Author Interviews
JANET HORVATH

This interview was posted on musicmattersblog.com.

1. You come from a very musical family and began playing at a young age. Can you tell us when you first became aware of the importance of proper body use and injury prevention as a musician?

As a young teenager I remember frequently getting lazy with my posture. During high school orchestra rehearsals I would lean back and slump in my seat out of boredom or disinterest perhaps. Soon I experienced daily back -aches. I was really puzzled. Why did my back hurt so often? I, like other young, people didn't mention it to my parents or teachers. It took me a while to figure it out but I did realize that it was associated with my playing posture. As soon as I sat up properly my back-aches went away. That was the beginning of my awareness, I think, although I didn't know it at the time. Years later, when I became a college student of the great pedagogue Janos Starker, I wanted to be the best Starker student who ever lived! So I locked myself in a practice room (not admitting that I was also trying to escape from loneliness – I was away from home for the first time in my life). Soon my left arm started to hurt. I believed erroneously that if I played through the pain I'd be a better cellist…right? I continued my rigorous practicing. Soon my arm throbbed and I could no longer deny that I had hurt myself. I had let myself get to the point that I couldn't use a knife and fork or turn a doorknob, let alone play! I could do little with that arm, nor play for three months, all the while thinking that my life was over. When Mr. Starker returned from his concert tour that fall, I was so fearful of admitting to him that I was injured. To his credit, he hid his horror quite well! From that day, we began to rebuild my technique from the ground up, eliminating any tension and any awkward postures. It took a good six months to slowly get back in shape – with a new approach – playing with ease.

2. What has changed in your own practicing and playing since you experienced your injury and went through the rehabilitation process?

I have developed a third eye! When I am playing I am always thinking about how I can make it easier for myself. I know that playing without tension, being fluid in my movements, and relaxed, will only help me play with more expression and passion. I avoid playing if I feel an ache or pain. I stop and analyze what I might be doing to cause this. I try to take it easy if I am tired or very stressed. I always warm up. I always take breaks – 10 minutes per hour is a good guide. When that is not possible, say in an

orchestra rehearsal, I have developed my Onstage Tricks™ – small moves that can alleviate tension even during performance to avoid risking injury. I vary my repertoire in my practicing so I don't get "stuck" on one particularly challenging passage or technique. I am always aware that I am an athlete and my body does have its limits.

3. Is there a relationship between injury prevention and artistry in playing?

Making music with passion and artistry, at its best, requires us to be able to "lose" ourselves in the piece of music we are interpreting. It is very difficult, if not impossible, to play with ease and with a beautiful interpretation when we are in pain or so fatigued that all we can think about is getting through a performance. An athlete's performance is compromised if they are hurting and so is ours. Make playing easy for yourself! When we can play tension free, and with fluidity then we are able to really touch our audiences with our music.

4. Teachers have a limited time with their students each week. How can we best utilize that time to help our students learn and practice effective injury prevention principles?

I think it is essential to include these techniques in each lesson so that it becomes ingrained in students. First, I would suggest a few minute warm up period at the beginning of each lesson. Few youngsters really know how to warm up, mistaking technical exercises for warming up. I have several suggestions in my book, but suffice it to say start not too slow, not too fast, not too high, and not too low i.e. in the medium range of your instrument at medium tempi gentle and easy. I urge teachers to take time in the lesson to uncurl arms and wiggle, to alternate standing and sitting positions if possible, and to spend time discussing a practice plan that varies repertoire. Teachers should be open about the possibility of injury and have an open approach so that a student feels that they can talk about their playing and hopes and dreams, as well as any issues of pain.

5. It seems like the best way for teachers to effectively work with students, especially as it relates to injury prevention, is to be so well-educated and aware of the root causes and symptoms that we can recognize them in our students and be proactive in addressing them. Do you agree? How do you recommend that teachers go about doing this (with reading your book, of course, being at the top of the list!)?

So true! I think there have been generations of teachers who have had no injury

prevention training themselves, so they are at a loss when a student becomes injured. Today, musicians play longer hours, and they play more difficult repertoire with increasingly difficult challenges at younger ages and at higher levels. Hence, injuries are on the rise and we cannot get away with technical and postural imperfections. Teachers must learn how to instill injury prevention as a mindset in their students (and yes my book covers quite a gamut of suggestions and information, as well as resources for further help).

6. Any additional comments?

I want to emphasize that several injuries may present themselves with similar symptoms. It is essential when there is a persistent problem not to self-diagnose, but to seek expert professional help. There are many Performing Arts Medicine Centers springing up all over the country. These medical professionals know the challenges of playing an instrument. The sooner you get a diagnosis and you are treated, the better chance there is that there can be total recovery.

This interview was posted at musicedmagic.com.

