 converter
3. I-phone App ICD-10 is \$4.99.
4. Android ICD-10 app Findacode

**2014 JCSMS Graduate Student Fellow Poster Presentation** Alan Needle, PhD, ATC, CSCS presented "Ankle Injury Alters the Links between Joint Laxity, Peripheral Sensation, and Cortical Activation". <http://natafoundation.org/wp-content/uploads/2010/04/2014-Doctoral-Winner-Alan-Needle.pdf>

## **Graduate Student Fellow Program**

**What is a JCSMS Graduate Student Fellow?** Each year, the Joint Commission on Sports Medicine and Science selects two member organizations to participate in the JCSMS graduate student fellow program. These organizations each name a fellow and two runners-up for the upcoming year's meeting.

Each fellow displays a poster at the next Joint Commission meeting. The Joint Commission pays for or reimburses the fellow for airfare (or mileage, not to exceed economy airfare), hotel, the cost to assemble the poster, and a \$1,000 grant. Fellows do not speak at the meeting, but will be asked to stand by their posters at a specified time.

The graduate student fellow first runners-up receive a \$750 grant, and attend the meeting if the fellow cannot. The second runners-up receive \$500, and attend the meeting if the fellow and the first runner-up cannot.

**How is a Graduate Student Fellow Selected?** The two JCSMS member organizations designated that year to name an outstanding graduate student are responsible for the selection process. Many associations already give awards to graduate students for poster or free





# The 5th Annual Thomas Hyde/ACASC Student Scholarship Poster Presentation Contest

Congratulations to the following students for their participation in the 5th Annual Thomas Hyde/ACASC Student Scholarship Poster Presentation Contest. Each student was asked to create a poster about a sports chiropractic topic of their choice and presented them at the ACASC Symposium in Portland, OR on Oct.3-5 2014. Commemorative awards and scholarship monies donated by sponsors will be given to the top five (5) vote getters. Congratulations and thank you for your participation!

1<sup>st</sup> Place: Eric Olson, \$1500

2<sup>nd</sup> Place: Adam Robinson, \$1000

3<sup>rd</sup> Place: Jennifer Nolan, \$750

Honorable Mentions:

Whitney Phillips \$500

Elizabeth Moos \$500



## Research Update

Readers, “Research Update” is a new Sports Talk forum for all sports chiropractors to share relevant peer reviewed research that might cross our paths from time to time. We hope you enjoy these brief descriptions that help us keep up to date in this vast world of knowledge expansion.

We invite everyone to contribute and it should take minimal effort on the part of the contributor. The author's purpose is to simply describe an interesting article from a peer reviewed journal. Full citations are necessary so that anyone can obtain the original article if desired. Opinions are allowed. And expressions of relevance is encouraged.

Norman Eng, DC  
secretary@acasc.org

### **1. Brain or Strain? Symptoms Alone Do Not Distinguish Physiologic Concussion From Cervical/Vestibular Injury**

John J. Leddy, MD, John G. Baker, PhD, Asim Merchant, MD, John Picano, BS, Daniel Gaile, PhD, Jason Matuszak, MD, and Barry Willer, PhD

[Clin J Sport Med](#). 2014 Jul 21. [Epub ahead of print]

This University of Buffalo study retrospectively evaluated 118 cases of post-concussive syndrome (symptoms lasting > 3 weeks) that were seen between 2007 and 2012. The same symptom matrix that we use in the SCAT 3 was performed. The athletes were divided into categories of brain injury, cervical/vestibular injury or both according to these physical findings. Symptom limitations from treadmill tests were presumed to be brain injury in origin. This is the Buffalo Concussion Treadmill Test (BCCT). The cervicogenic/vestibular category had no symptom limitation to the treadmill test but did have positive cervical injury findings like tenderness, spasm and limited ROM. The cervicogenic/vestibular group also had positive findings such as abnormal tandem gait, ocular convergence, or signs and symptoms with visual smooth pursuit.

Conclusions: There were no symptoms or categories of symptoms that could distinguish between brain injury and cervical injury following concussion. This included cognitive symptoms as well.

Other studies described have demonstrated that neuropsychological testing is also incapable of distinguishing between brain injury and cervical injury.

Though some may question the authors' patient categorization, I think the findings are still pertinent to the sports chiropractor. And given that there is no gold standard test to identify brain concussion, I think their classification systems were reasonable.

**This provides just another reason why sports chiropractors should be involved in the evaluation and management of Sports Concussion!** At a Sports Concussion Conference I once heard a neurologist say, “Not everything that shakes is a seizure.” Or in this context, not all symptoms following head contact are from the brain.

What clinicians can most delicately evaluate cervical injury?

Humbly offered by Ed Feinberg, DC