# **Empowering Musicians: Teaching, Transforming, Living**

# Expand Your Influence: Enhance Health And Performance In Music Students

"You play in a bar room, people are smoking, there are long hours, practicing, you carry equipment to your gig. The idea of all of this (health needs) is foreign to the music community, from the conservatory level to the level of street performers and everything in between."

—Jon Batiste, jazz musician, artist-in-residence, Athletes and the Arts

Initiated in 2008 and formally launched in 2013, Athletes and the Arts (AATA) is a multi-organizational initiative recognizing that athletes exist throughout the performing arts community and that established performance, wellness and injury prevention research for sport athletes also is applicable to performing artists. As noted in the quote above, health and wellness are generally foreign concepts in the performing arts community, including the students and parents you work with.

#### Randall W.

Dick, MS, FACSM, is a Fellow, former Board of Trustee of the American College of Sports Medicine, 20-year employee of the NCAA managing



sports medicine/injury prevention programs and current leader of the Athletes and the Arts initiative. Performing artists are athletes. Just like "sport" athletes they:

- Practice or perform almost every day
- Play through pain
- Compete in challenging environments
- Experience little "off season"
- Face extreme competition
- Face real risk of career-threatening injury

Yet, performing artists rarely have access to the injury prevention, nutrition, and practice and competition guidelines afforded most sport athletes, even at the youth level. Performing artists (musicians, dancers, singers, conductors, actors, marching band members of all ages) and their instructors *need* this information, along with education and research associated with unique performance-related problems.

Why the concern?

- In one year, 64 percent of a World Class Drum Corps had members who developed a stress fracture.
- Fifty percent of all musicians have some form of noise-induced hearing loss (NIHL).
- Seventy-five percent of orchestra instrumentalists will develop at least one musculoskeletal disorder from playing during their lifetimes.
- In one study, 79 percent of music students reported a history of playing-related pain before entering university music training.

MTNA is an active member of the AATA initiative, and its members have a unique opportunity to influence the development and longevity of musicians and their art for generations to come. Contrary to most sport athletes, musicians (both amateur and professional) and teachers have careers that extend many decades.

One of the early successes of Athletes and the Arts, particularly the Performing Arts Medicine Association organization, was working with the National Association of Schools of Music (NASM) to create a standard around health and safety in 2012. The standard, which applies to almost 650 schools of music within the United States, reads, in part:

It is the obligation of the institution that all students in music programs be fully apprised of health and safety issues, hazards, and procedures inherent in practice, performance, teaching and listening.

Music program policies, protocols, and operations must reflect attention to injury prevention and to the relationship among musicians health.

For NASM and these schools, which produce 100,000 future performers and/ or teachers annually, this is a significant change from most previous training.

Imagine if this wellness education began even earlier so that by the time young students—your students—arrive at a music school or conservatory, these concepts were already well ingrained.

Imagine if you devoted 5 minutes to a one-hour lesson or 30 minutes four times a year to a discussion related to health and wellness with your students.

Imagine if you also shared this information with your students' parents.

You might ask, "Why me?" I say, "If not you, then who?" You are opening the door to a grand adventure that can enhance the lives not only of your students but countless others who appreciate music as an international language. While a primary goal is to teach one to make great music, if the performer is limited mentally or physically *because* of performing, you have defeated your purpose. It is a great opportunity to enhance the experience and you, the music teacher, are in a perfect position to do so. Youth football coaches educate about concussion prevention, youth soccer coaches teach proper heading techniques, why shouldn't music teachers educate about wellness, hearing and cross-training?

#### What Should I Talk About?

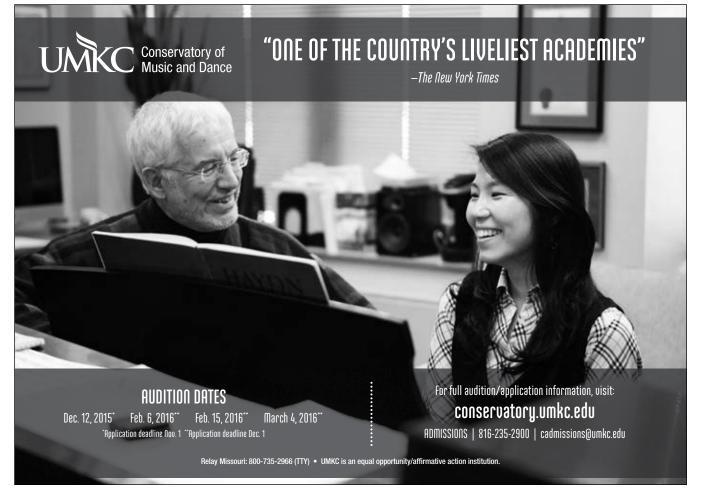
#### Practice And Performance In Perspective

Lessons from the sport world:

 At some point the number of practice hours may hurt rather than help. Consider *focused* practice segments with different goals in each session. Rote repetition for extended periods of time has not proven successful.