MEdM: In your book you go into detail on dozens of different music related maladies from repetitive stress injuries to muscle strain. One of those areas included is the topic of hearing loss in musicians. Most people think about hearing loss either as a problem of the very old or perhaps as being caused by having your earphones turned up too loud, but you say in your book that hearing damage can be caused by a number of classroom rehearsal and performance factors as well. From a music educators perspective, what are the most common causes of hearing loss in the music classroom both for the student and for the teacher? Horvath: Hearing problems can occur due to the size of the ensemble in relation to the size of the room. When an ensemble is "crammed" into a space, sounds bounce off the walls and are magnified. Furthermore musicians must sit too close together. **MEdM: Are there any musicians in the ensemble that need to be more proactive in protecting their hearing than others**?

Horvath: It helps to keep this in mind -

Too Loud, Too High; Too Close, Too Long

Hearing loss occurs due to the combination of the exposure time, the noise level, the peak level of the sounds and the proximity to the sounds. The highest frequencies are the most damaging. Any instrumentalist who is "in the line of fire", those who sit in front of the piccolo, the E flat clarinet, the trumpets, the high hat cymbals and the soprano saxophone should be very proactive. Also violinists' left ears are continually exposed to their own high frequency sounds, which frequently can climb above 100 decibels. Violinists need to protect their left ears.

MEDM: What are some of the early warning signs of hearing damage that a music student or teacher should be aware of? Horvath: Hearing loss is insidious and may creep up on you. It is therefore highly recommended to get a base- line hearing test. The signs of trouble may be quite subtle and include the following danger signals:

- ear pain or reduced hearing
- normal sounds seem loud or painful
- sensitivity to certain frequencies even if they are not loud
- loud sounds are unbearable
- a single tone sounds as a different pitch in each ear
- any ringing, hissing, rattling, or humming in the ears
- inability to hear words clearly
- a tendency to speak loudly

- a frequent impulse to turn up the volume on TV's iPods, radios, especially after a loud performance or rehearsal
- any confusion discerning consonants- p's, t's, b's, d's, th's and in music an inability to discern subtle shadings colors or overtones
- ear, neck, or jaw pain and frequent ear "popping"
- difficulty distinguishing sounds when there is background noise
- difficulty hearing which direction a sound is coming from

MEDM: How can someone protect their hearing without impeding their ability to listen to the rest of the ensemble? Horvath: It is essential to protect our hearing. No rehearsal or performance is worth risking hearing injury as there is no replacement for our hearing. Always carry the small foam over- the- counter earplugs in your bag, locker or pocket for those unexpected moments of loud noise. Etymotic Research ER-15 and ER25 Musician's Earplugs ™ are designed specifically for musicians to reduce sound levels by 15 and 25 decibels. These are deep –fitting earplugs that must be custom fitted by a licensed audiologist to conform with your ear canal. These reduce the decibel level uniformly and are designed to allow you to hear yourself and your colleagues well enough to play. The longer you wear them the more quickly your brain will adjust to hearing normally. **MEDM:** How can a teacher build a case for having their room acoustically treated? Are there statistical ways to measure the sound during a rehearsal? **Horvath:** There are several studies that have indicated that millions of young people are already suffering hearing loss and injury such as tinnitus (the ringing or roaring in the ears). One such comprehensive study is downloadable on my website for free- asoundear.playinglesshurt.com and dangerousdecibels.org has an excellent curriculum and educator training kits and workshops. Other good websites include hearnet.com and hear-the-world.com.

Decibels work logarithmically. NIOSH has indicated that one's maximum exposure per day should be no more than 85 dB per eight hour day. This means that exposure to 88 dB should be limited to four hours per day, and 91 dB to two hours a day. Any exposure above 106 decibels even for a few minutes is risky. Dosimeters and sound level meters are available to accurately measure the levels in a classroom and even measure an individual's personal cumulative daily dose of sound. I suggest that parents should advocate. There are several grass-routes organizations that are advocating for the reduction of noise pollution www.noiseoff.org, www.quiet.org , www.pipedown.info, www.noisefree.com and www.dontlosethemusic.com.

MEDM: Are there any cost effective ways to treat a space to reduce the loudness of the room?

Horvath: It doesn't take a big budget to increase the safety of a room and the musicians.

- Increase the space between musicians
- Use risers and put the treble instruments on them so that their sounds go over the heads of the people in front of them.
- Blackboards and concrete walls behind the teacher/conductor or students are highly reflective surfaces. Use drapes over blackboards
- Use 3-D relief art, wall coverings or hangings on walls especially if they are plaster, tile or concrete
- Carpet the area where the teacher/conductor stands and use carpet remnants to cover as much of the classroom floor as possible.
- Use acoustic paneling and sound absorptive materials on walls
- Use baffles/plexiglass shields. These should be place no more than seven inches from the musician's ears while ensuring that they are not too close to the loud instrument behind you so that their sounds are not reflected back to them. This will not reduce the overall sound level but will deflect the impact of a loud sound.
- Concentrate on perfecting softer dynamics. Alternate rehearsing softer works with louder works.
- Avoid rehearsing in small reverberant rooms.
- Rehearse without amplification.