- Large acute increases in the time spent physically practicing increases risk of injury. If the volume or intensity of practice must increase, do it gradually.
- Cross-train—Employ a mental or physical activity that allows the body to focus on something different. Emphasize both mental and physical rest and recovery.

Fun in youth soccer has been examined in a recent study with a goal of sustaining child and adolescent sport participation. Three of 11 identified



dimensions—positive coaching, trying hard (being challenged) and being a good sport were the highest-rated components of fun in this activity (not swag, rituals, uniforms or learning and improving).

How do these findings translate to you and your music students?

**Select appropriate repertoire**— Select repertoire that challenges students' growth but does not overwhelm them physically or musically.

**Teach healthy practice strategies**—Encourage students to problem solve and avoid mindless practice. Break up practice sessions to enhance concentration and avoid overuse.

Observe, record and review the strength and posture needed during practice—Help students understand the value of core strength to posture and being strong enough to hold their posture (or instrument, where applicable) for long stretches.

**Promote joy of performance** *Provide students a range of performance opportunities so they feel comfortable in performance setting.* 

#### **Overuse/Burnout**

Consider repetitive motion, a major source of injury in the sport world:

- Approximately 150 pitches thrown per team in a professional baseball game.
- Approximately 8,000 steps per field player in a soccer match.
- Approximately 50,000 steps in a marathon.
- Approximately 3 million musical notes in a full-length Broadway performance.

Youth in today's culture are driven to train early and extensively. Early specialization and extensive training creates well-documented risks of over-use injury, burnout, stress and less enjoyment in youth sports. Researchers also caution that young athletes are ill-equipped physically, socially and psychologically to handle the rigors of intense training and make informed decisions about their training path. The daily training demands in addition to academic and other social activities can exhaust children. Sleep specialists recommend that adolescents sleep up to 9 hours per evening. Yet, under this intensive training regimen, such rest is virtually impossible

unless other critical aspects of a young adolescent's life are sacrificed.

The performing artist faces many of these same challenges, but the specific research for this population is scarce. Consider the learnings from youth sport research when working with your students to make it fun (see above) and minimize the risk of physical and mental overuse.

#### **Noise-Induced Hearing Loss**

Be aware of exposure to both the intensity of the sound (measured in decibels) and its duration. Government standards for occupations with high noise exposure have a foundation exposure value of no more than 85 decibels (dB) for an 8-hour period. However, for every 3 dB increase, time exposure is halved:

- 88 dB—4 hours/day
- 91 dB—2 hours/day
- 94 dB—1 hour/day

The dynamic range of music, live or recorded, can peak at or above 95 dB. Normal piano practice ranges from 60–90 dB; more intense practicing is in the 70–105 dB range. Hearing damage can occur, for both student *and* 



# **Current AATA collaborators**

(as of July 2015) (Founding members in bold)

## American College of Sports Medicine (ACSM) Center for Music Arts Entrepreneurship, Loyola University (New Orleans) Performing Arts Medical Association (PAMA)

American Medical Society for Sports Medicine (AMSSM) American Osteopathic Academy of Sports Medicine (AOASM) Conn-Selmer

Drum Corp International (DCI) Music Teachers National Association (MTNA) National Association for Music Education (NAfME) National Association of Teachers of Singing (NATS) National Athletic Trainers' Association (NATA) National Hearing Conservation Association New Orleans Performing Artists Clinic

instructor, when exposed to 94 dB for 60 minutes or less daily.

Consider educating your students and parents about these issues, encourage an annual hearing test with an audiologist and acquire a dosimeter (\$30–50 or an app for your phone) so you can monitor and modify your own teaching environment.

### Health Professional Relationship/ Wellness Coach

Encourage students and parents to establish a health professional relationship before they are injured. Discuss creating a student performance diary to document a "typical" week of practice, performance and other related activity. It will be a valuable resource for a healthcare provider to counsel on any prevention efforts. Finally, know *your* role if a student appears injured. Ask appropriate questions to steer to medical consultation if needed. Work as partners with medical professionals to help the student to return to play appropriately. *«* 

#### Resources

While this may seem a bit daunting, and perhaps not part of your original training, please know that www.athletesandthearts.com is a resource for much of this information, including one-pagers that you can share with students and parents on subjects ranging from hearing loss to performance anxiety and a variety of nutrition issues. Please use the website to educate yourself and those you teach to enhance their long-term wellness and performance.

"I believe music is healing and if you want to heal other people, you've got to heal yourself first. The healthier we are as musicians and the arts community in general, dancers and actors, the better the world will be."

—Jon Batiste

